

Program

**Room S1**  
Bldg. 13 1325

**CSJ Award Presentation**

Tuesday, March 20, PM

Chair: HARA, Michikazu (13:00~14:00)

**1S1-01# CSJ Award Presentation** Development of New Metal-catalyzed Organic Transformations Based on Detailed Study of the Reaction Mechanism (Grad. Sch. Eng., Osaka Univ.) ○MASHIMA, Kazushi (13:00~14:00)

Thursday, March 22, AM

Chair: HAINO, Takeharu (11:00~12:00)

**3S1-01# CSJ Award Presentation** Rational Design of High-Performance Acid-Base Combined Catalysts (Grad. Sch. Eng., Nagoya Univ.) ○ISHIHARA, Kazuaki (11:00~12:00)

Thursday, March 22, PM

Chair: KUWANO, Ryoichi (14:00~15:00)

**3S1-02# CSJ Award Presentation** Molecular Design and Regulation of Metalloenzymes (Grad. Sch. Sci., Nagoya Univ.) ○WATANABE, Yoshihito (14:00~15:00)

Friday, March 23, AM

Chair: INOUE, Masayuki (11:00~12:00)

**4S1-01# CSJ Award Presentation** Challenge of Organic chemistry for multimolecular crowding biosystems (Grad. Sch. Eng., Kyoto Univ.) ○HAMACHI, Itaru (11:00~12:00)

**Room S2**  
Bldg. 13 1326

**A New Paradigm for "MONODZUKURI": Initiated with Innovative Synthetic Transformations**

Tuesday, March 20, AM

(9:30~9:35)

**1S2-01 Special Program Lecture** "Monodzukuri" strategy initiated from synthetic chemistry (Biofunc. Syn. Chem. Lab., RIKEN) ○TANAKA, Katsunori (09:30~09:35)

Chair: IGAWA, Kazunobu (9:35~10:05)

**1S2-02 Special Program Lecture** Designing and understanding organic reactions by automated reaction path search methods combined with quantum chemical calculations (Fac. Sci., Hokkaido Univ.) ○MAEDA, Satoshi (09:35~10:05)

Chair: TSUJI, Hayato (10:05~10:20)

**1S2-03 Special Program Lecture** Cross-coupling reactions of nitroarenes (Grad. Sch. Eng., Kyoto Univ.) ○NAKAO, Yoshiaki (10:05~10:20)

Chair: HAMURA, Toshiyuki (10:20~10:50)

**1S2-04 Special Program Lecture** Fun to Design, Organic Redox Systems! From the World-record Structure to Unimolecular Memory (Fac. Sci., Hokkaido Univ.) ○SUZUKI, Takanori (10:20~10:50)

Chair: OISHI, Shinya (11:00~11:30)

**1S2-05 Special Program Lecture** Exploring the potential of cytochrome P450 enzymes by using an integrated substrate screening system (Grad. Sch. Pharm. Sci., Tohoku Univ.) ○KANO, Naoki (11:00~11:30)

Chair: NAMBA, Kosuke (11:30~12:00)

**1S2-06 Special Program Lecture** Toward development of artificial assembly lines for multicyclic alkaloids (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○OGURI, Hiroki (11:30~12:00)

Chair: YOKOSHIMA, Satoshi (12:00~12:30)

**1S2-07 Special Program Lecture** Total Synthesis of Biologically Active Natural Products Based on the Chiral Pool Approach (Fac. Sci. Tech., Keio Univ.) ○CHIDA, Noritaka (12:00~12:30)

**CSJ Award Presentation**

Wednesday, March 21, AM

Chair: KATO, Takashi (9:40~10:40)

**2S2-01# CSJ Award Presentation** Creation of Biofunctional Self-assembled Nanomaterials and Their Bioapplications (Grad. Sch. Eng., Kyoto Univ.) ○AKIYOSHI, Kazunari (09:40~10:40)

Chair: NAGATSUGI, Fumi (11:00~12:00)

**2S2-02# CSJ Award Presentation** Study on the Structure and Functional Control of DNA (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SUGIYAMA, Hiroshi (11:00~12:00)

**CSJ Public Lecture**

Wednesday, March 21, PM

(13:25~13:30)

**2S2-03 CSJ Public Lecture** Opening statement (Grad. Sch. Sci., The Univ. of Tokyo) ○SUGA, Hiroaki (13:25~13:30)

Chair: TERAO, Jun (13:30~14:20)

**2S2-04 CSJ Public Lecture** Materials Innovation by SHINAYAKA Polymers (Grad. Sch. Frontier Sci., The Univ. of Tokyo) ○ITO, Kohzo (13:30~14:20)

Chair: NAKANISHI, Takashi (14:20~15:10)

**2S2-05 CSJ Public Lecture** Revolution of AI-based drug discovery, generating with the industries (Grad. Sch. Med., Kyoto Univ.) ○OKUNO, Yasushi (14:20~15:10)

Chair: SAITO, Yuika (15:20~16:10)

**2S2-06 CSJ Public Lecture** Marine Dragons of the Dinosaur Era (Fac. of Edu., Tokyo Gakuji Univ.) ○SATO, Tamaki (15:20~16:10)

Chair: SUGA, Hiroaki (16:10~17:00)

**2S2-07 CSJ Public Lecture** Japanese Experiment Module "Kibo" on the International Space Station (ISS) and Contribution to drug discovery research by "Made in Space" protein crystals (JAXA) ○OHNISHI, Takuya; YAMADA, Mitsugu (16:10~17:00)

**Design of the molecular residence by creating new functional molecule**

Friday, March 23, AM

(9:30~9:35)

**4S2-01 Special Program Lecture** introduction (Grad. Sch. Sci., Nagoya Univ.) ○ABE, Hiroshi (09:30~09:35)

Chair: ARISAWA, Mitsuhiro (9:35~10:25)

**4S2-02 Special Program Lecture** Structure analysis of pharmaceutical and natural compounds using molecular inclusion by multiple interactions (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○SAKURAI, Fumie; FUJITA, Makoto (09:35~10:00)

**4S2-03 Special Program Lecture** Development of Bioassay Systems for Mirror-image Screening (Grad. Sch. Pharm. Sci., Kyoto Univ.) ○OISHI, Shinya (10:00~10:25)

Chair: ABE, Hiroshi (10:25~11:25)

**4S2-04 Special Program Lecture** Development of bioanalytical probes based on the regulation of molecular residence (IMRAM, Tohoku Univ.) ○MIZUKAMI, Shin (10:25~10:55)

**4S2-05 Special Program Lecture** Drug Discovery of thrombopoietin receptor agonist by phenotypic screening (Shionogi & Co., Ltd.) ○TAKAYAMA, Masami (10:55~11:25)

Chair: TAKAYAMA, Masami (11 : 25~12 : 25)

**4S2-06 Special Program Lecture** Optimization of constrained peptides based on biophysical data (PeptiDream Inc.) ○MASUYA, Keiichi (11:25~11:55)

**4S2-07 Special Program Lecture** Discovery of drug candidates acting on the molecular residence in biological systems (Sch. Pharm. Sci., Univ. Shizuoka) ○ASAI, Akira (11:55~12:25)

(12 : 25~12 : 30)

**4S2-08 Special Program Lecture** Summary (Shionogi & Co., Ltd.) ○TAKAYAMA, Masami (12:25~12:30)

## Room S3

Bldg. 14 1421

### Creation of Innovative Catalysts

Tuesday, March 20, AM

(9 : 30 ~9 : 35)

**1S3-01 Medium and Long-Term Program Lecture** Introduction (Grad. Sch. Eng., The Univ. of Tokyo) ○NOZAKI, Kyoko (09:30~09:35)

Chair: NOZAKI, Kyoko (9 : 35 ~11 : 15)

**1S3-02 Medium and Long-Term Program Lecture** Catalysis - Unlimited Possibilities (IRI, NAIST) ○MURAI, Shinji (09:35~10:00)

**1S3-03 Medium and Long-Term Program Lecture** Hoping development of new concepts about catalysis functions (Tokyo Tech.) ○AIKA, Ken-ichi (10:00~10:25)

**1S3-04 Medium and Long-Term Program Lecture** Creation of Solid Catalytic Function in Unprecedented Direction (Fac. Eng., Kanagawa Univ.) ○UEDA, Wataru (10:25~10:50)

**1S3-05 Medium and Long-Term Program Lecture** Catalytic Peptide Synthesis for the destructive innovation (Mol. Cat. Res. Center, Chubu Univ.) ○YAMAMOTO, Hisashi (10:50~11:15)

Chair: KITAGAWA, Hiroshi (11 : 15~12 : 30)

**1S3-06 Medium and Long-Term Program Lecture** Catalysis and Surface Chemistry (IMS) ○KAWAI, Maki (11:15~11:40)

**1S3-07 Medium and Long-Term Program Lecture** Molecular design of metalloenzymes (Grad. Sch. Sci., Nagoya Univ.) ○WATANABE, Yoshihito (11:40~12:05)

**1S3-08 Medium and Long-Term Program Lecture** Precise control over hydrocarbon compounds structures (Mitsui Chemicals, Incorporated) ○FUJITA, Terunori (12:05~12:30)

### Molecular Science for Complex Systems: Can we predict functions of complex molecular systems ?

Tuesday, March 20, PM

(13 : 30~13 : 40)

**1S3-09 Medium and Long-Term Program Lecture** Opening remarks (Sch. Life Sci. Tech., Tokyo Tech.) ○KITAO, Akio (13:30~13:40)

Chair: HAYASHI, Shigehiko (13 : 40~14 : 40)

**1S3-10 Medium and Long-Term Program Lecture** First-principles study of photo-functional materials and heterogeneous catalysis (Inst. for Cat., Hokkaido Univ.) ○NAKAYAMA, Akira (13:40~14:00)

**1S3-11 Medium and Long-Term Program Lecture** Theoretical prediction of optical functional materials by the global reaction route mapping (IRI, NAIST) ○HATANAKA, Miho (14:00~14:20)

**1S3-12 Medium and Long-Term Program Lecture** Molecular dynamics simulations of Glass-forming liquids: Understanding the molecular mechanism of drastic slowing down (Grad. Sch. Eng. Sci., Osaka Univ.) ○KIM, Kang (14:20~14:40)

Chair: TAKAHASHI, Satoshi (14 : 55~15 : 55)

**1S3-13 Medium and Long-Term Program Lecture** New Reactions, New Materials, and New Functions based on Integration of Theoretical Calculation and Synthetic Chemistry (Grad. Sch. Pharm., The Univ. of Tokyo) ○UCHIYAMA, Masanobu (14:55~15:15)

**1S3-14 Medium and Long-Term Program Lecture** Molecular Encapsulations Attracted by Aromatic Nanospaces: Biomolecules and Inorganic Clusters (Lab. Chem. Life Sci., Tokyo Tech.) ○YAMASHINA, Masahiro; YOSHIZAWA, Michito (15:15~15:35)

**1S3-15 Medium and Long-Term Program Lecture** Functional Diversity of the Photoactive Protein Rhodopsin and Its Applicability for Artificial Control of the Biological Activities by Light (Grad. Sch. Dent. and

Phar. Sci., Okayama Univ.) ○SUDO, Yuki (15:35~15:55)

Chair: UCHIYAMA, Masanobu (16 : 10~17 : 10)

**1S3-16 Medium and Long-Term Program Lecture** Investigation of the protein dynamics by single molecule fluorescence spectroscopy (IMRAM, Tohoku Univ.) ○TAKAHASHI, Satoshi; OIKAWA, Hiroyuki (16:10~16:30)

**1S3-17 Medium and Long-Term Program Lecture** Bottom-up approach to molecular recognition systems (Lab. Chem. Life Sci., Tokyo Tech.) ○ISHIUCHI, Shunichi (16:30~16:50)

**1S3-18 Medium and Long-Term Program Lecture** Probing molecular functions by fluorescence correlation analysis (Molecular Spectroscopy Lab., RIKEN) ○ISHII, Kunihiko (16:50~17:10)

(17 : 10~17 : 30)

**1S3-19 Medium and Long-Term Program Lecture** Concluding discussion (Sch. Life Sci. Tech., Tokyo Tech.) ○KITAO, Akio (17:10~17:30)

### Elucidation of the molecular mechanism of photosynthesis and development of artificial photosynthesis systems

Wednesday, March 21, PM

(13 : 30~13 : 35)

**2S3-01 Medium and Long-Term Program Lecture** Opening Remarks (Grad. Sch. Eng., Kyoto Univ.) ○ABE, Ryu (13:30~13:35)

Chair: KUDO, Akihiko (13 : 35~14 : 15)

**2S3-02 Medium and Long-Term Program Lecture** Recent progress and future prospects of artificial photosynthesis (Grad. Sch. Eng., The Univ. of Tokyo; X-Breed, Shinshu Univ.) ○DOMEN, Kazunari (13:35~14:15)

Chair: INOUE, Haruo (14 : 15~15 : 15)

**2S3-03 Medium and Long-Term Program Lecture** Structure and function of water-splitting and oxygen-evolving photosystem II in natural photosynthesis (OCARINA) ○KAMIYA, Nobuo (14:15~14:45)

**2S3-04 Medium and Long-Term Program Lecture** Molecular mechanism of electron-transfer regulation in natural photosynthesis (Grad. Sch. Sci., Nagoya Univ.) ○NOGUCHI, Takumi (14:45~15:15)

Chair: ABE, Ryu (15 : 25~16 : 25)

**2S3-05 Medium and Long-Term Program Lecture** Water splitting and carbon dioxide reduction using semiconductor photocatalysts (Fac. Sci., TUS) ○KUDO, Akihiko (15:25~15:55)

**2S3-06 Medium and Long-Term Program Lecture** State-of-the-art researches on CO<sub>2</sub> reduction photocatalysts with metal complexes as main players (Sch. Sci., Tokyo Tech.) ○ISHITANI, Osamu (15:55~16:25)

Chair: HASHIMOTO, Hideki (16 : 25~17 : 25)

**2S3-07 Medium and Long-Term Program Lecture** Time-resolved x-ray structural analysis for photochemical reactions in natural and artificial photosynthesis (KEK) ○NOZAWA, Shunsuke (16:25~16:55)

**2S3-08 Medium and Long-Term Program Lecture** Control of selective oxidation of water molecule for construction of artificial photosynthesis (Grad. Sch. Urban Environmental Sci., TMU) ○INOUE, Haruo (16:55~17:25)

(17 : 25~17 : 30)

**2S3-09 Medium and Long-Term Program Lecture** Closing Remarks (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○HASHIMOTO, Hideki (17:25~17:30)

### Development and application of the molecular analytical devices to elucidate the function of the cells, tissues and organs

Thursday, March 22, PM

(13 : 30~13 : 40)

**3S3-01 Medium and Long-Term Program Lecture** Opening remarks (Grad. Sch. Eng., Osaka Univ.) ○TAMIYA, Eiichi (13:30~13:40)

Chair: TAMIYA, Eiichi (13 : 40~15 : 40)

**3S3-02 Medium and Long-Term Program Lecture** Single Cell Level Receptor Profiling Platform for Immune Cells Characterization (Grad. Sch. Eng., Osaka Univ.) ○SAITO, Masato (13:40~14:20)

**3S3-03 Medium and Long-Term Program Lecture** 3D tissue construction by microfluidic device technology (IIS, The Univ. of Tokyo) ○TAKEUCHI, Shoji (14:20~15:00)

**3S3-04 Medium and Long-Term Program Lecture** Organ-on-chips Based-on Microfluidic technology (Sch. Eng., Tokai Univ.; MNTC, Tokai Univ.) ○KIMURA, Hiroshi (15:00~15:40)

Chair: FUJITA, Satoshi (15 : 50~17 : 10)

**3S3-05 Medium and Long-Term Program Lecture** Integration of imaging and RNA-seq for understanding of spatial biomolecule distribution in tissue samples (Research Org. for Nano & Life Innovation, Waseda Univ.) ○HOSOKAWA, Masahito (15:50~16:30)

**3S3-06 Medium and Long-Term Program Lecture** Design of molecularly imprinted polymers for realtime fluorescence detection of intact exosomes (Grad. Sch. Eng., Kobe Univ.) ○TAKEUCHI, Toshifumi (16:30~17:10)

(17 : 10~17 : 20)

**3S3-07 Medium and Long-Term Program Lecture** Conclusive Remarks (BRI, AIST) ○FUJITA, Satoshi (17:10~17:20)

## Color Materials Science: Coloration Principles and Stimuli-Responsivity

Friday, March 23, AM

(9 : 30 ~ 9 : 40)

**4S3-01# Special Program Lecture** Opening remarks (RCFM, NIMS) ○HIGUCHI, Masayoshi (09:30~09:40)

Chair: TAKAGI, Shinsuke (9 : 40 ~ 10 : 20)

**4S3-02# Special Program Lecture** Electrochromism of metallo-supramolecular polymer (RCFM, NIMS) ○HIGUCHI, Masayoshi (09:40~10:00)

**4S3-03# Special Program Lecture** Electrochemical control of optical properties of photo-functional materials (Grad. Sch. Eng., Chiba Univ.) ○NAKAMURA, Kazuki (10:00~10:20)

Chair: TAKEOKA, Yukikazu (10 : 30~11 : 30)

**4S3-04# Special Program Lecture** Molecular Self-assembled Colorimetric Chemosensor Arrays (IIS, The Univ. of Tokyo) ○MINAMI, Tsuyoshi (10:30~10:50)

**4S3-05# Special Program Lecture** Unique absorption and emission behavior of layered materials - dyes complexes (Grad. Sch. Urban Environmental Sci., TMU) ○TAKAGI, Shinsuke (10:50~11:10)

**4S3-06# Special Program Lecture** Plasmonic nanoparticles and the coherent interaction with dye molecules (RCFM, NIMS) ○EGUCHI, Miharuru; UENO, Kosei; MISAWA, Hiroaki (11:10~11:30)

Chair: HIGUCHI, Masayoshi (11 : 40~12 : 20)

**4S3-07# Special Program Lecture** Structural colored materials by black and white components (Grad. Sch. Eng., Nagoya Univ.) ○TAKEOKA, Yukikazu (11:40~12:00)

**4S3-08# Special Program Lecture** Robust structural color coatings prepared via electrophoretic deposition (Grad. Sch. Eng., Hiroshima Univ.) ○KATAGIRI, Kiyofumi (12:00~12:20)

(12 : 20~12 : 25)

**4S3-09# Special Program Lecture** Closing remarks (Grad. Sch. Eng., Nagoya Univ.) ○TAKEOKA, Yukikazu (12:20~12:25)

## Manipulation with optical forces to construct nanomaterials functions

Friday, March 23, PM

(13 : 30~13 : 35)

**4S3-10# Special Program Lecture** Introductory remarks (IMS) ○OKAMOTO, Hiromi (13:30~13:35)

Chair: TORIMOTO, Tsukasa (13 : 35~14 : 15)

**4S3-11# Special Program Lecture** Laser trapping and microspectroscopy of single water droplets in air (Grad. Sch. Sci., Hiroshima Univ.) ○ISHIZAKA, Shoji (13:35~13:55)

**4S3-12# Special Program Lecture** Non-plasmonic nanostructured semiconductor assisted (NASSCA) optical tweezers (Grad. Sch. Sci., Osaka City Univ.) ○TSUBOI, Yasuyuki (13:55~14:15)

Chair: OKAMOTO, Hiromi (14 : 15~15 : 05)

**4S3-13# Special Program Lecture** Biomolecule enabled chirality in single nanoparticle (SNU) ○NAM, Ki Tae (14:15~14:45)

**4S3-14# Special Program Lecture** Crystallization control with optical forces (National Chiao Tung Univ.) ○SUGIYAMA, Teruki (14:45~15:05)

Chair: MURAKOSHI, Kei (15 : 05~15 : 45)

**4S3-15# Special Program Lecture** Solution phase synthesis of multi-ary quantum dots and their photofunctionality (Grad. Sch. Eng., Nagoya Univ.) ○TORIMOTO, Tsukasa (15:05~15:25)

**4S3-16# Special Program Lecture** Orientational control of nanosheet by laser irradiation (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○SUZUKI, Yasutaka (15:25~15:45)

Chair: TSUBOI, Yasuyuki (15 : 45~16 : 25)

**4S3-17# Special Program Lecture** Possibility for room-temperature molecular manipulation at electrified interfaces (Fac. Sci., Hokkaido Univ.) ○MURAKOSHI, Kei (15:45~16:05)

**4S3-18# Special Program Lecture** Optical trapping and deposition of molecular nanoparticles in the nanogap of plasmonic antennas (RIES, Hokkaido Univ.) ○PIN, Christophe; ISHIDA, Shutaro; TAKAHASHI, Genta; FUKAMINATO, Tuyoishi; SASAKI, Keiji (16:05~16:25)

(16 : 25~16 : 30)

**4S3-19# Special Program Lecture** Closing remarks (Hitachi High-Technologies Corp.) ○INABA, Ryoji (16:25~16:30)

## Room S4

Bldg. 14 1422

## New Strategy for Discovery of Bioactive Molecules for Chemical Biology

Tuesday, March 20, AM

(9 : 30 ~ 9 : 35)

**1S4-01 Medium and Long-Term Program Lecture** Opening remark (Grad. Sch. Pharm., The Univ. of Tokyo) ○INOUE, Masayuki (09:30~09:35)

Chair: KAKEYA, Hideaki (9 : 35 ~ 10 : 05)

**1S4-02 Medium and Long-Term Program Lecture** Generation of OBOC Library of Peptide Natural Products (Grad. Sch. Pharm., The Univ. of Tokyo) ○INOUE, Masayuki (09:35~10:05)

Chair: INOUE, Masayuki (10 : 05~10 : 35)

**1S4-03 Medium and Long-Term Program Lecture** Advanced lipidomics strategy to identify bioactive lipids (Fac. Pharm., Keio Univ.) ○ARITA, Makoto (10:05~10:35)

Chair: ARITA, Makoto (10 : 35~11 : 05)

**1S4-04 Medium and Long-Term Program Lecture** Development of macrocyclic peptides exhibiting covalent inhibition with tubable reactivities (Grad. Sch. Sci., The Univ. of Tokyo) ○ZAWA, Naoya; ○GOTO, Yuki; SUGA, Hiroaki (10:35~11:05)

Chair: GOTO, Yuki (11 : 05~11 : 35)

**1S4-05 Medium and Long-Term Program Lecture** Screening of ligands for protein interactions based on physicochemical analyses (Grad. Sch. Eng., The Univ. of Tokyo; IMS, The Univ. of Tokyo) ○TSUMOTO, Kohei; NAGATOISHI, Satoru (11:05~11:35)

Chair: TSUMOTO, Kohei (11 : 35~12 : 05)

**1S4-06 Medium and Long-Term Program Lecture** Investigation of chemical communication among microbes to find bioactive small molecules (Grad. Sch. Pharm. Sci., Kyoto Univ.) ○KAKEYA, Hideaki (11:35~12:05)

(12 : 05~12 : 10)

**1S4-07 Medium and Long-Term Program Lecture** Closing remarks (Grad. Sch. Pharm. Sci., Kyoto Univ.) ○KAKEYA, Hideaki (12:05~12:10)

## Molecular Design and Molecular Technology: Creation of New Functions for Innovation

Tuesday, March 20, PM

(13 : 35~13 : 40)

**1S4-08 Medium and Long-Term Program Lecture** Introduction of Molecular Technology, CREST & PRESTO (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Takashi (13:35~13:40)

Chair: YAMAZOE, Seiji (13 : 40~14 : 40)

**1S4-09 Medium and Long-Term Program Lecture** Porous Molecular Conductors Synthesized by Using pi-pi Interaction and Coordination Bonds (Grad. Sch. Sci., Tohoku Univ.) ○IGUCHI, Hiroaki (13:40~13:55)

**1S4-10 Medium and Long-Term Program Lecture** Photocatalytic CO<sub>2</sub> Reduction using Metal Complexes for Elements Strategy (Sch. Sci., Tokyo Tech.) ○TAKEDA, Hiroyuki; ISHITANI, Osamu (13:55~14:10)

**1S4-11 Medium and Long-Term Program Lecture** Physical Property Measurement Methods under Applied Electric Fields (Grad. Sch. Sci., Osaka Univ.) ○YAMASHITA, Satoshi; NAKAZAWA, Yasuhiro (14:10~14:25)

**1S4-12 Medium and Long-Term Program Lecture** Molecular technology enabling the control of the main chain helical chirality and its applications for the development of new materials (Grad. Sch. Eng., Kyoto Univ.) ○NAGATA, Yuuya (14:25~14:40)

Chair: KARASAWA, Satoru (14 : 50~15 : 50)

**1S4-13 Medium and Long-Term Program Lecture** Base catalytic application of polyanion metal oxide clusters (Grad. Sch. Sci. Eng., TMU) ○YAMAZOE, Seiji (14:50~15:05)

**1S4-14 Medium and Long-Term Program Lecture** Novel Macromolecular Technology for Versatile Copolymers via Multiple Active Species (Grad. Sch. Eng., Nagoya Univ.) ○SATO, Kotaro (15:05~15:20)

**1S4-15 Medium and Long-Term Program Lecture** Creation of Molecular Technology and Catalysis Featuring Control of Proton/Electron Movement (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KUWATA, Shigeki (15:20~15:35)

**1S4-16 Medium and Long-Term Program Lecture** Preparation of Heterocycles by Using Catalytic C-H Bond Activation and Its Synthetic Application to Functional Molecules (Sch. Life Sci. Tech., Tokyo Tech.) ○HATA, Takeshi (15:35~15:50)

Chair: HATA, Takeshi (15 : 55~17 : 10)

**1S4-17 Medium and Long-Term Program Lecture** Development of molecular technology for control over photonic spin (Fac. Sci., TUS) ○YUASA, Junpei (15:55~16:10)

**1S4-18 Medium and Long-Term Program Lecture** Local optical activity on chiral materials for molecular technology (Center for Mesoscopic Sci., IMS) ○NARUSHIMA, Tetsuya (16:10~16:25)

**1S4-19 Medium and Long-Term Program Lecture** Dynamical study in molecular scale using coherent X-rays (RIKEN Spring-8 Center) ○HOSHINO, Taiki (16:25~16:40)

**1S4-20 Medium and Long-Term Program Lecture** The biocompatible polymers with graft and ester free structure (IRI, NAIIST) ○AJIRO, Hiroharu (16:40~16:55)

**1S4-21 Medium and Long-Term Program Lecture** Developments of Thermos-responsive Nano-Particles Capable of Disease Imaging (Showa Pharm. Univ.) ○KARASAWA, Satoru (16:55~17:10)

(17 : 10~17 : 25)

**1S4-22 Medium and Long-Term Program Lecture** Closing Remarks (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Takashi (17:10~17:25)

## Special Lecture

Wednesday, March 21, AM

Chair: SAITO, Susumu (10 : 00~10 : 50)

**2S4-01# Special Lecture** Some New Perspectives on the Efficient Outer Sphere Hydrogenation of Carbonyl Containing Substrates (Los Alamos National Laboratory, USA) ○GORDON, John C.; DUB, Pavel A. (10:00~10:50)

Chair: MASHIMA, Kazushi (11 : 00~11 : 50)

**2S4-02# Special Lecture** Synthesis and reactivity of transition metal borylimido compounds (Univ. of Oxford) ○PHILIP, Mountford (11:00~11:50)

Thursday, March 22, AM

Chair: SUEMATSU, Shunzo (10 : 00~10 : 50)

**3S4-01# Special Lecture** Advanced Nano-Materials for Capacitive Energy Storage (JME, Inc.) ○JOHN R., Miller (10:00~10:50)

## High-energy Processing in Liquid

Friday, March 23, AM

(9 : 30 ~9 : 35)

**4S4-01# Special Program Lecture** Opening remarks (Grad. Sch. Sci., Osaka City Univ.) ○YATSUHASHI, Tomoyuki (09:30~09:35)

Chair: NAKAMURA, Takahiro (9 : 35 ~11 : 05)

**4S4-02# Special Program Lecture** Microwave chemistry and in-liquid plasma using semiconductor power devices (Sci. Tec., Sophia Univ.) ○HORIKOSHI, Satoshi (09:35~10:00)

**4S4-03# Special Program Lecture** Introduction of nanoparticle producing equipment using LASER ablation in liquid (Hamamatsu Nano Technology Inc.) ○KAWAKAMI, Tomonori (10:00~10:25)

**4S4-04# Special Program Lecture** Laser processes utilizing high energy state induced at liquid-solid interface (RISC, AIST) ○SATO, Tadateki (10:25~10:45)

**4S4-05# Special Program Lecture** Time-resolved XAFS studies on laser-induced particle formation of palladium metal in an aqueous solution

(QuBS) ○SAEKI, Morihisa (10:45~11:05)

Chair: SUGIYAMA, Teruki (11 : 20~12 : 30)

**4S4-06# Special Program Lecture** Nanoparticle formation by laser ablation of perylene microcrystals in an aqueous surfactant solution (Fac. Sci., Univ. of Ryukyus) ○TAMAKI, Yoshiaki (11:20~11:45)

**4S4-07# Special Program Lecture** Improved synthesis of luminescent Si nanoparticles by pulsed laser irradiation of porous structures in liquid (Fac. Sci. Eng., Hosei Univ.) ○NAKAMURA, Toshihiro; YUAN, Ze (11:45~12:10)

**4S4-08# Special Program Lecture** Laser Parameter Effect on Particle Obtained by Pulsed Laser Melting in Liquid (NRI, AIST) ○ISHIKAWA, Yoshie; SAKAKI, Shota; KOSHIZAKI, Naoto (12:10~12:30)

## Next-generation photofunctional materials innovated by dimensional reaction fields

Friday, March 23, PM

(13 : 30~13 : 35)

**4S4-09 Special Program Lecture** Opening remarks (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○KAWAMATA, Jun (13:30~13:35)

Chair: YUI, Tatsuto (13 : 35~14 : 55)

**4S4-10 Special Program Lecture** Phase-resolved attosecond electron wavepacket imaging (Sch. Advanced Sci. Eng., Waseda Univ.) ○NIKURA, Hiromichi (13:35~14:05)

**4S4-11 Special Program Lecture** Single-molecule level analysis of nucleic acids structure based on the observation of fluorescence blinking (ISIR, Osaka Univ.) ○KAWAI, Kiyohiko (14:05~14:30)

**4S4-12 Special Program Lecture** Observation of reaction site for photocatalytic reaction using semiconducting nanosheet (Fac. Eng., Kumamoto Univ.) ○IDA, Shintaro (14:30~14:55)

Chair: EGUCHI, Miharuru (15 : 05~16 : 25)

**4S4-13 Special Program Lecture** Two-dimensional materials as photochemical reaction fields (Grad. Sch. Urban Environmental Sci., TMU) ○TAKAGI, Shinsuke (15:05~15:30)

**4S4-14 Special Program Lecture** Dimensionality in photon upconversion (Grad. Sch. Eng., Kyushu Univ.) ○YANAI, Nobuhiro (15:30~15:55)

**4S4-15 Special Program Lecture** Three-dimensional environment and chromophore characteristics in fluorescent proteins (ISIR, Osaka Univ.) ○NAGAI, Takeharu (15:55~16:25)

(16 : 25~16 : 30)

**4S4-16 Special Program Lecture** Closing remarks (Fac. Eng., Niigata Univ.) ○YUI, Tatsuto (16:25~16:30)

**Room S5**

Bldg. 14 1423

## Precise organic synthesis and functional materials based on molecular space

Tuesday, March 20, AM

(9 : 30 ~9 : 35)

**1S5-01# Special Program Lecture** Introduction (Grad. Sch. Fish. & Env. Sci., Nagasaki Univ.) ○SHIRAKAWA, Seiji (09:30~09:35)

Chair: IMAHORI, Tatsushi (9 : 35 ~11 : 15)

**1S5-02# Special Program Lecture** Catalysis of Trialkylsulfonium Salts (Grad. Sch. Fish. & Env. Sci., Nagasaki Univ.) ○SHIRAKAWA, Seiji (09:35~10:05)

**1S5-03# Special Program Lecture** The Interplay between Experiment and Computation: Rational Design of Chiral Space in Asymmetric Catalysis (Coll. Sci., Rikkyo Univ.) ○YAMANAKA, Masahiro (10:05~10:40)

**1S5-04# Special Program Lecture** Cooperative Molecular Recognition and Catalysis (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○EMA, Tadashi (10:40~11:15)

Chair: KUMAGAI, Naoya (11 : 25~12 : 30)

**1S5-05# Special Program Lecture** Photoinduced Domino Reactions of Terminally-Fluorinated Stilbene Derivatives (Fac. Sci., Yamagata Univ.) ○MURASE, Takashi (11:25~11:55)

**1S5-06# Special Program Lecture** Spatial Control around the Active Site in Homogeneous Catalysis: Ligand Effect (Grad. Sch. Eng., The Univ. of Tokyo) ○NOZAKI, Kyoko (11:55~12:30)

## Emerging approaches for bioanalysis

Tuesday, March 20, PM

(13 : 30~13 : 35)

**1S5-07 Special Program Lecture** Aim (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○SATO, Moritoshi (13:30~13:35)

Chair: NAKANISHI, Jun (13 : 35~13 : 50)

**1S5-08 Special Program Lecture** Manipulating living systems by light (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○SATO, Moritoshi (13:35~13:50)

Chair: SATO, Moritoshi (13 : 50~16 : 25)

**1S5-09 Special Program Lecture** Bioimaging applications of functional molecule localization technologies (IMRAM, Tohoku Univ.) ○MIZUKAMI, Shin (13:50~14:15)

**1S5-10 Special Program Lecture** Biosensing using Organic Thin Film Transistors (IIS, The Univ. of Tokyo) ○MINAMI, Tsuyoshi (14:15~14:40)

**1S5-11 Special Program Lecture** Integration of hardware/software technologies toward standardization of IoT Olfactory Sensing Systems (MANA, NIMS) ○YOSHIKAWA, Genki (14:40~15:05)

**1S5-12 Special Program Lecture** Microfluidic Devices for Sorting and Precise Chemical Processing of Cells (Grad. Sch. Eng., Chiba Univ.) ○YAMADA, Masumi; SEKI, Minoru (15:10~15:35)

**1S5-13 Special Program Lecture** A single bacterium and a single cell analysis by microfluidic devices (Grad. Sch. Eng., Kyushu Univ.) ○KAJI, Noritada; YASUI, Takao; BABA, Yoshinobu (15:35~16:00)

**1S5-14 Special Program Lecture** Commercialization of microfluidic system. (Inst. Micro. Tech. Co., Ltd.) ○TAZAWA, Hidekatsu (16:00~16:10)

**1S5-15 Special Program Lecture** Active watching of cell migration (MANA, NIMS) ○NAKANISHI, Jun (16:10~16:25)

(16 : 25~16 : 30)

**1S5-16 Special Program Lecture** Summary (MANA, NIMS) ○NAKANISHI, Jun (16:25~16:30)

## Interdisciplinary approaches to dynamics of biometals and "biometals science"

Friday, March 23, AM

(9 : 30 ~ 9 : 31)

**4S5-01 Special Program Lecture** Introduction (Okazaki Institute for Integrative Bioscience) ○AONO, Shigetoshi (09:30~09:31)

Chair: AONO, Shigetoshi (9 : 31 ~ 11 : 00)

**4S5-02 Special Program Lecture** X-ray crystal structure analysis in metalloproteins. (Grad. Sch. Med. Life Sci., Yokohama City Univ.) ○PARK, Sam-yong (09:31~10:00)

**4S5-03 Special Program Lecture** Observation of Enzymatic Reaction by Time-resolved X-ray Crystallography Using X-ray Free Electron Laser (RIKEN Spring-8 Center) ○TOSHA, Takehiko (10:00~10:30)

**4S5-04 Special Program Lecture** Native Mass Spectrometry -Application to nucleosomes and metal proteins- (Grad. Sch. Med. Life Sci., Yokohama City Univ.) ○AKASHI, Satoko (10:30~11:00)

Chair: SHIRO, Yoshitsugu (11 : 00~12 : 30)

**4S5-05 Special Program Lecture** Biochemical imaging for dynamics of uranium distribution and tissue effects in kidney (NIRS) ○TAKEDA, Shino (11:00~11:30)

**4S5-06 Special Program Lecture** Investigating protein 3D structures in living cells by paramagnetic in-cell NMR (Grad. Sch. Sci. Eng., TMU) ○ITO, Yutaka (11:30~12:00)

**4S5-07 Special Program Lecture** Approach of theoretical and computational science to the structure and reactivity of metalloenzymes (IMCE, Kyushu Univ.) ○YOSHIZAWA, Kazunari (12:00~12:30)

## Collaboration between dentistry and chemistry for QOL improvement

Friday, March 23, PM

(13 : 30~13 : 35)

**4S5-08 Special Program Lecture** Objective of the session (Center for Promotion of Higher Edu., Kogakuin Univ.) ○MOCHIZUKI, Chihiro (13:30~13:35)

Chair: OKADA, Koichi (13 : 35~14 : 30)

**4S5-09 Special Program Lecture** Dental materials and chemistry (Tsurumi Univ.) ○HAYAKAWA, Tohru (13:35~14:05)

**4S5-10 Special Program Lecture** Chemistry of organic-inorganic hy-

brid material for dental use (Tokuyama Dental Co., Ltd.) ○KAZAMA, Hideki (14:05~14:30)

Chair: MATSUMURA, Yuriko (14 : 30~15 : 20)

**4S5-11 Special Program Lecture** Dental adhesive resin (Sun Medical Co., Ltd.) ○ORI, Tatsuya (14:30~14:55)

**4S5-12 Special Program Lecture** Dental crown & bridge materials for metal-free restoration (Kuraray Noritake Dental Inc.) ○OKADA, Koichi (14:55~15:20)

Chair: MOCHIZUKI, Chihiro (15 : 20~16 : 20)

**4S5-13 Special Program Lecture** Dental materials for denture construction (Tsurumi Univ.) ○OHKUBO, Chikahiro (15:20~15:50)

**4S5-14 Special Program Lecture** Materials science for oral and maxillofacial implants (Tokyo Dental Coll.) ○YOSHINARI, Masao (15:50~16:20)

# Room S6

Bldg. 14 1424

## Sustainable, Functional Redox Chemistry Contributes to Super Smart Society

Tuesday, March 20, AM

(9 : 30 ~ 9 : 35)

**1S6-01 Special Program Lecture** Opening remarks (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○INAGI, Shinsuke (09:30~09:35)

Chair: SENBOKU, Hisanori (9 : 35 ~ 10 : 25)

**1S6-02 Special Program Lecture** Visible-Light Radical Functionalization by Photoredox Catalysis (IIR, Tokyo Tech.) ○KOIKE, Takashi (09:35~10:00)

**1S6-03 Special Program Lecture** Selective oxygenation using organic photoredox catalysts (IACS, Osaka Univ.; OTRI, Osaka Univ.) ○OHKUBO, Kei (10:00~10:25)

Chair: MAEKAWA, Hirofumi (10 : 25~11 : 20)

**1S6-04 Special Program Lecture** Visible-light induced perfluoroalkylation using organoredox catalyst (Fac. Core Res., Ochanomizu Univ.) ○YAJIMA, Tomoko (10:25~10:50)

**1S6-05 Special Program Lecture** Development of Flow Chemical Synthetic Processes Driven by Electrical Energy (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○ATOBE, Mahito (10:50~11:20)

Chair: IKEDA, Hiroshi (11 : 20~12 : 25)

**1S6-06 Special Program Lecture** Development of Fluorescent Sensors for Detection, Quantification and Visualization of Water (Grad. Sch. Eng., Hiroshima Univ.) ○OOYAMA, Yousuke (11:20~11:45)

**1S6-07 Special Program Lecture** Improved Performance of a Conducting-bridge Random Access Memory (CB-RAM) Device Using Ionic Liquid Engineering (Grad. Sch. Eng., Tottori Univ.) ○ITOH, Toshiyuki; NOKAMI, Toshiki; HYASE, Shuichi; KINOSHITA, Kentaro (11:45~12:25)

## Synchrotron Micro- and Powder Crystal Structure Analysis for Chemists

Tuesday, March 20, PM

(13 : 30~13 : 35)

**1S6-08 Special Program Lecture** Introduction (JASRI) ○SAKATA, Makoto (13:30~13:35)

Chair: TAKAYA, Hikaru (13 : 35~14 : 35)

**1S6-09 Special Program Lecture** Recent development of SHELX program system for single-crystal X-ray analysis and some practical advice (REC for NS, Keio Univ.) ○OHBA, Shigeru (13:35~14:05)

**1S6-10 Special Program Lecture** Use of CheckCIF for crystal structure publication (Sch. Sci., Tokyo Tech.) ○UEKUSA, Hidehiro (14:05~14:35)

Chair: HONMA, Tetsuo (14 : 35~15 : 45)

**1S6-11 Special Program Lecture** Fundamentals and Applications of Pair-Distribution Function Analysis Using Synchrotron X-ray (JASRI) ○SUGIMOTO, Kunihisa (14:35~15:00)

**1S6-12 Special Program Lecture** Impact of powder structural analysis for advanced battery development using synchrotron X-ray (NISSAN ARC, LTD.) ○ITOH, Takanori; IMAI, Hideto (15:00~15:20)

**1S6-13 Special Program Lecture** Rapid and Tiny Single Crystal Structure Analysis Using Synchrotron Radiation (JASRI) ○YASUDA,

Nobuhiro (15:20~15:45)

Chair: TAKAYA, Hikaru (15:45~16:30)

- 1S6-14 Special Program Lecture** Single Crystal X-Ray Crystallographic Analysis for Organic Small Molecules using the Yadokari-software. (Grad. Sch. Nat. Sci., Nagoya City Univ.) ○SASAMORI, Takahiro (15:45~16:05)
- 1S6-15 Special Program Lecture** What's Happening for the Crystal Structure Analysis: Treatments of Space Group Determination and Twinned Crystals, Practical Examples (Coll. Sci., Rikkyo Univ.) ○MINOURA, Mao (16:05~16:30)

## Mechanical Materials for Soft Robotics

Friday, March 23, AM

(9:30~9:40)

- 4S6-01 Special Program Lecture** Opening Remarks (Research Org. for Nano & Life Innovation, Waseda Univ.) ○KOSHIMA, Hideko (09:30~09:40)

Chair: ASahi, Toru (9:40~10:10)

- 4S6-02 Special Program Lecture** Soft Robotics with new materials (Fac. Sci. Eng., Waseda Univ.) ○SUGANO, Shigeki (09:40~10:10)

Chair: NAKAI, Hidetaka (10:10~11:00)

- 4S6-03 Special Program Lecture** Photoresponsive photomechanical microcrystals (Grad. Sch. Eng., Osaka City Univ.) ○KOBATAKE, Seiya (10:10~10:35)

- 4S6-04 Special Program Lecture** Design of Thermoslient Crystals (Sch. Life Sci. Tech., Tokyo Tech.) ○KINBARA, Kazushi (10:35~11:00)

Chair: TSUTSUMI, Osamu (11:00~11:50)

- 4S6-05 Special Program Lecture** Development of Photomobile Materials Based on Crosslinked Liquid-Crystalline Polymers (Research and Development Initiative, Chuo Univ.) ○UBE, Toru (11:00~11:25)

- 4S6-06 Special Program Lecture** Application of plastic materials to robotics (Mitsui Chemicals, Incorporated) ○TAWA, Tsutomu (11:25~11:50)

Chair: KOSHIMA, Hideko (11:50~12:20)

- 4S6-07 Special Program Lecture** Construction of Mechanical Materials Using Cyclodextrins (Grad. Sch. Sci., Osaka Univ.) ○HARADA, Akira (11:50~12:20)

(12:20~12:30)

- 4S6-08 Special Program Lecture** Closing Remarks (Research Center for Smart Molecules, Rikkyo Univ.) ○IRIE, Masahiro (12:20~12:30)

## Importance of recording study evidence and Encouragement of using electronic

Friday, March 23, PM

(13:30~13:35)

- 4S6-09 Special Program Lecture** Why labo note in academia? (CAC Croit Corp.) ○OKAJIMA, Nobuyuki (13:30~13:35)

Chair: OKAJIMA, Nobuyuki (13:35~14:40)

- 4S6-10 Special Program Lecture** Importance of study record preservation and usability of electronic lab-notebook (Lab-Consultation Co., Ltd.) ○SHIMAMOTO, Tetsuo (13:35~14:00)

- 4S6-11 Special Program Lecture** Utilization of electronic experiment notebooks at a chemical company research institute (Nard Inst., Ltd.) ○MIYAMOTO, Atsuo (14:00~14:20)

- 4S6-12 Special Program Lecture** What to expect from ELN (Fac. Sci. Eng., Waseda Univ.) ○YAMAGUCHI, Junichiro (14:20~14:40)

Chair: SHIMAMOTO, Tetsuo (14:50~16:20)

- 4S6-13 Special Program Lecture** Chronicle of lab notebook in MASE laboratory at Shizuoka University (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○MASE, Nobuyuki (14:50~15:10)

- 4S6-14 Special Program Lecture** Usage example of the Electronic Lab-Notebook in the field of an organic reaction development (Grad. Sch. Eng., Hiroshima Univ.) ○KOMEYAMA, Kimihiro (15:10~15:30)

- 4S6-15 Special Program Lecture** Electronic laboratory notebook to manage and store the research records in university (Grad. Sch. Sci., Osaka Univ.) ○MAKI, Yuta (15:30~15:55)

- 4S6-16 Special Program Lecture** Cooperation of Electronic Laboratory Notebook (ELN) with Artificial Intelligence (AI) Technique (Fac. Sci. Eng., Waseda Univ.) ○NAKAI, Hiromi (15:55~16:20)

(16:20~16:25)

- 4S6-17 Special Program Lecture** Why labo note in academia? (CAC Croit Corp.) ○OKAJIMA, Nobuyuki (16:20~16:25)

## Room S7

Bldg. 14 1431

## Crystals from Light

Friday, March 23, PM

- 4S7-01 Special Program Lecture** Introduction (Grad. Sch. Sci. Tech., Gunma Univ.) ○OKUTSU, Tetsuo (13:30~13:35)

Chair: ITO, Fuyuki (13:35~14:25)

- 4S7-02 Special Program Lecture** Optical trapping method toward crystal chemistry (National Chiao Tung Univ.) ○SUGIYAMA, Teruki (13:35~14:00)

- 4S7-03 Special Program Lecture** Chiral asymmetry on chiral crystallization in chiral optical field (Grad. Sch. Eng., Chiba Univ.) ○NIINOMI, Hiromasa; SUGIYAMA, Teruki; TAGAWA, Miho; UJIHARA, Toru; MARUYAMA, Mihoko; MORI, Yusuke; MIYAMOTO, Katsuhiko; OMATSU, Takashige (14:00~14:25)

Chair: NIINOMI, Hiromasa (14:35~15:50)

- 4S7-04 Special Program Lecture** Promotion of protein crystal growth by actively switching crystal growth mode via femtosecond laser ablation (ILE, Osaka Univ.; Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) ○MARUYAMA, Mihoko; YOSHIKAWA, Hiroshi; YOSHIMURA, Masashi; MORI, Yusuke (14:35~15:00)

- 4S7-05 Special Program Lecture** Organic crystal growth dynamics probed by photophysical process (Fac. Edu., Shinshu Univ.) ○ITO, Fuyuki (15:00~15:25)

- 4S7-06 Special Program Lecture** Crystallization by optical alignment of molecules adsorbed on gold surface (Grad. Sch. Sci. Tech., Gunma Univ.) ○OKUTSU, Tetsuo (15:25~15:50)

(15:50~16:00)

- 4S7-07 Special Program Lecture** Future perspective (National Chiao Tung Univ.) ○SUGIYAMA, Teruki (15:50~16:00)

## Room S9

Bldg. 14 1433

## Synthesis of Structurally Complex Natural Products: New Transformations and Strategies

Friday, March 23, PM

- 4S9-01 Special Program Lecture** explanation of the aim (Grad. Sch. Pharm. Sci., Nagoya Univ.) ○YOKOSHIMA, Satoshi (13:30~13:35)

Chair: YOKOSHIMA, Satoshi (13:35~14:40)

- 4S9-02 Special Program Lecture** Nucleophilic Addition to Amides: Development and Application to Total Synthesis of Natural Products (Fac. Sci. Tech., Keio Univ.) ○SATO, Takaaki (13:35~14:00)

Chair: SATO, Takaaki (14:00~14:25)

- 4S9-03 Special Program Lecture** Synthetic studies on natural products with polycyclic systems (Grad. Sch. Pharm. Sci., Nagoya Univ.) ○YOKOSHIMA, Satoshi (14:00~14:25)

Chair: YOKOSHIMA, Satoshi (14:25~14:50)

- 4S9-04 Special Program Lecture** Organic synthesis that makes natural products more functional (Grad. Sch. Pharm., Kyushu Univ.) ○HIRAI, Go (14:25~14:50)

Chair: HIRAI, Go (14:50~15:15)

- 4S9-05 Special Program Lecture** Synthetic studies on complex cage-like alkaloids (Inst. Bio. Sci., Tokushima Univ. Grad. Sch.) ○NAMBA, Kosuke; SATO, Ryota; KOTAKA, Ryota; FUCHIGAMI, Ryuichi; TANINO, Keiji (14:50~15:15)

Chair: NAMBA, Kosuke (15:15~15:40)

- 4S9-06 Special Program Lecture** Modular synthesis of multi-arylated aromatics (Sch. Advanced Sci. Eng., Waseda Univ.) ○YAMAGUCHI, Junichiro (15:15~15:40)

Chair: YAMAGUCHI, Junichiro (15 : 40~16 : 05)

**4S9-07 Special Program Lecture** Asymmetric Total Synthesis of Polycyclic Natural Compound Solanoclepin A (Fac. Sci., Hokkaido Univ.) ○TANINO, Keiji (15:40~16:05)

(16 : 05~16 : 10)

**4S9-08 Special Program Lecture** a closing address (Grad. Sch. Pharm., Kyushu Univ.) ○HIRAI, Go (16:05~16:10)

## Room SC

Bldg. 3 342

### Integration of AI and Single molecular science

Tuesday, March 20, AM

(9 : 30 ~9 : 35)

**1SC-01 Special Program Lecture** Introductory Talk (ISIR, Osaka Univ.) ○TANIGUCHI, Masateru (09:30~09:35)

Chair: KIGUCHI, Manabu (9 : 35 ~10 : 55)

**1SC-02 Special Program Lecture** Integration of a Single-Molecule Sequencing Method with Machine Learning (ISIR, Osaka Univ.; CREST, JST) ○TANIGUCHI, Masateru; WASHIO, Takashi (09:35~09:55)

**1SC-03 Special Program Lecture** Single-molecule dynamics under a strong intermolecular interaction (RIKEN SISL) ○KIM, Yousoo (09:55~10:15)

**1SC-04 Special Program Lecture** Single Molecule Device Having Switching Behavior Induced by Physical Stimulus (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○TAMAKI, Takashi; MINODE, Keigo; NUMAI, Yuichi; OHTO, Tatsuhiko; YAMADA, Ryo; TADA, Hirokazu; TERAU, Jun (10:15~10:35)

**1SC-05 Special Program Lecture** Current-voltage and two-level conductance switch noise characteristics observed for single metal-complex molecule-junctions. (Grad. Sch. Eng. Sci., Osaka Univ.) ○YAMADA, Ryo (10:35~10:55)

Chair: TANIGUCHI, Masateru (11 : 10~12 : 30)

**1SC-06 Special Program Lecture** Electric transport simulation by computational chemistry and data science (CD-FMat, AIST) ○NAKAMURA, Hisao (11:10~11:30)

**1SC-07 Special Program Lecture** Computational electrochemistry with full-atomistic kinetic Monte Carlo simulations (MCES, Tokyo Tech.) ○TADA, Tomofumi (11:30~12:30)

**1SC-08 Special Program Lecture** Properties and Single-Molecule Electric Conduction Behavior of Molecular Wires with Restricted Effective-Conjugation Length (ISIR, Osaka Univ.) ○IE, Yutaka (11:50~12:10)

**1SC-09 Special Program Lecture** Thermopower control with Au atomic junction (Grad. Sch. Sci., Eng., Tokyo Tech.) ○KIGUCHI, Manabu (12:10~12:30)

### Frontiers of Women Young Scientists in Bioorganic Chemistry and Chemical Biology

Tuesday, March 20, PM

(13 : 30~13 : 35)

**1SC-10 Special Program Lecture** Opening remarks (Fac. Agr., Shinshu Univ.) ○OHKANDA, Junko (13:30~13:35)

Chair: OHKANDA, Junko (13 : 35~14 : 25)

**1SC-11 Special Program Lecture** Peptide assembly on a self-assembled peptide scaffold (Grad. Sch. Eng., Kyushu Univ.) ○WAKABAYASHI, Rie (13:35~14:00)

**1SC-12 Special Program Lecture** A novel mechanism of transcriptional regulation by G-quadruplexes: The role of non-coding DNAs during tumor progression (FIBER, Konan Univ.) ○TATEISHI-KARIMATA, Hisae (14:00~14:25)

Chair: NAGATSUGI, Fumi (14 : 35~15 : 25)

**1SC-13 Special Program Lecture** Development of novel functional oligonucleotides for regulation of epigenetic gene expression (Hakubi Center, Kyoto Univ.; Dep. Chem., Sch. Sci., Kyoto Univ.; PRESTO, JST) ○YAMAYOSHI, Asako (14:35~15:00)

**1SC-14 Special Program Lecture** Development of activatable fluorescent probes based on intramolecular spirocyclization (Grad. Sch. Med., The Univ. of Tokyo) ○KAMIYA, Mako; URANO, Yasuteru (15:00~15:25)

Chair: SHIMAMOTO, Keiko (15 : 35~16 : 25)

**1SC-15 Special Program Lecture** Development of target identification methods for investigation of bioactive small molecules. (Grad. Sch. Fac.

Eng., Tokyo Univ. of Agri. and Technol.) ○SAKURAI, Kaori (15:35~16:00)

**1SC-16 Special Program Lecture** Artificial DNA/RNA binding proteins regulating specific gene expression (ICR, Kyoto Univ.) ○IMANISHI, Miki (16:00~16:25)

(16 : 25~16 : 30)

**1SC-17 Special Program Lecture** closing (Bio. Research Inst., Suntory Foundation for Life Sciences) ○SHIMAMOTO, Keiko (16:25~16:30)

## Room SD

Auditorium Room [L]

### Dynamic Ordering in Bio- and Artificial Molecules Out of Equilibrium

Tuesday, March 20, AM

(9 : 30 ~9 : 35)

**1SD-01 Special Program Lecture** Introduction of this session (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○HIRAOKA, Shuichi (09:30~09:35)

Chair: SATO, Hirofumi (9 : 35 ~11 : 00)

**1SD-02 Special Program Lecture** Energy Landscape of the PYP/PBP Complex Molecular System Modulated by Light Signal (Grad. Sch. Mat. Sci., NAIST) ○KAMIKUBO, Hironari (09:35~10:05)

**1SD-03 Special Program Lecture** Cellular Morphogenesis Driven by Protein Self-Assembly and Disassembly (Grad. Sch. Bio. Sci., NAIST) ○INAGAKI, Naoyuki (10:05~10:35)

**1SD-04 Special Program Lecture** Time-dependent evolution of supramolecular assemblies (RCFM, NIMS) ○SUGIYASU, Kazunori (10:35~11:00)

Chair: SUGIYASU, Kazunori (11 : 00~12 : 30)

**1SD-05 Special Program Lecture** Revealing molecular self-assembly process and self-assembly not controlled by equilibrium (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○HIRAOKA, Shuichi (11:00~11:30)

**1SD-06 Special Program Lecture** Theoretical study on stability for nanocubes formed with gear-shaped amphiphile molecules (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○TACHIKAWA, Masanori (11:30~12:00)

**1SD-07 Special Program Lecture** Real time monitoring of self-assembly process by molecular-level theory (Grad. Sch. Eng., Kyoto Univ.) ○SATO, Hirofumi (12:00~12:30)

### Luminescence Chemistry Ensemble: Interplay of Theory and Experiment Toward Rational Material Design

Tuesday, March 20, PM

(13 : 30~13 : 40)

**1SD-08 Special Program Lecture** Opening Remarks (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KONISHI, Gen-ichi (13:30~13:40)

Chair: MUTAI, Toshiki (13 : 40~14 : 10)

**1SD-09 Special Program Lecture** Development of Aggregation Induced Emission Material Based on Minimum Energy Conical Intersection: Theoretical Detection of Internal Conversion (FIFC, Kyoto Univ.) ○SUZUKI, Satoshi; KONISHI, Gen-ichi (13:40~13:55)

**1SD-10 Special Program Lecture** Development of AIEgens by Visualizing the Minimum Energy Conical Intersection (MECI) (Sch. Mater. & Chem. Tech., Tokyo Tech.) SUZUKI, Satoshi; ○KONISHI, Gen-ichi (13:55~14:10)

Chair: TSUJI, Hayato (14 : 10~14 : 40)

**1SD-11 Special Program Lecture** Design of pure blue TADF materials by multiple resonance effect (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○HATAKEYAMA, Takuji (14:10~14:40)

Chair: IKEDA, Hiroshi (14 : 40~15 : 10)

**1SD-12 Special Program Lecture** Potential Abilities of Computational Chemistry for Researches on Properties of Luminescent Materials (HPC Systems Inc.) ○HONDA, Yasushi (14:40~15:10)

Chair: SUENOBU, Tomoyoshi (15 : 10~15 : 40)

**1SD-13 Special Program Lecture** Photoluminescence properties of multinary metal chalcogenide quantum dots with less toxicity (Grad. Sch. Eng., Nagoya Univ.) ○TORIMOTO, Tsukasa (15:10~15:40)

Chair: HASOBE, Taku (15 : 40~16 : 25)

**1SD-14 Special Program Lecture** Novel photophysical properties based on open-shell character: Cooperative approach of theory and experiments (Grad. Sch. Sci., Osaka Univ.) ○KUBO, Takashi; NAKANO, Masayoshi (15:40~16:00)

**1SD-15 Special Program Lecture** Open-shell nature pioneers novel optical properties: A combined theoretical and experimental approach (Grad. Sch. Eng. Sci., Osaka Univ.) KUBO, Takashi; ○NAKANO, Masayoshi (16:00~16:25)

(16 : 25~16 : 30)

**1SD-16 Special Program Lecture** Closing remarks (IIS, The Univ. of Tokyo) ○MUTAI, Toshiki (16:25~16:30)

## Room A1

Bldg. 14 1424

### Infrastructure technology to support the society

Wednesday, March 21, AM

#### State-of-the-art membrane technology 2018

Chair: ARAI, Kazuyoshi (9 : 00 ~12 : 10)

**2A1-01 ATP Keynote Lecture** Introduction of 2018ATP session and Application potentials of advanced adsorption science (Shinshu Univ.) ○KANEKO, Katsumi (09:00~09:50)

**2A1-06 ATP Special Invited Lecture** Frontier in Zeolite Synthesis (Grad. Sch. Eng., The Univ. of Tokyo) ○OKUBO, Tatsuya (09:50~10:30)

**2A1-10 ATP Special Invited Lecture** Adsorptive continuous separation and energy conversion processes (Inst. Sci. Eng., Kanazawa Univ.) ○KODAMA, Akio (10:30~11:10)

**2A1-14 ATP Invited Lecture** Gas separation and purification technology in the industrial gas field. (Taiyo Nippon Sanso Corp.) ○NAKAMURA, Akihiro (11:10~11:40)

**2A1-17 ATP Invited Lecture** Industrialization of mesoporous carbons and its structural characteristics (Toyo Tanso Co.,Ltd.) ○MORISHITA, Takahiro (11:40~12:10)

Wednesday, March 21, PM

Chair: ZETTSU, Nobuyuki (13 : 10~15 : 30)

**2A1-26# ATP Keynote Lecture** From Atoms in cement to Cities: Statistical Physics and Multi-Scale Computer Simulations (MIT) ○ROLAND, J. m., Pellenq (13:10~14:10)

**2A1-32 ATP Special Invited Lecture** Design and synthesis of nanoporous metal complexes showing specific guest adsorption (Grad. Sch. Eng., Nagoya Univ.) ○MATSUDA, Ryotaro (14:10~14:50)

**2A1-36 ATP Invited Lecture** Industrial applications for adsorption & separation processes using activated carbons (Osaka Gas Chemicals Co., Ltd.) ○SEKI, Kenji (14:50~15:20)

**2A1-39 ATP Incubation Time** (15:20~15:30)

Chair: SUGIOKA, Takuo (15 : 30~18 : 00)

**2A1-40 ATP Special Invited Lecture** Expectation for Nanoporous Liquid Crystals (The Univ. of Tokyo) ○KATO, Takashi (15:30~16:10)

**2A1-44 ATP Special Invited Lecture** Current activities and future development of mesoporous materials (Toyota Central R&D Labs., Inc.) ○INAGAKI, Shinji (16:10~16:50)

**2A1-48 ATP Special Invited Lecture** Flux growth and water purifier application of inorganic crystals having ion-exchange performances (X-Breed, Shinshu Univ.) ○TESHIMA, Katsuya; HAYASHI, Fumitaka; SUDARE, Tomohito; ZETTSU, Nobuyuki (16:50~17:30)

**2A1-52 ATP Invited Lecture** Industrial application of porous coordination polymer (PCP, MOF) (NIPPON STEEL & SUMITOMO METAL CORPORATION) ○KAJIRO, Hiroshi (17:30~18:00)

## Room A2

Bldg. 14 1431

### Innovative healthcare technologies

Tuesday, March 20, AM

#### Inorganic biomaterials for medical innovation

(9 : 50 ~10 : 00)

**1A2-06 Introduction** (Kyushu Univ.) ○MASARU, Tanaka (09:50~10:00)

Chair: NAOYUKI, Nishikawa (10 : 00~12 : 00)

**1A2-07 ATP Special Invited Lecture** One-pot wet-chemical synthesis of calcium phosphate-based nanocomposites for biomedical applications (NRI, AIST) ○OYANE, Ayako; NAKAMURA, Maki (10:00~10:40)

**1A2-11 ATP Special Invited Lecture** Development of highly functionalized biomaterials with bone-bonding property (Grad. Sch. Eng., Nagoya Univ.) ○CHIKARA, Ohtsuki (10:40~11:20)

**1A2-15 ATP Invited Lecture** Development of calcium phosphate artificial bone with unidirectional pore structure (KURARAY CO., LTD.) ○KUWAYAMA, Tomoya; HOTTA, Yuji; MATSUO, Takashi; HIGAKI, Tatsuhiko (11:20~11:50)

**1A2-18 ATP Incubation Time** (11:50~12:00)

Tuesday, March 20, PM

Chair: TOMOYUKI, Onishi (13 : 00~14 : 20)

**1A2-25 ATP Special Invited Lecture** Development of hydroxyapatite ceramic bone graft substitute and column adsorbent for biomolecules. (Olympus Terumo Biomaterials Corp.) ○TETSURO, Ogawa (13:00~13:40)

**1A2-29 ATP Invited Lecture** Development of antibacterial artificial hip joint (AG-PROTEX) (KYOCERA Corp.) ○FUMIAKI, Miyaji (13:40~14:10)

**1A2-32 ATP Incubation Time** (14:10~14:20)

Chair: MASARU, Tanaka (14 : 20~15 : 20)

**1A2-33 ATP Keynote Lecture** Next generation metallic implants (IBB, Tokyo Med. and Dental Univ.) ○TAKAO, Hanawa (14:20~15:10)

**1A2-38 ATP Incubation Time** (15:10~15:20)

Chair: KEIGO, Aoi (15 : 20~16 : 30)

**1A2-39 ATP Special Invited Lecture** New biomimetic bone inductive material derived from cells (Grad. Sch. Dent. and Phar. Sci., Okayama Univ.) ○TAKUYA, Matsumoto (15:20~16:00)

**1A2-43 ATP Invited Lecture** Biocompatible Inorganic Materials for Dental Use (YAMAKIN CO., LTD.) ○TAKESHI, Sakamoto (16:00~16:30)

### Infrastructure technology to support the society

Wednesday, March 21, AM

#### New trends in ecosystem biomimetics; toward the sustainable society

(10 : 30~10 : 40)

**2A2-10 Introductory Remark** (CIST) ○SHIMOMURA, Masatsugu (10:30~10:40)

Chair: KOBAYASHI, Motoyasu (10 : 40~11 : 30)

**2A2-11 ATP Keynote Lecture** Management technology for ecosystem services: Relationships between biomimetics and urban design (Grad. Sch. Environmental Studies, Tohoku Univ.) KOHSAKA, Ryo; ○UCHIYAMA, Yuta (10:40~11:30)

Chair: MITOMO, Hideyuki (11 : 30~12 : 40)

**2A2-16 ATP Invited Lecture** Biomimetics for Sustainable Urban Planning (Univ. of Tsukuba) ○TANIGUCHI, Mamoru (11:30~12:00)

**2A2-19 ATP Invited Lecture** Opal film for underlying strain or crack: application to infrastructure inspection technique. (PWRI) ○HYAKUTAKE, Tsuyoshi (12:00~12:30)

**2A2-22 ATP Incubation Time** (12:30~12:40)

Wednesday, March 21, PM

Chair: FUJII, Syuji (13 : 30~14 : 50)

**2A2-28 ATP Special Invited Lecture** Icy Plume Particle Sample Return from the Ocean Worlds: Search for Evidences of the Second Genesis



- (JAXA) ○YANO, Hajime (13:30~14:10)  
**2A2-32 ATP Invited Lecture** Innovations in electrotrophic ecosystems on deep-sea hydrothermal fields (JAMSTEC) ○YAMAMOTO, Masahiro (14:10~14:40)  
**2A2-35 ATP Incubation Time** (14:40~14:50)  
 Chair: HOZUMI, Atsushi (14 : 50~16 : 20)  
**2A2-36 ATP Invited Lecture** Business & Biodiversity and Natural Capital Management, Contributing SDGs and Attracting ESG Investment (Nikkei Business Publications, Inc.) ○FUJITA, Kaoru (14:50~15:20)  
**2A2-39 ATP Invited Lecture** Environmental Management in SHIMADZU CORPORATION proceeding through the visualization of biodiversity (Shimadzu Corp.) ○OKANO, Masamichi; YASUI, Yoshihide (15:20~15:50)  
**2A2-42 ATP Invited Lecture** A new organization as biomimetics network Japan (SPSJ) ○HIRASAKA, Masao (15:50~16:20)

- (16 : 20~16 : 30)  
**2A2-45** Closing Remark (CIST) ○SHIMOMURA, Masatsugu (16:20~16:30)

### Thursday, March 22, AM

#### Perspective of cellulose nanofibers by young researchers

- (9 : 40 ~9 : 50)  
**3A2-05** Introduction of "Perspective of Cellulose Nanofibers by Young Researchers" (Osaka Univ.) ○NOGI, Masaya (09:40~09:50)

- Chair: ERIYAMA, Yuichi (9 : 50 ~12 : 00)  
**3A2-06 ATP Keynote Lecture** Fundamentals, applications, and tasks of cellulose nanofibers - focusing on AIST technology - (RISC, AIST) ○ENDO, Takashi (09:50~10:40)  
**3A2-11 ATP Special Invited Lecture** Lignocellulosic nanofiber: its properties and potential (Grad. Sch. Bioresources., Mie Univ.) ○NONAKA, Hiroshi; TAKAYANAGI, Koharu (10:40~11:20)  
**3A2-15 ATP Invited Lecture** Development of interfacial control technique for cellulose nanofibers (Kao Corp.) ○YOSHIDA, Yutaka; YAMATO, Kyohei; MUKAI, Kenta; SHIOMI, Hiroyuki; KUMAMOTO, Yoshiaki; ISOGAI, Akira (11:20~11:50)  
**3A2-18 ATP Incubation Time** (11:50~12:00)

### Thursday, March 22, PM

- Chair: WATANABE, Eiji (13 : 00~16 : 40)  
**3A2-25 ATP Special Invited Lecture** Nanocellulose-Metal Nanocomposite Paper for Molecular Conversion and Sensing (ISIR, Osaka Univ.) ○KOGA, Hirota (13:00~13:40)  
**3A2-29 ATP Invited Lecture** Thermal conductive property of cellulose nanofiber films and its application (Coll. Sci., Rikkyo Univ.) ○UETANI, Kojiro (13:40~14:10)  
**3A2-32 ATP Invited Lecture** Development of compounding and processing methods of cellulose nanofibers for life scientific applications (Grad. Sch. of Appl. Biol. Sci., Gifu Univ.) ○MURASE, Rina; KITAMURA, Takeo; HASHIMOTO, Masayuki; TERAMOTO, Yoshikuni (14:10~14:40)  
**3A2-35 ATP Incubation Time** (14:40~14:50)  
**3A2-36 ATP Special Invited Lecture** - (FFPRI) ○TANAKA, Reina (14:50~15:30)  
**3A2-40 ATP Invited Lecture** Characterization of esterified cellulose nanofibers (RISC, AIST) ○IWAMOTO, Shinichiro (15:30~16:00)  
**3A2-43 ATP Invited Lecture** The unique characteristics and the applications of TEMPO oxidized cellulose nanofibers in aqueous (DKS Co. Ltd.) ○TAWA, Takazumi (16:00~16:30)  
**3A2-46 ATP Incubation Time** (16:30~16:40)

**Room A3**  
 Bldg. 14 1432

### Frontiers in energy chemistry

#### Tuesday, March 20, AM

#### Catalytic approaches in artificial photosynthesis

- (9 : 20 ~9 : 30)  
**1A3-03** Session introduction by organizer (AIST) ○SAYAMA, Kazuhiro (09:20~09:30)  
 Chair: TSUJI, Ryotaro (9 : 30 ~11 : 00)  
**1A3-04 ATP Special Invited Lecture** Construction of artificial

- photosynthesis by integration of metal complexes on nanoporous materials (Toyota Central R&D Labs., Inc.) ○INAGAKI, Shinji (09:30~10:10)  
**1A3-08 ATP Special Invited Lecture** Artificial Photosynthesis for Sustainable ICT Society (FUJITSU LABORATORIES LTD.) ○IMANAKA, Yoshihiko (10:10~10:50)  
**1A3-12 ATP Incubation Time** (10:50~11:00)

- Chair: SAYAMA, Kazuhiro (11 : 00~12 : 10)  
**1A3-13 ATP Keynote Lecture** Viewpoint toward the realization of artificial photosynthesis (Cent.Artificial Photosynthesis, TMU) ○INOUE, Haruo (11:00~12:00)  
**1A3-19 ATP Incubation Time** (12:00~12:10)

### Tuesday, March 20, PM

- Chair: IKEDA, Sigeru (13 : 00~14 : 20)  
**1A3-25 ATP Invited Lecture** Production of energy carriers using non-oxide photoelectrodes (Grad. Sch. Eng., The Univ. of Tokyo) ○MINEGISHI, Tsutomu (13:00~13:30)  
**1A3-28 ATP Special Invited Lecture** Electro/photo-chemical small molecule conversion by transition metal complexes (LCCMS, IMS) ○MASAOKA, Shigeyuki (13:30~14:10)  
**1A3-32 ATP Incubation Time** (14:10~14:20)

- Chair: SUNADA, Yusuke (14 : 20~15 : 40)  
**1A3-33 ATP Special Invited Lecture** Visible light-driven carboxylation reactions (Tokyo Tech.) ○IWASAWA, Nobuharu (14:20~15:00)  
**1A3-37 ATP Invited Lecture** Copper-Catalyzed Transformation of Carbon Dioxide as a C1 Source (Kyoto Univ.) ○FUJIHARA, Tetsuaki (15:00~15:30)  
**1A3-40 ATP Incubation Time** (15:30~15:40)

- Chair: AMAO, Yutaka (15 : 40~17 : 00)  
**1A3-41 ATP Special Invited Lecture** Synthesis of carbonates and carbamates by the reaction of carbon dioxide with alcohols and amines using ceria catalyst (Tohoku Univ.) ○TOMISHIGE, Keiichi (15:40~16:20)  
**1A3-45 ATP Special Invited Lecture** Production of Bulk Chemicals from CO<sub>2</sub> by Homogeneous Catalysis (The Univ. of Tokyo) ○NOZAKI, Kyoko (16:20~17:00)

- (17 : 00~17 : 10)  
**1A3-49** Closing Remark (Osaka City Univ.) ○AMAO, Yutaka (17:00~17:10)

### Infrastructure technology to support the society

#### Wednesday, March 21, AM

#### Element strategy on catalyst innovation toward future sustainable society

- (9 : 30 ~9 : 40)  
**2A3-04** Introduction (Osaka Univ.; NAIST; JST) ○MURAI, Shinji (09:30~09:40)  
 Chair: TAKAYA, Hikaru (9 : 40 ~11 : 30)  
**2A3-05 ATP Keynote Lecture** Electride Catalysts: a novel approach to activation of N<sub>2</sub> molecules (MCES, Tokyo Tech.) ○HOSONO, Hideo (09:40~10:30)  
**2A3-10 ATP Incubation Time** (10:30~10:40)  
**2A3-11 ATP Special Invited Lecture** Catalytic ammonia synthesis at low temperature in electric field (Waseda Univ.) ○SEKINE, Yasushi (10:40~11:20)  
**2A3-15 ATP Incubation Time** (11:20~11:30)

- Chair: HARA, Kenji (11 : 30~12 : 10)  
**2A3-16 ATP Special Invited Lecture** Transition Metal-Catalyzed Reduction of Molecular Dinitrogen into Ammonia under Ambient Conditions (Grad. Sch. Eng., The Univ. of Tokyo) ○NISIBAYASHI, Yoshiaki (11:30~12:10)

#### Wednesday, March 21, PM

- (13 : 10~13 : 50)  
**2A3-26 ATP Invited Lecture** Synthetic Organic Chemistry Seeking for New Chemical Resources (Kyoto Univ.) ○NAKAMURA, Masaharu (13:10~13:40)  
**2A3-29 ATP Incubation Time** (13:40~13:50)

- Chair: TSUCHIBUCHI, Tsuyoshi (13 : 50~14 : 30)  
**2A3-30 ATP Invited Lecture** A Development of Catalyst/Process Technology to Achieve Resource & Energy Saving of Producing of Petrochemical Bulk Products (Sumitomo Chemical Co., Ltd.) ○IWANAGA, Kiyoshi (13:50~14:20)  
**2A3-33 ATP Incubation Time** (14:20~14:30)

Chair: IYAMA, Hironobu (14 : 30~15 : 10)

**2A3-34 ATP Invited Lecture** Design of Molecular Catalysts for Synthesis of New Polyolefins (Grad. Sch. Sci. Eng., TMU) ○NOMURA, Kotohiro (14:30~15:00)

**2A3-37 ATP Incubation Time** (15:00~15:10)

Chair: FUKAYA, Norihisa (15 : 10~16 : 50)

**2A3-38 ATP Special Invited Lecture** Reduction of use of precious metals in three-way-catalyst by functionalizing metal oxide support as a catalyst (Grad. Sch. Eng., Kyoto Univ.) ○TANAKA, Tsunehiro (15:10~15:50)

**2A3-42 ATP Incubation Time** (15:50~16:00)

**2A3-43 ATP Keynote Lecture** Future of catalyst discovery, industry-academia collaboration, and catalyst research (IRC3, AIST) ○SATO, Kazuhiko (16:00~16:50)

(16 : 50~17 : 00)

**2A3-48** Closing remarks (Osaka Univ.; NAIST; JST) ○MURAI, Shinji (16:50~17:00)

## Room A4

Bldg. 14 1433

### Frontiers in energy chemistry

Tuesday, March 20, AM

#### Next-generation batteries to realize a low-carbon society

(10 : 20~10 : 30)

**1A4-09** Opening Remarks (Yokohama Natl. Univ.) ○DOKKO, Kaoru (10:20~10:30)

Chair: DOKKO, Kaoru (10 : 30~12 : 10)

**1A4-10 ATP Special Invited Lecture** High-throughput Search for Battery Ceramics based on Data Science (NIMS-CMi2 & GREEN; ESICB, Kyoto Univ.) ○NAKAYAMA, Masanobu (10:30~11:10)

**1A4-14 ATP Keynote Lecture** Creation of new super-ionic conductors and their application to all-solid-state battery (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KANNO, Ryoji (11:10~12:00)

**1A4-19 ATP Incubation Time** (12:00~12:10)

Tuesday, March 20, PM

Chair: KOUMURA, Nagatoshi (13 : 30~14 : 40)

**1A4-28 ATP Invited Lecture** Transition-Metal Carbides MXenes as Charge Storage Host (Grad. Sch. Eng., The Univ. of Tokyo) ○OKUBO, Masashi; YAMADA, Atsuo (13:30~14:00)

**1A4-31 ATP Invited Lecture** Development of metalpolysulfide electrode active materials by mechanochemical process (Grad. Sch. Eng., Osaka Pref. Univ.) ○SAKUDA, Atsushi; HAYASHI, Akitoshi; TATSUMISAGO, Masahiro (14:00~14:30)

**1A4-34 ATP Incubation Time** (14:30~14:40)

Chair: DOKKO, Kaoru (14 : 40~15 : 30)

**1A4-35 ATP Keynote Lecture** Lithium Ion Battery, current, past, and future (LIBTEC) ○YOSHINO, Akira (14:40~15:30)

Chair: HOSONO, Eiji (15 : 30~16 : 20)

**1A4-40 ATP Special Invited Lecture** Recent advances in zinc air and other innovative batteries (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○ARAI, Hajime (15:30~16:10)

**1A4-44 ATP Incubation Time** (16:10~16:20)

Chair: KUBOKI, Takashi (16 : 20~17 : 20)

**1A4-45 ATP Invited Lecture** Studies on Electrode/Solid Electrolyte Interface in Oxide-Based All-Solid-State Batteries (Grad. Sch. Eng., Nagoya Univ.) ○IRIYAMA, Yasutoshi (16:20~16:50)

**1A4-48 ATP Invited Lecture** Development of Solvation-controlled Electrolyte Solutions for High-voltage Lithium Ion Batteries (Doshisha Univ.) ○DOI, Takayuki; INABA, Minoru (16:50~17:20)

(17 : 20~17 : 30)

**1A4-51** Closing Remarks (Yokohama Natl. Univ.) ○DOKKO, Kaoru (17:20~17:30)

Wednesday, March 21, AM

#### Challenges and future prospects for hydrogen energy utilization

(10 : 00~10 : 10)

**2A4-07** Development of new hydrogen technology (Tokyo Tech.) ○AIKA, Kenichi (10:00~10:10)

Chair: AIKA, Kenichi (10 : 10~12 : 10)

**2A4-08 ATP Keynote Lecture** Technical challenges and future prospects for expanding hydrogen energy utilization (Mizuho Info. Res. Inst., Inc.) ○YONEDA, Masakazu (10:10~11:00)

**2A4-13 ATP Invited Lecture** Development of hydrogen combustion technology for CO<sub>2</sub> free hydrogen energy supply chain (Kawasaki Heavy Industries, Ltd.) ○KAZARI, Masahide (11:00~11:30)

**2A4-16 ATP Invited Lecture** Activities toward construction of Hydrogen Fueling Infrastructure and System and Catalyst Development for Hydrogen Production from Organic Hydrides (JXTG Nippon Oil & Energy Corp.) ○IKI, Hideshi; HIRANO, Yuichiro; NAGATSUKA, Tomomi; MIZUNO, Yasushi (11:30~12:00)

**2A4-19 ATP Incubation Time** (12:00~12:10)

Wednesday, March 21, PM

Chair: KOBAYASHI, Hideaki (13 : 00~14 : 50)

**2A4-25 ATP Special Invited Lecture** Green Hydrogen and Fuel Cells for Future Sustainable Growth (Grad. Fac. Eng., Yokohama Natl. Univ.) ○OTA, Kenichiro (13:00~13:40)

**2A4-29 ATP Invited Lecture** CO<sub>2</sub> fuelization with using renewable hydrogen and its prospect (Hitachi Zosen Co.) ○KUMAGAI, Naokazu; IZUMIYA, Kouichi; TAKANO, Hiroyuki; HASHIMOTO, Koji (13:40~14:10)

**2A4-32 ATP Invited Lecture** Production of CO<sub>2</sub> free Ammonia with EOR (IEEJ) ○HIRAI, Harumi (14:10~14:40)

**2A4-35 ATP Incubation Time** (14:40~14:50)

Chair: TANIMURA, Satoshi (14 : 50~16 : 10)

**2A4-36 ATP Special Invited Lecture** Ammonia as a fuel: Features and mechanism of combustion (Inst. of Fluid Sci., Tohoku Univ.) ○KOBAYASHI, Hideaki (14:50~15:30)

**2A4-40 ATP Invited Lecture** Blended combustion characteristics of pulverized coal and ammonia (CRIEPI) ○HARA, Saburo; YAMAMOTO, Akira; KIMOTO, Masayoshi; OZAWA, Yasushi (15:30~16:00)

**2A4-43 ATP Incubation Time** (16:00~16:10)

Chair: HARA, Saburo (16 : 10~17 : 20)

**2A4-44 ATP Invited Lecture** Using Hydrogen as Industrial Gas Turbine Fuel (Mitsubishi Hitachi Power Systems, Ltd.) ○TANIMURA, Satoshi (16:10~16:40)

**2A4-47 ATP Special Invited Lecture** Development of direct ammonia-fueled fuel cell systems (Grad. Sch. Eng., Kyoto Univ.) ○MATSUI, Toshiaki (16:40~17:20)

(17 : 20~17 : 30)

**2A4-51** Closing remarks (Tokyo Tech.) ○AIKA, Kenichi (17:20~17:30)

Thursday, March 22, AM

#### Frontier researches and developments on printable solar cells

(9 : 10 ~9 : 20)

**3A4-02** Session introduction (Toin Univ. of Yokohama) ○MIYASAKA, Tsutomu (09:10~09:20)

Chair: SEGAWA, Hiroshi (9 : 20 ~10 : 40)

**3A4-03 ATP Special Invited Lecture** Perovskite Photovoltaics: Present Situations and Directions to Implementation (Fac. Bio. Eng., Toin Univ. of Yokohama) ○MIYASAKA, Tsutomu (09:20~10:00)

**3A4-07 ATP Invited Lecture** Development of perovskite solar cells for practical use (Panasonic Corp. Technology Innovation Div.) ○MATSUI, Taisuke; HIGUCHI, Hiroshi; NEGAMI, Takayuki (10:00~10:30)

**3A4-10 ATP Incubation Time** (10:30~10:40)

Chair: MIYASAKA, Tsutomu (10 : 40~12 : 10)

**3A4-11 ATP Invited Lecture** Dye-sensitized solar cell (DSC) and energy harvesting utilizing of DSC (Fujikura Ltd.) ○TAKESHI, Yamaguchi (10:40~11:10)

**3A4-14 ATP Keynote Lecture** The chemistry of printable solar cell research (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKAMURA, Eiichi (11:10~12:00)

**3A4-19 ATP Incubation Time** (12:00~12:10)

Thursday, March 22, PM

Chair: HAYASE, Shuzi (13 : 00~14 : 30)

- 3A4-25 ATP Special Invited Lecture** Improvement of Performance of Organometal Halide Perovskite Solar Cells (The Univ. of Tokyo)  
○SEGAWA, Hiroshi (13:00~13:40)
- 3A4-29 ATP Special Invited Lecture** Global PV Market Expansion led by the Development of Organic Photovoltaics in Japan (RTS Corp.)  
○OHIGASHI, Takashi; SUGIBUCHI, Koichi; KURIHARA, Risa; YAMAYA, Haruki; KAIZUKA, Izumi; IKKI, Osamu (13:40~14:20)
- 3A4-33 ATP Incubation Time** (14:20~14:30)

Chair: IKEDA, Sigeru (14 : 30~16 : 00)

- 3A4-34 ATP Special Invited Lecture** Solar cell performance from the view point of hetero-interface structure (Grad. Sch. Life Sci. Sys. Eng., KIT)  
○HAYASE, Shuzi (14:30~15:10)
- 3A4-38 ATP Special Invited Lecture** Ternary Blend Polymer Solar Cells (Grad. Sch. Eng., Kyoto Univ.) ○HIDEO, Ohkita (15:10~15:50)
- 3A4-42 ATP Incubation Time** (15:50~16:00)

Chair: MATSUO, Yutaka (16 : 00~17 : 10)

- 3A4-43 ATP Special Invited Lecture** Reducing the Photon Energy Loss in Organic Photovoltaics (Grad. Sch. Eng., Hiroshima Univ.)  
○OSAKA, Itaru (16:00~16:40)
- 3A4-47 ATP Invited Lecture** Waterproof and stretchable organic solar cells (RIKEN) ○FUKUDA, Kenjiro; JINNO, Hiroaki; SOMEYA, Takao (16:40~17:10)

(17 : 10~17 : 20)

- 3A4-50** closing comments (Toin Univ. of Yokohama) ○MIYASAKA, Tsutomu (17:10~17:20)

**Room A5**  
Bldg. 14 1434

Infrastructure technology to support the society

Tuesday, March 20, AM

Initiative of chemistry for IoT and AI □Drive;  
actuator materials, Use; informatics-  
(9 : 30 ~9 : 40)

- 1A5-04** Opening Remark of ATP TIA session, Initiative of Chemistry for IoT and AI -Drive: actuator materials, Use: informatics- (IFMRI, AIST)  
○ASAKA, Kinji (09:30~09:40)

Chair: ASAKA, Kinji (9 : 40 ~10 : 30)

- 1A5-05 ATP Keynote Lecture** Overview of Materials Informatics (NIMS; JST) ○ITO, Satoshi (09:40~10:30)

Chair: ITO, Satoshi (10 : 30~12 : 30)

- 1A5-10 ATP Special Invited Lecture** Lessons learned from Bioinformatics (Grad. Sch. Sci., The Univ. of Tokyo) ○TAKAGI, Toshihisa (10:30~11:10)
- 1A5-14 ATP Incubation Time** (11:10~11:20)
- 1A5-15 ATP Special Invited Lecture** Innovative materials design by high dimensional materials informatics (Nagoya Univ.) ○ADACHI, Yoshitaka (11:20~12:00)
- 1A5-19 ATP Invited Lecture** Materials Design and Prediction Using Computational Science (Sumitomo Chemical Co., Ltd.) ○ISHIDA, Masaya; KURITA, Yasuyuki; NAKAZONO, Akiko (12:00~12:30)

Tuesday, March 20, PM

Chair: ASAKA, Kinji (13 : 30~15 : 40)

- 1A5-28 ATP Keynote Lecture** New actuators and Robotics (Tokyo Tech.) ○SUZUMORI, Koichi (13:30~14:20)
- 1A5-33 ATP Special Invited Lecture** Soft Actuators Using Conducting Polymers (Grad. Sch. Med., Eng., Univ. of Yamanashi) ○OKUZAKI, Hidenori (14:20~15:00)
- 1A5-37 ATP Incubation Time** (15:00~15:10)
- 1A5-38 ATP Invited Lecture** Development of ultra-flexible organic electronics for integration to actuators (RIKEN) ○FUKUDA, Kenjiro; SOMEYA, Takao (15:10~15:40)

Chair: IINO, Hiroaki (15 : 40~17 : 20)

- 1A5-41 ATP Invited Lecture** Application of highly homogeneous silicone thin film, ELASTOSIL(r) FILM, to dielectric elastomer actuators (wacker asahikasei silicone co.,ltd.) ○SUZUKI, Yusuke (15:40~16:10)
- 1A5-44 ATP Incubation Time** (16:10~16:20)

- 1A5-45 ATP Invited Lecture** Liquid-Crystalline Polymers as Photoresponsive Actuators (Research and Development Initiative, Chuo Univ.)  
○UBE, Toru (16:20~16:50)
- 1A5-48 ATP Invited Lecture** Printed Electroactive Nanocarbon-Polymer Actuator (AIST) ○MONOBE, Hirosato; ASAKA, Kinji (16:50~17:20)

Innovative healthcare technologies

Wednesday, March 21, PM

Frontier of bio-startup companies to revolutionize healthcare technologies

(13 : 00~13 : 10)

- 2A5-25** Aims of this session, best wishes for further development of bioventure companies in Japan (The Univ. of Tokyo) ○SUGA, Hiroaki (13:00~13:10)

Chair: OHNO, Osamu (13 : 10~15 : 00)

- 2A5-26 ATP Special Invited Lecture** Boron-Based Drug Discovery By A US Biotech Start-Up (Anacor Pharmaceuticals) ○TSUTOMU, Akama (13:10~13:50)
- 2A5-30 ATP Invited Lecture** Ion Channel Drug Discovery at RaQualia (RaQualia Pharma Inc.) ○KIYOSHI, Kawamura (13:50~14:20)
- 2A5-33 ATP Incubation Time** (14:20~14:30)
- 2A5-34 ATP Invited Lecture** Aiming to commercialize HGF gene therapy for ischemic diseases (AnGes, Inc.) ○SEIJI, Hirasaki (14:30~15:00)

Chair: DEKISHIMA, Yasumasa (15 : 00~16 : 50)

- 2A5-37 ATP Invited Lecture** Drug Repositioning (MediciNova, Inc.) ○YUICHI, Iwaki (15:00~15:30)
- 2A5-40 ATP Incubation Time** (15:30~15:40)
- 2A5-41 ATP Invited Lecture** Development of biopharmaceuticals utilizing blood-brain barrier penetration technology "J-Brain Cargo" (JCR Pharm. Co., Ltd.) ○YODEN, Eiji (15:40~16:10)
- 2A5-44 ATP Invited Lecture** What is the Most important supports for Bio-Ventures? (ReqMed Com., Ltd.) ○TADASHI, Matsumoto (16:10~16:40)
- 2A5-47 ATP Incubation Time** (16:40~16:50)

Thursday, March 22, PM

Innovative Sensing Technologies for the Future of Healthcare

(13 : 00~13 : 10)

- 3A5-25** Innovating Sensing Technology for the Future of Healthcare (Grad. Sch. Sci., The Univ. of Tokyo) ○OZAWA, Takeaki (13:00~13:10)

Chair: OZAWA, Takeaki (13 : 10~15 : 20)

- 3A5-26 ATP Special Invited Lecture** Highly accurate cancer detection using *C. elegans* olfaction (HIROTSU BIO SCIENCE INC.)  
○HIROTSU, Takaaki (13:10~13:50)
- 3A5-30 ATP Special Invited Lecture** Strategy for preparation of anti-fungal medicines to infectious diseases in near future society (Grad. Sch. Agri., Kyoto Univ.) ○UEDA, Mitsuyoshi (13:50~14:30)
- 3A5-34 ATP Special Invited Lecture** Bioelectronics: Detection of cell functions using field effect transistors (IBB, Tokyo Med. and Dental Univ.)  
○MIYAHARA, Yuji (14:30~15:10)
- 3A5-38 ATP Incubation Time** (15:10~15:20)

Chair: SAKURAI, Kaori (15 : 20~16 : 40)

- 3A5-39 ATP Special Invited Lecture** Towards the visualization of haptic behavior -from the case study to the application- (Shiseido Company, Limited) ○KAWASOE, Tomoyuki (15:20~16:00)
- 3A5-43 ATP Special Invited Lecture** Detection of intracellular proteins using nanoneedle (BRI, AIST; Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○NAKAMURA, Chikashi (16:00~16:40)

**Room P**  
Sports Hall Arena

Tuesday, March 20, PM

(15 : 00~16 : 30)

Energy

- 1PC-001<sup>#</sup>** Photocatalytic hydrogen production and decomposition of hydrogen sulfide under visible light with anti-photocorrosive tri-composite photocatalysts (Fac. Eng., TUS) ○NAGAKAWA, Haruki; NAGATA, Morio

- 1PC-002<sup>#</sup>** Electron tomography as a novel tool for an analysis of excited energy transfer reaction in organic-inorganic hybrid nanomaterials (Grad. Sch. Eng., Hokkaido Univ.) ○AKITA, Ikumi; ISHIDA, Yohei; YONEZAWA, Tetsu
- 1PC-003<sup>#</sup>** Development of Organic and Inorganic Hybrid Thermoelectric Materials using Ag Nanoplates (Grad. Sch. Eng., Tokyo Univ. of Sci., Yamaguchi) ○HOSHINO, Satoshi; YOSHIYAMA, Kohei; OSHIMA, Keisuke; SHIRAIISHI, Yukihide; TOSHIMA, Naoki
- 1PC-004<sup>#</sup>** Organic Hybrid Thermoelectric Materials Containing PEDOT-PSS and ITO Nanoparticles (Grad. Sch. Eng., Tokyo Univ. of Sci., Yamaguchi) ○TAGUCHI, Kazuki; KURANAGA, Daiki; OSHIMA, Keisuke; SHIRAIISHI, Yukihide; TOSHIMA, Naoki
- 1PC-005<sup>#</sup>** Development of Organic Dye Compounds for Photosensitization of Carbon Nanotube Photocatalyst (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○MIYAKE, Hideaki; ITO, Tomoka; SHIBATA, Masaru; MURAKAMI, Noritake; ISHIMOTO, Kango; IZAWA, Takumi; TAJIMA, Tomoyuki; TAKAGUCHI, Yutaka
- 1PC-006<sup>#</sup>** Hydrogen generation by mechanochemical reaction between metal and water: relation of reaction products and the hydrogen generation. (Grad. Sch. Sci., Hiroshima Univ.) ○YAMAMOTO, Takuya; NAKANO, Yasuhiro; SAITOW, Ken-ichi
- 1PC-007<sup>#</sup>** Polymeric *p*-Type Dopant with Permanent Doping Durability for Transparent Carbon Electrodes (Grad. Sch. Eng., The Univ. of Tokyo) ○JEON, Il; OKADA, Hiroshi; MARUYAMA, Shigeo; MATSUO, Yutaka
- 1PC-008<sup>#</sup>** Large amounts of hydrogen generated from mechanochemical reaction between H<sub>2</sub>O and Si particles: how dangling bonds, specific surface area, and temperature affect the reaction? (Fac. Sci., Hiroshima Univ.) ○OHTA, Haruhisa; UEDA, Taiki; SAITOW, Ken-ichi
- 1PC-009** Towards Scanning Photocurrent Microscopy as an on-site battery analysis tool. (NISSAN ARC, LTD.) ○MYALITSIN, Anton
- 1PC-010** Synthesis of the Vanadium Oxide Material for Magnesium Battery Cathode (Saitama Industrial Technology Center) ○INAMOTO, Masashi; KURIHARA, Hideki
- 1PC-011** Development of Unsymmetrical Squaraine Dyes Applicable to Dye-Sensitized Solar Cells Utilized under The Indoor Light Environment (Grad. Sch. Eng., Osaka Pref. Univ.; Photosciences & Photonics Section, CSIR-NIIST, India) ○NINOMIYA, Yuichiro; MAEDA, Takeshi; PRADHAN, Sourava C; SOMAN, Suraj; AJAYAGHOSH, Ayyappanpillai; YAGI, Shigeyuki
- 1PC-012** Microscopic Understanding of Ionic Structures for the High Energy Density Supercapacitors -Superionic State Formation of Ionic Liquid in Carbon Nanopores (X-Breed, Shinshu Univ.) ○FUTAMURA, Ryusuke; IYAMA, Taku; SALANNE, Mathieu; BIGGS, Mark; GOGOTSI, Yury; SIMON, Patrice; KANEKO, Katsumi
- 1PC-013** Syntheses and optical properties of *meso*-linked dyads of chlorophyll-*a* and bacteriochlorophyll-*a* derivatives (Graduate School of Life Sciences, Ritsumeikan University) ○NOMURA, Yosaku; SHOJI, Sunao; TAMIYAKI, Hitoshi
- 1PC-014** Synthesis and Properties of Dimers of Dibenzobarrelene-Incorporated 1,4-Di(2-thienyl)-1-thio-1,3-butadiene Derivative (Grad. Sch. Sci., Eng., Saitama Univ.) ○MURAKAMI, Natsuki; NAKATA, Norio; ISHII, Akihiko
- 1PC-015<sup>#</sup>** Transient emission spectroscopy of dye molecules adsorbed on metal oxide semiconductor (Grad. Sch. Sci., Josai Univ.) ○MITSUKE, Koichiro; WATANABE, Kohei; TAKAYANAGI, Kohei; YOSHIDA, Akira
- 1PC-016<sup>#</sup>** The Three-Dimensional Arrangement of The Photofunctional Molecules using DNA Aptamer on a Gold Surface (Grad. Sch. of Life and Env. Sci., Kyoto Pref. Univ.) ○NAKAMURA, Fukiko; ISHIDA, Akito
- 1PC-017<sup>#</sup>** 1-D Sn Nanoparticles: Control Synthesis and Applications (Grad. Sch. Eng., Hokkaido Univ.) Z. DE JUAN, Lyn Marie; ONGUYEN, Mai Thanh; YONEZAWA, Tetsu
- 1PC-018<sup>#</sup>** Microfluidic Fuel Cell Fabrication With Non-precious Carbon Nitride Nanofibers As Cathode Catalyst (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○JINDAL, Amandeep; BASU, Suddhasatwa; CHAUHAN, Neha; UKAI, Tomofumi; KUMAR, Sakthi
- 1PC-019<sup>#</sup>** Highly Stabilized Perovskite Solar Cells by Li<sup>+</sup>-Encapsulated Fullerene Salt as Both Dopant and Anti-Oxidant (NENU) ○UENO, Hiroshi; JEON, Il; SEO, Seungju; MARUYAMA, Shigeo; MATSUO, Yutaka
- 1PC-020** Stabilizing power output of negative electrode in enzymatic biofuel cell. (AISIN COSMOS R&D CO.,LTD.) ○NAKAOKI, Yuichiro; ISEZAKI, Yuka
- 1PC-021** Characteristics of LiPON film for all-solid-state battery deposited by using MOCVD method (Future Tech. Res. Lab., ULVAC, Inc.) ○TSUKAHARA, Naoki; UKISHIMA, Sadayuki
- 1PC-022** Development of photoelectrodes for watersplitting using the 3-D transparent conductive layer (Advanced Research Div., Panasonic Corp.) ○UENO, Koki; TAMURA, Satoru; KANEKO, Yasushi
- 1PC-023** Rechargeable Battery with 100% Cathode-active Material: Application of Conductive  $\pi$ -Stacked Structure of a Stable Organic Neutral Radical (Fac. Eng., Aichi Inst. of Tech.; KFTRAL, KANEKA CORP.) ○MURATA, Tsuyoshi; ITO, Hiroshi; MORITA, Miwa; TSUJI, Ryotaro; MORITA, Yasushi
- 1PC-024** Facile method to prepare PEDOT/SWCNT composite films and their thermoelectric properties (Grad. Sch. Eng., Hiroshima Univ.) ○IMAE, Ichiro; ZHANG, Lu; HARIMA, Yutaka
- 1PC-025** Fabrication and photochemical application of hierarchical layered

- electrochemical polymerized films from aqueous solution of thiophene monomers (Sch. Eng., The Univ. of Shiga Pref.) ○AKIYAMA, Tsuyoshi; TSUJIAI, Takatoshi; HIRATA, Shuya; KUMAGAWA, Yu; OKU, Takeo
- 1PC-026** Alkaline-durable Anion-conducting Electrolyte Membranes Containing Poly (4-vinyl-2-methyl-imidazole) Prepared By Radiation-Induced Grafting (Grad. Sch. Sci. Tech., Gunma Univ.; QuBS) ○KOTA, Takeuchi; KIMIO, Yoshimura; HIROKI, Akihiro; MAEKAWA, Yasunari
- 1PC-027** High resolution surface analysis technique for nanomaterials (NIT, Nara College) ○MIEDA, Eiko; MATSUSHIMA, Yuka; YAMADA, Hirohisa; KATAKURA, Katsumi
- 1PC-028** Alkaline Durability Improvement of Graft-type Anion Conducting Membrane via Controlling Monomer Sequence Distribution in Graft Chain (QST) ○YOSHIMURA, Kimio; YU, Hwan-chul; ZHAO, Yue; HIROKI, Akihiro; SHISHITANI, Hideyuki; YAMAGUCHI, Susumu; TANAKA, Hirohisa; MAEKAWA, Yasunari

## Resources/Environment/Green sustainable chemistry

- 1PC-029<sup>#</sup>** Novel bulky PNP pincer ligands: the effect on the stabilization and geometry of unusual oxidation states of Ni complexes (OIST Coord. Chem. and Catal. Unit.) ○LAPOINTE, Sébastien; KHASKIN, Eugene; KHUSNUTDINOVA, Julia
- 1PC-030<sup>#</sup>** Visible green light-promoted radical cation Diels-Alder reaction catalyzed by thioxanthylum-based organophotoredox catalysts (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○TANAKA, Kenta; HOSHINO, Yujiro; HONDA, Kiyoshi
- 1PC-031<sup>#</sup>** Size-dependent composition and CO oxidation activity of size-controlled tin oxide clusters synthesized by using dendrimers (Lab. Chem. Life Sci., Tokyo Tech.; JST-ERATO) ○INOMATA, Yusuke; ALBRECHT, Ken; YAMAMOTO, Kimihisa
- 1PC-032<sup>#</sup>** Activation of Cytochrome P450-Catalyzing Whole-cell Biotransformation of Aromatics Using Extracellular Additives (Grad. Sch. Sci., Nagoya Univ.) ○KARASAWA, Masayuki; SHOJI, Osami; WATANABE, Yoshihito
- 1PC-033<sup>#</sup>** Study on the decomposition of Cu-BTC Metal-Organic Framework (HKUST-1) by the Steam (Advanced Research Div., Panasonic Corp.) ○ZHANG, Jin; MORITA, Masashi
- 1PC-034<sup>#</sup>** Polymer Grafting via the Catalyst-free Click Reaction using Kinetically Stabilized Nitrite *N*-Oxides (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TSUTSUBA, Toyokazu; TAKATA, Toshikazu
- 1PC-035<sup>#</sup>** Direct transformations of tetrafluoroethylene into useful synthetic intermediates for organofluorine compounds (Grad. Sch. Eng., Osaka Univ.) ○KIKUSHIMA, Kotaro; OHASHI, Masato; OGOCHI, Sensesuke
- 1PC-036** Rapid and Mild Synthesis of Amino Acid *N*-Carboxy Anhydrides Using Basic-to-Acidic Flash Switching in a Micro-flow Reactor (Lab. Chem. Life Sci., Tokyo Tech.) ○OTAKE, Yuma; NAKAMURA, Hiroyuki; FUSE, Shinichiro
- 1PC-037** Convenient Method for the Generation of Deuterium Gas Catalyzed by an Iridium Complex and Its Application to the Deuteration of Organic Compounds (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○ENOMOTO, Akane; KAJITA, Shunpei; FUJITA, Ken-ichi
- 1PC-038** Green sustainable production of triphenylmethane dye oxidized by hydrogen peroxide (Osaka. Pref. Univ. Coll. Tech.; Kobata Sangyo Co., Ltd.) ○TSUJIMOTO, Hidetaka; ITHOH, Keiji; NISIGAHANA, Tamotsu; NOMOTO, Akihiro; UESHIMA, Michio
- 1PC-039** Environmentally Benign Esterification Catalyzed by Highly Active Ammonium Salts (Grad. Sch. Eng., Nagoya Univ.) ○TOH, Kohei; TABATA, Yuji; HATANNO, Manabu; ISHIHARA, Kazuaki
- 1PC-040** Effect of Differences in Dendrimer Structures on Catalytic Activity of Size-Controlled Palladium Nanoparticles (JST-ERATO; Lab. Chem. Life Sci., Tokyo Tech.; Coll. of Liberal Arts, ICU) ○KITAZAWA, Hirokazu; ALBRECHT, Ken; CHUN, Wang Jae; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 1PC-041** Supercritical water synthesis of a Mo(S,Se) cathode material for water splitting (IMRAM, Tohoku Univ.) ○NAKAYASU, Yuta; BRADLEY, Siobhan; TOMAI, Takaaki; NANN, Thomas; HONMA, Itaru
- 1PC-042** Mutual conversion of CO<sub>2</sub> and formic acid with Ir catalysts having amide ligands (RIEF, AIST) ○KANEGA, Ryoichi; ONISHI, Naoya; HIMEDA, Yuichiro
- 1PC-043** Thermal controlled selective synthesis of 4-substituted chromanes using inverse-electron-demand Diels-Alder reaction with ortho-quinone-methides (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○KISHIMOTO, Mami; TANAKA, Kenta; HOSHINO, Yujiro; HONDA, Kiyoshi
- 1PC-044** The development of flow microreactors (FMR) technology in Ajinomoto Co., Inc. (Grad. Sch. Eng., Kyoto Univ.) ○ENDO, Yuta; NAKAHARA, Yuichi; KATO, Keisuke; FURUSAWA, Mai; SHIMAZAKI, Toshiya; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 1PC-045** Fabrication of titanium oxide-gold nanoparticle composite thin-films by surface so-gel process and their photocatalytic properties (Sch. Eng., The Univ. of Shiga Pref.) ○MITSUKAWA, Shota; AKIYAMA, Tsuyoshi; OKU, Takeo
- 1PC-046** Fabrication and photovoltaic properties of an inverted-type organic thin-film solar cells incorporation of photofunctional material into electron transport layer (Sch. Eng., The Univ. of Shiga Pref.) ○MATSUMIYA,

- Yusuke; MITSUKAWA, Shota; AKIYAMA, Tsuyoshi; OKU, Takeo
- 1PC-047** Development of the chemical manufacturing process using the non-edible biomass resources as the raw material (Ube Industries, Ltd.)  
○YAMADA, Atsushi; IKUTA, Junya; YAMAMOTO, Yasushi
- 1PC-048** Preparation of alkynylphosphoryl compounds via a palladium-catalyzed dehydrogenative coupling of terminal alkynes with P(O)H compounds (IRC3, AIST) ○HAN, Li-biao; CHEN, Tiegiao
- 1PC-049** Large Scale Synthesis of water-soluble ( $\gamma$ -Cyclodextrin)<sub>2</sub>-C<sub>60</sub> Complex using Three Dimensional Ball Mill (NIT, Sendai College) ○ENDO, Tomoaki; NAGAO, Daisuke; NAGAO, Fumiyoshi; YAMAOKA, Yasuaki; KWON, Eunsang
- 1PC-050** Development of monitoring method for diluted radioactive Cs in seawater (NRI, AIST) ○TORAD, Nagy; TANAKA, Hisashi; MINAMI, Kimitaka; KAWAMOTO, Tohru; KANAI, Ramon; ISHIKAWA, Kohei; KAMIMURA, Ryuichi
- 1PC-051** Development of anti-fouling RO membrane (Toray Industries, Inc.) ○HAMADA, Tsuyoshi; OKABE, Jun; OGAWA, Takafumi; KIMURA, Masahiro
- 1PC-052** CO<sub>2</sub> Reduction Activity of Ni(cyclam) Complex Molecules Immobilized on an Electrode Surface by Hydrophobization Using Counterion Exchange Method (Toyota Central R&D Labs., Inc.) ○MURASE, Masakazu; KITAHARA, Gaku; SUZUKI, Tomiko; OHTA, Riichiro
- 1PC-053** Improvement of reverse osmosis (RO) membrane (Toray Industries, Inc.) ○SUZUKI, Monami; SASAKI, Takao; OGAWA, Takafumi; KIMURA, Masahiro
- 1PC-054** Palladium on carbon catalysts with porous carbon from rice husks as a support (Dexerials Corporation) ○TANBA, Katsuya; YAMADA, Shinichiro; BUNO, Hiroki; CHOI, Jun-chul; FUKAYA, Norihisa
- 1PC-055** Synthesis of sulfonated carbon based solid acid catalyst containing chlorine by solution plasma and its application to hydrolysis of cellulose (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○IKURA, Ryuhei; ISHIZAKI, Takahiro
- 1PC-056** An addition of H-phosphine oxides to alkynes under photoirradiation (IRC3, AIST) ○SAGA, Yuta; HAN, Li-biao
- 1PC-057** Transformation of kanamycin resistance gene in *Mesembryanthemum crystallinum* (Fac. Eng., KAIT) ○MOCHIDUKI, Yuki; SAITO, Takashi
- 1PC-058** Study on the mechanism of sugar isomerization-accelerating effect of organogermanium compound, Ge-132 (Asai Germanium Res. Inst. Co., Ltd.) ○SHIMADA, Yasuhiro; NAGASAWA, Takae; SATO, Katsuyuki; NAKAMURA, Takashi; TOKUJI, Yoshihiko; KASUMI, Takafumi
- 1PC-059** Good Points of Flow-Reactors(PFR&CSTR) in Organic Experiments (RigakuKobo, LLC; MAK Engineering Co.) ○NAKAYAMA, Nobuyuki; KOTANI, Isao; KOTANI, Kentaro
- 1PC-060** Search for extreme environment microorganisms living in deep-sea sediments. (Fac. Eng., KAIT) ○SHIYU, Kiyonobu; OTSU, Raimu; HASUI, Mizunao; MAKITA, Hiroko; SAITO, Takashi
- 1PC-061** Total recycling of waste bathtub made of glass fiber reinforced plastics generated from Kumamoto Earthquake (Fac. Eng., Sojo Univ.) ○IKENAGA, Kazutoshi; KAWABE, Yusui
- 1PC-062** Fire extinguishing and environmental evaluation of Eco-friendly Soap-Based Class A Foam contributes to reduction of greenhouse effect gas (Shabondama Soap Co.,LTD.) ○KANYAMA, Takahide; KAWAHARA, Takayoshi; UEZU, Kazuya
- New materials**
- 1PC-063** Synthesis of Lanthanoid-Based Metallo-Supramolecular Polymer with Bisteryridine Ligand and the Magnetic Properties (RCFM, NIMS) ○YOSHIDA, Takefumi; HIGUCHI, Masayoshi
- 1PC-064** Toughening and functionalization of vinyl polymer-based rotaxane-cross-linked polymers (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SAWADA, Jun; AOKI, Daisuke; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 1PC-065** A Novel Eu(III) and Fe(II) based 3D-Metallo Supramolecular Polymers for Proton Conduction Applications (Pol. Mater. Unit, NIMS) ○YEMINENI, Narayana; HIGUCHI, Masayoshi
- 1PC-066** Next Generation Electrochromic Devices Based on Metallo-supramolecular Polymers (Pol. Mater. Unit, NIMS) ○RANA, Utpal; HIGUCHI, Masayoshi
- 1PC-067** Creation of novel Fe-Pd ordered alloy nanoparticles by introducing third element (ICR, Kyoto Univ.) ○MATSUMOTO, Kenshi; SATO, Ryota; TERANISHI, Toshiharu
- 1PC-068** Metallo-supramolecular polymers of osmium for electrochromic application (Pol. Mater. Unit, NIMS) ○BERA, Manas Kumar; HIGUCHI, Masayoshi
- 1PC-069** Development of Quaternary Ammonium Salt-Type Novel Ionic Liquids and Properties of Surfactants in Ionic Liquids (Grad. Sch. Human. Sci., Nara Women's Univ.; NIKKOL GROUP Cosmos Technical Center Co., Ltd.) ○KAWAI, Risa; YADA, Shihou; YOSHIMURA, Tomokazu; HASHIMOTO, Satoru; SUZUKI, Toshiyuki
- 1PC-070** Realtime X-ray fluorescence movie of calcium and iron in growing chemical garden (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○ZHAO, Wenyang; SAKURAI, Kenji
- 1PC-071** Development of Thermal Conductive Carbon Nanotube / Aluminum Nitride Composites to Reduce Filler Filling Levels - CNT Synthetic Technology on Sub-Micro Ceramic Substrate - (NTRC, AIST) ○MATSUMOTO, Naoyuki; IRIE, Michiko; HIRANO, Megumi; ISHIZAWA, Sachiko; FUTABA, Don
- 1PC-072** Observation of negative thermal expansion in ultra thin polyvinyl acetate thin film (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○LIU, Yuwei; SAKURAI, Kenji
- 1PC-073** Development of Redox-Active Functional Liquids (Fac. Eng., Kagawa Univ.) ○ISODA, Kyosuke
- 1PC-074** Magnesium Tetraethynylporphyrins Linked with Diketopyrrolopyrroles for Small Molecule Organic Solar Cells (Grad. Sch. Eng., The Univ. of Tokyo) ○NAKAGAWA, Takafumi; OGUMI, Keisuke; OKADA, Hiroshi; WANG, Huan; MATSUO, Yutaka
- 1PC-075** Stimuli-responsive liquid phthalocyanine (Grad. Sch. Sci. Technol., Shinshu Univ.) ○CHINO, Yoshiaki; NAKANISHI, Takashi; KIMURA, Mutsumi
- 1PC-076** Synthesis of sulfur-based polymer materials from elemental sulfur and algae oil (TREMS, Univ. of Tsukuba) ○KUWABARA, Junpei; OISHI, Shuhei; OMODA, Ryo; AIHARA, Yuichi; CHOI, Junchul; TAKAHASHI, Toshikazu; WATANABE, Hideo; WATANABE, Makoto; KANBARA, Takaki
- 1PC-077** Elastic Crystals: Fluorochromism via Mechanical Bending (Dept. Appl. Chem., Nat. Def. Acad.) ○HAYASHI, Shotaro
- 1PC-078** Ultraviolet shielding properties and application of metal oxide-supported mesoporous silica (Adv. Mater. Res. Lab., Tosoh Corp.; Sch. Mater. & Chem. Tech., Tokyo Tech.; Lab. Chem. Life Sci., Tokyo Tech.) ○ASANO, Sachio; TOSHITOMI, Fumiaki; IWANAGA, Kohei; OSUGA, Ryota; NOMURA, Junko
- 1PC-079** Development of Reactive Metal-Containing Ionic Liquids Exhibiting Thermochromism with Variable Color Range (Grad. Sch. Sci., Kobe Univ.) ○TOMINAGA, Takumi; MOCHIDA, Tomoyuki
- 1PC-080** Development of Solid Solutions Based on Cage-Silsesquioxanes (KIT) ○IMOTO, Hiroaki; MORIMOTO, Satoshi; NAKA, Kensuke
- 1PC-081** Expansion of selective metal-vapor deposition on diarylethene surface and these applications for electronic devices (Osaka Kyoiku Univ.) ○MATSUMOTO, Saki; SHIRAKAWA, Riku; HOSHIMOTO, Kannei; TSUJIOKA, Tsuyoshi
- 1PC-082** Mechano-optical behavior of Cholesteric Liquid Crystal Elastomers (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○KIMURA, Seiya; KU, Kyosun; FUJISAWA, Kaori; TSUTSUMI, Osamu; AKAMATSU, Norihisa; SHISHIDO, Atsushi
- 1PC-083** Tailor-Made Synthesis of Extended  $\pi$ -Systems from Alkynylboranes: Towards Electronic Materials and Pharmaceuticals (Sch. Sci. Eng., Meiji Univ.) ○SAWATSUGAWA, Yuuki; TANI, Tomohiro; TSUCHIMOTO, Teruhisa
- 1PC-084** Gas Sorption and Supercapacitive Behaviors of Micro-/Mesoporous Few-Layer Graphitic Carbon Materials (Dept. Chem., Hankuk Univ. of Foreign Studies) ○HUH, Seong; KIM, Hyun-chul
- 1PC-085** Copper particle pastes for low temperature and rapid sintering process (Grad. Sch. Eng., Hokkaido Univ.) ○YONEZAWA, Tetsu; TSUKAMOTO, Hiroki
- 1PC-086** Endohedral lithium-ion-containing fullerene bearing diphenylmethane or fluoreno groups (Grad. Sch. Eng., The Univ. of Tokyo) ○OKADA, Hiroshi; UENO, Hiroshi; KAWAKAMI, Hiroki; AOYAGI, Shinobu; MATSUO, Yutaka
- 1PC-087** The self-assembly of gold nanoparticles is available to SERS nanobeacons (LASTI, Univ. of Hyogo; Archilys) ○FUKUOKA, Takao; MORI, Yasushige; YAMAGUCHI, Akinobu
- 1PC-088** Effects of Monomer Concentration on the Radical Polymerization Initiated with Borane-pyridine Complex (Tohoku Seikatsu Bunka Univ.) ○SHUICHI, Kanno
- 1PC-089** Hollow Sphere Organic Nanocapsules with Stimuli Responsive Properties (RISC, AIST) ○KOGISO, Masaki; DING, Wuxiao
- 1PC-090** Effect of sheath-flow for electrospray in a liquid medium (NICCA CHEMICAL CO.,LTD.) ○FUJII, Masaki; WAKISAKA, Akihiro; KOBAYASHI, Kazuhiko
- 1PC-091** Direct hydrophobization of hinoki-lignocellulose nanofiber with hydrosilane derivatives in aqueous media. (Dept. of Chem. Eng., NIT, Nara College) ○NISHIJO, Mayu; ISHIKAWA, Susumu; ODA, Nozomu; SUGIYAMA, Hiroyuki; SHIMADA, Toyoshi
- 1PC-092** Preparation of Oligosilanes with Iteration of Deprotonation-Nucleophilic Substitution Sequence (Fac. Eng., Gifu Univ.) ○TAKAMORI, Atsushi; HIBINO, Hayata; KAMEYAMA, Hiroaki; NARUSE, Yuji
- 1PC-093** Development of coarse-grained models for fracture behavior analysis of thermosetting epoxy resin (Nippon steel & sumikin chemical Co., Ltd.; Grad. Sch. Eng., The Univ. of Tokyo) ○SHOJI, Naoyuki; YAMASHITA, Takefumi
- 1PC-094** Development of intermolecular interaction models for the accurate molecular dynamics simulation (Nippon steel & Sumikin chemical Co., Ltd.; Grad. Sch. Eng., The Univ. of Tokyo) ○SASAKI, Kohei; YAMASHITA, Takefumi
- 1PC-095** Development of self-healing materials (KRI,Inc.) ○YAMAJI, Nana; HAYASHI, Megumi; HIGUCHI, Akiji
- 1PC-096** Synthesis, Structures, and Ground State Mechanochromism of

Fluorenylidene-Acrindane (Grad. Sch. Eng., The Univ. of Tokyo; Univ. Sci. Tech. China) ○MATSUO, Yutaka; WANG, Ya; NAKAGAWA, Takafumi; OKADA, Hiroshi; UENO, Hiroshi

## Electro-communications/Electronics

- 1PC-097<sup>#</sup>** Novel Synthesis and Photoluminescent Properties of Phosphorescent Organobismuth(III) Complexes (Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Sci., Osaka Pref. Univ.) ○OKAMURA, Naoki; MAEDA, Takeshi; FUJIWARA, Hideki; YAGI, Shigeyuki
- 1PC-098<sup>#</sup>** Correlation between morphology and electronic property in highly-oriented metal-organic framework nanosheet crystals (Grad. Sch. Eng., Osaka Pref. Univ.) ○OHATA, Takashi; MAKITA, Tatsuyuki; TAKEYA, Junichi; MAKIURA, Rio
- 1PC-099<sup>#</sup>** Dual Ion Beam Sputtered Low Power high endurance resistive switch with memristive behaviour (Indian Institute of Technology, Indore) ○KUMAR, Amitesh; DAS, Mangal; BHARDWAJ, Ritesh; KHAN, Md Arif; MANDAL, Biswajit; HTAY, Myo Than; KRANTI, Abhinav; MUKHERJEE, Shaibal
- 1PC-100<sup>#</sup>** Solid-state white-light emission from single luminophore (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○YOUNIS, Osama; TSUTSUMI, Osamu
- 1PC-101<sup>#</sup>** Measurement Tools for the Circular Dichroism in the Photo-excited State Toward the Development CPL Materials (IMRAM, Tohoku Univ.) ○KURONUMA, Makoto; KIKUCHI, Yota; ARAKI, Yasuyuki; MORI, Tadashi; WADA, Takehiko
- 1PC-102<sup>#</sup>** Redox Responsive Chiral Dopant for Color-Modulable Cholesteric Liquid Crystals (Grad. Sch. Eng., The Univ. of Tokyo) ○TOKUNAGA, Shoichi; ITOH, Yoshimitsu; AIDA, Takuzo
- 1PC-103** Photoresponsive material for additive type RtoR fine patterning technologies and Imaging mass spectrometry evaluation (Nikon Corp.) ○KAWAKAMI, Yusuke
- 1PC-104** Effect of pre-formed layers on the separation of carbon nanotubes by electric field induced layer formation method (NRI, AIST) ○KUWAHARA, Yuki; SASAKI, Fusako; NIHEY, Fumiyouki; SAITO, Takeshi
- 1PC-105** Fabrication of polar organic single-crystalline thin films and optical switching of SHG based on photoisomerization (Grad. Sch. Eng., Kyushu Univ.) ○NAGAI, Yuki; ISHIBA, Keita; YAMAMOTO, Ryosuke; MORIKAWA, Masa-aki; KIMIZUKA, Nobuo
- 1PC-106<sup>#</sup>** Fabrication of Ag Electrode by Patterning of Ag Nanoink on Silicon Substrate and Investigation of the Ag/Si Electrical Contacts (ORIST) ○SAITOH, Masashi; KASHIWAGI, Yukiyasu; CHIGANE, Masaya
- 1PC-107** Self-assembly of silver nano colloidal particles for printed electronics: a molecular simulation study (FLEC, AIST) ○YONEYA, Makoto; SUGISAWA, Shinya; HASEGAWA, Tatuo
- 1PC-108** Efficient Synthesis of Red Phosphorescent Emitter for Organic Light-Emitting Diodes (IRC3, AIST; Tanaka Kikinzo Kogyo K.K.) ○KONNO, Hideo; FUJIKAKE, Tsutomu; TANIUCHI, Jyunichi; KOBAYASHI, Rumi; MASAHIRO, Yasushi
- 1PC-109** Invisible silver grid transparent electrodes prepared by gravure offset printing (Future Technology Research Laboratory, ULVAC, Inc.) ○HASHIMOTO, Natsuki; HAYASHI, Shigeo; OHSAWA, Masato
- 1PC-110** Enhanced Layered-Herringbone Packing due to Long Alkyl Chain Substitution in Solution-Processable Organic Semiconductors (FLEC, AIST) ○MINEMAWARI, Hiromi; TANAKA, Mutsuo; TSUZUKI, Seiji; INOUE, Satoru; YAMADA, Toshikazu; KUMAI, Reiji; SHIMOI, Yukihiro; HASEGAWA, Tatsuo

## Medical care/Health care/Biotechnology

- 1PC-111<sup>#</sup>** Design, Synthesis and RNase H activity of Hemi-Gapmer Type Peptide Ribonucleic Acid (PRNA)-DNA chimeras for the RNase H mediated catalytic oligonucleotide therapeutics (IMRAM, Tohoku Univ.; Neuro., Tokyo Med. and Dental Univ.) ○INAGAKI, Masahito; UNABARA, Daisuke; UEMATSU, Ryohei; ARAKI, Yasuyuki; ISHIBASHI, Satoru; YOKOTA, Takanori; WADA, Takehiko
- 1PC-112<sup>#</sup>** Sandwich-typed assays for endogenous microRNA quantification using bispyrene probes (KIT) ○WATARI, Yu; NAKAJIMA, Kosuke; YAMAYOSHI, Asako; MURAKAMI, Akira; KOBORI, Akio
- 1PC-113<sup>#</sup>** Stimuli-responsive Macromolecules for Modulating Biomolecular Functions (Grad. Sch. Eng., The Univ. of Tokyo) ○MOGAKI, Rina; OKURO, Kou; AIDA, Takuzo
- 1PC-114<sup>#</sup>** Enhanced Fluorescent Immunoassay of a Tumor Marker Using an Optical Interference Mirror Slide (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○YASUDA, Mitsuru; FUJITA, Suzuka; AKIMOTO, Takuo; SHIGETO, Shinsuke
- 1PC-115<sup>#</sup>** Synthesis of Novel Bipyrole Derivatives: Applications for Staining of a Poly(hydroxyalkanoate) Producer (NIT, Kitakyushu College) ○OKAWARA, Toru; MIZUNO, Kohei; KUNITAKE, Kiko; OKAO, Natsumi; TAKEHARA, Kenji
- 1PC-116<sup>#</sup>** Molecular Self-assembled Chemosensor Arrays for Simultaneous Detection of Saccharides (IIS, The Univ. of Tokyo) ○SASAKI, Yui; MINAMI, Tsuyoshi
- 1PC-117<sup>#</sup>** Development of SN-38 based nano-prodrugs for cancer treatment (IMRAM, Tohoku Univ.) ○TANITA, Keita; KOSEKI, Yoshitaka;

- KAMISHIMA, Takaaki; KASAI, Hitoshi
- 1PC-118<sup>#</sup>** Solidification of poly(2-methoxyethyl acrylate) via block copolymerization with poly(methyl methacrylate) and its properties (Grad. Sch. Sci. Tech., Keio Univ.) ○KUROKAWA, Naruki; ENDO, Fuyuki; BITO, Kenta; MAEDA, Tomoki; HOTTA, Atsushi
- 1PC-119<sup>#</sup>** Transfer Dehydration of Primary Amides Using Electron-Deficient Nitriles (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○OOKABE, Hiroyuki; ISOGAWA, Takahiro; NARAOKA, Asuka; NOYORI, Ryoji; NAKA, Hiroshi
- 1PC-120<sup>#</sup>** Development of bioorthogonal SERS probes and their application to nucleic acid detection (KIT) ○OTA, Ryo; NAGAI, Yuki; TAKAGI, Noriyuki; KOBORI, Akio
- 1PC-121** Development of scalp stratum corneum care method focusing on stabilization of protein structure. (Milbon Co., Ltd.) ○SAKURAI, Yuuki; FURUTA, Momoko; WATANABE, Kosuke; SUZUTA, Kazuyuki; SHIRAKI, Kentaro; ITO, Len
- 1PC-122** Development of sprayable colloidal wound dressing for digestive system cancer therapy (RCFM, NIMS) ○NISHIGUCHI, Akihiro; TAGUCHI, Tetsushi
- 1PC-123** Development of Homogeneous Polyoxyethylene Type Nonionic Surfactants with Multi-Branched Chains (Grad. Sch. Human. Sci., Nara Women's Univ.; Nissan Chemical Industries, Ltd.) ○YADA, Masaki; YOSHIOKA, Yuiko; YOSHIMURA, Tomokazu; KODA, Toshinari
- 1PC-124** Development of novel compounds inducing cardiomyocyte proliferation (Grad. Sch. Pharm., The Univ. of Tokyo; Grad. Sch. Med., The Univ. of Tokyo; Tokyo Med. and Dental Univ.; RIKEN) ○KONDO, Masaki; HARA, Hironori; TAKEDA, Norifumi; SAITO, Tatsuo; HATA, Yutaka; KOMURO, Issei; UCHIYAMA, Masanobu
- 1PC-125** Correlation between interfacial structure and function of biocompatible polymer with intermediate water (Grad. Sch. Eng., Kyushu Univ.) ○UEDA, Tomoya; KITAHARA, Yoko; MURAKAMI, Daiki; TANAKA, Masaru
- 1PC-126** Exploration of selective cytotoxic substances under nutrient starvation conditions from marine organisms (Sch. Adv. Eng., Kogakuin Univ.) ○NAGAYA, Yuki; ITO, Ami; MUKOUHATA, Issei; MATSUNO, Kenji; OHNO, Osamu
- 1PC-127** Screening of the inhibitors of lipopolysaccharide (LPS) from marine organisms (Sch. Adv. Eng., Kogakuin Univ.) ○TERASAKI, Takuro; IWASAKI, Arihiro; SUENAGA, Kiyotake; MATSUNO, Kenji; OHNO, Osamu
- 1PC-128** Screening of ER stress inhibitors from marine organisms. (Sch. Adv. Eng., Kogakuin Univ.) ○SATO, Keigo; HONMA, Ryo; MATSUNO, Kenji; OHNO, Osamu
- 1PC-129** Development of a gas-sensitive field-effect transistor for sensing volatile organic compounds toward medical diagnosis (IBB, Tokyo Med. and Dental Univ.) ○YOSHIZUMI, Toshihiro; GODA, Tatsuro; MATSUMOTO, Akira; MIYAHARA, Yuji
- 1PC-130** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (43): Synthesis of *N*-methyl chlorin derivatives that stabilize G-quadruplex (Grad. Sch. Life Sci., Ritsumeikan Univ.; FIBER, Konan Univ.; FIRST, Konan Univ.) ○NAGANO, Yasunobu; ENDOH, Tamaki; OGASAWARA, Shin; SUGIMOTO, Naoki; TAMIAMI, Hitoshi
- 1PC-131<sup>#</sup>** Influence of saturated non-polar lipids on tear film lipid layer stability (Lion corporation; Grad. Sch. Eng., Utsunomiya Univ.) ○YOSHIDA, Masataka; YAMAGUCHI, Masato; TABUCHI, Nobuhito; KON, Ryo; IIMURA, Ken-ichi
- 1PC-132** A method of packaging biomaterials into a glass microfluidic chip (RIKEN QBiC) ○FUNANO, Shunichi; OTA, Nobutoshi; SATO, Asako; TANAKA, Yo
- 1PC-133** Site-specific introduction of functional molecules into the vicinity of the active site of chymotrypsin (Kanazawa Inst. of Tech.) KOGA, Masato; KUMAKURA, Takuya; ○ONO, Shin
- 1PC-134** Dimerization of chymotrypsin by site-specific chemical modification (Kanazawa Inst. of Tech.) ○HATAKEYAMA, Takahiro; HAYAKAWA, Takuma; KURODA, Hirofumi; OYAMA, Hiroshi; ONO, Shin
- 1PC-135<sup>#</sup>** Development of continuous glucose monitoring using glucose responsive fluorescent hydrogel (IIS, The Univ. of Tokyo) ○SAWAYAMA, Jun; TAKEUCHI, Shoji
- 1PC-136<sup>#</sup>** Development of a rapid disease diagnosis system utilizing antibody-coated fluorescence magnetic beads (Sch. Life Sci. Tech., Tokyo Tech.; Tokyo Med. Univ., Dept. Nanoparticle Transl. Res.; Keio Univ., Sch. Med.; Grad. Sch. Eng., The Univ. of Tokyo; Matrix Cell Res. Inc.) ○SAKAMOTO, Satoshi; MATSUDA, Sachiko; KUSAKABE, Moriaki; SEKINO, Masaki; KITAGAWA, Yuko; HANDA, Hiroshi
- 1PC-137<sup>#</sup>** Preparation and cellular uptake of Amadori-PE containing liposomes (IBB, Tokyo Med. and Dental Univ.) ○MIYAZAWA, Taiki; NAKAGAWA, Kiyotaka; KAMIYOSHIHARA, Reina; MIYAZAWA, Teruo
- 1PC-138** Production and Purification Technology of Hinoki Essential Oils (Yamaguchi Pref. Ind. Tech. Inst.) ○IWATA, Arihiro; OGAWA, Tomoki; MIYAZAKI, Shogo; NAKAMURA, Nobutoshi; KOIKE, Hidekazu; MATSUSHITA, Naomi
- 1PC-139** Development of Amino Acid-Type Surfactants of *N*-Acyl-*N*-(2-hydroxyethyl)- $\beta$ -alanine with Hydroxy Group (Grad. Sch. Human. Sci., Nara Women's Univ.; NOF CORPORATION; Kracie Home Products, Ltd.)

- WAKIZAKA, Miyako; YADA, Shiho; YOSHIMURA, Tomokazu; SHIMOSEGAWA, Hiroshi; FUJITA, Hiroya; MATSUE, Yukako
- 1PC-140** Inhibition of histamine release which is involved in allergic responses induced by components of Peppermint (*Mentha piperita* L.) (Fac. Eng., KAIT) ○EGUCHI, Miho; SAITO, Takashi
- 1PC-141** Evaluation of fibrinolytic activity in fruiting body mushrooms (Fac. Eng., KAIT) ○MATSUOKA, Yuki; SAITO, Takashi
- 1PC-142** Preparation of novel anticancer drugs using short lived radionuclides (Grad. Sch. Sci., Osaka Univ.) ○KABAYAMA, Kazuya; KANEDA, Kazuko; MANABE, Yoshiyuki; SHIMOYAMA, Atsushi; TOYOSHIMA, Atsushi; FUKASE, Koichi; SHINOHARA, Atsushi
- 1PC-143** Development of macrophage activator with protease-treated whey protein (Grad. Sch. Biosci. Bioind., Tokushima Univ.) ○NISHIGAWA, Ryohei; KUWADA, Emi; IKAME, Saki; IDUCHI, Yuka; ENDO, Makoto; UTO, Yoshihiro; YAMADA, Hisatsugu; TASAKA, Toru; UNUMA, Hideki; TOKUNAGA, Ken; HAYAKAWA, Akio; GO, Akiteru; GO, Kikyuu
- 1PC-144** Synthesis of DNA-responsive Gels with Double-stranded DNAs as Crosslinks and Their SNPs Recognition Behavior (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○TAKAHASHI, Naho; OKAWA, Kaori; OHBA, Chihiro; MINAMITSUJI, Makoto; KAWAMURA, Akifumi; MIYATA, Takashi

## Room A5

Bldg. 14 1434

### Asian International Symposium - Photochemistry - Friday, March 23, PM

(13 : 00~13 : 10)

- 4A5-25<sup>#</sup>** Opening Remarks / Closing Remarks Opening Remarks (13:00~13:10)

Chair: Maitani, Masato (13 : 10~15 : 10)

- 4A5-26<sup>#</sup>** Invited Lecture [Area Plenary Lecture 1] Chemistry of Quantum Dot and Applications to Biological Sensing and Imaging (US Naval Research Lab.) ○Susumu, Kimihiro (13:10~13:40)
- 4A5-29<sup>#</sup>** Invited Lecture Optical Properties of Colloidal Semiconductor Quantum Dots and Their Application to Biological Sensing (Saitama Univ.) ○Fukuda, Takeshi (13:40~14:00)
- 4A5-31<sup>#</sup>** Keynote Lecture Health and Environmental Sensing Enabled by Nanostructured Electronic Devices (Chinese Univ. of Hong Kong) ○Zhao, Ni (14:00~14:30)
- 4A5-34<sup>#</sup>** Invited Lecture Solution Processed Infrared PbS Colloidal Quantum Dot / ZnO Nanowire Solar Cells (The Univ. of Tokyo) ○Wang, Haibin (14:30~14:50)
- 4A5-36<sup>#</sup>** Invited Lecture Preparation and Photoelectrochemical Properties of Low-Toxic Ag-based Quantum Dots for Photoenergy Conversion System (Nagoya Univ.) ○Kameyama, Tatsuya (14:50~15:10)

Chair: Murakami, Takuro (15 : 20~16 : 20)

- 4A5-39<sup>#</sup>** Keynote Lecture Additive Assisted Controllable Growth of High Quality Perovskite Films With Enhanced Performance (Shanghai Jiao Tong Univ.) ○Zhao, Yixin (15:20~15:50)
- 4A5-42<sup>#</sup>** Invited Lecture [Area Plenary Lecture 2] Design and Application of Organic-Inorganic Perovskites (Sophia Univ.) ○Takeoka, Yuko (15:50~16:20)

Chair: Maitani, Masato (16 : 20~16 : 40)

- 4A5-45<sup>#</sup>** Invited Lecture Keys for High Efficiency and Commercialization of Perovskite Solar Cells (AIST) ○Murakami, Takuro (16:20~16:40)

Chair: Murakami, Takuro (16 : 40~17 : 00)

- 4A5-47<sup>#</sup>** Invited Lecture Photoluminescence spectroscopy of lead halide perovskite semiconductors and solar cells (Chiba Univ.) ○Yamada, Yasuhiro (16:40~17:00)

(17 : 00~17 : 10)

- 4A5-49<sup>#</sup>** Opening Remarks / Closing Remarks Closing Remarks (17:00~17:10)

## Room A6

Bldg. 14 1441

### Coordination Chemistry, Organometallic Chemistry

Tuesday, March 20, AM

Pd

Chair: OZAWA, Yoshiki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1A6-01, 1A6-02, 1A6-03, 1A6-04, 1A6-05, 1A6-06)

- 1A6-01** Synthesis of Tetranuclear Palladium Complexes Supported by a New Linear Tetrphosphine Containing an Amino Group, rac-dmpmp (Fac. Sci., Nara Women's Univ.) ○TANAKA, Miho; HAMADA, Mami; MIKITA, Yumina; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 1A6-02** Synthesis and Properties of Cationic Palladium Complexes with PS<sub>3</sub>-type Tripodal Tetradentate Ligand Bearing *t*-Bu Group (Grad. Sch. Sci. Tech., Gunma Univ.) ○OMA, Rin; TAKEDA, Nobuhiro; UNNO, Masafumi
- 1A6-03** Construction of Gigantic Self-Assembled Complexes Composed of Linear Bidentate Ligands and Pd(II) Ions (Grad. Sch. Eng., The Univ. of Tokyo) ○OFUKU, Masafumi; DOMOTO, Yuya; FUJITA, Daishi; FUJITA, Makoto
- 1A6-04** Synthesis of Palladium Clusters with Bridging Tropylium Ligands (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NOJIMA, Hikari; YAMAMOTO, Koji; MURAHASHI, Tetsuro
- 1A6-05** Synthesis and Structure of  $\pi$ -Conjugated Tetraenyl Pd<sub>4</sub> Chain Complexes (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KAWASUMI, Yuna; YAMASHITA, Mitsuki; YAMAMOTO, Koji; MURAHASHI, Tetsuro
- 1A6-06** Photo-induced Isomerization of Bis-carotene Pd<sub>2</sub> Clusters (Sch. Mater. & Chem. Tech., Tokyo Tech.; CIMoS, IMS) ○YAMASHITA, Mitsuki; HORIUCHI, Shinnosuke; YAMAMOTO, Koji; MURAHASHI, Tetsuro

Chair: NAKAMAE, Kanako (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1A6-08, 1A6-10, 1A6-12, 1A6-13)

- 1A6-08<sup>\*\*</sup>** Synthesis of Pd(II) complexes of extended catecholate ligands and wide-range tuning of near-IR absorptivity (Grad. Sch. Mat. Sci., Univ. of Hyogo; Sch. Sci., Univ. of Hyogo) ○TAHARA, Keishiro; KADOWAKI, Tomoya; KIKUCHI, Jun-ichi; ASHIHARA, Yuya; OZAWA, Yoshiki; ABE, Masaaki
- 1A6-10<sup>\*</sup>** Oxidative cracking of halogenated benzene derivatives catalyzed by palladium(II)-NHC complexes in water (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SHIMOYAMA, Yoshihiro; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko
- 1A6-12** Construction of Metal-Macrocyclic Framework/Au Nanoparticle Composites (Grad. Sch. Sci., The Univ. of Tokyo) ○YAMASHITA, Yutaro; TASHIRO, Shohei; SHIONOYA, Mitsuhiro
- 1A6-13<sup>#</sup>** Functionalization of Pd(II)-macrocyclic-assembled core-shell porous crystals (Grad. Sch. Sci., The Univ. of Tokyo; Coll. Sci., Rikkyo Univ.) ○MITSUI, Shinya; BURKE, David; TASHIRO, Shohei; MATSUSHITA, Nobuyuki; SHIONOYA, Mitsuhiro

Pt

Chair: ISHIZUKA, Tomoya (11 : 20~12 : 00)

\* 11:10-11:20: interval for laptop PC connection.(1A6-15, 1A6-16, 1A6-17, 1A6-18)

- 1A6-15** Synthesis and Reactions of A-Frame Type Triplatinum Complexes Supported by a Linear Tetrphosphine, meso-dmpmp (Fac. Sci., Nara Women's Univ.) ○URABE, Mari; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 1A6-16** synthesis and metal assembly of directional  $\pi$ -conjugated oligomers (IIR, Tokyo Tech.; JST ERATO, Tokyo Tech.; JST PRESTO, Tokyo Tech.; Lab. Chem. Life Sci., Tokyo Tech.) ○OKAWA, Mizuki; AMEMIYA, Fumihito; YAMAMOTO, Kimihisa; IMAOKA, Takane
- 1A6-17** Synthesis, characterization, intervalence charge transfer properties of Pt(II) complexes of biscatecholato ligands (Sch. Sci., Univ. of Hyogo; Grad. Sch. Mat. Sci., Univ. of Hyogo) ○ASHIHARA, Yuya; TAHARA, Keishiro; OZAWA, Yoshiki; ABE, Masaaki
- 1A6-18** Photocatalytic hydrogen evolution using a cyano-bridged metal complex containing Pt or Ni ions (Grad. Sch. Eng., Osaka City Univ.) ○KITASE, Akira; TABE, Hiroyasu; YAMADA, Yusuke

## Tuesday, March 20, PM

Chair: MIYASAKA, Hitoshi (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(1A6-26, 1A6-29, 1A6-31)  
**1A6-26<sup>#</sup> CSJ Award for Young Chemists** Creation of Novel Materials Situated in Dimensional Crossover Region and Investigation of Their Physical Properties (Dep. Chem., Sch. Sci., Kyoto Univ.) OOTSUBO, Kazuya  
**1A6-29<sup>#\*</sup>** Atomicity Precise Synthesis of Metal Clusters Using Multinuclear Platinum Ring Complexes as the Precursor (Lab. Chem. Life Sci., Tokyo Tech.; JST-ERATO; JST-PRESTO) OKANUMA, Yuki; IMAOKA, Takane; YAMAMOTO, Kimihisa  
**1A6-31** Solar Driven Hydrogen Production in a Photoelectrochemical Cell Using a Pt Porphyrin Modified TiO<sub>2</sub> Electrode as a Cathode (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) MORITA, Kohei; TAKIJIRI, Kohei; SAKAI, Ken; OZAWA, Hironobu

Chair: OZAWA, Hironobu (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1A6-33, 1A6-34, 1A6-35, 1A6-36, 1A6-37, 1A6-38)  
**1A6-33** Synthesis and H<sub>2</sub>-evolving Activity of New Dinuclear Platinum(II) Bipyridine Complexes with a Controlled Metal-Metal Interaction. (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) OYAMAKAWA, Kazuma; WAKIYAMA, Fumiaki; YAMAUCHI, Kousei; SAKAI, Ken  
**1A6-34** Ultrasound-Induced Emission Enhancement of Clothespin-Shaped Pt (II) Complexes bearing Methoxy Substituents (Sch. Eng. Sci., Osaka Univ.) IKESHITA, Masahiro; TAKAHASHI, Koichi; KAWAMORITA, Soichiro; KOMOYA, Naruyoshi; NAOTA, Takeshi  
**1A6-35<sup>#</sup>** Synthesis, structure and emission property of polymethylene-vaulted *trans*-bis(5-pyrazolylaldiminato)platinum(II) complexes (Grad. Sch. Eng. Sci., Osaka Univ.) OLE, Ngoc Ha-thu; NAOTA, Takeshi  
**1A6-36** Structure Dependence of Photophysical Properties of *trans*-Bis(*o*-aminosulfenato)platinum(II) Complexes bearing Pyrenylethynyl Group (Grad. Sch. Eng. Sci., Osaka Univ.) OUENO, Kazushi; KATAKURA, Naoki; KAWAMORITA, Soichiro; KOMIYA, Naruyoshi; NAOTA, Takeshi  
**1A6-37** Direct Functionalization on Coordination Platforms of Vaulted *trans*-bis(salicylaldiminato)Pt(II) Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) IWASHITA, Asuka; KAWAMORITA, Soichiro; NAOTA, Takeshi  
**1A6-38** Behavior of excited trimer emission in solution of Pt(II) complex having N<sup>+</sup>C<sup>-</sup>N ligand (Grad. Sch. Nanobiosci., Yokohama City Univ.) KONNO, Yuri; SHINOZAKI, Kazuteru

Chair: MASAOKA, Shigeyuki (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(1A6-40, 1A6-42, 1A6-43, 1A6-44)  
**1A6-40<sup>#\*</sup>** The Effect of the Aromaticity on the Phosphorescent Emission from *trans*-Bis(iminoaryloxy)platinum(II) Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) OINOUE, Ryo; NAITO, Masaya; EHARA, Masahiro; NAOTA, Takeshi  
**1A6-42** Self-assembling properties of amphiphilic redox-active Pt(II) complexes (Grad. Sch. Sci. Eng., Chuo Univ.) OKADA, Koyuki; NAKAMURA, Yuichi; MATSUMOTO, Takeshi; CHANG, Ho-chol  
**1A6-43** Control of Stacking Structures and Physical Properties of Cyano-Bridged Two-Dimensional Coordination Polymers FePt(CN)<sub>4</sub> (Grad. Sch. Sci. & Tech., Kumamoto Univ.) MATSUNARI, Hiromu; OHTANI, Ryo; HAYAMI, Shinya  
**1A6-44<sup>#\*</sup>** Facile Synthesis and Photophysical Properties of Pt(II) Complexes Having a Dicarbanion Ligand (Fac. Sci., Hokkaido Univ.) YOSHIDA, Masaki; WAKASUGI, Chuei; SAMEERA, W. M. C.; KOBAYASHI, Atsushi; KATO, Masako

## Pt, Rh

Chair: YOSHINARI, Nobuto (16 : 40~17 : 40)

- \* 16:30-16:40: interval for laptop PC connection.(1A6-47, 1A6-48, 1A6-49, 1A6-51)  
**1A6-47<sup>#</sup>** Synthesis and self-assembly of macrocyclic dinuclear Pt(II) and Pt(IV) complexes (Grad. Sch. Sci., The Univ. of Tokyo) SHIMIZU, Shun; TASHIRO, Shohei; SHIONOYA, Mitsuhiko  
**1A6-48** Synthesis of Rhodium(III) Complexes with Redox-active *o*-Phenylenediamine Ligands and its C-H amination Reactivity (Grad. Sch. Eng., Osaka Univ.) KAGA, Akira; FUJITA, Daiki; SUGIMOTO, Hideki; ITOH, Shinobu  
**1A6-49<sup>#\*</sup>** Reactivity of Rh(III) Nitrene-radical Complexes Having a Redox-active Tetradentate Ligand (Grad. Sch. Eng., Osaka Univ.) FUJITA, Daiki; SUGIMOTO, Hideki; MORIMOTO, Yuma; ITOH, Shinobu  
**1A6-51<sup>#\*</sup>** The development of a framework catalyst for photocatalytic hydrogen evolution (SOKENDAI; IMS) CHINAPANG, Pondchanok; OKAMURA, Masaya; ITOH, Takahiro; KONDO, Mio; KONDO, Mio; MASAOKA, Shigeyuki

## Rh

Chair: KOBAYASHI, Atsushi (17 : 50~18 : 30)

- \* 17:40-17:50: interval for laptop PC connection.(1A6-54, 1A6-55, 1A6-56, 1A6-57)  
**1A6-54** Construction of a Rh(II) dimer based framework with substitution-labile sites and its reactivity (Sch. Physical Sci., SOKENDAI) KACHI, Mami; ITOH, Takahiro; OKAMURA, Masaya; KONDO, Mio; MASAOKA, Shigeyuki  
**1A6-55<sup>#</sup>** Adsorption Behavior of Single Crystals Composed of L-Cysteinato Rh<sup>III</sup><sub>2</sub>Zn<sup>II</sup><sub>4</sub> Complex Anions toward Transition Metal Ions (Osaka Univ.) SODKHOUMKUM, Rapheepreaw; YOSHINARI, Nobuto; KONNO, Takumi  
**1A6-56** Crystalline-state Photoisomerization of a Rhodium Dithionite Complex with *n*-Propyl Groups (Grad. Sch. Sci. Eng., Kindai Univ.; Grad. Sch. Mat. Sci., Univ. of Hyogo) MIYATA, Seiya; NAKAI, Hidetaka; OZAWA, Yoshiki; ABE, Masaaki  
**1A6-57** Syntheses and elucidation of luminescence properties of novel tris-cyclometalated rhodium(III) complexes. (Grad. Sch. Nanobiosci., Yokohama City Univ.) TANSO, Shota; SHINOZAKI, Kazuteru

Asian International Symposium  
- Inorganic Chemistry, Coordination  
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Wednesday, March 21, PM

Chair: Kodera, Masahito (13 : 00~14 : 10)

- 2A6-25<sup>#</sup> Keynote Lecture** Porpholactone: An emerging model for tetrapyrrole cofactors (Peking Univ.) Zhang, Jun-Long (13:00~13:30)  
**2A6-28<sup>#</sup> Invited Lecture** Biohybrid Catalysts Harboring a Synthetic Metal Complex within a Barrel Protein (Osaka Univ.) Onoda, Akira (13:30~13:50)  
**2A6-30<sup>#</sup> Invited Lecture** Toward Bright and Tunable Persistent Luminescence in Garnets (Kyoto Univ.) Xu, Jian (13:50~14:10)  
 Chair: Uemura, Takashi (14 : 20~15 : 40)  
**2A6-33<sup>#</sup> Keynote Lecture** Sub-Inm Ultrathin Nanocrystals (Tsinghua Univ.) Wang, Xun (14:20~14:50)  
**2A6-36<sup>#</sup> Invited Lecture** Rationally-Assembled Frameworks as Model Material Systems for Basic Science of Energy Conversion/Storage Mechanisms: From Tunable-Electronic Properties to Controlled Electrochemical Reactions (NIMS) Sakaushi, Ken (14:50~15:10)  
**2A6-38<sup>#</sup> Keynote Lecture** Solution-processed Organic Crystals for Transistor Applications (Nanjing Univ.) Li, Yun (15:10~15:40)

Chair: Zhang, Jun-Long (15 : 50~17 : 20)

- 2A6-42<sup>#</sup> Keynote Lecture** Bioinorganic Chemistry-Approaches Towards Elucidating Enzymatic Reactions (Sookmyung Women's Univ.) Hong, Seungwoo (15:50~16:20)  
**2A6-45<sup>#</sup> Invited Lecture** Multipoint Solid-Supported Phosphine Ligands for Efficient Organometallic Catalysis (Hokkaido Univ.) Iwai, Tomohiro (16:20~16:40)  
**2A6-47<sup>#</sup> Invited Lecture** Layered Double Hydroxide Supported Palladium Nanoparticles for Efficient Heterogeneous Acceptorless Dehydrogenative Aromatization Reactions (The Univ. of Tokyo) Jin, Xiongjie (16:40~17:00)  
**2A6-49<sup>#</sup> Invited Lecture** Modular synthesis of Multiarylated Aromatics (Waseda Univ.) Yamaguchi, Junichiro (17:00~17:20)

Coordination Chemistry, Organometallic  
Chemistry

## Thursday, March 22, AM

## Fe

Chair: MIYAKE, Yoshihiro (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3A6-01, 3A6-02, 3A6-03, 3A6-04, 3A6-05, 3A6-06)  
**3A6-01** Synthesis and Structures of Lithium and Iron Complexes Bearing Bulky Arylthiolate Ligands (Grad. Sch. Sci. Eng., Kindai Univ.) SUGANO, Kohei; HAMURA, Masahiro; HAYAKAWA, Naoki; MATSUO, Tsukasa  
**3A6-02** Synthesis and Structures of Iron complexes with Bulky Carboxylate Ligands (Grad. Sch. Sci. Eng., Kindai Univ.) NISHITANI, Nobuhisa; NISHII, Mamiko; HAMURA, Masahiro; MATSUO, Tsukasa  
**3A6-03** Preparation of Multi-nuclear Iron Clusters from Oxo-centered Trinuclear Iron Clusters and Organosilicon Compounds (Grad. Sch. Eng. Sci., Osaka Univ.) ODA, Hiroaki; TORII, Ryuya; REJ, Supriya; TSURUGI, Hayato; MASHIMA, Kazushi  
**3A6-04** Synthesis of Iron Dinitrosyl Complexes by Using Planar Nitrogen Containing Ligands (Coll. Sci., Ibaraki Univ.) OHTA, Ayuri; MINAKAWA, Yurika; FUJISAWA, Kiyoshi



- 3A6-05** Theoretical Studies on Operation of Molecular Device made of Biferrocenium Complexes and Prediction of Device Operation using Electrostatic Potential Model (Center for Promotion of Higher Edu., Kogakuin Univ.; Grad. Sch., Kogakuin Univ.; Grad. Sch. Mat. Sci., Univ. of Hyogo; Sch. Adv. Eng., Kogakuin Univ.) ○TOKUNAGA, Ken; ODATE, Fumiya; TAHARA, Keishiro; SATO, Mitsunobu
- 3A6-06** Syntheses, Electrochemical Properties and Assembly of Metalloporphyrin Complexes Bearing Intermolecular Interaction Sites (SOKENDAI; IMS; ACT-C, JST) ○TASAKI, Masahiro; OKABE, Yuki; KONDO, Mio; MASAOKA, Shigeyuki

Chair: KONDO, Mio (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(3A6-08, 3A6-10, 3A6-12)
- 3A6-08\*\*** Gas Adsorption Properties of Cyanide-Bridged Nanoporous Metal Complexes with Coordinatively Unsaturated Metal Sites (Grad. Sch. Eng., Nagoya Univ.) ○MISHIMA, Akio; HORI, Akihiro; YUNSHENG, Ma; MATSUDA, Ryotaro
- 3A6-10\*\*** Recyclable ammonia adsorbent using Prussian blue analogue (NRI, AIST) ○TAKAHASHI, Akira; NODA, Keiko; SUGIYAMA, Yutaka; KAWAMOTO, Tohru
- 3A6-12** Direct oxidation of alkanes catalyzed by 5,15-dizaporphyrin iron complexes (Grad. Sch. Eng., Nagoya Univ.) ○NISHIMURA, Tsubasa; MIYAKE, Yoshihiro; SHINOKUBO, Hiroshi

Chair: MATSUMOTO, Takeshi (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(3A6-14, 3A6-16, 3A6-18)
- 3A6-14\*\*** The effect of substituents on the redox properties of pentanuclear iron complexes (IMS) ○VIJAYENDRAN, Praneeth; OKAMURA, Masaya; KONDO, Mio; MASAOKA, Shigeyuki
- 3A6-16\*\*** Supramolecular Activation of an Ethane Oxidation Catalyst based on a Nitrido-Bridged Iron Porphyrinoid Dimer (Grad. Sch. Sci., Nagoya Univ.) ○YAMADA, Yasuyuki; MIHARA, Nozomi; TAKAYA, Hikaru; KITAGAWA, Yasutaka; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; TANAKA, Kentaro
- 3A6-18** Methane Oxidation Reaction Catalyzed by a Nitrido-Bridged Dinuclear iron complex in a Supramolecular Porphyrinoid Dimer (Grad. Sch. Sci., Nagoya Univ.) ○MORITA, Kentaro; YAMADA, Yasuyuki; MIHARA, Nozomi; TANAKA, Kentaro

## Thursday, March 22, PM

Chair: TANAKA, Kentaro (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(3A6-26, 3A6-29, 3A6-30, 3A6-31)
- 3A6-26#** CSJ Award for Outstanding Young Women Chemists Development of function-integrated metal complex catalysis for small molecule conversion (IMS) ○KONDO, Mio
- 3A6-29** Photochemical Hydrogen Evolution Reaction of *o*-Phenylenediamine Complexes and its Controlling Factor. (Grad. Sch. Sci. Eng., Chuo Univ.) ○AKISAWA, Hideaki; YAMAMOTO, Risa; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 3A6-30** Mechanistic Studies of Photocatalytic CO<sub>2</sub> Reduction Using Fe(II) Ion, Aromatic Diimine, and a Cu(I)-Complex Photosensitizer. (Sch. Sci., Tokyo Tech.) ○IRIMAJIRI, Mina; TAKEDA, Hiroyuki; KOIKE, Kazuhide; NOZAWA, Shunsuke; ADACHI, Shinichi; ISHITANI, Osamu
- 3A6-31** Synthesis, Characterization, and Investigations of Diazapyridinophane First-row Metal Complexes as Catalysts for CO<sub>2</sub> Reduction (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○SAKAGUCHI, Yuto; CALL, Arnau; CIBIAN, Mihaela; SAKAI, Ken

Chair: ISHIDA, Takayuki (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(3A6-33, 3A6-35, 3A6-36, 3A6-37, 3A6-38)
- 3A6-33\*\*** Ultrafast, High-Contrast and Remarkable Coloration Efficiency of Electrochromic Devices Based on Metallo-Supramolecular Polymers (Pol. Mater. Unit, NIMS) ○RANA, Utpal; HIGUCHI, Masayoshi
- 3A6-35** Preparation and Application Magnetic Ionic liquids using various types of Ionic Liquids (Fac. Edu., Kagawa Univ.) ○FUJIKAWA, Yuto; TAKAGI, Yumiko; RINA, Takeoka
- 3A6-36** Withdrawn
- 3A6-37** Substituent effects on the spin state of mononuclear iron(II) complexes with linear hexadentate 1,2,3-triazolimine ligands. (Fac. Edu., Gifu Univ.) ○NAKATA, Keishi; HAGIWARA, Hiroaki
- 3A6-38** Magnetic properties of dithiooxalato bridged heterometal complex under light irradiation (Grad. Sch. Sci., TUS) ○NAGAMINE, Shota; ENOMOTO, Masaya; OKAZAWA, Atsushi

Chair: SHIGA, Takuya (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(3A6-40, 3A6-41, 3A6-42, 3A6-43, 3A6-44)
- 3A6-40** Study on iron(II) spin-crossover complexes with linear-alkyl-substituted tris(2-pyridyl)methane derivatives (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○KASHIRO, Atsushi; ISHIDA, Takayuki
- 3A6-41** Substituent Effect in Spin-Crossover Behavior of Pybox-iron(II) Complexes (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications)

- KIMURA, Akifumi; ISHIDA, Takayuki
- 3A6-42#** Spin Crossover in Cyanide-Bridged [Fe<sup>III</sup><sub>2</sub>Fe<sup>II</sup><sub>2</sub>] Tetranuclear Clusters with Chiral Ligands (IMCE, Kyushu Univ.) ○LI, Junqiu; KANEGAWA, Shinji; SATO, Osamu
- 3A6-43** Syntheses and magnetic properties of metal complexes with the derivative of Bis(pyrazole-1-yl)pyridine ligand (Sch. Sci., Tohoku Univ.) ○UCHIDA, Kaiji; KAGESAWA, Kouichi; YAMASHITA, Masahiro
- 3A6-44\*\*** Spin State Conversion in Iron(III) Complex Responsive to Multiple External Stimuli (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○KOBAYASHI, Fumiya; OHTANI, Ryo; NAKAMURA, Masaaki; HAYAMI, Shinya

## Fe, Ni

Chair: ENOMOTO, Masaya (16 : 40~17 : 40)

- \* 16:30-16:40: interval for laptop PC connection.(3A6-47, 3A6-48, 3A6-49, 3A6-51, 3A6-52)
- 3A6-47** Synergistic Spin State Change in Alkane Clathrates of Fe(II)Pt(II) Porous Coordination Polymer (Grad. Sch. Sci., Kyushu Univ.; Grad. Sch. Eng., Nagoya Univ.) ○YOSHINO, Haruka; MISHIMA, Akio; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 3A6-48#** Spin crossover iron complexes with Brønsted acid/base (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SAIKI, Ryo; MIYAMOTO, Haruka; SHIGA, Takuya; OSHIO, Hiroki
- 3A6-49#** Physical properties of Kagomé-type molecular conductor with hydrophilic pores (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HAYASHI, Mikihiro; MAESATO, Mistuhiko; SUGIMOTO, Kunihisa; KITAGAWA, Hiroshi
- 3A6-51** Cyclic insulation effects on synthesis and redox behavior of metal-bis(dithiobenzoate) complexes (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○HARADA, Ryosuke; HOSOMI, Takuro; MASAI, Hiroshi; TERAOKA, Jun
- 3A6-52** Anion encapsulation behavior of the dimeric cubane Ni(II) capsules by alkyl-chain bridging (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○KUSUMOTO, Sotaro; KOBAYASHI, Fumiya; OHTANI, Ryo; HAYAMI, Shinya; NAKAMURA, Masaaki

## Ni

Chair: KOSHIYAMA, Tomomi (17 : 50~18 : 50)

- \* 17:40-17:50: interval for laptop PC connection.(3A6-54, 3A6-55, 3A6-57, 3A6-58)
- 3A6-54** Enhancement of photocatalytic CO<sub>2</sub> reduction catalyzed by a Ni complex having a tetradentate S<sub>2</sub>N<sub>2</sub> ligand by addition of Lewis acids (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○TSUKAKOSHI, Yuto; HONG, Dachao; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko
- 3A6-55\*\*** Redox Behavior of a RhNiRh Trinuclear Complex with Six-Membered N,S-Chelate Rings (Grad. Sch. Sci., Osaka Univ.) ○KOUNO, Masahiro; YOSHINARI, Nobuto; KUWAMURA, Naoto; YAMAGAMI, Kohei; SEKIYAMA, Akira; OKUMURA, Mitsutaka; KONNO, Takumi
- 3A6-57** Borylation of Aryl Halide by a Nickel Complex Bearing an S<sub>2</sub>N<sub>2</sub> Pincer Ligand (Grad. Sch. Sci., Kitasato Univ.) ○TORIYABE, Takumi; KAMITANI, Masahiro; YUGE, Hidetaka
- 3A6-58\*\*** Novel bulky PNP pincer ligands: the effect on the stabilization and geometry of unusual oxidation states of Ni complexes (OIST Coord. Chem. and Catal. Unit) ○LAPOINTE, Sébastien; KHASKIN, Eugene; KHUSNUTDINOVA, Julia

## Friday, March 23, AM

Chair: OZAWA, Tomohiro (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4A6-01, 4A6-02, 4A6-03, 4A6-04, 4A6-05)
- 4A6-01** Alkane Hydroxylation Catalyzed by Late-transition Metal Complexes Supported by Redox Active Diphenol Ligand (Grad. Sch. Eng., Osaka Univ.) ○ITO, Mayu; MORIMOTO, Yuma; ARIYASU, Shinya; SHOJI, Osami; SUGIMOTO, Hideki; WATANABE, Yoshihito; ITOH, Shinobu
- 4A6-02** Catalytic alkane oxidation activity of nickel(II) complexes with tris(oxazolylmethyl)amine ligand (Fac. Eng., Kanagawa Univ.) ○TERAO, Ikumi; NAKAZAWA, Jun; HIKICHI, Shiro
- 4A6-03** Mechanistic Studies on Electrochemical Hydrogen Evolution by Nickel(II) Dithiolene Complexes Having Polyazaphthalene Units (Grad. Sch. Sci., Kyushu Univ.) ○AIMOTO, Yutaro; KOSHIBA, Keita; YAMAUCHI, Kosei; SAKAI, Ken
- 4A6-04** Multi-electron Reduction Reactions Catalyzed by Metal Complexes Having NHC Ligands (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○KOGA, Toshihiro; KAWANO, Ken; YAMAUCHI, Kosei; SAKAI, Ken
- 4A6-05\*\*** Electrochemical Hydrogen Evolution Catalyzed by Pyrazinedithiolatonickele(II) Complexes Having Proton Relays in the Second Coordination Sphere (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○KOSHIBA, Keita; YAMAUCHI, Kosei; SAKAI, Ken

Chair: YAMAUCHI, Kosei (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4A6-08, 4A6-09, 4A6-10, 4A6-11, 4A6-12, 4A6-13)

- 4A6-08** The effect of ionic liquid-substituent group attached to nickel complex with CO<sub>2</sub> reduction ability (Grad. Sch. Eng., Nagoya Inst. of Tech.)  
○WADA, Haruki; NAGAI, Takuya; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki
- 4A6-09** Synthesis of Ni complex directed towards hydrogen generation catalyst containing P - N type ligand (Grad. Sch. Eng., Nagoya Inst. of Tech.)  
○DOBASHI, Masato; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

## Os

- 4A6-10<sup>#</sup>** Alkane Oxidation by Anion-adduct of Osmium Tetroxide (Grad. Sch. Eng., Osaka Univ.) HIRATA, Yuka; ○SUGIMOTO, Hideki; HIKICHI, Shiro; ITOH, Shinobu
- 4A6-11** Reactive Species in Aminohydroxylation of Alkenes Catalyzed by Osmium Complexes (Grad. Sch. Eng., Osaka Univ.) ○FUJIMOTO, Tomohiro; SUGIMOTO, Hideki; ITOH, Shinobu
- 4A6-12<sup>#</sup>** Electrochromic metallo-supramolecular polymers based on osmium (Pol. Mater. Unit, NIMS) ○BERA, Manas Kumar; HIGUCHI, Masayoshi

## Zn

- 4A6-13** Synthesis and Structures of Au<sup>I</sup>-Zn<sup>II</sup> Multinuclear Complexes Composed of Two Kinds of Au<sup>I</sup> Metalloligands (Grad. Sch. Sci., Osaka Univ.) ○FUJIOKA, Masanari; YOSHINARI, Nobuto; KOJIMA, Tatsuhiko; KONNO, Takumi

Chair: KOSHIYAMA, Tomomi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4A6-15, 4A6-17, 4A6-19)
- 4A6-15<sup>#</sup>** Near-IR light-induced electron transfer system using a distorted phthalocyanine (Sch. Physical Sci., SOKENDAI) ○ENOMOTO, Takafumi; KONDO, Mio; MASAOA, Shigeyuki
- 4A6-17<sup>#</sup>** Synthesis of Multinuclear Macrocyclic Complexes that Orderly Assemble Labile Coordination Sites and Its Supramolecular Structure (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba) ○NAKAMURA, Takashi; KAWASHIMA, Yuto; KANEKO, Yuya; NABESHIMA, Tatsuya
- 4A6-19<sup>#</sup>** Synthesis and reactivity of borohydride-based coordination polymers (WPI-CeMS, Kyoto Univ.) ○KADOTA, Kentaro; SIVANIAH, Easan; KITAGAWA, Susumu; HORIKE, Satoshi

## Friday, March 23, PM

Chair: HORIKE, Satoshi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4A6-28, 4A6-29, 4A6-30, 4A6-31, 4A6-33)
- 4A6-28** Synthesis and Luminescent Properties of Porous Coordination Polymers Incorporated Luminescent Boron-Complex-Based Ligand (Fac. Sci., Kyushu Univ.) ○SATO, Yuku; TOGO, Tatsuo; MIURA, Hiroki; YOSHINO, Haruka; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 4A6-29** The Elucidation of a Crystal Growth Mechanism of Solid-solution Type Interdigitated Metal-Organic Frameworks by Atomic Force Microscope (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KAMAKURA, Yoshinobu; TANAKA, Daisuke
- 4A6-30** Evaluation of the Center Metal Effects on the Crystal Growth of Solid Solution Metal-Organic Frameworks (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○HIKAWA, Arata; KAMAKURA, Yoshinobu; HOSONO, Nobuhiko; TANAKA, Daisuke
- 4A6-31<sup>#</sup>** Atomic-resolution microscopic study of germinating knot/linker assembly in metal organic framework formation (Grad. Sch. Sci., The Univ. of Tokyo; Fac. Eng., The Univ. of Tokyo) ○XING, Junfei; SCHWEIGHAUSER, Luca; OKADA, Satoshi; KUMAMOTO, Akihiro; SHIBATA, Naoya; HARANO, Koji; NAKAMURA, Eiichi
- 4A6-33** Syntheses and Sorption Properties of Three-dimensional Nanoporous Metal Complexes Having Perfluoroalkyl Chains (Grad. Sch. Eng., Nagoya Univ.) ○ITO, Yu; HORI, Akihiro; MA, Yunsheng; HIJIKATA, Yuh; MATSUDA, Ryotaro

Chair: KONDO, Mio (14 : 40~16 : 00)

- \* 14:30-14:40: interval for laptop PC connection.(4A6-35, 4A6-36, 4A6-37, 4A6-38)
- 4A6-35** Synthesis and Sorption Properties Nanoporous Metal Complex Decorated with Alkyl Halide Groups (Grad. Sch. Eng., Nagoya Univ.) ○SUZUKI, Yuna; HORI, Akihiro; MA, Yunsheng; MATSUDA, Ryotaro
- 4A6-36** Control of [2+2] Photocycloaddition Reactions in Nanoporous Metal Complexes (Grad. Sch. Eng., Nagoya Univ.) ○KIYOSE, Atsushi; FUJIMURA, Masashi; HORI, Akihiro; MA, Yunsheng; SATO, Hiroshi; HIJIKATA, Yuh; MATSUDA, Ryotaro
- 4A6-37** Synthesis and characterization of novel proton conductive zinc phosphonates with organic cations (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○YAMASHITA, Haruka; KONDOU, Atsushi; MAEDA, Kazuyuki
- 4A6-38** Theoretical study of metal ion effect on electronic structures of bis (dipyrrinato) complexes (Sch. Eng. Sci., Osaka Univ.) ○AOKI, Shogo; NATORI, Yoshiki; KITAGAWA, Yasutaka; NAKANO, Masayoshi

\* 15:20-15:30: interval for laptop PC connection.(4A6-40, 4A6-42)

- 4A6-40<sup>#</sup>** Theoretical investigation of intrinsic dynamics of nano porous framework (WPI-ITbM, Nagoya Univ.) ○PIRILLO, Jenny; HIJIKATA, Yuh
- 4A6-42** Improvement of mechanical property of a metal-organic framework by polymer introduction (Grad. Sch. Eng., Kyoto Univ.) ○HIZUKA, Tomoya; UEMURA, Takashi

## Room A7

Bldg. 14 1442

## Coordination Chemistry, Organometallic Chemistry

Tuesday, March 20, AM

## Ag

Chair: OHASHI, Kenji (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1A7-01, 1A7-03, 1A7-05, 1A7-06)
- 1A7-01<sup>#</sup>** Construction of benzimidazole[3]arene-based supramolecular metal complexes (Grad. Sch. Sci., The Univ. of Tokyo) ○TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 1A7-03<sup>#</sup>** Synthesis and Photophysical Properties of Silver(I) Coordination polymers with 4,4'-Bipiperidine and 4,4'-Bipyridine (Grad. Sch. Sci. Eng., Univ. of Toyama) YOSHIOKA, Tsubasa; SUGIMOTO, Satoshi; TAKEUCHI, Sota; OHTSU, Hideki; ○TSUGE, Kiyoshi
- 1A7-05** Reactivity of a D-Penicillaminato Nickel(II) Complex toward Silver(I) Complexes with Phosphine Ligands (Grad. Sch. Sci., Osaka Univ.) ○MIYAMOTO, Kyouhei; KUWAMURA, Naoto; YAMADA, Mihoko; KONNO, Takumi
- 1A7-06<sup>#</sup>** Study on syntheses of silver(II)-phthalocyanines and effects of molecular aggregation on their spectral properties (GREEN, NIMS; Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.; Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○ISAGO, Hiroaki; FUJITA, Harumi; NAKAI, Suzuko; SUGIMORI, Tamotsu

## Ag, Zn

Chair: KUWAMURA, Naoto (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(1A7-08, 1A7-10, 1A7-11, 1A7-12)
- 1A7-08<sup>#</sup>** The mechanism of photocatalytic hydrogen evolution by a polyoxometalate-silver ethynide composite cluster (Coll. Hum. Sci., Nihon Univ.) ○OHASHI, Kenji; OZEKI, Tomoji
- 1A7-10** Synthesis and Reactivity of Dinuclear Zinc Complexes Using a Novel Ligand with Bis(dipicolylamine) Units (Grad. Sch. Eng., Nagasaki Univ.) ○MATSUO, Yasumasa; HORIUCHI, Shinnosuke; SAKUDA, Eri; ARIKAWA, Yasuhiro; UMAKOSHI, Keisuke
- 1A7-11<sup>#</sup>** Synthesis and Characterization of Chiral Multinuclear Nickel and Zinc Complexes Involving Binaphthyl-bipyridyl Moieties (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) TAKAISHI, Kazuto; ○BIKASH DEV, Nath; YAMADA, Yuya; MAEDA, Chihiro; EMA, Tadashi
- 1A7-12** Catalytic Activity on CO<sub>2</sub> Fixation Reaction of Multinuclear Nickel and Zinc Complexes Involving a Binaphthyl Moiety (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) TAKAISHI, Kazuto; ○YAMADA, Yuya; NATH, Bikash Dev; MAEDA, Chihiro; EMA, Tadashi

## Zn, Mn

Chair: ARIKAWA, Yasuhiro (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(1A7-14, 1A7-15, 1A7-16, 1A7-17, 1A7-18)
- 1A7-14<sup>#</sup>** Nanographene-based Flexible Metal-Organic Frameworks (Grad. Sch. Eng., The Univ. of Tokyo; CEMS, RIKEN) ○SUGINOME, Shun; SATO, Hiroshi; AIDA, Takuzo
- 1A7-15** Syntheses and Sorption Properties of Photoreactive Nanoporous Metal Complexes Decorated with Diazo Groups on the Pore Surface (Sch. Eng., Nagoya Univ.) ○NAKAJO, Toshinobu; HORI, Akihiro; MA, Yunsheng; MATSUDA, Ryotaro
- 1A7-16** Design and Synthesis of Nanoporous Metal Complexes which can Trap and Release Dissolved Oxygen (Grad. Sch. Eng., Nagoya Univ.) ○FUJIMURA, Masashi; KIYOSE, Atsushi; HORI, Akihiro; MA, Yunsheng; MATSUDA, Ryotaro
- 1A7-17** Synthesis of new amphiphilic metal complex lipids (Kumamoto Univ.) ○ANEGAWA, Yuka; OHTANI, Ryo; NAKAMURA, Masaaki; HAYAMI, Shinya
- 1A7-18** Manganese(II) Hydroxo Complex Using Bulky N<sub>3</sub> Type Ligand and its Reaction with Hydrogen Peroxide (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○SAKUMA, Syuhei; FUJISAWA, Kiyoshi

## Tuesday, March 20, PM

## Mn

Chair: KACHI, Chihiro (13 : 10~14 : 10)

\* 13:00-13:10: interval for laptop PC connection.(1A7-26, 1A7-27, 1A7-28, 1A7-30)

- 1A7-26** Synthesis and properties of multinuclear complexes of first-row transition metals with tripod ligands containing  $\beta$ -ketoiminate moieties (Grad. Sch. Sci., Osaka Univ.) ○ARAI, Takuya; KUSUMOTO, Masaaki; HATANAKA, Tsubasa; HUNAHASHI, Yasuhiro
- 1A7-27** Synthesis and Properties of multinuclear complexes of first-row transition metals with a cage-type ligand (Grad. Sch. Sci., Osaka Univ.) ○KAJITA, Motoki; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro
- 1A7-28**<sup>†</sup> Photocatalytic CO<sub>2</sub> Reduction Using Mn(I) Complexes with a Carbonic Acid Ester Ligand as a Catalyst and Its Mechanism (Sch. Sci., Tokyo Tech.) ○KOIZUMI, Hiroki; FABRY, David; TAKEDA, Hiroyuki; ISHITANI, Osamu
- 1A7-30**<sup>†</sup> Structural and Mechanistic Studies on Supramolecular Mn(I) Complexes for Selective Photocatalytic CO<sub>2</sub> Reduction (Grad. Sch. Sci., Eng., Tokyo Tech.) ○FABRY, David C.; KOIZUMI, Hiroki; YAMAZAKI, Yasuomi; TAKEDA, Hiroyuki; TAMAKI, Yusuke; ISHITANI, Osamu

Chair: HATANAKA, Tsubasa (14 : 20~15 : 20)

\* 14:10-14:20: interval for laptop PC connection.(1A7-33, 1A7-34, 1A7-35, 1A7-37, 1A7-38)

- 1A7-33**<sup>†</sup> Electrochemical Switching of Magnetic Phase in a Tetraoxolene-Bridged Honeycomb Ferrimagnet Using a Lithium-Ion Battery System (IMR, Tohoku Univ.) ○CHEN, Jian; TANIGUCHI, Kouji; SEKINE, Yoshihiro; MIYASAKA, Hitoshi
- 1A7-34** Theoretical studies of intra-molecular magnetic interaction in a series of Mn(III) Salen-type dimer complexes (Grad. Sch. Eng. Sci., Osaka Univ.; Fac. Sci., Toho Univ.; IMR, Tohoku Univ.) ○KITAGAWA, Yasutaka; KACHI-TERAJIMA, Chihiro; MIYASAKA, Hitoshi; NAKANO, Masayoshi
- 1A7-35**<sup>†</sup> Tunable thermal expansions of 2D coordination polymers via relaxation of double distortions in nodes (Fac. Adv. Sci. Tech., Kumamoto Univ.) ○OHTANI, Ryo; HAYAMI, Shinya
- 1A7-37** Formation of ionic liquid by melting of a cyano-bridged one dimensional coordination polymer (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○HIRAOKA, Tomoaki; OHTANI, Ryo; HAYAMI, Shinya
- 1A7-38** Syntheses and physical properties of 1D metal nitride C<sub>2</sub>MnN(CN)<sub>4</sub> (C = K, Na) (Kumamoto Univ.) ○YANAGISAWA, Junichi; OHTANI, Ryo; HAYAMI, Shinya

## Mn, Ru

Chair: NAGAO, Hirotaka (15 : 30~16 : 30)

\* 15:20-15:30: interval for laptop PC connection.(1A7-40, 1A7-41, 1A7-43, 1A7-45)

- 1A7-40** Synthesis and Characterization of Dinuclear Manganese Complexes with Quinoline-Based Ligands (Grad. Sch. Human. Sci., Nara Women's Univ.) ○NAITO, Kyoko; MATSUMOTO, Arimasa; MIKATA, Yuji
- 1A7-41**<sup>†</sup> Phosphine-Substituted Ru(II) Polypyridine Complex for Catalytic CO<sub>2</sub> Reduction (IMS; Sch. Physical Sci., SOKENDAI; Nagoya Univ.; ACT-C, JST) ○LEE, Sze Koon; NAKAMURA, Go; OKAMURA, Masaya; KONDO, Mio; MASAOKA, Shigeyuki
- 1A7-43**<sup>†</sup> Functions of surface modified nano-carbon materials by metal complex or metal-organic network films (Research and Development Initiative, Chuo Univ.) ○OZAWA, Hiroaki; YOSHIKAWA, Kai; UBE, Toru; IKEDA, Tomiki; HAGA, Masa-aki
- 1A7-45** Vapochromic emission of manganese(II) complexes in the crystalline state and the time-resolved spectroscopic analysis (Grad. Sch. Eng., Osaka Univ.; UNISOKU Co., Ltd.; Sch. Eng., Nihon Univ.) ○KITAGAWA, Kota; SUENOBU, Tomoyoshi; NAKAYAMA, Ken-ichi; HANADA, Hiroaki; NAKAGAWA, Tatsuo; KATO, Ryuzi

## Ru

Chair: MIKATA, Yuji (16 : 40~17 : 40)

\* 16:30-16:40: interval for laptop PC connection.(1A7-47, 1A7-48, 1A7-49, 1A7-50, 1A7-51, 1A7-52)

- 1A7-47** Self-Assembly of Ruthenium Trinuclear Complexes with Long Alkyl Chains at a Liquid-Air Interface (Grad. Sch. Mat. Sci., Univ. of Hyogo; MANA, NIMS) ○NAKAGAWA, Takahiro; OZAWA, Yoshiki; TAHARA, Keishiro; MORI, Taizo; ARIGA, Katsuhiko; ABE, Masaaki
- 1A7-48** Preferential synthesis of even cyclic clusters with triruthenium complexes (Sch. Sci., Univ. of Hyogo) ○TAKAMURA, Kazuki; DAICHO, Keita; TAHARA, Keishiro; OZAWA, Yoshiki; ABE, Masaaki
- 1A7-49** Synthesis and Reactions of Trichloridoruthenium Complex Bearing Benzyl(2-pyridylmethyl)aminoacetate (Sci. Tec., Sophia Univ.) ○MIURA, Yurika; SUZUKI, Tomoyo; NAGAO, Hirotaka
- 1A7-50** Synthesis of Monoalkylaminechloridoruthenium (II) Complexes Bearing 2-pyridinecarboxylate and 2,2'-bipyridine (Sci. Tec., Sophia Univ.) ○TOMIOKA, Nozomi; SUZUKI, Tomoyo; NAGAO, Hirotaka

- 1A7-51** Synthesis of half-sandwich-type dinuclear complexes bridged by a non-chelating diphosphine ligand (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SUZUKI, Satoshi; TODA, Tatsuro; KUWATA, Shigeki
- 1A7-52** Synthesis and structure of pincer-type macrocyclic ruthenium complex (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SATO, Hiroki; SOGAWA, Hiromitsu; TSUKAMOTO, Tadashi; TAKATA, Toshikazu

Chair: SOGAWA, Hiromitsu (17 : 50~18 : 50)

- \* 17:40-17:50: interval for laptop PC connection.(1A7-54, 1A7-55, 1A7-56, 1A7-57, 1A7-58, 1A7-59)
- 1A7-54** Synthesis and modification of Ru(II)-terpyridyl complexes with cyclic ligands (Grad. Sch. Sci., Osaka Univ.) ○ASANO, Kyohei; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro
- 1A7-55** Self-assembly of Ru/Pd and Ru/Pt discrete heterometallic coordination cages (Grad. Sch. Eng., The Univ. of Tokyo) ○SUNOHARA, Haruka; TAKEZAWA, Hiroki; FUJITA, Makoto
- 1A7-56** Synthesis and Structures of Ruthenium Complexes Having Newly Prepared Bisbipyridine Ligands (Grad. Sch. Eng., Nagasaki Univ.) ○NISHIUE, Mayu; ONODERA, Gen; FUKUDA, Tsutomu; SAKUDA, Eri; UMAKOSHI, Keisuke; KIMURA, Masanari
- 1A7-57** Synthesis and properties of a hetero-trinuclear Ru(II)-Ru(II)-Pt(II) complex having 2,2'-bipyrimidines as bridging ligands (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○ITOGAWA, Masaki; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko
- 1A7-58** Synthesis and reactivity of hetero-dinuclear metal complexes with adjacent reaction sites (IRC3, AIST) ○HONG, Dachao; OHGOMORI, Yuji; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko; KON, Yoshihiro
- 1A7-59** Synthesis and Evaluation of Physical Properties of Ruthenium Complexes Containing Non-innocent Indigo Derivatives (Grad. Sch. Sci. Eng., Chuo Univ.) ○ARITANI, Kazushi; YOSHIKAWA, Kai; OZAWA, Hiroaki; CHATTERJEE, Madhumita; LAHIRI, Kumar Goutam; TAYLOR, James; HARTL, Frantisek; HAGA, Masa-aki

## Wednesday, March 21, PM

## f-block element

Chair: HASEGAWA, Yasuchika (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(2A7-33, 2A7-34, 2A7-35, 2A7-36, 2A7-37, 2A7-38)
- 2A7-33** Synthesis, Structure, and Luminescence Properties of a Gadolinium Complex Having Biphenyl Groups (Grad. Sch. Sci. Eng., Kindai Univ.) ○KITAMURA, Takuya; NAKAI, Hidetaka
- 2A7-34**<sup>†</sup> Synthesis and Magnetic Properties of Lanthanoid-Based Metallo-Supramolecular Polymer with Terpyridine Ligand (RCFM, NIMS) ○YOSHIDA, Takefumi; HIGUCHI, Masayoshi
- 2A7-35**<sup>†</sup> Tunable Multicolored Emission and Slow Magnetic Relaxation in the series of EuxTb<sub>1-x</sub>[Co(CN)<sub>6</sub>] complexes (Grad. Sch. Sci., The Univ. of Tokyo) ○KUMAR, Kunal; CHORAZY, Szymon; NAKABAYASHI, Koji; SIEKLUCKA, Barbara; OHKOSHI, Shin-ichi
- 2A7-36** Observation of magneto-chiral effect in luminescent Tb(III) complexes with chiral  $\beta$ -diketonate and phenanthroline ligands (Grad. Sch. Sci., Tohoku Univ.; IMR, Tohoku Univ.) ○KISHIUE, Shuhei; KIMURA, Shojiro; TANIGUCHI, Kouji; MIYASAKA, Hitoshi
- 2A7-37** Photoluminescence quenching of 4f metal ions from tridentate ligands having a nitroxide-substituted pyridine (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○ONDO, Akihiro; ISHIDA, Takayuki
- 2A7-38** Sensing ability for anions by Luminescent Lanthanide Complexes with Cyclen-based Ligand (Grad. Sch. Human. Sci., Nara Women's Univ.) ○KUDO, Mayumi; KOMORI, Yumi; KATAOKA, Yumiko; KAJIWARA, Takashi

Chair: NAKABAYASHI, Koji (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(2A7-40, 2A7-41, 2A7-42, 2A7-43, 2A7-44)
- 2A7-40** Ratiometric thermometry based on ligand symmetry of nona-coordinated Eu(III) complexes (Grad. Sch. Sci., TUS; PRESTO, JST) ○OKAYASU, Yoshinori; YUASA, Junpei
- 2A7-41** Development and Emission Properties of Multinuclear Lanthanide Complexes having Carbazole Ring (Fac. Sci., TUS; PRESTO, JST) ○HAYAKAWA, Kanako; YUASA, Junpei
- 2A7-42** Binding Modes of Europium(III) Complexes Having  $\beta$ -Diketonate Ligands with Two Pyrrole Rings (Grad. Sch. Sci., TUS; Grad. Sch. Mat. Sci., NAIST; PRESTO, JST) ○KAITO, Ayaka; KAWAI, Tsuyoshi; YUASA, Junpei
- 2A7-43**<sup>†</sup> A Novel Three Dimensional Heterometallo Supramolecular Polymers for Proton Conduction Applications (Pol. Mater. Unit, NIMS) ○YEMINENI, Narayana; HIGUCHI, Masayoshi
- 2A7-44**<sup>†</sup> Circularly polarized luminescence of a chiral Eu(III) complex depending on solvents (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○WADA, Satoshi; KITAGAWA, Yuichi; NAKANISHI, Takayuki; GON, Masayuki; TANAKA, Kazuo; FUSHIMI, Koji; CHUJO, Yoshiaki; HASEGAWA, Yasuchika

Chair: YUASA, Junpei (16 : 40~17 : 40)

\* 16:30-16:40: interval for laptop PC connection.(2A7-47, 2A7-49, 2A7-50, 2A7-51)

**2A7-47\*\*** Thermostability and luminescence properties of mononuclear Eu(III) complexes with aryl-extended diketone ligands (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○KOIZUKA, Toru; YAMAMOTO, Masanori; KITAGAWA, Yuichi; NAKANISHI, Takayuki; FUSHIMI, Koji; HASEGAWA, Yasuchika

**2A7-49** Syntheses and SMM properties of Ln(III) complexes supported by an N<sub>5</sub>-Schiff base ligand (Fac. Sci., Nara Women's Univ.) ○KOBAYASHI, Kaede; HARADA, Yukina; KATAOKA, Yumiko; KAJIWARA, Takashi

**2A7-50<sup>#</sup>** Dual functionalities of color-tunable photoluminescence and single ion magnet behavior embedded in cyanido-bridged bimetallic framework (Grad. Sch. Sci., The Univ. of Tokyo) ○WANG, Junhao; CHORAZY, Szymon; NAKABAYASHI, Koji; SIEKLUCKA, Barbara; OHKOSHI, Shin-ichi

**2A7-51\*** Biradical-bridged one-dimensional lanthanoid compounds: Synthesis, crystal structure, and physical properties (Fac. Sci., TUS) ○KANETOMO, Takuya; YOSHIKADO, Shun; MAKIMURA, Kayoko; ISHIDA, Takayuki; ENOMOTO, Masaya

## Thursday, March 22, AM

## Co

Chair: YAMAUCHI, Kosei (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3A7-01, 3A7-02, 3A7-03, 3A7-04, 3A7-05, 3A7-06)

**3A7-01** Syntheses of diamide-type Co(III) complexes with different substituents and their electronic effects on the binding to nitric oxide (Fac. Eng. Nagoya Inst. of Tech.) ○YAMAGUCHI, Ena; KIMOTO, Yuya; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

**3A7-02** Construction of supramolecular structures of metallo-macrocycle incorporating lipid amphiphilic molecule (Dept. Chem., Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○AKIYOSHI, Ryohei; OHTANI, Ryo; HAYAMI, Shinya

**3A7-03** Synthesis of metalladithiolene complexes including corannulene framework (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○KUBO, Takahiro; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro

**3A7-04** Synthesis of  $\pi$ -conjugated compounds with metalladithiolene complex in side chain (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○KATO, Ayumu; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro

**3A7-05** Nonlinear Time Response in Racemization of Helical Cobalt(III) Metallochromophores Induced by Amine Ligand Exchange (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○CHIBA, Shunsuke; SAKATA, Yoko; AKINE, Shigehisa

**3A7-06** Lock Effect in Racemization of Helical Cobalt(III) Metallochromophores Induced by Amine Ligand Exchange (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○CHIBA, Shunsuke; SAKATA, Yoko; AKINE, Shigehisa

Chair: HAYAMI, Shinya (10 : 10~11 : 00)

\* 10:00-10:10: interval for laptop PC connection.(3A7-08, 3A7-09, 3A7-10, 3A7-12)

**3A7-08** Synthesis and dynamic structure changes of hydrophobic helical Cobalt dinuclear complex (Grad. Sch. Sci., Osaka City Univ.) ○SHINOHARA, Hiroki; FUJITA, Aiko; SHINODA, Satoshi; MIYAKE, Hiroyuki

**3A7-09** Porous Molecular Conductor Synthesized from Chelate Complexes (Sch. Sci., Tohoku Univ.) ○KOYAMA, Shohei; IGUCHI, Hiroaki; TAKAISHI, Shinya; YAMASHITA, Masahiro

**3A7-10\*\*** Hydrogen-bonded Supramolecular Structure and Magnetic Properties of Co(II) Complex with Tris-chelate Complex as a Metalloligand (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○MITSUHASHI, Ryoji; UEDA, Takaaki; SUZUKI, Takayoshi; MIKURIYA, Masahiro

**3A7-12** Attachment and Helicity Control of A Metallohost Trinuclear Cobalt Complex on a SiO<sub>2</sub> Surface (RCMS, Nagoya Univ.; Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.; Sch. Physical Sci., SOKENDAI; Grad. Sch. Sci., Nagoya Univ.; IMS) ○SAWAGUCHI, Kana; CHIBA, Shunsuke; SHIRAOGAWA, Takafumi; SAKATA, Yoko; BABA, Hiroshi; MURATSUGU, Satoshi; EHARA, Masahiro; AKINE, Shigehisa; TADA, Mizuki

Chair: ISHIDA, Hitoshi (11 : 10~12 : 00)

\* 11:00-11:10: interval for laptop PC connection.(3A7-14, 3A7-15, 3A7-17, 3A7-18)

**3A7-14** Thermal- and pressure-induced transformation of new valence tautomeric complex (Fac. Sci. Eng., Chuo Univ.; IMR, Tohoku Univ.) ○KONISHI, Ryunosuke; YAMADA, Shota; KOSAKA, Wataru; MIYASAKA, Hitoshi; MATSUMOTO, Takeshi; CHANG, Ho-chol

**3A7-15\*\*** Mechanistic Investigation of Hydrogen Evolution Catalysis Promoted by Co-NHC complexes (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○YAMAUCHI, Kosei; KAWANO, Ken; SAKAI, Ken

**3A7-17** Kinetic Studies on Water Oxidation Catalyzed by Cobalt Polyox-

ometalates (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○TAIRA, Natsuki; TSUBONOUCHI, Yuta; SAKAI, Ken

**3A7-18** Influence of Bridging Ligands on Oxygen Reduction Catalyzed by Dinuclear Cobalt-Polypyridyl Complexes (Grad. Sch. Sci., Rikkyo Univ.) ○ARIMA, Hiroaki; NAKAZONO, Takashi; WADA, Tohru

## Thursday, March 22, PM

## Co, Ru

Chair: KURAMOCHI, Yusuke (13 : 10~14 : 10)

\* 13:00-13:10: interval for laptop PC connection.(3A7-26, 3A7-27, 3A7-28, 3A7-29, 3A7-30, 3A7-31)

**3A7-26\*** Selective Hydroxylation of Lower Alkanes in Fluorous Solvents Catalyzed by Fluorophilic-transition-metal Complexes (Grad. Sch. Eng., Osaka Univ.) ○SHIMAOKA, Yuki; MORIMOTO, Yuma; ITOH, Shinobu

**3A7-27** Alkane Hydroxylation Catalyzed by Transition-metal Complexes Immobilized on Mesoporous Silica (Grad. Sch. Eng., Osaka Univ.) ○KABE, Shinsuke; MORIMOTO, Yuma; SUGIMOTO, Hideki; HIKICHI, Shiro; ITOH, Shinobu

**3A7-28** A Cobaltporphyrin-Modified TiO<sub>2</sub> Electrode for Electrochemical Oxygen Evolution (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○AKAMINE, Katsuhiko; SAKAI, Ken; OZAWA, Hironobu

**3A7-29\*** Catalytic activity of some water-soluble metal porphyrins for CO<sub>2</sub> reduction in aqueous media (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○CHENG, Xinyi; YAMAMOTO, Keiya; CIBIAN, Mihaela; SAKAI, Ken

**3A7-30** Photocatalytic water reduction by nanoparticle photocatalyst with multilayered ruthenium(II) photosensitizers (Sch. Sci., Hokkaido Univ.) ○YOSHIMURA, Nobutaka; KOBAYASHI, Atsushi; YOSHIDA, Masaki; KATO, Masako

**3A7-31** Product Selectivity and Mechanism of Photoelectrochemical CO<sub>2</sub> Reduction Reaction over Ru Complex Catalyst linked with Semiconductor Photocathode (Toyota Central R&D Labs., Inc.) ○SEKIZAWA, Keita; SHIRAI, Souichi; SATO, Shunsuke; MORIKAWA, Takeshi

## Ru

Chair: KOBAYASHI, Atsushi (14 : 20~15 : 20)

\* 14:10-14:20: interval for laptop PC connection.(3A7-33, 3A7-34, 3A7-36, 3A7-38)

**3A7-33** Development of a fixation method of a Ru(II)-Re(I) supramolecular photocatalyst onto a semiconductor electrode and photocatalytic CO<sub>2</sub> reduction using the new molecular photocathode (Sch. Sci., Tokyo Tech.) ○KAMATA, Ryutarou; KUMAGAI, Hiromu; YAMAZAKI, Yasuomi; ISHITANI, Osamu

**3A7-34\*\*** Development of Ru(II) redox photosensitizers with wideband absorption by singlet-to-triplet transitions (Sch. Sci., Tokyo Tech.) ○TAMAKI, Yusuke; ISHITANI, Osamu

**3A7-36\*\*** Development of stable photochemical H<sub>2</sub> evolution systems using robust Ru(bpy)<sub>3</sub><sup>2+</sup> derivatives with various functional groups (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○YAMAMOTO, Keiya; SAKAI, Ken

**3A7-38** A Ruthenium Photosensitizer Modified-TiO<sub>2</sub> Electrode for Near-Infrared Light Driven Hydrogen Evolution (Grad. Sch. Sci., Kyushu Univ.) ○JEONG, Hyengin; SAKAI, Ken; OZAWA, Hironobu

Chair: MASAOKA, Shigeyuki (15 : 30~16 : 30)

\* 15:20-15:30: interval for laptop PC connection.(3A7-40, 3A7-41, 3A7-42, 3A7-43, 3A7-44, 3A7-45)

**3A7-40** Near-Infrared Light-Driven Hydrogen Evolution using a Polypyridyl Triruthenium(II) Photosensitizer (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) ○TSUJI, Yutarou; YAMAMOTO, Keiya; YAMAUCHI, Kosei; SAKAI, Ken

**3A7-41** Water Oxidation Catalyzed by a Dinuclear Ruthenium Complex with Bidentate Benzimidazole Ligands Capable of Deprotonation (Grad. Sch. Sci., Rikkyo Univ.) ○KOIWA, Akane; NAKAZONO, Takashi; WADA, Tohru

**3A7-42** Water Oxidation Catalyzed by a Ruthenium Complex Inspired by the Oxygen-Evolving Center of Photosynthesis (Grad. Sch. Sci., Rikkyo Univ.) ○KUMAGAI, Yugo; NAKAZONO, Takashi; WADA, Tohru

**3A7-43** Dinuclear Ruthenium Complexes Bridged with a Peptide Chain: CO/ Formate Selectivity in Photocatalytic CO<sub>2</sub> Reduction (Grad. Sch. Sci., Kitasato Univ.) ○OHTSUKA, Atsushi; MATSUURA, Kousuke; KURAMOCHI, Yusuke; ISHIDA, Hitoshi

**3A7-44** Multinuclear Ruthenium Complexes Bridged with a Peptide Chain: Effects of Photo-induced Electron Transfer Efficiency on Photocatalytic CO<sub>2</sub> Reduction (Grad. Sch. Sci., Kitasato Univ.) ○ISHIDA, Hitoshi; KOJIMA, Chiaki

**3A7-45** Theoretical study of catalytic reaction mechanisms of [Ru(bpy)<sub>2</sub>(pbn)]<sup>2+</sup> and [Ru(bpy)<sub>2</sub>(bpp)]<sup>2+</sup> (Grad. Sch. Eng. Sci., Osaka Univ.) ○TERAMOTO, Rena; NATORI, Yoshiaki; KITAGAWA, Yasutaka; NAKANO, Masayoshi

Chair: YAMADA, Teppei (16 : 40~17 : 40)

\* 16:30-16:40: interval for laptop PC connection.(3A7-47, 3A7-48, 3A7-49,

3A7-51)

- 3A7-47** Ruthenium dinuclear organometallic molecular wires with acene moieties : synthesis and effect of bridge ligand (Lab. Chem. Life Sci., Tokyo Tech.) ○KAWANO, Reo; TANAKA, Yuya; AKITA, Munetaka
- 3A7-48** Withdrawn
- 3A7-49**<sup>#</sup> Synthesis and reactivity of ruthenium complex containing benzene-dithiolate ligand (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○SAGAWA, Takuya; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 3A7-51**<sup>#</sup> Magnetic Sponge Behavior via Electronic State Modulations in a Redox-Active [Ru<sub>2</sub>]<sub>2</sub>TCNQ Coordination Framework (IMR, Tohoku Univ.) ○ZHANG, Jun; KOSAKA, Wataru; MIYASAKA, Hitoshi

Chair: OHTANI, Ryo (17 : 50~18 : 50)

\* 17:40-17:50: interval for laptop PC connection.(3A7-54, 3A7-56, 3A7-57, 3A7-58, 3A7-59)

- 3A7-54**<sup>#</sup> An Empirical Rule for Interlayer Distances Determining the Magnetic Ground State in a Layered Magnet of Paddlewheel-type Diruthenium Unit and TCNQ (IMR, Tohoku Univ.) ○KOSAKA, Wataru; ITOH, Masahisa; MIYASAKA, Hitoshi
- 3A7-56** Magnetic control of charge-transfer molecular magnets by tuning the on-site Coulomb repulsion in acceptors (Grad. Sch. Sci., Tohoku Univ.) ○NAGANO, Kohei; MIYASAKA, Hitoshi; TANIGUCHI, Kouji; KOSAKA, Wataru; SEKINE, Yoshihiro
- 3A7-57**<sup>#</sup> Magnetism control of thin-film constructed by charge-transfer assembly of paddlewheel-type diruthenium complex and TCNQ derivatives (IMR, Tohoku Univ.; Grad. Sch. Sci., Tohoku Univ.) ○SEKINE, Yoshihiro; MIYASAKA, Hitoshi
- 3A7-58** pH dependence of the Seebeck coefficient of the thermocell consisting of Ruthenium complex (Fac. Eng., Kyushu Univ.) ○KOBAYASHI, Takashi; YAMADA, Tepei; KIMIZUKA, Nobuo
- 3A7-59** Ion gating accompanied by electron transfer at the heterolayer film composed of Ruthenium complexes and Prussian blue nanocrystals (Grad. Sch. Sci. Eng., Chuo Univ.) ○IDE, Mitsutoshi; SATOU, Hiroaki; YOSHIKAWA, Kai; OZAWA, Hiroaki; HAGA, Masa-aki

## Friday, March 23, AM

## Cu

Chair: KODERA, Masahito (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4A7-01, 4A7-02, 4A7-03, 4A7-04, 4A7-05, 4A7-06)

- 4A7-01**<sup>#</sup> Synthesis and Electrochemistry of Pt<sup>II</sup><sub>2</sub>Cu<sup>II</sup><sub>2</sub>Zn<sup>II</sup> Coordination Polymers with D-Penicillamine (Grad. Sch. Sci., Osaka Univ.) ○KUWAMURA, Naoto; KURIOKA, Yoshinari; KONNO, Takumi
- 4A7-02** Syntheses, Structures and Luminescence Properties of *N*-Alkylbenzimidazolethiolate Copper(I) Hexanuclear Complexes (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○MORI, Marino; KIYOOKA, Hidetoshi; OZAWA, Yoshiaki; TAHARA, Keishiro; ABE, Masaaki
- 4A7-03** Encapsulations and structures of fully fluorine-substituted coordination complexes with benzophenone derivatives (Coll. Eng., Shibaura Inst. of Tech.) ○IKUMURA, Yoshinori; LEE, Chong Hyoun; HORI, Akiko
- 4A7-04** Elucidation of Crystallization Process of Multicomponent MOF by using a Micro Flow Reactor (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○TANAKA, Yoko; KITAMURA, Yuu; HIRATANI, Moe; KAWANO, Ryuji; HONMA, Tetsuo; TAKAYA, Hikaru; YOSHIKAWA, Hirohumi; TANAKA, Daisuke
- 4A7-05** Investigation of Competitive Reaction in Crystallization Processes of Multicomponent MOFs (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KITAMURA, Yu; TANAKA, Yoko; TANAKA, Daisuke
- 4A7-06** Synthesis and Properties of Cyclic Metal Complexes in a Cage-type Molecule (Grad. Sch. Sci., Osaka Univ.) ○SHIMIZU, Naoya; NAGATA, Kojiro; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro

Chair: HORI, Akiko (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4A7-08, 4A7-09, 4A7-11, 4A7-13)

- 4A7-08** Growth control of metal-organic frameworks on metal ion-doped polymer substrates (FIRST, Konan Univ.) ○HATA, Manami; OHHASHI, Takashi; TSURUOKA, Takaaki; TAKASHIMA, Yohei; AKAMATSU, Kensuke
- 4A7-09**<sup>#</sup> Controlling the Orientation of Metal-Organic Framework Crystals by an Interfacial Growth Approach Using a Metal Ion-Doped Polymer Substrate (FIRST, Konan Univ.) ○OHASHI, Takashi; TSURUOKA, Takaaki; FUJIMOTO, Seiya; TAKASHIMA, Yohei; AKAMATSU, Kensuke
- 4A7-11**<sup>#</sup> Unsymmetrical naphthyridinone based ligand scaffolds for the development of linear chain multimetallic complexes (Coordination Chemistry and Catalysis Unit, OIST) ○RIVADA WHEELAGHAN, Orestes; KHUSNUTDINOVA, Julia
- 4A7-13** Mechanism and activity control with ligand electronic effect on benzene oxidation with H<sub>2</sub>O<sub>2</sub> catalyzed by dinuclear copper complex (Fac. Sci. Eng., Doshisha Univ.) ○TAKAHASHI, Hiroto; TSUJI, Tomokazu; HITOMI, Yutaka; KODERA, Masahito

Chair: AKAMATSU, Kensuke (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4A7-15, 4A7-17, 4A7-18, 4A7-19, 4A7-20)

- 4A7-15**<sup>#</sup> C-C Bond Formation of Carbonyl Compounds Catalyzed by a Mononuclear Copper(II)-Superoxide Complex (Grad. Sch. Eng., Osaka Univ.) ○ABE, Tsukasa; MORIMOTO, Yuma; SUGIMOTO, Hideki; ITOH, Shinobu
- 4A7-17** Development of new dinuclear Cu(I) complexes with better properties as redox photosensitizers in photocatalytic CO<sub>2</sub> reduction. (Sch. Sci., Tokyo Tech.) ○MONMA, Yu; TAKEDA, Hiroyuki; KOIKE, Kazuhide; ISHITANI, Osamu
- 4A7-18** Sorption Properties of H<sub>2</sub> and D<sub>2</sub> in Kagome Type of Cu-based Nanoporous Metal Complexes (Grad. Sch. Eng., Nagoya Univ.) ○SHIMIZU, Sadayoshi; HORI, Akihiro; MA, Yunsheng; MATSUDA, Ryotaro
- 4A7-19** Ortho-Para Nuclear Spin Conversion of Hydrogen in Kagome Type of Cu-based Nanoporous Metal Complexes (Grad. Sch. Eng., Nagoya Univ.) ○KANESHIMA, Keita; SUZUKI, Takaya; HORI, Akihiro; MA, Yunsheng; MATSUDA, Ryotaro
- 4A7-20** Construction of  $\pi$ -Stack Columnar Structure in Naphthalenediimide-Based Coordination Polymers (Sch. Sci., Tohoku Univ.) ○FUKU, Kentaro; MIYATA, Momoka; IGUCHI, Hiroaki; TAKAISHI, Shinya; YAMASHITA, Masahiro

## Friday, March 23, PM

Chair: TAKAISHI, Shinya (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4A7-28, 4A7-29, 4A7-30, 4A7-31, 4A7-32)

- 4A7-28**<sup>#</sup> Gas Sorption and Dielectric Properties of One-Dimensional Copper Coordination Polymers with Heteroaromatic Ligands (RIES, Hokkaido Univ.; Fac. Env. Earth Sci., Hokkaido Univ.) ○TAKAHASHI, Kiyonori; NORO, Shin-ichiro; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi
- 4A7-29** Synthesis of Mixed Metal Nanoporous Complex with Open Metal Site Showing Guest Selective Adsorption (Grad. Sch. Eng., Nagoya Univ.) ○HARADA, Yuki; HIJIKATA, Yuh; HORI, Akihiro; MA, Yunsheng; MATSUDA, Ryotaro
- 4A7-30** Adsorptive Removal of Dimethyl Sulfide Using Nanoporous Metal Complexes (Sch. Eng., Nagoya Univ.) ○AKIRA, Yonezu; MASASHI, Morita; AKIHIRO, Hori; YUNSHENG, Ma; RYOTARO, Matsuda
- 4A7-31** Structural and Spectroscopic Analysis of Rotational Motions of Molecules in Nanoporous Metal Complexes (Grad. Sch. Eng., Nagoya Univ.) ○NAKAJIMA, Yasuaki; HORI, Akihiro; MA, Yunsheng; KOUZAKA, Wataru; MATSUDA, Ryotaro

## Ir

- 4A7-32**<sup>#</sup> Indirect Homogeneous Conversion of Carbon Dioxide to Methanol in Water at Low Temperature (ETRI, AIST) ○WANG, Lin; TSURUSAKI, Akihiro; ONISHI, Naoya; HIMEDA, Yuichiro

Chair: HATANAKA, Tsubasa (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4A7-35, 4A7-36, 4A7-37, 4A7-39, 4A7-40)

- 4A7-35** Photophysics and photocatalytic CO<sub>2</sub> reduction ability of a supramolecular photocatalyst consisting of an Ir(III) complex (Sch. Sci., Tokyo Tech.) ○NAKAMURA, Satoshi; YAMAZAKI, Yasuomi; ISHITANI, Osamu
- 4A7-36** Synthesis of Cyclometalated Iridium(III) Complexes Bearing L-Glutamide Moieties and Their Emission Properties in Supramolecular Gel Phase. (Grad. Sch. Eng. Sci., Osaka Univ.) ○TAKANO, Kenta; OTSUKI, Kyohei; KAWAMORITA, Soichiro; IMADA, Yasushi; NAOTA, Takeshi
- 4A7-37**<sup>#</sup> Photofunctional Iridium Complexes in Vesicles: Their Long-Lived Excited States and Photosensitizing Properties in Aqueous Solution (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○TAKIZAWA, Shin-ya; SEBATA, Shinogu; IKUTA, Naoya; MURATA, Shigeru
- 4A7-39** Preparation of Luminescent Silica Nanoparticles Modified by Emissive Ir Complexes (Grad. Sch. Sci. Eng., Chuo Univ.) ○MORI, Natsuki; HAGA, Masa-aki

## Re

- 4A7-40** Electrochemical CO<sub>2</sub> reduction using Re(I)-complex catalyst with a Ru(II) complex as an electron pool unit. (Sch. Sci., Tokyo Tech.) ○YATSU, Taiki; KUMAGAI, Hiromu; YAMAZAKI, Yasuomi; ISHITANI, Osamu

Chair: ISHIDA, Hitoshi (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(4A7-42, 4A7-44, 4A7-45, 4A7-47)

- 4A7-42**<sup>#</sup> Photocatalytic CO<sub>2</sub> Reduction Using A Novel Os(II)-Re(I)-Ru(II) Hetero-Trinuclear Complexes (Sch. Sci., Tokyo Tech.) ○YAMAZAKI, Yasuomi; ISHITANI, Osamu
- 4A7-44** Photocatalytic CO<sub>2</sub> Reduction Using a Ru-Re Dinuclear Complex Immobilized on Solid Surface (Sch. Sci., Tokyo Tech.) ○SAITO, Daiki; YAMAZAKI, Yasuomi; ISHITANI, Osamu

- 4A7-45<sup>#</sup>** Guest Responsivity of Luminescent Coordination Polymers Using Nitridotetracyano Re(V) Building Unit (Grad. Sch. Sci., Kyushu Univ.; Grad. Sch. Eng., Nagoya Univ.) OMIURA, Hiroki; MISHIMA, Akio; YAMATE, Hitomi; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 4A7-47** Systematical Synthesis and Luminescent Properties of Porous Coordination Polymers Using Luminescent Nitridotetracyano Re(V) Building Unit (Fac. Sci., Kyushu Univ.) OSASAKI, Kenta; YAMATE, Hitomi; YOSHINO, Haruka; MIURA, Hiroki; KOSHIYAMA, Tomomi; OHBA, Masaaki

## Room A8

Bldg. 14 1443

### Coordination Chemistry, Organometallic Chemistry

Tuesday, March 20, AM

Cr, Mo, W

Chair: HATANAKA, Tsubasa (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1A8-01, 1A8-02, 1A8-03, 1A8-04, 1A8-05)
- 1A8-01** Efficient catalytic asymmetric Henry reaction by self-assembly Cr(III)-salen complex (Grad. Sch. Chem. Sci. Technol., TUS) OKOGA, Toshihiko; IMAHORI, Tatsushi
- 1A8-02<sup>#</sup>** Synthesis and Structure of a Complex Having an Mo-Ge Triple Bond (Grad. Sch. Sci., Tohoku Univ.) ODHUNGANA, Tara Prasad; HASHIMOTO, Hisako; TOBITA, Hiromi
- 1A8-03** Substituent Effect on Catalytic Nitrogen Fixation via Cleavage of Triple Bond of Nitrogen Molecule (Grad. Sch. Eng., The Univ. of Tokyo) OITABASHI, Takayuki; ARASHIBA, Kazuya; EIZAWA, Aya; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki
- 1A8-04** Vinylidene Rearrangement and Sulfinate Elimination from Sulfonfylalkynes in a Molybdenum Complex (Grad. Sch. Sci. Eng., Chuo Univ.) OSAKAJIRI, Kousuke; KUWABARA, Takuya; KODAMA, Shintaro; ISHII, Youichi
- 1A8-05<sup>#</sup>** Reactions of a Tungsten Silylyne Complex with Alkynes: Formation of Silametallacyclobutadienes via [2+2] Cycloaddition (Grad. Sch. Sci., Tohoku Univ.) OYOSHIMOTO, Takashi; HASHIMOTO, Hisako; HAYAKAWA, Naoki; MATSUO, Tsukasa; TOBITA, Hiromi

W, Fe

Chair: MURAOKA, Takako (10 : 10 ~ 11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(1A8-08, 1A8-09, 1A8-10, 1A8-11, 1A8-12)
- 1A8-08** Formation of Peculiar Cationic Germynes from the Reactions of a Cationic Germlyne Complex with Terminal Alkynes (Grad. Sch. Sci., Tohoku Univ.) OMIYAZAKI, Yoshikazu; WATANABE, Takahito; TOBITA, Hiromi
- 1A8-09** Oxidation of water using ferrocenium cation under visible light irradiation (Grad. Sch. Eng., The Univ. of Tokyo) OTANABE, Yoshiaki; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki
- 1A8-10** Synthesis and Reactions of Iron Complexes of 1,1'-bis(arylamide) vanadocenes (Grad. Sch. Sci., Osaka Univ.; Sch. Sci., Tokyo Tech.) OKUSUNOSE, Hinano; HATANAKA, Tsubasa; KAWAGUCHI, Hiroyuki; FUNAHASHI, Yasuhiro
- 1A8-11** Synthesis and Reactions of Fe and Co Complexes with Terphenyldiamide Ligands (Grad. Sch. Sci., Osaka Univ.) OYAMADA, Yuka; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro
- 1A8-12** Synthesis and Reactions of Fe complexes with P,N,O-tridentate Schiff bases (Grad. Sch. Sci., Osaka Univ.) OKONYA, Natsumi; HATANAKA, Tsubasa; FUNAHASHI, Yasuhiro

Fe, P

Chair: HASHIMOTO, Hisako (11 : 10 ~ 12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(1A8-14, 1A8-15, 1A8-16, 1A8-17, 1A8-18)
- 1A8-14** Construction and reactivity of coordinatively unsaturated 3d metal complexes bearing Organosilyl ligands (Grad. Sch. Eng., The Univ. of Tokyo) OARATA, Shogo; SUNADA, Yusuke
- 1A8-15** Reactions of Dichlorogallyliron Complexes with Dimethyl Disulfide (Sch. Sci. Tech., Gunma Univ.) OHTANI, Aoi; MURAOKA, Takako; UENO, Keiji
- 1A8-16** Iron complexes with PNNP ligand: Siloxane bond formation reaction by dehydrogenative coupling reaction (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba; IRC3, AIST) OTAKESHITA, Tomoihiro; SATO, Kazuhiko; NAKAJIMA, Yumiko
- 1A8-17** Synthesis of tetraphosphine compounds by an iron complex catalyzing

double hydrophosphination reaction and their reactivities (Grad. Sch. Sci., Osaka City Univ.) NOCHIDA, Tomoya; OITAZAKI, Masumi; NAKAZAWA, Hiroshi

- 1A8-18** Convenient synthesis of phosphinecarboxamide (Fac. Sci., Osaka City Univ.) ITAZAKI, Masumi; OMATUTANI, Takanari; NOCHIDA, Tomoya; NAKAZAWA, Hiroshi

Tuesday, March 20, PM

Al

Chair: NAKATA, Norio (13 : 10 ~ 14 : 00)

- \* 13:00-13:10: interval for laptop PC connection.(1A8-26, 1A8-27, 1A8-28, 1A8-29)
- 1A8-26** Synthesis of Group 13 Metal-Pheox Complexes for a Lewis Acid-Lewis Base Catalyst (Grad. Sch. Eng., Osaka Univ.) NISHIMOTO, Yoshihiro; OTAKAKURA, Taro; YASUDA, Makoto
- 1A8-27<sup>#</sup>** Synthesis and Characterization of Pheox- and Pheox-Al Complexes and Its Application to the Coupling Reaction of  $\beta$ -Alkoxyenones with Silyl Enolates (Grad. Sch. Eng., Osaka Univ.) ONAKAO, Shuichi; NISHIMOTO, Yoshihiro; YASUDA, Makoto
- 1A8-28<sup>#</sup>** Copolymerization of Cyclohexene Oxide and Carbon Dioxide Catalyzed by Bifunctional Aluminum Porphyrin Complexes (Fac. Eng., The Univ. of Tokyo) MAEDA, Chihiro; TOKUDA, Hideki; EMA, Tadashi; ODENG, Jingyuan; NOZAKI, Kyoko
- 1A8-29<sup>#</sup>** Asymmetric conjugate cyanation of  $\alpha, \beta$ -unsaturated imides by a self-assembly Al-salen catalyst (Fac. Eng., TUS) OKITAHARA, Yusuke; SUGIYAMA, Hirotaka; IMAHORI, Tatsushi

Co, Rh

Chair: IWASAKI, Takanori (14 : 10 ~ 15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(1A8-32, 1A8-33, 1A8-34, 1A8-35, 1A8-36)
- 1A8-32** Efficient asymmetric hydrolytic ring-opening reaction of meso-epoxide by self-assembly Co-salen catalyst (Grad. Sch. Chem. Sci. Technol., TUS) OKOYAMA, Kenta; IMAHORI, Tatsushi
- 1A8-33** Cobalt(II)-Catalyzed Intermolecular Coupling Reaction of Alkyne with Pinacolborane (Fac. Sci., Fukuoka Univ.) OOKI, Yukari; KOGA, Yuji; MATSUBARA, Kouki
- 1A8-34** Silyl-bridged dicobalt complexes formed by the reaction of a NHC-cobalt dialkyl complex with hydrosilanes (Interdisciplinary Research Center for Catalytic Chemistry) OISHIZAKA, Yusuke; NAKAJIMA, Yumiko
- 1A8-35** Self-Assembly Salen Complexes utilizing Charge-Transfer Complexes (Grad. Sch. Eng., TUS) OTSUNOGAYA, Kosuke; IMAHORI, Tatsushi
- 1A8-36<sup>#</sup>** Organometallic Approaches to Optimization of Rhodium Catalysts for Efficient Parahydrogen-Induced Polarization (Grad. Sch. Eng., The Univ. of Tokyo; IRC3, AIST) ONAGANAWA, Yuki; ITODA, Marino; NONAKA, Hiroshi; SANDO, Shinsuke

Rh, Ir

Chair: KAYAKI, Yoshihito (15 : 20 ~ 16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(1A8-39, 1A8-40, 1A8-41, 1A8-42, 1A8-43, 1A8-44)
- 1A8-39<sup>#</sup>** Dehydrogenation of dimethylamine-borane catalyzed by half-sandwich Ir and Rh complexes: Mechanism and the role of Cp\* non-innocence (Grad. Sch. Eng., The Univ. of Tokyo) PAL, Shrinwantu; OKUSUMOTO, Shuhei; NOZAKI, Kyoko
- 1A8-40** Synthesis and structures of anionic diaryliridium complexes (Grad. Sch. Eng., Osaka Univ.) OKAIWA, Toshikazu; IWASAKI, Takanori; KAMBE, Nobuaki
- 1A8-41** Photocatalytic CO<sub>2</sub> reduction using an iridium complex with PNNP-type tetradentate ligand (Grad. Sch. Sci., Nagoya Univ.; Toyota Central R&D Labs., Inc.) OKAMADA, Kenji; MURAKI, Manami; JUNG, Jieun; SEKIZAWA, Keita; SATO, Shunsuke; MORIKAWA, Takeshi; FUKUZUMI, Shunichi; NOYORI, Ryoji; SAUTO, Susumu
- 1A8-42** Synthesis of Iridium Hydride Complex Supported by an Electro-rich Metallodiphosphine Ligand and Its Use in Catalytic E-Selective Semi-Hydrogenation of Alkynes (Grad. Sch. Sci., Osaka Pref. Univ.) OKITAMURA, Manami; TAKEMOTO, Shin; MATSUZAKA, Hiroyuki
- 1A8-43** Synthesis and reactivity of light-sensitizing trinuclear iridium polyhydride complexes ligated by diphosphines having fluorene moiety (Grad. Sch. Sci. Eng., TMU) OSHITAYA, Shoji; NOMURA, Kotohiro; INAGAKI, Akiko
- 1A8-44** Reaction of a Side-on-type Silanethione-coordinated Iridium Complex with Elemental Sulfur: Characterization of the Sulfur Insertion Products (Grad. Sch. Sci. Tech., Hirosaki Univ.) OHTANI, Ryusuke; OHTA, Shun; OKAZAKI, Masaaki

Ir, Ni

Chair: OOHASHI, Masato (16 : 30 ~ 17 : 30)

- \* 16:20-16:30: interval for laptop PC connection.(1A8-46, 1A8-47, 1A8-48, 1A8-49, 1A8-50, 1A8-51)

- 1A8-46** Synthesis and Reactivity of Iridium Complexes Having Silyl(2,2'-Bipyridine) Pincer Ligands (Grad. Sch. Sci., Tohoku Univ.)  
○MOCHIZUKI, Daiki; KOMURO, Takashi; TOBITA, Hiromi
- 1A8-47<sup>#</sup>** Studies on Catalysis of Dinuclear Iridium Complexes with Bridging 1,4-Butadienyl Ligand (Grad. Sch. Eng., Kyoto Univ.) ○SASAKURA, Kohei; OKAMOTO, Kazuhiro; OHE, Kouichi
- 1A8-48** Straightforward Synthesis of Tethered *N*-sulfonyldiamine-Ir Complexes via Condensation of a Cp Ligand Having a Hydroxyl Alkyl Chain (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NAKAMURA, Hitomi; MATSUNAMI, Asuka; KUWATA, Shigeki; KAYAKI, Yoshihito
- 1A8-49** Ni/Co-Catalyzed C(sp<sup>3</sup>)-C(sp<sup>3</sup>) Cross-Coupling Using Alkyl Tosylates as Radical Sources (Grad. Sch. Eng., Hiroshima Univ.) ○MICHIIYUKI, Takuya; OSAKA, Itaru; KOMEYAMA, Kimihiro
- 1A8-50** Nickel/Cobalt-Catalyzed Methylation of Organo Halides (Grad. Sch. Eng., Hiroshima Univ.) ○YAMAHATA, Yuta; OSAKA, Itaru; KOMEYAMA, Kimihiro
- 1A8-51** Synthesis and Reactivity of Nickel-Aryne Complexes Bearing 2,3-Thiophene Fragment (Grad. Sch. Eng., Osaka Univ.) ○TERADA, Misaki; NISHII, Yuji; MIURA, Masahiro

## Ni

Chair: OKAMOTO, Kazuhiro (17 : 40~18 : 30)

- \* 17:30-17:40: interval for laptop PC connection.(1A8-53, 1A8-55, 1A8-56, 1A8-57)
- 1A8-53<sup>#</sup>** Ni(0)-catalyzed multi-component coupling reactions of tetrafluoroethylene with unsaturated compounds (Grad. Sch. Eng., Osaka Univ.)  
○KAWASHIMA, Takuya; OHASHI, Masato; OGOSHI, Sensuke
- 1A8-55** Catalytic Si-F  $\sigma$ -Bond Activation by Nickel Complex (Grad. Sch. Sci., Osaka Pref. Univ.) ○ISASA, Tomohito; KAMEO, Hajime; MATSUZAKA, Hiroyuki
- 1A8-56** Ni/Cu-catalyzed selective monoalkylation of chlorosilanes (IRC3, AIST) ○BEPPU, Teruo; MATSUMOTO, Kazuhiro; SATO, Kazuhiko; NAKAJIMA, Yumiko
- 1A8-57** Nickel-Catalyzed Transformation of Propargylic Alcohol Derivatives into 2-Aryloxy-1,3-dienes (Grad. Sch. Eng., Kyoto Univ.) ○HORI, Yusaku; OKUMURA, Shintaro; ISHIDA, Naoki; MURAKAMI, Masahiro

## Wednesday, March 21, AM

## Ag, Au

Chair: NAGANAWA, Yuki (9 : 00 ~9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(2A8-01, 2A8-02, 2A8-03, 2A8-04)
- 2A8-01** Silver-Catalyzed Synthesis of 3-Sulfonyl Coumarin Derivatives From *N*-Sulfonyl Amino Acids (Sch. Advanced Sci. Eng., Waseda Univ.)  
○HAMADA, Daisuke; MAKINO, Sohei; KANYIVA, Kyallo Stephen; SHIBATA, Takanori
- 2A8-02** Facile Synthesis of Pyrroloindoline Derivatives Using Silver-Catalyzed  $\alpha$ -Aminoalkylation as Key Step (Sch. Advanced Sci. Eng., Waseda Univ.)  
○KANYIVA, Kyallo Stephen; MAKINO, Sohei; SHIBATA, Takanori
- 2A8-03** [2+2] cycloaddition reaction of metallacyclic vinyl-gold complex (Fac. Sci., Shizuoka Univ.) ○TANAKA, Yosuke; NISHINA, Naoko
- 2A8-04** Gold-Catalyzed Cyclization at the C5-Position of Isoxazoles (Lab. Chem. Life Sci., Tokyo Tech.) ○FUKUHARA, Shintaro; MORITA, Taiki; FUSE, Shinichiro; NAKAMURA, Hiroyuki

## Wednesday, March 21, PM

## B, Si

Chair: KAWACHI, Atsushi (12 : 30~13 : 20)

- \* 12:20-12:30: interval for laptop PC connection.(2A8-22, 2A8-23, 2A8-24, 2A8-25)
- 2A8-22** Synthesis, structure and reactivity of bromo(borapyridane) (IRC3, AIST) ○SEO, Yuto; LEE, Vladidimir Ya.; FUKAYA, Norihisa; CHOI, Junchul
- 2A8-23** Valence Isomerization of a Tetrasila-1,3-diene (Grad. Sch. Sci., Tohoku Univ.) ○FUJIEDA, Kentaro; AKASAKA, Naohiko; IWAMOTO, Takeaki
- 2A8-24** Synthesis and Functionalization of a Novel Cyclic Disilene (Grad. Sch. Sci., Tohoku Univ.) ○TANAKA, Kaho; AKASAKA, Naohiko; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 2A8-25<sup>#</sup>** Synthesis, Structure, and Reactivity of a Series of Disilenes Bearing Amino and Boryl Groups (Grad. Sch. Sci., Tohoku Univ.) ○KOSAI, Tomoyuki; IWAMOTO, Takeaki

## Si

Chair: IWAMOTO, Takeaki (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2A8-28, 2A8-29, 2A8-30, 2A8-31, 2A8-32, 2A8-33)
- 2A8-28** Synthesis of *o*-(Silyl)(boryl)benzenes with Less Sterically Hindered Aryl Groups (Grad. Sch. Sci., Eng., Hosei Univ.) ○SHIMIZU, Tomomi;

KAWACHI, Atsushi

- 2A8-29** Synthesis of Huge Silicon Clusters by the Reduction of Tetrachlorocyclooligosilane (Grad. Sch. Sci. Tech., Gunma Univ.; Grad. Sch. Sci., Osaka Pref. Univ.) ○MORIKAWA, Yusuke; TSURUSAKI, Akihiro; KYUSHIN, Soichiro
- 2A8-30** Synthesis of Polyhydrooligosilanes by the Reduction of 1,2-Dichloro-1,2-dihydrodisilanes (Grad. Sch. Sci. Tech., Gunma Univ.) ○TSUDA, Shunsuke; KYUSHIN, Soichiro
- 2A8-31** Synthesis and Liquid Crystalline Properties of Oligosilanes Bearing Polar End Groups (Grad. Sch. Sci. Tech., Gunma Univ.; Takasaki Advanced Radiation Research Institute) ○SEKIZAWA, Takuya; KYUSHIN, Soichiro; YOSHIMURA, Kimio; MAEKAWA, Yasunari
- 2A8-32** Formation of Dianions of Ladder Oligosilanes (Grad. Sch. Sci. Tech., Gunma Univ.; Sagami Chemical Research Institute) ○NOMURA, Ryunosuke; UETA, Yoshinori; TANAKA, Ryoji; KYUSHIN, Soichiro; MATSUMOTO, Hideyuki
- 2A8-33** Synthesis and Characterization of NHC-Coordinated Hydrosilylenes Bearing a Bulky Eind Group (Grad. Sch. Sci. Eng., Kindai Univ.) ○SADAMORI, Kazuya; HAYAKAWA, Naoki; MATSUO, Tsukasa

Chair: KANNO, Ken-ichiro (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2A8-35, 2A8-36, 2A8-37, 2A8-38, 2A8-39, 2A8-40)
- 2A8-35** Synthetic Study of Silanes with Bulky Aryl Substituents (Grad. Sch. Sci., Tohoku Univ.) ○HONDA, Shunya; SASAKI, Shigeru; IWAMOTO, Takeaki
- 2A8-36** Synthesis and redox properties of a disilene bearing triarylamine moieties (Grad. Sch. Sci., Tohoku Univ.) ○KARAKIDA, Takuro; SASAKI, Shigeru; IWAMOTO, Takeaki
- 2A8-37** Synthesis of Properties of a Highly-Distorted Disilene (Grad. Sch. Sci., Tohoku Univ.) ○NUKAZAWA, Takumi; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 2A8-38** Synthesis of Hexasilacyclohexane Derivatives Convertible Their Substituents (ICR, Kyoto Univ.) ○YAMATO, Omatsu; YOSHIIYUKI, Mizuhata; TOKITOH, Norihiro
- 2A8-39** Synthetic Studies of Novel Silabenzene with *tert*-Butyl Group at the 2-Position (ICR, Kyoto Univ.) ○TSUJI, Shingo; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro
- 2A8-40** Synthetic studies of 1-Silaazulene (ICR, Kyoto Univ.) ○OSHIRO, Taku; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro

Chair: MIZUHATA, Yoshiyuki (15 : 50~16 : 40)

- \* 15:40-15:50: interval for laptop PC connection.(2A8-42, 2A8-43, 2A8-44, 2A8-45, 2A8-46)
- 2A8-42** Reactions of a Dialkyldisilyne with Dichlorophosphines (Grad. Sch. Sci., Tohoku Univ.) ○SUGAWARA, Shohei; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 2A8-43** Synthesis of Silyl- and Alkyl-substituted Disilene and its Reduction (Sch. Sci. Eng., Univ. of Tsukuba) ○HIBI, Fuya; ICHINOHE, Masaaki
- 2A8-44** Generation of Silyl-substituted Silylene and Disilene by the Reaction of Lithiosilacyclopropane Derivative with TipSiMeCl<sub>2</sub> (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○KIKUCHI, Yui; SEKIGUCHI, Akira; ICHINOHE, Masaaki
- 2A8-45** Disproportionation Reactions of Various Dihydrodisilanes under Mild Conditions (Grad. Sch. Sci. Tech., Gunma Univ.) ○SUZUKI, Yuda; KANNO, Ken-ichiro; KYUSHIN, Soichiro
- 2A8-46** Synthesis of 1,1,4,4-Tetrachlorotetrasilane as a Precursor of Silicon Clusters (Grad. Sch. Sci. Tech., Gunma Univ.) ○OGURA, Hiromichi; KYUSHIN, Soichiro

Chair: ICHINOHE, Masaaki (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(2A8-48, 2A8-49, 2A8-50, 2A8-51, 2A8-52)
- 2A8-48** Synthesis and Structures of Various Bis(alkenyl)tetra- and hexasilanes via Ruthenium-Catalyzed Hydrosilylation (Grad. Sch. Sci. Tech., Gunma Univ.) ○KAJIMA, Keisuke; KANNO, Ken-ichiro; KYUSHIN, Soichiro
- 2A8-49** Properties of Octahalocyclooctasilanes (Grad. Sch. Sci. Tech., Gunma Univ.) ○KOBAYASHI, Yukihisa; KYUSHIN, Soichiro
- 2A8-50** Ruthenium-Catalyzed Hydrosilylation of 1,3-Dienes (Grad. Sch. Sci. Tech., Gunma Univ.) ○NOGUCHI, Seiya; KANNO, Ken-ichiro; KYUSHIN, Soichiro
- 2A8-51** Ruthenium-Catalyzed Hydrosilylations Using Hydrodisilane and Alkynes Having Electron-Withdrawing Groups (Grad. Sch. Sci. Tech., Gunma Univ.) ○KANNO, Ken-ichiro; ONO, Yukie; NOGUCHI, Seiya; KYUSHIN, Soichiro
- 2A8-52** Novel approach to synthesizing hexahydrosilaphenylene via intramolecular triple metathesis of tri(1-cyclobutenyl)silane (Fac. Sci., Shizuoka Univ.) ○LEE, Junghun; SUGINO, Takumi; SAKAMOTO, Kenkichi

## Thursday, March 22, AM

Chair: IMOTO, Hiroaki (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3A8-01, 3A8-02, 3A8-03, 3A8-04, 3A8-05, 3A8-06)
- 3A8-01** Silyl-substituents effects on the photophysical properties of Thieno[3,2-

b]thiophene (Grad. Sch. Urban Environmental Sci., TMU) ○HAYASHI, Daiki; INAGAKI, Yusuke; SETAKA, Wataru

**3A8-02** Synthesis of a Bipyridylene-bridged Molecular Gyrotop and Formation of its Palladium Complex (Grad. Sch. Urban Environmental Sci., TMU) ○ITO, Masaya; INAGAKI, Yusuke; YAMAGUCHI, Kentaro; SETAKA, Wataru

**3A8-03** Selective synthesis of alkoxy-silyl-substituted siloxanes by Cu-catalyzed coupling reaction of alkoxyhydrosilanes with silanols (IRC3, AIST) ○SATO, Yasushi; YAMAMOTO, Mie; SATO, Kazuhiko; IGARASHI, Masayasu

**3A8-04** Synthesis, Structure and Reactivity of Orthosilicic Acid and Its Oligomers (IRC3, AIST) ○IGARASHI, Masayasu; MATSUMOTO, Tomohiro; YAGIHASHI, Fujio; SATO, Kazuhiko; SHIMADA, Shigeru

**3A8-05** Synthesis, Structure and Reactivity of Cubic Octamer of Orthosilicic acid. (IRC3, AIST) ○NOZAWA, Takeshi; MATSUMOTO, Tomohiro; YAGIHASHI, Fujio; BEPPU, Teruo; SATO, Kazuhiko; IGARASHI, Masayasu

**3A8-06** Hydride Reduction of Alkoxy-silanes using NaBH<sub>4</sub> (IRC3, AIST) ○AOYAGI, Keiya; MATSUMOTO, Kazuhiko; SATO, Kazuhiko; NAKAJIMA, Yumiko

## Ge

Chair: SAITO, Masaichi (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3A8-08, 3A8-09, 3A8-10, 3A8-11, 3A8-12, 3A8-13)

**3A8-08** Toward Polycyclic Aromatic Hydrocarbons of Heavier Group 14 Element Analogues of the Aryl Anion (ICR, Kyoto Univ.) ○FUJIMORI, Shiori; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro

**3A8-09** Synthesis and Structure of Germanate Complex Having Phenanthroline-dioxido Ligands (Fac. Eng., Tottori Univ.) ○YONEDA, Tomoka; NANJO, Masato

**3A8-10** Synthesis, Structure, and Properties of Chlorogermynes Having an N-P and an N-O Bidentate Ligands (Fac. Sci., Gakushuin Univ.) ○INOMATA, Koya; YABUKI, Shunsaku; MOCHIDA, Kunio

**3A8-11** Synthesis and Characterization of Unsaturated Bond Species of Heavier Group 14 Elements with Bulky MPind Groups (Fac. Sci. Eng., Kindai Univ.) ○OHNO, Ryoma; MAGAMI, Kosuke; KONAKA, Shigeaki; NUMATA, Yasuyuki; HAYAKAWA, Naoki; MATSUO, Tsukasa

**3A8-12** Synthesis and Properties of  $\pi$ -Conjugated Digermene Compounds Bearing the Bulky Rind Groups (Fac. Sci. Eng., Kindai Univ.) ○HAYAKAWA, Naoki; NUMATA, Yasuyuki; KAWAII, Hotaka; YAMATANI, Kenta; HASHIZUME, Daisuke; MATSUO, Tsukasa

**3A8-13** Synthesis and Structures of Divalent Species of Heavier Group 14 Elements with Bulky Carboxylate Ligands (Grad. Sch. Sci. Eng., Kindai Univ.) ○YAMASHITA, Ryota; MIYAMOTO, Yu; NISHITANI, Nobuhisa; HAYAKAWA, Naoki; MATSUO, Tsukasa

## Ge, Sn, Pb

Chair: NANJO, Masato (11 : 20~12 : 10)

\* 11:10-11:20: interval for laptop PC connection.(3A8-15, 3A8-16, 3A8-17, 3A8-18, 3A8-19)

**3A8-15** Synthesis and Reactivity of Tetragermacyclobutadiene (Grad. Sch. Sci. Eng., Kindai Univ.) ○NUMATA, Yasuyuki; HAYAKAWA, Naoki; MATSUO, Tsukasa

**3A8-16** Investigation on Reactivity of a Zero-Valent Tin Complex Stabilized by a Butadiene Ligand (Grad. Sch. Sci., Eng., Saitama Univ.) ○KOBAYASHI, Shinya; FURUKAWA, Shunsuke; SAITO, Masaichi

**3A8-17** Reactivity of chlorostannylene stabilized by iminophosphonamide ligand (Fac. Sci., Saitama Univ.) ○NAKAYA, Kazuki; TAKAHASHI, Shintaro; NAKATA, Norio; ISHII, Akihiko

**3A8-18** Synthesis of tin-linked molecular bevel gears and observation of gear slippage (Grad. Sch. Urban Environmental Sci., TMU) ○HOSONO, Satoshi; INAGAKI, Yusuke; YAMAGUCHI, Kentaro; SETAKA, Wataru

**3A8-19** Synthesis and Reactivity of a Series of Diarylplumblyenes Bearing the Bulky Rind groups (Fac. Sci. Eng., Kindai Univ.) ○KONAKA, Shigeaki; HAYAKAWA, Naoki; MATSUO, Tsukasa

## Thursday, March 22, PM

### Cu

Chair: SAKAMOTO, Ryu (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(3A8-27, 3A8-29, 3A8-30, 3A8-31, 3A8-32)

**3A8-27\*** Copper(I)-Catalyzed Stereodivergent Hydrodefluorination of *gem*-Difluoroalkenes (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○KOJIMA, Ryoto; KUBOTA, Koji; ITO, Hajime

**3A8-29** Copper(I)-Catalyzed Stereoselective Defluoroborylation of Aliphatic *gem*-Difluoroalkenes (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SEO, Tamae; KOJIMA, Ryoto; ITO, Hajime

**3A8-30** Copper(I)-Catalyzed Enantioselective Borylation of (E)-Allyltrifluorides via  $\beta$ -Fluoroelimination (Grad. Sch. Eng., Hokkaido Univ.) ○AKIYAMA, Sota; KOJIMA, Ryoto; ITO, Hajime

**3A8-31** Cu-catalyzed selective alkoxyalkylation of styrenes (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○MURATA, Yumi; NISHIKATA, Takashi

**3A8-32** Copper-catalyzed cyanation of tert-alkyl bromides (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○ISHIDA, Syo; NISHIKATA, Takashi

Chair: NISHIKATA, Takashi (14 : 30~15 : 20)

\* 14:20-14:30: interval for laptop PC connection.(3A8-34, 3A8-35, 3A8-36, 3A8-37, 3A8-38)

**3A8-34** Copper Catalyzed Asymmetric Borylation of Aliphatic Ketones and Ketimines (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○OSAKI, Shun; KUBOTA, Koji; ITO, Hajime

**3A8-35** Unusual Temperature Dependence of Enantioselectivity in the Asymmetric Ring Opening Reaction of Meso-epoxide Catalyzed by Homochiral MOF (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○NAKAJI, Kazusada; TANAKA, Kouichi

**3A8-36** Development of Mono-N-alkylation of Primary Amides and Arylamines using Alkylsilyl Peroxides (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SAKURAI, Shunya; SAKAMOTO, Ryu; MARUOKA, Keiji

**3A8-37** New Synthetic Method of Organoboron Compounds using Alkylsilyl Peroxides (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SEIHARA, Takumi; SAKAMOTO, Ryu; MARUOKA, Keiji

**3A8-38** Development of Copper-catalyzed Alkylation of Terminal Alkynes using Alkylsilyl Peroxides via a Radical Mechanism (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KATO, Terumasa; SAKAMOTO, Ryu; MARUOKA, Keiji

### Pd

Chair: WAKIOKA, Masayuki (15 : 30~16 : 30)

\* 15:20-15:30: interval for laptop PC connection.(3A8-40, 3A8-41, 3A8-42, 3A8-43, 3A8-44, 3A8-45)

**3A8-40** Construction of group 10 transition metal clusters via insertion into Si-Si bonds (Grad. Sch. Eng., The Univ. of Tokyo; IIS, The Univ. of Tokyo) ○SHIMAMOTO, Kento; SUNADA, Yusuke

**3A8-41** Oxygenation of a Benzyl Ligand on Palladium Promoted by Secondary Phosphine Oxides (Fac. Sci., Nara Women's Univ.) ○OKA, Sayaka; KATAOKA, Yasutaka; URA, Yasuyuki

**3A8-42** Palladium-mediated stoichiometric anti-Markovnikov addition of an N-H bond of 2-pyridones to an alkenylphosphine (Fac. Sci., Nara Women's Univ.) ○SATO, Ruriko; KATAOKA, Yasutaka; URA, Yasuyuki

**3A8-43** Synthesis of 4-membered ring compounds using oxocyclobutenyl complex (Grad. Sch. Eng., Saitama Inst. of Tech.) ○AZAMI, Hidekazu; IWASAKI, Masakazu

**3A8-44** Cis/trans Isomerization Reaction of Methylpalladium Complexes Bearing a Partially Saturated IzQO Ligand (Grad. Sch. Eng., The Univ. of Tokyo) ○AKITA, Shumpei; NAKANO, Ryo; ITO, Shingo; NOZAKI, Kyoko

**3A8-45** Role of Ag salt in dehydrogenative cross coupling reaction (TREMS, Univ. of Tsukuba) ○SHIMOYAMA, Yuto; KUWABARA, Junpei; KANBARA, Takaki

Chair: URA, Yasuyuki (16 : 40~17 : 40)

\* 16:30-16:40: interval for laptop PC connection.(3A8-47, 3A8-49, 3A8-51, 3A8-52)

**3A8-47\*** Diastereoselective Michael reaction catalyzed by pyridinebisamide-palladium (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NAMBU, Yoko; TAKATA, Toshikazu

**3A8-49\*\*** Syntheses of Substituted 1,4-Disila-2,5-cyclohexadienes from Cyclic Hexasilane Si<sub>6</sub>Me<sub>12</sub> and Alkynes via Successive Si-Si Bond Activation by Pd/Isocyanide Systems. (IMCE, Kyushu Univ.) ○TAHARA, Atsushi; NAGINO, Shunsuke; SUNADA, Yusuke; HAIGE, Ryohei; NAGASHIMA, Hideo

**3A8-51\*** Synthesis of Poly(3-hexylthiophene) via Highly Selective Direct Arylation Polymerization: Control of Molecular Weight and End Groups (ICR, Kyoto Univ.) ○XU, Kai; WAKIOKA, Masayuki; OZAWA, Fumiyuki

**3A8-52** Stille Cross Coupling of  $\alpha$ -(Trifluoromethyl) benzyl Chlorides with Allylstannanes (Fac. Eng. Nagoya Inst. of Tech.) PUNNA, Nagender; ○HARADA, Kyosuke; TOKUNAGA, Etsuko; SHIBATA, Norio

### Pd, Pt

Chair: KUWABARA, Junpei (17 : 50~18 : 40)

\* 17:40-17:50: interval for laptop PC connection.(3A8-54, 3A8-55, 3A8-56, 3A8-57, 3A8-58)

**3A8-54** Mechanistic Insight into Dehydrogenative Arene Coupling of Dimethyl Phthalate: A Study of Palladium Complexes Catalyst by Liquid Phase XAFS (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.; Grad. Sch. Eng. Sci., Osaka Univ.; ICR, Kyoto Univ.) ○SANO, Kosuke; KOMINE, Nobuyuki; MITSUDOME, Takato; TAKAYA, Hikaru; HIRANO, Masafumi

**3A8-55** Synthesis and Dynamic Behavior of Hydrido(dihydrosilyl)platinum (II) Complex Having Trimethyl Phosphine Ligands (Grad. Sch. Sci., Eng., Saitama Univ.) ○AOYAMA, Motoo; KATO, Nanami; NAKATA, Norio; ISHII, Akihiko

**3A8-56** Synthesis and Reactivity of Platinum Complexes Having a Group 14 Element-Containing Pincer Type Ligand (Sch. Sci., Tokyo Tech.)



○NAKAYA, Ryota; TAKAYA, Jun; IWASAWA, Nobuharu

- 3A8-57** Macrocyclic Pt-complex having NCN pincer-type ligand: synthesis, structure and catalytic activity (Sch. Mater. & Chem. Tech., Tokyo Tech.)  
○HIGUCHI, Kazuki; YAMAMOTO, Koji; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 3A8-58** Oligomerization of Trimethylsilanol by Platinum Catalyst (Grad. Sch. Sci., Hiroshima Univ.) ○TSUMURA, Daisuke; KUBO, Kazuyuki; KUME, Shouko; MIZUTA, Tsutomu

### Friday, March 23, AM

#### Ce, Ti, Cr, Sm

Chair: ISHIDA, Yutaka (9:00 ~ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(4A8-01, 4A8-02, 4A8-03, 4A8-04, 4A8-05, 4A8-06)
- 4A8-01** Mechanism for Alternative Copolymerization of Carbon Dioxide and Epoxide Catalyzed by Macrocyclic Zn<sub>3</sub>Ln Cluster Complexes (Graduate School of Engineering Science, Osaka University) ○AOKI, Ryota; NAGAE, Haruki; AKUTAGAWA, Shin-nosuke; SPANIOL, Thomas P.; OKUDA, Jun
- 4A8-02** Telomerization on Alternating Copolymerization of Cyclohexene Oxide with Carbon Dioxide Catalyzed by Macrocyclic LnZn<sub>3</sub> Cluster Complexes (Sch. Eng. Sci., Osaka Univ.) ○AKUTAGAWA, Shin-nosuke; AOKI, Ryota; NAGAE, Haruki; SPANIOL, Thomas P.; TSURUGI, Hayato; OKUDA, Jun; MASHIMA, Kazushi
- 4A8-03** Synthesis of Titanium Pyrrolylaluminate Complexes and Their Catalytic Activity for  $\alpha$ -Olefin Polymerization (Sch. Eng. Sci., Osaka Univ.) ○HATO, Wataru; ANGA, Srinivas; TSURUGI, Hayato; MASHIMA, Kazushi
- 4A8-04**<sup>#</sup> C-N and C-C Bonds Cleavage of Substituted Pyridines by a Trinuclear Ti Hydride Complex (RIKEN CSRS) ○HU, Shaowei; SHIMA, Takanori; HOU, Zhaomin
- 4A8-05** Dinitrogen Activation by a Dinuclear Chromium Hydride Complex (RIKEN CSRS) ○SHIMA, Takanori; HOU, Zhaomin
- 4A8-06**<sup>#</sup> Cooperative Trimerization of Carbon Monoxide by Samarium and Lithium Boryls (Organometallic Chem. Lab. RIKEN) ○WANG, Baoli; LUO, Gen; NISHIURA, Masayoshi; HOU, Zhaomin

#### Ce, Hf, Y, Ti

Chair: SHIMA, Takanori (10:10 ~ 11:00)

- \* 10:00-10:10: interval for laptop PC connection.(4A8-08, 4A8-09, 4A8-10, 4A8-12)
- 4A8-08** Synthesis and reactivity of trivalent cerium complexes with N,N"-diaryldiethylenetriamine ligands (Grad. Sch. Eng. Sci., Osaka Univ.) ○SHINOHARA, Koichi; TSURUGI, Hayato; MASHIMA, Kazushi
- 4A8-09** Preparation of Cationic Dinuclear Benzylhafnium Complexes with a Bidentate (2-Amido)ethoxide Ligand (Grad. Sch. Eng. Sci., Osaka Univ.) ○INOUE, Mariko; TSURUGI, Hayato; MASHIMA, Kazushi
- 4A8-10**<sup>#</sup> Direct *Ortho*-C-H Bond Aminoalkylation of Pyridine Derivatives Catalyzed by Amidozirconium Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○TSURUGI, Hayato; KUNDU, Abhinanda; INOUE, Mariko; TSUJIMOTO, Nagataka; NAGAE, Haruki; MASHIMA, Kazushi
- 4A8-12** Synthesis and Structures of Group 4 Transition Metal Alkyl Complexes with Bulky Monodentate Aryloxy Ligands (Grad. Sch. Sci. Eng., Kindai Univ.) ○WATAUCHI, Toshiki; KANAZAWA, Shoya; SUZUKI, Nobuhisa; MATSUO, Tsukasa

#### Ti, Ta, V

Chair: OHTA, Shun (11:10 ~ 12:00)

- \* 11:00-11:10: interval for laptop PC connection.(4A8-14, 4A8-16, 4A8-17, 4A8-18)
- 4A8-14**<sup>\*</sup> Activation and Olefination of Methane by Metal-Carbon Multiple Bonds (UPenn) ○KUROGI, Takashi; BAIK, Mu-hyun; MINDIOLA, Daniel
- 4A8-16** Synthesis and Reactions of Naphthalene and Anthracene Complexes of Titanium (Grad. Sch. Sci., Eng., Tokyo Tech.) ○NAKANISHI, Yusuke; ISHIDA, Yutaka; KAWAGUCHI, Hiroyuki
- 4A8-17**<sup>#</sup> Transformation of Metallacyclopentadiene to Metallacyclopentene on Bimetallic Ditanalium Scaffold (Grad. Sch. Eng. Sci., Osaka Univ.) ○ANGA, Srinivas; LASKAR, Payel; YAMAMOTO, Keishi; TSURUGI, Hayato; MASHIMA, Kazushi
- 4A8-18** Preparation and Reactivity of Groups 4 and 5 Transition Metal Complexes Bearing PNP-Type Pincer Ligands Based on Pyrrole Skeleton (Grad. Sch. Eng., The Univ. of Tokyo) ○SEKIGUCHI, Yoshiya; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki

### Friday, March 23, PM

#### Ru

Chair: INAGAKI, Akiko (13:10 ~ 14:10)

- \* 13:00-13:10: interval for laptop PC connection.(4A8-26, 4A8-27, 4A8-29,

4A8-30)

- 4A8-26** Characterization and Reactivity of CpRu Chloride Complexes Obtained from Cationic CpRu  $\eta^6$ -Naphthalene Complex and Chloride Ion (Grad. Sch. Sci., Osaka Pref. Univ.) ○ISHII, Hana; TERAMOTO, Akira; TAKEMOTO, Shin; MATSUZAKA, Hiroyuki
- 4A8-27**<sup>#</sup> Ru(0)-Catalyzed Direct Synthesis of Conjugated Trienes and Tetraenes by Coupling of Conjugated Dienes with Internal Alkynes (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○KIYOTA, Sayori; IN, Seonyoung; KOMINE, Nobuyuki; HIRANO, Masafumi
- 4A8-29** Synthesis and Proto-desilylation of Silyl-substituted Conjugated Trienes Prepared by Direct Coupling of Conjugated Dienes with Silylalkynes (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) SAITO, Ryo; KIYOTA, Sayori; KOMINE, Nobuyuki; ○HIRANO, Masafumi
- 4A8-30**<sup>#</sup> Ruthenium-catalyzed Synthesis of Acrylic Acid from Ethylene and CO<sub>2</sub> (Sch. Sci., Tokyo Tech.) ○ITO, Tatsuyoshi; TAKAHASHI, Kohei; IWASAWA, Nobuharu

Chair: TAKEMOTO, Shin (14:20 ~ 15:20)

- \* 14:10-14:20: interval for laptop PC connection.(4A8-33, 4A8-34, 4A8-35, 4A8-36, 4A8-37, 4A8-38)
- 4A8-33** Vinylidene Rearrangement of S-Substituted Internal Alkynes in a Ruthenium Complex (Grad. Sch. Sci. Eng., Chuo Univ.) ○TAKAMORI, Shuhei; SAKAJIRI, Kosuke; DEGUCHI, Kazuki; KODAMA, Shintaro; KUWABARA, Takuya; ISHII, Youichi
- 4A8-34** Synthesis of a Ruthenium Vinylidene Complex from an Alkynylphosphonates and its Pseudo-polymorphism (Grad. Sch. Sci. Eng., Chuo Univ.) DEGUCHI, Kazuki; SAKAJIRI, Kosuke; TAKAMORI, Shuhei; ○KUWABARA, Takuya; KODAMA, Shintaro; TAKANO, Keiko; HOUJOU, Hirohiko; ISHII, Youichi
- 4A8-35** Synthesis of Phosphaphenylene Derivatives via P-C Reductive Elimination and Their Fluorescence Properties (Grad. Sch. Sci. Eng., Chuo Univ.) ○KATO, Takahiro; KUWABARA, Takuya; KODAMA, Shintaro; MINAMI, Yasunori; HIYAMA, Tamejiro; ISHII, Youichi
- 4A8-36**<sup>#</sup> Synthesis of Tethered Amine-Ru Complexes via Intramolecular Defluorination and Catalytic Application to Asymmetric Transfer Hydrogenation (Sch. Mater. & Chem. Tech., Tokyo Tech.; Coll. Sci. Eng., Aoyama Gakuin Univ.) ○MATSUNAMI, Asuka; NAKAMURA, Hitomi; KUWATA, Shigeki; KAYAKI, Yoshihito
- 4A8-37** Reactions of  $\beta$ -Protic Ruthenium Complexes with Unsaturated Alcohols (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TASHIMA, Naoto; KUWATA, Shigeki
- 4A8-38** Synthesis and Reactivities of Protic Bis(pyridylidene) Ruthenium Complexes (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KURASHIMA, Kenta; SAWAZAKI, Taka; KAYAKI, Yoshihito; KUWATA, Shigeki

Chair: NAKAJIMA, Yumiko (15:30 ~ 16:20)

- \* 15:20-15:30: interval for laptop PC connection.(4A8-40, 4A8-41, 4A8-42, 4A8-43, 4A8-44)
- 4A8-40** Reactivity of a Trinuclear Ruthenium Complex Capped a m<sup>3</sup>-Oxoboryl Ligand. (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NINAGAWA, Hayato; TAKAO, Toshiro
- 4A8-41** Reactivity of diruthenium complexes having a dihydrobipyridyl ligand (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NAGAE, Ryo; TAKAO, Toshiro
- 4A8-42** Structure and reactivity of the Ru<sub>4</sub>Ni decahydrido cluster (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KOSUKEGAWA, Takuya; TAKAO, Toshiro
- 4A8-43** Synthesis, Structures, and Properties of Ruthenium Carbonyl Complexes Bearing Silyl(*N*-Heterocyclic Carbene) Chelate Ligands (Grad. Sch. Sci., Tohoku Univ.) ○TAKAHASHI, Kasumi; KOMURO, Takashi; TOBITA, Hiromi
- 4A8-44** Synthesis and property of organometallic multinuclear molecular wires with diethynylthiophene bridges (Lab. Chem. Life Sci., Tokyo Tech.) ○KATO, Yuya; TANAKA, Yuya; AKITA, Munetaka

**Room A9**  
Bldg. 14 1444

### Organic Chemistry -Reaction and Synthesis- Organic Electron Transfer Chemistry

#### Wednesday, March 21, AM

Chair: MATSUMOTO, Kouichi (10:00 ~ 10:50)

- \* 9:50-10:00: interval for laptop PC connection.(2A9-07, 2A9-08, 2A9-09, 2A9-10, 2A9-11)
- 2A9-07** Electrochemical Hydrogenation of *p*-Xylene Using a PEM Reactor (Sch. Eng., Yokohama Natl. Univ.) ○SHIMIZU, Yutaru; MINOSHIMA, Juri; FUKAZAWA, Atsushi; ATOBE, Mahito
- 2A9-08** Synthesis of novel amine-3HF complexes and their application to anodic fluorination (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○AOKI,

- Tsubasa; KAGOMOTO, Takeru; YAMADA, Masahide; TAJIMA, Toshiki  
**2A9-09** Synthesis of Azanucleosides by Anodic Oxidation (Fac. Agr., Tokyo Univ. of Agri. and Technol.) ○OKAMOTO, Kazuhiro; ISHII, Seika; SHOJI, Takao; CHIBA, Kazuhiro  
**2A9-10** An Attempt to Generate and Accumulate Glycosyl Cations by the Electrochemical Method Aiming at Their Direct Observation (Grad. Sch. Eng., Kyoto Univ.) ○SHIMIZU, Akihiro; OKUDONO, Jun; HAYASHI, Ryutarō; YOSHIDA, Jun-ichi  
**2A9-11** Electrolytic Cross-Coupling of Arenediazonium Salts and Arenes (Grad. Sch. Eng., Osaka Univ.) ○HATA, Dai; TOBISU, Mamoru; AMAYA, Toru

Chair: SHIMAKOSHI, Hisashi (11 : 00~11 : 50)

- \* 10:50-11:00: interval for laptop PC connection.(2A9-13, 2A9-14, 2A9-15, 2A9-16, 2A9-17)  
**2A9-13** Structure and external stimulus response of donor-acceptor type  $\pi$ -conjugated zwitterion with near-infrared absorption (Grad. Sch. Eng., Kyoto Univ.) ○ISHIZAKI, Yu; SHIMIZU, Akihiro; YOSHIDA, Jun-ichi  
**2A9-14** Efficient Synthesis and Properties of Benzodithienofurans and Benzodithienothiophenes (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○KURIMOTO, Yui; MITSUDO, Koichi; SUGA, Seiji  
**2A9-15** Innovation of New Luciferin Analog for *in vivo* Optical Imaging (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○SAITO, Ryohē; KITADA, Nobuo; KIYAMA, Masahiro; HIRANO, Takashi; MAKI, Shojiro  
**2A9-16** Development of an Anthracene-BODIPY Fluorescent Sensor for Water Based on PET (Photo-induced Electron Transfer) and FRET (Fluorescence Resonance Energy Transfer) Systems (Fac. Eng., Hiroshima Univ.) ○JIMBO, Daisuke; IMAE, Ichirou; OYAMA, Yousuke  
**2A9-17** Cycloaddition Reaction Assisted by Photoinduced Electron Transfer in a Lithium Perchlorate-Nitromethane System (Fac. Agr., Tokyo Univ. of Agri. and Technol.) ○NAGAHARA, Shingo; WAKAMATSU, Hiroki; OKADA, Yohei; CHIBA, Kazuhiro

### Wednesday, March 21, PM

Chair: TAJIMA, Toshiki (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2A9-28, 2A9-29, 2A9-30, 2A9-31, 2A9-32)  
**2A9-28** Electrochemical synthesis of cyclic oligogulucosamine with b-glycosidic linkages (Tottori Univ. the Graduate School of Sustainability Science) ○TANABE, Shichidai; YAMAMOTO, Takashi; NOKAMI, Toshiki; ITOH, Toshiyuki  
**2A9-29** Inversion of Stereochemistry in the Allylation of *N*-Acyliminium ion (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○YOSHIOKA, Kazuki; MITSUDO, Koichi; SUGA, Seiji  
**2A9-30** Synthesis of  $\pi$ -Extended Thienofurans via Electro-oxidative Dehydrogenative Cyclization (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MATSUO, Ren; MITSUDO, Koichi; SUGA, Seiji  
**2A9-31** Effect of Reaction Temperature for Selective Formation of Diaryl 1,2-Diketones from Diaryl Alkynes by Electrochemical Generation of Nitrate Radical (Grad. Sch. Sci. Eng., Kindai Univ.) ○KOMESU, Kazuki; MATSUMOTO, Kouichi; KASHIMURA, Shigenori  
**2A9-32** Synthesis of Fluorinated Piperidine Derivatives via Aza-Prins Cyclization Using Electrochemical Oxidation (Fac. Sci. Eng., Kindai Univ.) MATSUMOTO, Kouichi; ○HAYASHI, Erin; YANAGI, Rina; MITANI, Naoya; YAMAGUCHI, Kouji; KASHIMURA, Shigenori

Chair: OYAMA, Yousuke (14 : 30~15 : 20)

- \* 14:20-14:30: interval for laptop PC connection.(2A9-34, 2A9-35, 2A9-36, 2A9-37)  
**2A9-34** Efficient photochemical reduction of benzimidazolequinone with the assist of intramolecular proton transfer (Grad. Sch. Chem. Sci. Technol., TUS) ○YOSHIDA, Takeaki; KURAMOCHI, Yusuke; SATAKE, Akiharu  
**2A9-35** Benzimidazoline promoted reduction reaction of 2-substituted-2-bromoketones in the presence of molecular oxygen (Fac. Sci., Niigata Univ.) YOSHIOKA, Naoki; IZUMIYA, Norihiro; ○HASEGAWA, Eietsu  
**2A9-36** Mg-Promoted Reductive Coupling Reactions of Aliphatic Conjugated Esters with a Leaving Group at the  $\beta$ -Position of Ester and Acrylic Acid Ester (Grad. Sch. Eng., Nagaoka Univ. of Tech.) ○HASEGAWA, Tomoya; ZHANG, Tianyuan; MAEKAWA, Hirofumi  
**2A9-37** Anodic Oxidation of Isoeugenol on Boron-Doped Diamond Electrodes (Fac. Sci. Tech., Keio Univ.) ○YAMAMOTO, Takashi; IGARASHI, Dan; SAITOH, Tsuyoshi; NISHIYAMA, Shigeru; WALDVOGEL, Siegfried R.; EINAGA, Yasuaki

Chair: NOKAMI, Toshiki (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(2A9-40, 2A9-42, 2A9-44)  
**2A9-40** Excellent Catalytic Performance of B12 Complex with Cyclometalated Iridium(III) Complex as Photosensitizer under Visible Light Irradiation (Grad. Sch. Eng., Kyushu Univ.; Div. of Chem. Eng. and Mater. Sic. Ewa Womans Univ.; Ins. of Org. Chem. Polish Aca. of Sci.) ○TIAN, Hui; SHIMAKOSHI, Hisashi; KIM, Sinheui; PARK, Gyurim; YOU, Youngmin; GRYKO, Dorota; HISAEDA, Yoshio  
**2A9-42** Electric Field-induced Reaction on Wireless Electrodes for Fabrica-

- tion of Functional Materials (Interdisciplinary Grad. Sch. Sci. and Eng., Tokyo Tech.; Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KOIZUMI, Yuki; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke  
**2A9-44** Formation of the Intramolecularly-Bridged Tetraphenylbenzidine by an Electron-Transfer Reaction (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.; Grad. Sch. Sci., Osaka City Univ.) ○KURAMOTO, Yutarō; SAKATA, Takuma; MATSUI, Yasunori; OHTA, Eisuke; YOSHIDA, Kouhei; OKADA, Keiji; IKEDA, Hiroshi

### Thursday, March 22, AM

Chair: INAGI, Shinsuke (10 : 00~10 : 40)

- \* 9:50-10:00: interval for laptop PC connection.(3A9-07, 3A9-08, 3A9-09, 3A9-10)  
**3A9-07** Preparation of Chlorine Fine Bubbles Using Ultrasonic Irradiation and Its application to Synthesis of Polyaniline Hollow Particles (Sch. Eng., Yokohama Natl. Univ.) ○SHIRAIISHI, Yukihide; KOSHINO, Miharu; ATOBE, Mahito  
**3A9-08** Investigation of cathode materials for electroreductive polymerization of hexafluorobenzene (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○ITO, Wataru; WAKAI, Daigo; FUDO, Yusaku; TAJIMA, Toshiki  
**3A9-09** Electroreductive synthesis of polysilanes having germyl group termini and gerymlylene chains (Fac. Sci. Eng., Kindai Univ.; Grad. Sch. Sci. Eng., Kindai Univ.) ○SHIMAZU, Takuto; ISHIFUNE, Manabu  
**3A9-10** Electroreductive synthesis of the fluorenyl group-conjugated silicon-containing polymers (Fac. Sci. Eng., Kindai Univ.) ○TAKHASHI, Akane; ISHIFUNE, Manabu

Chair: OKADA, Yohei (10 : 50~11 : 30)

- \* 10:40-10:50: interval for laptop PC connection.(3A9-12, 3A9-13, 3A9-14, 3A9-15)  
**3A9-12** One-dimensional structure formation of pillar[6]arene by anodic oxidation (Sch. Mater. & Chem. Tech., Tokyo Tech.; Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○TSUNEISHI, Chiaki; NISHIYAMA, Hiroki; OGOSHI, Tomoki; TOMITA, Ikuyoshi; INAGI, Shinsuke  
**3A9-13** Development of Organic Cathode Active Material Based on Oxocarbon acid ionic liquids (Grad. Sch. Eng., Tottori Univ.) ○KOMURA, Takuro; HANDA, Naoyuki; NOKAMI, Toshiki; ITOH, Toshiyuki  
**3A9-14** Preparation of pH and thermo-responsive optically active polymer grafted graphite electrode (Fac. Sci. Eng., Kindai Univ.) ○SUGINO, Yuri; ISHIFUNE, Manabu  
**3A9-15** Stereoselective electrochemical reductions by using optically active thermoresponsive polymer-grafted carbon fiber electrodes consisting of chiral amino alcohol derivatives (Grad. Sch. Sci. Eng., Kindai Univ.) ○SHOJI, Takuya; ISHIFUNE, Manabu

### Asian International Symposium - Electrochemistry -

#### Thursday, March 22, PM

Chair: Amaya, Toru (13 : 00~14 : 10)

- 3A9-25** Keynote Lecture Electrochemical Synthesis of Heterocycles through Radical Cyclizations (Xiamen Univ.) ○Xu, Hai-Chao (13:00~13:30)  
**3A9-28** Invited Lecture Redox Tag-Assisted Radical Cation Diels-Alder Reactions (Tokyo Univ. of Agri. and Technol.) ○Okada, Yohei (13:30~13:50)  
**3A9-30** Invited Lecture Electrochemical Flow Synthesis Based on One-Electron Oxidation (Tokai Univ.) ○Arai, Kenta (13:50~14:10)

Chair: Shimizu, Akihiro (14 : 20~15 : 20)

- 3A9-33** Invited Lecture Bipolar Electrode-Electrochemiluminescence Approach for Biosensing (Nanjing Agricultural Univ.) ○Wu, Meisheng (14:20~14:40)  
**3A9-35** Invited Lecture Solar-Pumping Upconversion of Lanthanide-based Interfacial Coordination Nanoparticles (Aoyama Gakuin Univ.) ○Ishii, Ayumi (14:40~15:00)  
**3A9-37** Invited Lecture Redox Chemistry of Nitrogen-Containing 3D  $\pi$ -Conjugated Systems (Nagoya Univ.) ○Hiroto, Satoru (15:00~15:20)

Chair: Shimakoshi, Hisashi (15 : 30~16 : 40)

- 3A9-40** Keynote Lecture Photon- and Electron-Recycling Redox Catalysis for Organic Transformations (Ewha Womans Univ.) ○You, Youngmin (15:30~16:00)  
**3A9-43** Invited Lecture Creation of Novel Organic Semiconductors by Utilizing Photoinduced Electron-transfer Reaction (Osaka Pref. Univ.) ○Matsui, Yasunori (16:00~16:20)  
**3A9-45** Invited Lecture A Sugar Machine (Tottori Univ.) ○Nokami, Toshiki (16:20~16:40)

Chair: Mitsudo, Koichi (16 : 50~17 : 40)

- 3A9-48** Invited Lecture Functional Molecule-Based Nanosheets (The Univ. of Tokyo) ○Sakamoto, Ryota (16:50~17:10)

**3A9-50<sup>#</sup> Invited Lecture** In-plane Growth of Conducting Polymer Films by Means of Bipolar Electrochemistry (Tokyo Tech.) ○Inagi, Shinsuke (17:10~17:30)

**3A9-52<sup>#</sup> Opening Remarks / Closing Remarks** Closing Remarks (Yokohama National Univ.) ○Atobe, Mahito (17:30~17:40)

## Room B1

Bldg. 14 1451

### Coordination Chemistry, Organometallic Chemistry

Tuesday, March 20, AM

V, Cr

Chair: HORIKE, Satoshi (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1B1-01, 1B1-02, 1B1-04, 1B1-06)

**1B1-01** Synthesis and Properties of a Nonionic Mixed-Valence Tridecanuclear Vanadium(IV/V) Oxide Cluster Complex (Grad. Sch. Sci. Eng., Chuo Univ.) ○INOUE, Yuta; KODAMA, Shintaro; OH-ISHI, Katsuyoshi; ISHII, Youichi

**1B1-02<sup>#</sup>** Synthesis and Structure of Imido Vanadium(V) Complexes with Alkoxide Ligands (Grad. Sch. Eng., Osaka Univ.) ○SAKURAMOTO, Takashi; HIRAO, Toshikazu; TOBISU, Mamoru; MORIUCHI, Toshiyuki

**1B1-04<sup>#</sup>** Synthesis of a tetranuclear vanadium cubane-type cluster protected by Co(III) complexes with 1,4,7-triazacyclononane ligands (Inst. Sci. Eng., Kanazawa Univ.) ○KAWAMOTO, Keisuke; SUGIARTO, Sugiarto; HAYASHI, Yoshihito

**1B1-06** Preparation of Heterodinuclear Complexes Containing Chromium (III) and Various Transition-metal Ions by Using Dinucleating Nitrogen Ligands (Grad. Sch. Eng., Osaka Univ.) ○KAMIJO, Yuto; SUGIMOTO, Hideki; ITOH, Shinobu

Cr, Mo

Chair: HAYASHI, Yoshihito (10 : 10~11 : 00)

\* 10:00-10:10: interval for laptop PC connection.(1B1-08, 1B1-09, 1B1-10, 1B1-12)

**1B1-08** Glass Fabrication of Cr(II)-based coordination polymer and its redox property (Grad. Sch. Eng., Kyoto Univ.) ○OHARA, Yuki; KITAGAWA, Susumu; HORIKE, Satoshi

**1B1-09** Theoretical study on single-molecular electron conductivity of paddlewheel-type acetate-bridged binuclear complexes (Sch. Eng. Sci., Osaka Univ.) ○TADA, Hayato; NATORI, Yoshiki; TERAMOTO, Rina; AOKI, Shogo; ERA, Iori; KITAGAWA, Yasutaka; NAKANO, Masayoshi

**1B1-10<sup>#</sup>** Ionic liquid/metal-organic framework hybrid generated by ion-exchange reaction: synthesis and unique catalytic activity (FIRST, Konan Univ.) ○TAKASHIMA, Yohei; YOKOYAMA, Mai; TSURUOKA, Takaaki; AKAMATSU, Kensuke

**1B1-12** Structure and properties of Fe-Mo dithiolene dinuclear complexes (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○ABE, Takayuki; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro

Mo, W, Ti, Zr

Chair: SUGIMOTO, Hideki (11 : 10~12 : 00)

\* 11:00-11:10: interval for laptop PC connection.(1B1-14, 1B1-15, 1B1-16, 1B1-17, 1B1-18)

**1B1-14** Magnetization-induced second harmonic generation in a noncentrosymmetric cyanido-bridged bimetal assembly (Grad. Sch. Sci., The Univ. of Tokyo) ○KOMINE, Masaya; IMOTO, Kenta; MIYAMOTO, Yasuto; NAKABAYASHI, Koji; OHKOSHI, Shin-ichi

**1B1-15<sup>#</sup>** Metathesis Cleavage of an N=N Bond of Azo Compounds by Triply-bonded Dinuclear Tungsten Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○IKEDA, Hideaki; NISHI, Kohei; TSURUGI, Hayato; MASHIMA, Kazushi

**1B1-16** Bis(indolyl)-coordinated Group 4 Transition Metal Diamido Complexes: Synthesis, Structures, and Catalytic Hydroamination (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○SHINBAYASHI, Masaya; TAKENAKA, Amon; OKAZAKI, Masaaki; OHTA, Shun

**1B1-17<sup>#</sup>** Water-Gas Shift Reaction Activity of Pt Nanocrystals covered with a Metal-Organic Framework (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OGIWARA, Naoki; KOBAYASHI, Hirokazu; KITAGAWA, Hiroshi

**1B1-18** Acetic acid reduction on Pt nanoparticles loaded on metal-organic frameworks (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; RIKEN Spring-8 Center) ○YOSHIMARU, Shotaro; KATO, Kenichi; SADAKEYO, Masaaki; YAMAUCHI, Miho

Tuesday, March 20, PM

Zr, Au

Chair: YOSHIMURA, Takashi (13 : 10~14 : 10)

\* 13:00-13:10: interval for laptop PC connection.(1B1-26, 1B1-28, 1B1-29, 1B1-30, 1B1-31)

**1B1-26<sup>#</sup>** Synthesis and Optical Properties of Hybrid Zirconium-based Metal Organic Frameworks Composing of Porphyrins and N-Confused Analogues (Grad. Sch. Eng., Kyushu Univ.) ○YANG, Yufeng; ISHIDA, Masatoshi; FURUTA, Hiroyuki

**1B1-28** Preparation and Reaction of New Gold(I) Organosilicon Complexes by the Reaction of Au(I) Complex with Various Organosilicon Compounds. (Lab. Chem. Life Sci., Tokyo Tech.) ○KANADA, Atsushi; NIWA, Takaaki; TSUCHIDO, Yoshitaka; OSAKADA, Kohtarō

**1B1-29** Luminescence properties and structures of one-dimensional gold(I)-thiolate coordination polymer (Grad. Sch. Env. Sci., Hokkaido Univ.; Fac. Env. Earth Sci., Hokkaido Univ.) ○MURAKAMI, Midori; MATSUMINE, Riku; ONO, Takeya; SHICHIBU, Yuukatsu; HORIMOTO, Noriko; ISHIDA, Yasuhiro; KONISHI, Katsuaki

**1B1-30** Ligand effects on the properties of one-dimensional AuSR coordination polymers (Grad. Sch. Env. Sci., Hokkaido Univ.; Fac. Env. Earth Sci., Hokkaido Univ.) ○ONO, Takeya; MATSUMINE, Riku; MUERAKAMI, Midori; SHICHIBU, Yukatsu; KONISHI, Katsuaki

**1B1-31** Synthesis and Properties of Group 11 Metal(I) Complexes with 4-Aromatic Ring Substituted Pyrazolate (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○SAOTOME, Mai; FUJISAWA, Kiyoshi

Au, Ba, Al

Chair: ALBRECHT, Ken (14 : 20~15 : 30)

\* 14:10-14:20: interval for laptop PC connection.(1B1-33, 1B1-35, 1B1-36, 1B1-37, 1B1-39)

**1B1-33<sup>#</sup>** Unique non-bonding interaction in the diynyl-modified gold clusters (Grad. Sch. Env. Sci., Hokkaido Univ.; Fac. Env. Earth Sci., Hokkaido Univ.) ○IWASAKI, Mitsuhiro; SHICHIBU, Yukatsu; KONISHI, Katsuaki

**1B1-35** Syntheses and properties of subnanometer-sized gold clusters ligated with phenylene-bridged diphosphines (Grad. Sch. Env. Sci., Hokkaido Univ.) ○WANG, Shipeng; IWASAKI, Mitsuhiro; SHICHIBU, Yukatsu; KONISHI, Katsuaki

**1B1-36** Geometric structures and optical property of chiral Au<sub>13</sub> clusters (Grad. Sch. Env. Sci., Hokkaido Univ.) ○OGAWA, Yuri; SUGIUCHI, Mizuho; SHICHIBU, Yukatsu; KONISHI, Katsuaki

**1B1-37<sup>#</sup>** Stability Evaluation of Alkaline Earth Metal Complexes for Targeted Alpha-ray Therapy (Osaka Univ. Radio isotope center) ○NAGATA, Kojiro; YAJIMA, Tatsuo; YOSHIMURA, Takashi

**1B1-39** Development of New Structural Transformation Reaction of Metal-Organic Framework with H<sub>2</sub>O and its Use for Highly Efficient Postsynthetic Modification Reaction (FIRST, Konan Univ.) ○ATSUTO, Horikoshi; TAKASHIMA, Yohei; TSURUOKA, Takaaki; AKAMATSU, Kensuke

B, P, Sn, Al, Cd

Chair: SHICHIBU, Yukatsu (15 : 40~16 : 50)

\* 15:30-15:40: interval for laptop PC connection.(1B1-41, 1B1-42, 1B1-43, 1B1-44, 1B1-46)

**1B1-41** Tuning Reactivity of Cage-Shaped Borate by Bromo and Aryl Substituents around the Boron Atom as Lewis Acid Catalysts (Grad. Sch. Eng., Osaka Univ.) KONISHI, Akihito; ○TANAKA, Daiki; YASUDA, Makoto

**1B1-42** Synthesis, structures, luminescence and redox properties of novel meso-substituted phosphorus(V) porphyrin complexes (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○UMEGAKI, Kei; TAHARA, Keishiro; OZAWA, Yoshiki; ABE, Masaaki

**1B1-43** Synthesis of Tin(IV)-porphyrins in water at ambient temperature (Grad. Sch. Urban Environmental Sci., TMU) ○OHSAKI, Yutaka; THOMAS, Arun; SHIMADA, Tetsuya; TAKAGI, Shinsuke; TACHIBANA, Hiroshi; INOUE, Haruo

**1B1-44<sup>#</sup>** Controlling chromophore arrangement in coordination copolymers for photon upconversion (Grad. Sch. Eng., Kyushu Univ.; CMS, Kyushu Univ.; PRESTO, JST) ○HOSOYAMADA, Masanori; YANAI, Nobuhiro; KIMIZUKA, Nobuo

**1B1-46<sup>#</sup>** Photochemically reconfigurable porous crystals (Grad. Sch. Eng., The Univ. of Tokyo; RIKEN CEMS) ○SATO, Hiroshi; MATSUI, Toshiya; AIDA, Takuzo

Thursday, March 22, AM

Mn, Fe

Chair: INOMATA, Tomohiko (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3B1-01, 3B1-02, 3B1-04, 3B1-05, 3B1-06)

**3B1-01** Catalytic activity of manganese porphycene toward C-H bond

hydroxylation in thermostable hemoprotein and its mutants (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○CHIBA, Natsumi; OOHORA, Koji; HAYASHI, Takashi

**3B1-02<sup>\*\*</sup>** Catalytic Cyclopropanation of Styrene using Myoglobin Reconstituted with Iron Porphycene (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST; Inst. for Cat., Hokkaido Univ.) ○OOHORA, Koji; MEICHIN, Hiroyuki; ZHAO, Liming; WOLF, Matthew W.; AKIRA, Nakayama; HASEGAWA, Jun-ya; LEHNERT, Nicolai; HAYASHI, Takashi

**3B1-04** Disproportionation by metal(IV) oxo porphyrin complex (Fac. Sci., Nara Women's Univ.) ○NISHIKAWA, Kana; HONDA, Yuki; FUJII, Hiroshi

**3B1-05** Kinetic study of C-H hydroxylation on benzyl position by the model complex of the reactive intermediate species in Cytochrome P450 (Fac. Sci., Nara Women's Univ.) ○OKADA, Saki; HONDA, Yuki; FUJII, Hiroshi

**3B1-06** Syntheses and Properties of Fe(II)mono and dipyrroloporphyrin complexes (Grad. Sch. Fac. Sci. Eng., Shimane Univ.; ADRES, Ehime Univ.; Shimane Institute for Industrial Technology) ○TAKESHITA, Sho; IDE, Yuki; SUZUKI, Masaaki; MORI, Shigeki; YOSHINO, Katsumi; IKEUE, Takahisa

## Fe, Co

Chair: FUJII, Hiroshi (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3B1-08, 3B1-09, 3B1-10, 3B1-11, 3B1-12)

**3B1-08** Synthesis of 3D cross-linked iron complex in ferritin cavity (Grad. Sch. Sci., Osaka City Univ.) ○IKENOUE, Yuta; NAKAJIMA, Hiroshi

**3B1-09** Synthesis of dinuclear dinitrogen complexes bearing bridged pincer ligand for catalytic ammonia production (Fac. Eng. Nagoya Inst. of Tech.) ○MAEDA, Sayaka; LI, Zilong; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

**3B1-10** Reactivity of Co(II) complexes bearing an amidato-phenolato type ligand with dioxygen (Fac. Eng. Nagoya Inst. of Tech.) ○YOMURA, Shunsuke; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

**3B1-11** Preparation of Myoglobin Reconstituted with a Cobalt Corrole Complex and Evaluation of the Reaction with Hydrogen Peroxide (Grad. Sch. Eng., Osaka Univ.) ○TOMODA, Hirotaka; OOHORA, Koji; HAYASHI, Takashi

**3B1-12<sup>\*\*</sup>** Monoanionic Porphyrinoid Cobalt Complexes: Synthesis and Reactivity of Low-Valent Cobalt Species (Grad. Sch. Eng., Osaka Univ.) ○OGAWA, Ayumu; GU, Wenting; OOHORA, Koji; HAYASHI, Takashi

## Co, Ni, Au

Chair: MIYAKE, Hiroyuki (11 : 20~11 : 50)

\* 11:10-11:20: interval for laptop PC connection.(3B1-15, 3B1-16, 3B1-17)

**3B1-15<sup>#</sup>** A detailed study of catalytic silylation of N<sub>2</sub> using homogeneous mononuclear Co complexes (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○TAKEMOTO, Yoshiyuki; SUZUKI, Tatsuya; FUJIMOTO, Keisuke; OZAWA, Tomohiro; INOMATA, Tomohiko; MASUDA, Hideki

**3B1-16** Construction and Evaluation of a Hemoprotein-based Functional Model of Methane-generating Enzyme (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○MIYAZAKI, Yuta; OOHORA, Koji; HAYASHI, Takashi

**3B1-17** Metal accumulation design by using symmetric structure of ferritin cage (Sch. Life Sci. Tech., Tokyo Tech.) ○ITO, Nozomi; MAITY, Basudev; ABE, Satoshi; UENO, Takafumi

## Thursday, March 22, PM

### Os

Chair: IWASAKI, Takanori (13 : 30~13 : 50)

\* 13:20-13:30: interval for laptop PC connection.(3B1-28, 3B1-29)

**3B1-28** Reaction Mechanism of Intramolecular Aromatic Hydroxylation in Organometallic Osmium(III) Complexes (Grad. Sch. Eng., Osaka Univ.) ○AOKI, Kurumi; SUGIMOTO, Hideki; ITOH, Shinobu

**3B1-29<sup>#</sup>** Single Crystal X-ray Observation of Olefin Oxidation with the Toxic and Volatile Oxidant, OsO<sub>4</sub>, within Crystalline Molecular Containers (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○DRYZHAKOV, Marian; DUBEY, Ritesh; FUJITA, Makoto

Chair: KANBARA, Takaki (14 : 00~14 : 30)

\* 13:50-14:00: interval for laptop PC connection.(3B1-31)

**3B1-31** Young Scholar Lectures of CSJ Development of Highly Efficient Catalysts for Direct Arylation Polymerization (ICR, Kyoto Univ.) ○WAKIOKA, Masayuki

Chair: AKITA, Munetaka (14 : 40~15 : 10)

\* 14:30-14:40: interval for laptop PC connection.(3B1-35)

**3B1-35<sup>#</sup>** Young Scholar Lectures of CSJ Development of New Reaction Systems Driven by Assembly of Molecular Transition Metal Catalysts (LCCMS, IMS) ○HAMASAKA, Go

## Fe, Ru, Co, Ni, Cu

Chair: SHIMAZAKI, Yuichi (15 : 20~16 : 20)

\* 15:10-15:20: interval for laptop PC connection.(3B1-39, 3B1-40, 3B1-41, 3B1-43, 3B1-44)

**3B1-39** Synthesis of metallocene bearing permethylated cyclodextrins (Grad. Sch. Eng., Osaka Univ.) ○TAKAKURA, Kenta; TSUDA, Susumu; YAMAUCHI, Hiroki; IWASAKI, Takanori; FUJIWARA, Shin-ichi; KAMBE, Nobuaki

**3B1-40** Design and synthesis of organometallic molecular wires with long-legged ligand for stable molecular junction (Lab. Chem. Life Sci., Tokyo Tech.) ○BAE, Yeana; TANAKA, Yuya; AKITA, Munetaka

**3B1-41<sup>\*\*</sup>** Allosteric Gate Effect in a Soft Coordination Crystal Enables Discriminatory Sorption of Ethylene over Ethane (WPI-iCeMS, Kyoto Univ.) ○HOSONO, Nobuhiko; SEN, Susan; KITAGAWA, Susumu

**3B1-43<sup>#</sup>** Withdrawn

**3B1-44** Entrapment of various functional molecules into ionic liquid-modified mesoporous silica and the effect of ionic liquid for its reactivity (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○ITO, Yoshie; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

## Ga, Cu

Chair: OOHORA, Koji (16 : 30~17 : 20)

\* 16:20-16:30: interval for laptop PC connection.(3B1-46, 3B1-47, 3B1-49, 3B1-50)

**3B1-46** Singlet oxygen generation by irradiation to phthalocyanine derivatives having absorptions in vivo window (Grad. Sch. Fac. Sci. Eng., Shimane Univ.; Shimane Institute for Industrial Technology) ○FUJISHIRO, Rei; SONOYAMA, Hayato; FUJIMURA, Takuya; SASAI, Ryo; YOSHINO, Katsumi; IKEUE, Takahisa

**3B1-47<sup>\*\*</sup>** The electronic structure of one-electron oxidized Ni, Cu-salen complexes containing a side chain indole ring (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○OSHITA, Hiromi; YOSHIMURA, Takayoshi; ABE, Hitoshi; TANI, Fumito; MORI, Seiji; SHIMAZAKI, Yuichi

**3B1-49** Creation of an Artificial Metalloenzyme Containing a Novel Peptide Cross-linkage (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Life and Env. Sci., Osaka Pref. Univ.) YAMAWAKI, Sayaka; TANIGUCHI, Yuki; ○FUJIEDA, Nobutaka; ITOH, Shinobu

**3B1-50<sup>#</sup>** Oxidation reaction in dinuclear copper complex with asymmetric coordination environment modeling pMMO (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○NISHIMURA, Shibuki; OCHIAI, Tatsuya; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

## Friday, March 23, AM

### Mn, Fe, Co, Ni, Cu

Chair: OZAWA, Tomohiro (11 : 00~11 : 50)

\* 10:50-11:00: interval for laptop PC connection.(4B1-13, 4B1-14, 4B1-15, 4B1-16, 4B1-17)

**4B1-13** Catalytic Hydroxylation of Alkanes Using Myoglobin Mutants Reconstituted with Manganese Porphycene (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○TANAKA, Tomoya; NITTA, Kosuke; OOHORA, Koji; HAYASHI, Takashi

**4B1-14** Theoretical study of the relationship between ionization potentials and hydrogen bonds in 2Fe-2S ferredoxin active site (Sch. Eng. Sci., Osaka Univ.) ○ERA, Iori; NATORI, Yoshiki; TERAMOTO, Rena; AOKI, Shogo; TADA, Hayato; KITAGAWA, Yasutaka; NAKANO, Masayoshi

**4B1-15** A peroxodicobalt(II) complex stabilized by 6-hpa ligand: high O<sub>2</sub>-evolution activity by the water oxidation (Fac. Sci. Eng., Doshisha Univ.) ○IWANAGA, Osamu; ZAOPUTRA, Antonius Andre; TSUJI, Tomokazu; HITOMI, Yutaka; KODERA, Masahito

**4B1-16** Oxygenation of Phenol Derivatives by a Bis( $\mu$ -oxido)dinickel(III) Complex. (Sch. Eng., Osaka Univ.) ○AN, Jeyoung; MORIMOTO, Yuma; ITOH, Shinobu; TAKAGI, Yusaku

**4B1-17** Synthesis of a Trinuclear Copper Complex for Catalytic Hydroxylation of Lower Alkanes (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Eng., Osaka Univ.) ○NAKANISHI, Aya; ABE, Tsukasa; MORIMOTO, Yuma; SUGIMOTO, Hideki; ITOH, Shinobu

## Ni, Cu

Chair: KITAGAWA, Yasutaka (12 : 00~12 : 40)

\* 11:50-12:00: interval for laptop PC connection.(4B1-19, 4B1-20, 4B1-21, 4B1-22)

**4B1-19<sup>#</sup>** Reaction Mechanism of Aromatic Oxidation Reactions by a Bis( $\mu$ -oxido)dinickel(III) Complex (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Info. Sci., Hiroshima City Univ.) ○TAKAGI, Yusaku; MORIMOTO, Yuma; SAITO, Toru; TAKANO, Yu; ITOH, Shinobu

**4B1-20<sup>#</sup>** Aliphatic C-H Bond Activation by a Bis( $\mu$ -oxido)dinickel(III) Complex (Grad. Sch. Eng., Osaka Univ.) ○MORIMOTO, Yuma; TAKAGI, Yusaku; SAITO, Toru; TAKANO, Yu; ITOH, Shinobu

**4B1-21** Synthesis of cyclic amine modified amide type dinucleating ligand and

DNA cleavage and anticancer activity by its dicopper complex (Fac. Sci. Eng., Doshisha Univ.) ○MAEKAWA, Yuya; KADOYA, Yuki; HITOMI, Yutaka; KODERA, Masahito

**4B1-22<sup>#</sup>** Mechanism of High Activity in Hydrolytic DNA Cleavage by Dicopper Complex at low pH region (Grad. Sch. Eng., Doshisha Univ.) ○KADOYA, Yuki; HITOMI, Yutaka; KODERA, Masahito

## Room B2

### Bldg. 14 1452

### Polymer

Tuesday, March 20, AM

Chair: IHARA, Eiji (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(1B2-07, 1B2-08, 1B2-10, 1B2-11)

**1B2-07** Polymerization of disubstituted acrylamide having *tert*-butyl group, followed by de-*tert*-butylation (Grad. Sch. Tech. Ind. Soc. Sci., Tokushima Univ.) ○SUGIURA, Misato; HIRANO, Tomohiro; OSHIMURA, Miyuki; UTE, Koichi

**1B2-08<sup>#</sup>** Synthesis of single chain polymer films using pillared-layer metal-organic frameworks (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○MOCHIZUKI, Shuto; UEMURA, Takashi

**1B2-10** Synthesis of polysulfones by radical ring-opening polymerization (Grad. Sch. Eng., Osaka Pref. Univ.) ○FUJII, Yota; TAKASU, Minako; MATSUMOTO, Akikazu

**1B2-11\*** Penultimate Unit Effect on Propagation for Copolymerization of N-Substituted Maleimides (Grad. Sch. Eng., Osaka Pref. Univ.) TERADA, Suguru; ○MATSUMOTO, Akikazu

Chair: UEMURA, Takashi (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(1B2-14, 1B2-15, 1B2-17, 1B2-18, 1B2-19)

**1B2-14** Synthesis of polymer bearing cyclic hemiacetal ester pendants via radical polymerization of dehydrospirin. (Fac. Textile Sci. Technol., Shinshu Univ.) ○KAZAMA, Akane; MATSUHASHI, Yosuke; KOHSAKA, Yasuhiro

**1B2-15<sup>#</sup>** Development of Novel Cyclopolymerization Based on Intramolecular Alternative Insertion of Isocyanide and Allene into Palladium-Carbon Bond (Grad. Sch. Sci., Osaka Univ.) ○KANBAYASHI, Naoya; IKEGAMI, Jun; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka

**1B2-17** Coordination Copolymerization of Ethylene and Polar Monomers Using Palladium Complexes Bearing Methylene-Bridged Bisphosphine Monoxide Ligands (Grad. Sch. Eng., The Univ. of Tokyo) ○YASUDA, Hina; MITSUSHIGE, Yusuke; CARROW, Brad P.; ITO, Shingo; KOBAYASHI, Minoru; TAYANO, Takao; WATANABE, Yumiko; OKUNO, Yoshishige; HAYASHI, Shinya; KURODA, Jun-ichi; OKUMURA, Yoshikuni; NOZAKI, Kyoto

**1B2-18** Polymerization behavior of isoprene with group 4 *ansa*-monocyclopentadienylamido complexes (NIT, Oyama College) ○SATO, Ryota; NISHII, Kei

**1B2-19** Development of practical method for the preparation of trimethylaluminum-depleted methylaluminumoxane (Grad. Sch. Eng., Hiroshima Univ.) ○TANAKA, Ryo; KAWAHARA, Tomoyasu; SHINTO, Yuto; NAKAYAMA, Yuushou; SHIONO, Takeshi

Tuesday, March 20, PM

Chair: WAKIOKA, Masayuki (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(1B2-27, 1B2-28, 1B2-29, 1B2-31, 1B2-32)

**1B2-27** Synthesis of metallo-supramolecular polymers using a bifunctional T8-cage monomer (KIT) ○HASHIMOTO, Mari; FUJII, Shunichi; IMOTO, Hiroaki; NAKA, Kensuke

**1B2-28** Synthesis and Applications of Transition Metal Complexes and Polymers Having Phosphaferrocene Units (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○HAYASHI, Kohei; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi

**1B2-29<sup>#</sup>** Novel solid-state polymerization method with stochastic process in bond formation (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○ANAN, Shizuka; KOKADO, Kenta; SADA, Kazuki

**1B2-31** Synthesis and Characterizations of Methylene-Bonded Tetraphenylethene Polymers (Coll. Sci. Eng., Kanazawa Univ.) ○NAKANISHI, Ryota; KAKUTA, Takahiro; YAMAGISHI, Tada-aki; OGOSHI, Tomoki

**1B2-32** Synthesis and Optical Properties of  $\pi$ -Conjugated Polymers Possessing Dimethylenecyclobutane Units Exhibiting Aggregation-induced Emission Characteristics. (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○FUKUI, Kenta; EGUCHI, Hiroshi; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi

Chair: KAKUTA, Takahiro (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(1B2-34, 1B2-35, 1B2-36, 1B2-37, 1B2-39)

**1B2-34** Synthesis of Regioregular Random P3HT having Asymmetric Thienoisindigo via Direct Arylation (Dept. Appl. Chem., Nat. Def. Acad.) ○UEGAKI, Kaoru; YAMAMOTO, Shinichi; KOIZUMI, Toshio; HAYASHI, Shotaro

**1B2-35** Mixed-Ligand Approach to Highly Selective Direct Arylation Polymerization: Synthesis of Donor-Acceptor Polymers Containing Benzodithiophene Units (ICR, Kyoto Univ.) ○TORII, Naohiro; WAKIOKA, Masayuki; OZAWA, Fumiyouki

**1B2-36** Stereocontrolled Synthesis of Donor-Acceptor Polymers Containing 1,2-Dithienylethene Units via Direct Arylation Polymerization and Their Photoisomerization Behavior (ICR, Kyoto Univ.; RIIS, Okayama Univ.) ○YAMASHITA, Natsumi; WAKIOKA, Masayuki; MORI, Hiroki; NISHIHARA, Yasushi; OZAWA, Fumiyouki

**1B2-37<sup>#</sup>** Conjugate Substitution of  $\alpha$ -(Halomethyl)acrylate: A Facile, Versatile, and Convenient Reaction for Poly(conjugate ester) Synthesis (Fac. Textile Sci. Technol., Shinshu Univ.) ○KOHSAKA, Yasuhiro; HAGIWARA, Keito; MIYAZAKI, Takumi; ITO, Keiichi

**1B2-39** Polycondensation utilizing sequential conjugate substitution on methyl  $\beta$ -bromo- $\alpha$ -(bromomethyl)acrylate (Fac. Textile Sci. Technol., Shinshu Univ.) ○HAGIWARA, Keito; KOHSAKA, Yasuhiro

Chair: KOHSAKA, Yasuhiro (15 : 40~16 : 50)

\* 15:30-15:40: interval for laptop PC connection.(1B2-41, 1B2-42, 1B2-43, 1B2-45, 1B2-46, 1B2-47)

**1B2-41** Synthesis of Thermally Stable Aromatic Polythioethers by Oxidative Polymerization (Sch. Advanced Sci. Eng., Waseda Univ.) ○HIRAI, Motoyasu; SAITO, Seiya; YAMAZAKI, Tomoya; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**1B2-42** Synthesis and Properties of Ethyl-Substituted Poly(phenylene sulfide) by Oxidative Polymerization of Aromatic Disulfide (Sch. Advanced Sci. Eng., Waseda Univ.) ○SUN, Yushun; SAITO, Seiya; TANAKA, Yoko; OYAIZU, Kenichi; NISHIDE, Hiroyuki

**1B2-43<sup>#</sup>** Synthesis of bio-based poly(Schiff base) derived from furfural (Grad. Sch. Sci. Tech., Gunma Univ.) ○HAYASHI, Senri; TACHIBANA, Yuya; KASUYA, Ken-ichi

**1B2-45** Synthesis of Fluorine-containing Bio-based Copolymer Bearing *myo*-Inositol (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○OKAWARA, Kentou; FUKUMOTO, Hiroki; AGOU, Tomohiro; KUBOTA, Toshio

**1B2-46** Synthesis of Fluorine-containing Bio-based Copolymers Bearing Anhydrosugar Alcohols as Main Chain (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○ONODERA, Yuki; FUKUMOTO, Hiroki; AGOU, Tomohiro; KUBOTA, Toshio

**1B2-47** Synthesis of Polyacrylonitrile Derivatives by Controlled Radical Polymerization and their Dielectric Properties (Sch. Advanced Sci. Eng., Waseda Univ.) ○NAKAMURA, Ryota; WANG, Yu; SUGA, Takeo; OYAIZU, Kenichi; NISHIDE, Hiroyuki

Wednesday, March 21, AM

Chair: TAKEOKA, Yuko (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(2B2-07, 2B2-08, 2B2-09, 2B2-10, 2B2-11, 2B2-12)

**2B2-07** Characterization of Separation Property of Liquid Crystalline Virus-based Membranes (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○INOMATA, Haruhiko; SAWADA, Toshiki; SERIZAWA, Takeshi

**2B2-08** Control of the Assembled Structures of Filamentous Viruses based on Emulsion Formation (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TANAKA, Michihiro; SAWADA, Toshiki; SERIZAWA, Takeshi

**2B2-09** Preparation and Characterization of Films Composed of Filamentous Viruses Based on their Orientation Control (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○UEDA, Naoki; SAWADA, Toshiki; MARUBAYASHI, Hironori; NOJIMA, Shuichi; SERIZAWA, Takeshi

**2B2-10** Preparation and Material Application of Amylose-poly (THF-*b*-oxazoline) Inclusion Complex by Vine-Twining Polymerization (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○YANO, Keisuke; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi

**2B2-11** Pickering emulsion polymerization using self-assembled chitin nanofibers (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○NOGUCHI, Seiichiro; SATO, Koki; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi

**2B2-12** Preparation of elastic cellulose film through formation of ion gel (Grad. Sch. Sci., Eng., Kagoshima Univ.; IMCE, Kyushu Univ.) ○KADOKAWA, Jun-ichi; HABU, Yasuhiro; YAMAMOTO, Kazuya; TAKADA, Akihiko

Chair: SAWADA, Toshiki (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(2B2-14, 2B2-15, 2B2-17, 2B2-18, 2B2-19)

**2B2-14** Complex Formation from Cationic and Anionic Non-natural Amylose Analog Polysaccharides (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○UTO, Takuya; YUI, Toshifumi; YAMAMOTO, Kazuya; KADOKAWA, Jun-ichi

**2B2-15\*** Dissolution Simulation of Cellulose and Chitin in Ionic Liquids (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○UTO, Takuya; YAMAMOTO,

Kazuya; KADOKAWA, Jun-ichi

- 2B2-17** Synthesis and evaluation of cellulose/lignin hydrogels (III) -Effect of lignin on mechanical and antioxidant properties- (Grad. Sch. of Sci. Technol., Sophia Univ.) ○MITSUI, Chiaki; TAKEOKA, Yuko; RIKUKAWA, Masahiro; FUJITA, Masahiro
- 2B2-18** Synthesis and evaluation of cationic cellulose (III) -Effect of side chain length of cation on properties- (Grad. Sch. of Sci. Technol., Sophia Univ.) ○HAYASHI, Ayane; TAKEOKA, Yuko; RIKUKAWA, Masahiro; FUJITA, Masahiro
- 2B2-19** Fabrication of PLLA/HAP composites with urethane bond (II) - Control of mechanical properties by the amount of urethane bonds- (Grad. Sch. of Sci. Technol., Sophia Univ.) ○SAITO, Mika; FUJITA, Masahiro; TAKEOKA, Yuko; RIKUKAWA, Masahiro

### Wednesday, March 21, PM

Chair: FUJITA, Masahiro (14 : 40~15 : 30)

- \* 14:30-14:40: interval for laptop PC connection.(2B2-35, 2B2-36, 2B2-37, 2B2-38)
- 2B2-35** Effect of Salt Treatments on Physical Properties of Gels and Films Made of Polysaccharide Polyion Complexes (Fac. Eng., TUS) ○KONDO, Tetsuhei; CHIKAWA, Mayuko; IJIMA, Kazutoshi; HASHIZUME, Mineo
- 2B2-36** Evaluation of Effect of Molecular Size on Protein Loading and Release Behaviors of Polysaccharide Composite Films (Fac. Eng., TUS; Grad. Sch. Chem. Sci. Technol., TUS) ○OTSUKA, Yusuke; SHIBATA, Tomonori; IJIMA, Kazutoshi; HASHIZUME, Mineo
- 2B2-37** Supramolecular Asymmetric Photochirogenesis (SMAP) of 2-Anthracenecarboxylate with Proteins & Polymer Hybrids as Chiral Reaction Media-16 -Effects of PEG Addition- (IMRAM, Tohoku Univ.; IUC; Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba; Sch. Eng., Osaka Univ.) ○OKUGI, Mitsuru; FUJISHIRO, Yuuya; NISHIJIMA, Masaki; ARAKAI, Yasuyuki; SAKAMOTO, Seiji; IKEDA, Yutaka; NAGASAKI, Yukio; INOUE, Yoshihisa; WADA, Takehiko
- 2B2-38\*** Environmental Biodegradation Control of Polymers by Cleavage of Disulfide Bonds (Sch. Sci. Tech., Gunma Univ.) ○TACHIABANA, Yuya; BABA, Takuro; KASUYA, Ken-ichi

Chair: TACHIABANA, Yuya (15 : 40~16 : 30)

- \* 15:30-15:40: interval for laptop PC connection.(2B2-41, 2B2-42, 2B2-44)
- 2B2-41** Preparation of organic-inorganic nanocomposite containing fullerene derivatives (Fac. Sci. Technol., TUS) ○MITSUTANI, Yusuke; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 2B2-42\*\*** Design and Light-Emitting Functions of Hydrazone-Linked Covalent Organic Frameworks (Sch. Mat. Sci., JAIST) ○LI, Zhongping; JIANG, Donglin
- 2B2-44\*\*** Imine bonded covalent organic frameworks constructed by one dimensional chains (Sch. Mat. Sci., JAIST) ○YANG, Chao; JIANG, Donglin

### Thursday, March 22, AM

Chair: SUGA, Takeo (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(3B2-07, 3B2-08, 3B2-09, 3B2-11, 3B2-12)
- 3B2-07** Synthesis and characterization of diarylbiindolinone as a mechanochromophore toward a new class of mechanochromic polymers (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KAWASAKI, Kazuma; AOKI, Daisuke; OTSUKA, Hideyuki
- 3B2-08** Synthesis and characterization of mechanochromic polymers containing difluorenylsuccinonitrile (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SAKAI, Hio; SUMI, Tosikazu; GOSEKI, Raita; AOKI, Daisuke; OTSUKA, Hideyuki
- 3B2-09\*\*** Multicolor Mechanochromism of Polymer-Inorganic Composites Based on Dual Mechanochromophores (Sch. Mater. & Chem. Tech., Tokyo Tech.; Beckman Inst. for Adv. Sci. and Tech., UIUC; Dept. of Chem., UIUC; Dept. of Mater. Sci. and Eng., UIUC) ○KOSUGE, Takahiro; ROBB, Maxwell J.; HALMES, Abigail J.; LAU, Vivian M.; AOKI, Daisuke; MOORE, Jeffrey S.; OTSUKA, Hideyuki
- 3B2-11** Synthesis and Application of Precision Magnetic Polymer Microspheres and Nanostructures by Allylnickel-catalyzed Living Coordination Polymerization of Allene Derivatives (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○MATSUO, Tamaki; WAKIYA, Takeshi; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi
- 3B2-12** Synthesis of Liquid Crystalline Polymer Thin Films Possessing Perpendicularly Oriented Nanostructures by Living Coordination Block Copolymerization of Allene Derivatives (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SAKAI, Koyuki; IYODA, Tomokazu; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi

Chair: NISHIYAMA, Hiroki (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(3B2-14, 3B2-15, 3B2-16, 3B2-18, 3B2-19)
- 3B2-14** Controlled synthesis of dendrimer-like star branched polymer by living anionic polymerization via exclusive dimetalation at chain ends of polystyrene (KIT) ○TAJIMA, Ryosuke; ADACHI, Kaoru; TSUKAHARA, Yasuhisa

- 3B2-15** Facile synthesis of supramolecular A8B2 star-shaped copolymer via guest complexation of self-assembled coordination capsule (Grad. Sch. Sci., Hiroshima Univ.) ○NITTA, Natsumi; SEKIYA, Ryo; HAINO, Takeharu
- 3B2-16\*\*** Topology transformation of rotaxane-linked block copolymer from miktoarm A<sub>2</sub>B<sub>2</sub>-star to ABA-linear (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SATO, Hiroki; TAKATA, Toshikazu
- 3B2-18** Reversible linear and cyclic polymer topology transformation utilizing rotaxane dimer (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○AIBARA, Gouta; TSUKAMOTO, Tadashi; AOKI, Daisuke; TAKATA, Toshikazu
- 3B2-19** Synthesis of macromolecular [2]rotaxanes bearing polyester and Pd-containing macrocycle (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○HIROI, Miya; SOGAWA, Hiromitsu; TAKATA, Toshikazu

### Thursday, March 22, PM

Chair: HAYASHI, Shotaro (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(3B2-27, 3B2-28, 3B2-30, 3B2-31, 3B2-32)
- 3B2-27** Fusion of different cross-linked polymers based on a bond exchange reaction of hindered amino disulfides. (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TSURUOKA, Ayuko; IKUTA, Koki; TAKAHASHI, Akira; AOKI, Daisuke; OTSUKA, Hideyuki
- 3B2-28\*\*** A rational entry to macrocyclic compounds via selective cyclization derived from dynamic covalent bond (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○AOKI, Daisuke; IKUTA, Kouki; OTSUKA, Hideyuki
- 3B2-30** Condensation Reactions of Phenylboronic Acid and Poly(diethanolamine) toward Modification of Epoxy Resins (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○ITO, Yumiko; KIDA, Jumpei; AOKI, Daisuke; OTSUKA, Hideyuki
- 3B2-31** Structural Reorganization of Polymers Based on Radical Chain Transfer Reactions (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TSURUMI, Nao; KOSUGE, Takahiro; GOSEKI, Raita; AOKI, Daisuke; OTSUKA, Hideyuki
- 3B2-32** Photoregulation of Mechanochemical Diethylene Type Diels-Alder Bond Scission (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KIDA, Jumpei; IMATO, Keichi; GOSEKI, Raita; AOKI, Daisuke; MORIMOTO, Masakazu; OTSUKA, Hideyuki

Chair: KANBAYASHI, Naoya (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(3B2-34, 3B2-36, 3B2-37, 3B2-38)
- 3B2-34\*\*** Modification and Cross-linking of Polysiloxane via Catalyst-free Click Reaction using Kinetically Stabilized Nitrile *N*-Oxides (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TSUTSUBA, Toyokazu; TAKATA, Toshikazu
- 3B2-36** Efficient cross-linking reaction exploiting bifunctional aliphatic nitrile *N*-oxides (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○IKEDA, Tatsuhito; TSUTSUBA, Toyokazu; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 3B2-37** Bromoallylation of diphenylacetylenes using macrocyclic palladium catalyst (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NAMEKI, Riku; YAMAMOTO, Koji; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 3B2-38\*\*** Polymer transformation via highly efficient DBU-catalyzed CO<sub>2</sub>-fixation reaction under mild condition. (Sch. Mater. & Chem. Tech., Tokyo Tech.; Grad. Sch. Sci., Eng., Tokyo Tech.) ○KIM, Nam-kyun; SOGAWA, Hiromitsu; YAMAMOTO, Koji; TAKATA, Toshikazu

Chair: ADACHI, Kaoru (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(3B2-41, 3B2-43, 3B2-44, 3B2-45, 3B2-46)
- 3B2-41\*\*** Synthesis of end-phosphole polymers by organocatalyzed living radical polymerization (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○ZHENG, Feng; WANG, Chen-gang; GOTO, Atshushi; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi
- 3B2-43** Self assembly and fluorescent properties of hydrophilic polymer having fluorescent Spi-conjugated molecular structure (Dept. Appl. Chem., Nat. Def. Acad.) ○ONO, Tomoyuki; HAYASHI, Shoutaro; HIRAI, Ryosuke; KOIZUMI, Toshio; YAMAMOTO, Shin-ici
- 3B2-44** Mechanochromic Property of Side-Chain Liquid Crystal Polymer with Diarylbenzofuranone (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○YANAGISAWA, Moeko; GOSEKI, Raita; AOKI, Daisuke; OTSUKA, Hideyuki
- 3B2-45** Synthesis and Characterization of Mechanochromic Dendrimers (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○WATABE, Takuma; ISHIZUKI, Kuniaki; AOKI, Daisuke; OTSUKA, Hideyuki
- 3B2-46** Freezing-induced Mechanoluminescence of Cross-linked Polymer Gels with Light-emitting Mechanochromophores (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KATO, Sota; ISHIZUKI, Kuniaki; GOSEKI, Raita; AOKI, Daisuke; OTSUKA, Hideyuki

Chair: AOKI, Daisuke (16 : 50~17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(3B2-48, 3B2-49, 3B2-50, 3B2-52, 3B2-53)
- 3B2-48** Post-functionalization of a fluorine-containing  $\pi$ -conjugated polymer based on nucleophilic aromatic substitution reaction (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NISHIKAWA, Takanobu; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke

- 3B2-49** Synthesis of polyacrylamide possessing chiral tris(phenylisoxazolyl) benzenes (Fac. Sci., Hiroshima Univ.) ○SOTA, Mai; IKEDA, Toshiaki; HAINO, Takeharu
- 3B2-50<sup>#</sup>** Synthesis of Non-natural Helical Polypeptide Bearing 2,6-Naphthylene Spacer in the Main Chain (Grad. Sch. Sci., Osaka Univ.) ○ISHIDO, Yuki; KANBAYASHI, Naoya; OKAMURA, Taka-aki; ONITSUKA, Kiyotaka
- 3B2-52** Controlled Photo-curing and Unique Micro-phase Separation Using Bi-functional Photo-active Polymeric Dormant (Sch. Advanced Sci. Eng., Waseda Univ.) ○SUMIDA, Hiroyo; ANDO, Eigo; SUGA, Takeo; NISHIDE, Hiroyuki
- 3B2-53** Crosslinking of Cyclic Olefin Polymer via Thermal Imidization for Transparent Film Formation (Sch. Advanced Sci. Eng., Waseda Univ.) ○IIJIMA, Masakazu; SAHASHI, Yusuke; SUGA, Takeo; NISHIDE, Hiroyuki

**Room B3**  
Bldg. 14 1453

**Polymer**

**Tuesday, March 20, AM**

Chair: SAITO, Shohei (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(1B3-07, 1B3-08, 1B3-09, 1B3-10, 1B3-11, 1B3-12)
- 1B3-07** Synthesis of Chiral Polymers Containing Sequenced Guanidino Groups in the Main Chain and Their Catalysis (Tokushima Univ., Dept. Appl. Chem.) ○HARA, Momoko; ARAKAWA, Yukihiko; MINAGAWA, Keiji; IMADA, Yasushi
- 1B3-08** Asymmetric Suzuki-Miyaura Cross-coupling Reaction in Water with a Water-soluble Chiral Helical Polymer Catalyst Bearing Chiral Side Chains Derived from Lactic Acid (Sch. Eng., Kyoto Univ.) NAGATA, Yuuya; ○KAMIYA, Naoaki; SUGINOME, Michinori
- 1B3-09** Screw-sense Induction of Achiral Poly(quinoxaline-2,3-diyl) by an Efficient Chirality Transfer through Non-covalent-bonding Interactions from Protected Natural Amino Acids (Sch. Eng., Kyoto Univ.) NAGATA, Yuuya; ○IKEDA, Shoma; SUGINOME, Michinori
- 1B3-10<sup>#</sup>** Synthesis of Asymmetric Catalysts with an Efficient Chiral Amplification Based on the Feedback of the Reaction Products (Grad. Sch. Eng., Kyoto Univ.) NAGATA, Yuuya; ○MIYATA, Fumiko; SUGINOME, Michinori
- 1B3-11** Synthesis of Ionic Anthraquinone Polymer Particles and Application to Redox Flow Battery (Sch. Advanced Sci. Eng., Waseda Univ.) ○SUGAI, Yota; NAGANO, Takashi; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 1B3-12** Poly(TEMPO-substituted glycidyl ether) as a Cathode-active Material for a Totally Organic-based, Solid-state Secondary Battery (Sch. Advanced Sci. Eng., Waseda Univ.) ○TEZUKA, Toshiki; SATO, Kan; OYAIZU, Kenichi; NISHIDE, Hiroyuki

Chair: UBE, Toru (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(1B3-14, 1B3-15, 1B3-16, 1B3-17, 1B3-18, 1B3-19)
- 1B3-14<sup>#</sup>** XPS study on antistatic ability and surface properties of polymers with ionic liquids (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○REN, Jie; YOKOFUJITA, Toshiyuki; AOYAGI, Hiroki; SAITO, Yuta; SHIMAMURA, Hiroto; HORI, Tetsuya; IWAHASHI, Takashi; OUCHI, Yukio
- 1B3-15** Electrochemical Properties of Organic-based Batteries Using Hybrid Electrodes Containing Radical Polymers and Lithium Transition Metal Oxides (Sch. Advanced Sci. Eng., Waseda Univ.) ○YAMADA, Masayuki; MASUI, Tomomi; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 1B3-16** Synthesis of Poly(vinyl fluorenone) Particles and Its Hydrogenation and Dehydrogenation (Sch. Advanced Sci. Eng., Waseda Univ.) ○FURUKAWA, Shuhei; OKA, Kouki; KATO, Ryo; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 1B3-17** Synthesis of Anthraquinone-substituted Polyepichlorohydrin as a High Capacity Anode Active Material for Organic Secondary Batteries (Sch. Advanced Sci. Eng., Waseda Univ.) ○AKAHANE, Tomoki; SUZUKI, Miyu; SANO, Kouhei; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 1B3-18** Development of redox polymers containing  $\pi$ -extended bisriboflavin derivative and their application to catalytic aerobic oxidation (Fac. Sci. Eng., Shimane Univ.) ○NITTA, Takahiro; OKADA, Kazuya; IIDA, Hiroki
- 1B3-19** Synthesis and Application of Polymeric Phosphine Ligands prepared by P-C Cross Coupling Polymerization (Grad. Sch. Sci., Eng., Ehime Univ.) ○ONITAKE, Shin; HAYASHI, Minoru; OHTA, Hidetoshi; MIYOSHI, Syunik

**Tuesday, March 20, PM**

Chair: TANAKA, Kazuo (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(1B3-27, 1B3-28, 1B3-29,

- 1B3-30, 1B3-31, 1B3-32)
- 1B3-27** Methoxy-substituted Polytriarylamines and their Application as a hole-transporting layer of Perovskite Solar Cells (Sch. Advanced Sci. Eng., Waseda Univ.) ○SUGAI, Keisuke; OKADA, Wataru; SUGA, Takeo; OYAIZU, Kenichi; NISHIDE, Hiroyuki
- 1B3-28** Electrical properties of DNA-CTMA/pentacene multilayered films (Fac. Eng., Chiba Univ.) ○UEKUSA, Tomoki; OKA, Kaoru; NOBESHIMA, Daiki; WATANABE, Yuichi; UEMURA, Sei; NAKAMURA, Kazuki; KOBAYASHI, Norihisa
- 1B3-29** Temperature responsive copolymers containing hydrogen bonding unit and charge-transfer interaction unit (Sch. Sci., Hokkaido Univ.) ○FUKAYA, Naoki; KUROSHIMA, Yosiki; KOKADO, Kenta; SADA, Kazuki
- 1B3-30** Force-induced Fluorescence Response of Mechanophore-doped Polyurethane Dependent on Chemical Structures and Temperature (Dep. Chem., Sch. Sci., Kyoto Univ.; PRESTO, JST) ○KOTANI, Ryota; OSUKA, Atsuhiko; SAITO, Shohei
- 1B3-31** AIE-active Polyoxazolines prepared by bis(dialkylamino)anthracene dye as a initiator (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NISHIWAKI, Rihito; KONISHI, Gen-ichi
- 1B3-32** Photoinduced birefringent pattern and photoinactivation of liquid crystalline copolymer films with benzoic acid and phenylaldehyde side groups (Grad. Sch. Eng., Univ. of Hyogo) ○INADA, Shogo; FUJI, Ryosuke; KONDO, Mizuho; KAWATSUKI, Nobuhiro

Chair: KATO, Ryo (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(1B3-34, 1B3-35, 1B3-36, 1B3-37, 1B3-38, 1B3-39)
- 1B3-34<sup>#</sup>** Polymerization of Boron Formazanate Complexes and Their Physical Properties (Grad. Sch. Eng., Kyoto Univ.) ○KAWANO, Yuki; TANAKA, Kazuo; CHUJO, Yoshiki
- 1B3-35** Spectroscopic evaluation of oxygen-binding by photo-reversible coordination of polymer polymer coordinated to cobalt(II) schiff-base (Grad. Sch. Eng., Tokyo Denki Univ.) ○SAKAIRI, Kana; SUZUKI, Takayuki
- 1B3-36** Evaluation of Remoldability of Crosslinked Liquid-Crystalline Polymers with Dynamic Covalent Bonds in a Main Chain. (Fac. Sci. Eng., Chuo Univ.) ○MATSUSHITA, Masaya; KAWASAKI, Kyohei; UBE, Toru; IKEDA, Tomiki
- 1B3-37** Photoresponsive Behavior of Photomobile Polymer Materials Composed of Crosslinked Azobenzene Liquid-Crystalline Polymer / Polysiloxane with Phase-Separated Structures (Fac. Sci. Eng., Chuo Univ.) ○YODA, Takuya; UBE, Toru; IKEDA, Tomiki
- 1B3-38** Preparation of polymer actuators using photoalignment and evaluation of their photoresponsive behavior (Grad. Sch. Sci. Eng., Chuo Univ.) ○TSUNODA, Haruna; KAWASAKI, Kyohei; UBE, Toru; IKEDA, Tomiki
- 1B3-39** Evaluation of photoisomerization of azobenzene in Crosslinked Liquid-Crystalline Polymer at Cryogenic Conditions (Fac. Sci. Eng., Chuo Univ.; Research and Development Initiative, Chuo Univ.; CIMoS, IMS) ○OGIKUBO, Shunya; HASHIMOTO, Gaku; UBE, Toru; SUDA, Masayuki; YAMAMOTO, Hiroshi; IKEDA, Tomiki

Chair: KOKADO, Kenta (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(1B3-41, 1B3-42, 1B3-44, 1B3-46)
- 1B3-41** Fabrication of Hydrogen Bonding Complexes between Poly(4-vinylpyridine) Brushes and  $\pi$ -Conjugated Molecules (Fac. Sci. Eng., Chuo Univ.; Research and Development Initiative, Chuo Univ.) ○NAKAYAMA, Romu; UBE, Toru; HAGA, Masa-aki; IKEDA, Tomiki
- 1B3-42<sup>#</sup>** Synthesis and Polymerization of Fused Boron Ketoimines for the Development of Highly-Efficient Emissive Films (Grad. Sch. Eng., Kyoto Univ.) ○SUENAGA, Kazumasa; UEMURA, Kyoya; TANAKA, Kazuo; CHUJO, Yoshiki
- 1B3-44<sup>#</sup>** Synthesis of Poly(quinoxaline-2,3-diyl)s with a Sequence-controlled Terquinoxaline Core through Bidirectional Living Polymerization and Their CPL Properties (Grad. Sch. Eng., Kyoto Univ.) ○KURIYAMA, Shogo; NAGATA, Yuuya; SUGINOME, Michinori
- 1B3-46<sup>#</sup>** An azine linked conjugated polymer for programmable dual electrochromism (RIES, Hokkaido Univ.) ○KIM, Yuna; HAN, Minsu; PODUVAL, Mithrabinda; PARK, Taiho; TAMAOKI, Nobuyuki; KIM, Eunkyung

**Wednesday, March 21, AM**

Chair: SAKUMA, Ichiro (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(2B3-07, 2B3-08, 2B3-09, 2B3-11)
- 2B3-07** Synthesis and evaluation of benzoxaborole containing polymers having sugar chain affinity (I) -Evaluation of sugar binding ability- (Grad. Sch. of Sci. Technol., Sophia Univ.) ○SUZUKI, Yuui; FUJITA, Masahiro; TAKEOKA, Yuko; RIKUKAWA, Masahiro
- 2B3-08<sup>#</sup>** Synthesis of Single-walled Carbon Nanotube Coated with Cross-linked Polymer Post-modifiable by Michael Addition Reaction for Cancer Targeting (Grad. Sch. Eng., Kyushu Univ.) ○NAGAI, Yukiko; FUJIGAYA, Tsuyohiko

**2B3-09\*** Cellular uptake mechanism of hydrophilic nanoparticles into cell-sized liposomes and living cells (Grad. Sch. Eng., Kobe Univ.) ICHIKAWA, Shoko; SHIMOKAWA, Naofumi; TAKAGI, Masahiro; OKITAYAMA, Yukiya; TAKEUCHI, Toshifumi

**2B3-11\*\*** Development of Cancer Cell Specific Drug Delivery System with MMP-Activatable PEG-decorated Oligoarginine (IMRAM, Tohoku Univ.) OSUGAI, Hiroka; MATSUSHIMA, Moeka; SAKAMOTO, Seiji; ARAKI, Yasuyuki; YAMAYOSHI, Asako; ISHIBASHI, Satoru; YOKOTA, Takanori; WADA, Takahiko

Chair: IMOTO, Hiroaki (11 : 10~12 : 00)

\* 11:00-11:10: interval for laptop PC connection.(2B3-14, 2B3-16, 2B3-17)

**2B3-14\*\*** Multisystem analysis of adhesive interfacial thickness of polyolefin-based hot melt adhesives / polypropylene substrates (Graduate School of Engineering, Kobe University) MATSUMOTO, Takuya; SHIMIZU, Yousuke; NISHINO, Takashi

**2B3-16** Evaluation of Surface Characteristics of Hydrogel Controlled Network Structure (Grad. Sch. Eng., The Univ. of Tokyo) OMIZUNO, Hayato; TAN, Eiki; SAKUMA, Ichiro; AKAGI, Yuki

**2B3-17\*\*** Synthesis of PMMA-PMEA-PMMA triblock copolymer and its mechanical and anti-thrombogenic properties (Grad. Sch. Sci. Tech., Keio Univ.) KUROKAWA, Naruki; ENDO, Fuyuki; BITO, Kenta; MAEDA, Tomoki; HOTTA, Atsushi

### Wednesday, March 21, PM

Chair: ALBRECHT, Ken (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2B3-35, 2B3-38, 2B3-39, 2B3-40)

**2B3-35#** Young Scholar Lectures of CSJ Synthesis of Optically Active Polymers Containing Naturally Occurring Compounds as a Chiral Source and Their Application (Inst. Sci. Eng., Kanazawa Univ.) IKAI, Tomoyuki

**2B3-38** Synthesis and evaluation of cationic polyphenylenes having phosphonium groups (II) - Control of ion exchange capacity- (Sophia Univ.) OSHIMA, Tomohisa; FUJITA, Masahiro; TAKEOKA, Yuko; RIKUKAWA, Masahiro

**2B3-39** Permeability control parylene film by introduction of different hydrophilic substituents of bulkiness (Fac. Textile Sci. Technol., Shinshu Univ.) OGOTO, Mizuki; SHII, Takeshi; KIMURA, Mutsumi

**2B3-40** Improvement of water flux for Parylene nanofilms by introduction of cross-linking points. (Fac. Textile Sci. Technol., Shinshu Univ.) OSHII, Takeshi; KIMURA, Mutsumi

Chair: KIMURA, Mutsumi (15 : 50~16 : 40)

\* 15:40-15:50: interval for laptop PC connection.(2B3-42, 2B3-43, 2B3-44, 2B3-45, 2B3-46)

**2B3-42** Synthesis and optical properties of near-infrared emitting graphene quantum dots possessing perimidine moieties. (Grad. Sch. Sci., Hiroshima Univ.) YAMATO, Kairi; SUZUKI, Kaho; SEKIYA, Ryo; HAINO, Takeharu

**2B3-43** Synthesis of directional oligomers by dehydration condensation of boronate ester. (Lab. Chem. Life Sci., Tokyo Tech.) ONAITOU, Yuuki; YAMAMOTO, Kimihisa; IMAOKA, Takane

**2B3-44** Precise accumulation of gallium units and the clusterization using a dendrimer template. (Lab. Chem. Life Sci., Tokyo Tech.) ARAI, Yuki; KAMBE, Tetsuya; WATANABE, Aiko; IMAOKA, Takane; YAMAMOTO, Kimihisa

**2B3-45** Temperature-Dependent Helix Inversion of Poly(quinoxaline-2,3-diyl)s Bearing Chiral Ether Side Chains (Grad. Sch. Eng., Kyoto Univ.) MINAMI, Yoshiyuki; YAMAMOTO, Takeshi; SUGINOME, Michinori

**2B3-46** Fabrication and evaluation of composite films with Poly(methyl methacrylate) and Incompletely Condensed Cage-Silsesquioxane Fillers (KIT) SATO, Yuri; YUASA, Sota; IMOTO, Hiroaki; NAKA, Kensuke

### Thursday, March 22, AM

Chair: SOGAWA, Hiromitsu (10 : 00~11 : 00)

\* 9:50-10:00: interval for laptop PC connection.(3B3-07, 3B3-09, 3B3-11, 3B3-12)

**3B3-07\*\*** local-IPN conversion of DNA quadruplex gel for enhanced gel-state life time in water (Fac. Chem. Materials and Bioeng., Kansai Univ.) TANAKA, Shizuma; YUKAMI, Shinsuke; KUZUYA, Akinori; OHYA, Yuichi

**3B3-09\*\*** Self-assembly of crystalline cellulose oligomers into hydrogels for spatial immobilization of colloidal particles (Sch. Mater. & Chem. Tech., Tokyo Tech.) OHATA, Yuuki; SAWADA, Toshiki; SAKAI, Takamasa; SERIZAWA, Takeshi

**3B3-11** One-Step Preparation of Cellulosic Hydrogels Based on in vitro Enzymatic Reactions and their Post-Functionalization (Sch. Mater. & Chem. Tech., Tokyo Tech.) OFUKAYA, Yuka; SAWADA, Toshiki; SERIZAWA, Takeshi

**3B3-12** Optical resolution agents based on chitosan resins (Grad. Sch. Eng., Tokyo Denki Univ.) SAYAMA, Daisuke; HATANAKA, Masashi; MIYASAKA, Makoto

Chair: SERIZAWA, Takeshi (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(3B3-14, 3B3-15, 3B3-16, 3B3-17, 3B3-19)

**3B3-14** The physical properties and redox responsiveness of polymeric materials cross-linked by inclusion complex of viologen derivatives. (Grad. Sch. Sci., Osaka Univ.) OARAMOTO, Hikaru; TAKASHIMA, Yoshinori; HARADA, Akira; YAMAGUCHI, Hiroyasu

**3B3-15** Transport of fullerenes from cyclodextrin cavity to hydrophilic substrates (Grad. Sch. Eng., Hiroshima Univ.) INOUE, Yuya; SUGIKAWA, Kouta; IKEDA, Atsushi

**3B3-16** Control of polymer gel degradation behavior (Grad. Sch. Eng., The Univ. of Tokyo) GOSHO, Suguru; SAKUMA, Ichiro; AKAGI, Yuki

**3B3-17\*\*** Toughening and functionalization of vinyl polymer-based rotaxane-cross-linked polymers (Sch. Mater. & Chem. Tech., Tokyo Tech.) SAWADA, Jun; AOKI, Daisuke; SOGAWA, Hiromitsu; TAKATA, Toshikazu

**3B3-19** SBR Incorporating Rotaxane Cross-linked Structure via Post Cross-linking (Sch. Mater. & Chem. Tech., Tokyo Tech.) OFUCHI, Momoko; TSUKAMOTO, Tadashi; TAKATA, Toshikazu

### Thursday, March 22, PM

Chair: KAKUTA, Takahiro (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(3B3-27, 3B3-28, 3B3-29, 3B3-30, 3B3-31)

**3B3-27** Mechano-optical behavior of Cholesteric Liquid Crystal Elastomers (Grad. Sch. Life Sci., Ritsumeikan Univ.) KIMURA, Seiya; KU, Kyosun; FUJISAWA, Kaori; TSUTSUMI, Osamu; AKAMATSU, Norihisa; SHISHIDO, Atsushi

**3B3-28** Preparation of Dendrimer Supramolecular Polymer Templates Aiming for Cluster Array (Lab. Chem. Life Sci., Tokyo Tech.) MINAGAWA, Ken; ALBRECHT, Ken; MIYATA, Narumi; YAMAMOTO, Kimihisa

**3B3-29** Polymer protection of size controlled bismuth clusters in dendrimer (Lab. Chem. Life Sci., Tokyo Tech.) HOSONO, Reina; KAMBE, Tetsuya; IMAOKA, Shotaro; IMAOKA, Takane; YAMAMOTO, Kimihisa

**3B3-30** Electro-Optical Properties of Liquid Crystal Devices with Polymer Networks Containing Photochromic Moieties (Grad. Sch. Sci. Eng., Chuo Univ.; Research and Development Initiative, Chuo Univ.) SUZUKI, Takaya; UBE, Toru; IKEDA, Tomiki

**3B3-31\*\*** Development of Wide Temperature Polymer Electrolyte Membrane Based on Acid-grafted Poly(2,5-benzimidazole) (Grad. Sch. Eng., Kyushu Univ.) HAN, Hoon; FUJIGAYA, Tsuyohiko

Chair: KAKUTA, Takahiro (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(3B3-34, 3B3-35, 3B3-36, 3B3-37, 3B3-38)

**3B3-34** Effect of electrolytes on intra/inter-molecular interaction of sulfobetaine polymers (Grad. Sch. Fac. Sci. Technol., TUS) KOSEKI, Shota; AIKAWA, Tatsuo; KONDO, Takeshi; YUASA, Makoto

**3B3-35** Enantioselective substrates capturing using the optically active poly amino alcohols-grafted activated carbon fiber (Grad. Sch. Sci. Eng., Kindai Univ.) TAHARA, Kenichiro; ISHIFUNE, Manabu

**3B3-36\*** Colorimetric Enantiodiscrimination of Chiral Amines through Macromolecular Reaction with a Helical Poly(diphenylacetylene) Bearing Carboxy Pendants (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) MORI, Taro; HIROSE, Daisuke; YAMANAKA, Kentaro; IKAI, Tomoyuki; KANOH, Shigeyoshi; MAEDA, Katsuhiko

**3B3-37** Preparation and Size Control of Perovskite Crystals in Presence of Polymer Addition (Sch. Advanced Sci. Eng., Waseda Univ.) OKADA, Akihiro; SHIROGANE, Yuta; SUGA, Takeo; NISHIDE, Hiroyuki

**3B3-38\*\*** Iodine capture in two-dimensional covalent organic frameworks (Sch. Mat. Sci., JAIST) WANG, Ping; JIANG, Donglin

Chair: KOKADO, Kenta (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(3B3-41, 3B3-42, 3B3-43, 3B3-44, 3B3-45)

**3B3-41\*** Development of a Chiral Stationary Phase for HPLC Based on a Metal Cation-Responsive Optically Active Poly(phenylacetylene) (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ISOBE, Asahi; HIROSE, Daisuke; MAEDA, Katsuhiko; FREIRE, Félix

**3B3-42** Preparation of supramolecular materials with mobile crosslinking points by bulk polymerization and their physical properties (Grad. Sch. Sci., Osaka Univ.) IKURA, Ryohei; NOMIMURA, Suguru; TAKASHIMA, Yoshinori; HARADA, Akira; YAMAGUCHI, Hiroyasu

**3B3-43\*** Design and Synthesis of Highly Luminescent sp<sup>2</sup> carbon-Conjugated Covalent Organic Frameworks (Sch. Mat. Sci., JAIST) JIANG, Weiming; JIANG, Donglin

**3B3-44** Diels-Alder reaction in the hydrophobic field generated by the optically active thermoresponsive polymers (Fac. Sci. Eng., Kindai Univ.) MIYAKITA, Soki; ISHIFUNE, Manabu

**3B3-45\*\*** Hydroxide Anion Conduction in Ionic Covalent Organic Frameworks (Sch. Mat. Sci., JAIST) TAO, Shanshan; JIANG, Donglin



## Room B4

Bldg. 14 1454

## Inorganic Chemistry

Tuesday, March 20, AM

## Synthesis, Reactions, and Properties of Inorganic Compounds

Chair: UEDA, Jumpei (10 : 10~11 : 00)

\* 10:00-10:10: interval for laptop PC connection.(1B4-08, 1B4-09, 1B4-11)

**1B4-08<sup>#</sup>** Superconductivity in Pd Thin Film Irradiated with Hydrogen Ion Beam (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SUZUKI, Naoya; NAKAYAMA, Ryo; MAESATO, Mitsuhiko; KITAGAWA, Hiroshi**1B4-09<sup>\*</sup>** Oxygen diffusion properties of A-site layered/disordered perovskite oxides LaCa<sub>2</sub>Fe<sub>3</sub>O<sub>9</sub> (ICR, Kyoto Univ.) ○GUO, Haichuan; ICHIKAWA, Noriya; SAITO, Takashi; KAN, Daisuke; SHIMAKAWA, Yuichi**1B4-11<sup>\*\*</sup>** Structural and Magnetic Properties of Cation-ordered Perovskite Structure Materials Containing A-site Iron (ICR, Kyoto Univ.) ○AMANO, Midori; DENIS ROMERO, Fabio; SAITO, Takashi; SHIMAKAWA, Yuichi

Chair: SHIMAKAWA, Yuichi (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(1B4-14, 1B4-16, 1B4-17)

**1B4-14<sup>\*</sup>** Crystal structure and ionic conductivity of new structure-type oxide-ion conductors, BaSc<sub>2-x</sub>A<sub>x</sub>Si<sub>2</sub>O<sub>10-x/2</sub> (A=Mg, Ca) discovered by the bond valence method (Sch. Sci., Tokyo Tech.) ○NIWA, Eiki; FUJII, Kotaro; YASHIMA, Masatomo**1B4-16** Exploration of new structure-type oxide-ion conductors containing Zn by the bond valence method (Sch. Sci., Tokyo Tech.) ○NAKAMURA, Keigo; FUJII, Kotaro; NIWA, Eiki; YASHIMA, Masatomo**1B4-17<sup>\*\*</sup>** Young Scholar Lectures of CSJ Development of persistent phosphors by controlling photo-induced electron transfer and electron trap depth (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○UEDA, Jumpei

## Tuesday, March 20, PM

Chair: OSADA, Minoru (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(1B4-27)

**1B4-27<sup>#</sup>** CSJ Award for Creative Works Precise Structure Analysis and Exploration of Functional Inorganic Materials (Sch. Sci., Tokyo Tech.) ○YASHIMA, Masatomo

Chair: SUGAHARA, Yoshiyuki (14 : 30~15 : 20)

\* 14:20-14:30: interval for laptop PC connection.(1B4-34, 1B4-36, 1B4-38)

**1B4-34<sup>\*\*</sup>** Crystal structure and ion-conduction path of La<sub>0.9</sub>Str<sub>0.1</sub>O<sub>0.45</sub>F<sub>2</sub> by high-temperature neutron diffraction (Sch. Sci., Tokyo Tech.; Grad. Sch. Eng., Kyushu Univ.; ACNS, ANSTO) ○HIBINO, Keisuke; KOZAKAI, Satoshi; NIWA, Eiki; FUJII, Kotaro; ISHIIHARA, Tatsumi; HESTER, James R.; YASHIMA, Masatomo**1B4-36<sup>\*</sup>** Synthesis and physical properties of new pnictides with metal ordered NiAs structure (Grad. Sch. Eng., Kyoto Univ.) ○MURAKAMI, Taito; YAMAMOTO, Takafumi; KAGEYAMA, Hiroshi**1B4-38<sup>#</sup>** Structure and property measurements for Ag-Bi-I (ICR, Kyoto Univ.) ○KOEDTRUAD, Anucha; SAITO, Takashi; WAKAMIYA, Atsushi; KAN, Daisuke; SHIMAKAWA, Yuichi

Chair: TANAKA, Katsuhisa (15 : 30~16 : 30)

\* 15:20-15:30: interval for laptop PC connection.(1B4-40, 1B4-42, 1B4-44)

**1B4-40<sup>\*</sup>** Anion Site Control in Vanadium Oxyhydrides (Grad. Sch. Eng., Kyoto Univ.) ○YAMAMOTO, Takafumi; SHITARA, Kazuki; KITAGAWA, Shunsaku; KUWABARA, Akihide; KUROE, Masahiro; ISHIDA, Kenji; OCHI, Masayuki; KUROKI, Kazuhiko; FUJII, Kotaro; YASHIMA, Masatomo; KAGEYAMA, Hiroshi**1B4-42<sup>\*\*</sup>** Pd-H Chemical Bond in  $\alpha$ -phase PdHx (Dep. Chem., Sch. Sci., Kyoto Univ.; PRESTO, JST; Fac. Sci., Kyushu Univ.; Grad. Sch. Eng., Hiroshima Univ.; Grad. Sch. Sci., Osaka Pref. Univ.; JASRI/Spring-8; Grad. Sch. Eng., Kyushu Univ.; RCSLA, Kyushu Univ.) ○DEKURA, Shun; KOBAYASHI, Hirokazu; IKEDA, Ryuichi; MAESATO, Mitsuhiko; YOSHINO, Haruka; OHBA, Masaaki; ISHIMOTO, Takayoshi; KUBOTA, Yoshiki; KAWAGUCHI, Shogo; YOSHIOKA, Satoru; MATSUMURA, Syo; SUGIYAMA, Takeharu; KITAGAWA, Hiroshi**1B4-44<sup>\*\*</sup>** Observation of Giant Isotope Effects Induced by Deuterium Ion Beam Irradiation of Zinc Oxide (Dep. Chem., Sch. Sci., Kyoto Univ.; Grad. Sch. Eng., Kyushu Univ.; Nat. Inst. Tech., Akashi College; Grad. Sch. Eng., Osaka Univ.) ○NAKAYAMA, Ryo; SUZUKI, Naoya; MAESATO, Mitsuhiko; ARITA, Makoto; NAKANISHI, Hiroshi; KITAGAWA, Hiroshi

Chair: MAESATO, Mitsuhiko (16 : 40~17 : 20)

\* 16:30-16:40: interval for laptop PC connection.(1B4-47, 1B4-49, 1B4-50)

**1B4-47<sup>\*\*</sup>** A new approach to higher heat tolerance of CeO<sub>2</sub> nanoparticles bymixing with SiO<sub>2</sub> in nano-level through one-pot solvothermal method (Sch. Eng., KUT) ○NGUYEN, Hien Thi Thu; OHTANI, Masataka; KOBIRO, Kazuya**1B4-49** Development of X-ray CT contrast agent using bismuth metal nanoparticles (Coll. Eng., Ibaraki Univ.) ○YAMANAKA, Tatsushi; TOKUMASU, Akitoshi; INOSE, Tomoya; TOKUNAGA, Masanori; HATOYAMA, Keiichi; KAKIHANA, Masato; GONDA, Kohsuke; KOBAYASHI, Yoshio; NAKASHIMA, Kohichi**1B4-50** Synthesis of SrTiO<sub>3</sub> nanocrystals based on solution reaction chemistry (Coll. Eng., Ibaraki Univ.) ○YAMAZAKI, Reina; KOBAYASHI, Yoshio; ISHIGAKI, Toru; OHYAMA, Kenji; YONEDA, Yasuhiro; SEKINO, Tohru; YIN, Shu; KAKIHANA, Masato; HIGASHI, Masanobu; ABE, Ryu; NAKASHIMA, Kouichi

## Thursday, March 22, AM

## Solid Acid

Chair: SUZUKI, Kosuke (9 : 50~10 : 50)

\* 9:40-9:50: interval for laptop PC connection.(3B4-06, 3B4-07, 3B4-09, 3B4-11)

**3B4-06** Room-temperature two-electron reduction of O<sub>2</sub> over Co<sup>I</sup> ion-exchanged in MFI zeolite: Formation mechanism, electronic structure, and reactivity of Co<sup>III</sup>-peroxo (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MAMENARI, Yuki; ODA, Akira; OHKUBO, Takahiro; KURODA, Yasushige**3B4-07<sup>\*\*</sup>** RT hydroxylation of methane over Zn<sup>II</sup>-Oxyl created in MFI zeolite (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○ODA, Akira; OHKUBO, Takahiro; KURODA, Yasushige**3B4-09<sup>\*</sup>** Control of the Structure of Vanadium-Oxygen Units and their Oxidation Property (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○KIKUKAWA, Yui; SAKAMOTO, Yui; KHAIR, Miftahul; HAYASHI, Yoshihito**3B4-11** Epoxidation of Alkene with Hydrogen Peroxide Catalyzed by [M(W<sub>5</sub>O<sub>18</sub>)<sub>2</sub>]<sup>9-</sup> (M = La<sup>3+</sup> or Eu<sup>3+</sup>) (Coll. Eng., Chubu Univ.) ○ISHIKAWA, Eri; TOGAWA, Yuta

## Polyoxometalate

Chair: ISHIKAWA, Eri (11 : 00~12 : 00)

\* 10:50-11:00: interval for laptop PC connection.(3B4-13, 3B4-14, 3B4-15, 3B4-16, 3B4-17, 3B4-18)

**3B4-13** Correlation between the dielectric properties and lanthanide ion species included in the molecule (Grad. Sch. Sci., Hiroshima Univ.) ○MARUYAMA, Rio; KATO, Chisato; MARYUNINA, Kseniya; INOUE, Katsuya; TSUNASHIMA, Ryo; NISHIHARA, Sadafumi**3B4-14** Synthesis and dielectric properties of a stable polyoxometalate crystal, NH<sub>4</sub><sup>+</sup>-[TbP<sub>5</sub>W<sub>30</sub>O<sub>110</sub>] (Grad. Sch. Sci., Hiroshima Univ.) ○DATE, Takuya; MARUYAMA, Rio; KATO, Chisato; MARYUNINA, Kseniya; INOUE, Katsuya; TSUNASHIMA, Ryo; NISHIHARA, Sadafumi**3B4-15** Synthesis and Dielectric Properties of Reduced Preyssler-type Polyoxometalate(Red-[Ag-P<sub>5</sub>W<sub>30</sub>]) (Fac. Sci., Hiroshima Univ.) ○HAYASE, Tomoha; KATO, Chisato; MARUYAMA, Rio; DATE, Takuya; MARYUNINA, Kseniya; INOUE, Katsuya; TSUNASHIMA, Ryo; SADAKANE, Masahiro; MIYAOKA, Hiroki; NISHIHARA, Sadafumi**3B4-16** Synthesis of an Organic Solvent-Soluble Ring-Shaped Phosphotungstate (Grad. Sch. Eng., The Univ. of Tokyo) ○SUZUKI, Kosuke; YONESATO, Kentaro; SASAKI, Shinichi; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**3B4-17** Synthesis of Silver Nanoclusters Using Ring-Shaped Phosphotungstates (Grad. Sch. Eng., The Univ. of Tokyo) ○YONESATO, Kentaro; SASAKI, Shinichi; SUZUKI, Kosuke; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**3B4-18** Synthesis of Multinuclear Transition Metal Cores Using Ring-Shaped Phosphotungstates (Grad. Sch. Eng., The Univ. of Tokyo) ○SASAKI, Shinichi; YONESATO, Kentaro; SUZUKI, Kosuke; YAMAGUCHI, Kazuya; MIZUNO, Noritaka

## Thursday, March 22, PM

Chair: ITO, Takeru (13 : 10~14 : 10)

\* 13:00-13:10: interval for laptop PC connection.(3B4-26, 3B4-27, 3B4-28, 3B4-29, 3B4-30, 3B4-31)

**3B4-26** Syntheses and structures of polyoxometalate-silver ethynide composite clusters using Weakley-type polyoxometalates. (Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○YAMAMURA, Taku; OHASHI, Kenji; OZEKI, Tomoji**3B4-27** Synthesis of Silver Nanoclusters Using Lacunary Silicotungstates (Grad. Sch. Eng., The Univ. of Tokyo) ○ITO, Hiroyasu; SUZUKI, Kosuke; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**3B4-28** Synthesis of Multinuclear Metal Cores Using Hexavacant Lacunary Phosphotungstate (Grad. Sch. Eng., The Univ. of Tokyo) ○TOMINAGA, Naoto; MINATO, Takuo; SUZUKI, Kosuke; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**3B4-29** Reduction-Induced Introduction of Ag(I)/Ag(0) into Redox-active

Porous Ionic Crystals (Grad. Sch. Arts and Sci., The Univ. of Tokyo)  
 ○HARADA, Yuki; MAGIRA, Shotaro; UCHIDA, Sayaka

- 3B4-30** Effect of Ammonium Ion toward Proton Conduction in Porous Ionic Crystals (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○MIYAZAWA, Satoru; HOSONO, Reina; UCHIDA, Sayaka
- 3B4-31** High Proton Conduction in Crystalline Composites Based on Preyssler-type Polyoxometalates and polyallylamine (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○IWANO, Tsukasa; MIYAZAWA, Satoru; UCHIDA, Sayaka

Chair: KURODA, Yoshiyuki (14 : 20~14 : 50)

- \* 14:10-14:20: interval for laptop PC connection.(3B4-33, 3B4-34, 3B4-35)
- 3B4-33** Synthesis of polyoxometalate hybrid crystals comprising polymerizable ionic-liquid with styrene moiety. (Sch. Sci., Tokai Univ.) ○MISAWA, Toshiyuki; ITO, Takeru
- 3B4-34** Synthesis of hybrid crystals comprising silicotungstate and bolaamphiphile (Sch. Sci., Tokai Univ.) ○TOMIMATSU, Keita; IIMURA, Hiroyuki; MISAWA, Toshiyuki; ITO, Takeru
- 3B4-35** Structural transformation of alkyl-grated polyoxometalate cluster during desorption of crystalline solvent (Grad. Sch. Sci. Tech., Yamaguchi Univ.; RIES, Hokkaido Univ.; Fac. Env.Earth Sci., Hokkaido Univ.) ○FUJIBAYASHI, Masaru; TAKAHASHI, Kiyonori; NORO, Shin-ichiro; NAKAMURA, Takayoshi; TSUNASHIMA, Ryo

### Friday, March 23, AM

Chair: UCHIDA, Sayaka (9 : 10 ~10 : 10)

- \* 9:00-9:10: interval for laptop PC connection.(4B4-02, 4B4-03, 4B4-05, 4B4-06)
- 4B4-02** Synthesis of a calcium-containing polyoxovanadate (Coll. Sci. Eng., Kanazawa Univ.) ○KAWAKAMI, Atsushi; KIKUKAWA, Yuji; HAYASHI, Yoshihito
- 4B4-03\*\*** Sandwich-, Crown Ether-, and Cryptand-Type Polyoxovanadates for Yttrium Cores (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○MARUYAMA, Tatsuya; KIKUKAWA, Yuji; HAYASHI, Yoshihito
- 4B4-05** Decomposition process of a ball type polyoxometalate (Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○SHIOKAWA, Yuichi; OHASHI, Kenji; OZEKI, Tomoji
- 4B4-06\*\*** Assembling Chiral Mo Blue by Lanthanide Symmetry Breaker and Amino Acid Chiral Inducer (Univ. of Glasgow) ○XUAN, Weimin; LONG, De-liang; CRONIN, Leroy

### Porous Compounds

Chair: MAEDA, Kazuyuki (10 : 20~11 : 20)

- \* 10:10-10:20: interval for laptop PC connection.(4B4-09, 4B4-11, 4B4-12, 4B4-13, 4B4-14)
- 4B4-09\*\*** Adsorption properties of porous cesium salts of mixed polyoxometalates with different anion charge (Grad. Sch. Eng., The Univ. of Tokyo) ○OGASAWARA, Yoshiyuki; KOTABE, Takuya; UCHIDA, Sayaka; YAMAGUCHI, Kazuya; MIZUNO, Noritaka
- 4B4-11#** Preparation of Hydrogen-Bonded Supramolecular Assemblies of Non-Planar Metalloporphyrins and Their Application to Gas Sorption (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○MARCHI OGAWA, Bruno Kazuhiro; ISHIZUKA, Tomoya; KOTANI, Hiroaki; TABE, Hiroyasu; YAMADA, Yusuke; KOJIMA, Takahiko
- 4B4-12** Synthesis of Mesoporous Alumina Powders with Improved High Surface Areas (IFMRI, AIST) MARUOKA, Hirokazu; ○KIMURA, Tatsuo
- 4B4-13** Attempt to synthesize mesoporous ceramic thin films by microwave heating (TUS) ○SUZUKI, Norihiro
- 4B4-14** Synthesis and functions of a new iron oxide (MANA, NIMS) ○IDE, Yusuke; TOMINAKA, Satoshi; NISHIDA, Hideo; TSUNOJI, Nao; KOMAGUHI, Kenji; SANO, Tsuneji

### Friday, March 23, PM

#### Host-guest Hybrid Materials

Chair: SOHMIYA, Minoru (12 : 30~13 : 20)

- \* 12:20-12:30: interval for laptop PC connection.(4B4-22, 4B4-24, 4B4-25, 4B4-26)
- 4B4-22\*\*** Regulation of Substrate Selectivity of a Platinum Cluster Catalyst by a Macromolecular Nanocavity (Lab. Chem. Life Sci., Tokyo Tech.; JSTERATO; PRESTO, JST) ○KATO, Yuto; KAMBE, Tetsuya; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 4B4-24#** Photoluminescent properties of pyridinophane copper(I) complexes covalently incorporated into cross-linked poly(butyl acrylate) (OIST) ○KARIMATA, Ayumu; PATIL, Pradnya; KHUSNUTDINOVA, Julia
- 4B4-25** Adsorption behavior of cation dyes on Rh-doped titania nanosheet (Urban Environmental Sci., TMU) ○OHNISHI, Ryota; SANO, Keito; SONOTANI, Amane; SHIMADA, Tetsuya; TAKAGI, Shinsuke
- 4B4-26** Synthesis of layered manganese-phosphonate with 1,3,5-benzotriphosphonic acid (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○HIO, Kosuke; KONDOU, Atsushi; MAEDA, Kazuyuki

### Layered Materials

Chair: YOSHIHARA, Naoki (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4B4-28, 4B4-29, 4B4-30, 4B4-31, 4B4-32)
- 4B4-28** Investigation on preparation conditions of AFY metalloaluminophosphate phase through topotactic interlayer pillaring of a layered aluminophosphate (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○ARAKAWA, Kyosuke; KONDOU, Atsushi; MAEDA, Kazuyuki
- 4B4-29** Preparation of MnO<sub>2</sub> nanosheets of moth-eaten appearance (Grad. Sch. Eng., The Univ. of Tokyo) ○SUZUKI, Shinya; MIYAYAMA, Masaru
- 4B4-30** The ion-exchange study of strontium by natural vermiculite. (Showa Pharm. Univ.) ○SUZUKI, Noriko; YUTA, Kasahara; SHIDAYAMA, Tomoki; SATORU, Karasawa
- 4B4-31** Preparation of layered silicate RUB-15 containing Cu ions (Sch. Advanced Sci. Eng., Waseda Univ.) KOIKE, Masakazu; ○SAKAI, Rika; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki
- 4B4-32\*** Synthesis and optical properties of benzyl-modified layered silicon (Toyota Central R&D Labs., Inc.) ○HASHI, Masataka; NAKANO, Hideyuki

### Layered Materials, Carbon

Chair: SUZUKI, Shinya (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4B4-35, 4B4-36, 4B4-38, 4B4-40)
- 4B4-35** Preparation of B/C/N nanosheets using CVD method (Osaka Electro-Communication Univ.) ○AWAI, Masatoshi; KAWAGUCHI, Masayuki
- 4B4-36\*** Chemical etching treatment of copper foils for single-layer graphene growth by chemical vapor deposition (Fac. Eng., Fukuoka Univ.) ○YOSHIHARA, Naoki; NODA, Masaru
- 4B4-38\*** Seebeck effect of thermal and chemical modified graphene oxide (Dept. Chem., Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○OHMAGARI, Hitomi; SHUDO, Yuta; OHTANI, Ryo; HAYAMI, Shinya
- 4B4-40** Deoxofluorination effects and Intercalation of SF<sub>4</sub> to Graphite Oxide (Grad. Sch. Energy Sci., Kyoto Univ.; Grad. Sch. Eng., Univ. of Hyogo; NRI, AIST) ○YAMAMOTO, Hiroki; MATSUMOTO, Kazuhiko; MATSUO, Yoshiaki; SATO, Yuta; HAGIWARA, Rika

## Room B5

Bldg. 14 1455

### Resources Utilization Chemistry

#### Tuesday, March 20, PM

Chair: YAMAGUCHI, Aritomo (14 : 30~15 : 10)

- \* 14:20-14:30: interval for laptop PC connection.(1B5-34, 1B5-35, 1B5-36, 1B5-37)
- 1B5-34** Production of isoprene by catalytic cracking of algae-producing oil derived from squalene (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○KIMURA, Kazuya; SHIRAIISHI, Kazuma; KONDO, Takahiro; NAKAMURA, Junji; FUJITANI, Tadahiro
- 1B5-35** Development of Ruthenium-supported catalyst system for reductive amination of furfural (Sch. Mat. Sci., JAIST) ○MOHRI, Tomoaki; NISHIMURA, Shun; EBITANI, Kohki
- 1B5-36** Development and Evaluation of Compact Fast Pyrolysis Reactor for Local Biofuel Production for Local Consumption (JAIST) ○NISHIMURA, Shun; EBITANI, Kohki
- 1B5-37** Pyrolysis of cellulose and xylan in presence of polyethylene (Grad. Sch. Environmental Studies, Tohoku Univ.) ○TAKAHASHI, Yusuke; KUMAGAI, Shogo; KAMEDA, Tomohito; SAITO, Yuku; YOSHIOKA, Toshiaki

Chair: HOKURA, Akiko (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(1B5-39, 1B5-41, 1B5-43)
- 1B5-39\*** Selective Recovery of Rhodium Using Alkylanilines as Precipitants (Grad. Sch. Eng. Sci., Akita Univ.) ○MATSUMOTO, Kazuya; YAMAKAWA, Sumito; SEZAKI, Yuto; JIKEI, Mitsutoshi
- 1B5-41\*** Development of effective rare metal separation and recovery method via pH-sensitive polymer. (Ind. Tech. Inst. Ibaraki Pref.) ○KATO, Takeshi; IGARASHI, Shukuro; ODAGI, Miho
- 1B5-43\*** Quick Coloration of Wool Fibers Using Glucose Oxides (ORIST) ○OHE, Takeru; YOSHIMURA, Yurika

#### Wednesday, March 21, AM

Chair: SATO, Osamu (11 : 00~11 : 40)

- \* 10:50-11:00: interval for laptop PC connection.(2B5-13, 2B5-14, 2B5-15,

2B5-16)

- 2B5-13** Application of tandem micro reactor to evaluate the behavior of conversion of alkylphenol into phenol using zeolite catalyst (Grad. Sch. Environmental Studies, Tohoku Univ.) ○ASAKAWA, Masaki; KUMAGAI, Shogo; KAMEDA, Tomohito; SAITO, Yuko; WATANABE, Atsushi; TERAMAE, Norio; YOSHIOKA, Toshiaki
- 2B5-14** Basic study on utilization of the food waste using the mesophilic methane fermentation technology (Mie Pref. Ind. Res. Inst.) ○NISHIKAWA, Naomi; MAEGAWA, Akihiro; KUBO, Tomoko; MATSUURA, Shinya; HASHIMOTO, Noritsugu
- 2B5-15** A new conversion of alkyl amines to alcohols using supercritical alcohols (Fac. Eng., Yamaguchi Univ.; Ube Industries, Ltd.) ○KAMIMURA, Akio; MATSUMOTO, Hiroshi; KAISO, Kouji; AKINARI, Yugo; MATSUTANI, Kazuki
- 2B5-16** Design of ionic liquids for the production of glucose from dissolved cellulose (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SATO, Anri; AKIBA, Takashi; OHNO, Hiroyuki; NAKAMURA, Nobuhumi

## Environmental and Green Chemistry

### Wednesday, March 21, PM

Chair: MORIGUCHI, Takeshi (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(2B5-25, 2B5-27, 2B5-28, 2B5-30)
- 2B5-25\*\*** Design of metal oxide-modified electrode for oxidative H<sub>2</sub>O<sub>2</sub> production from H<sub>2</sub>O (Grad. Sch. Fac. Sci. Technol., TUS) ○MIYASE, Yuta; IGUCHI, Shoji; FUKU, Kojiro; MISEKI, Yugo; GUNJI, Takahiro; SAYAMA, Kazuhiro
- 2B5-27** Hydrogen peroxide production using non-noble metal cathode and photoanode without applying an external bias (RCPV, AIST) ○TAKASUGI, Souichi; MIYASE, Yuta; IGUCHI, Shouji; MISEKI, Yugo; GUNJI, Takahiro; SASAKI, Kotarou; FUJITA, Etsuko; SAYAMA, Kazuhiro
- 2B5-28\*\*** Valorization of Polyether Wastes through Efficient Depolymerization Using Layered Solid Acid Catalysts (Grad. Sch. Eng. Sci., Osaka Univ.) ○MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro
- 2B5-30** Bioethanol production from mixture of cellulose and xylan using imidazolium ionic liquids (IAE, Kyoto Univ.) ○KOMAI, Masato; KODAKI, Tsutomu; NOHIRA, Toshiyuki
- Chair: FUKU, Kojiro (14 : 10~15 : 10)
- \* 14:00-14:10: interval for laptop PC connection.(2B5-32, 2B5-34, 2B5-35, 2B5-37)
- 2B5-32\*** Non-catalytic degradation of waste bathtub generated from Kumamoto Earthquake and recycling (Fac. Eng., Sojo Univ.) ○IKENAGA, Kazutoshi; KAWABE, Yusei
- 2B5-34** development of new ionic liquids changeable their solubility toward water and organic solvents (Fac. Eng., Yamaguchi Univ.) ○SHIRAMATSU, Yuto; MURATA, Kengo; KARALULA, Valerie; KAWAMOTO, Takuji; KAMIMURA, Akio
- 2B5-35\*\*** Hydrogen-Peroxide Induced Efficient Mineralization of Melt-Processable Fluoropolymers in Subcritical Water (Fac. Sci., Kanagawa Univ.) ○HORI, Hisao; HONMA, Ryo
- 2B5-37** Development of environmental-benign Ionic liquids with dissolution ability of cellulose (Fac. Edu., Kagawa Univ.) ○OTA, Motoki; TAKAGI, Yumiko

Chair: IKENAGA, Kazutoshi (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(2B5-39, 2B5-40, 2B5-41, 2B5-42, 2B5-43, 2B5-44)
- 2B5-39** Development for novel hydroxyapatite catalyzed reactions (Grad. Sch. Eng., The Univ. of Tokyo) ○USAMI, Kaho; OKAMOTO, Akimitsu
- 2B5-40** Effect of Bi introducing amount in photo Fenton-like reaction using Bi-treated hydroxyapatite as a catalyst (Dept. Lib. Arts, Saitama Med. Univ.) ○MORIGUCHI, Takeshi; NAKAGAWA, Souhei
- 2B5-41** Effect of Au-supporting conditions on hydrogen peroxide production using Au-BiVO<sub>4</sub> photocatalyst (Fac. Env. Urban Eng., Kansai Univ.) ○IWAMURA, Kazushi; FUKU, Kojiro; IKENAGA, Naoki
- 2B5-42** Photocatalytic Production of Rare Sugars with Metal-Ion-Doped TiO<sub>2</sub> (Fac. Sci. Technol., TUS) ○IWASAKI, Kodai; YAMAGUCHI, Yuichi; YAMATOYA, Kenji; SUZUKI, Norihiro; KATSUMATA, Kenichi; TERASHIMA, Chiaki; FUJISHIMA, Akira; SAKAI, Hideki; NAKATA, Kazuya
- 2B5-43\*** Dynamics of water reduction by dye-sensitized photoelectrochemical cells incorporating ruthenium photosensitizers (Grad. Sch. Urban Environmental Sci., TMU) ○PURNAMA, Indra; KUBO, Yuji; MULYANA, Jacob Yan
- 2B5-44** Three-dimensional plasmonic photoanode with controlled interface between metal nanoparticles and semiconductor (RIES, Hokkaido Univ.) ○TAKAKURA, Ryohei; OSHIKIRI, Tomoya; UENO, Kosei; KONDO, Toshiaki; MASUDA, Hideki; MISAWA, Hiroaki

Chair: MAENO, Zen (16 : 30~17 : 10)

- \* 16:20-16:30: interval for laptop PC connection.(2B5-46, 2B5-47, 2B5-48, 2B5-49)
- 2B5-46** Adsorption of Heavy Metal Ions on Biomass. (Teikyo Univ.) ○YAMADA, Taku; YANAGIHARA, Naohisa
- 2B5-47** Production of cyanide ion by freezing aqueous solution containing amino acid and nitrite (Osaka Pref. Univ.) ○SUDA, Yusuke; KITADA, Koudai; TAKENAKA, Norimichi
- 2B5-48** Basic study of cleaning effects in micro-bubble filled with ultrasonic wave and surfactant (TMCIT) ○IKEDA, Hiroshi; AOKI, Shigeru; KURITA, Katsumi
- 2B5-49** Design of Fe-typed layered double hydroxide for effective degradation of organic pollutants (Fac. Env. Urban Eng., Kansai Univ.) ○FUKU, Kojiro; KANAI, Honami; OKUZONO, Wakana; IKENAGA, Naoki

### Thursday, March 22, AM

Chair: MAKI, Hideshi (9 : 00 ~9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(3B5-01, 3B5-02, 3B5-03, 3B5-04)
- 3B5-01** Measurements of HONO/NO<sub>2</sub> ration and NH<sub>3</sub> concentration in Ho Chi Minh, Vietnam (Osaka Pref. Univ.) ○TAKENAKA, Norimichi; TORIYAMA, Katsuya; FUKAE, Kengo; YOSHIHARA, Ayaka; NISHIMURA, Hitoshi; WAKAYAMA, Yuki; DUONG HUU, Huy; TO THI, Hien
- 3B5-02** Comparison of PM2.5 chemical constituents between indoor and outdoor air in the general houses (Osaka City Res. Center of Environ. Sci.) ○FUNASAKA, Kunihiro; FURUICHI, Yuko; SAKAI, Mamoru
- 3B5-03** Evaporation of nitric acid from snow surface to atmosphere (Osaka Pref. Univ.) ○KIYOSE, Tomofumi; TAKENAKA, Norimichi; NORO, Kazushi
- 3B5-04\*\*** Analysis of Polycyclic aromatic hydrocarbons in PM2.5 from Ho Chi Minh City by TD-GC/MS (Grad. Sch. Eng., Osaka Pref. Univ.) ○PHAM, Kim Oanh; TAKENAKA, Norimichi

Chair: FUNASAKA, Kunihiro (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(3B5-07, 3B5-09, 3B5-11, 3B5-12)
- 3B5-07\*\*** The Effect of Freezing for Ammonium Concentration Resulting from Reaction of Urea with Nitrite (Grad. Sch. Eng., Osaka Pref. Univ.) ○KITADA, Kodai; TAKENAKA, Norimichi
- 3B5-09\*** Analysis of the influence of anionic species on the hydrolysis reaction of coagulum for aluminum system water treatment by quadrupolar nucleus qNMR (Kobe Univ.) ○MAKI, Hideshi; OH, Yongjin; MIZUHATA, Minoru
- 3B5-11** Improvement of seawater desalination with sunlight using dye-modified membranes (Grad. Sch. Eng., Tohoku Gakuin Univ.; RCPT, AIST) ○KIKUCHI, Masaki; TOMITA, Kisho; FUJIWARA, Masahiro
- 3B5-12** Water purification and seawater desalination with transpiration stream induced by light irradiation (Grad. Sch. Eng., Tohoku Gakuin Univ.; RCPT, AIST) ○TOMITA, Kisho; KIKUCHI, Masaki; FUJIWARA, Masahiro

Chair: TAKENAKA, Norimichi (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(3B5-14, 3B5-15, 3B5-16, 3B5-17, 3B5-18, 3B5-19)
- 3B5-14** Adsorption and desorption characteristics of Cr(VI) Ion by KOH-treated activated carbon (Fac. Eng., Chiba Univ.) ○YAMOTO, Masashi; AMANO, Yoshimasa; MACHIDA, Motoi
- 3B5-15** Adsorption of nitrate ions in aqueous solution on nitrogen-doped activated carbon fibers (Fac. Eng., Chiba Univ.) ○YOO, Pyunghwa; AMANO, Yoshimasa; MACHIDA, Motoi
- 3B5-16** Composition and characterization of extracellular polysaccharides extracted from toxic cyanobacteria (*Microcystis*) by different methods (Fac. Eng., Chiba Univ.) ○SAKURAI, Shohei; AMANO, Yoshimasa; MACHIDA, Motoi
- 3B5-17** Growth and nutrient uptake characteristics of *Microcystis* and *Cyclotella* isolated from Lake Tega (Fac. Eng., Chiba Univ.) ○CHUJO, Masato; AMANO, Yoshimasa; MACHIDA, Motoi
- 3B5-18** Concentration of metals used for lithium ion batteries, nickel-metal hydride batteries and nickel plating in the water of Japanese rivers (Yokkaichi Analysis Center, Tokai Techno Co., Ltd.) ○MIYAZAKI, Akira; TSUTSUMI, Shinichiro; NAGAHAMA, Nobumasa; MARUTA, Toshihisa
- 3B5-19** Microplastic pollution in the Fuji River system (Teikyo Univ. of Sci.) ○NAKAYAMA, Hideyuki; FURUSATO, Takuya; KANOMATA, Masanori; TAMASAKI, Kai

## Room B6

Bldg. 14 1456

### Education and History of Chemistry

Tuesday, March 20, AM

Chair: IMAI, Izumi (9 : 50 ~ 10 : 40)

- \* 9:40-9:50: interval for laptop PC connection.(1B6-06, 1B6-08, 1B6-09, 1B6-10)
- 1B6-06\*** Research on teaching material of methane fermentation (Fac. Edu., Ehime Univ.) ○OHASHI, Atsushi; TOMITA, Akira
- 1B6-08** Development of the teaching materials of biomass to introduce carbon neutral concept (Grad. Sch. Edu., Hirosaki Univ.) ○CHOUNAN, Yukiyasu; KAWAMURA, Azusa; HARADA, Takuma; KATSUKAWA, Kenzo; HATAKEYAMA, Youichi
- 1B6-09** Dehydration of terpene alcohols with borate silica gel as solid acid (Grad. Sch. Mathematics Sci. Edu., TUS) ○MURATA, Megumi; INOUE, Masayuki
- 1B6-10** Identification of 8 kinds of fibers by coloring reactions (Grad. Sch. Mathematics Sci. Edu., TUS) ○YOSHIKAWA, Syogo; INOUE, Masayuki

Chair: CHOUNAN, Yukiyasu (10 : 50 ~ 11 : 50)

- \* 10:40-10:50: interval for laptop PC connection.(1B6-12, 1B6-15)
- 1B6-12 CSJ Award for Merits for Chemical Education** Contribution to Secondary School Chemistry Education through Chemical Experiments (Fac. Sci., Toho Univ.) ○IMAI, Izumi
- 1B6-15 CSJ Award for Merits for Chemical Education** Contribution to Chemical Education through Sophistication of Chemical Research for Teenage (NIT, Yonago College) ○TANIFUJI, Naoki

Tuesday, March 20, PM

Chair: OHASHI, Atsushi (13 : 00 ~ 13 : 50)

- \* 12:50-13:00: interval for laptop PC connection.(1B6-25, 1B6-27, 1B6-28)
- 1B6-25\*\*** The introduction of micro scale chemical experiments into remote education and science communication training (Salesian Polytechnic) ○NAGAO, Akemi; AIKAWA, Chihiro; YONEYAMA, Akifumi; HAMABE, Tadashi; TAKESHITA, Naokatsu
- 1B6-27** Wide applicability of microscale chemistry recognized in the 9th International Microscale Chemistry Symposium (Tohoku Univ.; Fac. Sci., TUS; Fac. Symbiotic. Syst. Sci. & Tech, Fukushima Univ.; Fac. Sci., Yamagata Univ.; Miyagi Univ. of Educ.; Fac. Edu., Kagawa Univ.; Coll. of Liberal Arts, ICU) ○OGINO, Kazuko; INOUE, Masayuki; INOMATA, Shinji; OGINO, Hiroshi; OMATA, Kenji; KURIYAMA, Yasunao; SAWATARI, Hideyuki; SEKINE, Tsutomu; TAKAGI, Yumiko; TOYOTA, Kozo; YOSHINO, Teruo; WATANABE, Naoshi
- 1B6-28\*** Cooperation for Development of High School Science Education in the Kingdom of Swaziland (Dept. Sci., Naruto Univ. of Edu.) ○TAKEDA, Kiyoshi; TERASHIMA, Yukio; YONEZAWA, Yoshihiko; KOZAI, Takeshi

Chair: KURIYAMA, Yasunao (14 : 00 ~ 15 : 00)

- \* 13:50-14:00: interval for laptop PC connection.(1B6-31)
- 1B6-31 CSJ Award for Chemical Education** Development of Creative Chemical Education Using a Handmade Oxygen Sensor (NIT, Tokyo College) ○TAKAHASHI, Mitsuo
- Chair: NAGAO, Akemi (15 : 10 ~ 16 : 10)
- \* 15:00-15:10: interval for laptop PC connection.(1B6-38, 1B6-40, 1B6-41, 1B6-42)
- 1B6-38\*** Open Lecture of "Light and Color" for High School Students Using LED Light Sources (Math. & Sci. Edu. Res. Center, KIT) ○OYABU, Matashige; FUJII, Satoshi; UCHIMURA, Hirokazu; NISHIOKA, Keita; KUDO, Tomoshige; YAMAOKA, Hidetaka
- 1B6-40** A educational study on photoacoustic effect with different materials and other factors. (Okayama Univ.) ○KITA, Masakazu
- 1B6-41** The Computing Education using Ichigojam BASIC for Chemistry. (Dept. Commerce, Kumamoto Gakuen Univ.; Science Education Gate Assembly for Otaru; Otaru City Council) ○IWAMA, Sekai; ASAHII, Fumiyoshi; MIYOSHI, Tatsuya; TAKAHASHI, Ryu
- 1B6-42\*** Expression of electronic structures of Oxidant and/or Reductant by New structural formula (LOGES) ○SANO, Horosi

Wednesday, March 21, AM

Chair: HIOKI, Hideaki (9 : 00 ~ 9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(2B6-01, 2B6-03)
- 2B6-01\*** Analysis with the Systematized Survey on the History of Technology: Clinical Examination, Air-Conditioner, Medical X-ray Tube, Optical Microscope and Watch (NMNS) ○KAMEI, Osamu
- 2B6-03\*** Implementation of chemistry and exhibition in Kenji Miyazawa

(Curator groupe, Osaka Science Museum) ○ONO, Msahiro

Chair: ONO, Msahiro (9 : 50 ~ 10 : 40)

- \* 9:40-9:50: interval for laptop PC connection.(2B6-06, 2B6-07, 2B6-08, 2B6-09, 2B6-10)
- 2B6-06** Synthesis of ethenzamide from methyl salicylate as an experiment for teaching material (Grad. Sch. Mathematics Sci. Edu., TUS) ○SAITO, Ryo; INOUE, Masayuki
- 2B6-07** Synthesis of aniline derivative pharmaceuticals with acetylsalicylic acid (Grad. Sch. Mathematics Sci. Edu., TUS) ○MITSUI, Syuta; INOUE, Masayuki
- 2B6-08** Color change of the bromothymol blue solution (Fac. Edu., Hirosaki Univ.) ○SHIMADA, Toru
- 2B6-09** An inquisitive learning program related to structure-function relationship through synthesis and dying with indigo derivatives. (Fac. Edu., Gunma Univ.; Fac. Bio., KAIT) ○SUZUKI, Yuichi; HIDA, Riho; OTAKE, Takayuki; OYA, Ryuji; NODA, Takeshi; HIOKI, Hideaki
- 2B6-10** Tracking the Hydrolysis Process of Penta-O-acetyl-β-D-glucopyranose Using Urine Test Paper (Fac. Sci., Toho Univ.) ○SUGIYAMA, Kazuya; MATSUSHIMA, Tomoya; WATANABE, Soichiro; YOKOTA, Hiromitsu; IMAI, Izumi

Chair: INOUE, Masayuki (10 : 50 ~ 11 : 50)

- \* 10:40-10:50: interval for laptop PC connection.(2B6-12, 2B6-15)
- 2B6-12 CSJ Award for Merits for Chemical Education** Practical activities of teaching and supervising chemistry-club and the contribution to the regional community in chemistry education (Nagano Prefectural Kiso Seihō High Sch.) ○SUYAMA, Kazuto
- 2B6-15 CSJ Award for Merits for Chemical Education** Activation of Chemical Education and Teacher Training (Osaka Prefectural Izumi High Sch.) ○FUKANO, Tetsuya

Thursday, March 22, PM

Chair: IKUO, Akira (13 : 00 ~ 13 : 50)

- \* 12:50-13:00: interval for laptop PC connection.(3B6-25, 3B6-26, 3B6-27, 3B6-28)
- 3B6-25** Development of environmental-benign Teaching Materials using Ionic Liquids (Fac. Edu., Kagawa Univ.) ○KUBO, Kosuke; TAKAGI, Yumiko
- 3B6-26** Development of environmentally-benign teaching material; application of science fair for children (Fac. Edu., Kagawa Univ.) ○BESSHO, Haruka; OTA, Motoki; TAKAGI, Yumiko
- 3B6-27** Development of Chemical Educational Support Tool Using Smart Devices (Osaka Sangyo Univ.) ○TAKANE, Shin-ya; KANNO, Tomoya; SAKAI, Yuuya; NAKATANI, Yasuko
- 3B6-28\*** Development of science teaching tools to support measurement experiments for visually impaired students (NIT, Tokyo College) ○TAKAHASHI, Mitsuo; HADA, Yoshihiro; KAWASHI, Norimichi; MATSUBARA, Shizuo

Chair: ITO, Masato M. (14 : 00 ~ 15 : 00)

- \* 13:50-14:00: interval for laptop PC connection.(3B6-31)
- 3B6-31 CSJ Award for Chemical Education** Contributions For Chemical Education through a Chemistry Website (Fac. Sci. Eng., Waseda Univ.) ○YAMAGUCHI, Junichiro

Chair: TAKAGI, Yumiko (15 : 10 ~ 16 : 00)

- \* 15:00-15:10: interval for laptop PC connection.(3B6-38, 3B6-39, 3B6-41, 3B6-42)
- 3B6-38** Experimental Program for considering experiment condition setting (Fac. Sci., Yamagata Univ.) ○KURIYAMA, Yasunao
- 3B6-39\*** Molarity (Amount Concentration) after Diluting Sulfuric Acid (Kobe College) ○TETSUO, Nakagawa
- 3B6-41** The development of teaching materials for the heat of reaction on dissolution and gas emission (Grad. Sch. Edu., Okayama Univ.) ○MORIKAWA, Naomi; KITA, Masakazu
- 3B6-42** Development and practice of experiment learning program using hand-made polymer electrolyte membrane and fuel cell. (Fac. of Edu., Tokyo Gakugei Univ.) ○HAYASHI, Yoshiya; IKUO, Akira; OGAWA, Haruo

## Room C1

Bldg. 6 633

### Catalysts and Catalysis

Tuesday, March 20, AM

Chair: HIGASHI, Masanobu (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1C1-01, 1C1-02, 1C1-03, 1C1-04, 1C1-05, 1C1-06)
- 1C1-01** Synthesis of BaNbO<sub>2</sub>N from (K,Na)<sub>1/4</sub>Ba<sub>3/4</sub>Zn<sub>1/4</sub>Nb<sub>3/4</sub>O<sub>3</sub> and its

- photocatalytic activity (Grad. Sch. Eng., The Univ. of Tokyo) ○ARAKI, Shota; HISATOMI, Takashi; HIGASHI, Tomohiro; KATAYAMA, Masao; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 1C1-02<sup>#</sup>** Influences of preparing methods on physical properties and photocatalytic activity of Ta<sub>3</sub>N<sub>5</sub>(Na,K)TaO<sub>3</sub> photocatalysts (Grad. Sch. Eng., The Univ. of Tokyo) ○ZHAO, Wenhao; WANG, Zheng; HISATOMI, Takashi; TAKADA, Tsuyoshi; DOMEN, Kazunari
- 1C1-03** Study on stacked photocatalyst panels for water splitting (Fac. Eng., The Univ. of Tokyo) ○HIKIMA, Shu; OKANIWA, Kaoru; WANG, Zheng; HISATOMI, Takashi; TAKATA, Tsuyoshi; HIGASHI, Tomohiro; KATAYAMA, Masao; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 1C1-04** Effects of nitridation conditions on surface properties and photocatalytic activity of LaTiO<sub>2</sub>N (Grad. Sch. Eng., The Univ. of Tokyo) ○NAKANISHI, Takahiro; HISATOMI, Takashi; KATAYAMA, Masao; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 1C1-05** Synthesis of BaTaO<sub>2</sub>N from a perovskite-type oxide precursor and its photocatalytic activity (Grad. Sch. Eng., The Univ. of Tokyo) ○HASEGAWA, Shuta; HISATOMI, Takashi; KATAYAMA, Masao; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 1C1-06** Theoretical investigation on the elucidation and the control of the defects in (ZnSe)<sub>0.85</sub>(CuIn<sub>0.7</sub>Ga<sub>0.3</sub>Se<sub>2</sub>)<sub>0.15</sub> solid solution photocathode (Fac. Eng., The Univ. of Tokyo) ○KUBO, Ayako; KANEKO, Hiroyuki; MINEGISHI, Tsutomu; DOMEN, Kazunari; YAMASHITA, Koichi

Chair: MAEDA, Kazuhiko (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1C1-08, 1C1-09, 1C1-10, 1C1-11, 1C1-12, 1C1-13)
- 1C1-08** Theoretical investigation on the band edge positions of Cu<sub>3</sub>VS<sub>4</sub> visible light responsive photocatalyst (Fac. Eng., The Univ. of Tokyo) ○MURASE, Fumiya; KUBO, Ayako; YAMASHITA, Koichi
- 1C1-09** The effect of surface treatment of BiVO<sub>4</sub> on the photocatalytic oxygen evolution from an aqueous solution containing Fe (III) ion (Grad. Sch. Fac. Sci. Technol., TUS) ○SHIMAMURA, Kagari; MISEKI, Yugo; GUNJI, Takahiro; IGUCHI, Shoji; SHICHIJOU, Yasuji; YOSHIDA, Keita; SUZUKI, Kimihito; SAYAMA, Kazuhiro
- 1C1-10** Extension of photoresponse of BiVO<sub>4</sub> photocatalyst by Cr-doping (, Tohoku University) ○OKUNO, Kazuya; KATO, Hideki; KOBAYASHI, Hisayoshi; KOBAYASHI, Makoto; KAKIHANA, Masato
- 1C1-11<sup>#</sup>** Influences of synthetic methods of Rh-doped SrTiO<sub>3</sub> on Z-schematic overall water splitting (IMRAM, Tohoku Univ.) ○DUONG, Phong Hong; MASHIYAMA, Takahiro; KATO, Hideki; KOBAYASHI, Makoto; IWASE, Akihiko; KUDO, Akihiko; KAKIHANA, Masato
- 1C1-12** Z-Scheme Water Splitting Using a Single-Walled Carbon Nanotube Photocatalyst. (Grad. Sch. Env. Life Sci., Okayama Univ.) ○IZAWA, Takumi; TAJIMA, Tomoyuki; MURAKAMI, Noritake; MIYAMOTO, Daiki; MIYAKE, Hideaki; VIT, Kalousek; IKEUE, Keita; TAKAGUTI, Yutaka
- 1C1-13** Synthesis of Titanium Oxide Nano Particles by Sol/Gel Method and their Molecular Catalyst Sensitized Water Splitting Behavior (Grad. Sch. Urban Environmental Sci., TMU) ○SANO, Keito; KUTTASSERY, Fazalurahman; REMELLO, Sebastian Nybin; SHIMADA, Tetsuya; TAKAGI, Shinsuke; TACHIBANA, Hiroshi; INOUE, Haruo

Chair: YOSHIDA, Tomoko (11 : 20~11 : 50)

- \* 11:10-11:20: interval for laptop PC connection.(1C1-15, 1C1-16, 1C1-17)
- 1C1-15** Photocatalytic reduction of nitroaromatics over organically modified titanium(IV) oxide photocatalyst under visible light irradiation. (Fac. Sci. Eng., Kindai Univ.) ○YAMAMOTO, Yuhei; FUKUI, Makoto; TANAKA, Atsuhiko; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 1C1-16** Effect of physical properties of bismuth vanadate photocatalyst on selective oxidation of alcohol (Fac. Sci. Eng., Kindai Univ.) ○MORISHITA, Kazuki; TANAKA, Atsuhiko; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 1C1-17** Effect of conduction band potential on gold-semiconductor plasmonic photocatalyst (Fac. Sci. Eng., Kindai Univ.) ○FUDO, Eri; TANAKA, Atsuhiko; HASHIMOTO, Keiji; KOMINAMI, Hiroshi

## Tuesday, March 20, PM

Chair: KOMINAMI, Hiroshi (13 : 00~14 : 10)

- \* 12:50-13:00: interval for laptop PC connection.(1C1-25, 1C1-26, 1C1-27, 1C1-28, 1C1-29, 1C1-30)
- 1C1-25** Surface modification of metal sulfides with metal cyanoferrates for improving the photocatalytic activity of H<sub>2</sub> evolution in Z-scheme water splitting under visible light (Grad. Sch. Eng., Kyoto Univ.) ○MATSUOKA, Hikaru; HIGASHI, Masanobu; TOMITA, Osamu; ABE, Ryu
- 1C1-26** Improving photocatalytic activity of an oxyhalide photocatalyst for efficient water oxidation by loading of cocatalyst using arc plasma deposition (Sch. Eng., Kyoto Univ.) ○WATANABE, Yasunori; HIGASHI, Masanobu; TOMITA, Osamu; ABE, Ryu
- 1C1-27** Synthesis of visible-light-responsive photocatalysts Bi<sub>6</sub>MWO<sub>14</sub>X(M = Nb or Ta, X = Cl or Br)and their application to water splitting (Sch. Eng., Kyoto Univ.) ○TAKASHIMA, Takanori; HIGAKSHI, Masanobu; NAKADA, Akinobu; TOMITA, Osamu; ABE, Ryu
- 1C1-28** Nitridation of layered KTiNbO<sub>5</sub> and its photocatalytic activity under

visible light (Sch. Sci., Tokyo Tech.) ○TOKUNAGA, Yuki; OSHIMA, Takayoshi; MAEDA, Kazuhiko

- 1C1-29** Photocatalytic properties of an oxyfluoride pyrochlore, Pb<sub>2</sub>Ti<sub>2</sub>O<sub>5.4</sub>F<sub>1.2</sub>, under visible light (Sch. Sci., Tokyo Tech.) ○KURIKI, Ryo; OKA, Kengo; OSHITANI, Osamu; MAEDA, Kazuhiko
- 1C1-30\*** Design of Metal-Organic Frameworks based on DFT Calculations and their Application for Visible Light-Driven Water Splitting (Grad. Sch. Eng., Osaka Pref. Univ.) ○MINE, Shinya; TATEWAKI, Kenta; KUSUKAWA, Yuka; TOYAO, Takashi; HORIUCHI, Yu; IKENO, Hidekazu; MATSUOKA, Masaya

Chair: SHISHIDO, Tetsuya (14 : 20~16 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1C1-33)
- 1C1-33 CSJ Award for Young Chemists** Synthesis and Functional Exploration of Metal Oxide Nanoclusters (Grad. Sch. Eng., The Univ. of Tokyo) ○SUZUKI, Kosuke

## Asian International Symposium - Catalyst Chemistry -

- 1C1-37<sup>#</sup> Opening Remarks / Closing Remarks** Opening Remarks (Tokyo Metropolitan Univ.) ○Shishido, Tetsuya (15:00~15:10)
- 1C1-38<sup>#</sup> Keynote Lecture** Catalytic conversion of energy molecules with 2D materials (Dalian Institute of Chemical Physics) ○Deng, Dehui (15:10~15:40)
- 1C1-41<sup>#</sup> Invited Lecture** Concerted Catalysis of Metal Complex on Solid Surface for Efficient Organic Reaction (Tokyo Tech) ○Motokura, Ken (15:40~16:10)
- 1C1-44<sup>#</sup> Opening Remarks / Closing Remarks** Closing Remarks (Tokyo Metropolitan Univ.) ○Shishido, Tetsuya (16:10~16:20)

## Catalysts and Catalysis

Chair: NAKADA, Akinobu (16 : 30~17 : 50)

- \* 16:20-16:30: interval for laptop PC connection.(1C1-46, 1C1-47, 1C1-48, 1C1-49, 1C1-50, 1C1-51, 1C1-52, 1C1-53)
- 1C1-46** Water Splitting over Metal Oxide Photocatalysts with an Aurivillius Structure (Fac. Sci., TUS) ○KANEKO, Shinji; IWASE, Akihiko; KUDO, Akihiko
- 1C1-47<sup>#</sup>** Photocatalytic CO<sub>2</sub>reduction using H<sub>2</sub>O as an electron donor over A<sub>2</sub>Zr<sub>2</sub>Ta<sub>8</sub>O<sub>30</sub>(A = Ba, Sr, Ca) with Tungsten Bronze Structure (Fac. Sci., TUS) ○SHRESTHA, Rekha Goswami; IWASE, Akihiko; KUDO, Akihiko
- 1C1-48** Photocatalytic O<sub>2</sub> Evolution over AgNbO<sub>3</sub>-PbTiO<sub>3</sub> Solid-Solution Oxide Photocatalysts under Visible Light Irradiation (Fac. Sci., TUS) ○WATANABE, Kenta; IWASE, Akihiko; KUDO, Akihiko
- 1C1-49** Z-schematic Water Splitting under Visible Light Irradiation Using NaNbO<sub>3</sub>/Rh:A (A = Ca, Sr, Ba, La) as an O<sub>2</sub>-Evolving Photocatalyst (Fac. Sci., TUS) ○TAKAHASHI, Yukihiko; UDAGAWA, Yuhei; IWASE, Akihiko; KUDO, Akihiko
- 1C1-50** Z-schematic CO<sub>2</sub> Reduction Utilizing Water as an Electron Donor Employing Metal Oxide Photocatalysts (Fac. Sci., TUS) ○KASHIMA, Aruto; YOSHINO, Shunya; IWASE, Akihiko; KUDO, Akihiko
- 1C1-51** Decomposition of an Aqueous Ammonia Solution over Ir,La-Codoped BaTa<sub>2</sub>O<sub>6</sub> Photocatalysts under Visible Light Irradiation (Fac. Sci., TUS) ○WANG, Honghui; TSUCHIYA, Taichi; II, Kazutaka; IWASE, Akihiko; KUDO, Akihiko
- 1C1-52** Sacrificial H<sub>2</sub> Evolution under Visible Light Irradiation over Cu<sub>4</sub>TiS<sub>4</sub> of a Novel Metal Sulfide Photocatalyst with d<sup>0</sup> Electron Configuration (Fac. Sci., TUS) ○UCHIDA, Jun; AONO, Naruhiko; IWASE, Akihiko; KUDO, Akihiko
- 1C1-53** Z-Schematic Water Splitting under Visible Light Irradiation Using Cu<sub>3</sub>MS<sub>4</sub> (M = V, Nb) with a Sulvanite Structure as an H<sub>2</sub>-Evolving Photocatalyst (Fac. Sci., TUS) ○NATSUME, Shuhei; UDAGAWA, Yuhei; YOSHINO, Shunya; IWASE, Akihiko; KUDO, Akihiko

Chair: TOMITA, Osamu (18 : 00~18 : 50)

- \* 17:50-18:00: interval for laptop PC connection.(1C1-55, 1C1-56, 1C1-57, 1C1-58, 1C1-59)
- 1C1-55** Effects of the crystalline and surface structures of Ga<sub>2</sub>O<sub>3</sub> on the photocatalytic activity for CO<sub>2</sub> reduction (Grad. Sch. Eng., Osaka City Univ.) ○KAWAGUCHI, Yu; YAMAMOTO, Numeaki; OZAWA, Akiyo; KATO, Yuma; YOSHIDA, Tomoko; TANEBE, Tetsuo
- 1C1-56<sup>#</sup>** Optimization of silver-loaded sodium titanate photocatalyst for the reduction of carbon dioxide with water (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.) ○XING, Zhu; AKIHIKO, Anzai; AKIRA, Yamamoto; HISAO, Yoshida
- 1C1-57** Cation-doped calcium titanate for photocatalytic reduction of carbon dioxide (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.) ○KIYOHORO, Taizo; ANZAI, Akihiko; YAMAMOTO, Akira; YOSHIDA, Hisao
- 1C1-58** Photocatalytic Steam Reforming of Methane on Calcium Titanate doped Lanthanoid (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.) ○ISECHI, Katsunori; FUJIWARA, Kenji; YAMAMOTO, Akira; YOSHIDA, Hisao
- 1C1-59** Pressure dependence of reactivity and selectivity in methane reforming

by gallium oxide photocatalysts under water vapor (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HIGASHI, Taisuke; SUGIMOTO, Toshiki; TAKEYASU, Koutarou; ITO, Yoji; YAMAMOTO, Akira; YOSHIDA, Hisao; WATANABE, Kazuya; MATSUMOTO, Yoshiyasu

### Wednesday, March 21, AM

Chair: YAMAMOTO, Akira (9:00 ~ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(2C1-01, 2C1-02, 2C1-03, 2C1-04, 2C1-05, 2C1-06)
- 2C1-01** Improvement of photocatalyst layers on both electrodes for high open-circuit voltage and high power of solar cell. (Grad. Sch. Sci., Chiba Univ.) ○URUSHIDATE, Kazuki; MATSUZAWA, Shigemitsu; LI, Jifu; KOJIMA, Takashi; IZUMI, Yasuo
- 2C1-02** Overall water splitting by using photoelectrochemical cells consisting of oxide-coated ZnSe:Cu(In,Ga)Se<sub>2</sub> thin film photocathodes without external bias voltage (Grad. Sch. Eng., The Univ. of Tokyo) ○KANEKO, Hiroyuki; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 2C1-03** Development of Efficient Oxyhalide Bi<sub>4</sub>NbO<sub>8</sub>Cl Photoanodes for Water Splitting under Visible Light Irradiation (Sch. Eng., Kyoto Univ.) ○KIMURA, Takuma; HIGASHI, Masanobu; NAKADA, Akinobu; TOMITA, Osamu; ABE, Ryu
- 2C1-04** Semiconductor Properties and Photoelectrochemical Behavior of La<sub>5</sub>Ti<sub>2</sub>CuS<sub>3</sub>O<sub>7</sub> Single Crystallites with a Length of Millimeter Order (Fac. Eng., The Univ. of Tokyo) ○SAKATA, Kazuma; HIGASHI, Tomohiro; IWASE, Motoki; HISATOMI, Takashi; KATAYAMA, Masao; MINEGISHI, Tsutomu; NISHIYAMA, Hiroshi; YAMADA, Taro; WATANABE, Tomoaki; DOMEN, Kazunari
- 2C1-05** Photoelectrochemical Production of Hydrogen Peroxide from Water by Using Bismuth Oxyhalide Photoelectrode under Visible Light (Sch. Eng., Kyoto Univ.) ○ENDO, Noriaki; TOMITA, Osamu; NAKADA, Akinobu; HIGASHI, Masanobu; ABE, Ryu
- 2C1-06** Effect of various cocatalysts loaded on silicon nanowire photoelectrodes for photoelectrochemical CO<sub>2</sub> reduction (Sch. Eng., Osaka Pref. Univ.) ○KOBORI, Naoki; TATIBANA, Mika; MINE, Shinya; MIYAZAKI, Keisuke; HORIUCHI, Yu; MATSUOKA, Masaya

Chair: IWASE, Akihiko (10:10 ~ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(2C1-08, 2C1-09, 2C1-10, 2C1-12)
- 2C1-08** Optimized photoreduction of CO<sub>2</sub> exclusively into methanol utilizing liberated reaction space in layered double hydroxides comprising zinc, copper, and gallium (Grad. Sch. Sci., Chiba Univ.) ○ZHANG, Hongwei; WEIN, Lukas Anton; MIYANO, Masaya; IZUMI, Yasuo
- 2C1-09** Investigation of CO<sub>2</sub> reduction on visible light responsible MOFs (Sch. Eng., Osaka Pref. Univ.) ○KUSUKAWA, Yuka; TATEWAKI, Kenta; MINE, Shinya; HORIUCHI, Yu; MATSUOKA, Masaya
- 2C1-10**<sup>#</sup> Oxygen-Doped Ta<sub>3</sub>N<sub>5</sub> as a Building Block for Z-scheme CO<sub>2</sub> Reduction with a Binuclear Ru(II) Complex Workable under a Wide Range of Visible Light (Sch. Sci., Tokyo Tech.) ○MURAOKA, Kanemichi; JUNIEJHON, Vequizo; YAMAKATA, Akira; ISHITANI, Osamu; MAEDA, Kazuhiko
- 2C1-12**<sup>#</sup> Synthesis and photocatalytic activity of a layered perovskite oxynitride Li<sub>2</sub>LaTa<sub>2</sub>O<sub>6</sub>N (Sch. Sci., Tokyo Tech.) ○OSHIMA, Takayoshi; MURAOKA, Kanemichi; VEQUIZO, Junie Jhon M.; YAMASHITA, Shunsuke; YAMAKATA, Akira; KIMOTO, Koji; ISHITANI, Osamu; MAEDA, Kazuhiko

Chair: KATO, Hideki (11:20 ~ 12:00)

- \* 11:10-11:20: interval for laptop PC connection.(2C1-15, 2C1-17)
- 2C1-15**<sup>#</sup> Accumulation of metal nanoparticles and photosensitizers in a porous protein crystal for photocatalytic hydrogen evolution (Grad. Sch. Eng., Osaka City Univ.; Sch. Life Sci. Tech., Tokyo Tech.) ○TABE, Hiroyasu; TAKAHASHI, Hikaru; ABE, Satoshi; UENO, Takafumi; YAMADA, Yusuke
- 2C1-17**<sup>#</sup> Molecular Mechanism of One-Photon Induced Water Splitting Catalyzed by Aluminum Porphyrin-TiO<sub>2</sub> Hybrid (Cent. Artificial Photosynthesis, TMU) ○MATHEW, Siby; KUTTASSERY, Fazalurahman; YAMAMOTO, Daisuke; TACHIBANA, Hiroshi; INOUE, Haruo

### Wednesday, March 21, PM

Chair: TANAKA, Atsuhiko (13:10 ~ 14:30)

- \* 13:00-13:10: interval for laptop PC connection.(2C1-26, 2C1-28, 2C1-30, 2C1-32)
- 2C1-26**<sup>#</sup> Improvement in photoelectrochemical properties of molecular photocathode for CO<sub>2</sub> reduction by modification with noble metal nanoparticles (Sch. Sci., Tokyo Tech.) ○KUMAGAI, Hiromu; ISHITANI, Osamu
- 2C1-28**<sup>#</sup> Two-step synthesis of layered perovskite oxychlorides to enhance the photocatalytic activity for visible-light-induced water splitting (Grad. Sch. Eng., Kyoto Univ.) ○NAKADA, Akinobu; SAEKI, Akinori; ABE, Ryu
- 2C1-30**<sup>#</sup> Catalytic Effect of Fe-Cr mixed oxide powder for Photochemical and Electrochemical Water Oxidation Reaction (Sch. Sci., Tokyo Tech.) ○KANAZAWA, Tomoki; MAEDA, Kazuhiko
- 2C1-32**<sup>#</sup> Stable photoelectrochemical methylcyclohexane production under

simulated sunlight by a particulate RuO<sub>2</sub>-modified ZnSe:Cu(In,Ga)Se<sub>2</sub> photocathode (Grad. Sch. Eng., The Univ. of Tokyo) ○KAGESHIMA, Yosuke; GOTO, Yosuke; KANEKO, Hiroyuki; MINEGISHI, Tsutomu; DOMEN, Kazunari

Chair: TAKEUCHI, Masato (17:00 ~ 17:30)

- \* 16:50-17:00: interval for laptop PC connection.(2C1-49, 2C1-50, 2C1-51)
- 2C1-49** Ensemble effect of co-catalyst on semi-hydrogenation of alkenes over titanium(IV) oxide photocatalyst (Fac. Sci. Eng., Kindai Univ.) ○IMAI, Shota; NAKANISHI, Kosuke; TANAKA, Atsuhiko; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2C1-50** Evaluation of SrTiO<sub>3</sub>:Rh photocatalyst by irradiation of two lights with different wavelengths (Fac. Sci. Eng., Kindai Univ.) ○HAYAMI, Kazuki; TANAKA, Atsuhiko; HASHIMOTO, Keiji; KOMINAMI, Hiroshi
- 2C1-51**<sup>#</sup> Activity and stability of an Al-doped SrTiO<sub>3</sub> photocatalyst co-loaded with metal oxide species for water splitting (Grad. Sch. Eng., The Univ. of Tokyo) ○HAO, Lyu; TZU HSUAN, Chiang; HISATOMI, Takashi; TSUYOSHI, Takata; MASAO, Katayama; TSUTOMU, Minegishi; KAZUNARI, Domen

## Room C2

Bldg. 6 634

### Catalysts and Catalysis

#### Tuesday, March 20, AM

Chair: ISHIHARA, Atsushi (9:00 ~ 10:00)

- \* 8:50-9:00: interval for laptop PC connection.(1C2-01, 1C2-02, 1C2-03, 1C2-04, 1C2-05)
- 1C2-01** Regioselective Carbon-Carbon Bond Cleavage of Biomass-derived Oxygenates Catalyzed by Ru Nanoparticles Supported on Cerium Oxides (Grad. Sch. Eng. Sci., Osaka Univ.) ○MIZUGAKI, Tomoo; UESUGI, Kohei; NITTA, Kodai; MAENO, Zen; MITSUDOME, Takato; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 1C2-02** Development of a Hybrid Metal Nanoparticle Catalyst for Hydrogenation of Amides under Mild Conditions (Sch. Eng. Sci., Osaka Univ.) ○MITSUDOME, Takato; TAKAHASHI, Kazuhiro; MAENO, Zen; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi
- 1C2-03** Development of PdAg Bimetallic Catalysts for CO<sub>2</sub> Hydrogenation to Formic Acid and the Effect of their Surface Compositions (Grad. Sch. Eng., Osaka Univ.) ○SANO, Taiki; MORI, Kousuke; YAMASHITA, Hiromi
- 1C2-04** Deoxygenation of sulfoxides over reduced MoO<sub>3</sub> catalyst exhibiting surface plasmon resonance effect (Sch. Eng., Osaka Univ.) ○HAEMATSU, Kohei; YAMASHITA, Hiromi; KUWAHARA, Yasutaka
- 1C2-05**<sup>#</sup> Estimation of Hydrogen Coverage in Propylene Hydrogenation over Supported Platinum Catalysts and its Role (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.; Grad. Sch. Sci., Osaka Univ.) ○YAMAMOTO, Akira; TSUCHIYA, Naoki; WATANABE, Taiki; HAYASHI, Akihiko; OKUMURA, Mitsutaka; YOSHIDA, Hisao

Chair: MITSUDOME, Takato (10:10 ~ 11:10)

- \* 10:00-10:10: interval for laptop PC connection.(1C2-08, 1C2-09, 1C2-11, 1C2-12)
- 1C2-08**<sup>#</sup> Support and Particle Size Effect on the Catalytic Activity in Carbon Dioxide Hydrogenation over Supported Platinum Catalysts (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.) ○DAI, Yuqiang; WATANABE, Taiki; YAMAMOTO, Akira; YOSHIDA, Hisao
- 1C2-09**<sup>#</sup> Heterogeneously-catalyzed continuous flow hydrogen production from 2-propanol as a hydrogen storage under microwave irradiation conditions (Gifu Pharm. Univ.) ○ICHIKAWA, Tomohiro; MATSUO, Tomohiro; YOSHIMURA, Takeo; SAWAMA, Yoshinari; MONGUCHI, Yasunari; SAJIKI, Hironao
- 1C2-11** Preparation of Pd-CeO<sub>2</sub> composite catalyst for dehydrogenation of formic acid. (Coll. Sci. Tech., Nihon Univ.) ○YAMAMOTO, Yuki; UMEGAKI, Tetsuo; KOJIMA, Yoshiyuki
- 1C2-12** Fabrication of spherical Ni/BaTiO<sub>3</sub> catalyst for hydrolysis of ammonia borane (Grad. Sch. Sci. Tech., Nihon Univ.) ○HOUSUYUYAMA, Hirohumi; UMEGAKI, Tetsuo; KOJIMA, Yoshiyuki

Chair: MIZUGAKI, Tomoo (11:10 ~ 12:20)

- \* 11:00-11:10: interval for laptop PC connection.(1C2-14, 1C2-15, 1C2-16, 1C2-17, 1C2-18, 1C2-19)
- 1C2-14** Catalytic cracking reactivity of novel zeolite-containing microporous and mesoporous hierarchical catalysts prepared using gel skeletal reinforcement (Grad. Sch. Eng., Mie Univ.) ○ISHIHARA, Atsushi; MORI, Kouki; HASHIMOTO, Tadanori; NASU, Hiroyuki
- 1C2-15** PdCuCr ternary catalyst in the hydrogen production from formic acid as a hydrogen storage material (Sch. Eng., Osaka Univ.) ○NAKA, Kouhei; MORI, Kousuke; YAMASHITA, Hiromi
- 1C2-16** Theoretical study of the influence of zeolite carrier on metal catalyst

(The Univ. of Tokyo) ○NAKAMOTO, Yutaka; USHIYAMA, Hiroshi

**1C2-17** Synthesis of metal or metal oxide nanoparticles encapsulated in a hollow silica sphere by using porous coordination polymer (RCSEC, Osaka Univ.) ○HARADA, Takashi; SHIGEMASU, Shogo; IKEDA, Shigeru; KAMIYA, Kazuhide; NAKANISHI, Shuji**1C2-18** Effect of support surface on palladium nanoparticle-embedded porous diamond spherical particle catalysts and application to flow reaction system (Fac. Sci. Technol., TUS) ○MAMADA, Ayaka; KONDO, Takeshi; AIKAWA, Tatsuo; YUASA, Makoto**1C2-19<sup>#</sup>** Pt Nanocrystals Covered with Metal-organic Framework for CO Oxidation Catalysis (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KOBAYASHI, Hirokazu; YAMAMOTO, Tomokazu; MATSUMURA, Syo; YOSHIHIDE, Nishida; SATO, Katsutoshi; NAGAOKA, Katsutoshi; KITAGAWA, Hiroshi

## Tuesday, March 20, PM

Chair: MORI, Kohsuke (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(1C2-28, 1C2-30, 1C2-32)

**1C2-28<sup>#</sup>** Pt nanobeads and Octahedral Pt<sub>3</sub>Ni Nanoparticles on Carbon Micro-Coil with Efficient and Durable Oxygen Reduction Electro-catalysis (Innovation Res. Ctr. for Fuel Cells, The Univ. of Electro-Communications) ○ZHAO, Xiao; GUNJI, Takao; TAKAO, Shinobu; KANEKO, Takuma; HIGASHI, Kotaro; SAKATA, Tomohiro; YOSHIDA, Yusuke; SAMJESKÉ, Gabor; URUGA, Tomoya; IWASAWA, Yasuhiro**1C2-30<sup>#</sup>** Relevance of relationship between electrochemical CV and in situ real-time XAFS to the ORR performance and degradation of a Pt/C cathode catalyst in PEFC (The Univ. of Electro-Communications; JASRI/Spring-8) ○SAMJESKÉ, Gabor; HIGASHI, Kotaro; TAKAO, Shinobu; KANEKO, Takuma; YOSHIDA, Yusuke; SAKATA, Tomohiro; SEKIZAWA, Oki; URUGA, Tomoya; IWASAWA, Yasuhiro**1C2-32<sup>#</sup>** Development of Novel Layered Nanocomposites coated by TiO<sub>2</sub> Nanoclusters and its Applications to Catalysis (Innovation Res. Ctr. for Fuel Cells, The Univ. of Electro-Communications) ○YOSHIDA, Yusuke; GUNJI, Takao; SAMJESKE, Gabor; KANEKO, Takuma; TAKAO, Shinobu; HIGASHI, Kotaro; SAKATA, Tomohiro; URUGA, Tomoya; IWASAWA, Yasuhiro

Chair: YAMAGUCHI, Kazuya (14 : 40~15 : 20)

\* 14:30-14:40: interval for laptop PC connection.(1C2-35, 1C2-37)

**1C2-35<sup>#</sup>** Investigation of Highly Active Pd Species for Methane Combustion Using In situ XAFS Spectroscopy (Grad. Sch. Eng., Nagoya Univ.) ○OHYAMA, Junya; MAHARA, Yuji; MURATA, Kazumasa; SATSUMA, Atsushi**1C2-37<sup>#</sup>** Three-way catalysis over self-regenerating Ni-Cu alloy catalysts (Grad. Sch. Eng., Kyoto Univ.) ○ASAKURA, Hiroyuki; HOSOKAWA, Saburo; ONUKI, Testuo; TERAMURA, Kentaro; TANAKA, Tsunehiro

Chair: OHYAMA, Junya (15 : 30~16 : 40)

\* 15:20-15:30: interval for laptop PC connection.(1C2-40, 1C2-41, 1C2-43, 1C2-45, 1C2-46)

**1C2-40** Electrochemical synthesis of pyruvic acid from lactic acid (Fac. Sci., Kyushu Univ.) ○MORIMOTO, Tatsuyoshi; YAMAUCHI, Miho**1C2-41<sup>#</sup>** Factors controlling Two-electron water oxidation catalyzed by aluminum porphyrins (Cent.Artificial Photosynthesis, TMU) ○KUTTASSERY, Fazalurahman; MATHEW, Siby; TACHIBANA, Hiroshi; INOUE, Haruo**1C2-43<sup>#</sup>** Fundamental science of low-temperature methane oxidative coupling by catalytic reaction with electric field (Sch. Advanced Sci. Eng., Waseda Univ.; PRESTO, JST; GREEN, NIMS) ○OGO, Shuhei; SATO, Ayaka; MURAKAMI, Kota; NAKATSUBO, Hideaki; IWASAKI, Kousei; YABE, Tomohiro; ISHIKAWA, Atsushi; NAKAI, Hiromi; SEKINE, Yasushi**1C2-45** Development of Highly Active Lanthana Catalysts for OCM (Oxidative Coupling of Methane) by Caesium Sulfate Modification (Fac. Eng., Saitama Inst. of Tech.) AKUTSU, Masaru; TAKISE, Tomoya; ○ARITANI, Hirofumi**1C2-46<sup>#</sup>** Visible-Light-Induced Aerobic Oxidation of Sulfides by a Phosphovanadotungstate (Grad. Sch. Eng., The Univ. of Tokyo) ○LI, Chifeng; SUZUKI, Kosuke; YAMAGUCHI, Kazuya; MIZUNO, Noritaka

Chair: TANABE, Makoto (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(1C2-48, 1C2-49, 1C2-50, 1C2-51)

**1C2-48** Selective Monoarylation of Ammonia over Supported Gold-Palladium Nanoparticles (Grad. Sch. Eng., The Univ. of Tokyo) ○KOIZUMI, Yu; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**1C2-49** Acceptorless Dehydrogenation of Piperidines over Supported Pd Nanoparticles Catalysts (The Univ. of Tokyo) ○OOYAMA, Takashi; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**1C2-50** Aerobic Oxidative Dehydrogenation of Saturated Aldehydes and Ketones over Supported Au-Pd Nanoparticle Catalysts (Grad. Sch. Eng., The Univ. of Tokyo) ○TAKEI, Daisuke; YATABE, Takafumi; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**1C2-51<sup>#</sup>** Unprecedented Catalytic Aurore Synthesis Enabled by Design of a Pd-on-Au Bimetallic Nanoparticle Catalyst Supported on CeO<sub>2</sub> (Grad. Sch. Eng., The Univ. of Tokyo) ○YATABE, Takafumi; JIN, Xiongjie;

YAMAGUCHI, Kazuya; MIZUNO, Noritaka

Chair: KAMATA, Keigo (17 : 50~18 : 20)

\* 17:40-17:50: interval for laptop PC connection.(1C2-54, 1C2-55, 1C2-56)

**1C2-54** Catalytic oxidation reactions for cycloalkenes using metal subnanoclusters (Lab. Chem. Life Sci., Tokyo Tech.) ○MATSURA, Kodai; KITAZAWA, Hirokazu; TANABE, Makoto; YAMAMOTO, Kimihisa**1C2-55** Dehydrogenative Borylation of Styrenes by Supported Copper Catalysts (Grad. Sch. Eng., The Univ. of Tokyo) ○YOSHII, Daichi; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka**1C2-56** Synthesis of  $\alpha$ -Keto Carbonyl Compounds from Vicinal Diols Using a Cu/N-oxyl Catalytic Aerobic Oxidation System (Grad. Sch. Eng., The Univ. of Tokyo) ○WACHI, Keiju; KATAOKA, Kengo; JIN, Xiongjie; YAMAGUCHI, Kazuya; MIZUNO, Noritaka

## Wednesday, March 21, AM

Chair: OGO, Shuhei (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2C2-01, 2C2-03, 2C2-04, 2C2-05, 2C2-06)

**2C2-01<sup>#</sup>** Size-dependent composition and CO oxidation activity of size-controlled tin oxide clusters synthesized by using dendrimers (Lab. Chem. Life Sci., Tokyo Tech.; JST-ERATO) ○INOMATA, Yusuke; ALBRECHT, Ken; YAMAMOTO, Kimihisa**2C2-03** Method of producing sulfonated graphene and its catalytic activity (Fac. of Eng., Okayama Univ.) ○HORI, Yuki; NISHINA, Yuta**2C2-04** The correlation between activity for intramolecular-cyclization of 2,5-hexanedione and acid properties of solid catalysts (Sch. Mat. Sci., JAIST) ○OHMATSU, Shintaro; NISHIMURA, Shun; EBITANI, Kohki**2C2-05** Relationship between hydroxymethylation of furfural and acid properties (Sch. Mat. Sci., JAIST) ○SHIBATA, Atsuki; NISHIMURA, Shun; EBITANI, Kohki**2C2-06** Synthesis of sulfonated carbon based solid acid catalyst containing chlorine by solution plasma and its application to hydrolysis of cellulose (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○IKURA, Ryuhei; ISHIZAKI, Takahiro

## Room C3

Bldg. 6 635

## Catalysts and Catalysis

## Tuesday, March 20, AM

Chair: ASAKURA, Hiroyuki (10 : 00~11 : 10)

\* 9:50-10:00: interval for laptop PC connection.(1C3-07, 1C3-09, 1C3-11, 1C3-12)

**1C3-07<sup>#</sup>** A Versatile Heterogeneous Pd Nanocluster Catalyst for Bond Transformation under Mild Condition (Inst. Bio. Sci., Tokushima Univ. Grad. Sch.) ○KARANJIT, Sangita; KASHIHARA, Masaya; NAKAYAMA, Atsushi; NANBA, Kosuke**1C3-09<sup>#</sup>** 3D-visualization of distribution and redox property of a PEFC Pt/C cathode catalyst during degradation process by imaging XAFS (RCMS, Nagoya Univ.) ○MAEJIMA, Naoyuki; MATSUI, Hirotsugu; ISHIGURO, Nozomu; TAN, Yuanyuan; URUGA, Tomoya; SAKATA, Tomohiro; HIGASHI, Kotaro; SEKIZAWA, Oki; TADA, Mizuki**1C3-11** DFT study on surface oxidation of NiO / Au core shell catalyst (Grad. Sch. Sci., Osaka Univ.) ○HAYASHIA, Akihide; ATO, Yoshinori; TADA, Kohei; KOGA, Hiroaki; KAWAKAMI, Takashi; YAMANAKA, Shusuke; OKUMURA, Mitsutaka**1C3-12<sup>#</sup>** Pt-nanoparticles supported on SnO<sub>2</sub>(110): structural, electronic, and chemical properties (Grad. Sch. Eng., Kyushu Univ.) ○RIVERA, David; ISHIMOTO, Takayoshi; KOYAMA, Michihisa

Chair: OKUMURA, Mitsutaka (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1C3-15, 1C3-17, 1C3-18, 1C3-19)

**1C3-15<sup>#</sup>** Hard X-ray emission spectrometers for *in situ* observations of adsorbed chemical species on a Pt/C cathode catalyst in polymer electrolyte fuel cells (Innovation Res. Ctr. for Fuel Cells, The Univ. of Electro-Communications) ○SAKATA, Tomohiro; SEKIZAWA, Oki; URUGA, Tomoya; HIGASHI, Kotaro; KANEKO, Takuma; ASAKURA, Kiyotaka; IWASAWA, Yasuhiro**1C3-17** Catalyst informatics on methane activation on binary alloys (IMCE, Kyushu Univ.) ○SAITO, Masashi; KAMACHI, Takashi; TSUJI, Yuta; YOSHIZAWA, Kazunari**1C3-18** Infrared spectroscopy investigation of the adsorption and desorption behavior of hydrogen over supported platinum catalysts (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; ESICB, Kyoto Univ.) ○TSUCHIYA, Naoki; YAMAMOTO, Akira; YOSHIDA, Hisao**1C3-19<sup>#</sup>** Semi-infinite Surface Green's Function and Effective Electronic

Hamiltonian for its Adsorbed Molecule (Grad. Sch. Eng., Kyoto Univ.)  
 OOTA, Wataru; SATO, Tohru

Tuesday, March 20, PM

Chair: SASAKI, Takehiko (13 : 30~14 : 40)

- \* 13:20-13:30: interval for laptop PC connection.(1C3-28, 1C3-29, 1C3-31, 1C3-32, 1C3-34)
- 1C3-28** Investigation of CO-NO reaction mechanism on Rhodium nanoparticle for automotive catalyst. (Technical research center, Mazda Motor Corporation) ○MATSUMURA, Yasuhiro; KODA, Yuki; YAMADA, Hiroshi; SHIGETSU, Masahiko; KUBOTA, Hiroshi; ISHIMOTO, Takayoshi; KAI, Hiroyuki
- 1C3-29**\* Titanium-based hydrides as catalytic materials for ammonia synthesis (Grad. Sch. Eng., Kyoto Univ.) ○KOBAYASHI, Yoji; MASUDA, Naoya; TANG, Ya; KAGEYAMA, Toki; UCHIDA, Yoshinori; YAMASHITA, Hiroki; KAGEYAMA, Hiroshi
- 1C3-31** Structural analysis of silica-immobilized Pd complex by variable-temperature XAFS and its catalytic performance for Suzuki-Miyaura coupling reaction (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○FUKUDA, Takuma; MOTOKURA, Ken; UEMURA, Yohei; MATSUMURA, Daiju; IKEDA, Marika; NAMBO, Masayuki; CHUN, Wang-jae
- 1C3-32**\* Preparation, Redox Performances, and Catalytic Oxidation Performances of Ceria-based Mixed Oxides Co-doped with the First and Second Series Transition Metals (Grad. Sch. Sci., Nagoya Univ.; PRESTO, JST; RCMS, Nagoya Univ.) ○MURATSUGU, Satoshi; HUANG, Xiubing; NAGASE, Shoko; YOKOTA, Genichi; IKEMOTO, Satoru; MATSUI, Hirosuke; TADA, Mizuki
- 1C3-34** Effect of irradiation temperature on oxygen reduction activity of nitrogen-doped carbon-based catalyst (Grad. Sch. Sci. Tech., Gunma Univ.) ○KANUMA, Yuki; SUGIMOTO, Masaki; IDESAKI, Akira; YAMAMOTO, Syunya; KOSHIKAWA, Hiroshi; YAMAKI, Tetsuya

Chair: MURATSUGU, Satoshi (14 : 50~16 : 00)

- \* 14:40-14:50: interval for laptop PC connection.(1C3-36, 1C3-38, 1C3-39, 1C3-40, 1C3-41)
- 1C3-36**\* Iso-Selective Hydroformylation of Non-Activated Alkenes Using a N-Triphos/Rh Catalyst (Grad. Sch. Eng., The Univ. of Tokyo) ○PHANOPOULOS, Andreas; NOZAKI, Kyoko
- 1C3-38**\* Oxygenation of Phenylboronic Acid in Alcoholic Solvent Catalyzed by Colloidal Nanogold (Grad. Sch. Eng., Osaka Univ.) ○VINSEN, Vinsen; SAKURAI, Hidehiro
- 1C3-39** Catalytic oxidation of hydrocarbon catalyzed by copper sub nano cluster (Lab. Chem. Life Sci., Tokyo Tech.) ○SONOBE, Kazutaka; TANABE, Makoto; YAMAMOTO, Kimihsa
- 1C3-40**\* Immobilized metal nanoparticles containing ionic liquids on SBA-15 as active catalysts in organic synthesis (Grad. Sch. Sci., The Univ. of Tokyo) ○KUSUMAWATI, ETTY Nurlia; SASAKI, Takehiko
- 1C3-41**\* CO<sub>2</sub> Reduction Selectivity on Cu Cathode Tuned by the on-surface CuAAC Modification (Grad. Sch. Sci., Hiroshima Univ.) ○KUME, Shoko; TAKEUCHI, Ryuji

Wednesday, March 21, AM

Chair: MAENO, Zen (9 : 30 ~ 10 : 10)

- \* 9:20-9:30: interval for laptop PC connection.(2C3-04, 2C3-05, 2C3-06, 2C3-07)
- 2C3-04** Concerted Catalysis by Supported Pd Complex and Silanol Group for Allylation Reactions of Nucleophiles with Allylic Alcohols (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○IKEDA, Marika; MOTOKURA, Ken; NAMBO, Masayuki; CHUN, Wang-jae; NAKAJIMA, Kiyotaka; TANAKA, Shinji
- 2C3-05** Co-immobilization procedure of Rh complex and tertiary amine on same SiO<sub>2</sub> surface for highly efficient hydrosilylation of olefins (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○MAEDA, Kyogo; MOTOKURA, Ken; UEMURA, Yohei; MATSUMURA, Daiju; CHUN, Wang-jae
- 2C3-06** Oxidative coupling of alkenes with arylboronic acids catalyzed by PS-Rh(III)NPs in Water (Fac. Eng., OIT) OHTAKA, Atsushi; ○FUKUI, Shiho; SAKON, Akira; SHIMOMURA, Osamu; NOMURA, Ryoki
- 2C3-07** Preparation and Catalytic Activity of Poly(tetrafluoroethylene)-Stabilized Metal Nanoparticles (OIT) OHTAKA, Atsushi; ○KAWASE, Misa; SAKON, Akira; SHIMOMURA, Osamu; NOMURA, Ryoki
- Chair: MOTOKURA, Ken (10 : 20~11 : 00)
- \* 10:10-10:20: interval for laptop PC connection.(2C3-09, 2C3-10, 2C3-11, 2C3-12)
- 2C3-09**\* Single-Molecule Fluorescence Microscopy Imaging of Ruthenium-Catalyzed Polymerization Reaction (UC Irvine; Grad. Sch. Pharm. Sci., Tohoku Univ.) ○SAITO, Nozomi; BLUM, Suzanne A.
- 2C3-10** Oxidative cross coupling reaction of catechols with active methylene compounds using supported metal catalysts (Grad. Sch. Eng. Sci., Osaka Univ.) ○YAMAMOTO, Masanobu; MAENO, Zen; MITSUDOME, Takato; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro
- 2C3-11** Selective N-formylation of Amines Using CO<sub>2</sub> as a Carbonyl Source Catalyzed by a Titanium Dioxide-Supported Gold Nanoparticle Catalyst

(Grad. Sch. Eng. Sci., Osaka Univ.) ○FUJITA, Shu; MITSUDOME, Takato; MAENO, Zen; MIZUGAKI, Tomoo; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

- 2C3-12** Regioselective Carbon-Carbon Bond Cleavage of Primary Alcohols Using Pd/CeO<sub>2</sub> Catalyst (Grad. Sch. Eng. Sci., Osaka Univ.) ○UESUGI, Kohei; MIZUGAKI, Tomoo; MAENO, Zen; MITSUDOME, Takato; JITSUKAWA, Koichiro; KANEDA, Kiyotomi

Chair: KUMAGAI, Hiromu (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(2C3-14, 2C3-15, 2C3-16, 2C3-17)
- 2C3-14** Photocatalytic characterization of TiO<sub>2</sub> nano-tile prepared by calcination of alkylamine-titanium complex hybrid LB film (Fac. Textile Sci. Technol., Shinshu Univ.) ○USAMI, Hisanao; SUGA, Ryosuke
- 2C3-15** Development of porphyrin dye nanoparticle-coated membranes for singlet oxygen generation under LED illumination (Grad. Sch. Eng., Nagaoka Univ. of Tech.) ○IKEDA, Makoto; TAKAHASHI, Yukiko
- 2C3-16** Investigation of metallic co-catalysts for efficient photocatalytic hydrogen peroxide production by oxygen reduction (Fac. Env. Urban Eng., Kansai Univ.) ○FUJIMOTO, Daiki; FUKU, Kojiro; IKENAGA, Naoki
- 2C3-17**\* Fabrication of TiO<sub>2</sub>-impregnated Porous Silica Glass Tubes and the Possibility to an Environmental Purification (KISTEC) ○HAYASHI, Mio; OCHIAI, Tsuyoshi; TAGO, Shoko; TAWARAYAMA, Hiromasa; HOSOYA, Toshifumi; FUJISHIMA, Akira; YAHAGI, Tsukaho

Room D1

Bldg. 9 931

Natural Products Chemistry

Tuesday, March 20, AM

Chair: ANDO, Yoshio (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1D1-08, 1D1-09, 1D1-10, 1D1-11, 1D1-12, 1D1-13)
- 1D1-08** Total synthesis of Mesimakobnol A, a cytotoxic polyphenol (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○MITSUGI, Keisuke; HIGUMA, Tatsuya; ICHIMURA, Humitaka; OHYOSHI, Takayuki; KIGOSHI, Hideo
- 1D1-09** Studies toward Total Synthesis of Kehokorin E, a Dibenzofuran Natural Product (Akita Univ., Grad. Sch. of Eng. Sci.) ○SATO, Daisuke; KONDO, Yoshihiko; AKIBA, Uichi; FUJIWARA, Kenshu
- 1D1-10** Studies toward Total Synthesis of Kehokorin A, a Dibenzofuran Glycoside (Akita Univ. Grad. Sch. of Eng. Sci.) FUJIWARA, Kenshu; ○MOTOUSU, Ryosuke; SATO, Daisuke; KONDO, Yoshihiko; AKIBA, Uichi
- 1D1-11** Studies toward Total Synthesis of Selaginellin A, isolated from *Selaginella tamariscina* (Akita Univ. Grad. Sch. of Eng. Sci.) FUJIWARA, Kenshu; ○ITAGAKI, Takaya; KONDO, Yoshihiko; AKIBA, Uichi
- 1D1-12** Synthesis of new ellagitannin possessing a 1,2-O-hexahydroxydiphenyl bridge on D-glucose (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○IKEUCHI, Kazutada; YAMADA, Hidetoshi
- 1D1-13** Syntheses of Monomeric Ellagitannins which are Components of Tetrameric Ellagitannin, Nobotanin K (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○HASHIMOTO, Hajime; IKEUCHI, Kazutada; WAKAMORI, Shinnosuke; YAMADA, Hideyoshi

Chair: FUJIWARA, Kenshu (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(1D1-15, 1D1-16, 1D1-17)
- 1D1-15** Synthetic Studies of 5-Epi-6-epi-pseudomajucinone and Its Derivatives Possessing the Trifused Carbocyclic System Using the Intramolecular Michael Addition Reaction (Fac. Sci., TUS) MURATA, Takatsugu; ○YONEKURA, Keita; ITO, Keiichi; TATEYAMA, Satoru; TOYOYAMA, Kiyotaka; SHIINA, Isamu
- 1D1-16** Synthetic Studies on Illisimonin A Using Reductive Intramolecular Coupling Reaction (Fac. Sci., TUS) MURATA, Takatsugu; YONEKURA, Keita; ○ITO, Keiichi; TOYOYAMA, Kiyotaka; TATEYAMA, Satoru; SHIINA, Isamu
- 1D1-17** Young Scholar Lectures of CSJ Studies on the Total Syntheses of Polyketide-derived Polycyclic Natural Products Using Isoxazole Building Blocks (Grad. Sch. Pharm. Sci., Kyoto Univ.) ○TAKIKAWA, Hiroshi

Wednesday, March 21, AM

Chair: ISHIWATA, Akihiro (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2D1-01, 2D1-02, 2D1-03, 2D1-04, 2D1-05)
- 2D1-01** Synthetic study of trimannosides having different linkage towards specificity analysis of α-1, 2 mannosidases (Fac. Sci. and Technol., Seikei Univ.) ○NITTA, Kyohei; KURIBARA, Taiki; TOTANI, Kiichiro



- 2D1-02** Systematic Synthesis of Mannosylerythritol Lipids (MELs) and Their Effects on Vesicle Formation (Fac. Sci. Tech., Keio Univ.) ○NASHIDA, Junki; NISHI, Nobuya; BANNO, Taisuke; ASAKURA, Kouichi; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 2D1-03**  $\beta$ -Stereolective Rhamnosylation Using Glycosyl-Acceptor-Derived Borinic Ester (Fac. Sci. Tech., Keio Univ.) ○SUEOKA, Kazuhiro; NISHI, Nobuya; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu
- 2D1-04** Syntheses of multi-antennary *N*-glycans containing polyactosaminyl chain using enzymatic sugar elongation (Grad. Sch. Sci., Osaka Univ.) ○OKAMURA, Soichiro; MANABE, Yoshiyuki; SHOMURA, Hiroki; WU, Hsin-ru; LIN, Chun-cheng; FUKASE, Koichi
- 2D1-05\*\*** Chemical synthesis and immune function of *Campylobacter jejuni* lipid A (Grad. Sch. Sci., Osaka Univ.) ○NAKAGAWA, Sho; SHIMOYAMA, Atsushi; FUKASE, Koichi

Chair: TOTANI, Kiichiro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2D1-08, 2D1-09, 2D1-10, 2D1-11, 2D1-12)
- 2D1-08** Synthetic study of  $\alpha$ (2,8)polysialic acid (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KOINUMA, Ryosuke; AOYAGI, Taku; TANAKA, Hiroshi
- 2D1-09** Synthetic study of (2,9) oligosialic acid by using *N*-acetyl 5*N*,4*O*-carbonyl protected sialyl donors (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SHIMIZU, Hayato; KOINUMA, Ryosuke; TANAKA, Hiroshi
- 2D1-10** Synthesis and structural analysis of  $\beta$ -1,5-linked  $L$ -arabinofuranotrioxylated structures from *Dinoflagellate* (RIKEN) ○ISHIWATA, Akihiro; ITO, Yukishige
- 2D1-11** Total synthesis of TMG chitotriomycin analogs using a disaccharide building block (Grad. Sch. Eng., Tottori Univ.) ○SHUJI, Takahashi; KEI, Kitamura; TATUYA, Fujiki; YUTA, Isoda; TOSHIKI, Nokami; TOSHIYUKI, Itoh
- 2D1-12\*\*** Automated Electrochemical Assembly of Oligoglucosides with  $\beta$ -glycosidic linkages (Grad. Sch. Eng., Tottori Univ.) ○MANMODE, Sujit; KATO, Moeko; NOKAMI, Toshiaki; ITOH, Toshiyuki

### Wednesday, March 21, PM

Chair: KUDO, Fumitaka (15 : 00~15 : 50)

- \* 14:50-15:00: interval for laptop PC connection.(2D1-37, 2D1-38, 2D1-39, 2D1-40, 2D1-41)
- 2D1-37** Total Synthesis of Natural Lignan Lactones Utilizing Regiocontrolled Benzannulation: Phyllamyricin A and Chaihunaphthone (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○SASAKI, Ryosuke; TANABE, Yoo
- 2D1-38** Total synthesis of the proposed structure of Grandiuvarin B (Pharm. and Applied Life Sci., NUPALS) KOJIMA, Masaru; ○SASAGAWA, Miwa; TUKANO, Tukasaka; NAKAMURA, Yutaka
- 2D1-39** Functional analysis of the biosynthetic genes for cyclohelminthols (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; Fac. Agric. and Life Sci., Hirosaki Univ.) ○UGAI, Takahiro; MINAMI, Atsushi; TANAKA, Shizuya; OZAKI, Taro; LIU, Chengwei; HASHIMOTO, Masaru; OIKAWA, Hideaki
- 2D1-40** Biosynthetic study of anthraquinone dimer natural product isolated from filamentous fungi (Grad. Sch. Sci., Hokkaido Univ.; Grad. Sch. Agricultural and Life Sci., The Univ. of Tokyo) ○FUKAYA, Mitusnoru; MINAMI, Atsushi; OZAKI, Taro; LIU, Chengwei; MARUYAMA, Jun-ichi; OIKAWA, Hideaki
- 2D1-41** Heterologous production of fungal natural products by using genome editing technology CRISPR/Cas9 (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Sch. Sci., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; Sch. Pharm., Iwate Med. Univ.; Grad. Sch. Agricultural and Life Sci., The Univ. of Tokyo) ○SATO, Yuya; TAKINO, Junya; SHIINA, Tetsuya; UGAI, Takahiro; MINAMI, Atsushi; OZAKI, Taro; LIU, Chengwei; FUJII, Isao; MARUYAMA, Jun-ichi; OIKAWA, Hideaki

Chair: OGURI, Hiroki (16 : 00~16 : 50)

- \* 15:50-16:00: interval for laptop PC connection.(2D1-43, 2D1-44, 2D1-45, 2D1-46, 2D1-47)
- 2D1-43** Heterologous production of the diterpenes specifically produced during the infection of *Pseudocercospora fijiensis*. (Sch. Sci., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; Grad. Sch. Eng., Hokkaido Univ.) ○TAZAWA, Akihiro; YE, Ying; OZAKI, Taro; LIU, Chengwei; MINAMI, Atsushi; OGASAWARA, Yasushi; DAIRI, Toru; OIKAWA, Hideaki
- 2D1-44** Genome mining of sesquiterpenoid by artificial reconstitution of the biosynthetic machinery (Sch. Sci., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; RIKEN CSRS) ○TAKINO, Junya; MINAMI, Atsushi; OZAKI, Taro; LIU, Chengwei; SHIRASU, Ken; OIKAWA, Hideaki
- 2D1-45** Identification of conidiogenone biosynthetic genes by genome mining approach (Sch. Sci., Hokkaido Univ.; Grad. Sch. Sci., Hokkaido Univ.; RIKEN CSRS) ○SHIINA, Tetsuya; OZAKI, Taro; LIU, Chengwei; KOSHINO, Hiroyuki; MINAMI, Atsushi; OIKAWA, Hideaki
- 2D1-46** Substrate specificity of ATP dependent ligase HitB in macrolactam antibiotic hitachimycin biosynthesis (Sch. Sci., Tokyo Tech.) ○NAKAZAWA, Yuichiro; MIYANAGA, Akimasa; KUDO, Fumitaka; EGUCHI, Tadashi
- 2D1-47** Investigation of cross-linking reaction between acyl transferase and

acyl carrier protein in polyketide biosynthesis (Sch. Sci., Tokyo Tech.) ○OUCHI, Risako; ISHIKAWA, Fumihiko; GOTO, Ena; KIMURA, Maki; MIYANAGA, Akimasa; TANABE, Genzoh; KUDO, Fumitaka; EGUCHI, Tadashi

Chair: MINAMI, Atsushi (17 : 00~17 : 40)

- \* 16:50-17:00: interval for laptop PC connection.(2D1-49, 2D1-50, 2D1-51, 2D1-52)
- 2D1-49** Functional analysis of the enzymes responsible for the formation of the kanosamine moiety in the kanamycin biosynthesis (Sch. Sci., Tokyo Tech.) ○KITAYAMA, Yukinobu; HIRAYAMA, Akane; MIYANAGA, Akimasa; KUDO, Fumitaka; EGUCHI, Tadashi
- 2D1-50** Stereochemistry of the five-membered cyclitol formation in the biosynthesis of carbocyclic nucleoside antibiotic aristeromycin. (Sch. Sci., Tokyo Tech.) ○YAMAGUCHI, Kaito; TSUNODA, Takeshi; MIYANAGA, Akimasa; KUDO, Fumitaka; EGUCHI, Tadashi
- 2D1-51** Searching for Cytotoxic Compounds from Marine Sponge (Grad. Sch. Sci., Eng., Ehime Univ.; ADRES, Ehime Univ.) ○DAIDO, Naoki; KURAMOTO, Makoto; MORI, Shigeki; UNO, Hidemitsu
- 2D1-52** Determination of relative and absolute configuration in oxidation products of beer' bitter compounds by crystalline sponge method (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST; Kirin Co. Ltd.; Rigaku Corp.) ○TANIGUCHI, Yoshimasa; KIKUCHI, Takashi; FUJITA, Makoto

### Thursday, March 22, AM

Chair: TSUCHIKAWA, Hiroshi (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3D1-01, 3D1-02, 3D1-03, 3D1-04, 3D1-05, 3D1-06)
- 3D1-01** Synthetic Studies of Oxazoline-Tetrahydrofuran Moiety of Leupyrrin A<sub>1</sub> (Fac. Sci. Tech., Keio Univ.) ○TAKEDA, Kazutaka; MAEDA, Chihiro; TAKAYAMA, Tomoko; JIKAN, Tetsuhiko; TEI, Jinpei; SAIKAWA, Youko; NAKATA, Masaya
- 3D1-02** Synthetic study on a cremoxanthone A, a natural product with anthraquinone-xanthone composite structure (Sch. Sci., Tokyo Tech.) ○NAKAKOHARA, Hiroshi; HIRANO, Yoichi; TAKIKAWA, Hiroshi; SUZUKI, Keisuke
- 3D1-03** Synthetic Study on Antitumor Antibiotic Saptomycin H (Sch. Sci., Tokyo Tech.) ○SHIMURA, Jun; ANDO, Yoshio; SUZUKI, Keisuke
- 3D1-04** Synthetic study on accumulated doubly-linked flavan oligomers (Sch. Sci., Tokyo Tech.) ○TAKEDA, Rikako; SEKO, Yusuke; OHMORI, Ken; SUZUKI, Keisuke
- 3D1-05** Synthesis of PM181110 Lactam Part Using the Asymmetric Aldol Reaction and the MNBA-mediated Macrolactamization (Fac. Sci., TUS) TONOI, Takayuki; ○SATO, Teruyuki; SHIINA, Isamu
- 3D1-06** Synthesis of FE399 Lactam Part Using the MNBA-mediated Macrolactamization (Fac. Sci., TUS) TONOI, Takayuki; SATO, Teruyuki; YOSHIDA, Tomoki; ○IKEDA, Miyuki; YUMURA, Ayumi; SHIMONAKA, Motoyuki; SHIINA, Isamu

Chair: TONOI, Takayuki (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3D1-08, 3D1-09, 3D1-10, 3D1-11, 3D1-12, 3D1-13)
- 3D1-08** Synthesis of C15-C27 Segment of Venturicidin C (Sch. Adv. Eng., Kogakuin Univ.) ○OZAWA, Masahiro; YASUI, Eiko; NAGUMO, Shinji
- 3D1-09** Stereoselective Synthesis of the C19-C36 Segment of Arenicolides A (Fac. Eng., Kogakuin Univ.) ○KAMIYU, Youhei; IWATA, Hiromasa; YASUI, Eiko; NAGUMO, Shinji
- 3D1-10** Synthetic Study of Enigmazole A (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MEISSNER, Andreas; KISHI, Takayuki; FUJISAWA, Yuka; MURAI, Yuto; TAKAMURA, Hiroyoshi; KADOTA, Isao
- 3D1-11** Studies toward the total synthesis of enigmazole A (Grad. Sch. Life Sci., Tohoku Univ.; Fac. Sci. Eng., Chuo Univ.) ○SAKURAI, Keisuke; SASAKI, Makoto; FUWA, Haruhiko
- 3D1-12** Synthetic study of Lobatamides (Fac. Sci. Tech., Keio Univ.) ○NAGASHIMA, Yoshiyuki; NAKASUJI, Eiko; HAYASHI, Kana; SATO, Takaaki; CHIDA, Noritaka
- 3D1-13** Synthetic study of scytophycins (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○MIYAZAKI, Yuto; NAMIKI, Mayu; OHYOSHI, Takayuki; KIGOSHI, Hideo

Chair: SATO, Takaaki (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3D1-15, 3D1-17, 3D1-19)
- 3D1-15\*\*** Studies toward the Total Synthesis of Goniodomin A (Grad. Sch. Life Sci., Tohoku Univ.) ○KAWASHIMA, Yuki; MIYOSHI, Taro; IWASAKI, Kotaro; FUWA, Haruhiko; SASAKI, Makoto
- 3D1-17\*\*** Total synthesis and stereochemical revision of iriomoteolide-2a (Grad. Sch. Life Sci., Tohoku Univ.; Fac. Sci. Eng., Chuo Univ.) ○SAKAMOTO, Keita; FUWA, Haruhiko
- 3D1-19\*\*** Total Synthesis and Biological Evaluations of Biselyngbyasides (Fac. Sci. Tech., Keio Univ.) ○SATO, Eisuke; SATO, Miho; TABANE, Yurika; NAKAJIMA, Naoya; OHKUBO, Akifumi; IWATSUKI, Masato; OGAWA, Haruo; TOYOSHIMA, Chikashi; MORITA, Maho; IWASAKI, Arihiro; SUENAGA, Kiyotake

## Thursday, March 22, PM

Chair: TAKAMURA, Hiroyoshi (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3D1-28, 3D1-29, 3D1-31, 3D1-32, 3D1-33)

**3D1-28** Synthetic studies toward  $\beta$ -naphthocyclinone (1): model synthesis of the bicyclic skeleton (Sch. Sci., Tokyo Tech.) ○NAKAZAWA, Yusuke; MATURI, Mark Marcello; FUKAZAWA, Takumi; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke**3D1-29\*\*** Synthetic studies toward  $\beta$ -naphthocyclinone (2): morphing a protecting group into a functional group (Sch. Sci., Tokyo Tech.) ○MATURI, Mark Marcello; NAKAZAWA, Yusuke; FUKAZAWA, Takumi; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke**3D1-31** Synthetic studies studies on pyranonaphthalene derivative via Claisen rearrangement accompanied by dearomatization of pyranonaphthalene skeleton (Sch. Sci., Tokyo Tech.) ○ISHIMARU, Takuimi; MARK, Maturi; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke**3D1-32** Sequential Redox Reaction: Total Synthesis of Spiroxin A (Sch. Sci., Tokyo Tech.) ○ANDO, Yoshio; SASAKI, Ryota; OHMORI, Ken; SUZUKI, Keisuke**3D1-33** Synthetic study on spiroxin A: Optimization of the protecting group (Sch. Sci., Tokyo Tech.) ○TANAKA, Daisuke; SASAKI, Ryota; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke

Chair: FUWA, Haruhiko (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3D1-35, 3D1-36, 3D1-37, 3D1-38, 3D1-39, 3D1-40)

**3D1-35** Synthetic study on granatinin by exploiting thiolate-mediated reductive cyclization (Sch. Sci., Tokyo Tech.) ○SUZUKI, Yuji; ANDO, Yoshio; OHMORI, Ken; SUZUKI, Keisuke**3D1-36** Synthetic study of ciguatera toxin CTX3C (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○TANAKA, Tokihiro; KIMOTO, Taku; TAKAMURA, Hiroyoshi; KADOTA, Isao**3D1-37** Synthetic Study of the C30-C50 Section of Karlotoxin 2 (Grad. Sch. Sci., Kyushu Univ.) ○UMENO, Keitaro; EBINE, Makoto; WAKAMIYA, Yuma; OISHI, Tohru**3D1-38** Synthetic Study of the DEF Ring of Maitotoxin (Grad. Sch. Sci., Kyushu Univ.) ○YASUDOMI, Takaya; YAKUSIJI, Hiroyuki; TORIKAI, Kohei; EBINE, Makoto; OISHI, Tohru**3D1-39** Synthetic Study of the VWX Ring System of Brevisulcalen-F (Grad. Sch. Sci., Kyushu Univ.) ○TANAKA, Tatsuya; TORIKAI, Kohei; EBINE, Makoto; SATAKE, Masayuki; OISHI, Tohru**3D1-40#** Synthetic Study of Hawaiiycin Analogs (Fac. Sci., Kyushu Univ.) ○BARUTI, Yemba; TORIKAI, Kohei; EBINE, Makoto; OISHI, Tohru

Chair: SHINADA, Tetsuro (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(3D1-42, 3D1-44, 3D1-46)

**3D1-42\*\*** Structure-Activity Relationship Studies of Maitotoxin Based on Chemical Synthesis (Fac. Sci., Kyushu Univ.) ○ONOUE, Hisaaki; OHSATO, Naoya; TORIKAI, Kohei; EBINE, Makoto; KONOKI, Keiichi; OISHI, Tohru**3D1-44\*\*** Elucidation of Bafilomycin-Vacuolar-type ATPase interaction based on solid-state NMR (Grad. Sch. Sci., Osaka Univ.) ○HAYASHI, Tatsuru; TSUCHIKAWA, Hiroshi; UMEGAWA, Yuichi; MURATA, Michio; NAGUMO, Yoko; USUI, Takeo**3D1-46\*\*** Structure elucidation of Palytoxins isolated from the red alga, *Chondria armata* (Bio. Research Inst., Suntory Foundation for Life Sciences) ○MORI, Shoko; SUGAHARA, Kohtarō; MAEDA, Mitsuru; IWASHITA, Takashi; YAMAGAKI, Tohru

Chair: USUKI, Toyonobu (17 : 00~17 : 50)

\* 16:50-17:00: interval for laptop PC connection.(3D1-49, 3D1-51, 3D1-52, 3D1-53)

**3D1-49\*\*** Total Synthesis of Oxirapentyn D, a Highly Oxidized Chromene Natural Product (Sch. Sci., Tokyo Tech.) ○SAKAI, Takahiro; SUZUKI, Keisuke; OHMORI, Ken**3D1-51** Enantioselective Total Synthesis of (+)-Methylgaleon, a Cyclic Diarylether Heptanoid (Coll. Sci., Ibaraki Univ.) ○SUZUKI, Hanako; FUJITA, Keiichi; SATO, Itaru**3D1-52** Stereoselective synthesis of epigallocatechin-3-gallate-BCD ring model by using an oxidative etherification (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○YAMANO, Masaharu; SUGIYAMA, Hirotaka; TANAKA, Hiroshi**3D1-53** Synthesis of oolonghomobisflavans by dimerization of epi-gallocatechin gallate. (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○FUKAGAWA, Yuki; FUJIMAKI, Ryo; TANAKA, Hiroshi

## Friday, March 23, AM

Chair: TANAKA, Hiroshi (9 : 30 ~ 10 : 20)

\* 9:20-9:30: interval for laptop PC connection.(4D1-04, 4D1-05, 4D1-06, 4D1-07, 4D1-08)

**4D1-04** Stereocontrol in  $S_N1$ -like glycosylation reaction using sugars with unusual boat conformation (Fac. Sci., Toho Univ.) ○TOHDA, Kazuki;

HASHIMOTO, Yusuke; SAITO, Ryota; SASAKI, Kaname

**4D1-05** Substrate scope in  $\beta$ -stereoselective mannosylations using donors with unusual conformation bearing a 2,6-lactone moiety. (Fac. Sci., Toho Univ.) ○SAITO, Masashi; HASHIMOTO, Yusuke; SAITO, Ryota; SASAKI, Kaname**4D1-06** Synthesis of convergent xylomannan with conformational fixed sugar as key structure (Fac. Sci., Toho Univ.) ○SAKAI, Hiroaki; MURAKOSHI, Kazuki; HASHIMOTO, Yusuke; SAITOU, Ryouta; SASAKI, Kaname**4D1-07** Synthesis and bioactivities of inositol phospholipid EhPIb analogues from protozoan parasite (Fac. Sci. Tech., Keio Univ.) ○SAITO, Ryota; AIBA, Toshihiko; NABIKI, Etsuko; ARAI, Yohei; SUEHARA, Sae; FUKASE, Koichi; MATSUMARU, Takanori; INUKI, Shinsuke; FUJIMOTO, Yukari**4D1-08** Direct Regio- and 1,2-*cis*-Stereoselective Glycosylation of Unprotected Natural Glycosides Using Boronic Acid Catalyst (Fac. Sci. Tech., Keio Univ.) ○YOSHIDA, Ryoki; TANAKA, Masamichi; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu

Chair: TANAKA, Katsunori (10 : 30~11 : 20)

\* 10:20-10:30: interval for laptop PC connection.(4D1-10, 4D1-11, 4D1-12, 4D1-13, 4D1-14)

**4D1-10** Photo-Induced Environmentally Benign *O*-Glycosylation Utilizing Diaryl Disulfide (Fac. Sci. Tech., Keio Univ.) ○ETO, Takahiro; KURINAMI, Satoshi; AOYAGI, Manabu; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu**4D1-11** Synthesis of partially stable isotope-labeled branched  $\beta$  (1,3)-Glucan oligosaccharides (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○HAMAGAMI, Hiroki; YAMAGUCHI, Yoshiki; TANAKA, Hiroshi**4D1-12** Synthesis of  $\alpha$  (1,2)branched  $\alpha$  (1,6)oligomannosides possessing  $\alpha$  (1,2)branched mannosides by using an  $\alpha$  (1,2) branched mannoside. (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○YAMADA, Haruka; KOINUMA, Ryouyusuke; TANAKA, Hiroshi**4D1-13** Total Synthesis of Antibiotic, Vineomycin A<sub>1</sub> (Fac. Sci. Tech., Keio Univ.) ○KURIKI, Hajime; MATSUMOTO, Yuka; FUNAKOSHI, Momoko; KANNO, Yoko; KOBAYASHI, Takumi; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu**4D1-14** Systematic Synthesis of Fucoidan Derivatives and Their Selective Inhibitory Activities toward Cancer-Related Enzyme Heparanase (Fac. Sci. Tech., Keio Univ.) ○KOSONO, Shuhei; KOMABA, Sumika; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu

Chair: SASAKI, Kaname (11 : 30~12 : 20)

\* 11:20-11:30: interval for laptop PC connection.(4D1-16, 4D1-17, 4D1-19)

**4D1-16** Selective cell recognition by concerted interaction of peptide/oligosaccharide (Biofunc. Syn. Chem. Lab., RIKEN; GlycoTargeting Research Lab., RIKEN) ○NOMURA, Shogo; TANAKA, Katsunori**4D1-17\*\*** Synthesis of *O*-Methylated Glycolipids by Direct Stereoselective Glycosidation and Transformation to Chemical Probes and Their Biological Evaluation (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SATO, Ko; OMAHDI, Zakaria; SHIBATA, Kensuke; SONODA, Koh-hei; YAMASAKI, Sho; TANAKA, Hiroshi**4D1-19\*\*** Syntheses of the functional structures of glycolipid essential for membrane protein integration in *E. coli*. (Bio. Research Inst., Suntory Foundation for Life Sciences) ○FUJIKAWA, Kohki; SUZUKI, Sonomi; IKEDA, Shiori; NISHIYAMA, Ken-ichi; SHIMAMOTO, Keiko

## Friday, March 23, PM

Chair: KAWASAKI, Tsuneomi (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4D1-28, 4D1-29, 4D1-30, 4D1-32)

**4D1-28#** One-pot Synthesis of Anthraquinones by Sc(OTf)<sub>3</sub>-catalyzed Tandem Reaction (Grad. Sch. Sci., Osaka City Univ.) ○TORIYAMA, Yohei; YASUNO, Yoko; SHINADA, Tetsuro**4D1-29** Total Synthesis of Termicalcicolanone B (Grad. Sch. of Sci. Technol., Sophia Univ.) ○EJIMA, Yuki; KITAHARA, Yuri; TSUNOI, Azuho; UTSUNOMIYA, Takahiro; TAZAWA, Kanane; MANABE, Kei; SUZUKI, Yumiko**4D1-30\*\*** Stereoselective construction of spiroacetal framework and evaluation of its thermodynamic/kinetic stability (Grad. Sch. Sci., Osaka Univ.) ○YASUKAWA, Yoshifumi; TSUCHIKAWA, Hiroshi; MURATA, Michio**4D1-32\*\*** One-pot Synthesis of Juglorubin (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.; Fac. Sci. Technol., TUS) ○KAMO, Shogo; KURAMOCHI, Kouji; TSUBAKI, Kazunori

Chair: KOBAYASHI, Yuichi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4D1-35, 4D1-36, 4D1-37, 4D1-38, 4D1-39, 4D1-40)

**4D1-35** Mechanistic Studies of the Mixed Anhydride Method Using New Aromatic Acid Anhydrides Bearing Trifluoromethyl Substituted Groups (Fac. Sci., TUS) ○TONOI, Takayuki; SHIINA, Isamu**4D1-36** Improved Asymmetric Total Synthesis of Antibiotic (3S,16Z,20E,23S)-Eushearilide (Fac. Sci., TUS; Chiba Univ.) TONOI, Takayuki; SATO, Teruyuki; ○YOSHIDA, Tomoki; NODA, Yuki; ISHIWADA, Naruhiko; KAMEI, Katsuhiko; YOSHINO, Mitsuaki;

SHIINA, Isamu

- 4D1-37** Asymmetric Total Synthesis of (2*E*,4*Z*)-Tanzawaic Acid B by the Stereoselective Intramolecular Diels-Alder (IMDA) reaction (Fac. Sci., TUS) SHIINA, Isamu; SUZUKI, Kyouhei; OMAEKAWA, Yutarou; TAKEDA, Sora; MURATA, Takatsugu
- 4D1-38** Synthetic Studies on Tanzawaic Acid Q Derivatives by the Stereoselective Intramolecular Diels-Alder (IMDA) reaction (Fac. Sci., TUS) SHIINA, Isamu; SUZUKI, Kyouhei; MURATA, Takatsugu; TAKANO, Tomohiro
- 4D1-39** Synthetic Study of Neodysiherbaine A via [3+2] Annulation of (1) aldehydo(1)-Aldose Derivatives (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) OHOTODA, Koki; NOZAKI, Shinya; ASAI, Shota; SASAKI, Ikuo; SUGIMURA, Hideyuki
- 4D1-40** Total Synthesis of Pyrenolide D (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) OYUYA, Ogawa; YUDAI, Yamazaki; MARINA, Kato; IKUO, Sasaki; HIDEYUKI, Sugimura

Chair: TSUCHIKAWA, Hiroshi (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(4D1-42, 4D1-43, 4D1-44, 4D1-45, 4D1-46, 4D1-47)
- 4D1-42** The synthesis of  $\alpha$ -Mycolic Acid by integration of C(sp<sup>3</sup>)-C(sp<sup>3</sup>) cross coupling reactions (Grad. Sch. Eng., Osaka Univ.) OWANG, Yufei; TERAHIGASHI, Shohei; IWASAKI, Takanori; KAMBE, Nobuaki
- 4D1-43** Synthetic Study of Maresin-L1, L2 (Sch. Life Sci. Tech., Tokyo Tech.) OMASAO, Morita; SAITOU, Shun; KOBAYASHI, Yuichi
- 4D1-44** Synthetic Study of Resolvine D1 (Sch. Life Sci. Tech., Tokyo Tech.) OMASAO, Morita; KURE, Shoutaku; KOBAYASHI, Yuichi
- 4D1-45** Synthetic Study on Tomuruline (Fac. Sci. Tech., Keio Univ.) OFUJIMURA, Haruka; KUDO, Chihiro; OHNO, Osamu; IWASAKI, Arihiro; SUENAGA, Kiyotake
- 4D1-46** Synthetic study of a marine lipopeptide, Minnamide A, for determination of its stereochemistry (Fac. Sci. Tech., Keio Univ.) OKOBAYASHI, Masayuki; SUMIMOTO, Shinpei; SHINOMIYA, Seiti; TERUYA, Toshiaki; IWASAKI, Arihiro; SUENAGA, Kiyotake
- 4D1-47** Isolation and structure of a new polyketide, caldoron, from the marine cyanobacterium (Fac. Sci. Tech., Keio Univ.) OSHIOTA, Ikuma; IWASAKI, Arihiro; SUMIMOTO, Shinpei; SEKI, Reiko; KOBAYASHI, Keisuke; HIROSHI, Tomoda; SUENAGA, Kiyotake

## Room D2

Bldg. 9 932

### Natural Products Chemistry

#### Tuesday, March 20, AM

Chair: YOSHIDA, Masahito (9 : 30 ~ 10 : 10)

- \* 9:20-9:30: interval for laptop PC connection.(1D2-04, 1D2-05, 1D2-06, 1D2-07)
- 1D2-04<sup>#</sup>** Stereoselective Syntheses of  $\beta$ -Hydroxy Amino Acids by Isonitrile Aldol Reaction (Grad. Sch. Sci., Osaka City Univ.) OFUKU, Kazuma; YASUNO, Yoko; SHINADA, Tetsuro
- 1D2-05<sup>#</sup>** Synthetic Study of Phomopsin A (Grad. Sch. Sci., Osaka City Univ.) OKARITA, Yuma; YASUNO, Yoko; SHINADA, Tetsuro
- 1D2-06** Novel sequence for selective activation of peptide-C-terminal (Sch. Sci., Osaka Univ.) OAMAZAKI, Yoko; OGAWA, Shogo; MAKI, Yuta; OKAMOTO, Ryo; KAJIHARA, Yasuhiro
- 1D2-07** Development of a synthetic method of glycopeptides by using amino thioacid (Sch. Sci., Osaka Univ.) ONOMURA, Kota; HARAGUCHI, Takuya; MAKI, Yuta; OKAMOTO, Ryo; KAJIHARA, Yasuhiro

Chair: SHINADA, Tetsuro (10 : 20~11 : 10)

- \* 10:10-10:20: interval for laptop PC connection.(1D2-09, 1D2-12, 1D2-13)
- 1D2-09<sup>#</sup>** Young Scholar Lectures of CSJ A Medicinal Application of Tryptophan-Selective Protein Bioconjugation (Grad. Sch. Pharm., The Univ. of Tokyo) OISAKI, Kounosuke
- 1D2-12** Practical Synthetic Study on Mugineic Acids toward Agriculture in Alkaline Infertile Soil. (Tokushima Univ.) OURABE, Atsumi; TSUGAWA, Ryou; NISHIO, Satoshi; SASAKI, Sayaka; SUZUKI, Motofumi; MASUDA, Hiroshi; KARANJIT, Sangita; NAKAYAMA, Atsushi; KOBAYASHI, Takanori; NANBA, Kousuke
- 1D2-13** Synthetic study of domoic acid (Univ. of Shizuoka) ONISHIZAWA, Shigeru; OHNISHI, Takuma; OHYAGI, Yuu; SASAKI, Shingo; SUZUKI, Hiroto; OUCHI, Hitoshi; INAI, Makoto; YOSHIMURA, Fumihiko; KAN, Toshiyuki

Chair: YOSHIMURA, Fumihiko (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1D2-15, 1D2-17, 1D2-18, 1D2-19, 1D2-20)
- 1D2-15<sup>#</sup>** Synthetic Study for Antibiotic Cyclodepsipeptide Piperidamycins (Grad. Sch. Pharm. Sci., Tohoku Univ.) OYOSHIDA, Masahito;

TAKAHASHI, Yusuke; SEKIOKA, Naoki; SHIN-YA, Kazuo; DOI, Takayuki

- 1D2-17<sup>#</sup>** Total Synthesis of SF-2132 (1) (Grad. Sch. Sci., Osaka City Univ.) OSAWAI, Akira; SEKIHARA, Ai; YASUNO, Yoko; SHINADA, Tetsuro
- 1D2-18<sup>#</sup>** Total Synthesis of SF-2132 (2) (Grad. Sch. Sci., Osaka City Univ.) OSEKIHARA, Ai; SAWAI, Akira; YASUNO, Yoko; SHINADA, Tetsuro
- 1D2-19<sup>#</sup>** Synthetic studies of marine polyamine (International Coll. Arts Sci., Yokohama City Univ.) OMIYAHARA, Masayoshi; SHIOZAKI, Hiroki; ISHIKAWA, Yuichi; OIKAWA, Masato
- 1D2-20** Ubiquitination of proteins by the use of a thiirane linker (IPR, Osaka Univ.) OKAWAKAMI, Toru; MISHIMA, Yuichi; HOJO, Hironobu; SUETAKE, Isao

#### Wednesday, March 21, AM

Chair: MORIMOTO, Yoshiki (9 : 40 ~ 10 : 20)

- \* 9:30-9:40: interval for laptop PC connection.(2D2-05, 2D2-06, 2D2-07, 2D2-08)
- 2D2-05** The Second-generation Synthesis of Paclitaxel. (Fac. Sci. Tech., Keio Univ.) OYAMAMOTO, Hiroaki; FUKAYA, Keisuke; YAMAGUCHI, Yuu; WATANABE, Ami; MOCHIZUKI, Syota; SAIO, Ryouyusuke; SATO, Takaaki; CHIDA, Noritaka
- 2D2-06** Synthetic Studies on Cembrane Diterpenoid (Research Foundation ITSUU Laboratory) OYAMASHITA, Shuji
- 2D2-07** Synthetic study of Tutin (Sch. Sci. Tech., Kwansei Gakuin Univ.) OHARAGUCHI, Shota; IKEUCHI, Kazutada; YAMADA, Hidetoshi
- 2D2-08** Synthetic Studies of Zeylanidine (Fac. Sci. Tech., Keio Univ.) OSADA, Naoki; SUGIMOTO, Yasunori; OGURA, Akihiro; TAKAO, Ken-ichi

Chair: YAMASHITA, Shuji (10 : 30~11 : 30)

- \* 10:20-10:30: interval for laptop PC connection.(2D2-10, 2D2-11, 2D2-12, 2D2-14)
- 2D2-10** Total Synthesis of a Marine Polyether Saiyacenol A (Grad. Sch. Sci., Osaka City Univ.) ONISHIKIBE, Kento; NISHIKAWA, Keisuke; MORIMOTO, Yoshiki
- 2D2-11** Asymmetric Total Synthesis of Nerolidol-type Sesquiterpenoid Using a Cyclization Reaction in Neutral Water (Grad. Sch. Sci., Osaka City Univ.) OMORITA, Kengo; HASHIMOTO, Subaru; HOSHINO, Akihiro; TAKEUCHI, Eriko; NISHIKAWA, Keisuke; MORIMOTO, Yoshiki
- 2D2-12<sup>#</sup>** Sterol-dependent membrane activity of steroidal saponin OSW-1 using spectroscopic and microscopic approaches (Grad. Sch. Sci., Osaka Univ.) OMALABED, Raymond; HANASHIMA, Shinya; MURATA, Michio; SAKURAI, Kaori
- 2D2-14<sup>\*</sup>** Asymmetric Total Synthesis of Brasilicardin A (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) OTOH, Ryusei; TORIZUKA, Makoto; MORI, Genki; YOSHIMURA, Fumihiko; TANINO, Keiji

#### Wednesday, March 21, PM

Chair: NAKAO, Yoichi (15 : 00~15 : 50)

- \* 14:50-15:00: interval for laptop PC connection.(2D2-37, 2D2-38, 2D2-39, 2D2-40, 2D2-41)
- 2D2-37** Synthetic study of kanamienamide, an 11-membered macrolactone containing an enamide. (Fac. Sci. Tech., Keio Univ.) OOJIMA, Daisuke; IWASAKI, Arihiro; SUENAGA, Kiyotake
- 2D2-38** Search for muscle glucose uptake properties in Okinawan marine organism compounds (Fac. Edu., Univ. of Ryukyus) OZAKI, Kaori; YAMANO, Aki; SUEYOSHI, Kosuke; SUMIMOTO, Shinpei; IWASAKI, Arihiro; SUENAGA, Kiyotake; TERUYA, Toshiaki
- 2D2-39** Isolation and structure of hoshinoamides A and B, acyclic lipopeptides from a marine cyanobacterium collected at Ishigaki (Fac. Sci. Tech., Keio Univ.) IWASAKI, Arihiro; TADENUMA, Takato; SUMIMOTO, Shinpei; MATSUBARA, Teruhiko; SATO, Toshinori; SUENAGA, Kiyotake
- 2D2-40** Isolation and structure determination of a novel cyclic peptide from an Okinawan marine cyanobacterium. (Fac. Sci. Tech., Keio Univ.) IWASAKI, Keitaro; IWASAKI, Arihiro; SUENAGA, Kiyotake
- 2D2-41<sup>#</sup>** X-ray analysis of amino acid derivatives with the crystalline sponge method by Schiff base formation (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) OUTJAPIMUK, Soravit; YAN, Kaking; DUBEY, Ritesh; SAKURAI, Fumie; FUJITA, Makoto

Chair: HAYAKAWA, Ichiro (16 : 00~16 : 50)

- \* 15:50-16:00: interval for laptop PC connection.(2D2-43, 2D2-44, 2D2-45, 2D2-46, 2D2-47)
- 2D2-43** Total Synthesis of (+)-Cylindricine C using Nucleophilic Approach to Nitrones (Grad. Sch. Sci. Tech., Keio Univ.) OMATSUMOTO, Tsutomu; HIRAOKA, Shobu; MATSUZAKA, Koki; SATO, Takaaki; CHIDA, Noritaka
- 2D2-44** Total Synthesis of Madangamine B (Grad. Sch. Sci. Tech., Keio Univ.) OSUTO, Takahiro; TAKIKAWA, Shinsaku; YANAGITA, Yuta; NAGASHIMA, Yoshiyuki; MATSUO, Naoya; KUROSU, Yasuhiro; SATO, Takaaki; CHIDA, Noritaka
- 2D2-45** Studies on Total Synthesis of Tetrodotoxin (Grad. Sch. Sci., Osaka City Univ.) OTAKEDA, Rina; ARAKI, Yuusuke; KIKUCHI, Seiho;

- YOSHIYAMA, Haruka; NISHIKAWA, Keisuke; MORIMOTO, Yoshiaki  
**2D2-46** Synthetic study of (+)-saxitoxin by sequential Overman rearrangement (Grad. Sch. Sci. Tech., Keio Univ.) ○OKUYAMA, Yuya; OKAMOTO, Ryouzuke; SATO, Takaaki; CHIDA, Noritaka  
**2D2-47** Synthetic study of *ent*-(+)-quinine (Dept. Chem., Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○MISAKA, Remi; SHIOMI, Shinya; ISHIKAWA, Hayato

Chair: ISHIKAWA, Hayato (17 : 00~17 : 40)

- \* 16:50-17:00: interval for laptop PC connection.(2D2-49, 2D2-51)  
**2D2-49**<sup>#</sup> Formal Total Synthesis of Histriocotocin (Grad. Sch. Sci., Osaka City Univ.) ○MATSUMURA, Kunihiro; YOSHIDA, Hiroaki; KOYAMA, Tomoyuki; NISHIKAWA, Keisuke; MORIMOTO, Yoshiaki  
**2D2-51**<sup>#</sup> Total synthesis of Marine Natural Products Rubrolide O and Denigrin B (Fac. Sci., Kyushu Univ.) ○KARAK, Milandip; BARBOSA, Luiz C. A.; OISHI, Tohru; TORIKAI, Kohei

### Thursday, March 22, AM

Chair: MATSUMARU, Takanori (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3D2-01, 3D2-02, 3D2-03, 3D2-04, 3D2-05, 3D2-06)  
**3D2-01** Synthesis of Alkaloidal Scaffolds Triggered by Zinc(II)triflate-mediated Activation of an Alkyne (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○YORIMOTO, Sadaiwa; TSUNEKAWA, Yoshiaki; ICHINO, Tomoya; TSUBOUCHI, Akira; MAEDA, Satoshi; OGURI, Hiroki  
**3D2-02** Development of Regioselective Dimerizations of Dihydropyridines Inspired by Biogenetic Strategy (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○ARAI, Yuta; WATANABE, Ryo; FUJIKAWA, Soushi; KANEKO, Nobuto; OGURI, Hiroki  
**3D2-03** Total Synthesis of aplaminal, a marine cytotoxic alkaloid (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○AKEMOTO, Kei; ISHIHARA, Takuma; OHYOSHI, Takayuki; KIGOSHI, Hideo  
**3D2-04** Biomimetic total synthesis of aplaminal (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○OHYOSHI, Takayuki; ISHIHARA, Takuma; TANIGUCHI, Ayaka; AKEMOTO, Kei; KIGOSHI, Hideo  
**3D2-05** Synthetic Studies of Altemicidin-type Alkaloids (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○NAGAYASU, Anna; HAYAKAWA, Ichiro; SAKAKURA, Akira  
**3D2-06** Synthetic Studies of Core Carbon Framework of Yuzurimine-type Alkaloids (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○NAKASHIGE, Yuichi; YOSHINOBU, Takuya; HAYAKAWA, Ichiro; SAKAKURA, Akira

Chair: OHYOSHI, Takayuki (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3D2-08, 3D2-09, 3D2-10, 3D2-11, 3D2-12, 3D2-13)  
**3D2-08** Synthetic studies of CBL0137 (Grad. Sch. Sci. Eng., Univ. of Toyama) YOKOYAMA, Hajime; ○YAMAMOTO, Tomoaki; MIYAZAWA, Masahiro  
**3D2-09** Synthetic study of kosinostatin aglycone (Grad. Sch. Eng., KIT) ○TAKAHASHI, Shuhei; SHIMIZU, Yutaro; SHIMOOKA, Hirokazu; OKAUCHI, Tatsuo; KITAMURA, Mitsuru  
**3D2-10** Synthesis of bicyclic skeleton of calyciphylline B (Fac. Sci. Tech., Keio Univ.) ○SASAKI, Keiji; KOBAYASHI, Shoichiro; NAKANO, Reiki; SATO, Takaaki; CHIDA, Noritaka  
**3D2-11** Synthetic Studies of Phenanthroindolizidines - Preparation of Phenanthrene Moieties and Asymmetrization (Sch. Life Sci. Tech., Tokyo Tech.) ○KORIKI, Shunsuke; SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu  
**3D2-12** Synthetic Study of Dragmacidins Using Photochemical Reaction (Grad. Sch. Sci. Tech., Keio Univ.) ○KAWAKAMI, Shota; ARAI, Yohei; SHIOKAWA, Zenyu; MATSUMARU, Takanori; INUKI, Shinsuke; FUJIMOTO, Yukari  
**3D2-13** Synthesis of Indole Alkaloids Exploiting Ring Scission of Iboga Skeleton. (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○KUBOTA, Hiroki; OGURI, Hiroki

Chair: OHISHI, Tohru (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3D2-15, 3D2-16, 3D2-17, 3D2-19)  
**3D2-15** Bis[*N,N'*-(2-indanolyl)]-1,5-diazacyclooctane as Unique Metal Ligand: Synthesis of Palladium Nanoparticles and coupling reactions (Biofunc. Syn. Chem. Lab., RIKEN; GlycoTargeting Research Lab., RIKEN) ○FUJIKI, Katsumasa; TANAKA, Katsunori  
**3D2-16** Stereo-controlled Synthesis of Alkaloidal Scaffolds Utilizing Aromatic Amino Acids (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○HONDA, Takamitsu; TANIFUJI, Ryo; KOMATSU, Ryoko; OGURI, Hiroki  
**3D2-17**<sup>#</sup> Chemo-enzymatic rapid syntheses of tetrahydroisoquinoline alkaloids (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TANIFUJI, Ryo; KOMATSU, Ryoko; HONDA, Takamitsu; ASANO, Ryutarō; MINAMI, Atsushi; OIKAWA, Hideaki; OGURI, Hiroki  
**3D2-19**<sup>#</sup> Unified Total Synthesis of Stemoamide-type Alkaloids Featuring Chemoselective Assembly of Five-membered Building Blocks (Fac. Sci. Tech.,

- Keio Univ.) ○YORITATE, Makoto; TAKAHASHI, Yoshito; TAJIMA, Hayato; OGIHARA, Chisato; SODA, Yasuki; YOKOYAMA, Takashi; SATO, Takaaki; CHIDA, Noritaka

### Thursday, March 22, PM

Chair: KADOTA, Isao (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(3D2-28, 3D2-29, 3D2-30, 3D2-32)  
**3D2-28** Short synthesis of tripterifordins from stevioside, a natural sweetener (Fac. Eng., OIT) ○HAMADA, Yoshiaki; SHIBUKAWA, Keisuke; KURUMA, Takuma; MASUYAMA, Araki; KOBAYASHI, Shoji  
**3D2-29** Synthetic studies of aplysiacosterol A, a marine secosteroid (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○TANO, Hikaru; TOJO, Shoma; OHYOSHI, Takayuki; KIGOSHI, Hideo  
**3D2-30**<sup>\*</sup> Synthesis of Substituted Cyclopentene Derivatives via Cyclization of Vinyl Copper Species (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○YAMAGA, Hideomi; TANINO, Keiji  
**3D2-32**<sup>\*</sup> Synthetic Studies of Ivorenoid A (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○HORIGUCHI, Kosaku; TANINO, Keiji

Chair: TANINO, Keiji (14 : 40~15 : 30)

- \* 14:30-14:40: interval for laptop PC connection.(3D2-35, 3D2-36, 3D2-37, 3D2-38, 3D2-39)  
**3D2-35** Synthetic Study of Bipinnatin I (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○KIKUCHI, Takahiro; TAKAMURA, Hiroyoshi; KADOTA, Isao  
**3D2-36** Divergent Synthesis and Antifouling Activity of Geraniol-Butenolide Hybrid Molecules (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○OHASHI, Takumi; KIKUCHI, Takahiro; ENDO, Noriyuki; FUKUDA, Yuji; TAKAMURA, Hiroyoshi; KADOTA, Isao  
**3D2-37** Modification of synthetic route to 6-aza-artemisinins and structure-activity relationship studies (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MATSUOKA, Naoya; TAKAHASHI, Norihito; BONEPALLY, Karunakar, Reddy; OGURI, Hiroki  
**3D2-38** Reaction of 2,3-oxidosqualene derivatives and some nucleophilic agents (IRC3, AIST; Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○INAMI, Yuri; OKAMURA, Masami; TOMINAGA, Kenichi; ARIMURA, Takashi; KIGOSHI, Hideo  
**3D2-39** Structural Analysis of Non-polar Compounds Utilizing Halogen Interactions in a Crystalline Sponge (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST; Takasago International Corporation) ○SAKAGUCHI, Kazuhiko; FURUBAYASHI, Shunpei; SAKURAI, Fumie; FUJITA, Makoto

Chair: OGURI, Hiroki (15 : 40~16 : 30)

- \* 15:30-15:40: interval for laptop PC connection.(3D2-41, 3D2-42, 3D2-43, 3D2-44, 3D2-45)  
**3D2-41**<sup>#</sup> Pot-economical total synthesis of estradiol methyl ether using organocatalyst (Grad. Sch. Sci., Tohoku Univ.) ○KOSHINO, Seitaro; KWON, Eunsang; HAYASHI, Yujiro  
**3D2-42** Synthetic study of swinhoeisterol A, a rearranged steroid (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○TAKANO, Atsuhiko; ZHAO, Yiwen; OHYOSHI, Takayuki; KIGOSHI, Hideo  
**3D2-43** Stereoselective synthetic study of CD ring in Calcitriol lactone (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○AKIKO, Nagata; YUSUKE, Akagi; MASAHIRO, Yamanaka; MOTONARI, Uesugi; KAZUO, Nagasawa  
**3D2-44** Synthetic Studies of Vibsanin B (Fac. Sci. Tech., Keio Univ.) ○KAMESHIMA, Rika; SUMI, Takashi; OGURA, Akihiro; TAKAO, Ken-ichi  
**3D2-45** Synthetic Studies of Hirsutane-type Sesquiterpene Unit in Sterhirsutin A (Fac. Sci. Tech., Keio Univ.) ○ITO, Daiki; MATSUI, Kohei; OGURA, Akihiro; TAKAO, Ken-ichi

Chair: YAMADA, Hidetoshi (16 : 40~17 : 30)

- \* 16:30-16:40: interval for laptop PC connection.(3D2-47, 3D2-49, 3D2-50, 3D2-51)  
**3D2-47**<sup>#</sup> Enzymatic glycosylation reaction using 1,2-anhydro sugars as glycosyl donors (Grad. Sch. Eng., Tohoku Univ.) ○SERIZAWA, Kazunari; NOGUCHI, Masato; LI, Gefei; SHODA, Shin-ichiro  
**3D2-49** Study on 1,3-Dipolar Cycloaddition of Azide Spacer on Gold Nanoparticles with Lactose-Acetylene (Fac. of Sci., Okayama Univ. of Sci.) ○NAITO, Yuriko; YAMANAKA, Yusuke; SATA, Yuki; YAMADA, Haruo  
**3D2-50** Development of the Efficient Method for the Immobilization of GM3 on Gold Plate for the Elucidating Carbohydrate Interaction. (Fac. of Sci., Okayama Univ. of Sci.) ○YAMANAKA, Yusuke; SATA, Yuki; NIATO, Yuriko; HYODO, Mizuki; YAMADA, Haruo  
**3D2-51** Glycosyl Bunte-Salts: New Class of Intermediates for Sugar Chemistry (Grad. Sch. Eng., Tohoku Univ.) ○LI, Gefei; MEGURO, Yasuhiro; NOGUCHI, Masato; SHODA, Shin-ichiro

Chair: TAKAHASHI, Daisuke (17 : 40~18 : 30)

- \* 17:30-17:40: interval for laptop PC connection.(3D2-53, 3D2-54, 3D2-55, 3D2-56, 3D2-57)  
**3D2-53** Improved synthesis of 1,1'-(propane-1,3-diyl)dibenzene-2,2' -bis

(methylene) dibromide (Sch. Sci. Tech., Kwansei Gakuin Univ.)  
 ○SHIMADA, Hiroaki; MIKI, Kohei; IKEUTI, Kazutada; YAMADA, Hidetoshi

**3D2-54** Glycosylation of a glucosyl fluoride having 3,6-O-1,1'-(butane-1,4-diyldibenzene-2,2'-bis(methylene)-bridged group (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○HAGIMORI, Takara; SHIMADA, Hiroaki; IKEUCHI, Kazutada; WAKAMORI, Shinnosuke; YAMADA, Hidetoshi

**3D2-55** Transglycosylation Reaction of Resveratrol 3,5-di-O-β-glucopyranoside (Sch. Eng., Tokai Univ.) ○YABUNO, Rika; SUGAI, Takeshi; INAZU, Toshiyuki

**3D2-56** Suppression of side reaction in transglycosylation reaction (Sch. Eng., Tokai Univ.) ○KODAMA, Yudai; INAZU, Toshiyuki

**3D2-57** Glycosylation reaction activated by metal carbonyl complex (Grad. Sch. Eng., Tohoku Univ.) ○NOGUUCHI, Masato; SUZUKI, Sayaka; LI, Gefei; SHODA, Shin-ichiro

## Room D3

Bldg. 9 933

### Chemical Biology

Tuesday, March 20, AM

Chair: SATO, Shinichi (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1D3-01, 1D3-02, 1D3-04, 1D3-05, 1D3-06)

**1D3-01** Visualization of GABA<sub>A</sub> receptors with turn-on-type fluorescent probes (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○HARADA, Fumio; AMAIKE, Kazuma; YAMAURA, Kei; KIYONAKA, Shigeiki; HAMACHI, Itaru

**1D3-02<sup>#</sup>** Ligand Directed Acyl Imidazole Chemistry for Drug Sensing of AMPA-Type Glutamate Receptor (Grad. Sch. Eng., Kyoto Univ.; Grad. Sch. Eng., Kyoto Univ.) ○SAKAMOTO, Seiji; WAKAYAMA, Sho; KIYONAKA, Shigeiki; HAMACHI, Itaru

**1D3-04** Synthesis of 10-Substituted 9-Aminoanthracenes and Their Application for an Imaging Reagent (Sch. Sci., Kitasato Univ.) ○UCHIYAMA, Yosuke; KIMURA, Shinobu; KUNIYA, Suguru; KURUTAKI, Takanori; WATANABE, Ryo; MATSUZAWA, Hideyo; KAWAKAMI, Fumitaka; UCHIYAMA, Koji; MARUYAMA, Hiroko; ITAKURA, Makoto

**1D3-05<sup>#</sup>** Development of multicolor OFF-ON-OFF Fluorescent Probes for Detection of Protein Degradation (Grad. Sch. Eng., Osaka Univ.) ○YU, Chiawei; HORI, Yuichiro; YAMASAKI, Kohei; KIKUCHI, Kazuya

**1D3-06<sup>#</sup>** Design and development of PYP-tag coumarin ligands with halo-methyl ketone moieties for fluorogenic protein labeling (Grad. Sch. Eng., Osaka Univ.) ○KUMAR, Naresh; HORI, Yuichiro; KIKUCHI, Kazuya

Chair: NONAKA, Hiroshi (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1D3-08, 1D3-09, 1D3-10, 1D3-11, 1D3-12, 1D3-13)

**1D3-08** Synthesis and Fluorescence properties of dibenzonaphthyridine derivatives : Detection of DNA intercalation (Fac. Sci., Fukuoka Univ.) ○OBA, Akinori; IWASHITA, Hidefumi; NAGAHORA, Noriyoshi; OKUMA, Kentaro; SHIOJI, Kosei

**1D3-09** Synthesis and Functional Evaluation of Gadolinium Oxide Nanoparticles Conjugated with Anti-HER2 Antibody as a Tumor Specific MRI Contrast Agent (Grad. Sch. Eng., Kyoto Univ.) ○NAKAJIMA, Rina; KIMURA, Yu; SON, Aoi; IMAI, Hirohiko; MATSUDA, Tetsuya; KONDO, Teruyuki

**1D3-10** Tumor-selective fluorescence imaging by using the betaine polymer probes: Investigation of the pharmacokinetics and tumor-selectivity depending on the betaine structures (Grad. Sch. Eng., Kyoto Univ.) ○KOMAKI, Takanori; YAMADA, Hisatsugu; KIMURA, Yu; SON, Aoi; SANDO, Shinsuke; AOYAMA, Yasuhiro; KONDO, Teruyuki

**1D3-11** Reaction of Near-Infrared Dye-Conjugated Phosphorylcholine Polymer Probes with Reactive Oxygen Species (ROS) (Grad. Sch. Eng., Kyoto Univ.) ○MATSUI, Yuta; KOMAKI, Takanori; KIMURA, Yu; SON, Aoi; YAMADA, Hisatsugu; AOYAMA, Yasuhiro; KONDOU, Teruyuki

**1D3-12** Development of intracellular protein labeling system using mutant β-lactamase (Grad. Sch. Eng., Osaka Univ.) ○SAKAI, Yukio; MINOSHIMA, Masafumi; KIKUCHI, Kazuya

**1D3-13** Development of protein-labeling probe using β-lactamase inhibitor (Grad. Sch. Eng., Osaka Univ.) ○UMENO, Taro; ROUX, Margaux; MINOSHIMA, Masafumi; KIKUCHI, Kazuya

Chair: HORI, Yuichiro (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(1D3-15, 1D3-16, 1D3-17, 1D3-18, 1D3-19, 1D3-20)

**1D3-15<sup>#</sup>** Development of visible light controllable nitric oxide releasers and biological application (Grad. Sch. Pharm. Sci., Nagoya City Univ.) ○IEDA, Naoya; OKUNO, Hana; HOTTA, Yujii; KAWAGUCHI, Mitsuyasu; KIMURA, Kazunori; NAKAGAWA, Hidehiko

**1D3-16** Development of phosphorescent ruthenium complex-immobilized mesoporous silica nanoparticles and their cytotoxicity (Grad. Sch. Eng., Kyoto Univ.) ○KITAJIMA, Natsuko; UMEHARA, Yui; SON, Aoi; TANABE, Kazuhito; KONDO, Teruyuki

**1D3-17** Fluorescence Probe for Visualizing the Inner Structure of Mitochondria (WPI-ITbM, Nagoya Univ.) ○TAKI, Masayasu; WANG, Chenguang; YAMAGUCHI, Shigehiro

**1D3-18** Photostable NIR nanoparticles: Preparation and Application to In Vivo Imaging (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.) ○SENDA, Kieko; TAKI, Masayasu; ARIMOTO, Tomoko; YUKAWA, Hiroshi; BABA, Yoshinobu; YAMAGUCHI, Shigehiro

**1D3-19** Development of novel molecular tag technology directed to in vivo near infrared fluorescence imaging (Grad. Sch. Med., The Univ. of Tokyo) ○OKAMOTO, Hiroyuki; ASANUMA, Daisuke; ASANUMA, Daisuke; NAMIKI, Shigeyuki; HIROSE, Kenzo

**1D3-20** Super-photostable Fluorescent Probe for the Long-term Monitoring of Lipid Droplet Formation (Grad. Sch. Sci., Nagoya Univ.) ○KAJIWARA, Keiji; TAKI, Masayasu; SATO, Yoshikatsu; YAMAGUCHI, Shigehiro

Tuesday, March 20, PM

Chair: OKAMOTO, Akimitsu (13 : 40 ~ 14 : 40)

\* 13:30-13:40: interval for laptop PC connection.(1D3-29, 1D3-32, 1D3-34)

**1D3-29<sup>#</sup>** Young Scholar Lectures of CSJ Design of highly sensitive magnetic resonance molecular probes using dynamic nuclear polarization (Grad. Sch. Eng., The Univ. of Tokyo) ○NONAKA, Hiroshi

**1D3-32<sup>#</sup>** Development of an in vivo imaging technique for detecting enzyme activities using activatable <sup>19</sup>F MRI nanoprobes (Grad. Sch. Eng., Osaka Univ.) ○AKAZAWA, Kazuki; SUGIHARA, Fuminori; MINOSHIMA, Masafumi; MIZUKAMI, Shin; KIKUCHI, Kazuya

**1D3-34** Sensitive and selective <sup>19</sup>F MR imaging of cathepsin K activity using perfluorocarbon-encapsulated silica nanoparticle (Sch. Eng., Osaka Univ.) ○OKUNISHI, Atsuya; AKAZAWA, Kazuki; SUGIHARA, Fuminori; MIZUKAMI, Shin; KIKUCHI, Kazuya

Chair: YAMAGUCHI, Satoshi (14 : 50 ~ 15 : 50)

\* 14:40-14:50: interval for laptop PC connection.(1D3-36, 1D3-37, 1D3-38, 1D3-39, 1D3-40, 1D3-41)

**1D3-36** Design and synthesis of fluorescent turn-on probe using GFP fluorophore derivative for the saccharide receptors (Sch. Life Sci. Tech., Tokyo Tech.) ○INADA, Kotaro; KANAMORI, Takashi; OHKUBO, Akihiro; OGURA, Shun-ichiro; YUASA, Hideya

**1D3-37** Fabrication of porous nanosheets and their application to live imaging tools of floating cells (Grad. Sch. of Eng., Tokai Univ.) ○AOKI, Takuto; ZHANG, Hong; HATANO, Kanae; KABAYAMA, Kazuya; FUKASE, Koichi; OKAMURA, Yosuke

**1D3-38** Surface modification of water-repellent nanosheets and their application to deep tissue imaging (Grad. Sch. of Eng., Tokai Univ.) ○YARINOME, Kenji; ZHANG, Hong; AOKI, Takuto; KAWAKAMI, Yosuke; TAKAHASHI, Taiga; NEMOTO, Tomomi; OKAMURA, Yosuke

**1D3-39** Fluorescence Photoswitching Based on Photochromic Quencher (Grad. Sch. Eng., Osaka Univ.) ○WATABE, Keichiro; HORI, Yuichiro; KIKUCHI, Kazuya

**1D3-40** Development of PYP-tag-labeling probe based on designed green fluorogenic coumarin ligand (Grad. Sch. Eng., Osaka Univ.) ○GAO, Jingchi; HORI, Yuichiro; KIKUCHI, Kazuya

**1D3-41** Development of synthetic-molecule/protein hybrid probes for detection of genome sequence (Grad. Sch. Eng., Osaka Univ.) ○UMENO, Maho; HORI, Yuichiro; NISHIDA, Ayuko; TSUJI, Shogo; IMANISHI, Miki; FUTAKI, Shiroh; KIKUCHI, Kazuya

Chair: KIMURA, Yu (16 : 00 ~ 17 : 00)

\* 15:50-16:00: interval for laptop PC connection.(1D3-43, 1D3-44, 1D3-45, 1D3-46, 1D3-47, 1D3-48)

**1D3-43** Functional Evaluation of TLR4 Ligands with Live Cell Imaging (Grad. Sch. Sci., Osaka Univ.) ○NAITO, Hikari; KABAYAMA, Kazuya; SHIMOYAMA, Atsushi; FUKASE, Koichi

**1D3-44** Development of Photoactivatable protein labeling system (Grad. Sch. Life Sci., Tohoku Univ.) ○ARAI, Keisuke; YOSHIMURA, Akimasa; MATSUI, Toshitaka; KIKUCHI, Kazuya; MIZUKAMI, Shin

**1D3-45** Development of Mg<sup>2+</sup>-selective fluorescent probe for visualizing intracellular Mg<sup>2+</sup> dynamics (IMRAM, Tohoku Univ.) ○WAKABAYASHI, Keisuke; MATSUI, Yusuke; KIKUCHI, Kazuya; MIZUKAMI, Shin

**1D3-46** Development of a novel method for the determination of PTP activity based on tyrosine labeling reaction (Lab. Chem. Life Sci., Tokyo Tech.) ○FUJIMAKI, Hiroki; SATO, Shinichi; NAKAMURA, Hiroyuki

**1D3-47<sup>#</sup>** Development of Solvatochromic Fluorophores for Turn-on Fluorescent Labeling of Lysine Residues (Grad. Sch. Pharm., Kyushu Univ.) ○ASO, Mariko; OTA, Chiyo; HIRAI, Go

**1D3-48** Quantitative analysis of lipase activity using lipase-responsive fluorescent probe (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○MIWA, Masayuki; WATANABE, Yomi; SHIZUMA, Motohiro;

KAWASAKI, Hideya; SATO, Hirofumi

Chair: KIYONAKA, Shigeki (17 : 10~18 : 00)

- \* 17:00-17:10: interval for laptop PC connection.(1D3-50, 1D3-51, 1D3-52, 1D3-53, 1D3-54)
- 1D3-50<sup>#</sup>** Aggregation-induced singlet oxygen generation using functional aggregates of fluorophore and anthrylphenylene dyads (ISIR, Osaka Univ.) ○KIM, Sooyeon; ZHOU, Yang; FUJITSUKA, Mamoru; MIYATA, Mikiji; MAJIMA, Tetsuro
- 1D3-51** Simultaneous imaging of lipid droplet and intracellular oxygen concentration in 3T3-L1 adipocyte (Sch. Life Sci. Tech., Tokyo Tech.) ○MAEDA, Kazuma; ODAI, Shunsuke; ITO, Hidehiro; KAMACHI, Toshiaki
- 1D3-52** Synthesis of Pt-porphyrin modified mesoporous silica nanoparticles and application for intracellular oxygen concentration imaging (Sch. Life Sci. Tech., Tokyo Tech.) ○ODAI, Shunsuke; ITO, Hidehiro; OKAMOTO, Masaki; KAMACHI, Toshiaki
- 1D3-53** Intravital Real-Time Imaging of Osteoclast V-ATPase Dynamics with pH-activatable Red Fluorescent Probe (Grad. Sch. Eng., Osaka Univ.) ○OMORI, Yuta; MAEDA, Hiroki; MINOSHIMA, Masafumi; KIKUCHI, Kazuya
- 1D3-54** Development of Fluorogenic Probe for Reversible Protein Labeling (Grad. Sch. Eng., Osaka Univ.) ○SOWA, Toshiyasu; MINOSHIMA, Masafumi; KIKUCHI, Kazuya

### Wednesday, March 21, AM

Chair: TAKAOKA, Yosuke (9 : 10 ~10 : 10)

- \* 9:00-9:10: interval for laptop PC connection.(2D3-02, 2D3-03, 2D3-04, 2D3-05, 2D3-07)
- 2D3-02** Cytotoxicity of Alkylating PI Polyamides Library (Fac. Sci., Kyoto Univ.) ○OHNO, Tomo; KASHIWAZAKI, Gengo; HASHIYA, Kaori; BANDO, Toshikazu; SUGIYAMA, Hiroshi
- 2D3-03** Evaluation of Alkylating PIP Conjugates Targeting RUNX Binding Sites (Dep. Chem., Sch. Sci., Kyoto Univ.) ○MAEDA, Rina; KASHIWAZAKI, Gengo; OBATA, Shunsuke; BANDO, Toshikazu; SUGIYAMA, Hiroshi
- 2D3-04** Safety Study and Pharmacokinetics of an Alkylating PI Polyamide with Antitumor Effects (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KASHIWAZAKI, Gengo; BANDO, Toshikazu; KAMIKUBO, Yasuhiko; SUGIYAMA, Hiroshi
- 2D3-05\*** Controlling signal duration in living cells using degradable and non-degradable self-localizing ligands (Grad Sch. Eng., Nagoya Inst. of Tech.; Grad. Sch. Pharm., The Univ. of Tokyo) ○NAKAMURA, Akinobu; SAWADA, Shunsuke; OKI, Choji; YOSHII, Tatsuyuki; ICHIHASHI, Yuki; KOMATSU, Toru; URANO, Yasuteru; TSUKIJI, Shinya
- 2D3-07** Optochemical SLIPT system for spatiotemporal control of cell signaling (Grad Sch. Eng., Nagoya Inst. of Tech.) ○OKI, Choji; NAKAMURA, Akinobu; YOSHII, Tatsuyuki; TSUKIJI, Shinya

Chair: SATO, Shinichi (10 : 20~11 : 20)

- \* 10:10-10:20: interval for laptop PC connection.(2D3-09, 2D3-11, 2D3-12, 2D3-13, 2D3-14)
- 2D3-09\*** Protein Chemical Labeling with Peptide-tag/Probe Pair (1) : Application of Chemical Labeling with Oligo Asp-tag to Protein Visualization by Transmission Electron Microscopy (Shigemoto Group, IST Austria; Grad. Sch. Pharm., Kyushu Univ.) ○TABATA, Shigekazu; JEVTIC, Marijo; KIDO, Munetsugu; FUCHIDA, Hirokazu; HAMACHI, Itaru; SHIGEMOTO, Ryuichi; OJIDA, Akio
- 2D3-11** Protein Chemical Labeling with Peptide-tag/Probe Pair (2) : Screening of High Reactive Oligo Asp-tag and Its Application to Bioimaging (Grad. Sch. Pharm., Kyushu Univ.) ○KURASHIGE, Nobutaka; FUCHIDA, Hirokazu; TABATA, Shigekazu; UCHINOMIYA, Shohei; OJIDA, Akio
- 2D3-12** Development of a highly reactive probe for oligo-his tag applicable to TEM imaging (Grad. Sch. Pharm., Kyushu Univ.) ○ZENMYO, Naoki; FUCHIDA, Hirokazu; KURASHIGE, Nobutaka; TABATA, Shigekazu; UCHINOMIYA, Shohei; OJIDA, Akio
- 2D3-13** Analysis on mode of action of bacterial infectious factor coronatine for universal species of plant (Grad. Sch. Sci., Tohoku Univ.) ○HAYASHI, Kengo; EGOSHI, Syusuke; ISHIMARU, Yasuhiro; TAKAOKA, Yosuke; UEDA, Minoru
- 2D3-14** Development of a molecular probe for the identification of unknown target protein of plant virulence factor Coronatine (Grad. Sch. Sci., Tohoku Univ.) ○MIYAGAWA, Saki; HAYASHI, Kengo; TAKAOKA, Yosuke; UEDA, Minoru

### Wednesday, March 21, PM

Chair: HOSOYA, Takamitsu (15 : 00~16 : 00)

- \* 14:50-15:00: interval for laptop PC connection.(2D3-37, 2D3-40, 2D3-41, 2D3-42)
- 2D3-37<sup>#</sup>** Young Scholar Lectures of CSJ Development and Application of Catalytic Protein Labeling Based on Radical Reactions (IIR, Tokyo Tech.) ○SATO, Shinichi
- 2D3-40** Engineering orthogonal SLIPT systems toward multiplexed control of

- cell signaling pathways (Grad Sch. Eng., Nagoya Inst. of Tech.) ○KATO, Kenya; NAKAMURA, Akinobu; YOSHII, Tatsuyuki; TSUKIJI, Shinya
- 2D3-41** Development of novel self-localizing ligands specific to the inner plasma membrane (Grad Sch. Eng., Nagoya Inst. of Tech.) ○SAWADA, Shunsuke; NAKAMURA, Akinobu; YOSHII, Tatsuyuki; TSUKIJI, Shinya
- 2D3-42** New translocation-based method for detection of protein-small molecule interactions in living cells (Grad Sch. Eng., Nagoya Inst. of Tech.; Fac. Eng. Nagoya Inst. of Tech.) ○SUZUKI, Sachio; IKUTA, Masahiro; NAKAMURA, Akinobu; YOSHII, Tatsuyuki; TSUKIJI, Shinya

Chair: TSUKIJI, Shinya (16 : 10~17 : 10)

- \* 16:00-16:10: interval for laptop PC connection.(2D3-44, 2D3-45, 2D3-46, 2D3-47, 2D3-48, 2D3-49)
- 2D3-44** Construction of coronatine stereochemical library (Grad. Sch. Sci., Tohoku Univ.) ○WATANABE, Raku; KATO, Nobuki; TOZAWA, Sho; UEDA, Minoru
- 2D3-45** Functional analyses of all stereoisomers of coronatine with phytohormone co-receptors to discover a novel bioactive small molecule (Grad. Sch. Sci., Tohoku Univ.) ○TOZAWA, Sho; ISHIMARU, Yasuhiro; WATANABE, Raku; NAGUMO, Keina; IWAHASHI, Mana; KATO, Nobuki; TAKAOKA, Yosuke; UEDA, Minoru
- 2D3-46** Establishment of method to evaluate the range of tyrosine labeling reaction catalyzed by Horseradish peroxidase (Lab. Chem. Life Sci., Tokyo Tech.) ○YOSHIDA, Masaki; HATANNO, Kensuke; SATO, Shinichi; NAKAMURA, Hiroyuki
- 2D3-47** Catalytic labeling of ligand-binding proteins on ruthenium photocatalyst-functionalized affinity beads (Lab. Chem. Life Sci., Tokyo Tech.) ○TSUSHIMA, Michihiko; SATO, Shinichi; NAKAMURA, Hiroyuki
- 2D3-48** Synthesis and biological evaluation of [<sup>18</sup>F] PET A β tracers possessing a neopentyl-type labelling unit. (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○FUJIMAKI, Ryo; TAGO, Tetsuro; TOYOHARA, Jun; TANAKA, Hiroshi
- 2D3-49** Synthesis of radioactive neopentyl iodides as dual-responsive molecular probe for theranostics (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TATSUTA, Maho; WASHIYA, Nana; SATO, Yui; SUZUKI, Hiroyuki; UEHARA, Tomoya; ARANO, Yasushi; TANAKA, Hiroshi

### Thursday, March 22, AM

Chair: SATO, Shinichi (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3D3-01, 3D3-02, 3D3-03, 3D3-04, 3D3-05, 3D3-06)
- 3D3-01** Synthesis and Photoproperties of a Visible Light Responsive Molecule Localizing Phospholipid Membrane (Fac. Sci., Fukuoka Univ.) ○KASAI, Kasumi; NAKAGAWA, Hiroyuki; NAGAHORA, Noriyoshi; OKUMA, Kentaro; SHIOJI, Kosei
- 3D3-02** Molecular tool for site-specific release of auxin (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST; PRESTO, JST) ○MASHIMO, Ayana; TAMESHIGE, Toshiaki; UCHIDA, Naoyuki; TORII, Keiko; HAGIHARA, Shinya; ITAMI, Kenichiro
- 3D3-03** Discovery of Small Molecules That Inhibit Drug Transporter (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○HAYASHI, Wakana; GOTO, Kaori; HAGIHARA, Shinya; HIROTA, Tsuyoshi; ITAMI, Kenichiro
- 3D3-04<sup>#</sup>** Multifunctional Gold Nanoparticles for Protein Degradation (Grad. Sch. Eng., The Univ. of Tokyo) ○MORISHITA, Kiyoshi; TEI, Reika; OKURO, Kou; AIDA, Takuzo
- 3D3-05** Synthesis and functional assessment of a photoresponsive compound for bioanalytical applications (IMRAM, Tohoku Univ.) ○MASHITA, Takato; KOWADA, Toshiyuki; TAKAHASHI, Hiroto; MATSUI, Toshitaka; MIZUKAMI, Shin
- 3D3-06** Photo-control of bioactive peptides by caged arginine (Grad. Sch. Eng., The Univ. of Tokyo) ○KONDA, Yoshiki; SAKAMOTO, Ryosuke; HAYASHI, Gosuke; OKAMOTO, Akimitsu

Chair: HAGIHARA, Shinya (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3D3-08, 3D3-09, 3D3-10, 3D3-12, 3D3-13)
- 3D3-08** Cytotoxic effect of silver nanoparticles coated by dextran polymer upon X-irradiation (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ○FUKADA, Soichiro; KURIHARA, Ryosuke; TANABE, Kazuhito
- 3D3-09** Capturing of glutathione by mesoporous nanoparticle possessing maleimide group (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ○ITO, Midori; KURIHARA, Ryosuke; TANABE, Kazuhito
- 3D3-10<sup>#</sup>** Advanced radiotherapy by using tumor-targeting gold nanoparticles (Tohoku Univ.) HATOYAMA, Keichiro; ○KITAMURA, Narufumi; TAKANO-KASUYA, Mayumi; HAMADA, Yoh; TAKASHI, Kamei; GONDA, Kohsuke
- 3D3-12<sup>#</sup>** Self-assembled peptide targets integrin mediated cancer cell migration (OIST) ○ROY, Sonu; ZHANG, Ye
- 3D3-13** Photoaffinity Labeling of Proteins Using Isoxazoles as Novel Labeling Agents (Lab. Chem. Life Sci., Tokyo Tech.) ○MORITA, Taiki; SATO, Shinichi; FUSE, Shinichiro; NAKAMURA, Hiroyuki

Chair: HAYASHI, Gosuke (11 : 20~12 : 00)

- \* 11:10-11:20: interval for laptop PC connection.(3D3-15, 3D3-16, 3D3-17,

3D3-18)

- 3D3-15** Development of covalent GST inhibitor (Grad. Sch. Sci., Nagoya Univ.; Grad. Sch. Pharm. Sci., Nagoya City Univ.) ○FUJIKAWA, Haruka; SHISHIDO, Yuku; KIMURA, Yasuaki; TOMOIKE, Fumiaki; MURAKAMI, Yuku; AOKI, Masahiro; ABE, Hiroshi
- 3D3-16<sup>#</sup>** Detection of cellular drug responses by optofluidic time-stretch microscopy with an extreme throughput of 1 million cells/s (Grad. Sch. Sci., The Univ. of Tokyo) ○LEI, Cheng; KOBAYASHI, Hirofumi; OZEKI, Yasuyuki; GODA, Keisuke
- 3D3-17** Design, Synthesis, and Biological Evaluation of Small Molecular  $\alpha$ -helix Mimetic PPI Inhibitors Targeting Hypoxia Inducible Factor (HIF-1) (Lab. Chem. Life Sci., Tokyo Tech.) ○UEDA, Hiroki; JOSHI, Manjusha; KAWAMURA, Jun; YOSHIMORI, Atsushi; NAKAMURA, Hiroyuki
- 3D3-18** Development of Albumin-based Boron Delivery System (Lab. Chem. Life Sci., Tokyo Tech.) ○ISHII, Satomu; SATO, Shinichi; NAKAMURA, Hiroyuki

## Thursday, March 22, PM

Chair: OJIDA, Akio (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(3D3-26, 3D3-28, 3D3-29, 3D3-30)
- 3D3-26<sup>#</sup>** Structure-Activity Relationship and Mechanism Elucidation of Novel Mammalian Circadian Clock Modulator (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; Grad. Sch. Sci., Osaka Pref. Univ.; RaQualia Pharma Inc.) ○OSHIMA, Tsuyoshi; ONO, Natsuko; KUWATA, Keiko; TSUYUGUCHI, Masato; KINOSHITA, Takayoshi; MORITA, Mikio; KAWAMURA, Kiyoshi; YAMAGUCHI, Junichiro; HAGIHARA, Shinya; KAY, Steve A.; HIROTA, Tsuyoshi; ITAMI, Kenichiro
- 3D3-28** Modification of membrane protein with synthetic glycan and functional analysis of the specific glycan on living cells (Grad. Sch. Sci., Osaka Univ.; NIID) ○MIYAKE, Shuto; KABAYAMA, Kazuya; SHOMURA, Hiroki; YAMAJI, Toshiyuki; HANADA, Kentaro; MANABE, Yoshiyuki; FUKASE, Koichi
- 3D3-29** Development of quantitative acrolein detection method based on [4 + 4] dimerization reaction of conjugated imine (Grad. Sch. Sci., Osaka Univ.) ○TSUCHIDA, Hiroya; SHIMOYAMA, Atsushi; KABAYAMA, Kazuya; TANAKA, Katsunori; FUKASE, Koichi
- 3D3-30<sup>#</sup>** Self-assembling molecules functionalize transplanted cells (ICR, Kyoto Univ.) ○TAKASHIMA, Ippei; KUSAMORI, Kosuke; VU, Thi Hue; MIZUKAMI, Yuya; KATSUDA, Yosuke; SATO, Shin-ichi; NISHIKAWA, Makiya; UESUGI, Motonari

Chair: MANABE, Yoshiyuki (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(3D3-33, 3D3-34, 3D3-35, 3D3-37)
- 3D3-33<sup>#</sup>** Studies on asymmetric synthesis of artificial glutamate analogs having opposite neuronal activities (International Coll. Arts Sci., Yokohama City Univ.) ○TSUKAMOTO, Shuntaro; MOROKUMA, Kenji; ISHIKAWA, Yuichi; OIKAWA, Masato
- 3D3-34** Quantitative evaluation of affinity between phytohormone co-receptor and its agonist/antagonist based on fluorescence anisotropy (Grad. Sch. Sci., Tohoku Univ.) ○NAGUMO, Keina; TAKAOKA, Yosuke; IWAHASHI, Mana; AZIZAH, Ika Nurul; KATOU, Nobuki; UEDA, Minoru
- 3D3-35<sup>#</sup>** Development of shoot branching enhancer targeting strigolactone receptor (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; JST-PRESTO) ○YOSHIMURA, Masahiko; TAKISE, Ryosuke; KIM, Sojung; SATO, Ayato; KUWATA, Keiko; INUKAI, Yoshiaki; YAGI, Akiko; KINOSHITA, Toshinori; ITAMI, Kenichiro; TSUCHIYA, Yuichiro; HAGIHARA, Shinya
- 3D3-37<sup>#</sup>** Synthetic approach toward site-specific control of plant hormone signaling (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; PRESTO, JST) ○YAMADA, Ryotaro; SARAH, Letitia; IWASAKI, Rie; TAKAHASHI, Koji; UCHIDA, Naoyuki; KINOSHITA, Toshinori; TORII, Keiko; ITAMI, Kenichiro; HAGIHARA, Shinya

Chair: OHNO, Osamu (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(3D3-40, 3D3-41, 3D3-42, 3D3-44)
- 3D3-40** Organ-selective enzyme reaction using glycocluster. (Biofunc. Syn. Chem. Lab., RIKEN; Biofunctional Chemistry Lab., A. Butlerov Inst., KFU; JST-PRESTO) ○ASANO, Risa; TAKAHASHI, Mihoko; SAKAMOTO, Kensaku; TANAKA, Katsunori
- 3D3-41** Synthesis of a fluorescent probe using sneeze inducing grayanotoxin I (Grad. Sch. Sci. Tech., Keio Univ.) ○ISHIKAWA, Shun; UBUKATA, Yusuke; ITO, Taku; NAKATA, Masaya; SAIKAWA, Yoko
- 3D3-42<sup>#</sup>** Reactive group-embedded affinity labeling reagent for efficient receptor protein labeling (Grad. Sch. Sci., Tohoku Univ.) ○NUKADZUKA, Yuuki; TAKAOKA, Yosuke; OURA, Saki; UEDA, Minoru
- 3D3-44<sup>#</sup>** Development of near-infrared photoactivatable amyloid-selective oxygenation catalyst and application to the disease-model mouse (Grad. Sch. Pharm., The Univ. of Tokyo) ○SOHMA, Youhei; NI, Jizhi; TANIGUCHI, Atsuhiko; OZAWA, Shuta; HORI, Yukiko; TOMITA, Taisuke; KANAI, Motomu

Chair: TAKAOKA, Yosuke (16 : 40~17 : 40)

- \* 16:30-16:40: interval for laptop PC connection.(3D3-47, 3D3-48, 3D3-50, 3D3-52)
- 3D3-47** Screening of the inhibitors of lipopolysaccharide (LPS) from marine organisms (Sch. Adv. Eng., Kogakuin Univ.) ○TERASAKI, Takuro; IWASAKI, Arihiro; SUENAGA, Kiyotake; MATSUNO, Kenji; OHNO, Osamu
- 3D3-48<sup>#</sup>** Molecular insights into micromechanical properties of raft-targeted self-assembly (OIST) ○LI, Guanying; MANG, Dingze; ZHANG, Ye
- 3D3-50<sup>#</sup>** Development of Lysine-Targeted Covalent Inhibitors for Intracellular Proteins Using Ligand-Directed NASA Chemistry (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○UEDA, Tsuyoshi; WATANABE, Yu; TAMURA, Tomonori; HAMACHI, Itaru
- 3D3-52** Synthesis and affinity evaluation of cyclic fatty acid derivatives to fatty acid binding Protein (FABP 7) for developing its selective inhibitors (Sch. Sci., Osaka Univ.) ○NAGAYASU, Mayu; TSUCHIKAWA, Hiroshi; SUGIYAMA, Shigeru; MATSUOKA, Shigeru; HARA, Toshiaki; MURATA, Michio; SHIMAMOTO, Chie; YOSHIKAWA, Takeo

Chair: TSUCHIKAWA, Hiroshi (17 : 50~18 : 50)

- \* 17:40-17:50: interval for laptop PC connection.(3D3-54, 3D3-56, 3D3-58, 3D3-59)
- 3D3-54<sup>#</sup>** An efficient and rational method for selecting allosteric modulators to GABA<sub>A</sub> receptors using ligand-directed chemistry (Grad. Sch. Eng., Kyoto Univ.) ○YAMAURA, Kei; KIYONAKA, Shigeki; SAKAMOTO, Seiji; HAMACHI, Itaru
- 3D3-56<sup>#</sup>** A new method for visualizing neurotransmitter receptors by a chemical cross-linking (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○AMAIKE, Kazuma; YAMAGAMI, Sadatoshi; NISHIKAWA, Yuki; KIYONAKA, Shigeki; HAMACHI, Itaru
- 3D3-58** Effective introduction of oligonucleotide into live cell with cell penetrating peptide (Grad. Sch. Eng., The Univ. of Tokyo) ○TAMAI, Makoto; HAYASHI, Gosuke; OKAMOTO, Akimitsu
- 3D3-59** Development of microbial bioreactor using artificial siderophore-iron complexes-modified electrode (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○ENDO, Suguru; INOMATA, Tomohiko; OZAWA, Tomohiro; MASUDA, Hideki

## Friday, March 23, AM

Chair: TAKAHASHI, Daisuke (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4D3-01, 4D3-03, 4D3-04, 4D3-05)
- 4D3-01\*** Chemistry of covalent drugs (1) : Development of kinase inhibitors based on the reaction profile of CFA group (Grad. Sch. Pharm., Kyushu Univ.) ○SATO, Mami; SHINDO, Naoya; FUCHIDA, Hirokazu; HATSUYAMA, Yuji; MIURA, Chizuru; OKAMOTO, Kei; WATARI, Kosuke; ONO, Mayumi; OJIDA, Akio
- 4D3-03** Chemistry of covalent drugs (2) : Exploration of a strain-release warhead and its application to development of covalent inhibitors. (Grad. Sch. Pharm., Kyushu Univ.) ○TOKUNAGA, Keisuke; SHINDO, Naoya; OJIDA, Akio
- 4D3-04** Polymer-tethered ligand-directed chemistry (1): Labeling chemical property in vitro (Sch. Eng., Kyoto Univ.) ○TORIGOE, Shogo; HAGI, Shinichiro; KUBOTA, Ryou; HAMACHI, Itaru
- 4D3-05<sup>#</sup>** Polymer-tethered ligand directed chemistry (2): Chemical labeling of folate receptor in live mice (Grad. Sch. Eng., Kyoto Univ.) ○KUBOTA, Ryou; HAGI, Shinichiro; IKEDA, Ryosuke; JIANG, Yanyan; HAMACHI, Itaru

Chair: UCHINOMIYA, Shohei (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4D3-08, 4D3-10, 4D3-12)
- 4D3-08<sup>#</sup>** Analysis of anti-proliferative effect of Paeoniflorigenone, a peculiar component of the roots of peony plants (Fac. Sci. Tech., Keio Univ.) ○HUANG, Ying; KAWAKAMI, Norifumi; MIYAMOTO, Kenji
- 4D3-10<sup>#</sup>** Regulation of mitochondrial respiration by intracellular carbon monoxide (Grad. Sch. Eng., Doshisha Univ.) ○MINEGISHI, Saika; KITAGISHI, Hiroaki; KANO, Koji
- 4D3-12<sup>#</sup>** Photoinduced reductive reaction in mitochondria by electron donor/acceptor linked molecules (RIES, Hokkaido Univ.) ○TAKANO, Yuta; MUNECHEKA, Reina; BIJU, Vasdevanpillai; HARASHIMA, Hideyoshi; IMAHORI, Hiroshi; YAMADA, Yuma

Chair: KUBOTA, Ryou (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4D3-15, 4D3-17, 4D3-19)
- 4D3-15<sup>#</sup>** Characterization of Novel Lipooligosaccharide from Symbiotic Bacteria and Synthesis of Its Active Principle Lipid A (Grad. Sch. Sci., Osaka Univ.) ○MIZOTE, Keisuke; SHIMOYAMA, Atsushi; SHIBATA, Naoko; DI LORENZO, Flaviana; FUJIMOTO, Yukari; MOLINARO, Antonio; KUNISAWA, Jun; KIYONO, Hiroshi; FUKASE, Koichi
- 4D3-17<sup>#</sup>** First Natural Sphingomyelin Synthase Inhibitor Inspiring "Sphingomimic" (Grad. Sch. Life Sci., Hokkaido Univ.) ○M.M. Mahadeva Swamy; MURAI, Yuta; OHNO, Yosuke; SUGA, Yoshiko; ANETAI, Masaki; YU, Jian; YAO, Min; KIHARA, Akio; MONDE, Kenji
- 4D3-19<sup>#</sup>** Synthesis and biological evaluation of natural product-mimicking 7,6-

spirocyclic imine compounds toward a specific inhibitor of neuronal nicotinic acetylcholine receptor (Grad. Sch. Sci., Osaka Univ.) ○MINAMINO, Kou; TSUCHIKAWA, Hiroshi; MURATA, Michio; KONOKI, Keiichi

### Friday, March 23, PM

Chair: IWASAKI, Arihiro (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4D3-28, 4D3-30, 4D3-31, 4D3-32, 4D3-33)
- 4D3-28<sup>#</sup>** H<sub>2</sub>O<sub>2</sub>-responsive protein labeling for ROS conditional proteomics (Grad. Sch. Eng., Kyoto Univ.) ○ZHU, Hao; TAMURA, Tomonori; HAMACHI, Itaru
- 4D3-30** Caged HDAC inhibitors having cell type specificity - design, synthesis and their potential use in epigenetic research (Fac. Sci., Toho Univ.) ○SAKAMOTO, Kotoko; SUZUKI, Akinobu; FURUTA, Toshiaki
- 4D3-31** Development of modular caged compounds and their target selective delivery (Fac. Sci., Toho Univ.) ○TAKEDA, Shiori; KAKEHI, Kazuyuki; SUZUKI, Akinobu; FURUTA, Toshiaki
- 4D3-32<sup>#</sup>** Investigation of 2-Benzoylpyridine-Au(III) catalyzed protein conjugation (Biofunc. Syn. Chem. Lab., RIKEN) ○LIN, Yixuan; MATSUOKA, Koji; TANAKA, Katsunori
- 4D3-33** Photo-Degradation of Proteins by the Aromatic Ring Moiety of Neocarzinostatin Chromophore (Fac. Sci. Tech., Keio Univ.) ○KITAMURA, Takashi; TAKAHASHI, Daisuke; TOSHIMA, Kazunobu

Chair: FUJIMOTO, Yukari (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4D3-35, 4D3-37, 4D3-38, 4D3-39, 4D3-40)
- 4D3-35<sup>#</sup>** Reversible photoregulation of translation in vivo (Fac. Sci., Hokkaido Univ.) ○OGASAWARA, Shinzi
- 4D3-37<sup>#</sup>** Gold-catalyzed cyclization of alkyne derivatives and its applications (Biofunc. Syn. Chem. Lab., RIKEN) ○VONG, Kenward; TANAKA, Katsunori
- 4D3-38** Synthesis of novel plant-growth stimulants by C-H functionalization of 2-azahypoxanthine (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; Grad. Sch. Sci. Technol., Shizuoka Univ.; ERATO, JST; Sch. Pharm. Sci., Univ. Shizuoka) ○UEDA, Ayaka; KITANO, Hiroyuki; CHOI, Jaehoon; ITO, Hideto; HAGIHARA, Shinya; KAN, Toshiyuki; KAWAGISHI, Hirokazu; ITAMI, Kenichiro
- 4D3-39** Structure-activity relationship and the synthesis of biotin probe of marine lipopeptide jahanyne family. (Fac. Sci. Tech., Keio Univ.) ○HOSHINA, Shizuka; IWASAKI, Arihiro; KUDO, Takafumi; TERUYA, Toshiaki; SUENAGA, Kiyotake
- 4D3-40** Development of gold-albumin catalyzed reaction. (Biofunc. Syn. Chem. Lab., RIKEN; Grad. Sch. Advanced Sci. Eng., Waseda Univ.; Kazan Univ.; JST-PRESTO) ○TSUBOKURA, Kazuki; VONG, Kenward; NAKAO, Yoichi; TANAKA, Katsunori

Chair: TERUYA, Toshiaki (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(4D3-42, 4D3-44, 4D3-45, 4D3-46, 4D3-47)
- 4D3-42<sup>#</sup>** Synthesis and Evaluation of Antitumor Activity of Acetogenin Derivatives with N-Methylpyrazole Connected by Sulfonamide (Kyoto Pharm. Univ.; The Cancer Chemotherapy Center of JFCR) ○MATSUMOTO, Takuya; AKATSUKA, Akinobu; OKAMURA, Mutsumi; DAN, Shingo; YAMORI, Takao; IWASAKI, Hiroki; YAMASHITA, Masayuki; KOJIMA, Naoto
- 4D3-44** Protein-Bound Metathesis Catalyst for Therapeutic In Vivo Synthetic Chemistry (Biofunc. Syn. Chem. Lab., RIKEN; GlycoTargeting Research Lab., RIKEN; Kazan Univ.; JST-PRESTO) ○EDA, Shohei; AHMADI, Peni; TANAKA, Katsunori
- 4D3-45<sup>#</sup>** Cytotoxic Studies of Natural Product Derivatives for Therapeutic In Vivo Synthetic Chemistry (Biofunc. Syn. Chem. Lab., RIKEN) ○AHMADI, Peni; EDA, Shohei; TANAKA, Katsunori
- 4D3-46** Development of FUT8 inhibitor: Fragment-Based Drug Discovery (FBDD) using coupling between alkyne and sulfonyl azide (Sch. Sci., Osaka Univ.) ○TAKAKURA, Yohei; MANABE, Yoshiyuki; FUKASE, Koichi
- 4D3-47** Synthesis and structure activity relationship study of phenyl group-containing lipid-modified CD1d ligands (Grad. Sch. Sci. Tech., Keio Univ.) ○KISHI, Junichiro; HIRATA, Natsumi; KASHIWABARA, Emi; INUKI, Shinsuke; FUJIMOTO, Yukari

**Room D4**  
Bldg. 9 934

### Biofunctional Chemistry ; Biotechnology

Tuesday, March 20, AM

Chair: KAJIHARA, Yasuhiro (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(1D4-07, 1D4-08, 1D4-09,

1D4-10, 1D4-11, 1D4-12)

- 1D4-07** Efficient synthesis of oligomannoside using a crosslinking protective group (Grad. Sch. Ind. Sci. Technol., TUS) ○UCHIDA, Maki; HACHISU, Masakazu; HORITO, Shigeomi
- 1D4-08** Synthesis of Bifunctional Derivative of Glucosyl Ceramide (Grad. Sch. Ind. Sci. Technol., TUS) ○UCHIYAMA, Kento; HACHISU, Masakazu; HORITO, Shigeomi
- 1D4-09** Design and synthesis of novel polymer based on aldohexose (Grad. Sch. Ind. Sci. Technol., TUS) ○OUCHI, Ayaka; HACHISU, Masakazu; HORITO, Shigeomi
- 1D4-10** Dynamics analysis of Lewis X oligosaccharides by NMR spectroscopy (Sch. Mat. Sci., JAIST) ○TATSUOKA, Hiroaki; HORI, Yoshiki; YAMAGUCHI, Takumi
- 1D4-11<sup>#</sup>** Synthetic studies of polydiacetylenes introducing various carbohydrate moieties at the terminal ends(II):Evaluation of polymerizabilities (Grad. Sch. Sci., Eng., Saitama Univ.; Saitama Univ. AIIT) ○ISHIZAWA, Masahiro; MATSUSHITA, Takahiko; KOYAMA, Tetsuo; YASUTAKE, Mikio; HATANO, Ken; MATSUOKA, Koji
- 1D4-12<sup>#</sup>** Synthetic studies of novel functional nanoparticles by means of the reverse micelles method (3)-Preparation and purification of the functional nanoparticles - (Grad. Sch. Sci., Eng., Saitama Univ.; Saitama Univ. AIIT) ○SAKAMOTO, Mao; MATSUSHITA, Takahiko; KOYAMA, Tetsuo; HATANO, Ken; MATSUOKA, Koji

Chair: HORITO, Shigeomi (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(1D4-14, 1D4-15, 1D4-16, 1D4-17, 1D4-18, 1D4-19)
- 1D4-14** Synthesis of novel cyclic oligosaccharides containing  $\beta$ -Gal-(1 $\rightarrow$ 4) repeating structures (Fac. Pharm. Sci., TUS) ○SHIRAIISHI, Tomomi; HARA, Rintaro; WADA, Takeshi
- 1D4-15<sup>#</sup>** Synthesis of *p*-Methoxyphenyl Sulfated  $\alpha$ -GalNAc Derivatives as Inhibitor of Japanese Encephalitis Virus (Aichi Univ. of Educ.; Aizu Univ., Junior College Division) ○HOR, Seanghai; SAKURAGI, Miho; YANAGISAWA, Keiya; YAMANAKA, Takashi; HIDARI, Kazuya; NAKANO, Hirofumi
- 1D4-16** Semisynthetic Study of Chondroitin Sulfate Derivatives (Grad. Sch. Sci., Osaka Univ.) ○KOKA, Atsumi; MANBO, Akihiro; OKAMOTO, Ryo; MAKI, Yuta; KAJIHARA, Yasuhiro
- 1D4-17<sup>#</sup>** Synthesis of gold nanoparticles modified with sugar(III):Investigation of aggregative conditions (Grad. Sch. Sci., Eng., Saitama Univ.; AIIT, Saitama Univ.) ○YONAIYAMA, Tomoki; MATSUSHITA, Takahiko; KOYAMA, Tetsuo; HATANO, Ken; MATSUOKA, Koji
- 1D4-18<sup>#</sup>** Synthetic study on dissociation mechanism of sialic acid by NA(3): Confirmation and evaluation of the dissociation of *p*-nitroaniline caused by the cleavage of sialic acid (Grad. Sch. Sci., Eng., Saitama Univ.; Saitama Univ. AIIT) ○DANIEL, Monique; MATSUSHITA, Takahiko; KOYAMA, Tetsuo; HATANO, Ken; MATSUOKA, Koji
- 1D4-19** Convenient detection of influenza virus using microparticles immobilized oligosaccharides obtained by saccharide primer method (Fac. Sci. Tech., Keio Univ.) ○KONO, Risa; OGAMI, Ayaka; SATO, Toshinori

### Tuesday, March 20, PM

Chair: NIIKURA, Kenichi (13 : 20~14 : 10)

- \* 13:10-13:20: interval for laptop PC connection.(1D4-27, 1D4-28, 1D4-29, 1D4-30, 1D4-31)
- 1D4-27** Elucidation of the interaction mechanisms between monoglucosylated glycans and a molecular chaperone (Sch. Mat. Sci., JAIST) ○NAKANE, Kenta; SUZUKI, Tatsuya; YANAKA, Saeko; KATO, Koichi; YAMAGUCHI, Takumi
- 1D4-28** Peptide specificity analysis of Peptide:N-glycanases using synthetic chitobiose-pentapeptides (Fac. Sci. and Technol., Seikei Univ.) ○KURIBARA, Taiki; ISHIHARA, Toshihiro; KUDO, Takaya; HIRANO, Makoto; TOTANI, Kiichiro
- 1D4-29** Synthesis study of bifunctional high-mannose type glycan probe via chemoenzymatic approach (Fac. Sci. and Technol., Seikei Univ.) ○ISHIKAWA, Shouta; HIRANO, Makoto; TOTANI, Kiichiro
- 1D4-30** Synthetic study of ubiquitinated glycoprotein using  $\delta$ -selenolysine derivative (Grad. Sch. Sci., Osaka Univ.) ○TANAKA, Yusuke; MAKI, Yuta; OKAMOTO, Ryo; KAJIHARA, Yasuhiro; IZUMI, Masayuki
- 1D4-31** A Study of Novel Glycopeptide Synthesis in Aqueous Phase using an Oligosaccharyl Asparagine as a Ligation Site (Grad. Sch. Sci., Osaka Univ.) ○NISHIKAWA, Rie; OKAMOTO, Ryo; MAKI, Yuta; CHANDRASHEKAR, Chaitra; KAJIHARA, Yasuhiro

Chair: TOTANI, Kiichiro (14 : 20~15 : 10)

- \* 14:10-14:20: interval for laptop PC connection.(1D4-33, 1D4-35, 1D4-36, 1D4-37)
- 1D4-33<sup>#</sup>** Total chemical synthesis and functional analysis of antifreeze glycoprotein toward elucidation of role of GalNAc at molecule level (Grad. Sch. Sci., Osaka Univ.) ○ORII, Ryo; FUKAMI, Daichi; TSUDA, Sakae; IZUMI, Masayuki; KAJIHARA, Yasuhiro; OKAMOTO, Ryo
- 1D4-35** Exploration of the regulation factors of protein glycosylation in the Golgi apparatus (Grad. Sch. Sci., Osaka Univ.) ○OKA, Ayae; KAYAHARA, Saya; MAKI, Yuta; OKAMOTO, Ryo; IZUMI, Masayuki;



KAJIHARA, Yasuhiro

**1D4-36** Substrate Specificity of GalNAc transferase isolated from Golgi apparatus (Grad. Sch. Sci., Osaka Univ.) ○IWAKI, Yuka; MAKI, Yuta; OKAMOTO, Ryo; KAJIHARA, Yasuhiro

**1D4-37** Development of GAG-like Oligosaccharide Substrates for newborn screening of the Mucopolysaccharidosis. (Fac. Sci. Tech., Keio Univ.; Natl. Cent. For Child Health and Dev.) ○WATANABE, Mashu; MATSUBAYASHI, Keiichi; ONODERA, Masashi; UCHIYAMA, Toru; NAKAJIMA, Hideki; SATO, Toshinori

Chair: OKAMOTO, Akimitsu (15 : 20~16 : 20)

\* 15:10-15:20: interval for laptop PC connection.(1D4-39, 1D4-40, 1D4-41, 1D4-42, 1D4-43, 1D4-44)

**1D4-39** The influence of gold nanoparticle shape on the adjuvant activity enhancement of poly(I:C) (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○TAZAKI, Taiyu; TABATA, Koshiro; AINAI, Akira; OHARA, Yuki; KOBAYASHI, Shintaro; ORBA, Yasuko; MITOMO, Hideyuki; SAWA, Hirofumi; SUZUKI, Tadaki; NIKURA, Kenichi; IJIRO, Kuniharu

**1D4-40** Preparation of Hemoglobin-Albumin Cluster as an Artificial Oxygen Carrier. (Fac. Sci. Eng., Chuo Univ.) ○SAKATA, Sho; FUNAKI, Ryosuke; MORITA, Yositsugu; KOMATSU, Teruyuki

**1D4-41** The effect of 5-aminolevulinic acid on lipid metabolism in 3T3-L1 cell. (Grad. Sch. Biosci. Biotech., Tokyo Tech.) ○OZAWA, Keita; ISHIDUKA, Masahiro; NAKAZHIMA, Motoo; TANAKA, Tooru; OGURA, Shun-ichiro

**1D4-42** Hydrolysis-driven fluorescence probe for protein sensing (Sci. Eng., The Univ. of Electro-Communications) ○TABUCHI, Yudai; YATABE, Kazuki; TAKI, Masumi

**1D4-43** Fabrication and Evaluation of Polymer Nanosheets Loading Lutein for Prevention of Ophthalmopathy (Grad. Sch. of Eng., Tokai Univ.) ○TSUBOI, Ryo; KUMASAKA, Miyu; KANAMORI, Akiko; YOKOYAMA, Sho; KIMURA, Hiroshi; OKAMURA, Yosuke

**1D4-44** Fabrication of Multilayered Porous Nanosheets Loading Hemostatic Drugs and Pressing-type Release of Drugs (Grad. Sch. of Eng., Tokai Univ.) ○TAKIMOTO, Shun; KOMACHI, Takuya; SUMIYOSHI, Hideaki; INAGAKI, Yutaka; OKAMURA, Yosuke

Chair: YOSHINO, Tomoko (16 : 30~17 : 40)

\* 16:20-16:30: interval for laptop PC connection.(1D4-46, 1D4-47, 1D4-48, 1D4-49, 1D4-51)

**1D4-46** Cytosolic protein delivery using phase-change nano-droplet (Grad. Sch. Eng., The Univ. of Tokyo) ○KISAKA, Miho; YAMAGUCHI, Satoshi; ISHIJIMA, Ayumu; AZUMA, Takashi; KOBAYASHI, Etsuko; SHIBASAKI, Yoshikazu; NAGAMUNE, Teruyuki; SAKUMA, Ichiro; OKAMOTO, Akimitsu

**1D4-47** Photoreponsive Fusiogenic Liposomes Containing Malachite Green Delivate and Targeting Delivery of Doxorubicin to Cells (Dept. of Chem. Eng., NIT, Nara College; ADRES, Ehime Univ.) ○WATANABE, Mai; HAYASHI, Keita; IWASAKI, Tomoyuki; SYUDO, Masachika; UDA, Ryoko

**1D4-48** Influence of tropone-skeleton on dispersion stability of nano-prodrugs (IMRAM, Tohoku Univ.) ○TANITA, Keita; KOSEKI, Yoshitaka; KAMISHIMA, Takaaki; KASAI, Hitoshi

**1D4-49** Functionalization of Mesoporous Silica Nanoparticles with efficient Endosomal Escape for Cancer Targeted Drug Delivery (RIES, Hokkaido Univ.) FORTUNI, Beatrice; RICCI, Monica; SUSANA, Rocha; MASUHARA, Akito; INOSE, Tomoko; ○UJI-I, Hiroshi

**1D4-51** A novel approach to study scalp skin conditions based on microbiome analysis using 16S rRNA gene sequencing (Milbon Co., Ltd.) ○WATANABE, Kosuke; SAKURAI, Yuki; SUTANI, Takashi; KOMATA, Makiko; INOUE, Fukashi; TACHIBANA, Kota; SUZUTA, Kazuyuki; ITO, Len

## Chemical Biology

Wednesday, March 21, AM

Chair: KIYONAKA, Shigeaki (9 : 00 ~9 : 50)

\* 8:50-9:00: interval for laptop PC connection.(2D4-01, 2D4-02, 2D4-03, 2D4-04)

**2D4-01** Analysis of glycans that depend on castration-resistant and androgen in prostate cancer cells by saccharide primer method (Fac. Sci. Tech., Keio Univ.) ○SASAKI, Katsumasa; KOSAKA, Takeo; OYA, Mototsugu; SATO, Toshinori

**2D4-02** Tyrosine labeling for protein functionalization using horseradish peroxidase (Lab. Chem. Life Sci., Tokyo Tech.) ○MATSUMURA, Masaki; SATO, Shinichi; NAKAMURA, Hiroyuki

**2D4-03** In vivo click reaction of acrolein: Application to therapeutic in vivo synthetic chemistry (Biofunc. Syn. Chem. Lab., RIKEN) ○PRADIPTA, Ambara Rachmat; FUJII, Motoko; URANO, Sayaka; TAHARA, Tsuyoshi; NOZAKI, Satoshi; WATANABE, Yasuyoshi; TANAKA, Katsunori

**2D4-04** Epigenetic analysis of histone H2A and H2B via chemical protein synthesis (Grad. Sch. Eng., The Univ. of Tokyo) ○HAYASHI, Gosuke; SUEOKA, Takuma; OKAMOTO, Akimitsu

Chair: TANAKA, Katsunori (10 : 00~10 : 50)

\* 9:50-10:00: interval for laptop PC connection.(2D4-07, 2D4-09, 2D4-10)

**2D4-07** Development of a fluorescent probe for live-cell imaging of fatty acid beta oxidation (Grad. Sch. Pharm., Kyushu Univ.) ○UCHINOMIYA, Shohei; KAWAGOE, Ryosuke; WEBER, Mark; SAKAMOTO, Mari; OJIDA, Akio

**2D4-09** Development of the fluorescence sensing system for detection of enzymes using the intramolecular cyclization reaction from carboxylic acid. (Grad. Sch. Pharm., Kyushu Univ.) ○NAKAMURA, Noriaki; UCHINOMIYA, Shohei; OJIDA, Akio

**2D4-10** Sequence-oriented peptide ligation to oligonucleotide (Grad. Sch. Eng., The Univ. of Tokyo) ○YANASE, Masafumi; HAYASHI, Gosuke; OKAMOTO, Akimitsu

Chair: OJIDA, Akio (11 : 00~11 : 40)

\* 10:50-11:00: interval for laptop PC connection.(2D4-13, 2D4-14, 2D4-15)

**2D4-13** Synthesis of chitosan-modified nanoparticles as a drug-carrier to intestinal immune cells (Grad. Sch. Eng., Kyoto Univ.) ○ISHII, Takumi; UMEHARA, Yui; SON, Aoi; KIMURA, Yu; KONDO, Teruyuki

**2D4-14** Brain cell-type specific activation of metabotropic glutamate receptors by coordination-chemogenetics (Grad. Sch. Eng., Kyoto Univ.) ○OJIMA, Kento; MICHIBATA, Yukiko; KUBOTA, Ryou; KIYONAKA, Shigeaki; HAMACHI, Itaru

**2D4-15** Cytotoxicity of 2-Geranylgeranyl-1,4-hydroquinone Isolated from Philippine Marine Sponge *Carteriospongia* sp. (Dept. Chem., MSU-IIT) ○GELANI, Chona; UY, Mylene

## Biofunctional Chemistry ; Biotechnology

Thursday, March 22, AM

### Cell

Chair: YAMAGUCHI, Satoshi (9 : 10 ~10 : 10)

\* 9:00-9:10: interval for laptop PC connection.(3D4-02, 3D4-03, 3D4-04, 3D4-05, 3D4-06, 3D4-07)

**3D4-02** Preparation of Hydroxyapatite-Nonwoven Silicate Fiber Composite Substrates for Cell Culture (Fac. Eng., TUS; Grad. Sch. Sci., TUS; Water Frontier Sci. & Technol. Res. Center, TUS) ○OKANO, Yasuyuki; ISHIKAWA, Shohei; IJIMA, Kazutoshi; OTSUKA, Hidenori; HASHIZUME, Mineo

**3D4-03** Capturing of endothelial progenitor cell on REDV surface under shear stress (Dep. Bio. Eng., NCV) ○KITAGAWA, Kazuki; MAHARA, Atsushi; NAKAOKI, Takahiko; YAMAOKA, Tetsuji

**3D4-04** Study of cell adhesion dynamics induced by DNA-PEG-lipids (Grad. Sch. Sci., Eng., Saitama Univ.) ○TOGO, Shoda; SATO, Ken; KAWAMURA, Ryuzo; KOBAYASHI, Naritaka; NAKABAYASHI, Seiichi; TERAMURA, Yuji; YOSHIKAWA, Hiroshi

**3D4-05** Development of a method for plasmid DNA transfer into human lymphocyte using nanoneedle array (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○HONDA, Yuki; YAMAGISHI, Ayana; KIM, Hyonchol; NAKAMURA, Chikashi

**3D4-06** Detection of intracellular VEGF using aptamer-immobilized nanoneedle (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MORIKAWA, Mone; YAMAGISHI, Ayana; SAITOH, Shiori; TSUKAKOSHI, Kaori; FUKAZAWA, Kyoko; ISHIHARA, Kazuhiko; IKEBUKURO, Kazunori; NAKAMURA, Chikashi

**3D4-07** Mechanical separation of neural stem cell derived from human iPSC cell using nanoneedle array (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MATSUMOTO, Yuta; KAWAMURA, Ryuzo; YAMAGISHI, Ayana; IJIMA, Masumi; KURODA, Shun'ichi; NAKAMURA, Chikashi

Chair: NAKAMURA, Chikashi (10 : 20~11 : 20)

\* 10:10-10:20: interval for laptop PC connection.(3D4-09, 3D4-10, 3D4-11, 3D4-12, 3D4-13, 3D4-14)

**3D4-09** Photo-cleavable PEG-lipids for light-guided cell release from single-cell array in a microfluidic system (Grad. Sch. Eng., The Univ. of Tokyo) ○JARZEBSKA, Natalia; YAMAGUCHI, Satoshi

**3D4-10** Single-cell manipulation method for adhesive cells using a photo-responsive PEG-lipid (Fac. Eng., The Univ. of Tokyo) ○YAMAOKA, Misato; YAMAGUCHI, Satoshi; IZUTA, Shin; YAMAHIRA, Shinya; OKAMOTO, Akimitsu

**3D4-11** Development of a photo-reactive surface for cell arrangement aiming at analysis of cell-cell interaction between heterologous cells (Fac. Eng., The Univ. of Tokyo) ○KOSAKA, Takahiro; YAMAGUCHI, Satoshi; IZUTA, Shin; OKAMOTO, Akimitsu

**3D4-12** Bioproduction of prostaglandins in the marine diatom *Fistulifera solaris* by cyclooxygenase expression (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TSURU, Yuki; MAEDA, Yoshiaki; YOSHINO, Tomoko; TANAKA, Tsyoshi

**3D4-13** Continuous paramylon production using microalgae *Euglena gracilis* under heterotroph condition (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TAKAMATSU, Shouhei; KOJIMA, Katsuhiko; ISHIKAWA, Takahiro; SODE, Koji

**3D4-14** Recombinant production of small bispecific antibody in *Synechocystis* sp. PCC 6803 (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SHIOYA, Sayumi; ASANO, Ryutarō; SODE, Koji

Chair: TAKEYAMA, Haruko (11 : 30~12 : 30)

- \* 11:20-11:30: interval for laptop PC connection.(3D4-16, 3D4-18, 3D4-20)  
**3D4-16**<sup>#</sup> Counting of the Number of Trimeric Autotransporter Adhesin Molecules on the Cell Surface via SNAP-tag Labeling (Grad. Sch. Eng., Nagoya Univ.) OKANIE, Junichi; MATSUZAKI, Yuki; HORI, Katsutoshi  
**3D4-18**<sup>#</sup> Fabrication of Biodegradable and Injectable IPN Hydrogel Consisting of Self-assembling Peptide and Chitosan (Grad. Sch. Sci., TUS) OISHIKAWA, Shohei; IJIMA, Kazutoshi; HASHIZUME, Mineo; IJIMA, Michihiro; OTSUKA, Hidenori  
**3D4-20**<sup>#</sup> Establishment of versatile magnetic separation of organelles using magnetic-plasmonic hybrid nanoparticles (Sch. Mat. Sci., JAIST) TAKAHASHI, Mari; WANG, Youren; MUKAI, Kohjiro; MATSUMOTO, Takeo; MATSUMURA, Kazuaki; TAKAKURA, Masahiro; TAGUCHI, Tomohiko; ARAI, Hiroyuki; MAENOSONO, Shinya

Thursday, March 22, PM

## Cell/Bioinformatics

Chair: HORI, Katsutoshi (13 : 40~14 : 40)

- \* 13:30-13:40: interval for laptop PC connection.(3D4-29, 3D4-30, 3D4-32, 3D4-34)  
**3D4-29** Separation, analysis and retrieval of cancer cells using a single cell microarray chip (Health Research Inst., AIST) YAMAMURA, Shohei; YAMADA, Eriko; KIMURA, Fukiko; MIYAJIMA, Kumiko; SHIGETO, Hajime  
**3D4-30**<sup>\*</sup> Mapping Analysis of Biomolecules in an Elongating Filamentous Fungus Using Raman Microspectroscopy (Sch. Sci. Tech., Kwansei Gakuin Univ.) OYASUDA, Mitsuru; TAKESHITA, Norio; SHIGETO, Shinsuke  
**3D4-32**<sup>#</sup> Droplet microfluidics toward accurate genome sequencing of environmental bacteria at the single-cell level (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ONISHIKAWA, Yohei; HOSOKAWA, Masahito; KOGAWA, Masato; TAKAHASHI, Kai; TAKEYAMA, Haruko  
**3D4-34** Evaluation of tissue fixation method for spatial transcriptome analysis (Center for Advanced Bio. Sci., Waseda Univ.) YAMAZAKI, Miki; HOSOKAWA, Masahito; YODA, Takuya; MATSUNAGA, Hiroko; ARIKAWA, Koji; TAKAHASHI, Kiyofumi; SAKANASHI, Chikako; TAKEYAMA, Haruko

## Biocatalysis

Chair: YAMAMURA, Shohei (14 : 50~15 : 50)

- \* 14:40-14:50: interval for laptop PC connection.(3D4-36, 3D4-37, 3D4-38, 3D4-40, 3D4-41)  
**3D4-36** Realization of highly efficient alcoholysis in aqueous media by hydrophobization of enzyme surface with a thermostable esterase (Grad. Sch. Sci. Tech., Keio Univ.) ASANO, Masato; EGAWA, Natsuko; KAWAKAMI, Norihumi; MIYAMOTO, Kenji  
**3D4-37** Improving alcoholysis efficiency of a thermostable esterase in aqueous media by hydrophobization inside of active site (Keio Univ.) OEGAWA, Natsuko; ASANO, Masato; KAWAKAMI, Norifumi; MIYAMOTO, Kenji  
**3D4-38**<sup>#</sup> Acceleration of Enzymatic Degradation of Poly(ethylene terephthalate) by Surface Coating with Anionic Surfactants (Grad. Sch. Sci. Tech., Keio Univ.) OFURUKAWA, Makoto; KAWAKAMI, Norifumi; MIYAMOTO, Kenji  
**3D4-40**<sup>#</sup> Complete Enantioselectivity Inversion by a Single Mutation of Geotrichum candidum Oxidoreductase in Reduction of Tetralones (Sch. Life Sci. Tech., Tokyo Tech.) KOESOEMA, Afifa Ayu; VERINA, Samantha; MATSUDA, Tomoko  
**3D4-41** Screening for microbial enzymes catalyzing domino reaction involving oxidation and asymmetric cyclization (Sch. Sci. Eng., Meisei Univ.) ISAKA, Keita; OASHI, Miwa; AIZAWA, Yuta; KUSHIMA, Yuho; KUSUYAMA, Natsumi; FUHSHUKU, Ken-ichi

Chair: MIYAMOTO, Kenji (16 : 00~17 : 00)

- \* 15:50-16:00: interval for laptop PC connection.(3D4-43, 3D4-44, 3D4-45, 3D4-46, 3D4-47)  
**3D4-43** Antioxidative mechanism of NAD(P)H coexisting with Hemoglobin (Dept. Chem., Nara Med. Univ.) YAMADA, Magohei; MATSUHIRA, Takashi; YAMAMOTO, Keizo; SAKAI, Hiromi  
**3D4-44** The biotransformation of resveratrol derivatives by phytolacca americana cultured cells (Fac. of Sci., Okayama Univ. of Sci.) YANAGI, Masayoshi; FUJITAKA, Yuuya; UESUGI, Daisuke; DOI, Syouta; SHIMODA, Kei; OZAKI, Shin-ichi; HAMADA, Hiroki  
**3D4-45** The biotransformation of flavon derivatives using plant cultured cells. (Fac. of Sci., Okayama Univ. of Sci.) INOUE, Manami; HUIJITAKA, Yuuya; ONISHI, Tatsuya; OZAKI, Shin-ichi; NAKAYAMA, Toru; WAKI, Toshiyuki; HAMADA, Hiroki  
**3D4-46** Synthesis of shikimic acid using Arabidopsis thaliana seedling as a biocatalyst (Grad. Sch. Sci., Osaka Pref. Univ.) KOJIMA, Hideo; INUI, Ayaka; TAKEDA, Satomi  
**3D4-47**<sup>\*</sup> Biotransformation of foreign substrate using plant cultured cells (Fac. of Sci., Okayama Univ. of Sci.) HAMADA, Hiroki; SHIMODA, Kei; OZAKI, Shin-ichi; NAKAYAMA, Toru; INOUE, Tsuyoshi

Chair: KAWAKAMI, Norifumi (17 : 10~18 : 10)

- \* 17:00-17:10: interval for laptop PC connection.(3D4-50, 3D4-52, 3D4-53, 3D4-54, 3D4-55)  
**3D4-50**<sup>#</sup> Molecular Design of Electrocatalysts towards Enhancement of Interfacial Electron Transport between Microorganism and Electrode (Grad. Sch. Eng., The Univ. of Tokyo) OTOKUNOU, Yoshihide; HASHIMOTO, Kazuhito; OKAMOTO, Akihiro  
**3D4-52** Synthesis of Optically Active Biaryl-Containing Compounds via HSA-Mediated Asymmetric Nitroaldol Reaction (Sch. Sci. Eng., Meisei Univ.) MATSUMOTO, Kazutsugu; KITABAYASHI, Ryota; ASAKURA, Shota; HARADA, Norimasa; SUKA, Noriyuki; TASHIRO, Mitsuru  
**3D4-53** Study on Asymmetric Hydrolysis of Enol Esters using Lipase and BSA (Sch. Sci. Eng., Meisei Univ.) MATSUMOTO, Kazutsugu; IMAMURA, Yuta; TESALONA, Marverick Kiel Alberto; HARADA, Norimasa; TASHIRO, Mitsuru  
**3D4-54** A hydrophobic reaction cavity anchoring a pyrene moiety within a  $\beta$ -barrel protein for stereoselective Diels-Alder reaction. (Grad. Sch. Eng., Osaka Univ.) TANIGUCHI, Naomasa; KATO, Shunsuke; ONODA, Akira; HAYASHI, Takashi  
**3D4-55** Substrate recognition mechanism of histidinol phosphate aminotransferase (Osaka Med. Coll.) HAYASHI, Hideyuki; MURAKAWA, Takeshi

## Room D5

Bldg. 9 935

## Biofunctional Chemistry ; Biotechnology

Tuesday, March 20, AM

## Functional Nucleic Acids

Chair: SANDO, Shinsuke (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1D5-01, 1D5-02, 1D5-03, 1D5-05)  
**1D5-01**<sup>#</sup> Locating the uracil-5-yl radical formed in genomic DNA containing 5-bromouracil (Grad. Sch. Sci., Kyoto Univ.) SUGIYAMA, Hiroshi; HASHIYA, Fumitaka  
**1D5-02** Efficient DNA cleavage by radiolytic reduction of Cu(II) complexes. (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ONOZUKA, Suzu; KURIHARA, Ryohsuke; TANABE, Kazuhito  
**1D5-03**<sup>#</sup> Enhanced Invasion Efficiency of Ru-modified PNA and Evaluation of its Photo-reactivity (Grad. Sch. Sci., Nagoya Univ.) HIBINO, Masaki; AIBA, Yuichiro; SHOJI, Osami; WATANABE, Yoshihito  
**1D5-05**<sup>#</sup> Rational Design of Allosteric DNzyme utilizing a Cu(II)-mediated Artificial Base Pair (Grad. Sch. Sci., The Univ. of Tokyo) NAKAMA, Takahiro; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiko

Chair: ABE, Hiroshi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1D5-08, 1D5-10, 1D5-11, 1D5-12, 1D5-13)  
**1D5-08**<sup>#</sup> Chemical approaches for quantum sequencing (1): Design of highly conductive non-natural nucleosides for accurate base-calling in quantum sequencer (Grad. Sch. Eng., The Univ. of Tokyo) FURUHATA, Takafumi; OHSHIRO, Takahito; UEKI, Ryosuke; TANIGUCHI, Masateru; SANDO, Shinsuke  
**1D5-10** Chemical approaches for quantum sequencing (2): Development of chemical tags that enable detection of the terminus of oligonucleotide (Fac. Eng., The Univ. of Tokyo) SUZUKI, Tomoaki; OHSHIRO, Takahito; FURUHATA, Takafumi; UEKI, Ryosuke; TANIGUCHI, Masateru; SANDO, Shinsuke  
**1D5-11** Effects of Molecular-crowding on Electron Transfer and Oxidative Damage in Pyrene-modified Oligonucleotides (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) TANAKA, Makiko; IIDA, Hiroki; MATSUMOTO, Takayuki  
**1D5-12** Development of the artificial oligonucleotide capable of the photocrosslinking ability induced a benzophenone (Grad. Sch. Sci. Tech., Gunma Univ.) SUNAGA, Toshihisa; MOTEGI, Dai; MOTEGI, Yuuya; SHINOZUKA, Kazuo; MORIGUCHI, Tomohisa  
**1D5-13** Development of novel fluorescent probe composed of artificial nucleic acid by incorporation of fluorescent nucleobases (Grad. Sch. Eng., Nagoya Univ.) MURAYAMA, Keiji; ASANUMA, Hiroyuki

Chair: OKAMOTO, Akimitsu (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1D5-15, 1D5-16, 1D5-17, 1D5-18, 1D5-19, 1D5-20)  
**1D5-15** Development of photoresponsive SNA for reversible photoregulation of duplex formation and dissociation (Grad. Sch. Eng., Nagoya Univ.) YAMANO, Yuuhei; MURAYAMA, Keiji; ASANUMA, Hiroyuki  
**1D5-16** Development of chemical ligation reaction for template polymerization of acyclic artificial nucleic acid: aTNA (Sch. Eng., Nagoya Univ.) MURAYAMA, Keiji; KURIKI, Takumi; ASANUMA, Hiroyuki

- 1D5-17** Topological capturing of target oligonucleotide by multi-branched DNA chemical ligation (Grad. Sch. Sci., Nagoya Univ.) ○TOMITA, Takashi; ABE, Naoko; KIMURA, Yasuaki; ONIZUKA, Kazumitsu; ABE, Hiroshi
- 1D5-18** DNA polymerase reaction using the oligonucleotide having sulfonamide linkage as a template. (Sch. Life Sci. Tech., Tokyo Tech.) ○SEKIYA, Shota; TAKESHITA, Leo; MASAKI, Yoshiaki; SEIO, Kohji
- 1D5-19** Incorporation of various chemically-modified deoxynucleoside triphosphates using DNA polymerase mutants (Grad. Sch. Sci. Tech., Gunma Univ.) ○HAGIWARA, Kenta; HOSHINO, Hidekazu; KASAHARA, Yuuya; OBIKA, Satoshi; PIET, Herdewijn; KUWAHARA, Masayasu
- 1D5-20** Development of on-site detection system of infectious genome (Grad. Sch. Sci. Tech., Gunma Univ.) ○FUJITA, Hiroto; KATAOKA, Yuka; KASHIWAGI, Yasuyo; KAWASHIMA, Hisashi; KUWAHARA, Masayasu

Tuesday, March 20, PM

### Nucleic Acids (Sensig, probe)

Chair: MURAYAMA, Keiji (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1D5-28, 1D5-29, 1D5-31, 1D5-32, 1D5-33)
- 1D5-28** Enantioselective Epoxidation Using DNA Hybrid Catalyst (Dep. Chem., Sch. Sci., Kyoto Univ.) ○MATSUI, Haruka; PARK, Soyoun; SUGIYAMA, Hiroshi
- 1D5-29<sup>##</sup>** Design and Application of DNA Hybrid Catalyst for Asymmetric Catalysis (Dep. Chem., Sch. Sci., Kyoto Univ.) ○PARK, Soyoun; YUM, Jihye; SUGIYAMA, Hiroshi
- 1D5-31<sup>#</sup>** Enantioselective Hydration of  $\alpha$ ,  $\beta$ -unsaturated Ketones Using a DNA Hybrid Catalyst Containing an Intrastrand Bipyridine Ligand (Grad. Sch. Sci., Kyoto Univ.) ○YUM, Jihye; HIRAGA, Ryota; PARK, Soyoun; SUGIYAMA, Hiroshi
- 1D5-32** Development of nucleic acid probe incorporating fluorescent off-on type molecule (Sch. Sci., Nagoya Univ.; Nagoya Univ.) ○YAMAOKA, Kazuki; ITO, Mao; ABE, Naoko; TOMOIKE, Fumiaki; KIMURA, Yasuaki; ABE, Hiroshi
- 1D5-33** Synthesis and Photophysical Properties of New Size-Expanded Fluorescent Thymine Analogue (Fac. Sci., Kyoto Univ.) ○HIRASHIMA, Shingo; HAN, Ji Hoon; PARK, Soyoun; SUGIYAMA, Hiroshi

Chair: MASAKI, Yoshiaki (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1D5-35, 1D5-37, 1D5-39, 1D5-40)
- 1D5-35<sup>##</sup>** Development of a single-base resolution method to detect 5-hydroxymethylcytosine by peroxotungstate and DNA sequencing and its application to genomic DNA (Grad. Sch. Eng., The Univ. of Tokyo) ○KOYAMA, Kenta; OKAMOTO, Akimitsu; HAYASHI, Gosuke
- 1D5-37<sup>##</sup>** Live-Cell Multi-Color Imaging of Endogenous RNAs with a Small Molecule and a Short RNA (ICR, Kyoto Univ.) ○YATSUZUKA, Kenji; SATO, Shin-ichi; PE, Kathleen Beverly; UESUGI, Motonari
- 1D5-39** Imaging analysis of RISC localization mechanism by using siRNA involving dye pair. (Grad. Sch. Eng., Nagoya Univ.) ○SATAKE, Mayu; KAMIMOTO, Hiroshi; ITO, Anna; KAMIYA, Yukiko; ASANUMA, Hiroyuki
- 1D5-40** DNA Methylation Analysis of Retrotransposons in human genome DNA with Chemical Probes (Grad. Sch. Eng., The Univ. of Tokyo) ○TAKEUCHI, Fumika; OKAMOTO, Akimitsu

Chair: HAYASHI, Gosuke (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1D5-42, 1D5-43, 1D5-44, 1D5-45, 1D5-46, 1D5-47)
- 1D5-42** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (46) : Thioflavin T as a sequence specific fluorescent probe for DNA I-motif structure (FIRST, Konan Univ.) ○KOHATA, Kazuki; AKAYAMA, Shiori; SUGIMOTO, Naoki; MIYOSHI, Daisuke
- 1D5-43** Development of color-changing fluorescent labeling agents using strand exchange of nucleic acids (Sch. Eng., Nagoya Univ.; PRESTO, JST) KASHIDA, Hiromu; ○MAKINO, Koki; NOMURA, Maki; ASANUMA, Hiroyuki
- 1D5-44** Detection of cellular RNA by RETF probe (RCMS, Nagoya Univ.) ○TOMOIKE, Fumiaki; YAMAOKA, Kazuki; ITO, Mao; KIMURA, Yasuaki; INOUE, Takafumi; ABE, Hiroshi
- 1D5-45<sup>#</sup>** Investigation of Nucleosome Using <sup>1</sup>hG-tC FRET System (Fac. Sci., Kyoto Univ.) ○HAN, Ji Hoon; PARK, Soyoun; SUGIYAMA, Hiroshi
- 1D5-46** Development of phosphatase probe utilizing rotaxane structure (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○BABA, Fumito; OKUYAMA, Hitomi; HIRAYAMA, Kenta; KUZUYA, Akinori; OYA, Yuichi
- 1D5-47** Development of sandwich-typed miRNA quantification system using bispyrene-modified probes. (KIT) ○ICHIMI, Kizuki; WATARI, Yu; KOBORI, Akio

Chair: MIYOSHI, Daisuke (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(1D5-49, 1D5-50, 1D5-51, 1D5-52, 1D5-53)

- 1D5-49** Analysis on base discrimination of DNA gap structure by using FRET (Grad. Sch. Eng., Nagoya Univ.; PRESTO, JST) ○KOKUBO, Yuuta; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 1D5-50** Molecular Beacon Designed with Totally Serinol Nucleic Acid (SNA) for Detection of miRNAs (Grad. Sch. Eng., Nagoya Univ.) ○ARIYOSHI, Junpei; MURAYAMA, Keiji; KAMIYA, Yukiko; KASHIDA, Hiromu; ASANUMA, Hiroyuki
- 1D5-51** Preparation of a hexaplex by artificial bases which have hydrogen bonding sites at both sides (Grad. Sch. Eng., Nagoya Univ.; PRESTO, JST; Okazaki Institute for Integrative Bioscience; Grad. Sch. Eng., Osaka Univ.) ○HATTORI, Yuhei; KASHIDA, Hiromu; ISHII, Kentaro; UCHIYAMA, Susumu; ASANUMA, Hiroyuki
- 1D5-52<sup>#</sup>** Metal-responsive structure conversion of artificial DNA three-way junctions: development of an alternative linker between the ligand and DNA (Grad. Sch. Sci., The Univ. of Tokyo) ○SAKAKIBARA, Shiori; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiro
- 1D5-53** Highly sensitive RNA-FISH with fluorescent-labeled PCR product and L-DNA tag (Fac. Eng., The Univ. of Tokyo) ○OGATA, Motoyuki; HAYASHI, Gosuke; OKAMOTO, Akimitsu

Wednesday, March 21, AM

### Nucleic Acids(Molecular recognition)

Chair: OHKUBO, Akihiro (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2D5-01, 2D5-02, 2D5-03, 2D5-04, 2D5-05, 2D5-06)
- 2D5-01** Synthesis and properties of the DNA mismatch-binding molecules modified with various metal binding amino acids (ISIR, Osaka Univ.) ○MIKI, Shota; YAMADA, Takeshi; NAKATANI, Kazuhiko
- 2D5-02** Synthesis and RNA cleavage activity of oligodiaminogalactose derivatives bearing RNA-cleaving agents (Fac. Pharm. Sci., TUS) ○IIDA, Tomoyoshi; YOSHINO, Rejiro; HARA, Rintaro; WADA, Takeshi
- 2D5-03** Synthesis of a nitrogen-containing aromatic guanidine with ADDA hydrogen-bonding surface and evaluation of binding to nucleic acids (ISIR, Osaka Univ.) ○MURAKAMI, Eitaro; SHIBATA, Tomonori; NAKATANI, Kazuhiko
- 2D5-04** Development of artificial nucleic acids to induce the base flipping out (IMRAM, Tohoku Univ.) ○ISHIDA, Kei; ONIZUKA, Kazumitsu; NAGATSUGI, Fumi
- 2D5-05** Development of fluorescence OFF/ON type pseudorotaxane-forming nucleic acids for noncovalent labeling of RNA (IMRAM, Tohoku Univ.) ○MATSUYAMA, Junpei; ONIZUKA, Kazumitsu; MIYASHITA, Takuya; KAWASAKI, Yuuya; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; NNAGATSUGI, Fumi
- 2D5-06** Development of functional nucleic acids with the RNA-cleaving ability (IMRAM, Tohoku Univ.) ○ONIZUKA, Kazumitsu; TAGUCHI, Akifumi; NAGATSUGI, Fumi

### Synthesis of Nucleic Acids

Chair: SEIO, Kohji (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2D5-08, 2D5-09, 2D5-10, 2D5-11, 2D5-12, 2D5-13)
- 2D5-08** Synthesis and properties of cyclic oligonucleotides containing acyl groups (Sch. Life Sci. Tech., Tokyo Tech.) ○NISHIZAWA, Shuhei; HASHIMOTO, Ritsui; MIYAKE, Yu; KANAMORI, Takashi; YUASA, Hideya; OHKUBO, Akihiro
- 2D5-09** Design and synthesis of new alkynyl C-nucleotide bearing 2-aminopyridine moiety as an adenine analog (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) ○KUROSAKI, Fumihiko; CHIBA, Junya; INOUE, Masahiko
- 2D5-10** Development of silylated pyrene with electron donating group introduced and artificial nucleic acid incorporating it (Grad. Sch. Sci. Tech., Gunma Univ.) ○SASAKI, Kaoruko; SHINOZUKA, Kazuo; MORIGUCHI, Tomohisa
- 2D5-11<sup>#</sup>** Synthesis of the modified oligonucleotide containing *o*-chlorobenzoic acid and its pH dependence of hybridization properties (Sch. Life Sci. Tech., Tokyo Tech.) KAEWSOMBOON, Tanasak; IKEDA, Kousuke; NISHIZA, Shuhei; ○KANAMORI, Takashi; YUASA, Hideya; OHKUBO, Akihiro
- 2D5-12** Development of an unnatural bases pair with "anti-syn" like glycosidic conformation (Grad. Sch. Eng., The Univ. of Tokyo; RCAST, The Univ. of Tokyo) ○MORIYAMA, Yuya; MORIHIRO, Kunihiko; OKAMOTO, Akimitsu
- 2D5-13** Synthesis of stereoregulated boranophosphate DNA by an oxazaphospholidine approach and evaluation of their properties (Fac. Pharm. Sci., TUS) ○KOGURE, Tomoki; SAITO, Tatsuya; HAMAMURA, Yuka; NUKAGA, Yohei; UCHIYAMA, Naoki; IWAMOTO, Naoki; IWATA, Rintaro; WADA, Takeshi

Wednesday, March 21, PM

Chair: TANABE, Kazuhito (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(2D5-34, 2D5-35, 2D5-36, 2D5-37, 2D5-38, 2D5-39)

**2D5-34** Synthesis and properties of oligonucleotides having various carbomylethyl groups at 2' position. (Sch. Life Sci. Tech., Tokyo Tech.)  
 ○KISHIMURA, Tomohiro; YOSHIDA, Keita; ANO, Akihiro; TOMORI, Takahito; MASAKI, Yoshiaki; SEIO, Kohji

**2D5-35** Chemical synthesis of 2'-oxidized nucleic acids (Dept. of Material & Life Chem., Kanagawa Univ.)  
 ○SANEYOSHI, Hisao; ONO, Akira

**2D5-36** Synthesis of 2',3'-bridged nucleotides (Sch. Life Sci. Tech., Tokyo Tech.)  
 ○INOUE, Atsushi; MASAKI, Yoshiaki; SEIO, Kohji

**2D5-37** Synthesis and properties of oligonucleotides containing 5'-amino-5'-hydroxymethylthymidine derivatives. (Sch. Life Sci. Tech., Tokyo Tech.)  
 ○WATANABE, Lintaro; AOYAMA, Tomohiro; MUTO, Kosuke; KANAMORI, Takashi; YUASA, Hideya; OHKUBO, Akihiro

**2D5-38** Synthesis of oligodeoxyribonucleotides containing 2-N-heteroarylguanine residues and their properties of higher-order structures (Tokyo Tech.)  
 ○MARUYAMA, Atsuya; INDE, Takeshi; MASAKI, Yoshiaki; SEIO, Kohji

**2D5-39** Synthesis and properties of triplex-forming oligonucleotide containing 2-aminoquinoline derivative. (Sch. Life Sci. Tech., Tokyo Tech.)  
 ○OHNISHI, Tatsuya; NISHIMURA, Yuri; KANAMORI, Takashi; YUASA, Hideya; OHKUBO, Akihiro

Chair: ONIZUKA, Kazumitsu (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(2D5-41, 2D5-42, 2D5-43, 2D5-44, 2D5-45, 2D5-46)

**2D5-41** Enzymatic synthesis of DNA incorporating photo-caged deoxypseudouridine (Sch. Life Sci. Tech., Tokyo Tech.)  
 TAKESHITA, Leo; ○YAMADA, Yuji; MASAKI, Yoshiaki; SEIO, Kohji

**2D5-42** Synthesis and Raman spectra of oligodeoxynucleotides bearing acetylene unit at pyrimidine bases (Coll. Sci. Eng., Aoyama Gakuin Univ.)  
 ○ITAYA, Ryota; IDEI, Wakana; KURIHARA, Ryohsuke; TANABE, Kazuhito

**2D5-43** Development of photo-crosslinking probe for identification of proteins recruited by poly ADP-ribose (Grad. Sch. Eng., The Univ. of Tokyo)  
 ○YASUDA, Masaki; MORIHIRO, Kunihiko; OKAMOTO, Akimitsu

**2D5-44** Synthesis of N-substituted guanidine bridged nucleic acids (Grad. Sch. Pharm. Sci., Osaka Univ.)  
 ○HORIE, Naohiro; YAMAGUCHI, Takao; OBIKA, Satoshi

**2D5-45** Synthesis of oligonucleotide modified with membrane permeable molecule (Sch. Sci., Nagoya Univ.; Sch. Sci., Nagoya Univ.)  
 ○TANAKA, Iku; OTA, Azumi; FUSHIHARA, Daichi; SHU, Zhaoma; ABE, Naoko; TOMOIKE, Fumiaki; KIMURA, Yasuaki; ABE, Hiroshi

**2D5-46** Chemo-enzymatic synthesis of site selectively modified and biotinylated caged oligonucleotides (Fac. Sci., Toho Univ.)  
 ○KODAMA, Kazunari; SUZUKI, Akinobu; FURUTA, Toshiaki

Chair: MORIHIRO, Kunihiko (16 : 50~17 : 40)

\* 16:40-16:50: interval for laptop PC connection.(2D5-48, 2D5-49, 2D5-51, 2D5-52)

**2D5-48** Construction of chiral amplification system by using Serinol Nucleic Acid (Grad. Sch. Eng., Nagoya Univ.; PRESTO, JST)  
 KASHIDA, Hiromu; ○NISHIKAWA, Keiji; MIYAGAWA, Toshiki; HATTORI, Yuhei; ASANUMA, Hiroyuki

**2D5-49\*** Development of functional oligonucleotide working in RNA interference system by using acyclic nucleic acid, SNA (Grad. Sch. Eng., Nagoya Univ.)  
 ○KAMIYA, Yukiko; DONOSHITA, Yuka; KAMIMOTO, Hiroshi; TAKAI, Junya; MURAYAMA, Keiji; ARIYOSHI, Jumpei; ASANUMA, Hiroyuki

**2D5-51** Synthesis of functional DNA with alkyl moiety and introduction into cell membrane (Coll. Sci. Eng., Aoyama Gakuin Univ.)  
 ○TAKEYAMA, Koutarou; KURIHARA, Ryohsuke; TANABE, Kazuhito

**2D5-52** synthesis and characterization of RNA labeled with peptide (Fac. Applied Bio. Sci., Gifu Univ.)  
 ○MAEDA, Yusuke; HONDA, Kenji; ISHIGURO, Riho; UENO, Yoshihito

## Thursday, March 22, AM

### Nucleic Acid

Chair: UEKI, Ryosuke (9 : 00 ~9 : 50)

\* 8:50-9:00: interval for laptop PC connection.(3D5-01, 3D5-02, 3D5-03, 3D5-04, 3D5-05)

**3D5-01** Characterization of Peroxidase Activities and Heme Coordination Structures of Complexes between Chemically Modified Hemes and G-Quadruplex DNA [d(TTAGGG)]<sub>4</sub> (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba)  
 ○SHINOMIYA, Ryosuke; SHIBATA, Tomokazu; OGURA, Takashi; YANAGISAWA, Sachiko; SUZUKI, Akihiro; NEYA, Saburo; SEN, Dipankar; YAMAMOTO, Yasuhiko

**3D5-02** Structural Characterization of Complexes between Heme and G-Quadruplex DNA formed from Human Telomere-Related Sequence (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba)  
 ○YAMAMOTO, Yasuhiko; ARAKI, Haruka; NAKAYAMA, Yusaku; OCHI, Kentaro; SHIBATA, Tomokazu; HENMI, Hikaru; SEN, Dipankar

**3D5-03** Characterization of Relationship between Peroxidase Activities and Structures of Complexes between Heme and G-Quadruplex DNA formed from Human Telomere-Related Sequence (Div. of Chem., Fac. Pure Appl. Sci.,

Univ. of Tsukuba)  
 ○ARAKI, Haruka; NAKAYAMA, Yusaku; OCHI, Kentaro; SHINOMIYA, Ryosuke; SHIBATA, Tomokazu; HEMMI, Hikaru; HAGIHARA, Masaki; OGURA, Takashi; YANAGISAWA, Sachiko; SUZUKI, Akihiro; NEYA, Saburo; SEN, Dipankar; YAMAMOTO, Yasuhiko

**3D5-04** Novel Chaperonin Protein Nanotubes by DNA Hybridization (I): Design of DNA-Appended GroELs and Their Nanotubes by Copolymerization (Fac. Eng., The Univ. of Tokyo)  
 ○KASHIWAGI, Daiki; SIM, Seunghyun; NIWA, Tatsuya; TAGUCHI, Hideki; AIDA, Takuzo

**3D5-05** Novel Chaperonin Protein Nanotubes by DNA Hybridization (II): Selective Cleavage of Nanotubes by Complementary DNAs (The Univ. of Tokyo)  
 ○KASHIWAGI, Daiki; SIM, Seunghyun; NIWA, Tatsuya; TAGUCHI, Hideki; AIDA, Takuzo

Chair: YAMAMOTO, Yasuhiko (10 : 00~10 : 50)

\* 9:50-10:00: interval for laptop PC connection.(3D5-07, 3D5-08, 3D5-09, 3D5-10)

**3D5-07** Functional oligonucleotide for regulation of cellular activities (3): Precise regulation of growth factor signaling via controlling receptor clustering (Fac. Eng., The Univ. of Tokyo)  
 ○AKIYAMA, Momoko; UEKI, Ryosuke; SANDO, Shinsuke

**3D5-08** Functional oligonucleotide for regulation of cellular activities (4): Development of functional oligonucleotide ligands for spatio-temporal control of a growth factor signaling (Grad. Sch. Eng., The Univ. of Tokyo)  
 ○HAYASHI, Shota; UEKI, Ryosuke; UENO, Tasaku; URANO, Yasuteru; SANDO, Shinsuke

**3D5-09** Development of hypoxia sensitive RNA molecules (Fac. Eng., The Univ. of Tokyo)  
 ○ISHINABE, Takuro; MORIHIRO, Kunihiko; OKAMOTO, Akimitsu

**3D5-10\*\*** In vitro and Cell-based assay of Cooperative assemblies to mimic transcription factor pair (Dep. Chem., Sch. Sci., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.)  
 ○YU, Zutao; SUGIYAMA, Hiroshi

Chair: SUGIYAMA, Hiroshi (11 : 00~12 : 00)

\* 10:50-11:00: interval for laptop PC connection.(3D5-13)

**3D5-13<sup>f</sup>** CSJ Award for Creative Works Creation of functional oligonucleotide with nucleotide-analogues designed from acyclic scaffold (Grad. Sch. Eng., Nagoya Univ.)  
 ○ASANUMA, Hiroyuki

## Asian International Symposium - Medicinal Chemistry -

Thursday, March 22, PM

(13 : 00~13 : 10)

**3D5-25<sup>f</sup>** Opening Remarks / Closing Remarks Opening Remarks (Hokkaido Univ.)  
 ○Wakimoto, Toshiyuki (13:00~13:10)

Chair: Sasaki, Eita (13 : 10~14 : 10)

**3D5-26<sup>f</sup>** Invited Lecture Development of Subtype-selective Agonist for Jasmonate Co-receptor (Tohoku Univ.)  
 ○Takaoka, Yousuke (13:10~13:30)

**3D5-28<sup>f</sup>** Invited Lecture Aggregate Formation and Lipid-related Activity of 5aTHQs, Cryptic Actinomycete Metabolites (Kyoto Univ.)  
 ○Nishimura, Shinichi (13:30~13:50)

**3D5-30<sup>f</sup>** Invited Lecture Structure, Chemical Synthesis, and Biosynthesis of Peptidic Natural Products (Hokkaido Univ.)  
 ○Kuranaga, Takefumi (13:50~14:10)

Chair: Wakimoto, Toshiyuki (14 : 20~15 : 30)

**3D5-33<sup>f</sup>** Keynote Lecture Genome Mining for Posttranslational Modifications (National Univ. of Singapore)  
 ○Morinaka, Brandon I. (14:20~14:50)

**3D5-36<sup>f</sup>** Invited Lecture Acrolein Click Chemistry-Mediated Oxidative Stress Imaging and Theranostics (RIKEN)  
 ○Pradipta, Ambara Rachmat (14:50~15:10)

**3D5-38<sup>f</sup>** Invited Lecture Discovery of Disease-related Alternation of Enzymatic Functions with Enzymomics Approach (The Univ. of Tokyo)  
 ○Komatsu, Toru (15:10~15:30)

Chair: Kita, Masaki (15 : 40~16 : 50)

**3D5-41<sup>f</sup>** Keynote Lecture Chemical Approaches to Interrogate Protein Posttranslational Modifications (The Univ. of Hong Kong)  
 ○Li, Xiang David (15:40~16:10)

**3D5-44<sup>f</sup>** Invited Lecture Molecular Renovation Strategy: A Novel Synthetic Methodology for Expeditious Development of Molecular Probes (RIKEN)  
 ○Niwa, Takashi (16:10~16:30)

**3D5-46<sup>f</sup>** Invited Lecture Chemoselective Protein Modification Using Organoradicals (The Univ. of Tokyo)  
 ○Oisaki, Kounosuke (16:30~16:50)

(16 : 50~17 : 00)

**3D5-48<sup>f</sup>** Opening Remarks / Closing Remarks Closing Remarks (Nagoya Univ.)  
 ○Kita, Masaki (16:50~17:00)

## Biofunctional Chemistry ; Biotechnology

Friday, March 23, AM

## Quadruplex

Chair: KUWAHARA, Masayasu (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4D5-01, 4D5-02, 4D5-03, 4D5-04, 4D5-05, 4D5-06)

**4D5-01** Synthesis of macrocyclic hexaoxazoles for visualization of G-quadruplex in living cell (Fac. Eng., Tokyo Univ. of Agri. and Technol.)  
○YASUDA, Mizuho; MA, Yue; SASAKI, Shogo; SEIMIYA, Hiroyuki; CHANG, Young-tae; NAGASAWA, Kazuo

**4D5-02** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (47): A molecular targeting photodynamic therapy by an RNA G-quadruplex ligand (FIRST, Konan Univ.) ○TAKAGI, Kazuki; YASUI, Takatoshi; ITOU, Katsuhiko; SUGIMOTO, Wataru; KAWAUCHI, Keiko; SUGIMOTO, Naoki; MIYOSHI, Daisuke

**4D5-03** Synthesis and evaluation of a multivalent type G4 ligand with macrocyclic hexaoxazole (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SASAKI, Shogo; MA, Yue; MAO, Hanbin; NAGASAWA, Kazuo

**4D5-04** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (43): Synthesis of *N*-methyl chlorin derivatives that stabilize G-quadruplex (Grad. Sch. Life Sci., Ritsumeikan Univ.; FIBER, Konan Univ.; FIRST, Konan Univ.) ○NAGANO, Yasunobu; ENDOH, Tamaki; OGASAWARA, Shin; SUGIMOTO, Naoki; TAMIAKI, Hitoshi

**4D5-05** Synthesis of G-quadruplex ligand with fluorescence by interacting with G-quadruplex (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.)  
○MA, Yue; IIDA, Keisuke; NAGASAWA, Kazuo

**4D5-06** Enhancement of peroxidase activity of myoglobin by binding to myoglobin binding aptamer (Fac. Eng., Tokyo Univ. of Agri. and Technol.)  
○NAKAMA, Kenta; YAMAGISHI, Yasuko; KANAZASHI, Mana; KUNO, Hitoshi; TSUKAKOSHI, Kaori; IKEBUKURO, Kazunori

Chair: YOSHIDA, Wataru (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4D5-08, 4D5-10, 4D5-11, 4D5-13)

**4D5-08<sup>##</sup>** Studying G-quadruplex structures by <sup>19</sup>F NMR (Fac. Med., Univ. of Miyazaki) ○BAO, Hongliang; ISHIZUKA, Takumi; XU, Yan

**4D5-10** G-Quadruplex Induction by Hairpin Pyrrole-Imidazole Polyamide Dimer (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OBATA, Shunsuke; ASAMITSU, Sefan; HASHIYA, Kaori; BANDO, Toshikazu; SUGIYAMA, Hiroshi

**4D5-11<sup>##</sup>** Simultaneous recognition of G-quadruplex and its proximal duplex by hybrid molecules constructed with dual DNA-binding components (Dep. Chem., Sch. Sci., Kyoto Univ.) ○ASAMITSU, Sefan; OBATA, Shunsuke; PHAN, Anh Tuan; HASHIYA, Kaori; BANDO, Toshikazu; SUGIYAMA, Hiroshi

**4D5-13** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (45) : Selective fluorescence detection of G-quadruplex by ZnAPC (FIRST, Konan Univ.) ○IMAGAWA, Yoshiki; SUGIMOTO, Naoki; MIYOSHI, Daisuke

Chair: ENDOH, Tamaki (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4D5-15, 4D5-16, 4D5-18, 4D5-20)

**4D5-15** Effects on introduction of functional groups at the N3 position of Thioflavin T (Grad. Sch. Sci. Tech., Gunma Univ.) ○KATAOKA, Yuka; KUWAHARA, Masayasu

**4D5-16<sup>##</sup>** Chemical probing of G-quadruplex structures by modified nucleosides (Fac. Med., Univ. of Miyazaki) ○ISHIZUKA, Takumi; XU, Yan

**4D5-18<sup>##</sup>** Structural regulation of G-quadruplex-forming aptamers by a G-quadruplex ligand to control its binding ability (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TSUKAKOSHI, Kaori; IKUTA, Yuri; KONDA, Kaoru; NISHIO, Maui; MA, Yue; NAGASAWA, Kazuo; KATO, Yoshio; NAKAMURA, Chikashi; SODE, Koji; IKEBUKURO, Kazunori

**4D5-20** Construction and Application of G-quadruplex structure using bipyridine containing DNA (Fac. Sci., Kyoto Univ.) ○YANAGITANI, Rio; SAKASHITA, Sohei; YUM, Jihye; PARK, Soyoun; SUGIYAMA, Hiroshi

Friday, March 23, PM

Chair: NAKATA, Eiji (13 : 30~14 : 20)

\* 13:20-13:30: interval for laptop PC connection.(4D5-28, 4D5-29, 4D5-31, 4D5-32)

**4D5-28<sup>#</sup>** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (38): Effects of malignant alteration in cancer cells on the G-quadruplex formation and transcript mutations (FIBER, Konan Univ.) ○TATEISHI, Hisae; KAWAUCHI, Keiko; OHYAMA, Tatsuya; SUGIMOTO, Naoki

**4D5-29<sup>##</sup>** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (39) : Control of replication of G-quadruplex containing oxidative lesion (FIBER, Konan Univ.; Konan Univ.) ○TAKAHASHI, Shuntaro; PODBEVSEK, Peter; PLAVEC, Janez; BYEANG HYEAN, Kim; SUGIMOTO, Naoki

**4D5-31** Preparation of DNA quadruplex nanogels under dilute conditions. (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○TATASUMI, Kohji; TANAKA, Shizuma; SAKAMOTO, Kota; YUKAMI, Shinsuke; KUZUYA, Akinori; OHYA, Yuichi

**4D5-32<sup>#</sup>** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (42): Quantitative analysis for effects of molecular network by crowding agents on the G-quadruplex stability (FIBER, Konan Univ.) ○OHYAMA, Tatsuya; TATEISHI-KARIMATA, Hisae; SUGIMOTO, Naoki

## Nucleic Acids (Structure)

Chair: AIBA, Yuichiro (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(4D5-34, 4D5-35, 4D5-37, 4D5-39)

**4D5-34** Antiparallel-oriented DNA triplex stability and sequence-recognition selectivity of oligonucleotides containing alpha-deoxyribose (Sch. Life Sci. Tech., Tokyo Tech.) ○INDE, Takeshi; MASAKI, Yoshiaki; MIYATAKE, Yuya; SEKINE, Mitsuo; SEIO, Kohji

**4D5-35<sup>##</sup>** Sequence Specific Modular Adaptors for Orthogonal Location of Multiple Enzymes on a DNA scaffold (IAE, Kyoto Univ.) ○NGUYEN, Thang; NAKATA, Eiji; SAIMURA, Masayuki; MORII, Takashi

**4D5-37<sup>\*</sup>** Protein array on a DNA scaffold (IAE, Kyoto Univ.) ○NAKATA, Eiji; DINH, Dinh; SAIMURA, Masayuki; MORII, Takashi

**4D5-39<sup>#</sup>** Binding Studies of a Three Carbon Atom Linked 2-amino-1,8-Naphthyridine Dimer with Bulge-Mismatch DNA (ISIR, Osaka Univ.)  
○DAS, Bimolendu; NAKATANI, Kazuhiko

## Nucleic Acids

Chair: TATEISHI-KARIMATA, Hisae (15 : 40~16 : 50)

\* 15:30-15:40: interval for laptop PC connection.(4D5-41, 4D5-42, 4D5-43, 4D5-44, 4D5-45, 4D5-46, 4D5-47)

**4D5-41** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (44) : Regulation of DNA structure and stability by combined effects of histone-mimicking polymers and osmolytes (FIRST, Konan Univ.) ○ZOUZUMI, Yu-ki; MIYATA, Takahumi; SHIMADA, Naohiko; SUGIMOTO, Naoki; MARUYAMA, Atushi; MIYOSHI, Daisuke

**4D5-42<sup>#</sup>** Investigation of the thermodynamic stability and structure of oligonucleotides containing 2'-*O*-methyl-8-methyl guanosine by CD and NMR (Fac. Med., Univ. of Miyazaki) ○BALASUBRAMANIAM, Thananjayan; ISHIZUKA, Takumi; XU, Yan

**4D5-43** Nucleotide synthesis via phosphorylation by H-pyrophosphonic acid (Sch. Life Sci. Tech., Tokyo Tech.) ○SUGIYAMA, Daiki; SHIOZAWA, Takashi; OHNO, Kentaro; TOMORI, Takahito; MASAKI, Yoshiaki; SEIO, Kohji

**4D5-44** Reaction between biomolecules and H-pyrophosphonic acid (Sch. Life Sci. Tech., Tokyo Tech.) ○SHIOZAWA, Takashi; SUGIYAMA, Daiki; TOMORI, Takahito; MASAKI, Yoshiaki; SEIO, Koji

**4D5-45** Development of backbone-modified peptide nucleic acid for the efficient invasion complex formation with double-strand DNA. (Grad. Sch. Sci., Nagoya Univ.) ○NAKAMORI, Shoya; AIBA, Yuichiro; SHOJI, Osami; WATANABE, Yoshihito

**4D5-46** Synthesis of trimer of 2-amino-1,8-naphthyridine and its DNA binding analysis (ISIR, Osaka Univ.) ○YAGI, Yuki; AIKAWA, Haruo; NAKATANI, Kazuhiko

**4D5-47** Synthesis and evaluation of indole derivatives as nucleic acids binding ligand (ISIR, Osaka Univ.) ○MINAMI, Ryo; DOHNO, Chikara; NAKATANI, Kazuhiko

## Room D6

Bldg. 9 936

## Biofunctional Chemistry ; Biotechnology

Tuesday, March 20, AM

## Protein (Metal)

Chair: UCHIDA, Takeshi (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1D6-01, 1D6-03, 1D6-05)

**1D6-01<sup>##</sup>** Self-assembly of hexameric hemoprotein chemically modified with functional molecules (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST)  
○HIRAYAMA, Shota; OOHORA, Koji; HAYASHI, Takashi

**1D6-03<sup>##</sup>** Supramolecular hemoprotein assemblies with a cell-penetrating peptide and evaluation of their cellular uptake ability (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST; Fac. Sci. Eng., Doshisha Univ.) ○KAJIHARA, Ryota; OOHORA, Koji; KITAGISHI, Hiroaki; HAYASHI, Takashi

**1D6-05<sup>##</sup>** Effect of Rare Codon Positions on *Hydrogenobacter thermophilus* cytochrome *c*<sub>552</sub> Oligomerization in *E. coli* Cells (Grad. Sch. Mat. Sci., NAIST) ○YANG, Hongxu; YAMANAKA, Masaru; NAGAO, Satoshi; HIROTA, Shun

Chair: AIBA, Yuichiro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1D6-08, 1D6-10, 1D6-12)  
**1D6-08<sup>#</sup>** Construction of a supramolecule with an artificial protein based on cytochrome *c*<sub>555</sub> (Grad. Sch. Mat. Sci., NAIST) ○ODA, Akiya; NAGAO, Satoshi; YAMANAKA, Masaru; UEDA, Ikki; SHIBATA, Naoki; HIGUCHI, Yoshiki; HIROTA, Shun  
**1D6-10<sup>#</sup>** Design and properties of domain-swapped myoglobin dimer (Grad. Sch. Mat. Sci., NAIST) ○NAGAO, Satoshi; SUDA, Ayaka; KOBAYASHI, Hisashi; SHIBATA, Naoki; HIGUCHI, Yoshiki; HIROTA, Shun  
**1D6-12<sup>\*</sup>** The analysis of alpha-beta subunit exchange equilibrium between PEG modified and native hemoglobins (Dept. Chem., Nara Med. Univ.) ○MATSUHIRA, Takashi; KURE, Tomoko; YAMAMOTO, Keizo; SAKAI, Hiromi

Chair: KOMATSU, Teruyuki (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1D6-15, 1D6-16, 1D6-17, 1D6-19, 1D6-20)  
**1D6-15** Addition of CO-dependent Quaternary Structural Change and Oligomerization of Thermostable Cytochrome *c*' (Grad. Sch. Mat. Sci., NAIST) ○YAMANAKA, Masaru; NAKAYAMA, Ryoko; WAKAI, Satoshi; FUJII, Sotarou; KOSHIZAWA, Daisuke; SAMBONGI, Yoshihiro; HIROTA, Shun  
**1D6-16** Study on the Heme Acquisition System of *Pseudomonas aeruginosa*: Expression and Purification of PhuUV-T (Grad. Sch. Sci., Nagoya Univ.) ○SAKAKIBARA, Erika; SHISAKA, Yuma; SHOJI, Osami; SUGIMOTO, Hiroshi; WATANABE, Yoshihito  
**1D6-17<sup>#</sup>** Analyzing the mechanism of growth inhibition against *Pseudomonas aeruginosa* using heme acquisition protein HasA with synthetic metal complexes (Grad. Sch. Sci., Nagoya Univ.) ○SHISAKA, Yuma; SHOJI, Osami; UEHARA, Hiromu; IWAI, Yusuke; NAKASHIMA, Ayaka; WATANABE, Yoshihito  
**1D6-19** Heme Binding to Porphobilinogen Deaminase from *Vibrio cholerae* Regulates the Formation of 1-Hydroxymethylbilane (Sch. Sci., Hokkaido Univ.) FUNAMIZU, Takumi; ISHIMORI, Koichiro; ○UCHIDA, Takeshi  
**1D6-20** Contribution of the dimer interface structural changes to the heme-degradation activity of HutZ, a heme-degradation enzyme, from *Vibrio cholerae* (Sch. Sci., Hokkaido Univ.) ○OTA, Kazuki; DOJUN, Nobuhiko; ISHIMORI, Koichiro; UCHIDA, Takeshi

## Tuesday, March 20, PM

Chair: MATSUO, Takashi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1D6-28, 1D6-29, 1D6-31, 1D6-32, 1D6-33)  
**1D6-28** Use of the malfunction of cytochrome P450BM3 induced by decoy molecules with aromatic rings for gaseous alkane hydroxylation (Grad. Sch. Sci., Nagoya Univ.) ○NAKAMURA, Daisuke; SHOJI, Osami; MORIUCHI, Toshiyuki; SUGIMOTO, Hiroshi; SHIRO, Yoshitsugu; AMII, Hideki; WATANABE, Yoshihito  
**1D6-29<sup>#</sup>** Hydroxylation of small gaseous alkane by mutated cytochrome P450BM3 with decoy molecules (Grad. Sch. Sci., Nagoya Univ.) ○ARIYASU, Shinya; SHOJI, Osami; AIBA, Yuichiro; SUGIMOTO, Hiroshi; SHIRO, Yoshitsugu; WATANABE, Yoshihito  
**1D6-31** Synthesis and O<sub>2</sub>-Binding Property of Recombinant(Hemoglobin-Albumin) Cluster. (Fac. Sci. Eng., Chuo Univ.) ○OKAMOTO, Wataru; FUNAKI, Ryosuke; MORITA, Yoshitsugu; KOMATSU, Teruyuki  
**1D6-32** Synthesis and O<sub>2</sub>-, CO-Binding Property of Myoglobin-Albumin Cluster (Fac. Sci. Eng., Chuo Univ.) ○ANEKAWA, Takumi; MORITA, Yoshitsugu; KOMATSU, Teruyuki  
**1D6-33** Creation of Artificial Metalloenzymes Containing a Precious Metal Active Site (Grad. Sch. Eng., Osaka Univ.) ○MATSUO, Atsuki; ICHIHASHI, Haruna; FUJIEDA, Nobutaka; ITOH, Shinobu

Chair: KOHZUMA, Takamitsu (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1D6-35, 1D6-37, 1D6-39, 1D6-40)  
**1D6-35<sup>#</sup>** Structure and Oxygen Binding Affinity of Hemoglobin-Albumin Cluster as an Artificial Oxygen Carrier (Fac. Sci. Eng., Chuo Univ.) ○MORITA, Yoshitsugu; YAMADA, Taiga; KOMATSU, Teruyuki  
**1D6-37<sup>#</sup>** Enhanced peroxidase activity of hexameric tyrosine-coordinated hemoprotein by substitution of an amino acid residue axially ligating to the heme molecule (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○MASHIMA, Tsuyoshi; OOHORA, Koji; HAYASHI, Takashi  
**1D6-39** Development of Asymmetric Copper Catalyst Employing Fibrous Peptide Assembly (Grad. Sch. Eng., Osaka Univ.; Osaka Pref. Univ.) ○TONOMURA, Atsushi; FUJIEDA, Nobutaka; ITOH, Shinobu  
**1D6-40** Construction of a photocatalytic hydrogen evolution system with an array of photosensitizers using hexameric hemoprotein (Grad. Sch. Eng., Osaka Univ.; PRESTO, JST) ○NAKAYAMA, Takehiro; OOHORA, Koji; HAYASHI, Takashi

Chair: OOHORA, Koji (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1D6-42, 1D6-43, 1D6-45, 1D6-47)  
**1D6-42** Photoinduced oxidation reaction using photosystem II reconstituted

membrane containing methane monooxygenase (Sch. Life Sci. Tech., Tokyo Tech.) ○KONDO, Ryuichi; MORI, Fumiya; ITO, Hidehiro; KAMACHI, Toshiaki

- 1D6-43<sup>\*</sup>** Elucidation of the activation/inactivation mechanism between the inactive Ni-SI<sub>2</sub> and active Ni-SI<sub>1</sub> states of [NiFe] hydrogenase (Grad. Sch. Mat. Sci., NAIST) ○TAI, Hulin; XU, Liyang; NISHIKAWA, Koji; HIGUCHI, Yoshiki; HIROTA, Shun  
**1D6-45<sup>\*</sup>** The Effects of Weak Interaction at the Vicinity of Active Site on Protein-mediated Electron Transfe (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○YAMAGUCHI, Takahide; AKAO, Kohei; KOHZUMA, Takamitsu  
**1D6-47** Effect of Protonation of Newly Introduced His Residue in the Second Coordination Sphere of a Blue Copper Protein, Pseudoazurin (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○TAKEBAYASHI, Naoki; SAITO, Yoshiyuki; YAMAGUCHI, Takahide; KOHZUMA, Takamitsu

Chair: KAMACHI, Toshiaki (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(1D6-49, 1D6-50, 1D6-51, 1D6-53)  
**1D6-49** A synthetic  $\beta$ -barrel via coordination-driven self-assembly (Grad. Sch. Eng., The Univ. of Tokyo) ○YAMAGAMI, Motoya; SAWADA, Tomohisa; FUJITA, Makoto  
**1D6-50** Preparation of a De Novo Hemoprotein-based Hydrogel toward Redox-responsive Materials (Grad. Sch. Eng., Osaka Univ.) ○OZAKI, Taichi; URAYAMA, Takahiro; OOHORA, Koji; HAYASHI, Takashi  
**1D6-51<sup>\*</sup>** Solution NMR study on the cytochrome *c* partial denaturation by binding to the lipid bilayer (Grad. Sch. Mat. Sci., NAIST) ○KOBAYASHI, Hisashi; NAGAO, Satoshi; HIROTA, Shun  
**1D6-53** Structural change of myoglobin by adsorption on the clay nano-sheets (Grad. Sch. Urban Environmental Sci., TMU) ○TABUCHI, Masahiro; ARAI, Tatsumi; SATO, Yurina; SHMADA, Tetsuya; TAKAGI, Shinsuke

Chair: SAWADA, Tomohisa (18 : 00~18 : 40)

- \* 17:50-18:00: interval for laptop PC connection.(1D6-55, 1D6-57, 1D6-58)  
**1D6-55<sup>#</sup>** N-terminus Specific Modification of Native Proteins through Chelation-assisted CuAAC Reaction (Grad. Sch. Eng., Osaka Univ.) ○INOUE, Nozomu; ONODA, Akira; HAYASHI, Takashi  
**1D6-57** One-pot Ligations of Multiple Peptide Fragments using Consecutive Deprotection of Alloc Group by Pd/TPPTS Complex (Grad. Sch. Eng., The Univ. of Tokyo) ○KAMO, Naoki; HAYASHI, Gosuke; OKAMOTO, Akimitu  
**1D6-58** Development of a new conjugation method for preparation of carrier proteins with a Hoveyda-Grubbs catalyst (Grad. Sch. Mat. Sci., NAIST; Grad. Sch. Sci., Osaka Univ.) ○WAKABAYASHI, Kazumoto; MATSUO, Takashi; YAMAGUCHI, Hiroyasu; HIROTA, Syun

## Wednesday, March 21, AM

### Protein (Protein Engineering)

Chair: NAKATA, Eiji (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2D6-01, 2D6-02, 2D6-03, 2D6-04, 2D6-06)  
**2D6-01** Length Control and Functionalization of Artificial Protein Needles (Sch. Life Sci. Tech., Tokyo Tech.) ○HISHIKAWA, Yuki; ABE, Satoshi; UENO, Takafumi  
**2D6-02** Creation of novel supramolecular structures based on artificial protein needles (Sch. Life Sci. Tech., Tokyo Tech.) ○YOSHIKAWA, Kengo; ABE, Satoshi; UENO, Takafumi  
**2D6-03** Intracellular delivery system for proteins with a cell-penetrating cyclodextrin (Fac. Sci. Eng., Doshisha Univ.) ○JIROMARU, Misa; HASEGAWA, Naomi; KITAGISHI, Hiroaki  
**2D6-04<sup>#</sup>** The accessibility of small molecules in the interior of designed spherical protein supramolecule, TIP60 (Fac. Sci. Tech., Keio Univ.) ○KAWAKAMI, Norifumi; KONDO, Hiroki; NASU, Erika; MIYAMOTO, Kenji  
**2D6-06** Catalytic activity of the alcohol dehydrogenase immobilized by the designed protein supramolecule, TIP60 (Grad. Sch. Sci. Tech., Keio Univ.) ○MATSUZAWA, Yuki; KAWAKAMI, Norihumi; MIYAMOTO, Kenji

Chair: ABE, Satoshi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2D6-08, 2D6-10, 2D6-11, 2D6-12)  
**2D6-08<sup>#</sup>** Reaction of Carbonic Anhydrase assembled on DNA scaffold (IAE, Kyoto Univ.) ○DINH, Huyen; NAKATA, Eiji; KINOSHITA, Masahiro; MORII, Takashi  
**2D6-10<sup>\*</sup>** Efficiency of The Enzyme Cascade Reaction on a DNA Scaffold (IAE, Kyoto Univ.) ○LIN, Peng; NGUYEN, Thang; DINH, Huyen; NAKATA, Eiji; MORII, Takashi  
**2D6-11** Construction and characterization of the enzyme-encapsulated core-shell-type fiber mats (Grad. Sch. Eng., Nagoya Inst. of Tech.) IDO, Yuya; IGUCHI, Makito; OBATA, Akiko; KAGUGA, Toshihiro; ○MIZUNO, Toshihisa  
**2D6-12<sup>#</sup>** A Synthetic Molecular Chaperone enables Protein Refolding (Grad. Sch. Eng., The Univ. of Tokyo) ○FUJITA, Daishi; SUZUKI, Ryoto; FUJITA, Makoto

Chair: FUJITA, Daishi (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(2D6-15, 2D6-17, 2D6-18, 2D6-19)
- 2D6-15<sup>#</sup>** Construction of supramolecular protein assemblies by molecular design of protein crystals (Grad. Sch. Biosci. Biotech., Tokyo Tech.) ○NEGISHI, Hashiru; ABE, Satoshi; UENO, Takafumi
- 2D6-17** In vivo encapsulation of exogenous proteins into polyhedra crystals by controlling electrostatic interaction (Sch. Life Sci. Tech., Tokyo Tech.; KIT) ○KASAMATSU, Makoto; ABE, Satoshi; MORI, Hajime; UENO, Takafumi
- 2D6-18** Creation of DNA-encapsulated artificial viral capsid via disulfide bond (Grad. Sch. Eng., Tottori Univ.) ○MATSUURA, Kazunori; NKAMURA, Yoko; INABA, Hiroshi
- 2D6-19<sup>#</sup>** Construction of DNA Aptamer Displayed Nanoparticles Using Rep Protein (Sch. Life Sci. Tech., Tokyo Tech.) ○GUO, Wei; MASHIMO, Yasumasa; MIE, Masayasu; KOBATAKE, Eiry

### Wednesday, March 21, PM

Chair: WAKABAYASHI, Rie (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(2D6-34, 2D6-35, 2D6-36, 2D6-38)
- 2D6-34** Accelerated derivatization of peptide by Scanning probe electrospray ionization(SPESI) (Sch. Sci., Osaka Univ.) ○TAKEUCHI, Aya; OTSUKA, Yoichi; KAMIHORIUCHI, Bui; MIYASHITA, Masahiro; MATSUMOTO, Takuya
- 2D6-35** selection of peptide catalyzing aminoacylation of RNA by mRNA display (Grad. Sch. Sci., The Univ. of Tokyo) ○TAKAKURA, Nariaki; GOTO, Yuki; SUGA, Hiroaki
- 2D6-36<sup>\*</sup>** N-Terminal fluorescent-labeled antibodies that show antigen-dependent fluorescence change (Sch. Mat. Sci., JAIST) FUKUNAGA, Keisuke; NOVITASARI, Dian; WATANABE, Takayoshi; ○HOHSAKA, Takahiro
- 2D6-38<sup>\*</sup>** Intermolecular and Intramolecular Photocrosslinking of Proteins through Position-specific Incorporation of Photocrosslink Amino Acid (Sch. Mat. Sci., JAIST) SHIBA, Rumi; ○WATANABE, Takayoshi; HOHSAKA, Takahiro

Chair: GOTO, Yuki (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(2D6-41, 2D6-43, 2D6-44, 2D6-46)
- 2D6-41<sup>#</sup>** Design of functional nucleic acid aptamers conjugated with antibody Fc domains (NIT, Kitakyushu College) ○TAKAHARA, Mari; MINAMIHATA, Kosuke; WAKABAYASHI, Rie; GOTO, Masahiro; KUSAKABE, Takahiro; LEE, Jaeman; KAMIYA, Noriho
- 2D6-43** Development of bacteriophage T7 combined with CRP-binding probe (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○MOCHIZUKI, Kazuto; YUKINO, Ryoji; TABUCHI, Yudai; SANDHU, Adarsh; TAKI, Masumi
- 2D6-44<sup>#</sup>** Molecular Design of Artificial Enzymes: Functional Analyses of L-PGDS Variants Binding to a Transition-state Analogue. (Fac. Sci., Osaka Pref. Univ.) ○MIYAMOTO, Naoki; NAKATSUJI, Masatoshi; INUI, Takashi; FUJII, Ikuo
- 2D6-46** Creation of the artificial VHH DNA library by a new construction method (Grad. Sch. Sci., Eng., Saitama Univ.) ○YAMAMOTO, Yasuhide; NEMOTO, Naoto; KUMACHI, Sighumi

Chair: TAKI, Masumi (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(2D6-48, 2D6-49, 2D6-50, 2D6-51, 2D6-52)
- 2D6-48** Development of novel synthetic ligands for growth factor receptors (Grad. Sch. Eng., The Univ. of Tokyo) ○HOSHIYAMA, Junya; UEKI, Ryosuke; MORIMOTO, Jumpei; SANDO, Shinsuke
- 2D6-49** Development of photo-sterilization system of *Pseudomonas aeruginosa* utilizing its heme acquisition protein (Grad. Sch. Sci., Nagoya Univ.) ○YAMADA, Shiho; SHISAKA, Yuma; IWAI, Yusuke; SHOJI, Osami; WATANABE, Yoshihito
- 2D6-50** Development of Sterilization Method using Heme-acquiring Protein of *Pseudomonas aeruginosa* (Sch. Sci., Nagoya Univ.) ○YOSHIMURA, Mami; AIBA, Yuichiro; SHOJI, Osami; WATANABE, Yoshihito
- 2D6-51** Site-specific introduction of functional molecules into the vicinity of the active site of chymotrypsin (Kanazawa Inst. of Tech.) KOGA, Masato; KUMAKURA, Takuya; KURODA, Hirofumi; OYAMA, Hiroshi; ○ONO, Shin
- 2D6-52** Dimerization of chymotrypsin by site-specific chemical modification (Kanazawa Inst. of Tech.) ○HATAKEYAMA, Takahiro; HAYAKAWA, Takuma; KURODA, Hirofumi; OYAMA, Hiroshi; ONO, Shin

### Thursday, March 22, AM

#### Protein (Sensing)

Chair: TSUGAWA, Wakako (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3D6-01, 3D6-02, 3D6-03, 3D6-04, 3D6-05)
- 3D6-01** Development of global DNA methylation level detection system using MBD-luciferase and CXXC-luciferase (TUT) ○BABA, Yuji; KARUBE,

Isao; YOSHIDA, Wataru

- 3D6-02** Development of a hemi-methylated DNA sensing system using SRA fused luciferase (TUT) ○TAKA, Natsumi; KARUBE, Isao; YOSHIDA, Wataru
- 3D6-03** Construction of DNA-protein hybrid molecules with genetically engineered Rep for sensing system. (Sch. Life Sci. Tech., Tokyo Tech.) ○HIRASHIMA, Rena; MASHIMO, Yasumasa; MIE, Masayasu; KOBATAKE, Eiry
- 3D6-04** Detection of protease activity using intramolecular excimer forming bispyrene peptide substrates (Grad. Sch. Life Sci. Sys. Eng., KIT) ○ZHANG, Shidan; HASHIMOTO, Kosei; SATO, Daisuke; KATO, Tamaki
- 3D6-05<sup>\*</sup>** Photoreaction dynamics and its diversity of blue light sensor protein phototropin (Dep. Chem., Sch. Sci., Kyoto Univ.) ○NAKASONE, Yusuke; OKAJIMA, Koji; TOKUTOMI, Satoru; TERAZIMA, Masahide

Chair: KOBATAKE, Eiry (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3D6-08, 3D6-09, 3D6-10, 3D6-11, 3D6-12, 3D6-13)
- 3D6-08** Preparation of enzyme fusion antibody fragments directed to a novel electrochemical immunosensors using Catcher/Tag system. (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○KIMURA, Hayato; ASANO, Ryutarō; SODE, Koji
- 3D6-09** Construction of anti-CRP single-chain variable fragment fused with glucose dehydrogenase as the novel biosensing molecule (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ASANO, Ryutarō; ○MOTOHASHI, Saki; KOJIMA, Katsuhiko; TSUGAWA, Wakako; SODE, Koji
- 3D6-10** Construction of anti-human hemoglobin single-chain antibodies for the novel colon cancer biosensing system. (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ASANO, Ryutarō; ○MIURA, Daimei; SODE, Koji
- 3D6-11** Construction of detection system for ligand-protein interactions using peptide ligation and luciferase reconstitution (Grad. Sch. Sci. Tech., Gunma Univ.) ○TAKAHASHI, Tsuyoshi
- 3D6-12** Screening of peptides capable of binding to cancer-related proteins using a detection system for ligand-protein interactions based on enzyme activities (Grad. Sch. Sci. Tech., Gunma Univ.) ○FUJIOKA, Meiko; MOGI, Chiaki; ARAI, Shogo; SUKA, Daiki; TAKAHASHI, Tsuyoshi
- 3D6-13** Development of fluorescence turn-on histone probe for visualization of nucleosome dynamics (Fac. Eng., The Univ. of Tokyo) ○ISHII, Takumi; HAYASHI, Gosuke; OKAMOTO, Akimitsu

Chair: TAKAHASHI, Tsuyoshi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3D6-15, 3D6-16, 3D6-18, 3D6-19, 3D6-20)
- 3D6-15** A structurally novel chitinase from a hyperthermophilic archaeon (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○KANAI, Tamotsu; HORIUCHI, Ayumi; ASLAM, Mehwish; ATOMI, Haruyuki
- 3D6-16<sup>#</sup>** Studies on GABA aminotransferase homologs from archaea (Grad. Sch. Eng., Kyoto Univ.) ZHENG, Ren-chao; HACHISUKA, Shin-ichi; TOMITA, Hiroya; ○ATOMI, Haruyuki
- 3D6-18** Screening of novel fungal FAD Glucose dehydrogenase harboring remarkable substrate specificity for glucose (Fac. Eng., Tokyo Univ. of Agri. and Technol.) KOJIMA, Katsuhiko; ○MIYAZAKI, Masahiro; TSUGAWA, Wakako; ASANO, Ryutarō; SODE, Koji
- 3D6-19** Recombinant production of FAD glucose dehydrogenase complex harboring truncated electron-transfer subunit (Fac. Eng., Tokyo Univ. of Agri. and Technol.) KOJIMA, Katsuhiko; SHIMAZAKI-OKUDA, Junko; MORI, Kazushige; ○ANADA, Masataka; ASANO, Ryutarō; TSUGAWA, Wakako; SODE, Koji
- 3D6-20<sup>#</sup>** Characterization of *Drosophila melanogaster* derived glucose dehydrogenase (*DmGDH*) (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○UDDIN, Alim; KOJIMA, Katsuhiko; ASANO, Ryutarō; IKEBUKURO, Kazunori; SODE, Koji

### Thursday, March 22, PM

#### Protein (Peptide)

Chair: TOMIZAKI, Kin-ya (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(3D6-28, 3D6-29, 3D6-30, 3D6-31, 3D6-32)
- 3D6-28** Construction of photoresponsive artificial viral capsid self-assembled from  $\beta$ -annulus peptide bearing azobenzene in the backbone (Grad. Sch. Eng., Tottori Univ.) ○FUJITA, Seiya; MATSUURA, Kazunori
- 3D6-29** Fluorescence correlation spectroscopy analysis of inclusion behavior of polysaccharides into artificial viral capsids (Grad. Sch. Eng., Tottori Univ.) ○FUJIWARA, Shuya; FUJITA, Seiya; INABA, Hiroshi; MATSUURA, Kazunori
- 3D6-30** Inhibition Mechanism of Influenza Virus Infection by Sugar-modified Peptide (Fac. Sci. Tech., Keio Univ.) ○FUJIWARA, Yurina; MATSUBARA, Teruhiko; SATO, Toshinori
- 3D6-31** Development of a new one-pot peptide ligation by using peptidyl-N-pivaloylguanidine (Grad. Sch. Sci., Osaka Univ.) ○HANAOKA, Takuya; MAKI, Yuta; KAJIHARA, Yasuhiro; OKAMOTO, Ryo
- 3D6-32<sup>#</sup>** Design and Synthesis of Conformationally Constrained  $\beta$ -Peptides with Chiral Backbone Substituents and Macrocyclization (Grad. Sch. Eng.,

The Univ. of Tokyo) ○MORIMOTO, Jumpei; KIM, Jungyeon; FUKUDA, Yasuhiro; SANDO, Shinsuke

Chair: SATO, Toshinori (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(3D6-35, 3D6-36, 3D6-37, 3D6-38, 3D6-39, 3D6-40)
- 3D6-35** Development of peptides derived from Tau protein directed to molecular incorporation into microtubules (Grad. Sch. Eng., Tottori Univ.; Fac. Sci., Hokkaido Univ.) ○YAMAMOTO, Takahisa; INABA, Hiroshi; KABIR, Arif Md. Rashedul; KAKUGO, Akira; SADA, Kazuki; MATSUURA, Kazunori
- 3D6-36** Binding analysis of fluorescent-labeled Tau-based peptides to microtubules (Grad. Sch. Eng., Tottori Univ.) ○INABA, Hiroshi; OZAWA, Tadahiro; YAMAMOTO, Takahisa; KABIR, Arif Md. Rashedul; KAKUGO, Akira; SADA, Kazuki; MATSUURA, Kazunori
- 3D6-37** Complexation of Plasmid DNAs and Peptides Tethering a Nuclear Localization Signal for Red Protein Expression. (Fac. Sci. Tech., Ryukoku Univ.) ○KATAOKA, Shunsuke; USUI, Kenji; YAMASAKI, Masayuki; TOMIZAKI, Kin-ya
- 3D6-38** Selective Recovery of Gold in the Presence of Metal Ion Contaminants with Aromatic Ring-Containing Peptides (Fac. Sci. Tech., Ryukoku Univ.) ○OKAMOTO, Takuya; IMAI, Takahito; ASANO, Masahiro; TOMIZAKI, Kin-ya
- 3D6-39** Calcium-Ion-Responsive Supramolecular Peptide Hydrogels for Local Drug Delivery (Sch. Life Sci. Tech., Tokyo Tech.) ○FUKUNAGA, Kazuto; TSUTSUMI, Hiroshi; MIHARA, Hisakazu
- 3D6-40<sup>#</sup>** Monosaccharide-modified  $\alpha$ -helix peptide phage libraries for carbohydrate-binding proteins (Sch. Life Sci. Tech., Tokyo Tech.) ○CHANG, Iou Ven; TSUTSUMI, Hiroshi; MIHARA, Hisakazu

Chair: NAGATOISHI, Satoru (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(3D6-42, 3D6-43, 3D6-44, 3D6-45, 3D6-46, 3D6-47)
- 3D6-42** Designed peptides controlling G-quadruplex structure by digestion of the peptides using protease (FIRST, Konan Univ.) ○SAKASHITA, Shungo; OKADA, Arisa; SHIMOOKA, Masayuki; TSURUOKA, Takaaki; HAMADA, Yoshio; USUI, Kenji
- 3D6-43** Construction of cell culture substrates using nanostructures generated by digestion of amyloid fibrils (FIRST, Konan Univ.) ○YOKOTA, Shin-ichiro; MASHIMO, Yasumasa; HAMADA, Yoshio; HARADA, Yoji; MIE, Masayasu; KOBATAKE, Eiry; USUI, Kenji
- 3D6-44** Self-assembling peptide hydrogel with a urea bond for cell scaffold material (Sch. Life Sci. Tech., Tokyo Tech.) ○KODAMA, Iori; MIHARA, Hisakazu; TSUTSUMI, Hiroshi
- 3D6-45** Construction of self-assembling peptide materials recruiting growth factors via heparin binding (Sch. Life Sci. Tech., Tokyo Tech.) ○OE, Hiroaki; TSUTSUMI, Hiroshi; MIHARA, Hisakazu
- 3D6-46** Screening of Peptides with a Specific Affinity for Dextran by Phage Display Methods (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NIWA, Tatsuya; SAWADA, Toshiki; SERIZAWA, Takeshi
- 3D6-47** Affinity-based Loading of Peptides into Polymeric Micelles (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TAKIZAWA, Misaki; SAWADA, Toshiki; SERIZAWA, Takishi

Chair: SAWADA, Toshiki (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(3D6-49, 3D6-50, 3D6-51, 3D6-52, 3D6-53, 3D6-54)
- 3D6-49** Evaluation of titanium-cell binding properties using peptide nanofibers with titanium binding sequences (HKH) and cell recognition sequences (RGD) (Fac. Sci. Tech., Ryukoku Univ.) ○KAWAMOTO, Koji; YAMASAKI, Masayuki; AOI, Yoshifumi; TOMIZAKI, Kin-ya
- 3D6-50** Synthesis of titania nanostructures using silica-peptide nanofiber templates (Fac. Sci. Tech., Ryukoku Univ.) ○KASUGA, Makoto; IMAI, Takahito; TOMIZAKI, Kin-ya
- 3D6-51** Analysis of fibril formation of amyloid beta on mixed ganglioside lipid bilayer (Fac. Sci. Tech., Keio Univ.) ○NAKAI, Mako; MATSUBARA, Teruhiko; SATO, Toshinori
- 3D6-52** The effects of metal ions of amyloid  $\beta$  fibril formation induced by ganglioside-containing lipid bilayer (Fac. Sci. Tech., Keio Univ.) ○ITO, Koichiro; MATSUBARA, Teruhiko; SATO, Toshinori
- 3D6-53** Observation of branched amyloid protofibrils with high speed AFM. (SUMS; Dep. Chem., Sch. Sci., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○TASHIRO, Ryu; TAGUCHI, Hiroaki; HIDAKA, Kumi; ENDO, Masayuki; SUGIYAMA, Hiroshi
- 3D6-54** Photocontrol of Collagen Triple Helix Self-assembly by Azobenzene Linker (Grad. Sch. Life Sci. Sys. Eng., KIT) ○ISHIZAKI, Yui; SATO, Daisuke; KATO, Tamaki

Chair: TSUTSUMI, Hiroshi (18 : 10~18 : 30)

- \* 18:00-18:10: interval for laptop PC connection.(3D6-56, 3D6-57)
- 3D6-56** Incorporation of non-native amino acids into a model protein using the expressed protein ligation technique (Grad. Sch. Sci., Eng., Yamagata Univ.) ○ARAKI, Takuya; KONNO, Hiroyuki; MAKABE, Koki
- 3D6-57** Minimal design to realize domain swapping of globular protein (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SHIGA, Shota; YAMANAKA,

Masaru; HIROTA, Shun; MAKABE, Koki

Friday, March 23, AM

## Protein (Protein Engineering)

Chair: FUJISHIRO, Takashi (9 : 50 ~ 10 : 50)

- \* 9:40-9:50: interval for laptop PC connection.(4D6-06, 4D6-08, 4D6-09, 4D6-11)
- 4D6-06<sup>#</sup>** Structural, physicochemical and computational analysis to reveal the mechanism of recognition of phosphorylated antigen by an antibody (Fac. Eng., The Univ. of Tokyo) ○KAWADE, Raiji; AKIBA, Hiroki; NAKAKIDO, Makoto; KURODA, Daisuke; MARUYAMA, Toshiaki; OKUMURA, Shigeru; ENTZMINGER, Kevin; CAAVEIRO, Jose; TSUMOTO, Kouhei
- 4D6-08** Computational and physicochemical analyses on thermostability of antibodies (Grad. Sch. Eng., The Univ. of Tokyo) ○KAWAKAMI, Eri; KURODA, Daisuke; NAKAKIDO, Makoto; TSUMOTO, Kouhei
- 4D6-09\*** A method for an antibody to possess the enzymatic function (II) (Fac. Eng., Oita Univ.; ISIT Nanotechnology Lab.) ○UDA, Taizo; AKIYOSHI, Yuko; TAGUCHI, Hiroaki; HIFUMI, Eri
- 4D6-11** Design of elastin-like polypeptide fusion proteins for improvement of protein stability (Sch. Life Sci. Tech., Tokyo Tech.) ○INOUE, Mio; IKEDA, Yusuke; MASHIMO, Yasumasa; MIE, Masayasu; KOBATAKE, Eiry

Friday, March 23, PM

## Protein

Chair: NAKAMURA, Nobufumi (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4D6-28, 4D6-30, 4D6-31, 4D6-32)
- 4D6-28<sup>#</sup>** Analyzing Degradation Mechanism of Fatty Acid to The Next Shorter Fatty Acid Using Hydrogen Peroxide Activated by Cytochrome P450 Peroxygenase (Grad. Sch. Sci., Nagoya Univ.) ○ONODA, Hiroki; SHOJI, Osami; SUZUKI, Kazuto; SUGIMOTO, Hiroshi; SHIRO, Yoshitsugu; WATANABE, Yoshihito
- 4D6-30** Intermolecular interaction dynamics of blue light sensor protein PYP and its downstream protein PBP (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KIM, Suhyang; TAKAKADO, Akira; NAKASONE, Yusuke; YAMAZAKI, Yoichi; KAMIKUBO, Hironari; TERAZIMA, Masahide
- 4D6-31** Oxidative folding of bovine  $\beta$ -lactoglobulin by using a water-soluble selenium oxidant (Sch. Sci., Tokai Univ.) ○MITSUJI, Takumi; SHINOZAKI, Reina; IWAOKA, Michio
- 4D6-32<sup>#</sup>** Mechanism of temperature compensation in the circadian clock (RIKEN QBiC) ○SHINOHARA, Yuta; KOYAMA, Yohei; UEDA, Hiroki

Chair: IWAOKA, Michio (14 : 40~15 : 30)

- \* 14:30-14:40: interval for laptop PC connection.(4D6-35, 4D6-36, 4D6-38, 4D6-39)
- 4D6-35** Iron-sulfur cluster biosynthetic system of a hyperthermophilic bacterium: X-ray crystal structure analysis of IscS2-IscU complex (Fac. Sci., Saitama Univ.) ○KUNICHIKA, Kouhei; FUJISHIRO, Takashi; YAMAKAWA, Makoto; HIRABAYASHI, Kei; IWANAGA, Tomoko; FUKUYAMA, Keiichi; WADA, Kei; TAKAHASHI, Yasuhiro
- 4D6-36\*** X-ray crystal structure analysis of sulfur-transferring enzyme complex involved in iron-sulfur cluster biosynthesis in *Bacillus subtilis* (Grad. Sch. Sci., Eng., Saitama Univ.) ○FUJISHIRO, Takashi; TERAHATA, Takuya; KUNICHIKA, Kouhei; YOKOYAMA, Nao; MARUYAMA, Chihiro; ASAI, Kei; TAKAHASHI, Yasuhiro
- 4D6-38** Characterization of a PQQ domain of a pyrroloquinoline quinone dependent pyranose dehydrogenase from *Coprinopsis cinerea* (CpPDH) (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MINAMI, Tatsuki; TAKEDA, Kouta; ISHIDA, Takuya; YOSHIDA, Makoto; IGARASHI, Kiyohiko; OHNO, Hiroyuki; NAKAMURA, Nobuhumi
- 4D6-39** Activation of Cytochrome P450-Catalyzing Whole-cell Biotransformation of Aromatics Using Extracellular Additives (Grad. Sch. Sci., Nagoya Univ.) ○KARASAWA, Masayuki; SHOJI, Osami; YOSHIHITO, Watanabe



# Room D7

Bldg. 9 937

## Biofunctional Chemistry ; Biotechnology

Tuesday, March 20, PM

### Functional Small Molecules

Chair: IKEUE, Takahisa (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1D7-28, 1D7-29, 1D7-30, 1D7-31, 1D7-32, 1D7-33)
- 1D7-28** Synthesis of Deuterated Chlorophyll Derivatives and Their Physical Properties (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; MIYANISHI, Takuya
- 1D7-29** Syntheses of Fluorinated Chlorophyll Derivatives and Their Physical Properties (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; NAKANO, Kohei; OGASAWARA, Shin
- 1D7-30** Synthesis and physical properties of chlorophyll-*a* homologs (Grad. Sch. Life Sci., Ritsumeikan Univ.) OEGAMI, Yuki; OGASAWARA, Shin; TAMIAMI, Hitoshi
- 1D7-31** Partial removal of B800 bacteriochlorophyll *a* from light-harvesting complex 2 of the purple photosynthetic bacterium *Rhodoblastus acidophilus* (Fac. Sci. Eng., Kindai Univ.; PRESTO, JST) SAGA, Yoshitaka; FUKUDA, Yoshitaka; MIYAGI, Kanji
- 1D7-32** Reconstitution of Chlorophyll *d* into the light-harvesting protein LH2 of purple photosynthetic bacterium *Rhodoblastus acidophilus* (Fac. Sci. Eng., Kindai Univ.; PRESTO, JST) SAGA, Yoshitaka; YAMASHITA, Madoka
- 1D7-33** Influence of membrane phase transition on self-aggregation behavior of various chlorophyll derivatives (Fac. Sci. Tech., Ryukoku Univ.) NISHIMURA, Norikai; MIYATAKE, Tomohiro

Chair: SAGA, Yoshitaka (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1D7-35, 1D7-36, 1D7-37, 1D7-38, 1D7-39, 1D7-40)
- 1D7-35** Effect of Moieties at meso-Position toward Photodynamic Activities of Porphyrin-Cyclodextrin Complexes (Grad. Sch. Eng., Hiroshima Univ.) SATAKE, Shuhei; SUGIKAWA, Kouta; FUNABASHI, Hisakage; KURODA, Akio; IKEDA, Atsushi
- 1D7-36** Structure control of complexes of porphyrin derivatives with cyclodextrin (Grad. Sch. Eng., Hiroshima Univ.) HORIGUCHI, Banri; SUGIKAWA, Kouta; IKEDA, Atsushi
- 1D7-37** Design and synthesis of unsaturated carbon chain-linked Protoporphyrin IX and evaluation of PDT activity (Lab. Chem. Life Sci., Tokyo Tech.) KAWAMURA, Jun; JOSHI, Manjusha; NAKAMURA, Hiroyuki
- 1D7-38** Development of a TX-816 as a sensitizer for 5-aminolevulinic acid-based photodynamic therapy (Grad. Sch. Biosci. Bioind., Tokushima Univ.) SHINOHARA, Yusei; SHIBA, Ikyuu; YAMADA, Hisatsugu; ENDO, Yoshio; ISHIZUKA, Masahiro; TANAKA, Tohru; UTO, Yoshihiro
- 1D7-39** Photosensitization properties of pH-responsive P(V) porphyrin derivative (Grad. Sch. Sci. Tech., Gunma Univ.; Grad. Sch. Eng., Shizuoka Univ.) HORIUCHI, Hiroaki; ISOGAI, Masataka; HIRAKAWA, Kazutaka; OKUTSU, Tetsuo
- 1D7-40** Structure and Spectroscopic Properties of Six-coordinated Oxypyridoporphyrin Iron(III) Complexes (Grad. Sch. Fac. Sci. Eng., Shimane Univ.; ADRES, Ehime Univ.; Grad. Sch. Pharm. Sci., Chiba Univ.; Fac. Sci., Toho Univ.) IDE, Yuki; YAMADA, Yuya; SUZUKI, Masaaki; MORI, Shigeki; NEYA, Saburo; NAKAMURA, Mikio; IKEUE, Takahisa

Chair: SUGIKAWA, Kouta (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1D7-42, 1D7-43, 1D7-44, 1D7-45, 1D7-47)
- 1D7-42** Magnetic Properties of Directly Linked Porphyrin Dimers with Ferric Ions (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) HOSODA, Haruka; IDE, Yuki; UMETANI, Masataka; TANAKA, Takayuki; OSUKA, Atsuhiko; IKEUE, Takahisa
- 1D7-43** Synthesis and functional evaluation of novel D $\pi$ A azo dyes for photoacoustic imaging (Sch. Life Sci. Tech., Tokyo Tech.) OISHI, Tsukasa; FUSE, Shinichiro; XI, Zeng; NAKAMURA, Kentaro; NAKAMURA, Hiroyuki
- 1D7-44** Synthesis and Mechanistic Study of Organic D $\pi$ A Dyes for Photodynamic Therapy (Lab. Chem. Life Sci., Tokyo Tech.; PMPERC, Hamamatsu Univ. Sch. Med.) TAKIZAWA, Miori; FUSE, Shinichiro; OKAZAKI, Shigetoshi; NAKAMURA, Hiroyuki
- 1D7-45<sup>th</sup>** Enhancement of the CO<sub>2</sub> reduction catalytic activity of formate dehydrogenase with artificial co-enzyme based on viologen derivative (OCARINA) IKEYAMA, Shusaku; AMAO, Yutaka
- 1D7-47** Selective utilization for reduction catalyzed with aldehyde dehydrogenase using artificial co-enzyme based on reduced form of methylviologen (Fac. Sci., Osaka City Univ.; OCARINA) ISHIBASHI, Tomoya; IKEYAMA, Syusaku; AMAO, Yutaka

Chair: FUSE, Shinichiro (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1D7-49, 1D7-50, 1D7-52, 1D7-53, 1D7-54)
- 1D7-49** Interaction between artificial co-enzyme and malic enzyme with CO<sub>2</sub> utilization (Grad. Sch. Sci., Osaka City Univ.; OCARINA) OKATAGIRI, Takayuki; IKEYAMA, Shusaku; AMAO, Yutaka
- 1D7-50<sup>\*</sup>** Synthesis of conformation-fixed inhibitors of coenzyme NAD and its inhibition mechanism against glutathione reductase (School of Pharmacy, IUHW) FUJII, Mikio; KITAGAWA, Yasuyuki
- 1D7-52** Stopped-flow-ESR and -optical study on flavonol-derived semiquinone radicals formed by reaction with superoxide anion radical in dry DMSO (KIT) OKUWABARA, Keiko; MIYAKE, Yusuke; KANAORI, Kenji; TAJIMA, Kunihiko
- 1D7-53** Stopped-flow-ESR study on the reaction between superoxide anion radical and tocopherol derivatives (KIT) YOSHIDA, Keisuke; KUWABARA, Keiko; SAKURAI, Yasuhiro; MIYAKE, Yusuke; KANAORI, Kenji; TAJIMA, Kunihiko
- 1D7-54** Quantification of CO released from CORMs in aqueous solution and in cells (Grad. Sch. Eng., Doshisha Univ.) KITA, Takahiro; MINEGISHI, Saika; KITAGISHI, Hiroaki

## Wednesday, March 21, AM

### Lipid

Chair: KINBARA, Kazushi (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2D7-01, 2D7-02, 2D7-04, 2D7-05)
- 2D7-01** Interaction between sterols and Amphidinol 3, a membrane-active marine natural product in lipid membranes. (Grad. Sch. Sci., Kyushu Univ.) HIEDA, Manami; KINOSHITA, Masanao; MATSUMORI, Nobuaki
- 2D7-02<sup>\*</sup>** Different influence of ceramide and its dihydro analog on the physico-chemical properties of sphingomyelin bilayers. (Fac. Sci., Kyushu Univ.) KINOSHITA, Masanao; TANAKA, Kaoru; BOBUAKI, Matsumori
- 2D7-04** Head group orientation of glucosylceramide in model membrane as revealed by solid state NMR (Grad. Sch. Sci., Osaka Univ.) ISHII, Akira; HANASHIMA, Shinya; UMEGAWA, Yuichi; MURATA, Michio
- 2D7-05<sup>th</sup>** Analysis of the raft-like nanodomains using sphingomyelin antipode (Grad. Sch. Sci., Osaka Univ.) YANO, Yo; HANASHIMA, Shinya; YASUDA, Tomokazu; TSUCHIKAWA, Hiroshi; MURATA, Michio; KINOSHITA, Masanao; MATSUMORI, Nobuaki; SUZUKI, Kenichi; SLOTTE, Peter; LONDON, Erwin

Chair: YASUHARA, Kazuma (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2D7-08, 2D7-09, 2D7-10, 2D7-11, 2D7-12)
- 2D7-08** Dynamic properties of domain structure formed by ganglioside GM1 in sphingomyelin-containing membrane (Grad. Sch. Sci., Osaka Univ.) OHNO, Shiori; HANASHIMA, Shinya; YASUDA, Tomokazu; TSUCHIKAWA, Hiroshi; MURATA, Michio; KINOSHITA, Masanao; MATSUMORI, Nobuaki; ANDO, Hiromune; SUZUKI, Kenichi; SLOTTE, J. Peter
- 2D7-09** Conformational analysis of sphingomyelin acyl chain by infrared spectroscopy and effects of cholesterol (Grad. Sch. Sci., Osaka Univ.; Grad. Sch. Sci., Osaka Univ.) SAIKI, Naoka; TSUCHIKAWA, Hiroshi; MONJI, Mami; UMEGAWA, Yuichi; MURATA, Michio; SLOTTE, J. Peter
- 2D7-10<sup>#</sup>** Ganglioside GM3 suppresses the oligomerization of EGFR TM domain in lipid bilayers (Grad. Sch. Sci., Osaka Univ.) NAKANO, Mikito; HANASHIMA, Shinya; HARA, Toshiaki; MURATA, Michio; KABAYAMA, Kazuya; FUKASE, Koichi; ANDO, Hiromune; SUZUKI, Kenichi; SLOTTE, J. Peter
- 2D7-11** Inter-lipid FRET titration reveals cluster formability of the raft lipids (Grad. Sch. Sci., Kyushu Univ.) KYO, Takumi; KINOSHITA, Masanao; MATSUMORI, Nobuaki
- 2D7-12<sup>th</sup>** Bicycles with Structural Stability Using a Chemically-Engineered Surfactant for a Drug Delivery Application (RIKEN CEMS) UCHIDA, Noriyuki; ISHIDA, Yasuhiro

Chair: MATSUMORI, Nobuaki (11 : 20~12 : 00)

- \* 11:10-11:20: interval for laptop PC connection.(2D7-15, 2D7-17, 2D7-18)
- 2D7-15<sup>\*</sup>** Transformation of lipid vesicles via interaction of supramolecular nanofibers (Grad. Sch. Eng., Hiroshima Univ.) SUGIKAWA, Kouta; KAKIGI, Tomoyuki; YASUHARA, Kazuma; IKEDA, Atsushi
- 2D7-17** Development of Amphiphilic Steroid-multimers and their Effects on Lateral Phase Separation (Sch. Life Sci. Tech., Tokyo Tech.) KATO, Maho; MURAOKA, Takahiro; KINBARA, Kazushi
- 2D7-18** Sensing of lipid membrane curvature by amphiphilic polymers. (Grad. Sch. Mat. Sci., NAIST) YAMANAKA, Ryo; KIKUCHI, Jun-ichi; YASUHARA, Kazuma

## Wednesday, March 21, PM

Chair: UMAKOSHI, Hiroshi (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(2D7-34, 2D7-35, 2D7-37, 2D7-39)

- 2D7-34** Modification of magnetosome membrane composition in the magnetotactic bacterium *Magnetospirillum magneticum* by expression of phosphatidylcholine synthase (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) OOTA, Shuhei; ITO, Yasuhiro; MAEDA, Yoshiaki; TANAKA, Tsuyoshi; YOSHINO, Tomoko
- 2D7-35\*** Function and Structure of Bacteriorhodopsin Are Optimized by Specific Interaction with Glycolipid S-TGA-1 (Fac. Sci., Kyushu Univ.) OINADA, Masataka; KINOSHITA, Masanao; MATSUMORI, Nobuaki
- 2D7-37\*\*** Molecular orientation and conformation of archaeal membrane lipid PGP-Me by solid-state NMR and its interaction with bacteriorhodopsin (Grad. Sch. Sci., Osaka Univ.) OYAMAGAMI, Masaki; THUCHIKAWA, Hiroshi; JIN, Cui; KAWATAKE, Satoshi; SATO, Fuminori; UMEGAWA, Yuichi; MURATA, Michio; SANGJAR, Seo; SHINODA, Wataru
- 2D7-39** Preparation and bilayer properties of oxidized and fluorescent derivatives of ceramide (Grad. Sch. Sci., Kyushu Univ.) OATSUFUJI, Takaaki; KINOSHITA, Masanao; MATSUMORI, Nobuaki

Chair: MURATA, Michio (15 : 40~16 : 20)

- \* 15:30-15:40: interval for laptop PC connection.(2D7-41, 2D7-43, 2D7-44)
- 2D7-41\*** Control of molecular recognition by Lipid Nano-Membrane (Grad. Sch. Eng. Sci., Osaka Univ.) OKAMOTO, Yukihiko; TAUCHI, Atsushi; KAWAKAMI, Ryo; SUGA, Keishi; UMAKOSHI, Hiroshi
- 2D7-43** Synthesis of acylceramides including unsaturated ultra-long-chain fatty acids that are crucially important to skin barrier (Grad. Fac. Life Sci., Hokkaido Univ.) OMURAI, Yuta; OGAWA, Ren; HASHINO, Shota; MONDE, Kenji
- 2D7-44** Facile preparation of neoglycolipids via Schiff base formation (Sch. Mat. Sci., JAIST) OMORI, Kazuki; KURIHARA, Kensuke; YAMAGUCHI, Takumi

### Environmental biotechnology

Chair: TANAKA, Tsuyoshi (16 : 30~17 : 20)

- \* 16:20-16:30: interval for laptop PC connection.(2D7-46, 2D7-47, 2D7-48, 2D7-49, 2D7-50)
- 2D7-46** Development of a method to determine the distribution of lignin in on the surface of lignocellulose nanofiber using atomic force microscope. (Kobe Univ.) OTOMITA, Kohei; TAKENAKA, Musashi; MORITA, Kenta; KAWAGUCHI, Hideo; OGINO, Chiaki; KONDO, Akihiko
- 2D7-47** Rapid micro-ELISA by using disk-shaped chips for optical pick-up detection (Grad. Sch. Eng., Osaka Univ.) OYOSHIKAWA, Hiroyuki; YOSHINAGA, Makoto; TAMIYA, Eiichi
- 2D7-48** Fabrication of gold-capped nanopillar LSPR structures using nanoimprinting and its application to real-time measurement of IgA (Grad. Sch. Eng., Osaka Univ.) Otakehiro, Akeyama; MASATO, Saito; EIICHI, Tamiya
- 2D7-49** CONTROL OF MICRODROPLET BEHAVIOR BY CENTRIFUGAL FORCE AND APPLICATION TO RAPID DROPLET PCR (Sch. Eng., Osaka Univ.) Omitsumaki, Takuya; SAITO, Masato; TAMIYA, Eiichi
- 2D7-50** In situ monitoring of molecular change during degradation of pork meat using Raman spectroscopy (Sch. Advanced Sci. Eng., Waseda Univ.) OHORII, Shumpei; ANDO, Masahiro; MIYAOKA, Rimi; HAMAGUCHI, Hiro-o; TAKEYAMA, Haruko

### Thursday, March 22, AM

#### Molecular Recognition

Chair: OJIDA, Akio (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3D7-01, 3D7-03, 3D7-04, 3D7-05, 3D7-06)
- 3D7-01\*** A novel concept for selective recovery of the rare earth inspired by biomineralization (Toyota Central R&D Labs., Inc.) OISHIDA, Nobuhiro; HATANAKA, Takaaki; MATSUGAMI, Akimasa; HAYASHI, Fumiaki
- 3D7-03** Intramolecular glucose rotation of  $\gamma$ -cyclodextrin (Grad. Sch. Sci., Eng., Saitama Univ.) O Matsuda, Nozomu; ISHIMARU, Yoshihiro
- 3D7-04** Intramolecular glucose rotation of  $\alpha$ -cyclodextrin (Grad. Sch. Sci., Eng., Saitama Univ.) OTSUKADA, Kenta; ISHIMARU, Yoshihiro
- 3D7-05** Clathration of oligosaccharides by self-assembled metal-organic complexes (Sch. Mat. Sci., JAIST) OFUJI, Kazuki; AKINAGA, Shuji; SAWADA, Tomohisa; FUJITA, Makoto; YAMAGUCHI, Takumi
- 3D7-06** Chiral Saccharide Recognition of Pyridine-Acetylene-Phenol Oligomers Containing Binaphthyl Moieties. (Grad. Sch. Med. Pharm. Sci. Edu., Univ. of Toyama) OMURASE, Mikino; OHISHI, Yuki; ABE, Hajime; INOUE, Masahiko

Chair: YAMAGUCHI, Takumi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3D7-08, 3D7-10, 3D7-11, 3D7-12, 3D7-13)
- 3D7-08\*** Ratiometric detection of metal ions by AM-contact sensing and its multi-sensing application (Grad. Sch. Pharm., Kyushu Univ.) TAKATA, Yusuke; KANEGAE, Anna; UCHINOMIYA, Shohei; SUGIMOTO, Manabu; OJIDA, Akio

- 3D7-10** Development of  $\sigma$ -Conjugated Environment-Responsive Fluorescent Molecules Bearing Oligosilane Backbone (Sch. Life Sci. Tech., Tokyo Tech.) OKATAOKA, Takuya; MURAOKA, Takahiro; KINBARA, Kazushi
- 3D7-11** Cadmium-Specific Fluorescent Response of BAPTA-Based Tetrakis-quinoline Derivatives (Grad. Sch. Human. Sci., Nara Women's Univ.) OKANEDA, Minori; MATSUMOTO, Arimasa; MIKATA, Yuji
- 3D7-12** Synthesis of Luminescent Lanthanide Complexes from Ditopic Ligands Composed of C2-dimeric Alkaloidal Scaffold (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) OTANIGUCHI, Tomoaki; Tsubouchi, Akira; YUASA, Junpei; OGURI, Hiroki
- 3D7-13** Synthesis and evaluation of fluorescence fullerene (Fac. Eng., KAIT) OHASHIMOTO, Akiko; YAMANAKA, Takehiro; TAKAMURA-ENYA, Takeji

Chair: Tsubouchi, Akira (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(3D7-15, 3D7-16, 3D7-17, 3D7-18, 3D7-19)
- 3D7-15** Development of a Bismuth-rhodamine as a red light-excitabile photosensitizer (Gifu Pharm. Univ.) OHIRAYAMA, Tasuku; MUKAIMINE, Akari; NISHIGAKI, Kenta; NAGASAWA, Hideo
- 3D7-16** Synthesis and functional evaluation of 1,4-dimethylanthracene derivatives as reversible trapping reagent of singlet oxygen (Coll. Sci. Eng., Aoyama Gakuin Univ.) OTANIGUCHI, Goki; KURIHARA, Ryohsuke; TANABE, Kazuhito
- 3D7-17** Short-step Synthesis of Indenopyrazolones and Evaluation of Their Biological Activity as Hypoxia-Inducible Factor Inhibitors (Lab. Chem. Life Sci., Tokyo Tech.) OSUZUKI, Kensuke; FUSE, Shinichiro; KAWAMURA, Jun; SATO, Shinichi; NAKAMURA, Hiroyuki
- 3D7-18** Development of boron cluster containing water-soluble folate derivatives for Boron Neutron Capture Therapy (Lab. Chem. Life Sci., Tokyo Tech.) ONAKAGAWA, Fumiko; KAWASHIMA, Hidehisa; KOZU, Saki; MORITA, Taiki; SATO, Shinichi; NAKAMURA, Hiroyuki
- 3D7-19** Synthesis of fluorophore dimer probes bearing diethylenetriamine spacer and evaluation of its molecular recognition properties (Fac. Sci., Fukuoka Univ.) O Matsumoto, Keisuke; KUSANO, Shuhei; HAYASIDA, Osamu

### Friday, March 23, AM

#### Nucleic Acids (Structure)

Chair: WADA, Takehiko (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4D7-01, 4D7-03, 4D7-04, 4D7-05)
- 4D7-01\*\*** Supramolecular Assemblies of Mechanically Interlocked Components Inside a DNA Origami Frame (IAE, Kyoto Univ.) ORAJENDRAN, Arivazhagan; PARK, Seo-jeong; NAKATA, Eiji; KWON, Youngjoo; MORII, Takashi
- 4D7-03** Comparison of interaction between mica and 2D or 3D DNA origami devices (Fac. Chem. Materials and Bioeng., Kansai Univ.) OYAMASAKI, Yuta; AKAMATSU, Naohide; WATANABE, Ryosuke; KUZUYA, Akinori; OHYA, Yuichi
- 4D7-04** Observation of crystal surface of self-assembled 3D DNA crystals by AFM (Dep. Chem., Sch. Sci., Kyoto Univ.) OEKI, Haruhiko; SUGIYAMA, Hiroshi; ENDO, Masayuki
- 4D7-05\*\*** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (37): The formation of RNA foci in repeat expansion disorders is promoted in molecular crowding conditions (FIBER, Konan Univ.) OTENG, Ye; TATEISHI, Hisae; SUGIMOTO, Naoki

#### Nucleic Acid Medicine

Chair: OHYA, Yuichi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4D7-08, 4D7-10, 4D7-12)
- 4D7-08\*\*** Design, Synthesis and RNase H activity of Hemi-Gapmer Type Peptide Ribonucleic Acid (PRNA)-DNA chimeras for the RNase H mediated catalytic oligonucleotide therapeutics (IMRAM, Tohoku Univ.; Neuro., Tokyo Med. and Dental Univ.) OINAGAKI, Masahito; UNABARA, Daisuke; UEMATSU, Ryohei; ARAKI, Yasuyuki; ISHIBASHI, Satoru; YOKOTA, Takanori; WADA, Takehiko
- 4D7-10\*\*** Improvement of single mismatch discrimination in RNase H cleavage by artificial cationic oligosaccharides (Fac. Pharm. Sci., TUS) OHARA, Rintaro; WADA, Takeshi
- 4D7-12\*\*** Development of nucleic acid medicine delivery system using photo-responsive nucleic acid nanostructure (Inst. Bio. Sci., Tokushima Univ. Grad. Sch.) OYAMAMOTO, Seigi; TARASHIMA, Noriko; MINAKAWA, Noriaki

Chair: WADA, Takeshi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4D7-15, 4D7-17, 4D7-19)
- 4D7-15\*\*** Small molecule induced CAG/CTG repeat contraction during PCR: Repeat length dependency (ISIR, Osaka Univ.) OBINTI MOHD ZAIFUDDIN, Nursakinah; DOHNO, Chikara; NAKATANI, Kazuhiko
- 4D7-17\*\*** Sequence-specific Readthrough of Termination Codon by Antisense Oligonucleotides (Grad. Sch. Sci., Nagoya Univ.; WPI-ITBM, Nagoya Univ.;

ERATO, JST; PRESTO, JST) ○YAMASHITA, Shun; ITAMI, Kenichiro; HAGIHARA, Shinya

**4D7-19<sup>#</sup>** An Osmium Oxidation Based Approach for Post-transcriptionally Modified Nucleotides Labeling in RNA (Grad. Sch. Eng., The Univ. of Tokyo) ○DEBNATH, Turja Kanti; OKAMOTO, Akimitsu

### Friday, March 23, PM

Chair: KAMIYA, Yukiko (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4D7-28, 4D7-30, 4D7-31, 4D7-32, 4D7-33)

**4D7-28<sup>#</sup>** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (41): Construction of RNA display from DNAs immobilized on microsphere and its application for aptamer optimization (FIBER, Konan Univ.) ○ENDO, Tamaki; OHYAMA, Tatsuya; SUGIMOTO, Naoki

**4D7-30** Design and Synthesis of Intracellular pH responsive chimeric PRNA-DNA derivatives incorporation of  $\alpha$ -PRNA-Phenylboronic acid unit (IMRAM, Tohoku Univ.; Neuro.,Tokyo Med. and Dental Univ.) ○FUKUYO, Yuri; INAGAKI, Masahito; UNABARA, Daisuke; UEMATSU, Ryohei; ASAI, Mitsuo; ARAKI, Yasuyuki; SAKAMOTO, Seiji; ISHIBASHI, Satoru; YOKOTA, Takanori; WADA, Takehiko

**4D7-31** Biological application of drug carrier consisted of amphiphilic oligonucleotides possessing azobenzene units (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ○ITAGAKI, Takuma; TANABE, Kazuhito; KURIHARA, Ryohsuke

**4D7-32** Nanoliposomes scaffolded on the DNA nanostructure (IAE, Kyoto Univ.) ○KONISHI, Hiroaki; DINH, Huyen; NAKATA, Eiji; NAKANO, Syun; MORII, Takashi

**4D7-33** Loading of an artificial nucleic acid into Thermus Thermophilus Argonaute for its efficient DNA cleavage (Sch. Sci., Nagoya Univ.) ○YAMAGUCHI, Kanae; YUICHIRO, Aiba

Chair: ONIZUKA, Kazumitsu (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4D7-35, 4D7-37, 4D7-38, 4D7-39, 4D7-40)

**4D7-35<sup>#</sup>** Naphthyridine tetramer as a bivalent ligand targeting DNA expanded GGGGCC sequences (ISIR, Osaka Univ.) ○LU, Yihuan; DOHNO, Chikara; NAKATANI, Kazuhiko

**4D7-37** Analysis of interaction between Dicer-PAZ and RNA by using photo-crosslinker (Grad. Sch. Eng., Nagoya Univ.) ○YOKOTA, Noriko; TSUDA, Hiroki; KAMIYA, Yukiko; ASANUMA, Hiroyuki

**4D7-38** Development of metal nanoparticle-based SERS probes and their application to nucleic acid detection (KIT) ○OTA, Ryo; NAGAI, Yuki; TAKAGI, Noriyuki; KOBORI, Akio

**4D7-39** Function control of RNA by N6-alkyl adenosine introduction (Sch. Sci., Nagoya Univ.) ○IMAEDA, Akihiro; OIKAWA, Ryota; ASIA, Kiyoshi; SAKURABA, Shun; IWAKIRI, Junichi; ABE, Naoko; TOMOIKE, Fumiaki; KIMURA, Yasuaki; ABE, Hiroshi

**4D7-40<sup>#</sup>** Nucleic Acids Chemistry beyond the Watson-Crick Double Helix (40): Crowding Regulates the Riboswitch Aptamer-Ligand Recognition Mechanism in Bacterial Pathogenesis Mimic Condition (FIBER, Konan Univ.) ○RODE, Ambadas B.; ENDO, Tamaki; SUGIMOTO, Naoki

Chair: KOBORI, Akio (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(4D7-42, 4D7-43, 4D7-44, 4D7-45, 4D7-46, 4D7-47)

**4D7-42** Aggregate formation and cellular uptake of amphiphilic nucleic acid bearing hydrophobic dye BODIPY (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ○ASAHI, Wataru; KURIHARA, Ryohsuke; TANABE, Kazuhito

**4D7-43** Evaluation of aggregated amphiphilic siRNA bearing hydrophobic BODIPY dye (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○KURIHARA, Ryohsuke; ASAHI, Wataru; TANABE, Kazuhito

**4D7-44** Synthesis and properties of siRNA containing 5' -C-aminopropyl-2' -O-methyl-nucleosides (Grad. Sch. Nat. Sci. & Tech., Gifu Univ.; Fac. Applied Bio. Sci., Gifu Univ.) ○KAJINO, Ryohei; MAEDA, Yusuke; UENO, Yoshihito

**4D7-45** Synthesis and properties of oligonucleotides including 4' -C-aminomethyl-2' -deoxy-2' F-arabinonucleotide (Grad. Sch. Nat. Sci. & Tech., Gifu Univ.; Fac. Applied Bio. Sci., Gifu Univ.) ○TSUCHIHARA, Tatsuya; MAEDA, Yusuke; UENO, Yoshihito

**4D7-46** Development of nucleoside analogues directed against antiviral activity (Grad. Sch. Sci., Nagoya Univ.) ○KATAKURA, Hideo; NIIMI, Yushi; KIMURA, Yasuaki; SUZUKI, Tetsuro; MURAKAMI, Yuko; ABE, Hiroshi

**4D7-47** Sialyllactose-modified triangle DNA as binding inhibitor of influenza virus hemagglutinin (Grad. Sch. Human Dev. Env., Kobe Univ.; ISIR, Osaka Univ.) ○YAMABE, Miyuki; KAIHATSU, Kunihiko; EBARA, Yasuhito

## Room E1

Bldg. 10 1011

### Physical Chemistry -Structure-

Tuesday, March 20, AM

#### Magnetic resonance

Chair: NAKAZAWA, Shigeaki (9 : 00 ~9 : 40)

\* 8:50-9:00: interval for laptop PC connection.(1E1-01, 1E1-02, 1E1-03)

**1E1-01** Spectroscopic study on structure of paramagnetic species produced by electrolytic redox reaction of tetramethylbenzobis(dioxole) derivatives (KIT) ○MIYAKE, Yusuke; MURATA, Naoya; ISHIZUKA, Takaki; KANAORI, Kenji; TAJIMA, Kunihiko

**1E1-02** Molecular motion analysis of imidazolium decyl diphosphonate crystals using solid state NMR (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○UNE, Ryota; FUWA, Hiroki; AMEMORI, Shogo; IDA, Tomonori; MIZUNO, Motohiro

**1E1-03<sup>\*</sup>** Inter-spin interaction of CLPOT inclusion compounds with 1D molecular chains of 4-X-TEMPO radicals (Col. of Arts and Sciences, Showa Univ.) ○KOBAYASHI, Hirokazu; TAKAMISAWA, Hitoshi; FURUHASHI, Yuta; NAKAGAWA, Haruka; NAKATSUGAWA, Kyohei; TAKEUCHI, Kanae; MORINAGA, Yuka

Chair: MIYAKE, Yusuke (9 : 50 ~10 : 40)

\* 9:40-9:50: interval for laptop PC connection.(1E1-06, 1E1-08, 1E1-09, 1E1-10)

**1E1-06<sup>\*</sup>** Analytical Expressions for ESR Spectra of High-Spin Metallocomplexes with Sizable Zero-Field Splitting Parameters and Applications to Rhenium Complexes (Grad. Sch. Sci., Osaka City Univ.; Fac. Sci., TUS) ○YAMANE, Takeshi; SUGISAKI, Kenji; SATO, Kazunobu; KANZAKI, Yuki; TOYOTA, Kazuo; SHIOMI, Daisuke; TADOKORO, Makoto; TAKUI, Takeji

**1E1-08** Analysis of the ESR spectra for Fe ion species in Mushrooms (Grad. Sch. Sci., Osaka City Univ.; Dep. Health Nutr. Sci., Aichi Shukutoku University; NFRI; Hokkaido Univ. of Educ.) ○NAKAZAWA, Shigeaki; KANNO, Tomomi; SUGISAKI, Kenji; KAMEYA, Hiromi; UKAI, Mitsuko; MATSUI, Miki; SATO, Kazunobu; TAKUI, Takeji

**1E1-09** A study of electronic states of stable naphthalene diimide radical ion with phosphonium groups by ESR/ENDOR spectroscopy (Grad. Sch. Sci., Osaka City Univ.) ○SAKIYAMA, Dan; TATSUMI, Shunsuke; SUGISAKI, Kenji; SATO, Kazunobu; TOYOTA, Kazuo; SHIOMI, Daisuke; KUMAR, Sharvan; KUMAR, Keshri; KUMAR, Yogendra; MUKHOPADHYAY, Pritam; TAKUI, Takeji

#### others

**1E1-10** Theoretical study on open-shell nature and nonlinear optical properties of pyridinium N-phenoxide betaine (Grad. Sch. Eng. Sci., Osaka Univ.) ○WATANABE, Koki; KITANO, Syoma; YAMANE, Masaki; TONAMI, Takayoshi; SHIMIZU, Akihiro; YOSHIDA, Jun-ichi; KISHI, Ryohei; NAKANO, Masayoshi

#### Electronic Spectrum/Electronics

Chair: AKAI, Nobuyuki (10 : 50~12 : 00)

\* 10:40-10:50: interval for laptop PC connection.(1E1-12, 1E1-13, 1E1-14, 1E1-15, 1E1-17)

**1E1-12** Theoretical study on correlations between open-shell nature, charge transfer, and nonlinear optical properties of quinopyridines derivatives (Sch. Eng. Sci., Osaka Univ.) ○KITANO, Shoma; TONAMI, Takayoshi; YAMANE, Masaki; KISHI, Ryohei; HIRAO, Yasukazu; KUBO, Takashi; NAKANO, Masayoshi

**1E1-13** Non-resonant two-photon absorption of thioguanosine and dithioguanosine (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○ANDOU, Saki; ISOZAKI, Tasuku; SUZUKI, Tadashi

**1E1-14** Ultraviolet photoelectron spectroscopic studies on Madelung energy of ionic liquids (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NOMOTO, Shiori; RYO, Suho; IWAHASHI, Takashi; KANAI, Kaname; OUCHI, Yukio

**1E1-15<sup>#</sup>** FUV spectroscopic study of electronic transitions correlated with electronic conductivity of gel electrolytes containing alkali metal ions (Grad. Sch. Sci. Eng., Kindai Univ.) ○UENO, Nami; WAKABAYASHI, Tomonori; MORISAWA, Yusuke

**1E1-17<sup>\*</sup>** Far and Deep-UV spectroscopic study for electronic states of n-alkane in the solid states (Fac. Sci. Eng., Kindai Univ.; NFRI; Sch. Sci. Tech., Kwansai Gakuin Univ.) ○MORISAWA, Yusuke; IKEHATA, Akifumi; OZAKI, Yukihiko

Tuesday, March 20, PM

Surface/Interface

Chair: NOJIMA, Yuki (13 : 10~14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(1E1-26, 1E1-28, 1E1-30)  
**1E1-26\*\*** Surface of uranyl aqueous solution studied by heterodyne-detected vibrational sum frequency generation spectroscopy (NSEC, JAEA)  
 ○KUSAKA, Ryoji; WATANABE, Masayuki  
**1E1-28\*\*** Observation of Molecular Structure of Polypropylene/Liquid Interfaces by Sum-Frequency Generation Vibrational Spectroscopy (NRI, AIST)  
 ○SATO, Tomoya; MIYAMAE, Takayuki; AKIYAMA, Hasuhisa; HORIUCHI, Shin  
**1E1-30\*\*** Structural transition and acceleration of H-D exchange reaction at topmost surface of hexagonal ice (0001) (Dep. Chem., Sch. Sci., Kyoto Univ.; PRESTO, JST; Grad. Sch. Sci. Eng., Univ. of Toyama; Grad. Sch. Sci., Tohoku Univ.; ESICB, Kyoto Univ.) ○TOSHIKI, Sugimoto; KATO, Fumiaki; OTUKI, Yuji; ISHIYAMA, Tatsuya; MORITA, Akihiro; WATANABE, Kazuya; YOSHIYASU, Matsumoto

Chair: OUCHI, Yukio (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1E1-33, 1E1-35, 1E1-37, 1E1-38)  
**1E1-33\*\*** Isotope Effect on Hydrogen Evolution Reactions (Sch. Sci., Hokkaido Univ.) ○MINAMIMOTO, Hiro; MURAKOSHI, Kei  
**1E1-35\*** Electronic states and excited electron dynamics of C60 fullerene thin films: Effects of substrate interaction (Grad. Sch. Sci. Tech., Keio Univ.; Fac. Sci. Tech., Keio Univ.) ○SHIBUTA, Masahiro; YAMAGIWA, Kana; NAKAJIMA, Atsushi  
**1E1-37** Soft X-ray photoelectron spectroscopy study of the electronic structures of Fe2P surfaces (Coll. Sci., Rikkyo Univ.) ○EDAMOTO, Kazuyuki; MOTOYAMA, Hiroki; SUGIZAKI, Yuichi; OZAWA, Kenichi  
**1E1-38** Relationship between structure of beer surfaces and formation of beer foam. (NRI, AIST; Kirin Co., Ltd) ○MIYAMAE, Takayuki; KATO, Haruhito; KATO, Masaru

Chair: MIYAMAE, Takayuki (15 : 30~16 : 20)

- \* 15:20-15:30: interval for laptop PC connection.(1E1-40, 1E1-41, 1E1-43, 1E1-44)  
**1E1-40** Single-crystalline clathrate hydrate surface observed with sum frequency generation spectroscopy (Fac. Eng., Saitama Univ.)  
 ○YAMAMOTO, Kouta; NOJIMA, Yuki; YAMAGUCHI, Shoichi  
**1E1-41\*** Isotopically diluted single-crystalline ice I<sub>h</sub> surface observed with HD-SFG spectroscopy (Fac. Eng., Saitama Univ.) ○NOJIMA, Yuki; SHIOYA, Yuki; TAKAHASHI, Misato; YAMAGUCHI, Shoichi  
**1E1-43** Ion adsorption/desorption hysteresis at interfaces of Pt electrode and diluted ionic liquids (Sch. Mater. & Chem. Tech., Tokyo Tech.)  
 ○IWAHASHI, Takashi; ZHOU, Wei; KIM, Doseok; OUCHI, Yukio  
**1E1-44\*** IV-SFG studies on electrode/solvate ionic liquid interface (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○QI, Chengzi; IWAHASHI, Takashi; YAMAGUCHI, Seitaro; FUJITA, Masahiro; ZHOU, Wei; OUCHI, Yukio

Wednesday, March 21, AM

Gas-phase spectroscopy

Chair: FUKUSHIMA, Masaru (9 : 00 ~9 : 40)

- \* 8:50-9:00: interval for laptop PC connection.(2E1-01, 2E1-02, 2E1-03, 2E1-04)  
**2E1-01\*** Development of IR-VIS Double Resonance Method for Neutral Molecular in Superfluid He Droplets (RIKEN, AMO) ○OTANI, Hatsuki; KUMA, Susumu; AZUMA, Toshiyuki  
**2E1-02** Development of IR-IR hole burning spectroscopy for ultra-cold ions trapped in a cryogenic ion trap (Fac. Sci., TUS; Lab. Chem. Life Sci., Tokyo Tech.) ○KASAI, Ken-ichi; ISHIUCHI, Shun-ichi; TSUKIYAMA, Koichi; FUJII, Masaaki  
**2E1-03** Observation of an ionization induced water migration in the 4-methylformamide-water 1:1 cluster by IR dip spectroscopy (Sch. Sci., Kitasato Univ.; Lab. Chem. Life Sci., Tokyo Tech.) ○KAMIYA, Tairiku; MIYAZAKI, Mitsuhiko; ISHIKAWA, Haruki; FUJII, Masaaki  
**2E1-04** Gas phase spectroscopy of complexes of a partial peptide in adrenoceptor and adrenaline analogs by using an electrospray cold ion trap technique (Sch. Biosci. Biotech., Tokyo Tech.) ○TAMURA, Masato; SEKIBUCHI, Tsubasa; ISHIUCHI, Shun-ichi; FUJII, Masaaki

Chair: MIYAZAKI, Mitsuhiko (9 : 50 ~10 : 50)

- \* 9:40-9:50: interval for laptop PC connection.(2E1-06, 2E1-08, 2E1-10)  
**2E1-06\*\*** Vibrational polyads in the nitrate free radical NO<sub>3</sub> (SOKENDAI)  
 ○HIROTA, Eizi; FUKUSHIMA, Masaru  
**2E1-08\*** Jet spectroscopy of metal containing free radical (Grad. Sch. Info. Sci., Hiroshima City Univ.) ○FUKUSHIMA, Masaru; ISHIWATA, Takashi  
**2E1-10\*\*** Rotational-state distribution of N<sub>2</sub>O<sup>+</sup> produced by intense femtosecond laser pulses (Grad. Sch. Arts and Sci., The Univ. of Tokyo; Grad. Sch.

Sci., The Univ. of Tokyo) ○SONODA, Kotaro; IWASAKI, Atsushi; YAMANOUCI, Kaoru; HASEGAWA, Hirokazu

Chair: FUJII, Masaaki (11 : 00~12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(2E1-13)  
**2E1-13\*** CSJ Award for Creative Works Ultrafast Reaction Imaging and Control by Intense Laser Fields (RCMS, Nagoya Univ.)  
 ○HISHIKAWA, Akiyoshi

Wednesday, March 21, PM

Crystal Structure

Chair: SAKAMOTO, Akira (13 : 10~14 : 20)

- \* 13:00-13:10: interval for laptop PC connection.(2E1-26, 2E1-28, 2E1-30, 2E1-32)  
**2E1-26\*\*** Selective Synthesis of Au<sub>20</sub>Ag<sub>4</sub>M(SC<sub>2</sub>H<sub>4</sub>Ph)<sub>18</sub> [M = Pt or Pd] Clusters and Determination of Their Geometric Structure by SCXD (Photocatalysis international research centre, TUS) ○HOSSAIN, Sakiat; ONO, Tasuku; YOSHIOKA, Mahiro; HOSOI, Mai; CHEN, Zhaoheng; KURASHIGE, Wataru; NEGISHI, Yuichi

IR/Raman

- 2E1-28\*** Raman Optical Activity of Tetra-Alanine in the Poly(L-Proline) II Type Peptide Conformation (Grad. Sch. Sci. Eng., Saga Univ.; IMRAM, Tohoku Univ.; Sch. Sci., RMIT Univ.) FURUTA, Masakazu; FUJISAWA, Tomotsumi; URAGO, Hiroyasu; SHINGAE, Takahito; TAKAHASHI, Satoshi; BLANCH, Ewan; ○UNNO, Masashi  
**2E1-30\*\*** Anharmonically-coupled low frequency mode in green fluorescent protein: the assignment by QM/MM calculation (Grad. Sch. Sci. Eng., Saga Univ.) ○FUJISAWA, Tomotsumi; UNNO, Masashi  
**2E1-32** Assignment of Vibrational Spectra of Photoactive Yellow Protein using Isotopically Labeled p-Coumaric Acid Chromophore (Fac. Sci. Eng., Saga Univ.) ○ISHII, Hisato; HARAGUCHI, Shojiro; REN, Jie; SHINGAE, Takahito; FUJISAWA, Tomotsumi; HANAMOTO, Takeshi; HOFF, Wouter D.; UNNO, Masashi

International Symposium on Molecular Science - Physical Chemistry / Theoretical Chemistry, Chemoinformatics, Computational Chemistry - Cosponsored by Japan Society for Molecular Science  
 Thursday, March 22, AM

(9 : 00 ~9 : 10)

- 3E1-01\*** Opening Remarks / Closing Remarks Opening Remarks (Kyoto Univ.) ○Matsumoto, Yoshiyasu (09:00~09:10)

Chair: Matubayashi, Nobuyuki (9 : 10 ~10 : 30)

- 3E1-02\*** Keynote Lecture Modeling ligand-protein binding kinetics using molecular simulations and a novel pathway search method (Univ. of California, Riverside) ○Chang, A. Chia-en (09:10~09:50)  
**3E1-06\*** Invited Lecture Molecular dynamics study of structures and vibrational spectra at aqueous solution/zwitterionic lipid interfaces (Univ. of Toyama) ○Ishiyama, Tatsuya (09:50~10:10)  
**3E1-08\*** Invited Lecture Quantum chemical effects on solvation incorporated by size-consistent multipartitioning quantum mechanics/molecular mechanics method (The Univ. of Tokyo) ○Watanabe, C. Hiroshi (10:10~10:30)

Chair: Tachikawa, Masanori (10 : 40~12 : 00)

- 3E1-11\*** Keynote Lecture Efficient Exploration of High Dimensional Free Energy Landscapes of Chemical Transformations (Indian Inst. of Tech. Kanpur) ○Nisanth N., Nair (10:40~11:20)  
**3E1-15\*** Invited Lecture Development of QM/MM-based methods to investigate electron transfer reactions in condensed phases (Kyoto Univ.) ○Nakano, Hiroshi (11:20~11:40)  
**3E1-17\*** Invited Lecture Predicting the structure of self-assembled supra-molecular nanosystems via all-atom molecular simulation (Kyoto Univ.) ○Yamamoto, Takeshi (11:40~12:00)

Thursday, March 22, PM

Chair: Mizutani, Yasuhisa (13 : 00~14 : 20)

- 3E1-25\*** Keynote Lecture Single-protein tracking for direct observation of cellular process in a living cell (Seoul National Univ.) ○Lee, Nam Ki (13:00~13:40)  
**3E1-29\*** Invited Lecture Microsecond Biomolecular Dynamics Observed at the Single Molecule Level Using Two-dimensional Fluorescence Lifetime Correlation Spectroscopy (RIKEN) ○Ishii, Kunihiko (13:40~14:00)  
**3E1-31\*** Invited Lecture Resolving 1 nm steps of a brownian-ratchet chitinase with gold nano particle (Okazaki Institute for Integrative Bioscience, NINS) ○Nakamura, Akihiko (14:00~14:20)

Chair: Kato Tatsuha (14 : 30~15 : 50)

- 3E1-34# Keynote Lecture** Chemical Programming of Biomacromolecules for Precision Nanomedicine (Huazhong Univ. of Science and Technology) ○Wu, Yuzhou (14:30~15:10)
- 3E1-38# Invited Lecture** Development of Luminescent Flat p-Conjugated Materials (Hiroshima Univ.) ○Haino, Takeharu (15:10~15:30)
- 3E1-40# Invited Lecture** Chemistry of Cyborg Supramolecules: Approaches to Biomolecular Science Taking Advantage of Artificial Biomolecular Interfaces (The Univ. of Tokyo; JST, ERATO) ○Sato, Sota (15:30~15:50)

Chair: Fujii, Asuka (16 : 00~17 : 20)

- 3E1-43# Keynote Lecture** Spectroscopy and Dynamics of Metal Clusters (Dalian Institute of Chemical Physics) ○Jiang, Ling (16:00~16:40)
- 3E1-47# Invited Lecture** Reaction of silicate clusters related to chemistry in the interstellar environment (Kyushu Univ.) ○Arakawa, Masashi (16:40~17:00)
- 3E1-49# Invited Lecture** Gas-phase spectroscopy by using IR ablation of droplet beam: High-sensitivity high-resolution observation of protein denaturation (Gakushuin Univ.) ○Asami, Hiroya (17:00~17:20)

(17 : 20~17 : 30)

- 3E1-51# Opening Remarks / Closing Remarks** Closing Remarks (Osaka Univ.) ○Mizutani, Yasuhisa (17:20~17:30)

## Physical Chemistry -Structure-

Friday, March 23, AM

### IR/Raman

Chair: NARA, Masayuki (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4E1-01, 4E1-02, 4E1-03, 4E1-04, 4E1-05, 4E1-06)
- 4E1-01** Photoisomerization and hydration of acetylacetone in a low temperature argon matrix (Grad. Sch. Sci., TUS) ○TAKAHASHI, Toko; YAMADA, Yasuhiro
- 4E1-02** Photochemical Reactions of Boron Triiodide Isolated in a Low Temperature Argon Matrix (Grad. Sch. Sci., TUS) ○HATORI, Mei; YAMADA, Yasuhiro
- 4E1-03** Effect of solvent annealing on the thin film structure of a porphyrin derivative (ICR, Kyoto Univ.) ○TOMITA, Kazutaka; SHIOYA, Nobutaka; KISE, Ryuma; SHIMOAKA, Takafumi; EDA, Kazuo; HASEGAWA, Takeshi
- 4E1-04** Raman spectroscopic study of helical conformation of perfluoroalkyl chains (ICR, Kyoto Univ.) ○SHIMOAKA, Takafumi; SONOYAMA, Masashi; AMII, Hideki; TAKAGI, Toshiyuki; KANAMORI, Toshiyuki; HASEGAWA, Takeshi
- 4E1-05** High-speed Fourier-transform coherent anti-Stokes Raman scattering spectroscopy with heterodyne detection (Grad. Sch. Sci., The Univ. of Tokyo) ○HIRAMATSU, Kotaro; YIZHI, Luo; IDEGUCHI, Takuro; GODA, Keisuke
- 4E1-06** Concentration Dependence of Intermolecular Dynamics in Aqueous Lidocaine Solutions Studied by Femtosecond Raman-Induced Kerr Effect Spectroscopy (Grad. Sch. Sci., Chiba Univ.) ○SHIROTA, Hideaki

Chair: SHIMOAKA, Takafumi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4E1-08, 4E1-10, 4E1-12, 4E1-13)
- 4E1-08#** Observation of structural changes in light-driven sodium ion pump KR2 upon sodium ion binding (Grad. Sch. Sci., Osaka Univ.) ○OTOMO, Akihiro; MIZUNO, Misao; INOUE, Keiichi; KANDORI, Hideki; MIZUTANI, Yasuhisa
- 4E1-10#** Photo-induced tight Au-Au bond formation dynamics in [Au(CN)<sub>2</sub>] oligomers and its ionic strength dependence studied by ultrafast time-domain Raman spectroscopy (Molecular Spectroscopy Lab., RIKEN) ○KURAMOCHI, Hikaru; TAKEUCHI, Satoshi; IWAMURA, Munetaka; NOZAKI, Koichi; TAHARA, Tahei
- 4E1-12** IR Electroabsorption Spectroscopy of Aqueous Ions by Utilizing Reverse Micelles (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○TODA, Shogo; SHIGETO, Shinsuke
- 4E1-13** Fabrication of Au@Ag core shell nanoparticles towards High Sensitivity Shell Isolated Nanoparticle Enhanced Raman Spectroscopy measurement (Lab. Chem. Life Sci., Tokyo Tech.) ○OZAWA, Miyu; TANG, Yuansen; KUZUME, Akiyoshi; YAMAMOTO, Kimihisa

Chair: KURAMOCHI, Hikaru (11 : 20~12 : 30)

- \* 11:10-11:20: interval for laptop PC connection.(4E1-15, 4E1-16, 4E1-17, 4E1-18, 4E1-19, 4E1-20, 4E1-21)
- 4E1-15** Effects of membrane environment on the chromophore structure and the oligomeric stability of light-driven proton pump (Grad. Sch. Sci., Osaka Univ.) ○SHIONOYA, Tomomi; MIZUNO, Misao; TSUKAMOTO, Takashi; SUDO, Yuki; MIZUTANI, Yasuhisa
- 4E1-16** Pathway of vibrational energy transfer in proteins through atomic

contact (Grad. Sch. Sci., Osaka Univ.) ○YAMASHITA, Satoshi; MIZUNO, Misao; MIZUTANI, Yasuhisa

- 4E1-17** Vibrational Circular Dichroism toward Stereoselective Recognition on a Solid Surface (Grad. Sch. Sci., Eng., Ehime Univ.; Fac. Medicine, Toho Univ.) ○SATO, Hisako; TAKIMOTO, Kazuyoshi; YAMAGISHI, Akihiko
- 4E1-18** Characterization of medaka scales by vibrational spectroscopic analyses (Tokyo Med. and Dental Univ.) ○NARA, Masayuki; MARUYAMA, Yusuke; HATTORI, Atsuhiko
- 4E1-19#** Size Dependent Spectral Analysis of Arc Plasma Deposition Pt Nanoplatelets by Shell-isolated Au Nano-stars Enhanced Raman Spectroscopy (Sch. Life Sci. Tech., Tokyo Tech.) ○TANG, Yuansen; KUZUME, Akiyoshi; YAMAMOTO, Kimihisa
- 4E1-20** Study of blinking surface-enhanced Raman scattering and fluorescence by power-law analysis and super-resolution imaging (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KITAHAMA, Yasutaka; FUNAOKA, Misato; NISHIYAMA, Yumi; OZAKI, Yukihiko
- 4E1-21** Study of the Vibrational Stark Effect of Nylon 6 Thin Films (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○OSHIRO, Moeka; FURUKAWA, Yuki; TAKASHIMA, Kenji

## Room E2

Bldg. 10 1012

## Theoretical Chemistry, Chemoinformatics, and Computational Chemistry

Tuesday, March 20, AM

### Simulation

Chair: MATUBAYASI, Nobuyuki (9 : 00 ~9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(1E2-01, 1E2-02, 1E2-04)
- 1E2-01** Analysis of Protonated Water Clusters using Variational Path Integral Molecular Dynamics Method (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○SUGISAWA, Hiroki; IDA, Tomonori; MIURA, Shinichi
- 1E2-02\*** The Application of Particle-mesh Ewald Summation and ONIOM Scheme to Path-integral Molecular Dynamics (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○KOBAYASHI, Osamu; NANBU, Shinkoh; TACHIKAWA, Masanori
- 1E2-04#** Trimethylamine-*N*-oxide: its hydration structure and surface activity, viewed by vibrational spectroscopy and molecular dynamics simulations (Grad. Sch. Eng. Sci., Osaka Univ.) ○OHTO, Tatsuhiko

### Bio-related

Chair: SUGIMOTO, Manabu (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(1E2-07, 1E2-09, 1E2-11, 1E2-12)
- 1E2-07#** In silico examination of non-bonding interactions in proteins (Institute of Quantum Beam Science) ○TABOROSI, Attila; YAMAGUCHI, Takahide; KOHZUMA, Takamitsu
- 1E2-09#** REMD-based flexible docking (RIKEN QBiC) ○RE, Suyong; OSHIMA, Hiraku; KAMIYA, Motoshi; SUGITA, Yuji
- 1E2-11** Free energy analysis of  $\beta$ -sheet aggregation by MD simulation (Grad. Sch. Eng. Sci., Osaka Univ.) ○MASUTANI, Keiichi; YAMAMORI, Yu; KIM, Kang; MATUBAYASI, Nobuyuki
- 1E2-12** Analysis of the Intermolecular Charge Fluxes Induced by Translations and Rotations of Peptides in Aqueous Solutions and the Terahertz Spectral Intensity Generation (Fac. Edu., Shizuoka Univ.) ○TORII, Hajime

### Simulation

Chair: TORII, Hajime (11 : 10~11 : 40)

- \* 11:00-11:10: interval for laptop PC connection.(1E2-14, 1E2-17)
- 1E2-14** CSJ Award for Young Chemists Developments of Molecular Crowding and Cascade-Type Massive Parallel Simulation Methods for Biological Functions of Proteins (CCS, Univ. of Tsukuba) ○HARADA, Ryuei

Chair: MATUBAYASI, Nobuyuki (11 : 40~12 : 10)

- 1E2-17#** CSJ Award for Young Chemists Development of Hybrid Method between Statistical and Quantum Mechanics to Understand Chemistries in Solution at Atomic Level (WPI-ITbM, Nagoya Univ.) ○YOKOGAWA, Daisuke

Tuesday, March 20, PM

### Simulation

Chair: YOKOGAWA, Daisuke (13 : 20~14 : 10)

- \* 13:10-13:20: interval for laptop PC connection.(1E2-27, 1E2-28, 1E2-29,

- 1E2-30, 1E2-31)  
**1E2-27** Molecular Dynamics Simulations of the Stability of Interlayer Anion in Layered Double Hydroxide (Advanced Research Div., Panasonic Corp.)  
 ○KENJI, Toyoda; FAYOLLE, Marine; MURASE, Hideaki; HINOGAMI, Reiko  
**1E2-28** The simulation of epitaxial growth rate of silicon thin film in Si-H-Cl system (Sch. Creative Sci. Eng., Waseda Univ.) ○TOYOSHIMA, Ryuki; KUNIOSHI, Nilson; YAMAGUCHI, Katsunori; HUWA, Akio  
**1E2-29** Molecular dynamics simulation of the anion binding association mechanism contributed to pyrrole rotation for 1,3-dipyrrolyl-1,3-propanediones including BF<sub>2</sub>. (Grad. Sch. Nanobiosci., Yokohama City Univ.)  
 ○KATO, Tomoki; MASHIKO, Takako; HAKETA, Yohei; MAEDA, Hiromitsu; TACHIKAWA, Masanori  
**1E2-30** Prediction of thermal conductivity anisotropy of liquid crystals by all-atom molecular dynamics simulations (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○OHKI, Ryuma; HAYASHI, Yoshihiro; KAWAUCHI, Susumu  
**1E2-31** Free energy analysis of water absorption in various polymer systems (Grad. Sch. Eng. Sci., Osaka Univ.) ○HANDA, Kazuya; MATUBAYASI, Nobuyuki

### Chemical Reaction

Chair: TAKANO, Yu (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1E2-33, 1E2-34, 1E2-35, 1E2-37, 1E2-38)  
**1E2-33** Search for CN Hybrid Structure (Fac. Sys. Eng., Wakayama Univ.; Institute for Quantum Chemical Exploration) ○YAMAKADO, Hideo; OHNO, Koichi  
**1E2-34** Exploration of Novel Carbon Structures: Double-layered Hexagonal Networks (Grad. Sch. Sci., Tohoku Univ.; Research Org. of Inform. & Syst.) ○OHNO, Koichi; SATOH, Hiroko; IWAMOTO, Takeaki  
**1E2-35\*** Systematic exploration of conical intersections based on time dependent density functional theory: Application to photoreactions (Fac. Sci., Hokkaido Univ.; PRESTO, JST) ○HARABUCHI, Yu; MAEDA, Satoshi  
**1E2-37** Reduction of chemical reaction network by projection operator method (Grad. Sch. Eng., Kyoto Univ.) ○YAGI, Tomoaki; SATO, Hirofumi  
**1E2-38** Theoretical study on addition effects of Sn on reversible hydrogenation reactions of toluene on Pt catalyst (Sch. Advanced Sci. Eng., Waseda Univ.)  
 ○TANAKA, Marina; HIRAI, Takahiro; OKOSHI, Masaki; NAKAI, Hiromi

Chair: TACHIKAWA, Masanori (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(1E2-40, 1E2-41, 1E2-42, 1E2-43, 1E2-44)  
**1E2-40** Analysis of substitution reactions of Cl atoms adsorbed at Si(100) surfaces by quantum chemical calculations (Grad. Sch. Creative Sci. Eng., Waseda Univ.) ○HAGINO, Sho; KUNIOSHI, Nilson; YAMAGUCHI, Katsunori; FUWA, Akio  
**1E2-41** Analysis of surface growth inhibition reactions in CVD reactors through DFT calculations (Grad. Sch. Creative Sci. Eng., Waseda Univ.)  
 ○FUJIMURA, Yoshiki; KUNIOSHI, Nilson; YAMAGUCHI, Katsunori; FUWA, Akio  
**1E2-42** Catalytic performance of a dicopper-oxo complex for methane hydroxylation (IMCE, Kyushu Univ.) ○HORI, Yuta; SHIOTA, Yoshihito; YOSHIZAWA, Kazunari  
**1E2-43** Theoretical study of C-H bond activation catalyzed by a dicopper complex (IMCE, Kyushu Univ.) ○SHIOTA, Yoshihito; HORI, Yuta; KODERA, Masahito; YOSHIZAWA, Kazunari  
**1E2-44\*\*** Applications of the semi-empirical rPM6 method to chemical reactions catalyzed by transition metal containing complexes. (Grad. Sch. Info. Sci., Hiroshima City Univ.) ○SAITO, Toru; TAKANO, Yu

Chair: OKUMURA, Mitutaka (16 : 40~17 : 30)

- \* 16:30-16:40: interval for laptop PC connection.(1E2-47, 1E2-49, 1E2-50, 1E2-51)  
**1E2-47\*\*** Theoretical study of CO oxidation on solid-solution surface of Ru-Cu alloy (IFRC, Kyushu Univ.) ○XIE, Wei; ISHIMOTO, Takayoshi; KOYAMA, Michihisa  
**1E2-49** A theoretical study on Phosphorus as anode materials of the Sodium ion secondary batteries (Grad. Sch. Eng., The Univ. of Tokyo) ○ITO, Yoshihiro; YAMASHITA, Koichi  
**1E2-50** Post Lithium Ion Batteries: Characterization of Phosphorous and Tin for Potassium-ion Anodes (Fac. Eng., The Univ. of Tokyo) ○KOJIMA, Megumi; ARABNEJAD, Saied; YAMASHITA, Koichi  
**1E2-51** Theoretical study on photoexcited states of organic-inorganic lead halide perovskites (Fac. Eng., The Univ. of Tokyo) ○KEITA, Takahashi; HIROKI, Uratani; KOICHI, Yamashita

### Materials

Chair: HARABUCHI, Yu (17 : 40~18 : 30)

- \* 17:30-17:40: interval for laptop PC connection.(1E2-53, 1E2-54, 1E2-55, 1E2-56, 1E2-57)  
**1E2-53** Theoretical analysis of isotropic nuclear magnetic shielding constant

- on hydrogen considering quantum fluctuation (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○WATANABE, Yoshiaki; KITA, Yukiumi; TACHIKAWA, Masanori  
**1E2-54** Analysis of a proton transfer reaction using the DFTB-RPMD method (Grad. Sch. Eng., Kyoto Univ.) ○KOSUGI, Kento; NAKANO, Hiroshi; SATO, Hirofumi  
**1E2-55** Force constant analysis of interacted systems (Hoshi Univ.)  
 ○SAKATA, Ken  
**1E2-56** Centrifugal distortion effect in laser-aligned diatomic molecules (Coll. Sci. Tech., Nihon Univ.) ○HONDA, Toshiaki; SAKO, Tokuei  
**1E2-57** Time dependent transient current in transistor-like nanostructures (Coll. Sci. Tech., Nihon Univ.) ○ASANO, Katsuya; TASHIRO, Ryoken; SAKO, Tokuei

### Wednesday, March 21, AM

#### Electronic Structure

Chair: KAWAI, Shinnosuke (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2E2-01, 2E2-03, 2E2-05)  
**2E2-01\*** Theoretical study on nonlinear optical properties of substructures of covalent organic frameworks composed of open-shell molecules (Grad. Sch. Eng. Sci., Osaka Univ.) ○KISHI, Ryohei; NAKANO, Masayoshi  
**2E2-03\*\*** Relationship between open-shell singlet nature and second hyperpolarizability in rectangular-shaped tetradical model systems (Sch. Eng. Sci., Osaka Univ.) ○MATSUI, Hiroshi; YAMANE, Masaki; TONAMI, Takayoshi; NAKANO, Masayoshi  
**2E2-05\*\*** Quantum Interference in Molecular Conductance through Alternant and Non-Alternant Hydrocarbons (IMCE, Kyushu Univ.) ○TSUJI, Yuta; YOSHIZAWA, Kazunari

Chair: YAMAMOTO, Norifumi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2E2-08, 2E2-10, 2E2-11, 2E2-12, 2E2-13)  
**2E2-08\*\*** Mechanism on potential shift of Au electrode immersed in ionic liquid: Crucial role of electron redistribution at interface (Grad. Sch. Info. Sci., Nagoya Univ.) ○INAGAKI, Taichi; TAKENAKA, Norio; NAGAOKA, Masataka  
**2E2-10** Computational Approach to Rise in Photoelectric Conversion Efficiency of Organic Thin Film Solar Cell (The Univ. of Tokyo) WATANABE, Kaoru; ○TAMURA, Hirofumi; YAMASHITA, Koichi  
**2E2-11** Constrained DFT calculation and analysis of electronic coupling of donor-bridge-acceptor molecules. (Sch. Eng., Kyoto Univ.) ○YOSHIMOTO, Mika; NAKANO, Hiroshi; SATO, Hirofumi  
**2E2-12** Theoretical analysis of the mechanism of positron binding and pair annihilation to benzene derivatives (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○ONO, Kuniaki; KITA, Yukiumi; TACHIKAWA, Masanori  
**2E2-13** Two-component Relativistic Time-Dependent Density Functional Theory Based on Noncollinear Spin Density (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○HIRAGA, Kenta; IKABATA, Yasuhiro; NAKAI, Hiromi

Chair: KISHI, Ryohei (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2E2-15, 2E2-17, 2E2-18, 2E2-20)  
**2E2-15\*\*** Polynomial Expression of Molecular Integral Function over STO' s for Algebraic Molecular Orbital Equation (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○JUN, Yasui  
**2E2-17** Theoretical investigation on absorption intensities of fundamental and overtone XH stretching vibrations in hydrogen bond complexes XH...Y (Grad. Sch. Sci. Tech., Keio Univ.) ○FURUDATE, Shunki; MORIMOTO, Ryosuke; YABUSHITA, Satoshi  
**2E2-18\*\*** Butadiene in intense laser fields by the time-dependent configuration-interaction method (Grad. Sch. Sci., The Univ. of Tokyo) ○YANG, Wenhong; LÖTSTEDT, Erik; YAMANOUCHI, Kaoru  
**2E2-20\*** HF and DFT Analysis of 2-Methoxyppyridylchalcogen Compounds: A Combined Experimental and Theoretical Analysis (Dept. Chem., Sri Guru Teg Bahadur Khalsa College) ○SINGH, Avtar; SINGH, Jaspreet; SHARMA, Neha

### Wednesday, March 21, PM

#### Materials

Chair: TSUJI, Yuta (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2E2-28, 2E2-30, 2E2-32)  
**2E2-28\*\*** Theoretical Study on the Aggregation Induced Emission of a Cyanostilbene Derivative (Chiba Inst. of Tech.) ○YAMAMOTO, Norifumi  
**2E2-30\*\*** Highly Efficient Search of Novel Perovskite Solar Cell Materials by Combining First-principle Calculations and Machine Learning (Grad. Sch. Sci. Eng., TMU) ○KANNO, Shohei; IMAMURA, Yutaka; HADA, Masahiko

## Dynamics

**2E2-32\*\*** Extraction of effective dynamical modes in quantum systems (Fac. Sci., Shizuoka Univ.) ○KAWAI, Shinnosuke

## Room E3

### Bldg. 10 1013

## Physical Chemistry -Properties-

Tuesday, March 20, AM

## Conductors

Chair: AKUTSU, Hiroki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1E3-01, 1E3-02, 1E3-03, 1E3-04, 1E3-05, 1E3-06)

**1E3-01** Synthesis and Structures of Various Hydrogen-bonded Crystals Based on a Metal-dithiolene Complex Having Two Catechol Moieties (ISSP, The Univ. of Tokyo) ○YOKOMORI, So; UEDA, Akira; KUMAI, Reiji; MURAKAMI, Youichi; MORI, Hatsumi

**1E3-02** Structures and Physical Properties of Hydrogen-bonded Charge-Transfer Complexes Composed of Catechol-fused TTF and Anilic Acid Derivatives (ISSP, The Univ. of Tokyo) ○DOI, Ryohei; UEDA, Akira; KUMAI, Reiji; MURAKAMI, Youichi; MORI, Hatsumi

**1E3-03** Synthesis of a Phenol-fused TTF Derivative and Structure and Properties of its Charge-transfer Salt (ISSP, The Univ. of Tokyo) ○UEDA, Akira; MORI, Hatsumi

**1E3-04** Structures and Properties of Molecular Conductors Based on a Trimeric TTF (Grad. Sch. Sci., Eng., Ehime Univ.; RU: OSC, Ehime Univ.; RU: PGeS, Ehime Univ.) MASUDA, Takuta; TOKUNAGA, Saki; SHIRAHATA, Takashi; ○MISAKI, Yohji

**1E3-05** Synthesis and properties of novel molecular complexes from electron acceptors bearing aromatic *N*-heterocycles (Sch. Sci., Kobe Univ.; Grad. Sch. Sci., Kobe Univ.) ○SUGITANI, Maho; TAKAHASHI, Kazuyuki

**1E3-06** Controls in Molecular Arrangement and Functions for Cation-Anion Pairs of Naphthalenediimide Derivative (Grad. Sch. Eng., Tohoku Univ.) ○KAWASAKI, Ayumi; TAKEDA, Takashi; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki

Chair: UEDA, Akira (10 : 10 ~ 11 : 20)

\* 10:00-10:10: interval for laptop PC connection.(1E3-08, 1E3-09, 1E3-10, 1E3-11, 1E3-12, 1E3-14)

**1E3-08** transport characteristics at the contact interface of organic Mott insulator and donor molecular crystal (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○ISHIDA, Kenshiro; YAKAHASHI, Yukihiko; SAITOU, Youhei; HARADA, Jun; KAWAMOTO, Atsushi; INABE, Tamotsu

**1E3-09** Physical properties and structure of the charge-transfer complex TMB-TCNQ which shows the neutral-ionic phase transition (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○KONDO, Tsubasa; TAKAHASHI, Yukihiko; HARADA, Jun; INABE, Tamotsu; YOKOKURA, Seiya; MATSUSHITA, Michio; AWAGA, Kunio

**1E3-10** Crystal Structures and Transport Properties of a Charge Transfer Complex Including TTF and Chloranil (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) TANAKA, Eri; ○TAKAHASHI, Yukihiko; TAKEHISA, Mika; HARADA, Jun; KUMAI, Reiji; INABE, Tamotsu

**1E3-11** Structure and Properties of (PO-CONH-*m*-*N*-methylpyridinium)[Ni(dmit)<sub>2</sub>].CH<sub>3</sub>CN (Grad. Sch. Sci., Osaka Univ.) ITO, Soichi; ○AKUTSU, Hiroki; KADOYA, Tomofumi; YAMADA, Jun-ichi; NAKATSUJI, Shin'ichi; NAKAZAWA, Yasuhiro

**1E3-12\*** Enhancement of both magnetic and charge orderings in two-dimensional molecular conductors exhibiting HOMO-LUMO inversion (Fac. Sci., Ehime Univ.) ○YAMAMOTO, Takashi; NAITO, Toshio; FUJIMOTO, Takashi; NAKAZAWA, Yasuhiro; TAMURA, Masafumi; IKEMOTO, Yuka; MORIWAKI, Tarō; YAKUSHI, Kyuya; KATO, Reizo

**1E3-14** Structures and Physical Properties of Novel Neutral Radical Gold Dithiolene Complexes (Grad. Sch. Sci., Nagoya Univ.) ○MIZUNO, Asato; BENJAMIN, Helen; MOGGACH, Stephen; NICHOL, Gary; SHUKU, Yoshiaki; MATSUSHITA, Michio; AWAGA, Kunio; ROBERTSON, Neil

## Tuesday, March 20, PM

Chair: MISAKI, Yohji (14 : 40 ~ 15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1E3-35)

**1E3-35#** CSJ Award for Creative Works Development of  $\pi$ -electron functional materials utilizing molecular degrees of freedom (ISSP, The Univ. of Tokyo) ○MORI, Hatsumi

Chair: TAKAHASHI, Kazuyuki (15 : 50 ~ 16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1E3-42, 1E3-44, 1E3-45,

1E3-46)

**1E3-42\*** Construction of  $\pi$ -d molecular conductors composed of octahedrally ligated iron tetrabenzoporphyrin: Molecular design for controlling a giant negative magnetoresistance effect (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Grad. Sch. Sci., Osaka Univ.; IMRAM, Tohoku Univ.; Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○NISHI, Miki; ISHII, Ryuta; IKEDA, Mitsuo; HANASAKI, Noriaki; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki; SUMIMOTO, Michinori; MATSUDA, Masaki

**1E3-44** Molecule based honeycomb structure consisted of radical anion specie of triptycene derivative with benzoquinone moieties (Grad. Sch. Sci., Nagoya Univ.) ○SHUKU, Yoshiaki; HYUN, Chang Seok; RYU, Young Jun; AN, Byeong Kwan; KWON, Ji Eon; PARK, Soo Young; TSUCHIZU, Masahisa; AWAGA, Kunio

**1E3-45** AC Photoelectric Conversion Cells Driven by Polarization Current of Insulator Layers (Grad. Sch. Sci., Nagoya Univ.; Sch. Sci., Nagoya Univ.) ○YOKOKURA, Seiya; TOMIMATSU, Akihiro; MATSUSHITA, Michio; AWAGA, Kunio

**1E3-46\*\*** Development of ion-switch transistor using solid-state ion exchange (Grad. Sch. Sci., Hiroshima Univ.) ○ICHIHASHI, Katsuya; KONNO, Daisuke; MARYUNINA, Kseniya; INOUE, Katsuya; TOYODA, Kazuhiro; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi; NISHIHARA, Sadafumi

## Magnetism

Chair: MATSUSHITA, Michio-m. (17 : 00 ~ 18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(1E3-49, 1E3-50, 1E3-51, 1E3-52, 1E3-53, 1E3-54)

**1E3-49** photo-induced magnetic properties of TTF-nitroxide radical mixed crystal system (Grad. Sch. Sci. and Technol., Niigata Univ.; Grad. Sch. Sci., Osaka Pref. Univ.) ○ABE, Masanori; FURUKAWA, Ko; HORIKIRI, Kazuki; FUJIWARA, Hideki

**1E3-50** Withdrawn

**1E3-51** Magnetic anomaly on isolated Cu(II)-CO<sub>3</sub><sup>2-</sup> spin ladder (Fac. Sci., Hiroshima Univ.) ○NISHIDA, Kazuki; ZHANG, Xiao; NAKANO, Yuki; MARYUNINA, Kseniya; INOUE, Katsuya; NISHIHARA, Sadafumi

**1E3-52** Magnetic Properties and Current-Voltage Characteristics of Neutral Iron Complexes with  $\pi$ -conjugated Ligands (Sch. Sci., Kobe Univ.; Grad. Sch. Sci., Kobe Univ.; Grad. Sch. Eng. Sci., Osaka Univ.; CSREA, Kobe Univ.; MPRC, Kobe Univ.) ○MIYAWAKI, Atsuhiko; TAKAHASHI, Kazuyuki; PHAM, Song-toan; OHTO, Tatsuhiko; TADA, Hirokazu; SAKURAI, Takahiro; OHTA, Hitoshi

**1E3-53#** Single Crystals of Sandwich-type Polyoxometalates Containing Carbonate-Bridged Tb Triangle with (CH<sub>3</sub>)<sub>n</sub>H<sub>4-n</sub>N<sup>+</sup> (*n*=1-4) Cations (Grad. Sch. Env. Sci., Hokkaido Univ.) ○CHEN, Jiao; FUJIBAYASHI, Masaru; TAKAHASHI, Kiyonori; KUBO, Kazuya; NORO, Shin-ichiro; NAKAMURA, Takayoshi

**1E3-54** Ab initio computations of magnetic interactions for spin frustration in triangle magnetic lattice : extension to DMRG-CASCI method (RIKEN AICS) ○KAWAKAMI, Takashi; SANO, Shinsuke; SAITO, Toru; SHOJI, Mitsuo; YAMADA, Satoru; TAKANO, Yu; YAMANAKA, Shusuke; OKUMURA, Mitsutaka; NAKAJIMA, Takahito; YAMAGUCHI, Kizashi

## Wednesday, March 21, AM

## Dielectric Properties

Chair: TSUNASHIMA, Ryo (9 : 30 ~ 10 : 20)

\* 9:20-9:30: interval for laptop PC connection.(2E3-04, 2E3-05, 2E3-06, 2E3-07, 2E3-08)

**2E3-04** Dielectric anomaly on binuclear mixed-valence vanadium complex, K<sub>3</sub>[V<sub>2</sub>O<sub>5</sub>(nta)<sub>2</sub>]3H<sub>2</sub>O (Grad. Sch. Sci., Hiroshima Univ.) ○HAGEO, Kazuki; MARYUNINA, Kseniya; INOUE, Katsuya; NISHIHARA, Sadafumi

**2E3-05** Structure of [Ni(dmit)<sub>2</sub>] salts including supramolecular structure of heterocyclic cations and dibenzo[24]crown-8 (Grad. Sch. Env. Sci., Hokkaido Univ.) SHIRAKAWA, Yuki; ○TAKAHASHI, Kiyonori; NORO, Shin-ichiro; AKUTAGAWA, Tomoyuki; NAKAMURA, Takayoshi

**2E3-06#** Mixed molecular assemblies of ferroelectric and liquid crystalline 1,3,5-benzenecarboxamide bearing -CONHC<sub>14</sub>H<sub>29</sub> chains (IMRAM, Tohoku Univ.) ○YUAN, Guohao; TAKEDA, Takashi; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki

**2E3-07** Molecular Assembly Structures and Dielectric Properties of Bis(alkylamide)-substituted Benzene Derivatives (IMRAM, Tohoku Univ.) ○KAWANA, Moeko; TAKEDA, Takashi; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki

**2E3-08#** Synthesis and physical properties of alkylamide-substituted porphyrin derivatives (Grad. Sch. Eng., Tohoku Univ.) ○WU, Jianyun; TAKEDA, Takashi; HOSHINO, Norihisa; AKUTAGAWA, Tomoyuki

Chair: NISHIHARA, Sadafumi (10 : 30 ~ 11 : 30)

\* 10:20-10:30: interval for laptop PC connection.(2E3-10, 2E3-12, 2E3-13, 2E3-14)

**2E3-10\*\*** Ferroelectricity of Alkylamide- and Alkylester-substituted Helicene Derivatives (Grad. Sch. Eng., Tohoku Univ.) ○ANETAI, Hayato;

TAKEDA, Takashi; HOSHINO, Norihisa; KOBAYASHI, Higashi; SAITO, Nozomi; SHIGENO, Masanori; YAMAGUCHI, Masahiko; AKUTAGAWA, Tomoyuki

**2E3-12** Structure and property of hydrogen bonding crystals of Hexamethylenetetramine (Fac. Sci., Yamaguchi Univ.) ○MORITA, Hagino; TSUNASHIMA, Ryo

**2E3-13** Effect of protonation on the structure and electrochemical behavior of pyridyl-grafted mixed-valence Fe [2×2] grid complex (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○UEZU, Yuta; TSUNASHIMA, Ryo

**2E3-14\*** Structural transformation of methanol linked two-dimensional network structure of dabco-based hydrogen and coordination bonding chains (Fac. Sci., Yamaguchi Univ.) ○TSUNASHIMA, Ryo; SHIGA, Misaki

### Wednesday, March 21, PM

Chair: NISHIKAWA, Hiroyuki (13 : 00~13 : 50)

\* 12:50-13:00: interval for laptop PC connection.(2E3-25, 2E3-28, 2E3-29)

**2E3-25** Young Scholar Lectures of CSJ Novel bulk functional materials based on thermal motility of organic molecules in their integrated structures (IMRAM, Tohoku Univ.) ○TAKEDA, Takashi

**2E3-28** Optical properties of benzothiazole derivatives with pyridyl group (IMRAM, Tohoku Univ.) ○TAKAHASHI, Keigo; NAKANE, Yuta; TAKEDA, Takashi; HOSHINO, Norihisa; SAKAI, Ken-ichi; AKUTAGAWA, Tomoyuki

**2E3-29** Sensing of amines using fluorescence chromism of 2-(2'-hydroxyphenyl)benzothiazole derivative (IMRAM, Tohoku Univ.) ○NAKANE, Yuta; TAKEDA, Takashi; HOSHINO, Norihisa; SAKAI, Ken-ichi; AKUTAGAWA, Tomoyuki

Chair: NAKANO, Masayoshi (14 : 00~14 : 50)

\* 13:50-14:00: interval for laptop PC connection.(2E3-31, 2E3-33, 2E3-34, 2E3-35)

**2E3-31\*** A comprehensive chiroptical spectrophotometer: Development and application (Fac. Eng., Oita Univ.) ○HARADA, Takunori; HAYAKAWA, Hiroshi; WATANABE, Masayuki; HIRAO, Shotaro; OHGA, Yasushi; TAKAHASHI, Toru

**2E3-33** Formation of strong coupling between surface lattice plasmon and J-aggregate confirmed by fluorescence microspectroscopic measurement (Sch. Sci., Hokkaido Univ.) ○HAYASHI, Takahiro; OIKAWA, Shunpei; KATO, Fumiya; LI, Xiaowei; MINAMIMOTO, Hiro; MURAKOSHI, Kei

**2E3-34** Excited-State Dynamics of Pentacene-Biradical Derivative (Grad. Sch. Sci., Osaka City Univ.; Sch. Sci. Tech., Kwasei Gakuin Univ.) ○SHIMIZU, Akihiro; YUKIHIRA, Nao; SATO, Hiroki; FUJIWARA, Masazumi; HASHIMOTO, Hideki; TEKI, Yoshio

**2E3-35** Time-Resolved ESR and Excited State Dynamics of Weak Organic Charge Transfer Complexes (Grad. Sch. Sci., Osaka City Univ.; Grad. Sch. Eng., Osaka City Univ.) ○KATO, Ken; HAGI, Shogo; SHIKOH, Eiji; TEKI, Yoshio

Chair: IKOMA, Tadaaki (15 : 00~15 : 50)

\* 14:50-15:00: interval for laptop PC connection.(2E3-37, 2E3-39, 2E3-41)

**2E3-37\*\*** Theoretical study of the energy perturbation effects on singlet fission dynamics (TCMS, IMS) ○ITO, Soichi; NAGAMI, Takanori; WATANABE, Kenichiro; NAKANO, Masayoshi

**2E3-39\*** Theoretical study on singlet fission dynamics of molecular aggregates: Size dependences and excitonic coupling effects (Grad. Sch. Eng. Sci., Osaka Univ.; TCMS, IMS; Grad. Sch. Sci., Osaka Univ.) ○NAKANO, Masayoshi; NAGAMI, Takanori; YAMANE, Masaki; TONAMI, Takayoshi; ITO, Soichi; KUBO, Takashi

**2E3-41** Theoretical study on electronic couplings in singlet fission of newly proposed sumanene-fused acene dimer models (Sch. Eng. Sci., Osaka Univ.) ○WATANABE, Kenichiro; NAGAMI, Takanori; TONAMI, Takayoshi; ITO, Soichi; NAKANO, Masayoshi

Chair: TEKI, Yoshio (16 : 00~16 : 50)

\* 15:50-16:00: interval for laptop PC connection.(2E3-43, 2E3-45, 2E3-46, 2E3-47)

**2E3-43\*\*** Polariton formation and dynamics in amorphous rubrene thin film embedded in optical microcavity (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TAKAHASHI, Shota; KASUKAWA, Shuhei; WATANABE, Kazuya; SUGIMOTO, Toshiki; MATSUMOTO, Yoshiyasu

**2E3-45** Optical Properties and Carrier Dynamics of Low Dimensional MoS<sub>2</sub> (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○SUZUKI, Kojiro; KATAYAMA, Tetsuro; KAJI, Takahiro; TAMAI, Naoto

**2E3-46** Theoretical study on the vibronic coupling in singlet fission for terrylenes (Grad. Sch. Eng. Sci., Osaka Univ.) ○NAGAMI, Takanori; ITO, Soichi; TONAMI, Takayoshi; YAMANE, Masaki; NAKANO, Masayoshi

**2E3-47** Theoretical study on spin multiplicity and intermolecular packing dependences of second hyperpolarizability  $\gamma$  for pentacene dimer models (Sch. Eng. Sci., Osaka Univ.) ○TONAMI, Takayoshi; NAGAMI, Takanori; YAMANE, Masaki; KISHI, Ryohei; NAKANO, Masayoshi

### Thursday, March 22, AM

#### Surface, Thin Films and Nano Materials

Chair: TAMAI, Naoto (9 : 40 ~ 10 : 40)

\* 9:30-9:40: interval for laptop PC connection.(3E3-05, 3E3-07, 3E3-09)

**3E3-05\*\*** Surface and redox properties of anatase nanoparticles from computational point of view (Sch. Sci., Tokyo Tech.) ○JUHASZ, Gergely

**3E3-07\*\*** Control on Strong Coupling State of PbS Quantum Dots-Au Nanobowtie under Electrochemical Potential Tuning (Fac. Sci., Hokkaido Univ.) ○LI, Xiaowei; MINAMIMOTO, Hiro; MURAKOSHI, Kei

**3E3-09\*** Visualization of photo-excited charge dynamics using time-resolved electrostatic force microscope (Grad. Sch. Sci., Osaka Univ.) ○ARAKI, Kento; IE, Yutaka; ASO, Yoshio; OHYAMA, Hiroshi; MATSUMOTO, Takuya

Chair: HOSHINO, Norihisa (10 : 50~11 : 50)

\* 10:40-10:50: interval for laptop PC connection.(3E3-12, 3E3-14, 3E3-16)

**3E3-12\*\*** Strong coupling between Fabry-Pérot nanocavity and localized surface plasmon resonance and its application for efficient water splitting (RIES, Hokkaido Univ.) ○SHI, Xu; UENO, Kosei; OSHIKIRI, Tomoya; SUN, Quan; SASAKI, Keiji; MISAWA, Hiroaki

**3E3-14\*\*** Extended Diffusion of Charge Carriers in Perovskite Nanocrystal Assembly (RIES, Hokkaido Univ.; Grad. Sch. Env. Sci., Hokkaido Univ.) ○GHIMIRE, Sushant; CHOUHAN, Lata; YUYAMA, Ken-ichi; TAKANO, Yuta; BIJU, Vasudevan

**3E3-16\*\*** Ion Effects on Third-Order Susceptibility in Sum Frequency Generation Spectroscopy of Aqueous Solutions (Grad. Sch. Sci., Tohoku Univ.) ○JOUTSUKA, Tatsuya; MORITA, Akihiro

### Thursday, March 22, PM

#### Liquid Crystals and Phase Transition

Chair: KATAYAMA, Kenji (13 : 10~14 : 10)

\* 13:00-13:10: interval for laptop PC connection.(3E3-26, 3E3-28, 3E3-30)

**3E3-26\*\*** Photo-induced dynamic release behavior of liquid crystalline microcapsules (Grad. Sch. Eng. Sci., Osaka Univ.; RIKEN CEMS) ○MAEDA, Takatoshi; IWAI, Yosuke; AYA, Satoshi; UCHIDA, Yoshiaki; NAOTA, Takeshi; ARAOKA, Fumito

**3E3-28\*** Phase diagram of water and Li by van der Waals equation of state (Fac. Bio., Hosei Univ.) ○KATAOKA, Yosuke

**3E3-30\*\*** Structure and charges correlations in the water-in-salt solutions studied by molecular dynamics simulation (IIR, Tokyo Tech.) ○GUBAREVICH, Anna; HABASAKI, Junko

Chair: SHIROTA, Hideaki (14 : 20~15 : 20)

\* 14:10-14:20: interval for laptop PC connection.(3E3-33, 3E3-35, 3E3-37)

**3E3-33\*** Phase demixing and remixing processes of thermo-responsive polymers revealed by the transient grating imaging technique (Grad. Sch. Sci. Eng., Chuo Univ.) KATO, Daik; SOHN, Woon Yong; ○KATAYAMA, Kenji

**3E3-35\*** Phase Transition Mechanism of Aqueous Solution with Lower Critical Solution Temperature Revealed by Soft X-ray Absorption Spectroscopy (PMS, IMS) ○NAGASAKA, Masanari; OHIGASHI, Takuji; YUZAWA, Hayato; KOSUGI, Nobuhiro

**3E3-37\*** Water Aggregation induced by Methylene group in Alkyne Aqueous solution (Chiba Inst. of Tech.) ○SHIBUTA, Satoshi; IMAMURA, Hiroshi

#### Ionic Liquid

Chair: KATAOKA, Yosuke (15 : 30~16 : 30)

\* 15:20-15:30: interval for laptop PC connection.(3E3-40, 3E3-41, 3E3-42, 3E3-43, 3E3-44, 3E3-45)

**3E3-40** Thermochromism of Organometallic Ionic Liquids Containing Rhodium Isoocyanide Complexes (Grad. Sch. Sci., Kobe Univ.) ○TOMINAGA, Takumi; MOCHIDA, Tomoyuki

**3E3-41** Chemical Reactivity of Organometallic Ionic Liquids Containing Rhodium Isoocyanide Complexes (Grad. Sch. Sci., Kobe Univ.) ○TOMINAGA, Takumi; MOCHIDA, Tomoyuki

**3E3-42** Synthesis and Phase Behaviors of Coordination Polymers Incorporating Metal-containing Ionic Liquids (Sch. Sci., Kobe Univ.) ○KIMATA, Hironori; MOCHIDA, Tomoyuki

**3E3-43** Development of poly(ionic liquid)s containing sandwich-type ruthenium complexes (Sch. Sci., Kobe Univ.) ○SUMITANI, Ryo; MOCHIDA, Tomoyuki

**3E3-44** Anion Effect of Phosphonium-based Ionic Liquids on 7-Azaindole Dimerization (Grad. Sch. Adv. Integration Sci., Chiba Univ.; Grad. Sch. Sci., Chiba Univ.) ○TAKAHASHI, Kotaro; SHIROTA, Hideaki

**3E3-45** Temperature Dependence of Low-Frequency Spectra of Ionic Liquids: Effects of Aromaticity in Cations and Their Side Groups (Grad. Sch. Adv. Integration Sci., Chiba Univ.; Grad. Sch. Sci., Chiba Univ.; BNL) ○KAKINUMA, Shohei; RAMATI, Sharon; WISHART, James F.; SHIROTA, Hideaki





hep phases in Au-Ru nanoparticles (Fac. Sci., Kyoto Univ.) ○ZHANG, Quan; KITAGAWA, Hiroshi

- 1E4-41** Catalytic activity of noble metal clusters for oxidation with oxygen (Lab. Chem. Life Sci., Tokyo Tech.) ○MINAMISAWA, Keigo; MIFTAKHUL, Huda; TANABE, Makoto; YAMAMOTO, Kimihisa
- 1E4-42** Withdrawn

Chair: FUTAMATA, Masayuki (16 : 10~16 : 30)

\* 16:00-16:10: interval for laptop PC connection.(1E4-44, 1E4-46, 1E4-47)

- 1E4-44\*** Creation of ultrasmall nanoparticles based on controlled assembling of early 4d/5d-transition metal ions (IIR, Tokyo Tech.) ○WAKIZAKA, Masanori; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 1E4-46** Immobilization of Near-infrared Dyes in Silica Layer near Gold Nanorods and Control of Fluorescence Enhancement Effect by Porosification of Silica Layer (Fac. Sys. Eng., Wakayama Univ.) ○TSUDA, Takaya; NAKAHARA, Yoshio; TANAKA, Mutsuo; TAMAI, Toshiyuki; YAJIMA, Setsuko
- 1E4-47** Plasmon-Exciton Coupling in Hollow Silver Nanoshell-Nile Red Nanocomposites (Fac. Sys. Eng., Wakayama Univ.) ○MIYAJI, Yumi; MIMURA, Chika; KADO, Shinpei; YAJIMA, Setsuko

Chair: IMAOKA, Takane (17 : 00~17 : 30)

\* 16:50-17:00: interval for laptop PC connection.(1E4-49, 1E4-50, 1E4-51)

- 1E4-49** Effect of Ligand Exchange Reaction on Crystallite Size of Silver Nanoparticle (Fac. Sys. Eng., Wakayama Univ.) ○OKADA, Soichiro; NAKAHARA, Yoshio; IENAGA, Takashi; WATANABE, Mitsuru; TAMAI, Toshiyuki; YAJIMA, Setsuko
- 1E4-50** Gap mode induced optical trapping of silver nanoparticles (Grad. Sch. Sci., Eng., Saitama Univ.) ○AKIBA, Natsumi; IIDA, Chiaki; FUTAMATA, Masayuki
- 1E4-51** Kinetic Analysis of Hollow Silver Nanoshell Formation by Reduction of Silver Thiocyanate Based on the Avrami Model (Fac. Sys. Eng., Wakayama Univ.) ○NISHIURA, Masashi; KADO, Shinpei; YAJIMA, Setsuko

### Wednesday, March 21, AM

Chair: MITOMO, Hideyuki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2E4-01, 2E4-02, 2E4-03, 2E4-05)

- 2E4-01** Synthesis of Gold Nanostructure Using Lipid Bilayer Membrane as a Scaffold (Grad. Sch. Eng., Hiroshima Univ.) ○MATSUMOTO, Risa; SUGIKAWA, Kouta; IKEDA, Atsushi
- 2E4-02** Inhibition of Gold Nanoparticle Assembly by Using Liposomes as Steric Hindrance (Grad. Sch. Eng., Hiroshima Univ.) ○MATSUO, Kotaro; SUGIKAWA, Kouta; IKEDA, Atsushi
- 2E4-03\*\*** Ligand Effect of Porphyrin-Protected Gold Clusters in the Electrochemical Hydrogen Evolution Reaction (ICR, Kyoto Univ.) ○EGUCHI, Daichi; SAKAMOTO, Masanori; TERANISHI, Toshiharu
- 2E4-05\*\*** Mechanistic Insights into Plasmon-Induced Charge Separation Based on Au Nanorods and Nanocubes (IIS, The Univ. of Tokyo) ○NISHI, Hiroyasu; SAKAMOTO, Masumi; TATSUMA, Tetsu

Chair: MAEDA, Mizuo (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2E4-08)

- 2E4-08 CSJ Award for Creative Works** Development of Stimuli-Responsive Gold Nanostructure Assembly and those Applications (RIES, Hokkaido Univ.; GI-CoRE, Hokkaido Univ.) ○JIRO, Kuniharu

### Organized Films

Chair: FUJIMORI, Atsuhiko (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2E4-15, 2E4-17, 2E4-19, 2E4-20)

- 2E4-15\*\*** Cell-inspired compartmentalization using aqueous multiphase systems (Dept. Biomedical Eng., Georgia Tech) ○KOJIMA, Taisuke; TAKAYAMA, Shuichi
- 2E4-17\*\*** Assembling behavior and functions of octyl  $\beta$ -cellulose at the air-water interface (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○YATAKA, Yusuke; SAWADA, Toshiaki; SERIZAWA, Takeshi
- 2E4-19\*** The Three-Dimensional Arrangement of The Photofunctional Molecules using DNA Aptamer on a Gold Surface (Grad. Sch. of Life and Env. Sci., Kyoto Pref. Univ.) ○NAKAMURA, Fukiko; ISHIDA, Akito
- 2E4-20** Site-selective adsorption and surface structure control of gold nanoparticles on vertically grown structures of silica precursor (Grad. Sch. Eng., Utsunomiya Univ.) ○MOHRI, Kazutaka; EDA, Masumi; NOHKI, Misa; NAKATA, Yuya; NASUNO, Eri; KATO, Norihiro; IIMURA, Ken-ichi

### Wednesday, March 21, PM

Chair: MORI, Taizo (13 : 30~14 : 20)

\* 13:20-13:30: interval for laptop PC connection.(2E4-28, 2E4-30, 2E4-31, 2E4-32)

- 2E4-28\*\*** Fabrication and structural control of nano-hole arrays using monolayer films as template (Grad. Sch. Eng., Utsunomiya Univ.)

○NGUYEN, Thi My An; NASUNO, Eri; KATO, Norihiro; IIMURA, Ken-ichi

- 2E4-30** Chirality and Helical Crystalline Nanofiber Growth in Organized Molecular Films of Diamide-based Gemini-type Surfactant (Fac. Eng., Saitama Univ.) ○MORIYA, Yuma; NAKAGAWA, Yuto; SATO, Eiichi; FUJIMORI, Atsuhiko
- 2E4-31** Comparison of Trefoil-like Triamide Derivatives having Three Hydrocarbons at the View Point of the Solid-state Structure and Behavior of Interfacial Molecular Film (Grad. Sch. Sci., Eng., Saitama Univ.) ○NAKAGAWA, Yuto; MORIYA, Yuma; SATO, Eiichi; SHIBASAKI, Yuji; FUJIMORI, Atsuhiko
- 2E4-32** Interaction between inorganic nanosheet template and biomaterial at interface field (Grad. Sch. Sci., Eng., Saitama Univ.) ○YUNOKI, Takeru; FUJIMORI, Atsuhiko

Chair: IIMURA, Ken-ichi (14 : 30~15 : 20)

\* 14:20-14:30: interval for laptop PC connection.(2E4-34, 2E4-35, 2E4-36, 2E4-37, 2E4-38)

- 2E4-34** Correlation between morphology and electronic property in highly-oriented metal-organic framework nanosheet crystals (Grad. Sch. Eng., Osaka Pref. Univ.) ○OHATA, Takashi; MAKITA, Tatsuyuki; TAKEYA, Junichi; MAKIURA, Rie
- 2E4-35** 2D nanosheet assembled carbon nanorings by vortex LB technic (MANA, NIMS; Grad. Sch. Sci., Nagoya Univ.) ○MORI, Taizo; TANAKA, Hiroyuki; DALUI, Amit; MITOMA, Nobuhiko; SAKAMOTO, Hiroto; SHRESTHA, Lok Kumar; ITAMI, Kenichiro; ARIGA, Katsuhiko
- 2E4-36** Formation and Structure of Organized Molecular Films of Phosphate-Modified Nanodiamond Containing Fluorocarbons (Grad. Sch. Sci., Eng., Saitama Univ.) ○GUO, Yifei; HIRAYAMA, Shuhei; MACHIDA, Hiroki; AKASAKA, Shuichi; FUJIMORI, Atsuhiko
- 2E4-37** Dispersibility in solution and monolayer behavior on the water surface of nanodiamond having various surface modified-chains (Fac. Eng., Saitama Univ.) ○MACHIDA, Hiroki; QI, Meng; GUO, Yifei; FUJIMORI, Atsuhiko
- 2E4-38** Nano-dispersion in Solvent and Organized Film Forming of Single-walled Carbon Nanotubes by Simple Surface-modification Method (Fac. Eng., Saitama Univ.) ○HIRAYAMA, Shuhei; YUNOKI, Takeru; FUJIMORI, Atsuhiko

Chair: WANG, Kehsuan (15 : 30~16 : 20)

\* 15:20-15:30: interval for laptop PC connection.(2E4-40, 2E4-42, 2E4-43, 2E4-44)

- 2E4-40\*\*** Unique Molecular Behaviors on Hydrophobic Interface: Investigations using Biomimetic Self-Assembled Monolayers (Grad. Sch. Eng., The Univ. of Tokyo) ○ITO, Yoshimitsu; HAO, Xing; SILVER, Eric; FU, Tengfei; CHEN, Shuo; AIDA, Takuzo
- 2E4-42** Structural Analysis of Lipid Layer Model of Tear Film in Compression-Expansion Cycles (Grad. Sch. Eng., Utsunomiya Univ.; Lion corporation) ○YAMAGUCHI, Masato; IIMURA, Ken-ichi; YOSHIDA, Masataka; TABUCHI, Nobuhito; KON, Ryo
- 2E4-43** Stabilized Fine Bubble Coating with Ion-complex Film (National Institute of Technology, Sasebo College) ○TANAKA, Yasuhiko; BABA, Ryuunosuke; JOHNO, Yuuki; SAGARA, Takamasa
- 2E4-44** Ion Permeability Control of Amphoterin B Channel Using Changes in Association State through Complexation (Grad. Sch. Sci., Kyushu Univ.) ○INOUE, Yuki; ASADA, Sana; KOSHIYAMA, Tomomi; OHBA, Masaaki

Chair: OHBA, Masaaki (16 : 30~17 : 30)

\* 16:20-16:30: interval for laptop PC connection.(2E4-46, 2E4-48, 2E4-49, 2E4-50, 2E4-51)

- 2E4-46\*\*** Aggregation of Chlorophyll on Discoidal Lipid Bilayer Membrane and Characterization of Its Photo-Function (Grad. Sch. Eng. Sci., Osaka Univ.) ○TAGUCHI, Shogo; SUGA, Keishi; HAYASHI, Keita; OKAMOTO, Yukihiko; NAKAMURA, Hidemi; UMAKOSHI, Hiroshi
- 2E4-48** Thermoresponsive release of lipid vesicles from hydrogels (Grad. Sch. Eng., Hiroshima Univ.) ○OOKA, Ryo; SUGIKAWA, Kouta; IKEDA, Atsushi
- 2E4-49** Formation Mechanism of Giant Vesicle Structures of Phospholipids with a Thermotropic Liquid-Crystalline Azobenzene Moiety (IMRAM, Tohoku Univ.) ○MIYOSHI, Kosuke; OBATA, Shihou; MURAMATSU, Atsushi; FUKAMINATO, Tsuyoshi; KURIHARA, Seiji; KANIE, Kiyoshi
- 2E4-50** Temperature dependence of iridescent color in a cationic surfactant solution below Krafft temperature (Grad. Sch. Sci. Eng., TMU) ○SEKIYA, Tomoyuki; KAWABATA, Youhei; KATO, Tadashi
- 2E4-51** Vesicle formation induced by shear flow in dialkyl cationic/nonionic surfactant aqueous solution (Grad. Sch. Sci. Eng., TMU) ○MASAOKA, Sachiko; KAWABATA, Youhei; KATO, Tadashi

### Thursday, March 22, AM

#### Fine Particles and Colloidal Dispersions

Chair: TSUCHIYA, Youichi (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3E4-01, 3E4-02, 3E4-03, 3E4-05)

- 3E4-01** Observation of microscale phase separation of poly (N, N-diethylacrylamide) by plasmonic heating (Fac. Eng., Tokushima Univ.)  
○KUROKAWA, Yoshitaka; AIBARA, Issei; HASHIMOTO, Shuichi
- 3E4-02** Shape- and Structure-Controlled Synthesis of Gold Based Nanostructures (Fac. Sci. Eng., Kindai Univ.) TAKAHASHI, Reki; OHASHI, Tatsu; NAKAJIMA, Kenta; ○SOEJIMA, Tetsuro
- 3E4-03<sup>##</sup>** Lattice Strain Induced Transformation of Interfacial Band Offsets in PbS/CdS Heterodimers (Dep. Chem., Sch. Sci., Kyoto Univ.) ○LIAN, Zichao; SAKAMOTO, Masanori; TERANISHI, Toshiharu
- 3E4-05<sup>##</sup>** Nanostructured Thermoelectric Material Composed of Heterogeneous  $\text{Cu}_2\text{Sn}_{1-x}\text{Zn}_x\text{S}_3$  Nanoparticles (JAIST) ○ZHOU, Wei; SHIJIMAYA, Chiko; HIGASHIMINE, Koichi; OHTA, Michihiro; MIYATA, Masanobu; MOTT, Derrick; AKATSUKA, Takeo; ONO, Hironobu; KOYANO, Mikio; MAENOSONO, Shinya

Chair: SOEJIMA, Tetsuro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3E4-08, 3E4-10, 3E4-11, 3E4-12)
- 3E4-08<sup>\*</sup>** Wartner dispersed nanoparticles with thermally activated delayed fluorescence (OPERA, Kyushu Univ.) ○TSUCHIYA, Youichi; IKESUE, Koudai; ADACHI, Chihaya
- 3E4-10** Preparation of bismuth nanoparticles by reaction of bismuth salt with thiol in amine (Fac. Eng., Yamagata Univ.) ○YASHIRO, Takumi; MATSUMURA, Yoshimasa; OCHIAI, Bungo
- 3E4-11** Phase Separation of Thermoresponsive Polymers on laser-heating of a Gold Nanoparticle observed by Raman Spectra (Fac. Eng., Tokushima Univ.) ○AIBARA, Issei; CHIKAZAWA, Jun-ichi; HASHIMOTO, Shuichi
- 3E4-12<sup>\*</sup>** Two-step thermoresponsive assembly of gold nanorods coated with a single kind of ligand (RIES, Hokkaido Univ.) IIDA, Ryo; ○MITOMO, Hideyuki; NIHKURA, Kenichi; IJIRO, Kuniharu

Chair: HASHIMOTO, Shuichi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3E4-15, 3E4-17, 3E4-19, 3E4-20)
- 3E4-15<sup>##</sup>** Microwave-assisted oxidation of secondary alcohols with magnetic nanoparticle catalysts (ICR, Kyoto Univ.) ○PINCELLA, Francesca; ISOZAKI, Katsuhiko; TAKAYA, Hikaru; NAKAMURA, Masaharu
- 3E4-17<sup>##</sup>** Withdrawn
- 3E4-19** Synthesis of Metal Nanoparticle inside Metal-Organic Frameworks using Amine-Borane as Vapor-Phase Reduction Agents (FIRST, Konan Univ.) ○SATO, Yasushi; NAKAGAMI, Madoka; TAKASHIMA, Yohei; TSURUOKA, Takaaki; AKAMATSU, Kensuke
- 3E4-20** Directed Association of DNA-Functionalized Gold Nanoparticle Oligomers (Grad. Sch. Frontier Sci., The Univ. of Tokyo; RIKEN Bioengineering Laboratory) ○YU, Li; SHIRAIISHI, Shota; WANG, Guoqing; AKIYAMA, Yoshitsugu; TAKARADA, Tohru; MAEDA, Mizuo

## Thursday, March 22, PM

Chair: MAENOSONO, Shinya (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(3E4-28, 3E4-30, 3E4-32, 3E4-33)
- 3E4-28<sup>##</sup>** Analysis of NO Adsorption on Rhodium Nanoparticles Using Machine Learning (IFRC, Kyushu Univ.) ○NANBA, Yusuke; ISHIMOTO, Takayoshi; KOYAMA, Michihisa
- 3E4-30<sup>##</sup>** Creation of novel Fe-Pd ordered alloy nanoparticles by introducing third element (ICR, Kyoto Univ.) ○MATSUMOTO, Kenshi; SATO, Ryota; TERANISHI, Toshiharu
- 3E4-32** Ultrathin Au nanowires synthesized in aqueous phase using a long-chain amidamine derivative (Fac. Eng., TUS) ○MIYAJIMA, Naoya; NAKAGAWA, Makoto; IMURA, Yoshiro; WANG, Ke-hsuan; KAWAI, Takeshi
- 3E4-33** Preparation of Au nanoflowers supported on Fe<sub>3</sub>O<sub>4</sub> and its catalytic property (Fac. Eng., TUS) ○KAN, Ryota; KAN, Ryota; KOIZUMI, Siori; WANG, Kehsuan; IMURA, Yoshiro; KAWAI, Takeshi

Chair: OKAMURA, Yosuke (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(3E4-35, 3E4-36, 3E4-37, 3E4-38, 3E4-40)
- 3E4-35** Low-temperature Sintering of Carboxylic Acid-Modified Copper Nanoparticles (NIT, Sendai College) ○SAKONAKA, Ayame; SATO, Tetsuo; MATSUBARA, Masaki
- 3E4-36** Metal deposition at desired position on polystyrene particles by an UV irradiation method (Fac. Eng., TUS) ○KINOSHITA, Kazuhiko; ICHIKAWA, Hiroto; IMURA, Yoshiro; WANG, Ke-hsuan; KAWAI, Takeshi
- 3E4-37** Fabrication of nano-spiral holes into polystyrene particles by an UV irradiation method and their optical properties (Fac. Eng., TUS) ○MURAI, Kouta; ICHIKAWA, Hiroto; IMURA, Yoshiro; WANG, Ke-hsuan; KAWAI, Takeshi
- 3E4-38<sup>\*</sup>** Development of Nanoparticles-Dispersed PMMA Resins by Atom Transfer Radical Polymerization (NIT, Sendai College; IMRAM, Tohoku Univ.) ○MATSUBARA, Masaki; WATANABE, Hiroki; MURAMATSU, Atsushi; KANIE, Kiyoshi
- 3E4-40** Mineralization of calcium phosphate by polymer nanoparticles

presenting carboxy groups with various acid dissociation constants in simulated body fluids (Fac. Eng., TUS; Grad. Sch. Chem. Sci. Technol., TUS; Grad. Sch. Eng., Kyushu Univ.; Water Frontier Sci. & Technol. Res. Center, TUS)  
○MATSUMOTO, Yuku; KOMARU, Kanae; IJIMA, Kazutoshi; HOSHINO, Yu; MIURA, Yoshiko; HASHIZUME, Mineo

Chair: IMURA, Yoshirou (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(3E4-42, 3E4-43, 3E4-44, 3E4-45, 3E4-46, 3E4-47)
- 3E4-42** Enhanced Photoluminescence of ZnS-AgInS<sub>2</sub> Quantum Dots Accumulated on Octahedral Au Nanoparticle Films (Grad. Sch. Eng., Nagoya Univ.) ○KURODA, Hiromu; KAMEYAMA, Tatsuya; TORIMOTO, Tsukasa
- 3E4-43** Vertical Growth of Plasmonic Nanotowers at a Solid Substrate (IIS, The Univ. of Tokyo) ○ONOZUKA, Nobuhito; SAITO, Kouichirou; TATSUMA, Tetsu
- 3E4-44** Optical and photothermal properties of large-sized plasmonic Pd nanospheres with >150 nm (Grad. Sch. Sci. Tech., Nihon Univ.) ○EGUCHI, Takumi; SUGIMOTO, Daiki; SUGAWA, Kousuke; OTSUKI, Joe
- 3E4-45** Real-time observation of Au nanoparticles Preparation with ionic liquid-sputtering method (Grad. Sch. Eng., Osaka Univ.) ○SASAKI, Tomoya; TSUDA, Tetsuya; UEMATSU, Taro; KUWABATA, Susumu
- 3E4-46<sup>##</sup>** Synthesis and Characterization of Au@Ni Core@Shell Nanoparticles (Sch. Mat. Sci., JAIST) ○HATSUKANO, Masahito; TAKAHASHI, Mari; MOHAN, Priyank; KITAUURA, Ryoichi; MOTT, Derrick; NIRO, Hideaki; SUZUKI, Ken; MAENOSONO, Shinya
- 3E4-47<sup>##</sup>** Biotinylation of Magnetic-Plasmonic Hybrid Nanoparticles for Versatile Bio-applications (Sch. Mat. Sci., JAIST) ○KITAUURA, Ryoichi; TAKAHASHI, Mari; MOHAN, Priyank; MOTT, Derrick; MAENOSONO, Shinya

Chair: SUGAWA, Kosuke (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(3E4-49, 3E4-51, 3E4-52, 3E4-53)
- 3E4-49<sup>\*</sup>** NMR relaxation phenomena of electrolyte solution in solid/liquid coexisting systems (Grad. Sch. Eng., Kobe Univ.) ○MIZUHATA, Minoru; MAKI, Hideshi; SOGAWA, Ren; TAKEMOTO, Marie; KUNIKATA, Masaki; SONG, Jung Eun; TACHIBANA, Takashi; MATSUI, Masaki
- 3E4-51** Dilution stability of peptide-coating UV absorber oil droplets dispersed type O/W emulsion (Fac. Sci. Tech., Keio Univ.; NOF Corp.; RCPT, AIST) ○TANAKA, Miyoko; BANNO, Taisuke; ASAKURA, Kouichi; MURAI, Masaki; WAKITA, Kazuaki; IMURA, Tomohiro
- 3E4-52** Fabrication of Disk-Shaped Particles and Their Application to Novel Carriers for Turbidimetric Assay (Grad Sch of Eng, Tokai Univ) ○ISHIKURA, Kenichi; SOGABE, Daiki; NAKAGAWA, Atsushi; OKAMURA, Yosuke
- 3E4-53** Fluorescence of nanoparticles of 7-tert-butylpyrenes (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○KASATANI, Kazuo; IIDA, Makoto; MORITA, Yuki; OKAMOTO, Hiroaki

## Friday, March 23, AM

Chair: KANIE, Kiyoshi (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4E4-01, 4E4-02, 4E4-03, 4E4-04, 4E4-05, 4E4-06)
- 4E4-01<sup>##</sup>** Isolation and characterization of Au<sub>25</sub>(SR)<sub>18</sub> cluster with face-centered-cubic gold core (Grad. Sch. Sci., The Univ. of Tokyo)  
○OMODA, Tsubasa; TAKANO, Shinjiro; YAMAZOE, Seiji; KOYASU, Kiichirou; TSUKUDA, Tatsuya
- 4E4-02<sup>##</sup>** Synthesis and optical properties of diphosphine-protected gold clusters (Grad. Sch. Sci., The Univ. of Tokyo) ○SHINJO, Naoaki; TAKANO, Shinjiro; TSUKUDA, Tatsuya
- 4E4-03** Size-selective and systematic synthesis of platinum clusters and evaluation of their oxygen reduction ability (Fac. Sci., TUS) ○SHIMIZU, Nobuyuki; MAEKAWA, Juri; HARASAWA, Atsuya; KURASHIGE, Wataru; NEGISHI, Yuichi
- 4E4-04** Creation of highly active water-splitting photocatalyst using ultrafine metal- nanocluster cocatalyst (Fac. Sci., TUS) ○MORI, Yutaro; KUMAZAWA, Rina; KURASHIGE, Wataru; IWASE, Akihiko; KUDO, Akihiko; NEGISHI, Yuichi
- 4E4-05** A First Synthesis of Fully Cationized Au<sub>144</sub>(SR<sup>+</sup>)<sub>60</sub> clusters (Grad. Sch. Eng., Hokkaido Univ.) ○NARITA, Kunihiko; ISHIDA, Youhei; YONEZAWA, Tetsu
- 4E4-06** Preparation of Iron-containing Clusters by Laser Ablation in Liquid on Pyrite (School of Engineering, Osaka university) ○MOTOHASHI, Yuka; YAKIYAMA, Yumi; MAFUNE, Fumitaka; OKAJIMA, Hajime; SAKAMOTO, Akira; SHIMIZU, Toshihiko; MINAMI, Yuki; SARUKURA, Nobuhiko; SAKURAI, Hidehiro

Chair: KURASHIGE, Wataru (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4E4-08, 4E4-09, 4E4-10, 4E4-11, 4E4-12, 4E4-13)
- 4E4-08** Synthesis of cationic mono- and bi-metallic nanoparticles with unique photofluorescent property via sputtering method (Grad. Sch. Eng., Hokkaido

Univ.) ○AKITA, Ikumi; CORPUZ, D. Ryan; ISHIDA, Yohei; YONEZAWA, Tetsu

**4E4-09** Investigation of structure of gold core and fluorescence property of cationic gold nanoparticles prepared by sputtering process through high performance liquid chromatography. (Grad. Sch. Eng., Hokkaido Univ.) ○MORITA, Akihiro; ISHIDA, Yohei; YONEZAWA, Tetsu

**4E4-10** Solvothermal synthesis of gallium-doped zinc oxide nanoparticles and Characterization of nanoin-coated thin film (Grad. Sch. Eng., Tohoku Univ.) ○KASAI, Yuki; KANIE, Kiyoshi; MURAMATSU, Atsushi

**4E4-11** Elucidation of DNA and RNA base molecules adsorbed on gold nanoparticles using flocculation-SERS method (Grad. Sch. Sci., Eng., Saitama Univ.) FUTAMATA, Masayuki; ○SEKI, Masako; OKABE, Hirotaka; MATSUDA, Naoki

**4E4-12** Photocatalytic Oxidation of Amino Alcohols with Gold Clusters Functionalized by Peptide Dendron Thiolates (ICR, Kyoto Univ.; Grad. Sch. Eng., Kyoto Univ.) ○UENO, Ryo; ISOZAKI, Katsuhiko; ISHIBASHI, Kosuke; TAKAYA, Hikaru; NAKAMURA, Masaharu

**4E4-13<sup>#</sup>** Chemical Synthesis of Tetrahedrite Nanoparticles as Building Blocks for Sustainable Thermoelectrics (Sch. Mat. Sci., JAIST) ○NAKADA, Takeshi; SHIJIMAYA, Chiko; TAKAHASHI, Mari; ZHOU, Wei; OHTA, Michihiro; MOTT, Derrick; AKATSUKA, Takeo; ONO, Hironobu; MAENOSONO, Shinya

Chair: ISHIDA, Yohei (11 : 20~11 : 40)

\* 11:10-11:20: interval for laptop PC connection.(4E4-15)

**4E4-15<sup>\*\*</sup>** Realtime X-ray fluorescence movie of calcium and iron in growing chemical garden (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○ZHAO, Wenyang; SAKURAI, Kenji

### Friday, March 23, PM

Chair: TAKAYA, Hikaru (13 : 10~14 : 00)

\* 13:00-13:10: interval for laptop PC connection.(4E4-26, 4E4-27, 4E4-28, 4E4-29, 4E4-30)

**4E4-26** Thermoresponsiveness of structural colored balloons showing LCST and the mechanism of shell thickness and structural color change (Grad. Sch. Eng., Kyoto Univ.) ○MORITA, Naoki; HIGASHIGUCHI, Kenji; MATSUDA, Kenji

**4E4-27** Coloring mechanism of photochromism in tungsten/polyvinyl alcohol composite film (Fac. Sci., Yamaguchi Univ.) ○ISOYAMA, Kouki; TANI, Seiji; HONDA, Kensuke; YAMAZAKI, Suzuko

**4E4-28** Abnormal viscosity increase and gel formation in clay aqueous dispersion by addition of alcohols (Coll. Industrial Tech., Nihon Univ.) ○KIMURA, Yuji; HARAGUCHI, Kazutoshi

**4E4-29** Adsorption and emission behavior of pyridine derivatives on clay nanosheets (Grad. Sch. Urban Environmental Sci., TMU) ○NAKAZATO, Ryosuke; MOTOHASHI, Minoru; SHMADA, Tetsuya; TAKAGI, Shinsuke

**4E4-30** Electrochemical Reduction of Oxalic Acid on Al-doped TiO<sub>2</sub> Catalysts (Grad. Sch. Sci., Kyushu Univ.) ○EGUCHI, Hiroto; SADAOKIYO, Masaaki; YAMAUCHI, Miho

## Room E5

Bldg. 10 1023

### Colloid and Interface Chemistry

Tuesday, March 20, AM

#### Molecular Assemblies

Chair: TAMARU, Shun-ichi (9 : 00 ~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1E5-01, 1E5-03, 1E5-04, 1E5-05, 1E5-06)

**1E5-01<sup>\*\*</sup>** Preparation and Characterization of MRI-Visible Theranostic Metal-Free Magnetic Nanoparticles (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○NAGURA, Kota; TAKEMOTO, Yusa; MORONAGA, Satoru; SHIMONO, Satoshi; UCHIDA, Yoshiaki; IMAI, Hirohiko; MATSUDA, Tetsuya; SHIINO, Akihiko; TANIGAKI, Kenji; AMANO, Tsukuru; YOSHINO, Fumi; NODA, Yohei; KOIZUMI, Satoshi; KATO, Tatsuhisa; KOMATSU, Naoki; TAMURA, Rui

**1E5-03** Synthesis of Pd Complexes and Development of Surfactant-Containing Cross Coupling Reaction. (Lab. Chem. Life Sci., Tokyo Tech.) ○KOBAYASHI, Yuka; OSAKADA, Kohtarō; SUZAKI, Yuji

**1E5-04<sup>#</sup>** Interaction analysis between glucose molecules on polymeric micelle and GLUT1 as a targeting membrane protein (Grad. Sch. Eng., The Univ. of Tokyo) ○NAKAMURA, Noriko; ANRAKU, Yasutaka; FUKUSHIMA, Shegeto; TOH, Kazuko; CABRAL, Horacio; KATAOKA, Kazunori

**1E5-05** Synthesis of amphiphilic compounds consisting of a galactose and several lipophilic groups and their properties in aqueous solution (Fac. Sys. Eng., Wakayama Univ.) ○MURAOKA, Shinya; OSUGA, Hideji; SAKAMOTO, Hidefumi

**1E5-06** Self-assembly and decomposition of amphiphilic block copolymer composed of depolymerizable polyester and poly(ethylene oxide) in water (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○Tsubata, Takayuki; HONDA, Satoshi; TOYOTA, Taro

Chair: OSUGA, Hideji (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1E5-08, 1E5-09, 1E5-10, 1E5-11, 1E5-12, 1E5-13)

**1E5-08** Solution Properties of Amino Acid-Sugar Hybrid Surfactant (Grad. Sch. Human. Sci., Nara Women's Univ.) ○SAIKAWA, Kana; YOSHIMURA, Tomokazu; HADA, Yohsuke; SAWAKI, Shigetoyo

**1E5-09** Effect of Hydrogen Bond on Interfacial Adsorption for Amino Acid-Type Surfactants of *N*-Acyl-*N*-(2-hydroxyethyl)- $\beta$ -alanine with Hydroxy Group (Grad. Sch. Human. Sci., Nara Women's Univ.; NOF CORPORATION; Kracie Home Products, Ltd.) ○WAKIZAKA, Miyako; YADA, Shiho; YOSHIMURA, Tomokazu; SHIMOSEGAWA, Hiroshi; FUJITA, Hiroya; MATSUE, Yukako

**1E5-10** Surface Adsorption Behavior of Ionic Liquid and Surfactant in Three Components of Quaternary Ammonium Salt-Type Ionic Liquid / Surfactant / Water (Grad. Sch. Human. Sci., Nara Women's Univ.; NIKKOL GROUP Cosmos Technical Center Co., Ltd.) ○KAWAI, Risa; YADA, Shiho; YOSHIMURA, Tomokazu; HASHIMOTO, Satoru; SUZUKI, Toshiyuki

**1E5-11** Solution Properties of Polyoxyethylene-Polyoxypropylene Copolymer Decyl-tetradecyl Ether Type Nonionic Surfactants (Fac. Sci., Nara Women's Univ.; NOF CORPORATION) ○YAMASAKI, Minami; YADA, Shiho; YOSHIMURA, Tomokazu; MURAI, Masaki; WAKITA, Kazuaki

**1E5-12** Surface-Active Properties of Homogeneous Polyoxyethylene-Type Nonionic Surfactants in Quaternary Ammonium Salt-Type Gemini Ionic Liquids (Grad. Sch. Human. Sci., Nara Women's Univ.; NIKKOL GROUP Cosmos Technical Center Co., Ltd.) ○NIKI, Maiko; KAWAI, Risa; YADA, Shiho; YOSHIMURA, Tomokazu; HASHIMOTO, Satoru; SUZUKI, Toshiyuki

**1E5-13** Structure of Gold Nanoparticles Protected by Homogeneous Polyoxyethylene Type Nonionic Surfactants Modified with Terminal Group and their Catalytic Activities (Grad. Sch. Human. Sci., Nara Women's Univ.; NIKKOL GROUP Cosmos Technical Center Co., Ltd.) ○YADA, Shiho; YOSHIMURA, Tomokazu; HASHIMOTO, Satoru; SUZUKI, Toshiyuki

Chair: KATO, Tadashi (11 : 20~12 : 00)

\* 11:10-11:20: interval for laptop PC connection.(1E5-15, 1E5-16, 1E5-17, 1E5-18)

**1E5-15** Preparation of Surfactant-free Oil-in-Water Emulsions with High Concentration of Oil by Gelation of Oil Droplets (Fac. Eng., Shinshu Univ.; Fac. Eng., Shinshu Univ.) ○MURAKAMI, Naoya; SAKAI, Toshio

**1E5-16** State of Water in Emulsifier-free Water-in-Oil Emulsion: Mixing Effect of Different Oils (Fac. Eng., Shinshu Univ.; Fac. Eng., Shinshu Univ.) ○INOUE, Tomohiro; SAKAI, Toshio

**1E5-17** Surface Properties of Emulsion Droplets: Macroscopic Characterization of Interfacial Film Strength (Grad. Sch. Sci. Technol., Shinshu Univ.) ○ISOGAI, Hiroyuki; SAKAI, Toshio

**1E5-18** Preparation of photo- and thermo- responsive coloring emulsion (Fac. Eng., TUS) ○KONDO, Ryoichi; IMURA, Yoshiro; WANG, Kehsuan; KAWAI, Takeshi

### Tuesday, March 20, PM

Chair: SAKAI, Toshio (15 : 00~16 : 00)

\* 14:50-15:00: interval for laptop PC connection.(1E5-37, 1E5-38, 1E5-39, 1E5-40, 1E5-42)

**1E5-37** Structural change of n-hexadecane-in-water nano-emulsion below the melting point (TMU) ○MIYOSHI, Itsuki; OKADA, Satoshi; KAWABATA, Youhei; DEGUCHI, Shigeru; KATOU, Tadashi

**1E5-38** Withdrawn

**1E5-39** Development of Nanoemulsion for fast bacterial detection (Fac. Sci., Kochi Univ.) ○SAITO, Airi; OCHI, Rika; HADANO, Shingo; WATANABE, Shigeru; NIKO, Yosuke

**1E5-40<sup>\*</sup>** Orientation and migration of a rigid rod polyelectrolyte in an electric field: The restoring force of a rigid rod polyelectrolyte (Fac. Integrated Arts Sci., Tokushima Univ.) ○MITSUHIRO, Matsumoto

**1E5-42<sup>#</sup>** Small- and wide-angle x-ray scattering study of temperature and pH dependent structural evolution of GMP gels (Research Institute for Bioscience Products & Fine Chemicals, Ajinomoto Co.,Inc.) ○KANEKO, Masaya; OHMORI, Kazushige; KISHINO, Mitsuhiro; YANASE, Keiichi; SENGOKU, Takuya; SATO, Takaaki

Chair: KASUYA, Motohiro (16 : 10~16 : 50)

\* 16:00-16:10: interval for laptop PC connection.(1E5-44, 1E5-45, 1E5-46)

**1E5-44** Friction dynamics of agar gel under sinusoidal motion (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SHINOMIYA, Koki; MAYAMA, Hiroyuki; NONOMURA, Yoshimune

**1E5-45** Frictional force control of agar gel with colloidal nanoparticles (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SASAKI, Shiori; SHINOMIYA, Koki; NONOMURA, Yoshimune

**1E5-46<sup>\*</sup>** Macroscopic Mechanical Response of Discotic Columnar Liquid Crystals (Lab. Chem. Life Sci., Tokyo Tech.; RIKEN Spring-8 Center;

IMRAM, Tohoku Univ.) ○KAJITANI, Takashi; KOBAYASHI, Miki; TAKATA, Masaki; FUKUSHIMA, Takanori

Chair: FUNAHASHI, Masahiro (17 : 00~17 : 40)

\* 16:50-17:00: interval for laptop PC connection.(1E5-49, 1E5-51)

**1E5-49<sup>#</sup>** Swelling of liquid crystalline polymer brush in a nematic solvent studied by surface force measurement (WPI-AIMR, Tohoku Univ.; IME, The University of Chicago) ○YANAGIMACHI, Takuya; LI, Xiao; XIE, Helou; NEALEY, Paul; KURIHARA, Kazuo

**1E5-51<sup>#</sup>** Redox Responsive Chiral Dopant for Color-Modulable Cholesteric Liquid Crystals (Grad. Sch. Eng., The Univ. of Tokyo) ○TOKUNAGA, Shoichi; ITOH, Yoshimitsu; AIDA, Takuzo

### Wednesday, March 21, AM

Chair: NISHIYAMA, Katsura (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2E5-01, 2E5-03, 2E5-05, 2E5-06)

**2E5-01<sup>#</sup>** Assembled Behaviors and Functionalization Based on  $\pi$ -Systems with Controllable Polarized Structures (Coll. Life Sci., Ritsumeikan Univ.) ○NAKAMURA, Kazuto; MAEDA, Hiromitsu

**2E5-03<sup>#</sup>** Self-organization behavior of asymmetrically *exo*-functionalized coordination cage: construction of processable porous materials (WPI-iCeMS, Kyoto Univ.) ○OMOTO, Kenichiro; HOSONO, Nobuhiko; KITAGAWA, Susumu

**2E5-05** Synthesis and Their Physical Properties of Low Molecular Gelator Having Perfluoroalkyl Chain and Phenyl Group (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○KANO, Kanako; SATO, Hisako; YAMAGISHI, Akihiko; YAJIMA, Tokmoko

**2E5-06** Two-dimensional Behavior of Gelators with Pefluoroalkyl Chains (Fac. Medicine, Toho Univ.) ○YAMAGISHI, Akihiko; YAJIMA, Tomoko; TAMURA, Kenji; SATO, Hisako

Chair: YAJIMA, Tomoko (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2E5-08, 2E5-09, 2E5-10, 2E5-11, 2E5-12, 2E5-13)

**2E5-08** Lamellar/Onion Intermediate Structures Existing as Steady States in a Low Shear rate Region (Grad. Sch. Sci. Eng., TMU) ○SUZUKI, Kento; KAWABATA, Youhei; NASHIMA, Takeshi; OHNO, Kosaku; KATO, Tadashi

**2E5-09** Preparation of hydrogel from a monosaccharide-type low molecular weight gelator with gelation ability for oils (GIC, Kyushu Univ.; ISIT Nanotechnology Lab.; Nissan Chemical Industries, Ltd.) ○ONO, Fumiya; SHINKAI, Seiji; WATANABE, Hisayuki

**2E5-10** Synthesis and characterization of crown ether-appended hexaazotri-naphthalene having various long alkyl chains (Kagawa Univ.) ○SHIMOOKA, Keigo; ISODA, Kyosuke

**2E5-11** Optical and thermal properties control of self-assembly low molecular-mass organogels (Faculty of Science and Technology) ○NISHIYAMA, Katsura; MORI, Norimitsu; NAGATA, Narihiro

**2E5-12** Remarkable Mechanical Response Behavior of Columnar Liquid-Crystals with a Bowl-Shaped Sumanene as a Mesogen (Lab. Chem. Life Sci., Tokyo Tech.; KEK; Grad. Sch. Eng., Osaka Univ.) ○KOMIYAMA, Ryo; KAJITANI, Takashi; HARUKI, Rie; KUMAI, Reiji; ADACHI, Shinichi; YAKIYAMA, Yumi; SAKURAI, Hidehiro; FUKUSHIMA, Takanori

**2E5-13<sup>#</sup>** Structural transition of hydrogels by tuning electrostatic repulsion between inorganic nanosheets: two gelation mechanisms dominated by attraction and repulsion between components (RIKEN CEMS) ○IGARASHI, Naoki; SANO, Koki; EBINA, Yasuo; SASAKI, Takayoshi; ISHIDA, Yasuhiro; AIDA, Takuzo

Chair: KAWABATA, Youhei (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2E5-15, 2E5-16, 2E5-17, 2E5-19)

**2E5-15** Protein responsive hydrogels coupled with an enzyme reaction (Grad. Sch. Eng., Kyoto Univ.) ○NAKAMURA, Keisuke; SHIGEMITSU, Hajime; MATSUZAKI, Tomonobu; KUBOTA, Ryou; HAMACHI, Itaru

**2E5-16** Controlled substance release from supramolecular double network hydrogel triggered by AND logic gate type input (Grad. Sch. Eng., Kyoto Univ.) ○TANAKA, Wataru; SHIGEMITSU, Hajime; KUBOTA, Ryou; HAMACHI, Itaru

**2E5-17<sup>#</sup>** Air Tolerant Photon Upconverting Hydrogels: Synergistic Protein-Surfactant Co-assembly Enables Oxygen Resistant Triplet Energy Migration. (Grad. Sch. Eng., Kyushu Univ.; CMS, Kyushu Univ.; PRESTO, JST) ○BHARMORIA, Pankaj; HISAMITSU, Shota; YANAI, Nobuhiro; KIMIZUKA, Nobuo

**2E5-19<sup>#</sup>** Preparation and morphological control of helical rods composed of self-assembled cyclodextrins (Grad. Sch. Eng., Osaka Univ.) ○SHIGEMITSU, Hajime; SONODA, Sayaka; TERAGAKI, Ayumi; KIDA, Toshiyuki

### Wednesday, March 21, PM

Chair: KIDA, Toshiyuki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2E5-28, 2E5-29, 2E5-30,

2E5-31, 2E5-32, 2E5-33)

**2E5-28** Amphiphilic rotaxane: Synthesis, topology transformation and micelle formation (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TSURUOKA, Taiki; NAKAZONO, Kazuko; TAKATA, Toshikazu

**2E5-29** Network Formation of Self-assembled Cellulose Oligomers (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○MAEDA, Tohru; SAWADA, Toshiki; SERIZAWA, Takeshi

**2E5-30** Preparation of Composite Hydrogels through Self-Assembly of Cellulose Oligomers and their Mechanical Properties (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KOJIMA, Tomoya; SAWADA, Toshiki; SERIZAWA, Takeshi

**2E5-31** Self-assembly and Nanostructural Control of Cellulose Oligomers with Amino Groups (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○CHIKAWA, Mayuko; NOHARA, Takatoshi; SAWADA, Toshiki; SERIZAWA, Takeshi

**2E5-32** Synthesis of Liposomes-Loaded Gold-Nanoparticle Nanotubes and Drug Release (Fac. Sci. Eng., Chuo Univ.) ○ENOMOTO, Yuto; MORITA, Yoshitsugu; KOMATSU, Teruyuki

**2E5-33** Synthesis of Self-Propelled Catalase Microtube and its Velocity Control (Fac. Sci. Eng., Chuo Univ.) ○SUGAI, Natsuhiko; NAKAI, Yoko; MORITA, Yoshitsugu; KOMATSU, Teruyuki

Chair: KOMATSU, Teruyuki (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(2E5-35, 2E5-37, 2E5-38, 2E5-39, 2E5-40)

**2E5-35<sup>\*</sup>** Structural control of thiophene nanosheets and application to supercapacitors (RCFM, NIMS) ○IKEDA, Taichi

**2E5-37** Synthesis of Fullerene Derivative Nanoparticles via Guest Exchange Reaction of Cyclodextrin Complexes (Grad. Sch. Eng., Hiroshima Univ.) ○KOZAWA, Kentaro; SUGIKAWA, Kouta; IKEDA, Atsushi

**2E5-38** Control of the threading ratio of cyclic molecules in polyrotaxane consisting of poly(ethylene glycol) and  $\alpha$ -cyclodextrins. (Sch. Sci., Osaka Univ.) ○KOBAYASHI, Yuichiro; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu; HARADA, Akira

**2E5-39** Synthesis of Gigantic Fluorinated Macrocycles and Their 1D Assembly for Mass Transport (Grad. Sch. Eng., The Univ. of Tokyo) ○HIRAHARA, Ryota; KONDA, Takeshi; SATO, Kohei; ITOH, Yoshimitsu; AIDA, Takuzo

**2E5-40** Assembling of rhenium complex derivatives with supramolecular gel and assembling effect for catalytic properties (Fac. Adv. Sci. Tech., Kumamoto Univ.) ○KUWAHARA, Yutaka; KAMO, Aiki; FUJIMOTO, Yuki; IWAMOTO, Tatsumi; TAKAFUJI, Makoto; IHARA, Hirotaka

Chair: KAKUTA, Takahiro (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2E5-42, 2E5-43, 2E5-44, 2E5-45, 2E5-46, 2E5-47)

**2E5-42** Nanostructures of aqueous co-assemblies of amphiphilic and lipophilic zinc chlorophyll derivatives (Fac. Sci. Tech., Ryukoku Univ.; Grad. Sch. Life Sci., Ritsumeikan Univ.) ○HOKOYAMA, Ryota; TAMIYAKI, Hitoshi; MIYATAKE, Tomohiro

**2E5-43** Pathway dependent and temporal morphology control of supramolecular nanostructures composed of peptide derivatives (Grad. Sch. Nat. Sci. & Tech., Gifu Univ.) ○ARAKAWA, Hanae; IKEDA, Masato

**2E5-44** development of low-molecular-weight hydrogelator with hydrophilic saccharide group (Fac. Sci., Shizuoka Univ.) ○MAKI, Takumi; AKAMA, Shuto; YAMANAKA, Masamichi

**2E5-45** Bundle formation of supramolecular nanofiber structure of diarylethene by depletion force and photoinduced shrinking of the fiber (Grad. Sch. Eng., Kyoto Univ.) ○HIGASHIGUCHI, Kenji; SAKAGUCHI, Akira; MATSUDA, Kenji

**2E5-46<sup>#</sup>** Size-controlled self-assembly and characterization of amorphous particles made of pentasubstituted [60]fullerenes (Grad. Sch. Sci., The Univ. of Tokyo; Grad. Sch. Med., The Univ. of Tokyo) ○SEKINE, Ryosuke; RAVAT, Prince; LIU, Chao; YANAGISAWA, Haruaki; KIKKAWA, Masahide; HARANO, Koji; NAKAMURA, Eiichi

**2E5-47** Electric Field-Response Behavior of Dipolar Hexaarylbenzene Derivatives (Lab. Chem. Life Sci., Tokyo Tech.) ○MIYAZAKI, Takuya; SHOJI, Yoshiaki; ISHIWARI, Fumitaka; KAJITANI, Takashi; FUKUSHIMA, Takanori

Chair: HIGASHIGUCHI, Kenji (17 : 00~17 : 30)

\* 16:50-17:00: interval for laptop PC connection.(2E5-49, 2E5-50, 2E5-51)

**2E5-49** Synthesis and Characterization of Phosphorescent Materials by Functionalization of Sulfonyl Groups (Coll. Sci. Eng., Kanazawa Univ.) ○UENO, Yukiko; KAKUTA, Takahiro; YAMAGISHI, Tada-aki; OGOSHI, Tomoki

**2E5-50** Effect of Terminal Group on Polypseudorotaxane Formation by Pillar [5]arene and Poly(ethylene glycol) (Coll. Sci. Eng., Kanazawa Univ.; Coll. Sci. Eng., Kanazawa Univ.) ○YAGYU, Masafumi; OGOSHI, Tomoki; KAKUTA, Takahiro; YAMAGISHI, Tada-aki

**2E5-51** Construction of Supramolecular Aggregates Composed of Quantum Dot and Organic Dye (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○YAMAUCHI, Mitsuaki; MASUO, Sadahiro

Thursday, March 22, AM

Chair: KAJITANI, Takashi (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3E5-01, 3E5-02, 3E5-03, 3E5-05, 3E5-06)
- 3E5-01** Responsive Properties of Chiral Assembled Gold Nanorods with Proteins to External Environments (Grad. Sch. Med., Eng., Univ. of Yamanashi) ○SHINMORI, Hideyuki; MOCHIZUKI, Chihiro
- 3E5-02** Photochemical Reaction and Self-Assembly of Bolaamphiphilic Bis-thymine Derivatives with amide bonds (Sch. Advanced Sci. Eng., Waseda Univ.) ○INADA, Moeka; UDAGAWA, Akihiro; SAITO, Kei; KOSHIMA, Hideko; ASAH, Toru
- 3E5-03\*** Control of Biomolecular Interactions by Stimuli-responsive Molecular Glues (Grad. Sch. Eng., The Univ. of Tokyo) ○OKURO, Kou; AIDA, Takuzo
- 3E5-05** Synthesis and LCST behaviors of cholesterol derivatives and cholic acid derivatives having OEG chains (Fac. Eng., Yamagata Univ.) ○KOMINATO, Yusuke; SATO, Kazuaki; ITO, Kazuaki
- 3E5-06** Photocatalytic Degradation of Rhodamine B using ZnTPyP Nanofibers Constructed by Surfactant-Assisted Method (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○TASHIRO, Keigo; YAMAZAKI, Suzuki

New fields and Others

Chair: ISODA, Kyosuke (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3E5-08, 3E5-10, 3E5-12)
- 3E5-08\*** Dispersions of copper particles for low temperature and rapid sintering to prepare conductive copper layers (Grad. Sch. Eng., Hokkaido Univ.) ○YONEZAWA, Tetsu; TSUKAMOTO, Hiroki
- 3E5-10\*\*** Bimetal Alloy Nanoparticles via Sputtering onto Liquid (Grad. Sch. Eng., Hokkaido Univ.) ○NGUYEN, Mai Thanh; YONEZAWA, Tetsu
- 3E5-12\*\*** Observation of negative thermal expansion in ultra thin polyvinyl acetate thin film (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○LIU, Yuwei; SAKURAI, Kenji

Chair: YONEZAWA, Tetsu (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(3E5-15, 3E5-17, 3E5-18, 3E5-19)
- 3E5-15\*\*** Oxidation-resistive high surface area graphenes (X-Breed, Shinshu Univ.) ○WANG, Shuwen; KANEKO, Katsumi
- 3E5-17** Formation of Highly-Ordered Molecular Self-Assembly using an Acoustic Levitation Method (Lab. Chem. Life Sci., Tokyo Tech.; RIKEN Spring-8 Center; JASRI; IMRAM, Tohoku Univ.) ○TANAKA, Hiroki; KAJITANI, Takashi; OHARA, Koji; OHSUMI, Hiroyuki; TAKATA, Masaki; FUKUSHIMA, Takanori
- 3E5-18** Characterization of Photoluminescent  $\pi$ -Conjugated Liquid with Chiral Moiety (Fac. Eng., Kagawa Univ.) ○IKENAGA, Ayumi; ISODA, Kyosuke
- 3E5-19** Evaluation of Physical Properties Photo Luminescent  $\pi$ -Conjugated N-Heteroacene Room Temperature Liquid Substituted with a Poly (ethylene oxide) (Fac. Eng., Kagawa Univ.) ○MATSUBARA, Miwa; ISODA, Kyosuke

Thursday, March 22, PM

Solid Surfaces and Interfaces

Chair: OHKUBO, Takahiro (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(3E5-28, 3E5-29, 3E5-30, 3E5-31, 3E5-33)
- 3E5-28** Removal of aged odor compounds from Japanese sake samples with supported gold nanoparticles and sensory evaluation (Grad. Sch. Sci., Kyushu Univ.) ○KIMURA, Moemi; MURAYAMA, Haruno; SHINOZAKI, Takaaki; YAMAMOTO, Eiji; ISOGAI, Atsuko; FUJII, Tsutomu; IIZUKA, Sachiko; TOKUNAGA, Makoto
- 3E5-29** A manufacturing method of high crystalline paramylon nanofiber for development of anti-aging cosmetics (Kanazawa Inst. of Tech.) ○TANAKA, Satoshi; OSAWA, Satoshi; TANIDA, Ikuhiro
- 3E5-30** Construction of Metal Organic Framework Structures with Porphyrin (Grad. Sch. Human. Sci., Ochanomizu Univ.) ○TOMIZAWA, Eika; KONDO, Yuri; TERASAKI, Haruka; KONDO, Toshihiro
- 3E5-31\*** Crystal conversion between metal-organic frameworks with different crystal topologies on two-dimensional substrate (FIRST, Konan Univ.) ○TSURUOKA, Takaaki; INOUE, Kohei; OHHASHI, Takashi; TAKASHIMA, Yohei; AKAMATSU, Kensuke
- 3E5-33** Effect of ZnO Particle Growth on CO<sub>2</sub> Adsorption Behavior and Surface Chemical Structure (Dept. Env. Life Sci., TUT) ○USHIRO, Yuya; ITO, Hiromitsu; MATSUMOTO, Akihiko

Chair: MATSUMOTO, Akihiko (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(3E5-35, 3E5-36, 3E5-37, 3E5-38, 3E5-39, 3E5-40)
- 3E5-35** Fabrication of Low Dimensional Nanoceramics in Carbon Nanohorns (Grad. Sch. Sci., Chiba Univ.) ○HOSHI, Daiki; WATANABE, Takumi;

OHBA, Tomonori

- 3E5-36** Templated-synthesis of ceramic and high affinity to CO<sub>2</sub> (Grad. Sch. Sci., Chiba Univ.) ○WATANABE, Takumi; HOSHI, Daiki; OHBA, Tomonori
- 3E5-37\*** Electronic transport properties of nanodiamonds with relevance to adsorbed water (Grad. Sch. Sci. Technol., Shinshu Univ.) ○PINA SALAZAR, Elda Zoraida; SAKAI, Toshio; OSAWA, Eiji; KANEKO, Katsumi
- 3E5-38** Enhanced Hydration Shell Formation in Carbon Nanotubes (Grad. Sch. Sci., Chiba Univ.) ○OYA, Yoshifumi; OHBA, Tomonori
- 3E5-39** Adsorption abilities of bromide ions into nanoporous carbon materials (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○HIRANO, Yuri; OHKUBO, Takahiro; KURODA, Yasushige
- 3E5-40** NMR study of dynamic hydration structure of ions in nanospace (Grad. Sch. Sci., Osaka Univ.; The Museum of Osaka Univ.) ○OGURA, Ryota; UEDA, Takahiro

Chair: UEDA, Takahiro (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(3E5-42, 3E5-44, 3E5-45, 3E5-46, 3E5-47)
- 3E5-42\*\*** Pore Size Effects on Superionic States of Ionic Liquids in Carbon Nanopores (X-Breed, Shinshu Univ.) ○FUTAMURA, Ryusuke; IYAMA, Taku; SALANNE, Mathieu; BIGGS, Mark; GOGOTSI, Yury; SIMON, Patrice; KANEKO, Katsumi
- 3E5-44\*** An unique adsorption behavior of Acetaldehyde on Oxidized activated carbon (Dept. Env. Life Sci., TUT) ○PHAM THI HUONG, Ngat; ITO, Hiromitsu; MATSUMOTO, Akihiko; ISHIHARA, Kazuhiro; SHIBANO, Shinya; INADA, Sunao; SHIMAMURA, Kodai
- 3E5-45** Fabrication of Laminated Graphene Layers from Graphite to Graphite (Fac. Sci., Chiba Univ.) ○KITAYAMA, Hiroki; OHBA, Tomonori; SHIMIZU, Kengo; OYA, Yoshifumi
- 3E5-46** Extremely permeable porous graphene with high H<sub>2</sub>/CO<sub>2</sub> separation ability (Grad. Sch. Sci., Chiba Univ.) ○SHIMIZU, Kengo; OHBA, Tomonori
- 3E5-47** Desulfurization of fuels using supported noble metal nanoparticles (Fac. Sci., Kyushu Univ.) ○SHINOZAKI, Takaaki; KO, Yohan; MURAYAMA, Haruno; YAMAMOTO, Eiji; TOKUNAGA, Makoto

Chair: OHBA, Tomonori (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(3E5-49, 3E5-51, 3E5-52)
- 3E5-49\*\*** Dynamic Quantum molecular sieving of oxygen isotopes using microporous adsorbents (Center for Energy and Environmental Science) ○KUMAR, Sanjeev; FUTAMURA, Ryusuke; VALLEJOS-BURGOS, Fernando; MATSUKATA, Masahiko; GOGOTSI, Yury; KANEKO, Katsumi
- 3E5-51** Versatile TiO<sub>2</sub> Nanocoral Substrate for Surface-Assisted Laser Desorption/Ionization Mass Spectrometry (Grad. Sch. Sci. Eng., Kindai Univ.) ○NAKAMURA, Yoshihiro; SOEJIMA, Tetsuro
- 3E5-52\*\*** Control of Molecular Conformation at Interfaces: Structure and Motion (MANA, NIMS) ○NAKANISHI, Waka; SOE, We-hyo; SHIRAI, Yasuhiro; DURAND, Corentin; YONAMINE, Yusuke; MINAMI, Kosuke; BOUJU, Xavier; KOLMER, Marek; JOACHIM, Christian; ARIGA, Katsuhiko

Friday, March 23, AM

Chair: NAKANISHI, Waka (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4E5-01, 4E5-02, 4E5-03, 4E5-05, 4E5-06)
- 4E5-01** Electric Field Effect on Structure and Properties of Nanoconfined Ionic Liquids (IMRAM, Tohoku Univ.) ○SHIBAZAKI, Shogo; MIZUKAMI, Masashi; OHTA, Noboru; YAGI, Naoto; KURIHARA, Kazue
- 4E5-02** Lubricity of PMMA Brush Layers Characterized by Resonance Shear Measurement (IMRAM, Tohoku Univ.) ○MIZUKAMI, Masashi; GEN, Masao; HSU, Shu-yao; TSUJII, Yoshinobu; KURIHARA, Kazue
- 4E5-03\*** Structural Analysis of Silica/Styrene-Butadiene Rubber Interfaces via Sum Frequency Generation Spectroscopy (NICH, Tohoku Univ.; Sumitomo Rubber Industries, Ltd; IMRAM, Tohoku Univ.) ○IMAMURA, Takako; MASUI, Tomomi; KISHIMOTO, Hiroyuki; MIZUKAMI, Masashi; KURIHARA, Kazue
- 4E5-05** Adhesions Between Polymer Films and Metal Plates Utilizing Silane Coupling Agents and Hot Press Techniques (Fac. Eng., TUS; Grad. Sch. Chem. Sci. Technol., TUS) ○ABE, Tatsuyuki; YAMAMOTO, Shoichi; WATANABE, Kento; IJIMA, Kazutoshi; HASHIZUME, Mineo
- 4E5-06** Observation of Single molecular trapping by electrochemical surface-enhanced Raman scattering observation. (Sch. Sci., Hokkaido Univ.) ○OYAMADA, Nobuaki; KATO, Fumiya; LI, Xiaowei; MINAMIMOTO, Hiro; MURAKOSHI, Kei

Chair: MIZUKAMI, Masashi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4E5-08, 4E5-09, 4E5-11, 4E5-13)
- 4E5-08** Precise Control of Nano-Gap at Metal Nano-Disk Dimer in Sub-Nanometer Scale (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SHUMPEI, Oikawa; MINAMIMOTO, Hiro; KEI, Murakoshi

- 4E5-09\*\*** Real-space and real-time observation of plasmon-induced dissociation of a single molecule (RIKEN SISL) ○KAZUMA, Emiko; JUNG, Jaehoon; UEBA, Hiromu; TRENARY, Michael; KIM, Yousoo
- 4E5-11\*** Surface Plasmon resonance sensor using far-ultraviolet light (Sch. Eng. Sci., Osaka Univ.) ○TANABE, Ichiro; TANAKA, Yoshito; WATARI, Koji; TARAS, Hanulia; GOTO, Takeyoshi; INAMI, Wataru; KAWATA, Yoshimasa; OZAKI, Yukihito
- 4E5-13** Effects of localized surface plasmon resonance on photon upconversion via triplet-triplet annihilation (Grad. Sch. Sci. Tech., Nihon Univ.) ○TAKESHIMA, Naoto; JIN, Shota; SUGAWA, Kosuke; OTSUKI, Joe

Chair: MASUDA, Takuya (11 : 20~12 : 00)

- \* 11:00-11:20: interval for laptop PC connection.(4E5-15, 4E5-16, 4E5-17, 4E5-18)
- 4E5-15** Orientation change of gold nanorods immobilized on the ITO substrate under the electric fields (Grad. Sch. Env. Sci., Hokkaido Univ.) ○NIHEI, Mizuki; NAKAMURA, Satoshi; MITOMO, Hideyuki; MATSUO, Yasutaka; IJIRO, Kuniharu
- 4E5-16** Fabrication of titanium oxide-gold nanoparticle composite thin-films by surface so-gel process and their photocatalytic properties (Sch. Eng., The Univ. of Shiga Pref.) ○MITSUKAWA, Shota; AKIYAMA, Tsuyoshi; OKU, Takeo
- 4E5-17** Fabrication and photochemical application of hierarchical layered electrochemical polymerized films from aqueous solution of thiophene monomers (Sch. Eng., The Univ. of Shiga Pref.) ○AKIYAMA, Tsuyoshi; TSUJII, Takatoshi; HIRATA, Shuya; KUMAGAWA, Yu; OKU, Takeo
- 4E5-18** Fabrication and photovoltaic properties of an inverted-type organic thin-film solar cells incorporation of photofunctional material into electron transport layer (Sch. Eng., The Univ. of Shiga Pref.) ○MATSUMIYA, Yusuke; MITSUKAWA, Shota; AKIYAMA, Tsuyoshi; OKU, Takeo

### Friday, March 23, PM

Chair: MINAMIMOTO, Hiro (13 : 10~14 : 00)

- \* 13:00-13:10: interval for laptop PC connection.(4E5-26, 4E5-27, 4E5-28, 4E5-29, 4E5-30)
- 4E5-26** Fabrication of  $\gamma$ -FeOOH and  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> hollow particle arrays by electrodeposition (Fac. Eng., TUS) ○ONIZUKA, Misato; WANG, Kehsuan; IMURA, Yoshiro; KAWAI, Takeshi
- 4E5-27** Effects of amino and carboxyl groups of amino acids on the electrodeposited nickel oxide film (Fac. Eng., TUS) ○IKEUCHI, Hayato; WANG, Kehsuan; IMURA, Yoshiro; KAWAI, Takeshi
- 4E5-28** Structure Analysis of Galvanic Replacement Reaction of Nickel Substrate Surface with Platinum (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○YOSHIOKA, Risa; SAKAI, Sayumi; KONDO, Toshihiro
- 4E5-29** In situ Analysis of Lithium Anode Reaction by Electrochemical Quartz Crystal Microbalance Technique (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○OHAMA, Ayano; SMARAN, Kumar Sai; NIIDA, Asako; KONDO, Toshihiro
- 4E5-30** Development of Amorphous Carbon Thin Films with High Oxygen Reduction Reaction Activity by Introduction of Oxygen Functional Groups for Cathode of Polymer Electrolyte Fuel Cell (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○WAKI, Yuta; SAITOH, Yu; SHIMIZU, Yuta; NARAGINO, Hiroshi; HONDA, Kensuke

## Room F1 Bldg. 10 1031

### Organic Chemistry -Reaction and Synthesis- Aromatic Compounds

#### Tuesday, March 20, PM

Chair: KATO, Shin-ichiro (13 : 10~14 : 00)

- \* 13:00-13:10: interval for laptop PC connection.(1F1-26, 1F1-27, 1F1-28, 1F1-29, 1F1-30)
- 1F1-26** Synthesis of 3<sup>1</sup>-Substituted Bacteriochlorophyll-*d* Analogs and Their Self-aggregation (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; ○KANEHISA, Seiji
- 1F1-27** Self-aggregation of synthetic chlorophyll derivatives bearing oxime groups (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; ○KATAYAMA, Airi
- 1F1-28** Self-aggregation of chlorophyll-*a* derivatives possessing functional groups at the 3<sup>1</sup> and 13<sup>2</sup> positions (Coll. Life Sci., Ritsumeikan Univ.) ○FUJIWARA, Yoshiki; TAMIAMI, Hitoshi
- 1F1-29** Synthesis of benzothiophene-containing aryl-substituted acenes by using SnCl<sub>2</sub>-catalyzed Friedel-Crafts reactions (Sci. Tec., Sophia Univ.) ○SAITO, Keisuke; TSUKAMOTO, Kadzuoki; MATSUZAKI, Masaki; TAKEOKA, Yuko; RIKUKAWA, Masahiro; MASUYAMA, Yoshiro; SUZUKI, Noriyuki

- 1F1-30** Mizoroki-Heck Reaction in Water Catalyzed by SCS-Pincer-Pd(II) Complexes Immobilized on Thermoresponsive Copolymers (Sci. Tec., Sophia Univ.) ○MIZUNO, Daisuke; RIKUKAWA, Masahiro; SUZUKI, Noriyuki

Chair: MURAKAMI, Kei (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(1F1-32, 1F1-33, 1F1-34, 1F1-35, 1F1-36, 1F1-37)
- 1F1-32** Synthesis and properties of substituted tetracene and bitetracene derivatives (Sch. Eng., The Univ. of Shiga Pref.) ○TSUJI, Kohei; KATO, Shin-ichiro; KITAMURA, Chitoshi
- 1F1-33** Synthesis of cyclobutaditetracene by dimerization of benzyne (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○IKESHIMA, Ryo; HAMURA, Toshiyuki
- 1F1-34** Synthesis and Physical Properties of a 5,7,12,14-Tetraethynyl Penta-cene and its Oligomers (Grad. Sch. Mat. Sci., NAIST) ○TANAKA, Satoshi; ARATANI, Naoki; YAMADA, Hiroko
- 1F1-35** Mechanical Stimulation Induces Chiral Symmetry Breaking by Hetero-double-helix Formation of Racemic Oxymethylenehelix Oligomers (Grad. Sch. Pharm. Sci., Tohoku Univ.) ○SAWATO, Tsukasa; SAITO, Nozomi; YAMAGUCHI, Masahiko
- 1F1-36** Thermal hysteresis of a (P)-tetramer/(M)-hexamer aminomethylenehelix oligomers system. (Grad. Sch. Pharm. Sci., Tohoku Univ.) ○SHINOZAKI, Yasuhiro; SAITO, Nozomi; YAMAGUCHI, Masahiko
- 1F1-37** Synthesis, structure, optical properties and complexation behavior of 10-mesityl-1,8-diphenylanthracene dimer (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.; Grad. Sch. Sci. Eng., TMU) ○NAKAMURA, Yuki; SANO, Hiroto; SHIRAI, Atsumi; IYODA, Masahiko; OTANI, Hiroyuki

Chair: ARATANI, Naoki (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(1F1-39, 1F1-41, 1F1-42, 1F1-43, 1F1-44)
- 1F1-39\*\*** Regioselective Aromatic C-H Borylation Controlled by Remote Steric Effect (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○SAITO, Yutaro; SEGAWA, Yasutomo; ITAMI, Kenichiro
- 1F1-41** Long-range Anisotropic Self-assembly of Ethynylhelix Oligomers with C16 Alkyl Terminal Groups (Grad. Sch. Pharm. Sci., Tohoku Univ.) SAITO, Nozomi; ○KOBAYASHI, Higashi; YAMAGUCHI, Masahiko
- 1F1-42** Synthesis and formation of lyotropic liquid crystal gel by an ethynylhelix oligomer with bicyclohexyl terminals (Grad. Sch. Pharm. Sci., Tohoku Univ.) SAITOU, Nozomi; ○YUZAWA, Ryosuke; YAMAGUTI, Masahiko
- 1F1-43** Synthesis and properties of 5,6,11,12,17,18-hexahydroxytrinitrophenylene derivatives (Sch. Eng., The Univ. of Shiga Pref.; Grad. Sch. Eng., Nagoya Inst. of Tech.) ○NISHIDA, Keigo; KATO, Shin-ichiro; ONO, Katsuhiko; KITAMURA, Chitoshi
- 1F1-44** Reactivity of antiaromatic porphyrinoid compounds (Grad. Sch. Sci., Eng., Saitama Univ.) ○HOSODA, Natsuki; FUJIWARA, Takashi; ISHIMARU, Yoshihiro

Chair: SAITO, Nozomi (16 : 30~17 : 20)

- \* 16:20-16:30: interval for laptop PC connection.(1F1-46, 1F1-47, 1F1-48, 1F1-49, 1F1-50)
- 1F1-46** Syntheses of Functionalized Polyacenes by Using Quinoidal Building Blocks (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KITAMURA, Kei; KUDO, Ryoji; HAMURA, Toshiyuki
- 1F1-47** Syntheses and Application of Star-Shaped Aromatic Polyketones (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○ADACHI, Kazuhiko; KIMATA, Yoshimitsu; YOSHIKAWA, Hirofumi; HAMURA, Toshiyuki
- 1F1-48** Palladium-catalyzed annulative dimerization of aryl triflates (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○HIRAGA, Taito; KOGA, Yoshito; SAITO, Yutaro; MURAKAMI, Kei; ITAMI, Kenichiro
- 1F1-49** Synthesis of 8-Membered Polyaromatics by Annulative Dimerization of Chlorophenanthrenes (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○KOGA, Yoshito; MURAKAMI, Kei; ITAMI, Kenichiro
- 1F1-50** Direct Functionalization of Parent Nitronyl Nitroxide by Pd-mediated Cross-Coupling Reaction (Grad. Sch. Eng. Sci., Osaka Univ.) ○NAKAMURA, Fumiya; SUZUKI, Shuichi; NAOTA, Takeshi

#### Wednesday, March 21, AM

Chair: KAWAMOTO, Takuji (9 : 00~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2F1-01, 2F1-02, 2F1-03, 2F1-05, 2F1-06)
- 2F1-01** Functionalization of 5,15-Diazaporphyrin Ring Using Direct Nucleophilic Substitution Reactions (Grad. Sch. Sci. and Technol., Niigata Univ.; Fac. Sci., Niigata Univ.) ○SUGAI, Takuma; OMOMO, Satoshi; MATANO, Yoshihiro
- 2F1-02** Synthesis and Properties of 5,10,20-Triaryl-5,15-diazaporphyrin Metal Complexes (Grad. Sch. Sci. and Technol., Niigata Univ.; Fac. Sci., Niigata Univ.) ○SUDDOH, Keisuke; HATAKEYAMA, Takuro; SATOH, Takaharu; MATANO, Yoshihiro
- 2F1-03\*** Synthesis and Structure of Pentadentate N-Confused Porphyrin bearing 2-Mercaptopyridine and Catalytic Activity of Cobalt Complex

- (Grad. Sch. Eng., Kyushu Univ.) ○MIYAZAKI, Takaaki; YAMAMOTO, Takaaki; MASHITA, Shunichi; DEGUCHI, Yuya; FUKUYAMA, Kazuki; TACHIBANA, Toshihiro; MIYANISHI, Mayuko; SHIOTA, Yoshihito; ISHIDA, Masatoshi; MORI, Shigeki; FURUTA, Hiroyuki
- 2F1-05** Synthesis and optical Properties of Butadiynyl-bridged Doubly N-Confused Dioxohexaphyrin Dimer (Grad. Sch. Eng., Kyushu Univ.) ○NAKAMURA, Yuma; ISHIDA, Masatoshi; FURUTA, Hiroyuki
- 2F1-06** Synthesis and inclusion behavior between fullerene and porphyrin dimers involving reversible conformational changes (Grad. Sch. Eng., Nagoya Univ.) ○TAKIGUCHI, Asahi; HIROTO, Satoru; SHINOKUBO, Hiroshi

Chair: ISHIDA, Masatoshi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2F1-08, 2F1-09, 2F1-10, 2F1-11, 2F1-12, 2F1-13)
- 2F1-08<sup>#</sup>** Electrochemical Synthesis of Carbonyl [60]Fullerene Derivatives (Fac. Eng., The Univ. of Tokyo) ○LIN, Haosheng; MATSUO, Yutaka; WANG, Guan-wu
- 2F1-09** Detosylation of Tosylamide with NaBH<sub>4</sub> (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○KAWABATA, Atsushi; ORITANI, Kyohei; KAWAMOTO, Takuji; KAMIMURA, Akio
- 2F1-10** Radical Borylation of Aryl Sulfones with NHC-Boranes (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○MORIOKA, Tsubasa; KAWAMOTO, Takuji; KAMIMURA, Akio; CURRAN, Dennis P.
- 2F1-11** Difunctionalization of Alkynes with T2O/DABCO (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○MII, Junya; KAWAMOTO, Takuji; KAMIMURA, Akio
- 2F1-12** Regioselective C-H Triflation of Binaphthol (Dept. of Chem. Eng., NIT, Nara College) ○NAKAZAWA, Hironobu; KUROSAKI, Ryo; KAMEI, Toshiyuki; SHIMADA, Toyoshi
- 2F1-13** Reductive Coupling Reaction of Iodoanisole Derivatives with Trifluoromethanesulfonic acid (Dept. of Chem. Eng., NIT, Nara College) ○KUROSAKI, Ryo; NAKAZAWA, Hironobu; KAMEI, Toshiyuki; SHIMADA, Toyoshi

Chair: SAWAMA, Yoshinari (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(2F1-15, 2F1-16, 2F1-17, 2F1-18, 2F1-19)
- 2F1-15** Synthesis of Multi-azido Peptide-type Platform Molecules and Application to Sequential Click Reaction (IBB, Tokyo Med. and Dental Univ.) ○FUJII, Saki; NISHIYAMA, Yoshitake; HAZAMA, Yuki; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2F1-16** Protection of Azido Group by Formation of Phosphazide (IBB, Tokyo Med. and Dental Univ.) ○MEGURO, Tomohiro; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2F1-17** Transient Protection of Strained Alkynes from Click Reaction via Complexation with Silver and Gold Species (IBB, Tokyo Med. and Dental Univ.) ○ADACHI, Keisuke; MEGURO, Tomohiro; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2F1-18** Nucleophilic Trifluoromethylation by use of Benzimidazole (Fac. Sci., Gakushuin Univ.) ○ISHIKAWA, Taisuke; MIYAGAWA, Masamichi; AKIYAMA, Takahiko
- 2F1-19** Multi-step skeletal transformation and fluorine atom transfer of terminally-fluorinated [7]helicene (Grad. Sch. Sci., Eng., Yamagata Univ.) ○MATSUDA, Chikako; MURASE, Takashi

### Wednesday, March 21, PM

Chair: OHMORI, Ken (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2F1-28, 2F1-30, 2F1-32, 2F1-33)
- 2F1-28<sup>#</sup>** Aromatic Aldehyde-Selective Functionalization via Pyridinium-Type Salt Intermediate (Gifu Pharm. Univ.) ○KAWAJIRI, Takahiro; OHTA, Reiya; FUJIOKA, Hiromichi; SAJIKI, Hironao; SAWAMA, Yoshinari
- 2F1-30<sup>#</sup>** Palladium on carbon-catalyzed dehydrogenative aromatization of unsaturated alicyclic hydrocarbon derivatives in water (Gifu Pharm. Univ.) ○YASUKAWA, Naoki; YOKOYAMA, Hiroki; MASUDA, Masahiro; MONGUCHI, Yasunari; SAJIKI, Hironao; SAWAMA, Yoshinari
- 2F1-32** Study on a conjugate addition of azulene derivatives to unsaturated carbonyl compounds, and application of the reaction. (Grad. Sch. Agr. Sci., Kobe Univ.) MIYAKE, Hideyoshi; ○YOSHIKAWA, Hiroaki
- 2F1-33** Study on a Lewis acid catalyzed coupling between 1-(azulen-1-yl)vinyl acetate and aromatic compounds. (Grad. Sch. Agr. Sci., Kobe Univ.) MIYAKE, Hideyoshi; ○AZUMA, Shuhei

Chair: MIYAKE, Hideyoshi (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2F1-35, 2F1-36, 2F1-38, 2F1-39)
- 2F1-35** Straightforward Synthesis of Diverse Benzo[*b*]thiophenes from Arynes and Alkynyl Sulfides (IBB, Tokyo Med. and Dental Univ.) ○MATSUZAWA, Tsubasa; UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2F1-36<sup>#</sup>** Synthesis of Divergent Sulfur-Containing Heterocycles Using Thio-sulfonates as Sulfur Surrogates (IBB, Tokyo Med. and Dental Univ.) ○KANEMOTO, Kazuya; SUGIMURA, Yasuyuki; SHIMIZU, Shigeomi;

YOSHIDA, Suguru; HOSOYA, Takamitsu

- 2F1-38** Improved Method for Efficient Synthesis of Cycloalkyne Precursors and Applications to the Preparation of Various Cycloalkenes (IBB, Tokyo Med. and Dental Univ.) ○TAMURA, Yuya; UCHIDA, Keisuke; NISHIYAMA, Yoshitake; KARAKI, Fumika; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2F1-39<sup>#</sup>** Silicon-tether Strategy for Intramolecular [4+2] Cycloaddition of Benzyne with Dienes (Sch. Sci., Tokyo Tech.) ○NISHII, Arata; TAKIKAWA, Hiroshi; SUZUKI, Keisuke

Chair: YOSHIDA, Suguru (15 : 50~16 : 40)

- \* 15:40-15:50: interval for laptop PC connection.(2F1-42, 2F1-43, 2F1-44, 2F1-45, 2F1-46)
- 2F1-42** Direct Amidation of Aromatics through Generation of Amidyl Radicals by Photoredox Catalysis (Lab. Chem. Life Sci., Tokyo Tech.) ○OCHI, Rika; MIYAZAWA, Kazuki; KOIKE, Takashi; AKITA, Munetaka
- 2F1-43** Selective Carbon-Carbon Bond-Forming Ligand Coupling Reaction of Tetraorganoborates Using Organic One-Electron Oxidant (Grad. Sch. Eng., Kyoto Univ.) ○NAKAMOTO, Daiki; OKAMOTO, Kazuhiro; OHE, Kouichi
- 2F1-44<sup>#</sup>** Tetraarylmethane Synthesis via TfOH-Promoted Cross Dehydrogenative Coupling (WPI-ITbM, Nagoya Univ.) ○YIM, Jacky C.-h.; FOWLER, Kevin G.; NAMBO, Masakazu; CRUDDEN, Cathleen M.
- 2F1-45** Synthesis of the optically active naphthopane and synthetic study about its oligomer (Sch. Sci., Tokyo Tech.) ○KIZAKI, Takuya; UEDA, Yasuyuki; SUZUKI, Keisuke; OHMORI, Ken
- 2F1-46** Stimuli-responsive Lewis base Catalysts for universal control of Diastereoselectivity in Mukaiyama Aldol Reaction (Grad. Sch. Eng., TUS) ○SASAKI, Aya; HIRANUMA, Takuya; ABE, Yuina; IMAHORI, Tatsushi

Chair: IMAHORI, Tatsushi (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(2F1-48, 2F1-49, 2F1-50, 2F1-51, 2F1-52)
- 2F1-48** Facile Synthesis of Highly Functionalized Aromatic Compounds via Generation of Arynes Triggered by Carbon-Carbon Bond Cleavage (IBB, Tokyo Med. and Dental Univ.) ○UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2F1-49** Cycloaddition Reaction of Electron Deficient Dienes with Two Arynes for the Synthesis of Polycyclic Compounds (IBB, Tokyo Med. and Dental Univ.) ○CHEN, Shengnan; MEGURO, Tomohiro; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 2F1-50** Synthesis of Fluorinated Compounds from Benzotrifluoride via Sequential Transformation of C-F Bonds (IBB, Tokyo Med. and Dental Univ.) ○KIM, Youngchan; SHIMOMORI, Ken; HOSOYA, Takamitsu; YOSHIDA, Suguru
- 2F1-51** Synthesis of Substituted Triptycenes Using Ynolate-Benzyne Triple Cycloaddition (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) ○FUJIWARA, Takumi; IWATA, Takayuki; SHINDO, Mitsuru
- 2F1-52** Synthesis and reactions of trimethylsilyl triptycenes (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) ○YOSHINAGA, Tatsuro; IWATA, Takayuki; SHINDO, Mitsuru

### Thursday, March 22, AM

Chair: MAEDA, Yutaka (9 : 10 ~10 : 00)

- \* 9:00-9:10: interval for laptop PC connection.(3F1-02, 3F1-03, 3F1-04, 3F1-05, 3F1-06)
- 3F1-02** Facile Synthesis of Functionalized Phosphines and Applications to Chemical Modification of Biomolecules (IBB, Tokyo Med. and Dental Univ.; RIKEN CSTH; RIKEN CLST) ○TERASHIMA, Norikazu; MEGURO, Tomohiro; KOIKE, Yuka; ITO, Harumi; KII, Isao; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3F1-03** Straightforward Synthesis of 9-Phosphathioxanthenes Using Aryne Intermediates (IBB, Tokyo Med. and Dental Univ.) ○TOKUNAGA, Naoya; NISHIYAMA, Yoshitake; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3F1-04** Facile Synthesis of Multisubstituted Aryne Precursors via 1,4-Addition of Phosphinylbenzoquinone and Their Synthetic Applications (IBB, Tokyo Med. and Dental Univ.) ○KAMADA, Shuhei; NISHIYAMA, Yoshitake; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3F1-05** Direct  $\alpha$ -Arylation of Alkylamides with Sulfonylarenes through a Radical Chain Mechanism (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○IKEDA, Yuko; MATSUKAWA, Yuka; SHIRAKAWA, Eiji
- 3F1-06** *tert*-Butoxy Radical-Induced Direct  $\alpha$ -Arylation of Alcohols with Sulfonylarenes (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○IKEDA, Yuko; KAGAWA, Hiroaki; SHIRAKAWA, Eiji

Chair: HARADA, Shingo (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3F1-08, 3F1-09, 3F1-10, 3F1-11, 3F1-12)
- 3F1-08** Concise Synthesis of Multisubstituted Benzenes via Thiosilylation and Oxy-silylation of 3-(Triflyloxy)arynes (IBB, Tokyo Med. and Dental Univ.) ○MIYATA, Yoshihiro; NAKAMURA, Yu; UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu
- 3F1-09** Facile Synthesis of Diverse Benzopyrans via Gold-Catalyzed Cyclization and Generation of Pyranobenzynes (IBB, Tokyo Med. and Dental



- Univ.) ○NAKAMURA, Yu; YOSHIDA, Suguru; HOSOYA, Takamitsu  
**3F1-10** Facile Synthesis of Versatile 5-Aminocoumarins via "Aryne Relay" Chemistry (IBB, Tokyo Med. and Dental Univ.) ○OZAWA, Saki; NAKAMURA, Yu; YOSHIDA, Suguru; HOSOYA, Takamitsu  
**3F1-11** Research on Stereoselective Synthesis and Reaction of Ortho-Quinone Mono-Hemiaminals (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○MATSUMOTO, Yuri; SAITO, Emi; NAKAMURA, Akihiko; NAMERA, Yuki; NAKADA, Masahisa  
**3F1-12\*\*** Divergent reactivity of C<sub>60</sub> with propargylic esters in the presence of transition metal catalyst (Fac. of Edu., Tokyo Gakugei Univ.) ○YAMADA, Michio; OCHI, Rika; YAMAMOTO, Yuhei; MAEDA, Yutaka

Chair: YAMADA, Michio (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3F1-15, 3F1-17, 3F1-19)  
**3F1-15\*\*** Development of Chemoselective Reactions utilizing Specific Properties of Metal Carbenoid Species (Grad. Sch. Pharm. Sci., Chiba Univ.) ○HARADA, Shingo; NAKAYAMA, Hiroki; UEDA, Jun; KANDA, Ayaka; TANIKAWA, Koki; KONO, Masato; NEMOTO, Tetsuhiro  
**3F1-17\*\*** Electron-catalyzed cross-coupling reaction accelerated by a photo-redox system using an organic dye (Dep. Chem., Sch. Sci., Kyoto Univ.; Sch. Sci. Tech., Kwansai Gakuin Univ.) ○OKURA, Keisho; SHIRAKAWA, Eiji  
**3F1-19\*\*** Cobalt-catalyzed Oxidant-free Dehydrogenative Intramolecular C-C Bond Formation of Aromatic Compounds under Light Irradiation (The University of Chicago) ○TSUKAMOTO, Tatsuhiro; DONG, Guangbin

### Thursday, March 22, PM

Chair: HARADA, Shingo (13 : 30~14 : 20)

- \* 13:20-13:30: interval for laptop PC connection.(3F1-28, 3F1-30, 3F1-31, 3F1-32)  
**3F1-28\*** Endohedral lithium-ion-containing fullerene bearing diphenylmethano or fluoreno groups (Grad. Sch. Eng., The Univ. of Tokyo) ○OKADA, Hiroshi; UENO, Hiroshi; KAWAKAMI, Hiroki; AOYAGI, Shinobu; MATSUO, Yutaka  
**3F1-30** Synthesis of Silylaryl Triflate-type Thienobenzene Precursors and Applications to Prepare Multisubstituted Benzothiophenes (IBB, Tokyo Med. and Dental Univ.; Grad. Sch. Med., Kyoto Univ.) ○YOSHIDA, Suguru; KURIBARA, Tomoko; MORITA, Takamoto; MATSUZAWA, Tsuhasa; MORIMOTO, Kazushi; KOBAYASHI, Takuya; HOSOYA, Takamitsu  
**3F1-31** Facile Synthesis of Polycyclic Aromatic Compounds from a Precursor Bearing a 1,3-Diylne Moiety through an Aryne Relay Chemistry (IBB, Tokyo Med. and Dental Univ.) ○SHIMIZU, Keita; UCHIDA, Keisuke; YOSHIDA, Suguru; HOSOYA, Takamitsu  
**3F1-32** Facile Synthesis of Diazido Compounds via Functional Group Selective Reactions (IBB, Tokyo Med. and Dental Univ.) ○NISHIYAMA, Yoshitake; MISAWA, Yoshihiro; HAZAMA, Yuki; YOSHIDA, Suguru; HOSOYA, Takamitsu

**Room F2**  
Bldg. 10 1032

### Physical Organic Chemistry -Structures and Properties-

Tuesday, March 20, PM

#### Molecular structure and stereochemistry

Chair: TAKAISHI, Kazuto (12 : 40~13 : 40)

- \* 12:30-12:40: interval for laptop PC connection.(1F2-23, 1F2-24, 1F2-25, 1F2-27)  
**1F2-23** Structure and Chiroptical properties of oligophenylene embedded in rigid chiral scaffold (Grad. Sch. Sci., Kitasato Univ.) ○ISHIOKA, Sumire; HASEGAWA, Masashi; TUBOMURA, Tarou; MAZAKI, Yasuhiro  
**1F2-24** Dimeric chiral [2.2]paracyclophane: the simplest duplex helical oligophenylenes (Sch. Sci., Kitasato Univ.) SASAKI, Hiroaki; ISHIOKA, Sumire; ○HASEGAWA, Masashi; MAZAKI, Yasuhiro  
**1F2-25\*** Synthesis and complexation-induced chiroptical properties of a large macrocycle templated by 1,3,5-tris(phenylethynyl)benzene framework (Fac. Sci., Hokkaido Univ.) KATOONO, Ryo; ○KAWAI, Shunsuke; ISHIGAKI, Yusuke; SUZUKI, Takanori  
**1F2-27\*\*** Three-way-output Electrochemical Response by Two-way Structural Modification of Indolocarbazole (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Fac. Sci., Hokkaido Univ.; Grad. Sch. Pharm. Sci., Kyoto Univ.) ○NOJO, Wataru; KAWADA, Yuiki; ISHIGAKI, Yusuke; KATOONO, Ryo; OHNO, Hiroaki; SUZUKI, Takanori

Chair: KATOONO, Ryo (13 : 50~14 : 50)

- \* 13:40-13:50: interval for laptop PC connection.(1F2-30, 1F2-31, 1F2-32, 1F2-33, 1F2-35)  
**1F2-30** Synthesis and Redox Behavior of Chiral Cyclic Phenylenediamine

- Derivatives (Grad. Sch. Eng., Osaka Univ.) ○TAYANO, Yoshiki; HIRANO, Misato; TOBISU, Mamoru; MORIUCHI, Toshiyuki  
**1F2-31** Synthesis and chiroptical properties of chiral *peri*-xanthenoxanthenes. (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) TAKAISHI, Kazuto; ○HINOIDE, Sakiko; MAEDA, Chihiro; EMA, Tadashi  
**1F2-32** Synthesis and CPL characteristics of regioisomers of pyrene-tethered chiral naphthalene tetramers. (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) TAKAISHI, Kazuto; ○IWACHIDO, Kazuhiro; TAKEHANA, Ryosuke; MAEDA, Chihiro; EMA, Tadashi  
**1F2-33\*\*** Development of Helically Twisted Cyclic Quinoline Oligoamides (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○URUSHIBARA, Ko; FERRAND, Yann; MASU, Hyuma; KAUFFMANN, Brice; TANATANI, Aya; HUC, Ivan  
**1F2-35** Efficient conversion of diketone subunits on densely carbonylated aliphatic compounds (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○SAITO, Yuki; YOSHIOKA, Shota; INOKUMA, Yasuhide

Chair: MORIUCHI, Toshiyuki (15 : 00~15 : 50)

- \* 14:50-15:00: interval for laptop PC connection.(1F2-37, 1F2-39, 1F2-40, 1F2-41)  
**1F2-37\*\*** Longest C-C single bond among neutral hydrocarbons with a bond length beyond 1.8 Å based on the intramolecular core-shell strategy (Fac. Sci., Hokkaido Univ.) ○ISHIGAKI, Yusuke; SHIMAJIRI, Takuya; KATOONO, Ryo; SUZUKI, Takanori  
**1F2-39** Synthesis of a *o*-Difluorobenzene-bridged Molecular Gyrotrop and its Rotational Dynamics in a Crystalline State (Grad. Sch. Urban Environmental Sci., TMU) ○TSUCHIYA, Taro; INAGAKI, Yusuke; YAMAGUCHI, Kentaro; SETAKA, Wataru  
**1F2-40** Synthesis of Phenylene-bridged Diazamacrocycles and their Redox Properties (Urban Environmental Sci., TMU) ○KAJIYAMA, Kazuki; INAGAKI, Yusuke; YAMAGUCHI, Kentaro; SETAKA, Wataru  
**1F2-41** Synthesis and photophysical properties of hexakis[4-(10' -phenyl-9' -anthracenyl)phenyl]benzene (Sch. Eng., Osaka Univ.) ○IWAI, Satono; MORI, Tadashi

Chair: MORI, Tadashi (16 : 00~16 : 40)

- \* 15:50-16:00: interval for laptop PC connection.(1F2-43, 1F2-44, 1F2-46)  
**1F2-43** Proton-sensing using distorted phthalocyanines by alpha substituents (Grad. Sch. Sci. Technol., Shinshu Univ.) ○OHSHIMA, Teruaki; KOBAYASHI, Nagao; KIMURA, Mutsumi  
**1F2-44\*** Rod-disc compatible bimesomorphic liquid crystals : molecular conformation and liquid crystalline phase transitions of ester-linked triphenylene-azobenzene systems (Fac. Sci. Tech., Ryukoku Univ.; JASRI; Grad. Sch. Mat. Sci., NAIST) MINOBE, Ryota; MATSUMOTO, Hiroki; KAWAHARA, Naoki; TANAKA, Daisuke; OHTA, Noboru; SEKIGUCHI, Hiroshi; HYODO, Kengo; UCHIDA, Kingo; ○SHIMIZU, Yo  
**1F2-46** Effect of chain length in the methylene linkage on liquid crystallinity of azobenzene-triphenylene liquid crystals with ether linkage. (Fac. Sci. Tech., Ryukoku Univ.; Grad. Sch. Mat. Sci., NAIST; JASRI) ○KAWAHARA, Naoki; MATSUMOTO, Hiroki; MINOBE, Ryota; NISHIMURA, Hiroyuki; OHTA, Noboru; SEKIGUCHI, Hiroshi; HYODO, Kengo; SHIMIZU, Yo; UCHIDA, Kingo

### Mechanochromism

Chair: ITO, Suguru (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(1F2-48, 1F2-50, 1F2-51, 1F2-52)  
**1F2-48\*\*** Phosphorescence Control Mediated by Molecular Rotation and Auophilic Interactions in Amphidynamic Crystals of Gold(I) Phosphane Complex (Grad. Sch. Eng., Hokkaido Univ.) ○JIN, Mingoo; CHUNG, Tim S.; SEKI, Tomohiro; ITO, Hajime; GARICA-GARIBAY, Miguel A.  
**1F2-50** Luminescent Amphidynamic Crystal of Dumbbell Shaped Gold(I)-Phosphane Complex: Thermosensitive Effect with Luminescence Color Change by Temperature Alteration (Grad. Sch. Eng., Hokkaido Univ.) ○YAMAMOTO, Sho; JIN, Mingoo; SEKI, Tomohiro; ITO, Hajime; GARICA-GARIBAY, Miguel A.  
**1F2-51** Stimuli-Responsive Properties of Gold(I) Isocyanide Complexes Having Triphenylethene Moiety (Grad. Sch. Eng., Hokkaido Univ.) ○MASHIMO, Takaki; SEKI, Tomohiro; ITO, Hajime  
**1F2-52** Introduction of Substituents to Gold(I) Isocyanide Complexes and their Stimuli-Responsive Properties (Grad. Sch. Eng., Hokkaido Univ.) ○KOBATASHI, Koh; SEKI, Tomohiro; ITO, Hajime

### Wednesday, March 21, AM

#### $\pi$ -conjugated system of boron-containing compounds

Chair: GON, Masayuki (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2F2-01, 2F2-02, 2F2-03, 2F2-04, 2F2-05, 2F2-06)  
**2F2-01** Structures and External Stimuli-Responsive Luminescent Properties of D-A-D Type Dibenzophenazines having Phosphorus-Bridged Electron Donors (Grad. Sch. Eng., Osaka Univ.; Durham Univ.; Silesian Univ. Tech)

- KAIHARA, Takahito; HIGGINBOTHAM, Heather; DATA, Przemyslaw; TAKEDA, Youhei; MINAKATA, Satoshi
- 2F2-02** Physicochemical Properties of D-A-D-A Type  $\pi$ -Conjugated Macrocycles employing Dibenzophenazines as the Electron Acceptors and Their Application as OLED Emitters (Grad. Sch. Eng., Osaka Univ.; Durham Univ.; Silesian Univ. Tech.) ○IZUMI, Saika; HIGGINBOTHAM, Heather; DATA, Przemyslaw; TAKEDA, Youhei; MINAKATA, Satoshi
- 2F2-03** Synthesis and Assemblies of Heterocycle-Bridged Dipyrrolyl  $\pi$ -Electronic Molecules (Coll. Life Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ○MIYASUE, Mika; HAKETA, Yohei
- 2F2-04** Synthesis of Macrocyclic  $\pi$ -Conjugated Hexameric Anthracene Derivatives Based on 1,8-Diaryl-3,6-Diborylanthracenes (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○OKUBO, Keisuke; KOBAYASHI, Kenji
- 2F2-05** Synthesis and Optical Properties of Extended  $\pi$ -Conjugated 9,10-Diphenylanthracene Derivatives (Fac. Sci., Shizuoka Univ.) ○TOYOSHIMA, Yuto; KOBAYASHI, Kenji
- 2F2-06** Synthesis and Physical Properties of Tetracoordinate Boron Atom-Centered Spiro Compounds (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○KAMEDA, Mayu; NAKATSUKA, Soichiro; HATAKEYAMA, Takuji

Chair: SHOJI, Yoshiaki (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2F2-08, 2F2-10, 2F2-11, 2F2-12, 2F2-13)
- 2F2-08<sup>#</sup>** Synthesis and Fundamental Properties of Boron-Containing Fluorescein Derivatives (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○ANDO, Naoki; SOUTOME, Hiroki; YAMAGUCHI, Shigehiro
- 2F2-10<sup>#</sup>** Synthesis and Evaluation of Conjugated Polymers Containing Fused Azomethine-Boron Complexes (Graduate School of Engineering, Kyoto University) ○OHTANI, Shunsuke; GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiki
- 2F2-11** Synthesis of Thienoazaborines via Friedel-Crafts C-H Borylation and Their Properties (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○SHIGEMORI, Keisuke; MITSUDO, Koichi; SUGA, Seiji
- 2F2-12** Syntheses of Halogen-Substituted Fused Azomethine-Boron Complexes with Solid-State Emissive Properties (Sch. Eng., Kyoto Univ.) ○TAKEDA, Yusuke; OHTANI, Shunsuke; GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiki
- 2F2-13** Synthesis and Polymerization of meta-Substituted Fused Azobenzene-Boron Complexes (Grad. Sch. Eng., Kyoto Univ.) ○WAKABAYASHI, Junko; GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiki

Chair: MAEDA, Hiromitsu (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2F2-15, 2F2-17, 2F2-18, 2F2-19, 2F2-20)
- 2F2-15<sup>#</sup>** Synthesis of *BN*-embedded Corannulene via Electrophilic C-H Borylation (Grad. Sch. Sci. Tech., Kwasei Gakuin Univ.) ○NAKATSUKA, Soichiro; HATAKEYAMA, Takuji
- 2F2-17** Tuning of Physical Properties of Phenoxaborine Analogues by Substituent Effect (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○KITERA, Sayuri; GOTO, Hajime; HATAKEYAMA, Takuji
- 2F2-18** Semiconductor Properties of Boron-Chelating Bithiophene Derivatives Having  $\pi$ -spacers (Grad Sch. Eng., Nagoya Inst. of Tech.) ○SUGIURA, So; SUZUKI, Keiji; ONO, Katsuhiko

### $\pi$ -conjugated system of hetero element containing compounds

- 2F2-19** Synthesis of Dithienophosphole Acting as Both Electron-acceptor and Electron-donor (Grad. Sch. Eng., Kyoto Univ.) ○ISHIDA, Keiichi; HIGASHINO, Tomohiro; IMAHORI, Hiroshi
- 2F2-20** Synthesis and Properties of Phosphole-bridged Porphyrin Dimers (Grad. Sch. Eng., Kyoto Univ.) ○NISHIMURA, Issei; HIGASHINO, Tomohiro; IMAHORI, Hiroshi

### Wednesday, March 21, PM

Chair: NISHIUCHI, Tomohiko (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2F2-28, 2F2-29, 2F2-30, 2F2-31, 2F2-32, 2F2-33)
- 2F2-28** Investigations of Chemical Sensing and Switching Ability of Fluorescent  $\lambda^5$ -Phosphinines (Grad. Sch. Sci., Eng., Ehime Univ.) ○YANO, Makoto; DAM, Thi Huyen Trang; OHTA, Hidetoshi; HAYASHI, Minoru
- 2F2-29** Photo-decomposition process and excited state dynamics of superphotostable dyes based on naphthophosphole oxide (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○KIMURA, Nao; FUKAZAWA, Aiko; WANG, Chenguang; SOTOME, Hikaru; INAI, Naoto; YOKOGAWA, Daisuke; MIYASAKA, Hiroshi; YAMAGUCHI, Shigehiro
- 2F2-30** Development of novel synthetic method for fluorinated heteroarenes using intramolecular cyclization reaction (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SHIKI, Ryosuke; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke
- 2F2-31** Synthesis of ring-fused pyridinium salts via nucleophilic aromatic substitution reaction of pyridines and fluoroarenes (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NISHIMI, Honoka; ASANUMA, Yuki; NISHIYAMA, Hiroki; TOMITA, Ikuyoshi; INAGI, Shinsuke

- 2F2-32** Creation of  $\sigma + \pi$ -mixed conjugated system by using poly(arylselenyl)-*p*-phenylene and elucidation of their orbital interaction (Grad. Sch. Sci., Eng., Saitama Univ.) ○SUZUKI, Takumi; FURUKAWA, Shunsuke; SAITO, Masaichi
- 2F2-33<sup>#</sup>** Synthesis of Disilabicyclooctadienyl-Bridged Acene Dimers (Grad. Fac. Eng., Yokohama Natl. Univ.; Grad. Sch. Sci. Eng., Chuo Univ.) ○TOKORO, Yuichiro; OHTSUKA, Nobuhiko; FUKUZAWA, Shin-ichi; OYAMA, Toshiyuki

Chair: TOYOTA, Shinji (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2F2-35, 2F2-36, 2F2-37, 2F2-39, 2F2-40)
- 2F2-35** Creation of  $\pi$ -Extended Molecules by Double Cross-Coupling Reactions of Stannaflorenes (Grad. Sch. Sci., Eng., Saitama Univ.; KIT) ○IWABUCHI, Haruka; CHIBA, Hironobu; NAKAO, Tsukasa; SHIMIZU, Masaki; FURUKAWA, Shunsuke; SAITO, Masaichi
- 2F2-36** Systematic synthesis and solid-state thermal properties of hexa-alkoxy trithiasumanenes with different alkyl chains (Grad. Sch. Sci., Eng., Saitama Univ.; IMRAM, Tohoku Univ.) ○KOYAMA, Masaya; WU, Jianyun; AKUTAGAWA, Tomoyuki; FURUKAWA, Shunsuke; SAITO, Masaichi

### PAH

- 2F2-37<sup>#</sup>** Precise synthesis of graphene nanoribbons by living annulative  $\pi$ -extension polymerization (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST., JST ERATO) ○YANO, Yuuta; WANG, Feijiu; MITOMA, Nobuhiko; MIYAUCHI, Yuhei; ITO, Hideto; ITAMI, Kenichiro
- 2F2-39** Synthesis and Properties of Anthracene Based Cyclic  $\pi$  Clusters (Grad. Sch. Sci., Osaka Univ.) ○KISAKA, Kazuki; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi
- 2F2-40** Synthesis and Properties of Radially Anthracene Arranged  $\pi$ -Cluster Molecules (Grad. Sch. Sci., Osaka Univ.) ○SHIMIZU, Kazuto; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi

Chair: KONISHI, Akihito (15 : 50~16 : 40)

- \* 15:40-15:50: interval for laptop PC connection.(2F2-42, 2F2-43, 2F2-44, 2F2-45, 2F2-46)
- 2F2-42** Physical properties of twisted bianthrone stabilized by  $\pi$ -electron donating groups (Grad. Sch. Sci., Osaka Univ.) ○NAGAMACHI, Nobuhiro; HIRAO, Yasukazu; NISHIUCHI, Tomohiko; KUBO, Takashi
- 2F2-43** Bilayer Graphene Model Based on Coronene (Grad. Sch. Mat. Sci., NAIST) ○UEHARA, Keiji; ARATANI, Naoki; YAMADA, Hiroko
- 2F2-44** Synthesis of endo-functionalized cyclododecaphenylenes (Fac. Sci., TUS) ○TANAKA, Yusei; ONO, Kosuke; KAWAI, Hidetoshi
- 2F2-45** Synthesis of organic chromophores bearing a 2,5-dihydropentalene skeleton (Sch. Eng., Hokkaido Univ.) ○HIGUCHI, Masayuki; YOSHIOKA, Shota; INOKUMA, Yasuhide
- 2F2-46<sup>#</sup>** Syntheses of Structurally Well-defined Polycyclic Aromatic Hydrocarbons by One Pot Cascade Reaction of the Suzuki-Miyaura and the Mizoroki-Heck Coupling Reactions (Dept. Chem., Tokyo Med. Univ.) ○HOSSAIN, Md. Awlad; HASEGAWA, Masashi; SUGIURA, Ken-ichi

Chair: ARATANI, Naoki (16 : 50~17 : 40)

- \* 16:40-16:50: interval for laptop PC connection.(2F2-48, 2F2-50, 2F2-51, 2F2-52)
- 2F2-48<sup>#</sup>** Synthesis and Properties of  $\pi$ -Extended Dibenzo[*a,f*]pentalenes: Effect of Ring-annulation on the Open-shell and Antiaromatic Character (Grad. Sch. Eng., Osaka Univ.) ○KONISHI, Akihito; OKADA, Yui; YASUDA, Makoto
- 2F2-50** Synthesis and Properties of Planar Polycyclic Hydrocarbons Bearing Heptalene Structure Subunit (Grad. Sch. Eng., Osaka Univ.) KONISHI, Akihito; ○HORII, Koki; YASUDA, Makoto
- 2F2-51** Characterization of N-Doped Polyaniline (Grad. Sch. Eng., Osaka Univ.) AMAYA, Toru; ○HATAI, Tomohiro; TOBISU, Mamoru
- 2F2-52** Preparation and ESR observation of *N*-oxyl Carbazole bridged Macrocages (Grad. Sch. Urban Environmental Sci., TMU) ○HASHIMOTO, Hikaru; INAGAKI, Yusuke; SETAKA, Wataru

### Thursday, March 22, AM

Chair: KAWASE, Takeshi (9 : 00~9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(3F2-01, 3F2-02, 3F2-03)
- 3F2-01** Synthesis and properties of novel aromatic ketones with 1-anthryl substituents (Sch. Sci., Tokyo Tech.) ○TSURUMAKI, Eiji; SEKIKAWA, Hiroshi; TOYOTA, Shinji
- 3F2-02** Unusual oxidative cyclization of di-1-anthrylketone (Sch. Sci., Tokyo Tech.) ○SEKIKAWA, Hiroshi; TSURUMAKI, Eiji; TOYOTA, Shinji
- 3F2-03<sup>#</sup>** CSJ Award for Young Chemists Synthesis and Characterization of Novel Functional Polycyclic Aromatic Hydrocarbons and Graphene Nanoribbons (Max Planck Inst. for Polymer Res.) ○NARITA, Akimitsu

## Thiophene and related compounds

Chair: ISHIKAWA, Hayato (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(3F2-07, 3F2-08, 3F2-09, 3F2-10, 3F2-11, 3F2-12)
- 3F2-07** The Origin of a Strong Intermolecular Interaction in a Novel Hexaazatriphenylene Derivatives (Kwansei Gakuin Univ. School of Science and Technology) ○HINOKIMOTO, Akira; KITAGAWA, Yasutake; TANAKA, Daisuke
- 3F2-08** Estimation of the Reactivity of Hexaazatriphenylene Derivatives and Primary Amines (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○TASHIRO, Mizuki; HINOKIMOTO, Akira; TANAKA, Daisuke
- 3F2-09** Evaluation of alternately stacked charge transfer complexes of hexaazatriphenylene derivatives as Li ion battery cathode materials (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○NAKASHIMA, Kensuke; SHIMIZU, Takeshi; YOSHIKAWA, Hirofumi; TANAKA, Daisuke
- 3F2-10** Synthesis and properties of 1,3,6,8-tetraalkyl-2,7-diazapyrenes (Grad. Sch. Eng., Nagoya Univ.; Grad. Sch. Eng., Kyoto Univ.) ○NAKAZATO, Takumi; KAMATSUKA, Takuto; INOUE, Junichi; SAKURAI, Tsuneaki; SEKI, Shu; MIYAKE, Yoshihiro; SHINOKUBO, Hiroshi
- 3F2-11** Synthesis and properties of N,N'-dimethyl-2,7-diazapyrenes (Grad. Sch. Eng., Nagoya Univ.) ○TAKEKOSHI, Haruka; NAKAZATO, Takumi; MIYAKE, Yoshihiro; SHINOKUBO, Hiroshi
- 3F2-12** Charge transporting properties of polyiodobenzenes bearing  $\sigma$ -symmetric delocalized orbitals (Grad. Sch. Sci., Eng., Saitama Univ.; NIT, Toyama College; Grad. Sch. Frontier Sci., The Univ. of Tokyo) ○TAKADA, Yuki; YAMAGISHI, Masakazu; OKAMOTO, Toshihiro; TAKEYA, Junichi; FURUKAWA, Shunsuke; SAITO, Masaichi

Chair: FUKAZAWA, Aiko (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(3F2-14, 3F2-15, 3F2-17, 3F2-18, 3F2-19)
- 3F2-14** Synthetic study of bisorthoquinone-containing [11] phenacene derivative for application to the stepwise redox switching (Dept. Chem., Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○KAWABATA, Yuta; URAKAWA, Kazuki; ISHIKAWA, Hayato
- 3F2-15<sup>##</sup>** Synthesis of borocyclic radical and  $\alpha$ -ketocarbenium ion derived from orthoquinone-containing polyaromatic compounds (Dept. Chem., Grad. Sch. Sci. & Tech., Kumamoto Univ.; Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○URKAWA, Kazuki; KAWABATA, Yuta; SUMIMOTO, Michinori; MATSUDA, Masaki; ISHIKAWA, Hayato
- 3F2-17** Synthesis, structure and properties of novel macrocyclic oligothiophene 6-mer linked with triple and double bonds (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.; Grad. Sch. Sci. Eng., TMU; Grad. Sch. Sci., Kitasato Univ.) ○TAKASHIKA, Masataka; OTANI, Hiroyuki; HASEGAWA, Masashi; IYODA, Masahiko
- 3F2-18** Alkyl-substituted macrocyclic oligothiophene 6-mers: substituent effects, structure, and functional properties (Grad. Sch. Sci. Eng., TMU; Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.; ISIR, Osaka Univ.) ○TOSHIHIRO, Fujiwara; MASATAKA, Takashika; HIDEYUKI, Shimizu; HIROYUKI, Otani; YUTAKA, Ie; YOSHIO, Aso; MASAHICO, Iyoda
- 3F2-19** Development of the method for the construction skeleton-extended selenophenes through intramolecular cyclization reaction with dechlorogenation (Grad. Sch. Sci., Eng., Saitama Univ.) ○CHIBA, Hironobu; MIBU, Soshi; FURUKAWA, Shunsuke; SAITO, Masaichi

## Thursday, March 22, PM

Chair: NAKANO, Koji (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(3F2-27, 3F2-29, 3F2-30, 3F2-31, 3F2-32)
- 3F2-27<sup>##</sup>** Synthesis, and Optical and Electrochemical Properties of Fused-Bibenzo[c]thiophene Derivative (Grad. Sch. Eng., Hiroshima Univ.) ○ENOKI, Toshiaki; AOYAMA, Satoshi; OHSHITA, Joji; OYAMA, Yousuke
- 3F2-29** Synthesis, Structure, and Intermolecular Interaction of Dithieno[*a,e*]pentalene without Bulky Substituents (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○USUBA, Junichi; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro
- 3F2-30** Synthesis and photophysical properties of phenylene-thienylene oligomers end-capped with sulfur-containing medium rings (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○HAYAKAWA, Masahiro; FUKAZAWA, Aiko; YAMAGUCHI, Shigehiro
- 3F2-31** Synthetic Study of S-containing  $\pi$ -conjugated nanobelts (Grad. Sch. Sci., Kitasato Univ.) ○UEDA, Masafumi; SATO, Ryo; MAZAKI, Yasuhiro
- 3F2-32** Synthesis of dithiazolylthienothiophenebisimide-based  $\pi$ -conjugated polymers for organic photovoltaics (Grad. Sch. Eng., Hiroshima Univ.) ○TESHIMA, Yoshikazu; SAITO, Masahiko; YOSHIDA, Hiroto; KOMAYAMA, Kimihiro; OSAKA, Itaru

Chair: HASEGAWA, Masashi (14 : 30~15 : 30)

- \* 14:20-14:30: interval for laptop PC connection.(3F2-34, 3F2-35, 3F2-36, 3F2-37, 3F2-38, 3F2-39)

- 3F2-34** Pd-Catalyzed Synthesis of Arylated TTF Analogs and Their Structural and Electrochemical Properties (Grad. Sch. Sci., Eng., Ehime Univ.) ○SAKAKIBARA, Ryo; YOSHIMURA, Aya; SHIRAHATA, Takashi; YORIMITSU, Hideki; MISAKI, Yohji
- 3F2-35** Synthesis and optical properties of chiral spiro  $\pi$ -conjugated compounds with thiophene rings (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○NAKAJIMA, Yuri; TAKASE, Ko; NAKANO, Kouji
- 3F2-36** Synthesis and Chiroptical Properties of Chiral Spiro  $\pi$ -Conjugated Molecules Compounds with Donor-Acceptor Structure (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○KUBO, Masahiro; NAKANO, Koji
- 3F2-37** Synthesis of nitrogen-containing extended  $\pi$ -electron compound with indole (Fac. Sci., Ehime Univ.) ○INOUE, Makoto; TAKASE, Masayoshi; MORI, Shigeki; OKUJIMA, Tetsuo; UNO, Hidemitsu

## Organic radical

- 3F2-38** Studies on Charge/Spin Transfer Processes of Triphenylamine-Based Mixed-Valence Compounds (Grad. Sch. Eng., Kyoto Univ.) ○UEBE, Masashi; ITO, Akihiro
- 3F2-39** Synthesis and Properties of Soluble Bis(trioxotriphenylamine) Derivatives (Grad. Sch. Sci., Osaka City Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) SHIMODE, Kento; SUZUKI, Shuichi; KOZAKI, Masatoshi; ○OKADA, Keiji
- Chair: ITO, Akihiro (15 : 40~16 : 40)
- \* 15:30-15:40: interval for laptop PC connection.(3F2-41, 3F2-42, 3F2-43, 3F2-45, 3F2-46)
- 3F2-41** Synthesis and Properties of Fused Polycyclic Neutral  $\pi$ -Radical Having Sulfur Atoms (Fac. Eng., Aichi Inst. of Tech.) ○OKAMURA, Takara; MURATA, Tsuyoshi; MORITA, Yasushi
- 3F2-42** Synthesis and Physical Properties of a  $\pi$ -Conjugated Trioxotriangulene Polymers (Fac. Eng., Aichi Inst. of Tech.) ○UKAI, Shusaku; MURATA, Tsuyoshi; MORITA, Yasushi
- 3F2-43<sup>##</sup>** Theoretical Study on Molecular Actuator Properties in Helical Open-Shell Molecules (Grad. Sch. Eng. Sci., Osaka Univ.) ○TAKAMUKU, Shota; NAKANO, Masayoshi; KERTESZ, Miklos
- 3F2-45** Structures and Physical Properties of Nitrogen-incorporated Trioxotriangulene Derivatives (Fac. Eng., Aichi Inst. of Tech.) ○SEKO, Azusa; MURATA, Tsuyoshi; MORITA, Yasushi
- 3F2-46** Synthesis of Regioselectively Isotope-Labeled Sensor Molecules for Highly Sensitive NMR based on Triplet-DNP (Fac. Eng., Aichi Inst. of Tech.) ○NAKAMURA, Yushi; ICHIO, Naoki; NEGORO, Makoto; KAGAWA, Akinori; KITAGAWA, Masahiro; MURATA, Tsuyoshi; MORITA, Yasushi

Chair: MURATA, Tsuyoshi (16 : 50~17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(3F2-48, 3F2-49, 3F2-51, 3F2-52, 3F2-53)
- 3F2-48** Synthesis and properties of pyrrole-fused azacoronenes with singlet diradical electronic structures (Grad. Sch. Sci., Eng., Ehime Univ.) ○OGAWA, Ryuma; TAKASE, Masayoshi; NARITA, Tomoyuki; NISHINAGA, Tohru; MORI, Shigeki; OKUJIMA, Tetsuo; UNO, Hidemitsu

## Photophysical properties

- 3F2-49<sup>##</sup>** Synthesis and Properties of Fused Azobenzene-Tin Complexes (Grad. Sch. Eng., Kyoto Univ.) ○GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiki
- 3F2-51** Synthesis and physical properties of pentaazaphenylene derivatives toward narrow HOMO-LUMO gap materials (Sch. Eng., Kyoto Univ.) ○OCHI, Junki; WATANABE, Hiroyuki; TANAKA, Kazuo; CHUJO, Yoshiki
- 3F2-52** Synthesis and Properties of  $\pi$ -Expanded Indigo Derivatives by Ring Expansion Reaction (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○TAMURA, Daichi; MAEDA, Hajime; SEGI, Masahito; FURUYAMA, Taniyuki
- 3F2-53** Increment of Stokes Shift on Imidazolium Salts Derived from 2,5-Diarylimidazole (Grad. Sch. Eng., Chiba Univ.) ○WATANABE, Mei; AKAZOME, Motohiro; MATSUMOTO, Shoji

Chair: MATSUMOTO, Shoji (18 : 00~18 : 50)

- \* 17:50-18:00: interval for laptop PC connection.(3F2-55, 3F2-57, 3F2-58, 3F2-59)
- 3F2-55<sup>##</sup>** Development of Aggregation Induced Emission Active Maleimide Dyes Based on Simple Synthetic Strategies (KIT) ○IMOTO, Hiroaki; FUJII, Ryosuke; NAKA, Kensuke
- 3F2-57** Synthesis and Circular Polarized Luminescence of Carbazole-Based BODIPYs with Chiral Binaphthyl Unit (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) MAEDA, Chihiro; ○NAGAHATA, Keiji; TAKAISHI, Kazuto; EMA, Tadashi
- 3F2-58** Preparation of Tetrazole-Fused  $\pi$ -Conjugated Compounds and Those Fluorescence Behavior in Solution (Sch. Life Sci. Tech., Tokyo Tech.) ○HATA, Takeshi; HAYASHI, Yoshiki; HASEGAWA, Yuki; ISHII, Ayumi; HASEGAWA, Miki; SHIGETA, Masayuki; URABE, Hirokazu

**3F2-59** Photo and mechanical stimuli-responsive luminescent materials  
(Grad. Sch. Eng., Chiba Univ.) ○KOBAYASHI, Takuji; YAGAI, Shiki

Friday, March 23, AM

### Photophysical Properties

Chair: IE, Yutaka (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4F2-08, 4F2-10, 4F2-11, 4F2-12, 4F2-13)
- 4F2-08<sup>#</sup>** Effect of Heteroatom Substitution on Photoluminescence and Electroluminescence Properties of Dibenzoheteroborin-Based Thermally Activated Delayed Fluorescence Molecules (IFRC, Kyushu Univ.; Grad. Sch. Eng., Kyushu Univ.) ○MATSUO, Kyohei; PARK, In Soeb; AIZAWA, Naoya; LEE, Jiyoung; YASUDA, Takuma
- 4F2-10** Synthesis and Properties of planar dehydro [12]- and -[16] annulene fused with dithienothiophene (Grad. Sch. Sci. Eng., TMU) ○SHIROMA, Shun; NOMURA, Kotohiro; NISHINAGA, Tohru
- 4F2-11** Synthesis and Photophysical Properties of  $\pi$ -Extended Dipyrromethene Derivatives (Fac. Sci. Tech., Keio Univ.) ○ITO, Hiroaki; SAKAI, Hayato; HASOBE, Taku
- 4F2-12** Synthesis of BN-Doped Polycyclic Aromatic Compounds Exhibiting Thermally Activated Delayed Fluorescence with High Color Purity (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○YOSHIURA, Kazuki; MATSUI, Kohei; ODA, Susumu; HATAKEYAMA, Takuji
- 4F2-13** Conformation control and fluorescence switching of [3.5](3,9)carbazolophanes (Osaka Kyoiku Univ.) ○MIYANAGA, Kanae; HORI, Kazushige; KUBONO, Koji; TANI, Fumito; GOTO, Kenta; MORI, Tadashi; TANI, Keita

Chair: KATAGIRI, Hiroshi (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(4F2-15, 4F2-17, 4F2-18, 4F2-19)
- 4F2-15<sup>#</sup>**  $\pi$ -Conjugated Molecular Bow: Dynamic Molecular Motion and Thermochromism (ICYS, NIMS) ○NAGURA, Kazuhiko; NAEEM, Karattu Chali; TAKEUCHI, Masayuki
- 4F2-17** Synthesis and Photophysical Properties of Flapping Fluorophores Bearing Nitrogen Atoms at the Main Skeleton (Dep. Chem., Sch. Sci., Kyoto Univ.; PRESTO, JST) ○ACHIWA, Ryo; KOTANI, Ryota; SAITO, Shohei; OSUKA, Atsuhiko
- 4F2-18** Molecular design of cumulene-based molecules for singlet fission (Grad. Sch. Sci., Osaka Univ.; Grad. Sch. Sci., Eng., Ehime Univ.) IHARA, Keiji; ○HIRAO, Yasukazu; NISHIUCHI, Tomohiko; ISHIBASHI, Yukihide; ASAH, Tsuyoshi; KUBO, Takashi
- 4F2-19** Synthesis, properties, and photovoltaic characteristics of new  $\pi$ -conjugated copolymers having fluorine-containing benzodioxocycloalkene-annelated thiophene as acceptor units (Sch. Eng., Osaka Univ.) ○KISHIMOTO, Yota; MORIKAWA, Koki; IE, Yutaka; ASO, Yoshio

Friday, March 23, PM

Chair: NISHINAGA, Tohru (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(4F2-27, 4F2-29, 4F2-30, 4F2-31)
- 4F2-27<sup>#</sup>** Low amplified spontaneous emission threshold and efficient electroluminescence from organic dyes based on bisstilbene (OPERA, Kyushu Univ.) ○MAMADA, Masashi; FUKUNAGA, Toshiya; SANDANAYAKA S. D., Atula; ADACHI, Chihaya
- 4F2-29** Synthesis, Properties, and Photovoltaic Characteristics of Two-Dimensional Thienylenevinylene Oligomers with Focusing on Dielectric Constant (ISIR, Osaka Univ.) ○SAKAI, Taishi; MISHIMA, Kenji; IE, Yutaka; YAMASHITA, Koichi; ASO, Yoshio
- 4F2-30** Synthesis and properties of completely insulated oligothiophene molecular wires with self-doping structure (ISIR, Osaka Univ.) ○INOUE, Takuya; IE, Yutaka; ASO, Yoshio
- 4F2-31<sup>#</sup>** Construction and Properties of  $\pi$ -Conjugated System Based on Azaphenylene Derivatives (Grad. Sch. Eng., Kyoto Univ.) ○WATANABE, Hiroyuki; TANAKA, Kazuo; CHUJO, Yoshiki

Chair: TANAKA, Kazuo (14 : 30~15 : 10)

- \* 14:20-14:30: interval for laptop PC connection.(4F2-34, 4F2-36, 4F2-37)
- 4F2-34<sup>#</sup>** Control of Solid-state Fluorescent Properties of  $\pi$ -Conjugated Molecules by Non-covalent Bonding (IMCE, Kyushu Univ.) ○YOSHIOGO, Yusuke; YAMAKAWA, Takeshi; WANG, Zijia; KANAI, Motomu; KUNINOBU, Yoichiro
- 4F2-36** 5-Disilanylthiazoles: Synthesis and Elucidation of the Correlation between Substituents and Photophysical Properties. (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○YAMAGUCHI, Kirara; SHIRAKAWA, Eiji
- 4F2-37** Electronic Structures and Solvent Effects of Donor-Acceptor Type Molecule with Galvinol and Acridinium Cation in the Molecule (Grad. Sch. Sci., Osaka Univ.) ○NAGAOKA, Gen; HIRAO, Yasukazu; NISHIUCHI, Tomohiko; KUBO, Takashi

Chair: HIRAO, Yasukazu (15 : 20~16 : 00)

- \* 15:10-15:20: interval for laptop PC connection.(4F2-39, 4F2-40, 4F2-41,

4F2-42)

- 4F2-39** Control of Orbital Energies and Optical Properties in Sulfonylaniline-type Dye by using the Nodal Plane of the Frontier Orbitals (Grad. Sch. Sci., Eng., Yamagata Univ.) ○KUDO, Shoh; BEPPU, Teruo; KATAGIRI, Hiroshi
- 4F2-40** Control of third-order nonlinear optical properties of open-shell one-dimensional conjugated systems by introducing cyclooctatetraene (Grad. Sch. Eng. Sci., Osaka Univ.) ○NISHIGAKI, Yusuke; SHOTA, Takamuku; YAMANE, Masaki; TONAMI, Takayoshi; KISHI, Ryohei; NAKANO, Masayoshi
- 4F2-41** Synthesis and VCD Structural Analysis of Axial Chiral Carbodiimide (Grad. Sch. Life Sci., Hokkaido Univ.) TANIGUCHI, Tohru; ○SUZUKI, Takahiro; SATOH, Haruka; MONDE, Kenji
- 4F2-42** Studies on Characteristic VCD Properties of Azido and Cyano Groups: Insight into Novel Methodologies to Analyze the Structures of Chiral Molecules (Grad. Fac. Life Sci., Hokkaido Univ.; Sch. Sci., Hokkaido Univ.) ○TANIGUCHI, Tohru; KITAHARA, Takahiro; MONDE, Kenji

## Room F3

Bldg. 10 1033

### Physical Organic Chemistry -Structures and Properties-

Tuesday, March 20, PM

#### Macrocyclic compounds

Chair: AMAYA, Toru (12 : 40~13 : 40)

- \* 12:30-12:40: interval for laptop PC connection.(1F3-23, 1F3-25, 1F3-26, 1F3-27, 1F3-28)
- 1F3-23<sup>#</sup>** Synthesis of a cycloparaphenylene catenane (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○SEGAWA, Yasutomo; KUWAYAMA, Motonobu; FUSHIMI, Masako; NISHIHARA, Taishi; ITAMI, Kenichiro
- 1F3-25<sup>#</sup>** An Obtuse-angled Corner Unit for Fluctuating Carbon Nano hoops (Fac. Sci., The Univ. of Tokyo; Grad. Sch. Pharm. Sci., Tohoku Univ.) ○SUN, Zhe; MIYAMOTO, Naoya; SATO, Sota; TOKUYAMA, Hidetoshi; ISOBE, Hiroyuki
- 1F3-26** Cycloaddition Reaction of Cycloparaphenylenes with 1,2,4-Triazoline-3,5-dione (ICR, Kyoto Univ.) ○YAMAMOTO, Koji; KAYAHARA, Eiichi; YAMAGO, Shigeru
- 1F3-27** Transition metal mediated carbon-carbon bond activation of cycloparaphenylenes and its applications (ICR, Kyoto Univ.) ○HAYASHI, Toshiki; KAYAHARA, Eiichi; YAMAGO, Shigeru
- 1F3-28** Synthesis and Properties of Nitrogen-containing Macrocycles Incorporating Anthracene Units. (Fac. of Sci., Okayama Univ. of Sci.) ○IWANAGA, Tetsuo; YAMAUCHI, Tomokazu; KOMORI, Takashi; SUZUKI, Shuichi; TOYOTA, Shinji; SHIMAZAKI, Ai; WAKAMIYA, Atsushi; MURATA, Yasujiro

Chair: SEGAWA, Yasutomo (13 : 50~14 : 50)

- \* 13:40-13:50: interval for laptop PC connection.(1F3-30, 1F3-31, 1F3-32, 1F3-33, 1F3-35)
- 1F3-30** Novel oxidative rearrangement reaction of a cyclic carbazole derivative (Fac. Pharm., Keio Univ.) ○YASUI, Masamichi; HANAYA, Kengo; SUGAI, Takeshi; HIGASHIBAYASHI, Shuhei
- 1F3-31** Synthesis of spirobifluorene cyclic trimer (Sch. Eng., Osaka Univ.) AMAYA, Toru; ○ONIKI, Junpei; MORIUCHI, Toshiyuki; TOBISU, Mamoru
- 1F3-32** Synthesis of  $\pi$ -Conjugated Macrocycles by Sequential 1,2-Carboration (Lab. Chem. Life Sci., Tokyo Tech.) ○MATSUNAGI, Kenta; SHOJI, Yoshiaki; SHIGENO, Naoki; FUKUSHIMA, Takanori

#### Non-planar compounds

- 1F3-33<sup>#</sup>** Synthesis and properties of redox-responsive [10]cycloparaphenylene derivatives having hydro- and benzoquinone units (ICR, Kyoto Univ.) ○SUN, Liansheng; KAYAHARA, Eiichi; YAMAGO, Shigeru
- 1F3-35** Synthesis of multi-functionalized cycloparaphenylenes (CPPs) from hydroquinone-containing CPPs (ICR, Kyoto Univ.) ○NAKANO, Masaya; SUN, Liansheng; KAYAHARA, Eiichi; YAMAGO, Shigeru

Chair: FURUKAWA, Shunsuke (15 : 00~16 : 00)

- \* 14:50-15:00: interval for laptop PC connection.(1F3-37, 1F3-38, 1F3-39, 1F3-40, 1F3-41, 1F3-42)
- 1F3-37** Synthesis of cyclic  $\pi$ -conjugated molecules with electron deficient moieties (ICR, Kyoto Univ.) ○HASHIMOTO, Sigma; KAYAHARA, Eiichi; YAMAGO, Shigeru
- 1F3-38** Synthesis of An Axially Chiral Porphyrin Dimer and Its Chiroptical Properties Controlled by Bidentate Ligand (Grad. Sch. Sci. Eng., TMU)

○WATANABE, Risa; HARA, Nobuyuki; IMAI, Yoshitane; HASEGAWA, Masashi; SUGIURA, Kenichi

- 1F3-39** First Optical Resolution of Bianthracenol and Its Chiroptical Properties (Grad. Sch. Sci. Eng., TMU) ○AKIMOTO, Hisato; IMAI, Yoshitane; SUGIURA, Ken-ichi
- 1F3-40** Synthesis and chiroptical properties of chiral cyclic compounds based on dithienothiophene and [2,2]paracyclophane (Grad. Sch. Sci., Kitasato Univ.) ○OKIYAMA, Yuta; HASEGAWA, Masashi; MAZAKI, Yasuhiro
- 1F3-41** Precise Synthesis and Optical Properties of a Laterally-Extended Helicene Derivative with Large Helical Diameter (Grad. Sch. Eng., Kyoto Univ.) ○NAKAKUKI, Yusuke; HIROSE, Takashi; MATSUDA, Kenji
- 1F3-42** Enhanced yet Inverted Effects of  $\pi$ -Extension in Self-Assembly of Curved  $\pi$ -Systems with Helicity (The Univ. of Tokyo JST ERATO; Grad. Sch. Sci., Tohoku Univ.) ○KOGASHI, Kanako; MATSUNO, Taisuke; SATO, Sota; ISOBE, Hiroyuki

Chair: KAYAHARA, Eiichi (16 : 10~17 : 10)

\* 16:00-16:10: interval for laptop PC connection.(1F3-44, 1F3-46, 1F3-48, 1F3-49)

- 1F3-44**<sup>##</sup> Synthesis and Molecular Recognition of Nanometer-sized Geodesic Phenylene Bowl (Grad. Sch. Sci., The Univ. of Tokyo; ERATO, JST; WPI-AIMR, Tohoku Univ.) ○IKEMOTO, Koki; KOBAYASHI, Ryo; SATO, Sota; ISOBE, Hiroyuki
- 1F3-46**<sup>##</sup> Out-of-plane anisotropy of triphosphasumanene derivatives and their application to organic/metal interfaces (Grad. Sch. Sci., Eng., Saitama Univ.; Coll. of Liberal Arts, ICU; Grad. Sch. Sci., The Univ. of Tokyo; MCES, Tokyo Tech.; Grad. Sch. Sci., Eng., Tokyo Tech.) ○FURUKAWA, Shunsuke; SUDA, Yuki; KOBAYASHI, Junji; KAWASHIMA, Takayuki; TADA, Tomofumi; FUJII, Shintaro; KIGUCHI, Manabu; SAITO, Masaichi
- 1F3-48** Silylated Fullerenes Derived from Cycloaddition of an Isolable Dialkylsilylene (Grad. Sch. Sci., Tohoku Univ.) ○MORI, Maiko; ISHIDA, Shintaro; IWAMOTO, Takeaki
- 1F3-49** Synthesis and Properties of Cyclophanes Bearing Phenothiazine Bridged by Various Linkages (Sch. Sci. Tech., Gunma Univ.; Grad. Sch. Sci. Tech., Gunma Univ.) ○YAGAWA, Miyu; YAMAMOTO, Koji; NAKAMURA, Yosuke

Chair: ODA, Susumu (17 : 20~18 : 10)

\* 17:10-17:20: interval for laptop PC connection.(1F3-51, 1F3-52, 1F3-53, 1F3-54)

- 1F3-51** Synthesis and Physical Properties of Poly[5]helicene by the Polymerization of a Helicenylyl Aryne (Grad. Sch. Sci., Osaka Pref. Univ.) ○TAKAHASHI, Yusuke; TSURUSAKI, Akihiro; KAMIKAWA, Ken
- 1F3-52** Synthesis and Properties of Butterfly-shaped Non-substituted Biphenothiazine with an Embedded Hydrazine Structure (Fac. Sci. Tech., Keio Univ.; Fac. Pharm., Keio Univ.) ○SHINDO, Yuri; SAIKAWA, Yoko; NAKATA, Masaya; HANAYA, Kengo; SUGAI, Takeshi; HIGASHIBAYASHI, Shuhei
- 1F3-53** Synthesis and optical properties of chiral [7]helicene derivatives (Grad. Sch. Eng., Tokyo Denki Univ.) ○OTANI, Miho; MIYASAKA, Makoto
- 1F3-54**<sup>\*</sup> Synthesis of Azacirculene Derivatives by Oxidative Fusion Reactions (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TANAKA, Takayuki; CHEN, Fengkun; KISE, Koki; OSUKA, Atsuhiko

### Wednesday, March 21, AM

Chair: ITO, Shingo (9 : 00~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2F3-01, 2F3-03, 2F3-05, 2F3-06)

- 2F3-01**<sup>##</sup> Synthesis, Structures, and Ground State Mechanochromism of N-Phenyl Substituted Fluorenylidene-Acridane (Univ. Sci. Tech. China; Grad. Sch. Eng., The Univ. of Tokyo) ○MATSUO, Yutaka; WANG, Ya
- 2F3-03**<sup>\*</sup> Regioselective Diels-Alder Reaction to Open-cage Ketolactam Derivatives of C<sub>60</sub> (Grad. Sch. Fac. Sci., Kanagawa Univ.; IRC3, AIST) ○TANAKA, Teruhiko; TAKAHASHI, Toshikazu; FUKAYA, Norihisa; CHOI, Jun-chul; KABE, Yoshio
- 2F3-05** Synthesis and properties of azulene-fused isobenzothiophene helicene derivatives (IMCE, Kyushu Univ.; Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○TERAOKA, Takaaki; MURAFUJI, Toshihiro; GOTO, Kenta; TANI, Fumito
- 2F3-06** Synthesis and Physicochemical Properties of Twisted D-A-D  $\pi$ -Conjugated Molecule Consisting of Diaza[5]helicene as the Acceptor. (Sch. Eng., Osaka Univ.; University of Freiburg) ○IKARI, Yuta; BOVENKERK, Marcel; TAKEDA, Youhei; ESSER, Birgit; MINAKATA, Satoshi

Chair: TAKEDA, Youhei (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2F3-08, 2F3-09, 2F3-10, 2F3-11, 2F3-12)

- 2F3-08** Study of sumanenyl carbene (Grad. Sch. Eng., Osaka Univ.) ○WANG, Yufeng; YAKIYAMA, Yumi; SAKURAI, Hidehiro
- 2F3-09** Porous Coordination Network Composed of Sumanene Derivatives (Grad. Sch. Eng., Osaka Univ.) ○HASEGAWA, Takumi; YAKIYAMA, Yumi; SAKURAI, Hidehiro
- 2F3-10**<sup>#</sup> Development of a Method for Introducing Substituents to Azapenta-

benzocorannulenes (Fac. Eng., The Univ. of Tokyo) ○NAKAMURA, Kimihiro; NAGANO, Taro; TOKIMARU, Yuki; ITO, Shingo; NOZAKI, Kyoko

- 2F3-11** Synthesis and Properties of Liquid Crystalline Molecules Having an Azapentabenzocorannulene Core (Fac. Eng., The Univ. of Tokyo) ○NAGANO, Taro; MIYAJIMA, Daigo; ITO, Shingo; AIDA, Takuzo; NOZAKI, Kyoko
- 2F3-12**<sup>##</sup> Synthesis of nitrogen-containing curved polycyclic aromatic hydrocarbons via 1,3-dipolar cycloaddition to corannulene (Grad. Sch. Eng., The Univ. of Tokyo) ○TOKIMARU, Yuki; ITO, Shingo; NOZAKI, Kyoko

Chair: KAWASE, Takeshi (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2F3-15)

- 2F3-15** CSJ Award for Creative Works Synthesis, Properties and Applications of Molecular Nanocarbons (WPI-ITbM, Nagoya Univ.; ERATO, JST) ○ITAMI, Kenichiro

### Wednesday, March 21, PM

Chair: MURATA, Yasujiro (14 : 00~14 : 40)

- \* 13:50-14:00: interval for laptop PC connection.(2F3-31, 2F3-32, 2F3-33)
- 2F3-31** Synthesis of azauckybowls with metal-binding sites (Sch. Eng., Nagoya Univ.) ○YOKOTA, Tomoya; HIROTO, Satoru; SHINOKUBO, Hiroshi
- 2F3-32** Synthesis of D-A type molecules containing bowl-shaped donor (Sch. Eng., Nagoya Univ.) ○TANAKA, Yuki; HIROTO, Satoru; SHINOKUBO, Hiroshi
- 2F3-33**<sup>\*</sup> Synthesis and Properties of Non-planar Expanded Azacoronene Derivatives (Grad. Sch. Sci., Eng., Ehime Univ.) ○OKI, Kosuke; TAKASE, Masayoshi; MORI, Shigeki; OKUJIMA, Tetsuo; UNO, Hidemitsu

Chair: HIROTO, Satoru (14 : 50~15 : 40)

\* 14:40-14:50: interval for laptop PC connection.(2F3-36, 2F3-38, 2F3-39, 2F3-40)

- 2F3-36**<sup>##</sup> Synthesis and Properties of a Quintuple [6]Helicene with a Corannulene Core (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST; Boston College) ○KATO, Kenta; SEGAWA, Yasutomo; SCOTT, Lawrence T.; ITAMI, Kenichiro
- 2F3-38** Synthesis of Metal Complexes of Fullerene C60 and Dynamic Behavior of the Encapsulated Water Molecule (ICR, Kyoto Univ.) ○KAWASAKI, Hiroto; HASHIKAWA, Yoshifumi; WAKAMIYA, Atsushi; MURATA, Yasujiro
- 2F3-39** Synthesis and Characterization of a Hydroxy Open-Cage C60 Derivative Having H-Bondings (ICR, Kyoto Univ.) ○HASEGAWA, Shota; HASHIKAWA, Yoshifumi; WAKAMIYA, Atsushi; MURATA, Yasujiro
- 2F3-40** Regioselective Functionalization of Fullerene C60 Derivatives Using a Palladium Catalyst (ICR, Kyoto Univ.) ○HASHIKAWA, Yoshifumi; MURATA, Michihisa; WAKAMIYA, Atsushi; MURATA, Yasujiro

### Porphyrin

Chair: SHIMIZU, Soji (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2F3-42, 2F3-43, 2F3-44, 2F3-45, 2F3-46, 2F3-47)

- 2F3-42** Synthesis and properties of *meso*-linked hetero-metal porphyrin arrays aimed at the single-molecule conductance study (Graduate School of Science, Osaka University) ○GOTO, Yusuke; TANI, Yosuke; YAMASHITA, Ken-ichi; OGAWA, Takuji
- 2F3-43** Synthesis of pyridinium-chlorophyll derivatives and their physical properties (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; ○TAKAHASHI, Tatsuya; OGASAWARA, Shin
- 2F3-44** Synthesis of chlorophyll derivatives linked with a chalcone moiety at the C3 position and the substituent effects on their optical properties (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○OHASHI, Kota; KINOSHITA, Yusuke; TAMIAMI, Hitoshi
- 2F3-45** Construction of light-harvesting models by self-aggregation of porphyrin-type chlorophyll derivatives (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○MATSUBARA, Shogo; TAMIAMI, Hitoshi
- 2F3-46** Synthesis of a beta-Divinylporphyrin and its Oligomerization Using Olefin Metathesis (Grad. Sch. Pharm. Sci., Chiba Univ.) ○KAMO, Taichi; YONEDA, Tomoki; HOSHINO, Tyuji; NEYA, Saburo
- 2F3-47** Synthesis and metal coordination of brominated tripyrins (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) IMAFUKU, Masato; NISHIGAICHI, Yutaka; ○SUZUKI, Masaaki

Chair: TAMIAMI, Hitoshi (17 : 00~17 : 40)

\* 16:50-17:00: interval for laptop PC connection.(2F3-49, 2F3-51)

- 2F3-49**<sup>##</sup> Synthesis and Chiroptical Properties of Copper N-Confused Corrole Dimers (Grad. Sch. Eng., Kyushu Univ.) ○MAURYA, Yogesh Kumar; ISHIDA, Masatoshi; FURUTA, Hiroyuki
- 2F3-51**<sup>##</sup> Synthesis and Photophysical Properties of Bis-Palladium Complexes of Doubly N-Confused Calix[6]phyrin(1.1.1.1.1.1) (Grad. Sch. Eng., Kyushu Univ.) ○PUSHPANANDAN, Poornenth; ISHIDA, Masatoshi; FURUTA, Hiroyuki

## Thursday, March 22, AM

Chair: YONEDA, Tomoki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3F3-01, 3F3-03, 3F3-04, 3F3-05)

**3F3-01\*** Synthesis of Benzenorcorroles Showing Strong Antiaromaticity and Diradical Character (Grad. Sch. Eng., Nagoya Univ.; Grad. Sch. Mat. Sci., NAIST; Grad. Sch. Fac. Sci. Eng., Shimane Univ.; Grad. Sch. Eng. Sci., Osaka Univ.; Dept. Chem., Yonsei Univ.) ○YOSHIDA, Takuya; TAKAHASHI, Kohtaro; IDE, Yuki; KISHI, Ryohei; FUJIYOSHI, Jun-ya; LEE, Sangsu; HIRAOKA, Yuya; KIM, Dongho; NAKANO, Masayoshi; IKEUE, Takahisa; YAMADA, Hiroko; SHINOKUBO, Hiroshi

**3F3-03** Synthesis and properties of a norcorrole cyclophane (Grad. Sch. Eng., Nagoya Univ.) ○NOZAWA, Ryo; HISAKI, Ichiro; SHINOKUBO, Hiroshi

**3F3-04** Synthesis and physical properties evaluation of 1,3,5-triporphyrinyl benzene tri meso-oxy radical (Dep. Chem., Sch. Sci., Kyoto Univ.; Center for Inst. Anal., Niigata Univ.) ○YAMAMOTO, Takayuki; SHIMIZU, Daiki; FURUKAWA, Ko; OSUKA, Atsuhiko

**3F3-05\*** Oxidative conversion of  $\beta$ -to- $\beta$  linked meso-aminoporphyrin dimers to nitrogen-containing  $\pi$ -extended porphyrins (Dep. Chem., Sch. Sci., Kyoto Univ.) ○FUJIMOTO, Keisuke; OSUKA, Atsuhiko

Chair: SHINOKUBO, Hiroshi (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3F3-08, 3F3-09, 3F3-10, 3F3-12)

**3F3-08** Synthesis and properties of  $\beta$ -alkyl-meso-aryl substituted sapphyrin (Grad. Sch. Pharm. Sci., Chiba Univ.) ○MORI, Daiki; YONEDA, Tomoki; HOSHINO, Tyuji; NEYA, Saburo

**3F3-09** Synthesis and Characterization of a meso-beta Substituted Dihydrohomoporphyrin and its Metal Complexes (Grad. Sch. Pharm. Sci., Chiba Univ.) ○INADERA, Miyuki; YONEDA, Tomoki; HOSHINO, Tyuji; NEYA, Saburo

**3F3-10\*\*** Synthesis of novel heteroporphyrinoids using dibromotripyrrin as a precursor (Dep. Chem., Sch. Sci., Kyoto Univ.) ○UMETANI, Masataka; TANAKA, Takayuki; OSUKA, Atsuhiko

**3F3-12\*** Effects of Inserted Substituents on the Properties of Porphyrin Arch-tape Dimers (Dep. Chem., Sch. Sci., Kyoto Univ.) ○FUKUI, Norihito; OSUKA, Atsuhiko

Chair: MAEDA, Chihiro (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3F3-15, 3F3-17, 3F3-19)

**3F3-15\*\*** Trimethylenemethane Stabilized by Embedding in Porphyrin-based Fused  $\pi$ -Framework (Dep. Chem., Sch. Sci., Kyoto Univ.; Center for Inst. Anal., Niigata Univ.) ○KATO, Kenichi; FURUKAWA, Ko; OSUKA, Atsuhiko

**3F3-17\*** Stable Diporphyrinyl-Aminyl Radical and Nitrenium Ion (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SHIMIZU, Daiki; OSUKA, Atsuhiko

**3F3-19\*\*** Magnesium Tetraethynylporphyrins Linked with Diketopyrrolopyrroles for Small Molecule Organic Solar Cells (Grad. Sch. Eng., The Univ. of Tokyo; Univ. Sci. Tech. China) ○NAKAGAWA, Takafumi; OGUMI, Keisuke; OKADA, Hiroshi; WANG, Huan; MATSUO, Yutaka

## Thursday, March 22, PM

Chair: MAEDA, Hajime (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3F3-28, 3F3-29, 3F3-31, 3F3-32, 3F3-33)

**3F3-28** Template Synthesis of Cyclic Porphyrin Hexamer (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) MAEDA, Chihiro; ○TOYAMA, Shoki; TAKAISHI, Kazuto; EMA, Tadashi

**3F3-29\*** Synthesis of Carbazole-Based Porphyrin Arrays (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MAEDA, Chihiro; TAKATA, Mototsugu; HONSHO, Asami; TAKAISHI, Kazuto; EMA, Tadashi

**3F3-31** Synthesis and Properties of Quadruply-Twisted Hückel Aromatic Molecules (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SOYA, Takanori; OSUKA, Atsuhiko

**3F3-32** Synthesis of alkyl-bridged hexaphyrin dimer (Dep. Chem., Sch. Sci., Kyoto Univ.) ○NAKAI, Akito; YONEDA, Tomoki; ISHIDA, Shin-ichiro; OSUKA, Atsuhiko

**3F3-33<sup>#</sup>** BINOL coordinated Tin(IV) Porphyrins (Grad. Sch. Sci. Eng., TMU) ○RAHMAN, Md Moshir; SUGIURA, Ken-ichi

Chair: ISHIZUKA, Tomoya (14 : 40 ~ 15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3F3-35, 3F3-36, 3F3-37, 3F3-38, 3F3-39, 3F3-40)

**3F3-35<sup>#</sup>** Synthesis and properties of *N*-methyl-5,15-diazaporphyrin (Sch. Eng., Nagoya Univ.) ○CHIA, Wen Xi; NISHIMURA, Tsubasa; OMORI, Hiroto; SHINOKUBO, Hiroshi

**3F3-36** Synthesis and properties of porphyrinoids having sulfonyl groups at meso positions (Grad. Sch. Eng., Nagoya Univ.) ○YAMASHITA, Daisuke; OOMORI, Hiroto; WACHI, Naruhiko; KONDO, Tsuyosi; SHINOKUBO, Hiroshi

**3F3-37** Synthesis and Properties of Tetraazaporphyrin Substituted with

Aggregation-Induced Emission Active Moieties (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○YANAGISAWA, Ryo; SHINOZAKI, Junichi; MAEDA, Hajime; SEGI, Masahito; FURUYAMA, Taniyuki

**3F3-38** Functionalization of Near Infrared Phthalocyanines and Their Physical Properties (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○IWAMOTO, Takayuki; MAEDA, Hajime; SEGI, Masahito; FURUYAMA, Taniyuki

**3F3-39** Synthesis and characterization of meso-nitrogen-embedded subporphyrins (Dep. Chem., Sch. Sci., Kyoto Univ.) ○KISE, Koki; OSUKA, Atsuhiko

**3F3-40** Synthesis of Novel meso-Functionalized Subporphyrin through meso-Lithiation (Dep. Chem., Sch. Sci., Kyoto Univ.) ○BEKKI, Yosuke; SHIMIZU, Daiki; FUJIMOTO, Keisuke; OSUKA, Atsuhiko

Chair: SHIMIZU, Soji (15 : 50 ~ 16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(3F3-42, 3F3-43, 3F3-45, 3F3-46)

**3F3-42** Synthesis of a Porphyrin Derivative Having Bulky Substituents at the Periphery and Selective Formation of Its Atoropisomers (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○TANAKA, Shogo; ISHIZUKA, Tomoya; KOTANI, Hiroaki; KOJIMA, Takahiko

**3F3-43\*** Formation of multi-electron-reduced dodecaphenylporphyrins and their reactivity (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○SUZUKI, Wataru; KOTANI, Hiroaki; ISHIZUKA, Tomoya; KOJIMA, Takahiko

**3F3-45** Synthesis of Novel 2NH-Corroles utilizing meso-Substituents and its Characterization (Dep. Chem., Sch. Sci., Kyoto Univ.) ○UETA, Kento; TANAKA, Takayuki; OSUKA, Atsuhiko

**3F3-46\*** Gallium complexes of triply linked corrole dimers and the appearance of their diradical character (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OOI, Shota; SHIMIZU, Daiki; TANAKA, Takayuki; OSUKA, Atsuhiko

Chair: TANAKA, Takayuki (17 : 00 ~ 18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(3F3-49, 3F3-50, 3F3-51, 3F3-53)

**3F3-49** Synthesis and property of mono-TTF-annelated phthalocyanine  $\mu$ -oxo dimer (Grad. Sch. Eng., Kyushu Univ.) ○HIEIDA, Taito; FURUTA, Hiroyuki; SHIMIZU, Soji

**3F3-50** Synthesis and Properties of Antiaromatic 5,15-Dioxaporphyrin and its  $\beta$ ,  $\beta$ -Linked Dimer (Grad. Sch. Eng., Kyushu Univ.) ○NISHIYAMA, Akihide; FUKUDA, Masaya; MORI, Shigeki; FURUTA, Hiroyuki; SHIMIZU, Soji

**3F3-51\*\*** Development of a Novel Blackened Porphyrinoid by N-Confusion Modification and Hetero-Metallation (Grad. Sch. Eng., Kyushu Univ.) ○WANG, Yue; TOMIHA, Daisuke; ISHIDA, Masatoshi; FURUTA, Hiroyuki

**3F3-53\*\*** Synthesis of Thiophene-fused Thiahexaphyrin and Its Möbius Aromaticity (Grad. Sch. Eng., Kyoto Univ.; WPI-iCeMS, Kyoto Univ.) ○HIGASHINO, Tomohiro; KUMAGAI, Atsushi; IMAHORI, Hiroshi

## Friday, March 23, AM

Chair: TAKASE, Masayoshi (9 : 20 ~ 10 : 10)

\* 9:10-9:20: interval for laptop PC connection.(4F3-03, 4F3-05, 4F3-07)

**4F3-03\*** Synthesis of Metal Complexes of Hexaphyrin(2.1.2.1.2.1) (Fac. Eng., Iwate Univ.; Grad. Sch. Mat. Sci., NAIST) ○KUZUHARA, Daiki; XUE, Songlin; ARATANI, Naoki; YAMADA, Hiroko

**4F3-05\*\*** One-Step Synthesis of Porphyrin(2.1.2.1) Nanobelt (Grad. Sch. Mat. Sci., NAIST; Fac. Eng., Iwate Univ.) ○XUE, Songlin; KUZUHARA, Daiki; ARATANI, Naoki; YAMADA, Hiroko

**4F3-07** Synthesis of nonplanar tetrabenzoporphyrin derivatives (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○KINAGA, Koji; NISHIGAICHI, Yutaka; ○SUZUKI, Masaaki

Chair: ARATANI, Naoki (10 : 20 ~ 11 : 10)

\* 10:10-10:20: interval for laptop PC connection.(4F3-09, 4F3-10, 4F3-11, 4F3-12, 4F3-13)

**4F3-09** Synthesis and properties of rare-earth complexes with multiple fused-diporphyrins (Graduate School of Science, Osaka University) ○OGAWA, Kaya; YAMASHITA, Ken-ichi; TANI, Yosuke; LEE, Sunri; SAKATA, Naoya; OGAWA, Takuji

**4F3-10** Synthesis, structure and physical properties of dinuclear heavy rare earth triple-decker porphyrin complexes (Graduate School of Science, Osaka University) ○YAMANAKA, Takayo; YAMASHITA, Ken-ichi; OGAWA, Takuji

**4F3-11** Reduction of  $\beta$ -tetracyanodithiaporphyrin derivatives (Graduate School of Science, Osaka University) ○NAKAJIMA, Kana; YAMASHITA, Ken-ichi; OGAWA, Takuji

**4F3-12** Synthesis and Properties of 1,5-Diazafulvalenes (Grad. Sch. Sci., Eng., Ehime Univ.) ○OKUJIMA, Tetsuo; MATSUZAKI, Yuya; SHIDA, Yoichi; MORI, Shigeki; NAKAE, Takahiro; TAKASE, Masayoshi; UNO, Hidemitsu

**4F3-13** Synthesis and properties of self-assembling HPHAC at both neutral and radical cation states (Grad. Sch. Sci., Eng., Ehime Univ.) ○SASAKI, Yoshiki; TAKASE, Masayoshi; NISHINAGA, Tohru; MORI, Shigeki;

OKUJIMA, Tetsuo; UNO, Hidemitsu

Chair: MORI, Shigeki (11 : 20~12 : 00)

- \* 11:10-11:20: interval for laptop PC connection.(4F3-15, 4F3-16, 4F3-17)
- 4F3-15** Synthesis of meso-tetrathienyl porphycene and  $\pi$ -extension by intramolecular annulation reaction (Grad. Sch. Eng., Kyushu Univ.)  
○MATSUSHITA, Yuta; KOIDE, Taro; ONO, Toshikazu; SHIMAKOSHI, Hisashi; HISAEDA, Noshio
- 4F3-16** Synthesis of novel porphycenes fused with azulenes (IMCE, Kyushu Univ.)  
○KAWANO, Yuta; KOIDE, Taro; MURAFUJI, Toshihiro; GOTO, Kenta; TANI, Fumito
- 4F3-17**<sup>##</sup> Substituent Effect on Oxidative Dimerization of beta-aminoporphyrins (Grad. Sch. Eng., Nagoya Univ.)  
○HIROTO, Satoru; ITO, Satoru; TSUBOI, Hideo; SHINOKUBO, Hiroshi

Friday, March 23, PM

## Semiconductor

Chair: NISHIHARA, Yasushi (13 : 10~13 : 50)

- \* 13:00-13:10: interval for laptop PC connection.(4F3-26, 4F3-28, 4F3-29)
- 4F3-26**<sup>##</sup> Fluorinated Naphtho[1,2-c:5,6-c']bis[1,2,5]thiadiazole-based Non-fullerene Electron Acceptor for Organic Solar Cell (ISIR, Osaka Univ.)  
○CHATTERJEE, Shreyam; IE, Yutaka; ASO, Yoshio
- 4F3-28** Synthesis, Properties, and photovoltaic characteristics of n-type semiconducting polymers based on fluorinated naphthobisthiadiazole (ISIR, Osaka Univ.)  
○IZUNO, Kakeru; IE, Yutaka; ASO, Yoshio
- 4F3-29** Synthesis and Charge-Transport Properties of Thiophene-Fused Nanographene Semiconductors (IFRC, Kyushu Univ.; Fac. Eng., Kyushu Univ.)  
○KOJIGUCHI, Yuka; MATSUO, Kyohei; YASUDA, Takuma

Chair: YASUDA, Takuma (14 : 00~14 : 50)

- \* 13:50-14:00: interval for laptop PC connection.(4F3-31, 4F3-33, 4F3-35)
- 4F3-31**<sup>\*</sup> Synthesis and Properties of Tetrazolopyridine-Containing  $\pi$ -Conjugated Compounds for n-Type Organic Semiconductors (ISIR, Osaka Univ.)  
○TAMBA, Shunsuke; TANAKA, Hikaru; HAGIYA, Kazutaka; IE, Yutaka; ASO, Yoshio
- 4F3-33**<sup>##</sup> Selective synthesis and transistor application of isomeric bisbenzothienobenzodithiophene derivatives (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; RIIS, Okayama Univ.)  
○NISHINAGA, Shuhei; MORI, Hiroki; NISHIHARA, Yasushi
- 4F3-35**<sup>\*</sup> Synthesis of Alkylated Dinaphthoanthradithiophene and Its Application to Organic Field-Effect Transistors (RIIS, Okayama Univ.; Grad. Sch. Nat. Sci. Technol., Okayama Univ.)  
○SAWANAKA, Yuta; TOYAMA, Ryota; MORI, Hiroki; NISHIHARA, Yasushi

## Room F4

Bldg. 10 1041

## Physical Organic Chemistry -Structures and Properties-

Tuesday, March 20, PM

## Supramolecular metal complex

Chair: NAKAMURA, Takashi (12 : 30~13 : 30)

- \* 12:20-12:30: interval for laptop PC connection.(1F4-22, 1F4-23, 1F4-24, 1F4-25, 1F4-26, 1F4-27)
- 1F4-22** Encapsulation and Stabilization of Oligo(Lactic Acid)s within an Anthracene-shelled Coordination Capsule in Water (Lab. Chem. Life Sci., Tokyo Tech.)  
○SHUNSUKE, Kusaba; MASHAHIRO, Yamashina; MICHITO, Yoshizawa; MUNETAKA, Akita
- 1F4-23** Construction of Coordination Cages Bearing Anthracene-based Asymmetric Ligands (Lab. Chem. Life Sci., Tokyo Tech.)  
○TSUTSUI, Takahiro; KUSABA, Syunsuke; YOSHIZAWA, Michito; AKITA, Munetaka
- 1F4-24** A Transformable Coordination Double Capsule/Tube with Multiple Anthracene Panels (Lab. Chem. Life Sci., Tokyo Tech.)  
○MATSUMOTO, Kyosuke; KUSABA, Shunsuke; YOSHIZAWA, Michito; AKITA, Munetaka
- 1F4-25** Self-Assembly and Chiral Self-Sorting Processes of a Pd<sub>2</sub>L<sub>4</sub> Cage Complex Constructed from Ditopic Ligands with Axial Chirality (Grad. Sch. Arts and Sci., The Univ. of Tokyo)  
○TATEISHI, Tomoki; KOJIMA, Tatsuo; HIRAOKA, Shuichi
- 1F4-26**<sup>##</sup> Counter anion of metal source alters the self-assembly mechanism of Pd<sub>2</sub>L<sub>4</sub> coordination cages (Grad. Sch. Arts and Sci., The Univ. of Tokyo)  
○TAKESHIGE, Leonardo Hayato; ZHU, Wenchao; TATEISHI, Tomoki; KOJIMA, Tatsuo; KAI, Shumpei; AKAGI, Shota; HIRAOKA, Shuichi
- 1F4-27**<sup>##</sup> Self-assembly of a Pd<sub>4</sub>L<sub>8</sub> Double-walled Square Partly Takes Place through the Formation of Kinetically Trapped Species (Grad. Sch. Arts and Sci., The Univ. of Tokyo)  
TATEISHI, Tomoki; ○ZHU, Wenchao; TAKESHIGE, Leonardo Hayato; KOJIMA, Tatsuo; HIRAOKA, Shuichi

Chair: YAMASHINA, Masahiro (13 : 40~14 : 30)

- \* 13:30-13:40: interval for laptop PC connection.(1F4-29, 1F4-30, 1F4-31, 1F4-32, 1F4-33)
- 1F4-29** Stability Control of an Enzyme by Spatial Isolation Strategy (Grad. Sch. Eng., The Univ. of Tokyo)  
○SUZUKI, Ryoto; FUJITA, Daishi; FUJITA, Makoto
- 1F4-30** Construction of a Self-assembled Coordination Cage Transformable by Cycloaddition (Grad. Sch. Eng., The Univ. of Tokyo)  
○TAMURA, Yukari; TAKEZAWA, Hiroki; FUJITA, Makoto
- 1F4-31** A self-assembled peptide complex with figure-of-eight knot topology (Grad. Sch. Eng., The Univ. of Tokyo)  
○AKINAGA, Shuji; SAWADA, Tomohisa; FUJITA, Makoto
- 1F4-32**<sup>##</sup> Demethylation of cyclopropanes via photo-induced guest-to-host electron transfer in a M<sub>6</sub>L<sub>4</sub> cage (Grad. Sch. Eng., The Univ. of Tokyo)  
○CULLEN, William; TAKEZAWA, Hiroki; FUJITA, Makoto
- 1F4-33** Structure and Properties of a Petanuclear Metallonanobelt Constructed by Template-directed Self-assembly of a Rigid Bent Ligand (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.)  
○YAMAMOTO, Ryoichi; SAKATA, Yoko; AKINE, Shigehisa

Chair: AKINE, Shigehisa (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1F4-35, 1F4-38, 1F4-39, 1F4-40)
- 1F4-35**<sup>##</sup> CSJ Award for Young Chemists Creation of Higher-order Peptidic Nanostructures by Concerted Folding and Assembly (Grad. Sch. Eng., The Univ. of Tokyo)  
○SAWADA, Tomohisa
- 1F4-38** Synthesis of a Macrocyclic Hexanuclear Palladium Complex Possessing Coordination Sites in the Inner Cavity and Its Structural Change Upon Molecular Binding (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba)  
○NAGAI, Akira; NAKAMURA, Takashi; NABESHIMA, Tatsuya
- 1F4-39** Synthesis and Function of Macrocyclic Saloph-Belt Complexes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba)  
○TSUKUDA, Shinnosuke; NAKAMURA, Takashi; NABESHIMA, Tatsuya
- 1F4-40** Construction of Supramolecular Tetrahedral Cages Utilizing Triple-helix Complexes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba)  
○MUTO, Keita; MATSUOKA, Ryota; NABESHIMA, Tatsuya

## Self-assembly

Chair: SAWADA, Tomohisa (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1F4-42, 1F4-43, 1F4-44, 1F4-46)
- 1F4-42** Synthesis of Anion-Responsive Molecules Comprising  $\pi$ -Extended Pyrrole Units (Coll. Life Sci., Ritsumeikan Univ.)  
MAEDA, Hiromitsu; ○SUGIURA, Shinya
- 1F4-43** Ion-Pairing Assemblies of  $\pi$ -Electronic Anions Formed by Intramolecular Hydrogen Bonding (Coll. Life Sci., Ritsumeikan Univ.)  
○TAKEDA, Yuka; MAEDA, Hiromitsu
- 1F4-44**<sup>##</sup> Bidirectional Allosteric Regulation of Guest Encapsulation on a Metal-Organic Capsule Paneled with Zinc Porphyrins (Grad. Sch. Sci., The Univ. of Tokyo)  
○ENDO, Kenichi; UBE, Hitoshi; SHIONOYA, Mitsuhiko
- 1F4-46**<sup>##</sup> Ion-Pairing Assemblies Comprising  $\pi$ -Electronic Anions Formed by Deprotonation of Acid Unit (Coll. Life Sci., Ritsumeikan Univ.)  
○SASANO, Yoshifumi; MAEDA, Hiromitsu

Chair: UBE, Hitoshi (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1F4-49, 1F4-51, 1F4-53, 1F4-54)
- 1F4-49**<sup>##</sup> Assembling Planer-Chiral Ferrocene Ligand into Ultra-large Helical Nanotubes (Grad. Sch. Eng., The Univ. of Tokyo)  
○KAWANO, Hiroki; YAMAGISHI, Hiroshi; ODOI, Kakeru; FUKINO, Takahiro; AIDA, Takuzo
- 1F4-51**<sup>\*</sup> Specific effects of tripodal triptycene units that affect self-assembly behavior and physical properties of polymers (Lab. Chem. Life Sci., Tokyo Tech.)  
○ISHIWARA, Fumitaka; OKABE, Gen; LIU, Haonan; OGIWARA, Hibiki; YAMASHITA, Yukihiko; KIMURA, Tadahiyo; KAJITANI, Takashi; FUKUSHIMA, Takanori
- 1F4-53** Preparation and  $\pi$ -Stacking Self-Assembly of 2,6-Pyridylene and 2,6-Pyrazylene Alternating Macrocyclic (Grad. Sch. Pharm. Sci., Univ. of Toyama; Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.)  
○SUZUKI, Daiki; ABE, Hajime; MINAMI, Takaya; MATSUMOTO, Shinya; INOUE, Masahiko
- 1F4-54** Morphology Control and Photophysical Properties of Pentacene Derivatives Possessing Long-Chain Substituents (Grad. Sch. Sci. Tech., Keio Univ.)  
○YOSHINO, Keisuke; SAKAI, Hayato; SYOJI, Yoshiaki; KAJITANI, Takashi; FUKUSHIMA, Takanori; ANETAI, Yuto; AKUTAGAWA, Tomoyuki; HO, Ko; TAKENOBU, Taishi; TKACHENKO, Nikolai; HASOBE, Taku

Wednesday, March 21, AM

## Organic Radicals

Chair: Matsuda, Kenji (9 : 20 ~ 10 : 00)

- \* 9:10-9:20: interval for laptop PC connection.(2F4-01, 2F4-03, 2F4-04, 2F4-05)
- 2F4-01**\*<sup>#</sup> Withdrawn
- 2F4-03** Magnetic Properties of Biradicals Having Close Contact Paramagnetic Chromophores (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○KOIZUMI, Naoki; ISHIDA, Takayuki
- 2F4-04** Unique Color Change of Phenothiazine Radical Cation Salt by Structural Phase Transition (Grad. Sch. Eng. Sci., Osaka Univ.) ○MAYA, Ryochi; SUZUKI, Shuichi; UCHIDA, Yoshiaki; NAOTA, Takeshi
- 2F4-05**\* Rechargeable Battery with 100% Cathode-active Material: Application of Conductive  $\pi$ -Stacked Structure of a Stable Organic Neutral Radical (Fac. Eng., Aichi Inst. of Tech.; KFTRAL, KANEKA CORP.) ○MURATA, Tsuyoshi; ITO, Hiroshi; MORITA, Miwa; TSUJI, Ryotaro; MORITA, Yasushi

## Organic Conductors/Semiconductors

Chair: MURATA, Tsuyoshi (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(2F4-08, 2F4-09, 2F4-11)
- 2F4-08** Structural and physical properties in (EDO-TTF-1)<sub>2</sub>XF<sub>6</sub> (X = P, As, Sb) based on iodine-containing donor molecule (Dep. Chem., Sch. Sci., Kyoto Univ.) ○ISHIDA, Kohdai; TAKAHASHI, Yuhsuke; NAKANO, Yoshiaki; ISHIKAWA, Manabu; YAMACHI, Hideki; URUICHI, Mikio
- 2F4-09**\*<sup>#</sup> Acenedithiophenediones as new electron-deficient  $\pi$ -building blocks (Grad. Sch. Sci., Tohoku Univ.; RIKEN CEMS) ○KAWABATA, Kohsuke; TAKIMIYA, Kazuo
- 2F4-11**\*<sup>#</sup> Control of Molecular Orientation in Rylene Diimides (ICR, Kyoto Univ.) ○NAKAMURA, Tomoya; SHIOYA, Nobutaka; SHIMOAKA, Takafumi; HASEGAWA, Takeshi; MURATA, Yasujiro; WAKAMIYA, Atsushi

Chair: WAKAMIYA, Atsushi (11 : 10~11 : 50)

- \* 11:00-11:10: interval for laptop PC connection.(2F4-14, 2F4-15, 2F4-16, 2F4-17)
- 2F4-14** Synthesis and Application to Field-Effect Transistors of Zigzag-Shaped Chryseno[2,1-b:8,7-b']dithiophene Semiconducting Molecules Having Phenyl Groups. (Grad. Sch. Frontier Sci., The Univ. of Tokyo) ○KOYAMA, Yasuaki; MITANI, Masato; SATO, Hiroyasu; YAMANO, Akihito; ISHII, Hiroyuki; KUROSAWA, Tadanori; TAKEYA, Junichi; OKAMOTO, Toshihiro
- 2F4-15** Synthesis and charge transport property of acene oligomers (Grad. Sch. Mat. Sci., NAIST) KAWANO, Koki; ○HAYASHI, Hironobu; YAMADA, Hiroko
- 2F4-16** Preparation and physical properties of phthalimide compounds with extended acene and oligomer units. (Grad. Sch. Eng., Univ. of Hyogo) ○HASHIMOTO, Akito; NISHIDA, Jun-ichi; KAWASE, Takeshi
- 2F4-17** Photoswitching of the transistor properties of diarylethene organic semiconductor by controlling charge injection barrier (Grad. Sch. Eng., Kyoto Univ.; MANA, NIMS) ○SHIMADA, Shinya; HIGASHIGUCHI, Kenji; HAYAKAWA, Ryoma; KUROKAWA, Yuka; WAKAYAMA, Yutaka; MATSUDA, Kenji

Wednesday, March 21, PM

## Supramolecular Chemistry

Chair: YAMAUCHI, Kosei (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(2F4-25, 2F4-26, 2F4-27, 2F4-28, 2F4-29, 2F4-30)
- 2F4-25** Syntheses and physical properties of chlorophyll-quinone conjugates by Diels-Alder reaction (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○FUNAYAMA, Naoya; TAMIAMI, Hitoshi
- 2F4-26** Syntheses and optical properties of *meso*-linked dyads of chlorophyll-*a* and bacteriochlorophyll-*a* derivatives (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○NOMURA, Yosaku; SHOJI, Sunao; TAMIAMI, Hitoshi
- 2F4-27** Synthesis of metal complexes using oligoisopyrazole ligands bearing convergent and divergent interaction sites. (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○UESAKA, Mitsuharu; YOSHIOKA, Shota; INOKUMA, Yasuhide
- 2F4-28** Research on self-assembly of flexible oligoisopyrazole ligands (Sch. Eng., Hokkaido Univ.) ○ASHIDA, Yoshiko; YOSHIOKA, Shota; INOKUMA, Yasuhide
- 2F4-29** Synthesis and physical properties of an amphiphilic 3-acetyl-chlorin and its complexes with transition metals (Fac. Sci. Tech., Ryukoku Univ.; Grad. Sch. Life Sci., Ritsumeikan Univ.) ○SASAKI, Taka-aki; TAMIAMI, Hitoshi; MIYATAKE, Tomohiro
- 2F4-30** Synthesis and properties of N<sub>2</sub>O-type chiral BODIPY dimer (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba) ○GOBO, Yuki; NABESHIMA, Tatsuya

Chair: MAEDA, Hiromitsu (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(2F4-32, 2F4-35, 2F4-37)
- 2F4-32** Young Scholar Lectures of CSJ Design of Organic Conjugated Materials and Contactless Microwave-Based Evaluation of Their Charge Carrier Transport Properties (Grad. Sch. Eng., Kyoto Univ.) ○SAKURAI, Tsuneaki
- 2F4-35**\* Metal-Driven Assembly of Benzene-Centered Tridentate Ligands and Their Chiroptical Properties (Grad. Sch. Chem. Sci. Technol., TUS; PRESTO, JST) ○IMAI, Yuki; YUASA, Junpei
- 2F4-37** Metal-Driven Assembly of Anthraquinone Bridging Ligands with Electron-Acceptor Properties (Grad. Sch. Sci., TUS; PRESTO, JST) ○ISEKI, Shuta; NONOMURA, Kohei; IMAI, Yuki; YUASA, Junpei

Chair: OGI, Soichiro (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(2F4-39, 2F4-40, 2F4-41, 2F4-42, 2F4-43)
- 2F4-39** Synthesis and properties of Zinc-coordinated cyclic dipyrins (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba) ○HOJO, Tomohiro; MATSUOKA, Ryota; NABESHIMA, Tatuya
- 2F4-40** Synthesis of Acene Derivatives and Their Emission Properties (Fac. Sci., TUS; PRESTO, JST) ○NONOMURA, Kohei; IMAI, Yuki; YUASA, Junpei
- 2F4-41** Creation of metastable supramolecular structure in non-equilibrium microspace (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) ○KANZAKI, Chisako; NUMATA, Munenori; KAJI, Shingo
- 2F4-42** Supramolecular structures of precise kinetic control in programmable microflow fields (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) ○KAJI, Shingo; NUMATA, Munenori; KITAMURA, Akitomo; KIKKAWA, Yoshihiro
- 2F4-43**\* Stimuli-responsive liquid phthalocyanine (Grad. Sch. Sci. Technol., Shinshu Univ.) ○CHINO, Yoshiaki; NAKANISHI, Takashi; KIMURA, Mutsumi

Chair: MATSUOKA, Ryota (16 : 30~17 : 30)

- \* 16:20-16:30: interval for laptop PC connection.(2F4-46, 2F4-48, 2F4-50, 2F4-51)
- 2F4-46**\*<sup>#</sup> Self-Assembly of Anthracene-Based Amphiphiles into Supramolecular Nanosheets (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○NISHIKAWA, Tsuyoshi; OGI, Soichiro; YAMAGUCHI, Shigehiro
- 2F4-48**\*<sup>#</sup> Dimension-Controlled Assemblies Based on  $\pi$ -Electronic Ion Pairs (Coll. Life Sci., Ritsumeikan Univ.) ○HAKETA, Yohei; BANDO, Yuya; MAEDA, Hiromitsu
- 2F4-50** Ion-Pairing Assemblies Based on Porphyrin Au<sup>III</sup> Complexes (Coll. Life Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ○TANAKA, Hiroki; HAKETA, Yohei
- 2F4-51** Saddle-Shaped Spiroborate Macrocycles: Preparation and Evaluation of Their Molecular Recognition Behavior (Grad. Sch. Natural Sci., Konan Univ.) ○KITAI, Takashi; DANJO, Hiroshi; KAWAHATA, Masatoshi; YAMAGUCHI, Kentaro

Thursday, March 22, AM

## Molecular capsule

Chair: IKEDA, Toshiaki (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3F4-01, 3F4-02, 3F4-03, 3F4-04, 3F4-05, 3F4-06)
- 3F4-01** Formation and Host Capability of an Aromatic Micelle with Phenothiazine Panels (Lab. Chem. Life Sci., Tokyo Tech.) ○SATOH, Yoshiyuki; KAI, Tomokuni; YOSHIZAWA, Michito; AKITA, Munetaka
- 3F4-02** Linkage of V-Shaped Amphiphilic Molecules with Anthracene Panels and its Assembly Behavior (Lab. Chem. Life Sci., Tokyo Tech.) ○NISHIOKA, Tomoya; KURODA, Kiyonori; YOSHIZAWA, Michito; AKITA, Munetaka
- 3F4-03** Short-Step Synthesis of a New Molecular Tube with Three Polyacene Rings (Lab. Chem. Life Sci., Tokyo Tech.) ○KIYONORI, Kuroda; YOSHIZAWA, Michito; AKITA, Munetaka
- 3F4-04** Metal-Coordination Assisted Chiral Pyridyl-Cavitand Capsule: Diastereomeric Encapsulation of Prochiral Guests (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○UETA, Takuro; NAKAMURA, Munetaka; KOBAYASHI, Kenji
- 3F4-05** Expanded Cavitand Hetero-Capsules Based on Hydrogen Bonds and Their Guest Encapsulations (Fac. Sci., Shizuoka Univ.) ○TSUKAMOTO, Yoshimi; KOBAYASHI, Kenji
- 3F4-06** Self-Assembled Molecular Gear: A 4:1 Complex of Rh(III)Cl Tetraarylporphyrin and Tetra(m-pyridyl)cavitand (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○NAKABAYASHI, Kakeru; KOBAYASHI, Kenji

Chair: KOBAYASHI, Kenji (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3F4-08, 3F4-10, 3F4-12, 3F4-13)
- 3F4-08**\*<sup>#</sup> Synthesis and Conformational Characteristics of Feet-to-Feet Connected Bisresorcinares (Grad. Sch. Sci., Hiroshima Univ.) ○SHIMOYAMA, Daisuke; IKEDA, Toshiaki; SEKIYA, Ryo; HAINO,



Takeharu

- 3F4-10\*\*** Control of Kinetic Stability of Nanocubes Assembled by Hydrophobic Effect (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○ZHAN, Yiyang; ISHII, Kentaro; KOJIMA, Tatsuo; SHOJI, Yoshiaki; HAKETA, Yohei; UCHIYAMA, Susumu; MAEDA, Hiromitsu; FUKUSHIMA, Takanori; HIRAOKA, Shuichi
- 3F4-12** Theoretical study on self-assembly stability of water-soluble gear-shaped amphiphile molecules caused by iodide ions (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○KOIDE, Takuya; MASHIKO, Takako; HIRAOKA, Shuichi; NAGASHIMA, Ump; TACHIKAWA, Masanori
- 3F4-13** Molecular recognition of self-assembled capsule controlled by cavity shape (Grad. Sch. Sci., Hiroshima Univ.) ○MAEHARA, Takeshi; IMAMURA, Taisuke; SEKIYA, Ryo; HAINO, Takeharu

Chair: TSUGE, Akihiko (11 : 20~12 : 10)

- \* 11:10-11:20: interval for laptop PC connection.(3F4-15, 3F4-16, 3F4-17, 3F4-18, 3F4-19)
- 3F4-15** Synthesis of Supramolecular Giant Ring Based on Dynamic Imine Bond of Dumbbell Type Benzaldehyde and Dumbbell Type Aniline with Long Flexible Spacers (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○FUJIMURA, Kouki; KOBAYASHI, Kenji
- 3F4-16** Sphere Formation and Crystallization Process of Chiral Macrocyclic Tetraamines containing Adamantane Moiety (Kagawa Sch. Pharm. Sci., Tokushima Bunri Univ.) ○TOMINAGA, Masahide; KAWAHATA, Masatoshi; ITOH, Tsutomu; YAMAGUCHI, Kentaro
- 3F4-17** Porphyrin hetero-dimer capsule based on hydrogen bond (Grad. Sch. Eng., Univ. of Fukui) ○KIMURA, Masaki; MIYASHITA, Junichi; MIYAGAWA, Shinobu; KAWASAKI, Tsunemi; TOKUNAGA, Yuji
- 3F4-18** Template Synthesis of a Structure-Controlled Porphyrin Tubes (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○OKA, Yuki; CHIBA, Yusuke; TERAJO, Jun
- 3F4-19** Construction of Triple Stranded Zn Porphyrin Dimers Using a Cavity of a Porphyrin Tube and Its Optical Property (Sch. Eng., Kyoto Univ.) ○CHIBA, Yusuke; FUJIHARA, Tetsuaki; TERAJO, Jun; TSUJI, Yasushi

## Thursday, March 22, PM

## Supramolecules

Chair: HAINO, Takeharu (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(3F4-28)
- 3F4-28#** CSJ Award for Creative Works Synthesis of Functionalized Insulated Molecular Wire and Development of Build-up Type Molecular Wiring Method (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○TERAO, Jun
- Chair: SATAKE, Akiharu (14 : 40~15 : 30)
- \* 14:30-14:40: interval for laptop PC connection.(3F4-35, 3F4-36, 3F4-37, 3F4-38, 3F4-39)
- 3F4-35** Assemblies and Electronic Properties of Hydrogen-Bonding Tetrafulvalene Derivatives (Grad. Sch. Sci. Tech., Nihon Univ.; Environment and Energy Mater. Div., NIMS) ○KANEKO, Ryuji; WU, Guohua; SUGAWA, Kosuke; ISLAM, Ashraf; OTSUKI, Joe
- 3F4-36** Synthesis and Reduction-responsive Aggregation Behavior of Amphiphilic Cyclophanes Having A Disulfide Moiety (Fac. Sci., Fukuoka Univ.) ○SUEOKA, Tadashi; KUSANO, Shuhei; HAYASHIDA, Osamu
- 3F4-37** Syntheses and evaluation of novel organogelators based on the cyclophane structure (Grad. Sch. Eng., KIT) ○DABA, Yuki; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- 3F4-38** Preparation and properties of organogelator based on various amino acid skeletons (Grad. Sch. Eng., KIT) ○RIKITAKE, Takuya; MORIGUCHI, Tetsuji; ARAKI, Kouji; TSUGE, Akihiko
- 3F4-39** Syntheses and properties of novel tweezer-shaped organogelators (Grad. Sch. Eng., KIT) ○HAMAMATSU, Chiaki; MORIGUCHI, Tetsuji; ARAKI, Kouji; TSUGE, Akihiko

Chair: ITOH, Yoshimitsu (15 : 40~16 : 40)

- \* 15:30-15:40: interval for laptop PC connection.(3F4-41, 3F4-43, 3F4-44, 3F4-45, 3F4-46)
- 3F4-41\*\*** Seeded Supramolecular Polymerization using Amino-Acid-based Diamides (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○OGI, Soichiro; MATSUMOTO, Kentaro; YAMAGUCHI, Shigehiro
- 3F4-43** Effect of Amino Acid Residues on Non-Equilibrium Supramolecular Polymerization of Amino-Acid-based Diamides (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○MATSUMOTO, Kentaro; OGI, Soichiro; YAMAGUCHI, Shigehiro
- 3F4-44** Seeded Supramolecular Polymerization of a Diketopyrrolopyrrole Dye in Aqueous Media (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○FUKAYA, Natsumi; OGI, Soichiro; YAMAGUCHI, Shigehiro
- 3F4-45** Control of supramolecular polymerization of platinum complex possessing phenylisoxazoles (Grad. Sch. Sci., Hiroshima Univ.) ○TSUKAMOTO, Hidemi; TAKAYAMA, Midori; IKEDA, Toshiaki; HAINO, Takeharu
- 3F4-46** Synthesis of head-to-tail supramolecular porphyrin polymer possessing flexible alkyl chain (Grad. Sch. Sci., Hiroshima Univ.) ○HISANO,

Naoyuki; IKEDA, Toshiaki; HAINO, Takeharu; AMIMOTO, Tomoko

Chair: OGI, Soichiro (16 : 50~17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(3F4-48, 3F4-50, 3F4-51, 3F4-53)
- 3F4-48\*\*** In situ observation and manipulation of supramolecular polymerization by using high-speed atomic force microscopy (RCFM, NIMS; Grad. Sch. Sci., Nagoya Univ.; Grad. Sch. Eng., Kyushu Univ.) ○FUKUI, Tomoya; UCHIHASHI, Takayuki; SASAKI, Norihiko; WATANABE, Hiroki; TAKEUCHI, Masayuki; SUGIYASU, Kazunori
- 3F4-50** Self-assembly of a porphyrin derivative bearing fluoroalkyl side chains (Grad. Sch. Eng., Kyushu Univ.; NIMS) ○SASAKI, Norihiko; FUKUI, Tomoya; TAKEUCHI, Masayuki; SUGIYASU, Kazunori
- 3F4-51\*\*** Integrated Supramolecular Polymerization in Liquid Crystalline Media (1): Emergence of Columnar Coassemblies and Chiral Self-Sorting Phenomena (Grad. Sch. Eng., The Univ. of Tokyo) ○YANO, Keiichi; ITOH, Yoshimitsu; ARAOKA, Fumito; AIDA, Takuzo
- 3F4-53#** Integrated Supramolecular Polymerization in Liquid Crystalline Media (2): Emergence of Radical Columnar Coassemblies and their Magnetic Switching (Fac. Eng., The Univ. of Tokyo) ○HANEBUCHI, Takahiro; YANO, Keiichi; ITOH, Yoshimitsu; AIDA, Takuzo

Chair: SUGIYASU, Kazunori (18 : 00~18 : 30)

- \* 17:50-18:00: interval for laptop PC connection.(3F4-55, 3F4-56, 3F4-57)
- 3F4-55** Synthesis of Precise Metal Accumulating Dendrimer Supramolecular Polymer (Lab. Chem. Life Sci., Tokyo Tech.) ○MIYATA, Narumi; ALBRECHT, Ken; TOBARI, Yuta; YAMAMOTO, Kimihisa
- 3F4-56** Development of Metal-Bridged One Dimensional Coordination Polymers with  $\pi$ -Conjugated Bipyridine Derivatives (Sch. Sci., Kobe Univ.) ○SUGIMOTO, Toshiyuki; EER, Dun; TSUDA, Akihiko
- 3F4-57** Mechanistic study of interconversion between two types of supramolecular polymers composed of bis(imidazolylporphyrinatozinc). (Fac. Sci., TUS) ○SUGIMOTO, Motonobu; SUZUKI, Yuki; KURAMOCHI, Yusuke; SATAKE, Akiharu

## Friday, March 23, AM

## Catenane, rotaxane

Chair: SETAKA, Wataru (9 : 00~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4F4-01, 4F4-02, 4F4-03, 4F4-04, 4F4-05)
- 4F4-01** A capsid-like assembly: synthesis of a metal-peptide [6]catenane (Grad. Sch. Eng., The Univ. of Tokyo) ○INOMATA, Yuuki; SAWADA, Tomohisa; FUJITA, Makoto
- 4F4-02** Cavity size control of Pd-macrocycle having handcuff [2]rotaxane skeleton and application to catalytic reaction (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○IKEDA, Ayano; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 4F4-03** Structure effect in kinetic optical resolution of mechanically chiral rotaxane (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KONAKAZAWA, Masahiro; NAKAZONO, Kazuko; TAKATA, Toshikazu
- 4F4-04** Synthesis of novel rotaxane possessing a diamide crown and an ammonium ion through their hydrogen bond (Grad. Sch. Eng., Univ. of Fukui) ○OKUMA, Yukari; TSUKAMOTO, Toshihiro; INAGAKI, Takayuki; MIYAGAWA, Shinobu; TOKUNAGA, Yuji
- 4F4-05\*\*** Synthesis of rotaxane using Sc or Y template (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TSUKAMOTO, Tadashi; TAKATA, Toshikazu

## Molecular machine, Molecular chirality

Chair: NAKAZONO, Kazuko (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4F4-08, 4F4-09, 4F4-10, 4F4-11, 4F4-12, 4F4-13)
- 4F4-08** Assembly, Thermodynamics, and Structure of a Two-Wheeled Composite of a Dumbbell-Shaped Molecule and Cylindrical Molecules with Different Edges (Grad. Sch. Sci., The Univ. of Tokyo; ERATO, JST; WPI-AIMR, Tohoku Univ.) ○MATSUNO, Taisuke; KAMATA, Sho; SATO, Sota; YOKOYAMA, Atsutoshi; SARKAR, Parantap; ISOBÉ, Hiroyuki
- 4F4-09** Synthesis and crystal structure of a resorcyliptycene (Grad. Sch. Urban Environmental Sci., TMU) ○TANAKA, Noriyuki; INAGAKI, Yusuke; YAMAGUCHI, Kentaro; SETAKA, Wataru
- 4F4-10** Control of rotary motion of a molecular bevel gear by forming a Ag(I) complex (Lab. Chem. Life Sci., Tokyo Tech.; Dep. Chem., Nat. Coll. Tech., Tokyo Coll.) ○SANNÔ, Makoto; TSUCHIDO, Yoshitaka; IDE, Tomohito; OSAKADA, Kohtarô
- 4F4-11** Supramolecular chirality induced for fused oligomers based on a macrocycle with dynamic figure eight chirality: (1) a dimer fused with *o*-phenyleneethynyls. (Fac. Sci., Hokkaido Univ.) KATOONO, Ryo; ○AOKI, Hironori; ISHIGAKI, Yusuke; SUZUKI, Takanori
- 4F4-12** Supramolecular chirality induced for fused oligomers based on a macrocycle with dynamic figure eight chirality:(2) a trimer fused with *o*-phenyleneethynyls (Fac. Sci., Hokkaido Univ.) KATOONO, Ryo; ○SAKAMOTO, Kazuki; ISHIGAKI, Yusuke; SUZUKI, Takanori
- 4F4-13** Supramolecular chirality induced for fused oligomers based on a

macrocyclic with dynamic figure eight chirality:(3) a tetramer fused with hexakis (phenylethynyl)benzene. (Grad. Sch. Sci., Hokkaido Univ.) KATOONO, Ryo; OBARA, Yudai; SAITO, Masataka; ISHIGAKI, Yusuke; SUZUKI, Takanori

### Molecular recognition

Chair: KATOONO, Ryo (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4F4-15, 4F4-16, 4F4-17, 4F4-18, 4F4-19, 4F4-20)
- 4F4-15** Kinetic Resolution of Epoxide with Chiral Bifunctional Porphyrin Catalyst (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) MAEDA, Chihiro; OMITSUZANE, Mayato; TAKAISHI, Kazuto; EMA, Tadashi
- 4F4-16** Efficient synthesis of cyclic bisporphyrin using template synthesis and following efficient isolation by modified silica gel column chromatography. (Fac. Sci., TUS) OHASHIMOTO, Masaya; KURAMOCHI, Yusuke; SATAKE, Akiharu
- 4F4-17** Separation of amine isomers by open-chain hosts having a partial structure of thiocalixarene (Grad. Sch. Eng., Tohoku Univ.) OOGIHARA, Jun; SONEHARA, Hayato; MOROHASHI, Naoya; HATTORI, Tetsutaro
- 4F4-18** Synthesis sensing of disubstituted tetraphenylethene derivative and evolution of molecular recognition properties. (Fac. Sci., Fukuoka Univ.; Fac. Sci., Fukuoka Univ.) OEN, Akihiro; KUSANO, Shuhei; HAYASHIDA, Osamu
- 4F4-19** Large Scale Synthesis of water-soluble ( $\gamma$ -Cyclodextrin)<sub>2</sub>-C<sub>60</sub> Complex using Three Dimensional Ball Mill (NIT, Sendai College) ONDO, Tomoaki; NAGAO, Daisuke; NAGAO, Fumiyo; YAMAOKA, Yasuaki; KWON, Eunsang
- 4F4-20** Formation Behavior of Inclusion Complexes between Cyclodextrin Dimers Bearing Multiple Linkers and Fatty Acid Esters (Grad. Sch. Eng., Osaka Univ.) OIGUCHI, Hitomi; ITO, Shogo; SHIGEMITSU, Hajime; KIDA, Toshiyuki

### Friday, March 23, PM

Chair: OHISHI, Yuki (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4F4-28, 4F4-29, 4F4-30, 4F4-32)
- 4F4-28** Synthesis and Reduction-responsive Properties of Water-soluble Cyclophanes Having A Dabsyl Disulfide Moiety (Fac. Sci., Fukuoka Univ.) OSHIBATA, Kana; KUSANO, Shuhei; HAYASHIDA, Osamu
- 4F4-29** Synthesis of hexakis(aminomethyl)benzene using Gabriel reaction (Fac. Sci., Shizuoka Univ.) OMASUDA, Junya; KONDO, Seiya; YAMANAKA, Masamichi
- 4F4-30** Molecular Design of Saccharide-Containing Functional Low-Molecular Weight Gelators and Their Chiral Saccharide-Saccharide Recognition (ISIT Nanotechnology Lab.; IAS, Kyushu Univ.) YOSHIHARA, Daisuke; SHINKAI, Seiji
- 4F4-32** Anionic polysaccharide-sensing with excimer/monomer switching of a 1,8-naphthalimide derivative (Grad. Sch. Eng., Tottori Univ.; Grad. Sch. Eng., Tottori Univ.) OIZAWA, Hironori; WADA, Mayuko; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki

### Supramolecular helix

Chair: YAMANAKA, Masamichi (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4F4-35, 4F4-37, 4F4-38, 4F4-39)
- 4F4-35** Stereoselective photodimerization of anthracenecarboxylic acids in chiral liquid crystalline media (RIKEN CEMS) OYAMADA, Kuniyo; ISHIDA, Yasuhiro
- 4F4-37** Synthesis of Double-Stranded Titanium(IV) Helicate Composed of Oligophenol Units and Its Reversible Structural Conversion (Grad. Sch. Eng., Nagoya Univ.) OITAKURA, Manabu; TAURA, Daisuke; OUSAKA, Naoki; YASHIMA, Eiji
- 4F4-38** Spontaneous Helix Formation of Phenol-Acetylene-Phenol Foldamers and their Chiral Induction (Grad. Sch. Pharm. Sci., Univ. of Toyama) OHAYASHI, Tomoya; ABE, Hajime; OHISHI, Yuki; INOUE, Masahiko
- 4F4-39** Remote Stereocontrol of Axial Chirality in Bipyridine Derivatives Bearing Dynamic Helical Peptides (Grad. Sch. Eng., Nagoya Univ.) OURUSHIMA, Akio; OUSAKA, Naoki; YASHIMA, Eiji

## Room F5

Bldg. 10 1042

### Physical Organic Chemistry -Structures and Properties-

Tuesday, March 20, PM

### Molecular recognition

Chair: KAWAI, Hidetoshi (12 : 30~13 : 30)

- \* 12:20-12:30: interval for laptop PC connection.(1F5-22, 1F5-23, 1F5-24, 1F5-25, 1F5-26)
- 1F5-22** Synthesis of Anion-Responsive  $\pi$ -Electronic Molecules Bearing Nitrogen Functional Groups (Coll. Life Sci., Ritsumeikan Univ.) OKUNO, Atsuko; MAEDA, Hiromitsu
- 1F5-23** Anion Receptors Based on Fluorescence Isophthalamide bearing Arylethynyl group (Fac. Sci., Yamagata Univ.) OIIOKA, Jun; KONDO, Shin-ichi
- 1F5-24** Carboxylic Acid Recognition of a Diamidine Having a 1,8-Diarylanthracene Unit (KIT) OKOJIMA, Yusuke; KUSUKAWA, Takahiro
- 1F5-25** Carboxylic Acid Recognition of Amidines Based on Aggregation Induced Emission (KIT) OHOSHIHARA, Yuki; TESSEMA, Eyob Ashenafi; TSUJIMOTO, Shinya; KUSUKAWA, Takahiro
- 1F5-26** Allosterically Amplified Sensing of Oligopeptides Using Cyclodextrin-Polythiophene Conjugates (Sch. Sci., Tokyo Tech.; PRESTO, JST; Grad. Sch. Eng., Osaka Univ.) ISHIDA, Yuki; INOUE, Yoshihisa; OFUKUHARA, Gaku

Chair: KONDO, Shinichi (13 : 40~14 : 40)

- \* 13:30-13:40: interval for laptop PC connection.(1F5-29, 1F5-30, 1F5-31, 1F5-32, 1F5-33, 1F5-34)
- 1F5-29** Synthesis and Ion-Pairing Assemblies of Cyclic Anion-Responsive  $\pi$ -Electronic Molecules (Coll. Life Sci., Ritsumeikan Univ.) OKANAME, Shunsuke; MAEDA, Hiromitsu
- 1F5-30** Self-Association of Pyrrole-Based  $\pi$ -Electronic Zwitterions (Coll. Life Sci., Ritsumeikan Univ.) OKUBO, Takayuki; MAEDA, Hiromitsu
- 1F5-31** Carboxylic Acid Recognition of a Diamidine Having a Tetraphenylethylene Unit (KIT) OTESEMA, Eyob Ashenafi; KUSUKAWA, Takahiro
- 1F5-32** Carboxylic Acid and Phosphonic Acid Recognition of a Diguandine (KIT) OMURA, Ryosuke; KUSUKAWA, Takahiro
- 1F5-33** Synthesis and Guest Recognition Properties of Hydrindacene-based Receptors bearing Peptide Chains (Fac. Sci., TUS) OHOKURA, Yuki; ONO, Kousuke; KAWAI, Hidetoshi
- 1F5-34** Chiral recognition by emissive molecules based on boronate tartaric acid (Grad. Sch. Urban Environmental Sci., TMU) OHOSHI, Ayaka; KAWAI, Meiko; KUBO, Yuji

Chair: KUSUKAWA, Takahiro (14 : 50~15 : 50)

- \* 14:40-14:50: interval for laptop PC connection.(1F5-36, 1F5-37, 1F5-38, 1F5-39, 1F5-40, 1F5-41)
- 1F5-36** Synthesis of a quinoline amide dye with a boronic acid-grafting group and its application to chemosensors (Grad. Sch. Urban Environmental Sci., TMU) OPRATOMO, Uji; KUBO, Yuji
- 1F5-37** Synthesis of Space-Controllable Anion-Responsive  $\pi$ -System Dimers (Coll. Life Sci., Ritsumeikan Univ.) ONAGANAWA, Atsushi; MAEDA, Hiromitsu
- 1F5-38** Oligomers of Pyrrole-Based Anion-Responsive  $\pi$ -Electronic Molecules (Coll. Life Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; ONISHIYAMA, Kenta; HAKETA, Yohei
- 1F5-39** Synthesis of Radially Arranged Oligomers of Anion-Responsive  $\pi$ -Electronic Molecules (Coll. Life Sci., Ritsumeikan Univ.) MAEDA, Hiromitsu; OFUKUKAWA, Shin; HAKETA, Yohei
- 1F5-40** Molecular Recognition of Multicarboxylic Acids Derivatives in a Conjugated Giant Macrocyclic Consisting of Diindolocarbazole and Salphen (Grad. Sch. Sci., Nagoya Univ.) OSAKATA, Takuya; KAWANO, Shin-ichi; TANAKA, Kentaro
- 1F5-41** Inclusion of Tetraalkylammonium Ions as a Guest into a Columnar Liquid Crystal Made of a Macrocyclic Consisting of Carbazole and Salphen (Grad. Sch. Sci., Nagoya Univ.) OKAWANO, Shin-ichi; KOBAYASHI, Chinatsu; TANAKA, Kentaro

Chair: FUKUHARA, Gaku (16 : 00~16 : 40)

- \* 15:50-16:00: interval for laptop PC connection.(1F5-43, 1F5-44, 1F5-45)
- 1F5-43** Trapping of cis, twisted conformers of amides by inclusion into a self-assembled coordination cage (Fac. Eng., The Univ. of Tokyo) OSHITAZAWA, Kosuke; TAKEZAWA, Hiroki; FUJITA, Makoto
- 1F5-44** Inclusion of linear diterpenes in a self-assembled hydrophobic cavity toward unusual electrophilic reactions (Grad. Sch. Eng., The Univ. of Tokyo) ONANJO, Hikaru; TAKEZAWA, Hiroki; FUJITA, Makoto

**1F5-45<sup>#</sup>** Organocatalytic Activities of Anion-Responsive  $\pi$ -Electronic Molecules (Coll. Life Sci., Ritsumeikan Univ.) ○HIRATA, Goki; MAEDA, Hiromitsu

Chair: TANAKA, Kentaro (16 : 50~17 : 50)

\* 16:40-16:50: interval for laptop PC connection.(1F5-48, 1F5-49, 1F5-51, 1F5-52, 1F5-53)

**1F5-48** Selective separation of poly(ethylene glycol) with different terminal groups using rigid MOFs (Sch. Eng., Kyoto Univ.; CREST, JST) ○WATANABE, Chikara; KITAO, Takashi; UEMURA, Takashi

**1F5-49<sup>#</sup>** Selective separation of poly(ethylene glycol) with different terminal groups using flexible MOFs (Grad. Sch. Eng., Kyoto Univ.) ○LE OUYA, Benjamin; UEMURA, Takashi

**1F5-51** Effective Halogen Interactions in the Guest Absorption by a Crystalline Sponge (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○FURUBAYASHI, Shumpei; SAKAGUCHI, Kazuhiko; SAKURAI, Fumie; FUJITA, Makoto

**1F5-52** Rapid structure elucidation of natural products from crude extracts in minute quantity by the Crystalline Sponge Method (Grad. Sch. Eng., The Univ. of Tokyo; MIT; Rigaku Corp.; ACCEL, JST) ○WADA, Naoki; KERSTEN, Roland; IWAI, Takahiro; LEE, Shoukou; SAKURAI, Fumie; KIKUCHI, Takashi; FUJITA, Daishi; WENG, Jing-ke; FUJITA, Makoto

**1F5-53<sup>#</sup>** Co-inclusion of Multiple Distinct Guests into a Biporous Crystalline Sponge (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○YAN, Kaking; DUBEY, Ritesh; FUJITA, Makoto

### Wednesday, March 21, AM

#### Nanostructures and their physical properties

Chair: ITO, Hideto (9 : 00 ~10 : 20)

\* 8:50-9:00: interval for laptop PC connection.(2F5-01, 2F5-03, 2F5-04, 2F5-05, 2F5-06, 2F5-07)

**2F5-01<sup>#</sup>** Emergence of Helical Supramolecular Copolymers through Molecular Recognition (IGPR, Chiba Univ.) ○ARATSU, Keisuke; YAGAI, Shiki

**2F5-03** Effect of chiral substituents on helical supramolecular copolymers (IGPR, Chiba Univ.) ○TAKEYA, Rika; ARATSU, Keisuke; YAGAI, Shiki

**2F5-04** Structural Control of Tetracene Alkanethiol-Modified Gold Nanoclusters for Generation of Long-Lived Triplet Excitons via Singlet Fission (Fac. Sci. Tech., Keio Univ.; Dept. Chem. Bioeng. Tampere Univ. Tech.) ○SAEGUSA, Toshiyuki; SAKAI, Hayato; TKACHENKO, Nikolai; HASOBE, Taku

**2F5-05** Sequential Photoinduced Process from Energy Transfer to Singlet Fission in Pentacene Dimer-Modified CdSe/ZnS Nanoparticles (Fac. Sci. Tech., Keio Univ.; Dept. Chem. Bioeng., Tampere Univ. Tech.) ○INAYA, Ryutarō; SAKAI, Hayato; TKACHENKO, Nikolai; HASOBE, Taku

**2F5-06** Photo-conversion of  $\alpha$ -diketone type heptacene precursors under anaerobic conditions (Grad. Sch. Mat. Sci., NAIST) ○HIEDA, Nao; HAYASHI, Hironobu; YAMADA, Hiroko

**2F5-07<sup>#</sup>** Experimental insight into chemical and electronic structures of large acenes (Grad. Sch. Mat. Sci., NAIST) ○HAYASHI, Hironobu; YAMADA, Hiroko

Chair: ARATANI, Naoki (10 : 30~11 : 40)

\* 10:20-10:30: interval for laptop PC connection.(2F5-10, 2F5-11, 2F5-13, 2F5-14, 2F5-15, 2F5-16)

**2F5-10<sup>#</sup>** Synthesis and Properties of Cup- and Bowl-shaped Cyclic Trilactams (Grad. Sch. Eng., Osaka Univ.) ○SARTYOUNGKUL, Sitanan; YAKIYAMA, Yumi; SAKURAI, Hidehiro

**2F5-11<sup>#</sup>** Self-Assembly Structure of Porphyrin based Single-Molecule Magnet on Single-Walled Carbon Nanotubes Surface (Grad. Sch. Sci., Osaka Univ.) ○ABD EL-MAGEED, Ahmed I. A.; YAMASHITA, Ken-ichi; OGAWA, Takuji

**2F5-13<sup>#</sup>** Mechanism of Surface Modification of Nanocarbon Materials with Cyclic Molecules Revealed by Atomic-resolution Microscopy (Grad. Sch. Sci., The Univ. of Tokyo) ○HANAYAMA, Hiroki; YAMADA, Junya; SHIMIZU, Toshiki; HARANO, Koji; NAKAMURA, Eiichi

**2F5-14<sup>#</sup>** Three-dimensional molecular structural analysis by using automated image matching in atomic-resolution electron microscopy (Grad. Sch. Sci., The Univ. of Tokyo; SYSTEM IN FRONTIER INC.) ○SHIMIZU, Toshiki; HANAYAMA, Hiroki; MAMIZU, Nobuya; FURUKAWA, Hiromitsu; HARANO, Koji; NAKAMURA, Eiichi

**2F5-15<sup>#</sup>** Single-Molecule Electron Microscopic Imaging of Aromatic Compounds Utilizing Chemical Modification of Curved Graphitic Surface (Grad. Sch. Sci., The Univ. of Tokyo) ○KAMEI, Ko; SHIMIZU, Toshiki; HARANO, Koji; NAKAMURA, Eiichi

**2F5-16** Synthesis and Structure Evaluation of Covalent Organic Nanotubes Using Photochemical Cross-Linking Reaction (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, JST) ○TOYA, Michihisa; MAEDA, Kaho; ITO, Hideto; ITAMI, Kenichiro

### Wednesday, March 21, PM

Chair: HASOBE, Taku (13 : 00~13 : 50)

\* 12:50-13:00: interval for laptop PC connection.(2F5-25, 2F5-27, 2F5-29)

**2F5-25<sup>#</sup>** Racemate Formation of Diarylethene Closed-Ring Isomer in the 2D Self-Assembly Investigated by STM at the Liquid/Graphite Interface (Grad. Sch. Eng., Kyoto Univ.) ○LI, Ruiji; HIROSE, Takashi; MATSUDA, Kenji

**2F5-27<sup>#</sup>** Self-Assembled Monolayers as Templates for Nanopatterned Chemical Functionalization of Graphitic Surfaces (Sch. Sci. Eng., Meiji Univ.; PRESTO, JST; Grad. Sch. Eng. Sci., Osaka Univ.; Department of Chemistry, KU Leuven; ISIR, Osaka Univ.) ○TAHARA, Kazukuni; ISHIKAWA, Toru; HIRSCH, Brandon E.; KUBO, Yuki; LI, Zhi; WALKER, Peter; DE FEYTER, Steven; TOBE, Yoshito

**2F5-29** Periodic Chemical Functionalization of Graphite Surfaces Using Porous Self-Assembled Monolayers Formed by van der Waals Interactions as Templating Masks (Grad. Sch. Eng. Sci., Osaka Univ.; Sch. Sci. Eng., Meiji Univ.; PRESTO, JST; Department of Chemistry, KU Leuven; ISIR, Osaka Univ.) ○KUBO, Yuki; TAHARA, Kazukuni; HIRSCH, Brandon E.; HIROSE, Keiji; DE FEYTER, Steven; TOBE, Yoshito

Chair: HIROSE, Keiji (14 : 00~14 : 50)

\* 13:50-14:00: interval for laptop PC connection.(2F5-31, 2F5-33, 2F5-34, 2F5-35)

**2F5-31<sup>#</sup>** Influence of Multidirectional Interactions on Domain Size and Shape of 2-D Molecular Assemblies Studied by STM (Grad. Sch. Eng., Kyoto Univ.) ○NISHITANI, Nobuhiko; HIROSE, Takashi; MATSUDA, Kenji

**2F5-33** Study on Self-Assemblies of Dehydrobenzo[12]annulene Derivatives Having Three Long Alkyl Chains and Short Substituent Groups (Sch. Sci. Eng., Meiji Univ.; Dept. of Chem., KU Leuven; ISIR, Osaka Univ.) ○NAKAYAMA, Ruri; KOBAYASHI, Hanaka; DE FEYTER, Steven; TOBE, Yoshito; TAHARA, Kazukuni

**2F5-34** Construction and Structural Change of Cage-type Boroxine Molecules Having Functional Group in their Interior Space (Sch. Sci., Tokyo Tech.) ○SANO, Yusuke; SHIMO, Shunsuke; ONO, Kosuke; TAKAHASHI, Kohei; IWASAWA, Nobuharu

**2F5-35** Co-assembly of alkylene-linked perylene bisimide dyads (IGPR, Chiba Univ.) ○HAIBARA, Riku; YAGAI, Shiki

Chair: SAWADA, Tomohisa (15 : 00~16 : 10)

\* 14:50-15:00: interval for laptop PC connection.(2F5-37, 2F5-38, 2F5-39, 2F5-40, 2F5-41, 2F5-42)

**2F5-37** Concentration dependence of 2-D polymorphism of porphyrin derivatives having amide group observed by STM (Grad. Sch. Eng., Kyoto Univ.) ○ADACHI, Kenya; HIROSE, Takashi; MATSUDA, Kenji

**2F5-38** Multidimensional organized structures formed by octupus type phthalocyanine (Fac. Textile Sci. Technol., Shinshu Univ.) ○KUDO, Ryota; CHINO, Yoshiaki; KOBAYASHI, Nagao; KIMURA, Mutsumi

**2F5-39** Aggregation behavior of Amphiphilic Phthalocyanines having Fluorine side chains (Fac. Textile Sci. Technol., Shinshu Univ.) ○KAWATA, Takahiro; KIMURA, Mutsumi

**2F5-40** Topological selection between helically coiled and toroidal supramolecular polymers composed of the same molecule (IGPR, Chiba Univ.) ○HIGASHIHARAGUCHI, Seiya; YAGAI, Shiki

**2F5-41** Light-induced transmutation of supramolecular polymers (IGPR, Chiba Univ.) ○KATAYAMA, Kosuke; YAGAI, Shiki

**2F5-42<sup>#</sup>** Application of Oligothiophene Supramolecular Polymer to Organic Photovoltaic Device (IGPR, Chiba Univ.; Grad. Sch. Eng., Osaka Univ.) ○OUCHI, Hayato; NAKAYAMA, Kenichi; YAGAI, Shiki

Chair: HIROSE, Takashi (16 : 20~17 : 20)

\* 16:10-16:20: interval for laptop PC connection.(2F5-45, 2F5-46, 2F5-47, 2F5-48, 2F5-49, 2F5-50)

**2F5-45** Construction of a layered metal-peptide material with woven structures (Grad. Sch. Eng., The Univ. of Tokyo) ○SAITO, Ami; SAWADA, Tomohisa; FUJITA, Makoto

**2F5-46** Construction of metal-free MRI contrast agents using water-soluble NO radicals with polar substituents (Grad. Sch. Pharm., Kyushu Univ.) ○SHIRAIISHI, Ryoma; MURAYAMA, Shuhei; MATSUOKA, Yuta; KANEKO, Tomoyo; AOKI, Ichio; YAMADA, Ken-ichi; KARASAWA, Satoru

**2F5-47** Preparation of the supramolecular organic radicals and its application to magnetic resonance imaging (Grad. Sch. Pharm., Kyushu Univ.) ○MORISHITA, Kosuke; MURAYAMA, Shuhei; AOKI, Ichio; HIRAI, Go; KARASAWA, Satoru

**2F5-48** Chiral inversion of HgS nanoparticles through a change in the coordination structure of chiral ligands (Grad. Sch. Mat. Sci., NAIST) ○KUNO, Jumpei; KAWAI, Tsuyoshi; NAKASHIMA, Takuya

**2F5-49** Impact of Optical Purity of Chiral Ligands on the Emission Property of Silver Nanocluster (Grad. Sch. Mat. Sci., NAIST) ○YOSHIDA, Hiroto; KUNO, Jumpei; KAWAI, Tsuyoshi; NAKASHIMA, Takuya

**2F5-50** Luminescent Properties of Gold Nanoclusters-Aryl iodides Complex (Grad. Sch. Eng., Osaka Univ.) ○SASAI, Kenji; RAGHU NATH, Dhital; PRANSEJIT, Maity; SAKAI, Hayato; HASOBE, Taku; SAKURAI, Hidehiro

## Thursday, March 22, AM

## Photophysical properties

Chair: SEKI, Tomohiro (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3F5-01, 3F5-03, 3F5-05, 3F5-06)

**3F5-01\*** Switching photomechanical property by structural phase transition (IMCE, Kyushu Univ.) ○GOTO, Kenta; TANI, Fumito**3F5-03\*\*** Control of Solid-State Emissive Properties of Aryl-Modified Carboranes by External Stimuli (Grad. Sch. Eng., Kyoto Univ.) ○TANAKA, Kazuo; NISHINO, Kenta; YAMAMOTO, Hideki; HASHIMOTO, Kazushi; CHUJO, Yoshiki**3F5-05** Two-Component Mechanochromic Luminescence of 3,3'-Dipyrenyl-2,2'-bithiophene Derivative (Grad. Sch. Eng., Yokohama Natl. Univ.) ITO, Suguru; ○KATADA, Genki; TAGUCHI, Tomohiro; UBUKATA, Takashi; ASAMI, Masatoshi**3F5-06** Two-step Mechanochromic Luminescence of Phenanthroimidazolyl-benzothiadiazole Derivatives (Grad. Sch. Eng., Yokohama Natl. Univ.) ITO, Suguru; ○NAGAI, Sayaka; UBUKATA, Takashi; ASAMI, Masatoshi

Chair: GOTO, Kenta (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3F5-08, 3F5-09, 3F5-10, 3F5-11, 3F5-12, 3F5-13)

**3F5-08** Near-infrared Mechanochromic Luminescence Found in Donor-acceptor Type Fluorescent Dyes with Phenothiazine Moieties (NIT, Kurume College) ○TANAKA, Honoka; MATSUMOTO, Taisuke; ISHI-I, Tsutomu**3F5-09** Crystal Phase Transition of V-Shaped Fluorophore Involving Conformational Planarization and Energy Transfer (Dep. Chem., Sch. Sci., Kyoto Univ.; PRESTO, JST) ○YAMAKADO, Takuya; SAITO, Shohei; OSUKA, Atsuhiko**3F5-10** PEGylated Flapping Viscosity Probe and its Rheological Analysis (Dep. Chem., Sch. Sci., Kyoto Univ.; PRESTO, JST) ○KITAKADO, Hidetsugu; YOKOYAMA, Soichi; SAITO, Shohei; OSUKA, Atsuhiko**3F5-11** Creation of emissive inclusion crystals and optical sensors using a guest inclusion phenomena (Grad. Sch. Eng., Kyushu Univ.) ○TSUKIYAMA, Yoshifumi; ONO, Toshikazu; KOIDE, Taro; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio**3F5-12** Investigation of acid-base induced fluorescence color change of pyrrolopyrrole derivatives in the solid state (Grad. Sch. Eng., Kyushu Univ.) ○YANO, Yoshio; ONO, Toshikazu; KOIDE, Taro; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio**3F5-13** Photophysical properties of 2-dimethylamino-4-phenylquinazoline derivatives (Grad. Sch. of Sci. Technol., Sophia Univ.) ○FUJIMAKI, Yuki; MOTOYAMA, Miho; WITULSKI, Bernhard; SUZUKI, Yumiko

Chair: ONO, Toshikazu (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3F5-15, 3F5-17, 3F5-19, 3F5-20)

**3F5-15\*\*** Synthesis and Solid State Emission Enhancement of Benzoin-Derived Fused  $\pi$ -Conjugated Molecules; Impact of the Peripheral Structure on the Nonradiative Decay (Grad. Sch. Sci., Osaka Univ.) ○TANI, Yosuke; OGAWA, Takuji**3F5-17\*\*** Dual Fluorescence Emission of Tetraaryldiborane(4) in the Solid State and in Solution (Lab. Chem. Life Sci., Tokyo Tech.) ○TANAKA, Naoki; SHOJI, Yoshiaki; SAKAI, Hayato; HASOBE, Taku; IKABATA, Yasuhiro; WANG, Qi; NAKAI, Hiromi; FUKUSHIMA, Takanori**3F5-19** Investigation of response to metal ions with 2,3-dinitroquinazolin (Sch. Eng., The Univ. of Shiga Pref.) ○NAKAGAWA, Hidemi; TAKEHARA, Munenori; KATO, Shin-ichiro; MARUO, Masahiro; KITAMURA, Chitoshi**3F5-20\*** Dihydroquinoline based "turn-off" fluorescence sensor for selective detection of Cu(II) ion. (Fac. Sci. Chulalongkorn Univ.) ○HASSAN, Dr. Kamrul; AJAVAKOM, Anawat

## Thursday, March 22, PM

Chair: SAKAI, Hayato (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3F5-28, 3F5-29, 3F5-30, 3F5-31, 3F5-32, 3F5-33)

**3F5-28** Synthesis of Anion-Responsive  $\pi$ -Electronic Systems with Orthogonally Introduced  $\pi$ -Moiety (Coll. Life Sci., Ritsumeikan Univ.) ○KODA, Naoya; MAEDA, Hiromitsu**3F5-29** Photophysical Properties of Di(1-pyrenyl)methanol Derivatives with Donor and/or Acceptor Groups. (Fac. Sci., Yamagata Univ.) ○SATO, Keisuke; KONDO, Shin-ichi**3F5-30** Synthesis and functions of BODIPYs containing chalcogenophenes (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba) ○TAGUCHI, Daisuke; NABESHIMA, Tatsuya**3F5-31** Synthesis and physical properties of dibenzophosphole oxide derivatives with electron-donating conjugated units (Sch. Eng., Univ. of Hyogo) ○KAWAKAMI, Yoshihiro; NISHIDA, Jun-ichi; KAWASE, Takeshi**3F5-32** Synthesis and Properties of a Series of Carbazole-Pyrimidine Conjugates and Their Platinum Complexes (Grad. Sch. Sci. Tech., Gunma

Univ.; Sch. Eng., The Univ. of Shiga Pref.) ○YOSHIKAWA, Naoki; KATO, Shin-ichiro; YAMAMOTO, Koji; NAKAMURA, Yosuke

**3F5-33** Synthesis and Fluorescence Property of 2,5-Bis(cyanostyryl)pyrrole Derivatives (Sch. Env. Sci. Eng., KUT) ○YOKOYAMA, Soichi; NISHIWAKI, Nagatoshi

Chair: NISHIDA, Jun-ichi (14 : 40 ~ 15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3F5-35, 3F5-37, 3F5-38, 3F5-39, 3F5-40)

**3F5-35\*\*** Modulation of Solid-State Emissive Properties of Diiminate Complexes Containing Group 13 Elements by Ligand Alteration on the Central Metal (Grad. Sch. Eng., Kyoto Univ.) ○ITO, Shunichiro; TANAKA, Kazuo; CHUJO, Yoshiki**3F5-37\*** Elucidation of Relationships between Solid-State Photophysical Properties and Crystal Structures of Boron Diiminate Showing Thermochromism and Non-linear Optical Properties (Grad. Sch. Eng., Kyoto Univ.) ○HIMENO, Ryoji; ITO, Shunichiro; TANAKA, Kazuo; CHUJO, Yoshiki**3F5-38** Synthesis and Photophysical Properties of Boron Diiminate Complexes Having Multiple Aromatic Groups on the Ligand Moiety (Grad. Sch. Eng., Kyoto Univ.) ○YAEGASHI, Misao; ITO, Shunichiro; TANAKA, Kazuo; CHUJO, Yoshiki**3F5-39\*** Synthesis and Evaluation of Multiple  $\alpha$ -Carboranes-Modified-Conjugated Molecules (Grad. Sch. Eng., Kyoto Univ.) ○WADA, Keisuke; HASHIMOTO, Kazushi; TANAKA, Kazuo; CHUJO, Yoshiki**3F5-40** Synthesis of a new "signal-on" probe using a hydrophilic AIE dye (FIRST, Konan Univ.) ○TAKAGI, Takemune; MURASHIMA, Takashi

Chair: ARAKI, Yasuyuki (15 : 50 ~ 16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(3F5-42, 3F5-44, 3F5-46, 3F5-47)

**3F5-42\*\*** Photoexcited pyramidal inversion of P-chiral phosphines (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○MACHIDA, Takashi; KOKADO, Kenta; SADA, Kazuki**3F5-44\*\*** Photo-responsive Chiral Inversion Behavior of [4n] annulene Derivatives based on Excited-state Aromaticity (Grad. Sch. Eng., The Univ. of Tokyo) ○UEDA, Michihisa; JORNER, Kjell; SUNG, Young Mo; MORI, Tadashi; KIM, Dongho; OTTOSSON, Henrik; AIDA, Takuzo; ITOH, Yoshimitsu**3F5-46** Preparation of circularly polarized luminophores based on chiral binaphthyl (Grad. Sch. Sci. Eng., Kindai Univ.; ORIST; Grad. Sch. Mat. Sci., NAIST) ○HARA, Nobuyuki; TAMURA, Mayoko; YANAGIDA, Hayato; SHIZUMA, Motohiro; FUJIKI, Michiya; IMAI, Yoshitane**3F5-47** Tunability of circularly polarized luminescence (CPL) of chiral peptide-pyrene luminophore (Grad. Sch. Sci. Eng., Kindai Univ.; ORIST; Grad. Sch. Mat. Sci., NAIST) ○MIMURA, Yuki; KITAMURA, Sayaka; SHIZUMA, Motohiro; KITAMATSU, Mizuki; FUJIKI, Michiya; IMAI, Yoshitane

Chair: KATO, Shin-ichiro (17 : 00 ~ 18 : 00)

\* 16:50-17:00: interval for laptop PC connection.(3F5-49, 3F5-51, 3F5-52, 3F5-53, 3F5-54)

**3F5-49\*** Relationship between the chromophore arrangement in chiral naphthalene diimide dimers and their excited state characteristics (IMRAM, Tohoku Univ.) ○ARAKI, Yasuyuki; SATO, Takehito; KURONUMA, Makoto; MIURA, Yuta; KIKUCHI, Yota; WADA, Takehiko**3F5-51** Chiral intertwined spirals and chiroptical properties dictated by cylinder helicity (Grad. Sch. Sci., The Univ. of Tokyo) ○SATO, Sota; YOSHII, Asami; TAKAHASHI, Satsuki; FURUMI, Seiichi; TAKEUCHI, Masayuki; ISOBE, Hiroyuki**3F5-52** Design and Synthesis of Helicene Derivative Having Excellent Chiroptical Luminescence Properties Based on the Control of Electronic Transition with Large Rotatory Strength (Grad. Sch. Eng., Kyoto Univ.) ○KUBO, Hiromu; HIROSE, Takashi; MATSUDA, Kenji**3F5-53** Synthesis and optical properties of cross-linked helical foldamer based on highly fluorescent L-shaped heteroarenes (Grad. Sch. Chem. Sci. Technol., TUS) ○TATENO, Kotaro; ONO, Kosuke; KAWAI, Hidetoshi**3F5-54** Synthesis of CPL-Emitting Rotaxanes Consisting of Alkynyl Fluorophores and  $\gamma$ -CDs by Template-Click Reaction (Grad. Sch. Pharm. Sci., Univ. of Toyama; Grad. Sch. Sci. Eng., Univ. of Toyama) ○HAYASHI, Keishiro; KOIKE, Hikaru; IWAMURA, Munetaka; NOZAKI, Koichi; INOUE, Masahiko

Chair: IWAMURA, Munetaka (18 : 10 ~ 18 : 40)

\* 18:00-18:10: interval for laptop PC connection.(3F5-56, 3F5-57, 3F5-58)

**3F5-56** Preparation of planar-chiral Tb(III) hybrid luminophore material having circularly polarized luminescence (CPL) property (Grad. Sch. Sci. Eng., Kindai Univ.; ORIST; Grad. Sch. Mat. Sci., NAIST; Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.; NIMS) ○TANIGUCHI, Ayano; HARA, Nobuyuki; SHIZUMA, Motohiro; TAJIMA, Nobuo; FUJIKI, Michiya; IMAI, Yoshitane**3F5-57** Preparation of chiral carboxylic acid / metal hybridised luminophores and their circularly polarized luminescence (CPL) properties (Fac. Sci. Eng., Kindai Univ.; Osaka Municipal Technical Research Institute; NIMS; Fac. Life Env. Sci., Kyoto Pref. Univ.) ○KAJI, Daiki; HARA, Nobuyuki; YOSHIDA, Keishiro; WAKABAYASHI, Sae; KITAYAMA, Masumi; SHIZUMA, Motohiro; TAJIMA, Nobuo; TSUBAKI, Kazunori; IMAI, Yoshitane

**3F5-58** Preparation of chiral binaphthyl/pyrene fluorophores emitting green circularly polarized luminescence (CPL) (Grad. Sch. Sci. Eng., Kindai Univ.; ORIST; Grad. Sch. Mat. Sci., NAIST) ○OKUDA, Koji; TANIMOTO, Kotomi; MIMURA, Yuki; SHIZUMA, Motohiro; FUJIKI, Michiya; IMAI, Yoshitane

### Friday, March 23, AM

Chair: KABE, Ryota (9:00~10:00)

\* 8:50-9:00: interval for laptop PC connection.(4F5-01, 4F5-03, 4F5-04, 4F5-05, 4F5-06)

**4F5-01\*\*** Elucidation of Excimer Formation of Phosphorescent Cyclometalated Platinum(II) Complexes at the Molecular Level (Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Sci., Osaka Pref. Univ.; CSIR-NIIST) ○OKAMURA, Naoki; MAEDA, Takeshi; FUJIWARA, Hideki; SOMAN, Anjali; DAS, Satyajit; UNNI, Narayanan; AJAYAGHOSH, Ayyappanpillai; YAGI, Shigeyuki

**4F5-03** Photoluminescence Mechanochromism of Phosphorescent Platinum (II) Complexes Bearing a Tridentate Cyclometalated Ligand (Grad. Sch. Eng., Osaka Pref. Univ.) ○ARIZONO, Haruka; OKAMURA, Naoki; MAEDA, Takeshi; YAGI, Shigeyuki

**4F5-04** Phosphorescence-to-phosphorescence mechanochromism of di(2-thienyl) diketone derivatives at room temperature (Graduate School of Science, Osaka University) ○TERASAKI, Morihisa; TANI, Yosuke; OGAWA, Takuji

**4F5-05** Dual Fluorescence-phosphorescence Emission of 1,4-Bis(arylsulfonyl)-2,5-disiloxybenzenes (KIT) ○SAKAI, Motoharu; KINOSHITA, Takumi; SHIMIZU, Masaki; MIYAKE, Yusuke; TAJIMA, Kunihiko

**4F5-06** Dual Fluorescence-phosphorescence Emission of 1,4-Bis(diarylphosphinyl)-2,5-bis(silyl-methoxy)benzenes (KIT) ○NAGANO, Sho; KINOSHITA, Takumi; SHIMIZU, Masaki

Chair: MATSUI, Yasunori (10:10~11:10)

\* 10:00-10:10: interval for laptop PC connection.(4F5-08, 4F5-09, 4F5-10, 4F5-12, 4F5-13)

**4F5-08** Dual Fluorescence-phosphorescence Emission of Diaryl-bis(disilyl-methoxy)benzenes (KIT) ○KINOSHITA, Takumi; SHIMIZU, Masaki; MIYAKE, Yusuke; TAZIMA, Kunihiko

**4F5-09** Substitution Pattern Effect of Diaryl-bis(silyl-methoxy) benzenes on Their Phosphorescence (KIT) ○NISHIMURA, Kenta; KINOSHITA, Takumi; SHIMIZU, Masaki

**4F5-10\*\*** Organic long persistent luminescence (OPERA, Kyushu Univ.; ERATO, JST; I<sup>2</sup>CNER, Kyushu Univ.) ○KABE, Ryota; ADACHI, Chihaya

**4F5-12** Effect of electron donor and acceptor for organic long persistent luminescence (OPERA, Kyushu Univ.; ERATO, JST; I<sup>2</sup>CNER, Kyushu Univ.) ○NISHIMURA, Naohiro; JINNAI, Kazuya; KABE, Ryota; ADACHI, Chihaya

**4F5-13** Synthesis and Optical Properties of Thermally Activated Delayed Fluorescence Materials with Homo Junction Design (Grad. Sch. Eng., Kyushu Univ.) ○TSUJI, Keita; TSUCHIYA, Youichi; ADACHI, Chihaya

Chair: SATO, Tohru (11:20~12:20)

\* 11:10-11:20: interval for laptop PC connection.(4F5-15, 4F5-16, 4F5-18, 4F5-19, 4F5-20)

**4F5-15** Arylselanyl-BODIPY as a sensitizer for triplet-triplet annihilation upconversion (Grad. Sch. Urban Environmental Sci., TMU) ○IIZUKA, Keita; NAKASHIMA, Mika; KUBO, Yuji

**4F5-16\*** Intramolecular Singlet Fission of Quaterylene Dimers (Fac. Sci. Tech., Keio Univ.) ○SAKAI, Hayato; TKACHENKO, Nikolai; HASOBE, Taku

**4F5-18** Intramolecular Singlet Fission of Novel Tetracene Dyads in Dilute Solution (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.; MPRC, Kobe Univ.; UNISOKU Co., Ltd.) ○KAWAOKA, Shuhei; MATSUI, Yasunori; NAGASHIMA, Hiroki; NAKAGAWA, Tatsuo; OKAMURA, Naoki; OHTA, Eisuke; YAGI, Shigeyuki; KOBORI, Yasuhiro; IKEDA, Hiroshi

**4F5-19** Synthesis and Spectroscopic Properties of Hexacene Derivatives (Grad. Sch. Sci. Tech., Keio Univ.; Tampere Univ. Tech. Dept. Chem. Bioeng.) ○NAKAMURA, Shunta; SAKAI, Hayato; TKACHENKO, Nikolai; HASOBE, Taku

**4F5-20** Synthesis and Excited-State Dynamics of Nitrogen-Containing Rylene Derivatives (Fac. Sci. Tech., Keio Univ.) ○HIRONO, Akitsu; SAKAI, Hayato; HASOBE, Taku

### Friday, March 23, PM

Chair: HASOBE, Taku (13:30~14:00)

\* 13:20-13:30: interval for laptop PC connection.(4F5-28, 4F5-29, 4F5-30)

**4F5-28** The effect of methoxy group in photoisomerization reaction of naphthopyran (Grad. Sch. Eng., Kyoto Univ.) ○FUJIMAKI, Kai; SATO, Tohru; INAGAKI, Yuki; MUTOH, Katsuya; ABE, Jiro

**4F5-29** The Structure of Charge-Transfer Excited State Responsible for the Fluorescence Emission of Dipyrildethylene (AIST) ○SONODA, Yoriko; SHIMOI, Yukihiko

**4F5-30** Theoretical Study on Open-Shell Singlet Character and Second

Hyperpolarizability of Carbon Nanobelts (Sch. Eng. Sci., Osaka Univ.) ○YAMANE, Masaki; KISHI, Ryohei; NAKANO, Masayoshi

## Room F6

### Bldg. 10 1043

### Organic Crystals

#### Wednesday, March 21, AM

#### Structure and Physical Properties

Chair: AKAZOME, Motohiro (9:20~10:20)

\* 9:10-9:20: interval for laptop PC connection.(2F6-03, 2F6-04, 2F6-05, 2F6-06, 2F6-07, 2F6-08)

**2F6-03** Two crystal polymorphs of a chlorinated diketopyrrolo-pyrrole derivative with hexyl group on amino position (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○OSUMI, Shigeto; SO, Heesoo; KAWAGUCHI, Junna; MATSUMOTO, Shinya

**2F6-04\*** Thermally induced dynamic behavior of a chlorinated diketopyrrolo-pyrrole derivative with propyl group on amino positions (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○SO, Heesoo; MINAMI, Takaya; JINDO, Takumi; MATSUMOTO, Shinya

**2F6-05** Relationship between photoinduced birefringence change of diarylethene crystals and their molecular structures (Grad. Sch. Eng., Osaka City Univ.) ○MORIMOTO, Kohei; KITAGAWA, Daichi; KOBATAKE, Seiya

**2F6-06** Phase transition and photoinduced shape changes of diarylethene crystals bearing octyl groups. (Grad. Sch. Eng., Osaka City Univ.) ○KAWASAKI, Kaito; KITAGAWA, Daichi; KOBATAKE, Seiya

**2F6-07\*** Dependence of photoinduced bending behavior of diarylethene single crystal on direction of polarized ultraviolet light (Grad. Sch. Eng., Osaka City Univ.) ○HIRANO, Akira; KITAGAWA, Daichi; KOBATAKE, Seiya

**2F6-08\*** Control of photomechanical crystal twisting depending on illumination direction (Grad. Sch. Eng., Osaka City Univ.) ○KITAGAWA, Daichi; TSUIJOKA, Hajime; KOBATAKE, Seiya

#### Dynamic Behavior

Chair: MUTAI, Toshiki (10:30~11:20)

\* 10:20-10:30: interval for laptop PC connection.(2F6-10, 2F6-11, 2F6-12, 2F6-13, 2F6-14)

**2F6-10** Photomechanical Bending of Dibenzobarrelelene Crystals (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○TANIGUCHI, Takuya; KUBOTA, Ayumi; MORITOKI, Tatsuya; ASAH, Toru; KOSHIMA, Hideko

**2F6-11** Regulation of thermo-mechanically response by changing the length of alkoxy chain in 5,12-diacetyl-5,12-dihydroquinoxalino[2,3-b]quinoxaline derivatives (Grad. Sch. Sci. Tech., Keio Univ.) ○WATANABE, Yoshihiro; MIURA, Youhei; YOSHIOKA, Naoki

**2F6-12** Viscoelastic changes during the crystallization of dibenzoylmethane boron difluoride complex (Fac. Edu., Shinshu Univ.) ○SAIGUSA, Mai; KANAYAMA, Naoki; ITO, Fuyuki

**2F6-13** Self-aggregation process of diphenylalanine derivatives with dibenzoylmethane boron complex probed by the fluorescence color changes. (Grad. Sch. Sci. Technol., Shinshu Univ.; Fac. Eng., Kumamoto Univ.; Fac. Edu., Shinshu Univ.) ○SAGAWA, Takehiro; FUKAMINATO, Tsuyoshi; ITO, Fuyuki

**2F6-14** Fluorescence microspectroscopic observation of molecular diffusion process into protein crystals (Fac. Sci., Josai Univ.) ○UWADA, Takayuki; TAKAHASHI, Ikuya; ISHIKAWA, Mitsuru

#### Wednesday, March 21, PM

Chair: HARANO, Koji (13:40~14:40)

\* 13:30-13:40: interval for laptop PC connection.(2F6-29, 2F6-31, 2F6-33, 2F6-34)

**2F6-29\*** Relationship between atom-atom contact and magnitude of attraction between molecules (CD-FMat, AIST; RISC, AIST) ○TSUZUKI, Seiji; UCHIMARU, Tadafumi

**2F6-31\*\*** Thermal shrinkage of cyclic molecular nanocarbons (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; JST-Itami ERATO, Nagoya Univ.) ○OZAKI, Noriaki; SAKAMOTO, Hiroto; ITAMI, Kenichiro

**2F6-33** Formation of Ice/Water Nanoring in the cavity of a Carbon Nanoring (Grad. Sch. Sci., Nagoya Univ.) ○SAKAMOTO, Hiroto; OZAKI, Noriaki; ITAMI, Kenichiro

**2F6-34\*** Structural Analysis of Soft Azobenzene Crystal and Its Mechanical Self-Oscillation under Continuous Blue Light Irradiation (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.; Rigaku Corp.) ○KEGAMI, Tomonori; SATONAGA, Shinnosuke; SATO, Hiroyasu; ○KAGEYAMA, Yoshiyuki; TAKEDA, Sadamu

## Design of Molecular Assembly

Chair: YOSHIOKA, Naoki (14 : 50~15 : 50)

- \* 14:40-14:50: interval for laptop PC connection.(2F6-36, 2F6-38, 2F6-39, 2F6-40)
- 2F6-36\*** Porous Molecular Crystal Possessing " $\pi$ -Wall" Comprising of Anthryl-substituted Triphenyltriazine (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.; Rigaku Corp.) ○OHTA, Eisuke; IZUMI, Haruka; MATSUI, Yasunori; SATO, Hiroyasu; IKEDA, Hiroshi
- 2F6-38** Oriented peptide nanotube crystals based on interdigitating cross  $\beta$ -sheets (Grad. Sch. Eng., The Univ. of Tokyo) ○WU, Yueqiao; SAWADA, Tomohisa; FUJITA, Makoto
- 2F6-39** Guest Inclusion Properties of Hydrogen-bonding Net-Tubes based on 5,6-Diphenylindanedecarboxamide (Fac. Sci., TUS) ○YOSHIOKA, Ayaka; SHIMIZU, Takahiro; ONO, Kosuke; TADOKORO, Makoto; KAWAI, Hidetoshi
- 2F6-40\*** Structure and Property of the Porous Molecular Crystal Composed of H-shaped Indanedione dimer (Grad. Sch. Eng., Osaka Univ.) ○YAKIYAMA, Yumi; FUJINAKA, Takahisa; SAKURAI, Hidehiro

## Molecular Recognition

Chair: HISAKI, Ichiro (16 : 00~16 : 40)

- \* 15:50-16:00: interval for laptop PC connection.(2F6-43, 2F6-45, 2F6-46)
- 2F6-43\*** Separation of C8 petroleum component by cocrystallization with the V-shaped acyclic molecule (Kagawa Sch. Pharm. Sci., Tokushima Bunri Univ.) ○KAWAHATA, Masatoshi; TOMINAGA, Masahide; HYODO, Tadashi; YAMAGUCHI, Kentaro
- 2F6-45** Crystal Structure and Gas Adsorption Behavior of Glycylphenylalanine Derivative (Grad. Sch. Human and Environ. Stud., Kyoto Univ.; Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○YAMANAKA, Kazuaki; TAKAHASHI, Hiroki; TSUE, Hirohito
- 2F6-46** Gas adsorption behavior of xerogel based on aspartame (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○NAKAJIMA, Mizuki; TAKAHASHI, Hiroki; TSUE, Hirohito

Chair: TAKAHASHI, Hiroki (16 : 50~17 : 30)

- \* 16:40-16:50: interval for laptop PC connection.(2F6-48, 2F6-49, 2F6-50, 2F6-51)
- 2F6-48** Construction and application towards catalytic reaction fields of Diamondoid Porous Organic Salts (d-POS) composed of tetrasulfonic acids and bulky amines. (Grad. Sch. Eng., Osaka Univ.) ○TSUCHIYA, Keiho; HISAKI, Ichiro; TOHNAL, Norimitsu
- 2F6-49** Swelling Behavior of Crystal Cross-linked Gel Based on Triple Interpenetrating Pillared-Layer MOF (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○FUKUSHIMA, Kanta; KOKADO, Kenta; SADA, Kazuki
- 2F6-50** Proton active transport in a single crystal of the coordination polymer without centrosymmetry (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○YUKI, Ohta; YOSHIYUKI, Kageyama; GORO, Maruta; SADAMU, Takeda
- 2F6-51** Ligand effect of Schiff base Cu(II) complex on crystal packing and magnetic properties (Fac. Sci. Tech., Keio Univ.) ○MIYATA, Takumi; NISHIKAWA, Daisuke; MIURA, Yohei; YOSHIOKA, Naoki

## Thursday, March 22, AM

## Chirality

Chair: UEKUSA, Hidehiro (9 : 30 ~10 : 30)

- \* 9:20-9:30: interval for laptop PC connection.(3F6-04, 3F6-05, 3F6-06, 3F6-07, 3F6-08)
- 3F6-04** Chirality control in crystallization using chiral optical vortex (Grad. Sch. Eng., Chiba Univ.) UEMURA, Naohiro; ○SAITO, Rei; ISHIKAWA, Hiroki; YOSHIDA, Yasushi; MINO, Takashi; OMASTU, Takashige; SAKAMOTO, Masami
- 3F6-05** Absolute Asymmetric Synthesis of Flavones Involving Enantioselective Dynamic Crystallization (Grad. Sch. Eng., Chiba Univ.; Fac. Eng., Chiba Univ.) UEMURA, Naohiro; ○SHIMIZU, Waku; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 3F6-06** Absolute Asymmetric Synthesis by Reversible Diels-Alder Reaction with Dynamic Crystallization (Chiba Univ.; Dept. Eng. Edu. Center, Chiba Inst. of Tech.) UEMURA, Naohiro; ○TOYODA, Seiya; YOSHIDA, Yasushi; MINO, Takashi; KASASHIMA, Yoshio; SAKAMOTO, Masami
- 3F6-07** Absolute Asymmetric Synthesis of Aspartic Acid Derivative by Michael Addition Reaction and Dynamic Crystallization (Grad. Sch. Eng., Chiba Univ.) ○UEMURA, Naohiro; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 3F6-08\*** Determination of Absolute Configuration from Low ee Sample by the Crystalline Sponge Method (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○SAIRENJI, Shio; KIKUCHI, Takashi; DUBEY, Ritesh; YAN, Kaking; FUJITA, Makoto

## Crystallization

Chair: SAKAMITO, Masami (10 : 40~11 : 20)

- \* 10:30-10:40: interval for laptop PC connection.(3F6-11, 3F6-12, 3F6-13, 3F6-14)
- 3F6-11** Crystal structure of multicomponent crystals of active pharmaceutical ingredient loratadine (Sch. Sci., Tokyo Tech.) ○HORIKAWA, Ayano; SEKINE, Akiko; UEKUSA, Hidehiro
- 3F6-12** Chiral resolution of Etodolac by co-crystallization (Sch. Sci., Tokyo Tech.) ○IWAKI, Ryoshi; SEKINE, Akiko; UEKUSA, Hidehiro
- 3F6-13** Dehydration transformation of scopolamine hydrobromide (Sch. Sci., Tokyo Tech.) ○UENO, Takuya; SEKINE, Akiko; UEKUSA, Hidehiro
- 3F6-14** Multi-step Dehydration Mechanism of Quinine Hydrochloride Dihydrate Crystal (Sch. Sci., Tokyo Tech.) ○NOGAMI, Shin; SEKINE, Akiko; UEKUSA, Hidehiro

## Thursday, March 22, PM

## Structure and Physical Properties

Chair: MATSUSHITA, Michio-m. (13 : 40~14 : 40)

- \* 13:30-13:40: interval for laptop PC connection.(3F6-29, 3F6-30, 3F6-31, 3F6-32, 3F6-34)
- 3F6-29** Structural Phase Transitions in a [2-Pyrrolidone]-[Chloranilic Acid] Molecular Complex with Double Hydrogen Bond Networks (Dep. Chem., Sch. Sci., Kyoto Univ.) ○DONOSHITA, Masaki; HAYASHI, Mikihiro; IKEDA, Ryuichi; SUGIMOTO, Kunihisa; KAWAGUCHI, Shogo; KITAGAWA, Hiroshi
- 3F6-30** Ferroelectric Phase Transition in Bisindolylmethylum salts (ISSP, The Univ. of Tokyo; FLEC, AIST) ○YOSHIDA, Junya; HORIUCHI, Sachio; MORI, Hatsumi
- 3F6-31** Synthesis and physicochemical properties of dimethyldihydrophenazine cation radical derivative (Fac. Sci. Tech., Keio Univ.) ○ITO, Rei; TAKAHASHI, Yusuke; MIURA, Youhei; YOSHIOKA, Naoki
- 3F6-32\*** Magneto-Structural Correlation of Pyrroline *N*-oxyl Biradical Derivatives Carrying Diphenyloxoverdazyl Radical (Fac. Sci. Tech., Keio Univ.) ○TAKAHASHI, Yusuke; MIURA, Youhei; YOSHIOKA, Naoki
- 3F6-34** Crystal structures and properties of diazole isomers connected at 2,6-position (Grad. Sch. Sci., Eng., Yamagata Univ.) ○AONUMA, Kazuhiro; SHIBUYA, Yusuke; KATAGIRI, Hiroshi

Room G1

Bldg. 11 1111

## Physical Chemistry -Chemical Kinetics and Dynamics-

## Tuesday, March 20, AM

Chair: NAKATA, Satoshi (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1G1-01, 1G1-02, 1G1-04, 1G1-05)
- 1G1-01** Effect of solvent distribution on self-running droplet motion in surfactant aqueous solution (Fac. Sci. Tech., SIST) ○NANZAI, Ben; SHIGEMOTO, Aya
- 1G1-02\*** Autonomous Swimming Motion of Mechanical Self-Oscillatory Crystal of Azobenzene under Continuous Blue Light Irradiation (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○KAGEYAMA, Yoshiyuki; IKEGAMI, Tomonori; OBARA, Kazuma; TAKEDA, Sadamu
- 1G1-04** Droplet motion depending on the size and the reaction rate of surfactant (Grad. Sch. Adv. Mathematics Sci., Meiji Univ.) ○OGASAWARA, Takuto; SUEMATSU J., Nobuhiko
- 1G1-05\*** Oscillatory motion of camphor particles generated by coupling with surface concentration (Meiji Univ.) ○MATSUDA, Yui; IKURA, Yumihiko; IKEDA, Kouta; SUEMATSU J., Nobuhiko
- Chair: AMEMIYA, Takashi (10 : 10~11 : 00)
- \* 10:00-10:10: interval for laptop PC connection.(1G1-08, 1G1-10, 1G1-11, 1G1-12)
- 1G1-08\*** Dynamics of self-propelled oil droplets induced by the generation of surfactants (Fac. Sci. Tech., Keio Univ.; Grad. Sch. Sci., Chiba Univ.; Sch. Computing, Tokyo Tech.) ○BANNO, Taisuke; KASUO, Yui; KOYANO, Yuki; TAKINOUE, Masahiro; KITAHATA, Hiroyuki; ASAKURA, Kouichi
- 1G1-10** Investigation of experimental conditions to spatial periodicity of periodic precipitation pattern caused by reaction and diffusion process (Grad. Sch. Sci., Eng., Yamagata Univ.) ○ITATANI, Masaki; FANG, Qing; UNOURA, Kei; NABIKAWA, Hideki
- 1G1-11** Role of polymerization initiator on Liesegang phenomenon with polymerization reaction (Fac. Sci., Yamagata Univ.) ○SATO, Daisuke;

SHIMIZU, Yushiro; MATSUI, Jun; UNOURA, Kei; NABIKI, Hideki  
**1G1-12** Formation process of Liesegang type precipitation pattern of calcium phosphate in agar gel (Grad. Sch. Sci., Eng., Kagoshima Univ.)  
 ○KAMINAGA, Akiko; UTO, Keishiro; NAKANAMI, Hiroto

Chair: SUEMATSU, Nobuhiko (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(1G1-14, 1G1-15, 1G1-16, 1G1-17, 1G1-18)
- 1G1-14** Glycolytic oscillations in spheroids of cervical cancer HeLa cells (Yokohama Natl. Univ.) ○TAKAHASHI, Junpei; SHIBATA, Kenichi; AMEMIYA, Takashi
- 1G1-15** Self-propelled motion of coumarin particle in couple with pH and light (Grad. Sch. Sci., Hiroshima Univ.) ○IRIE, Yasutaka; NAKATA, Satoshi
- 1G1-16** Spatio-temporal pattern and synchronization of two- or three-dimensional chemical wave propagating on the surface or in the body of a sphere (Grad. Sch. Sci., Hiroshima Univ.) ○KUZE, Masakazu; KITAHATA, Hiroyuki; STEINBOCK, Oliver; NAKATA, Satoshi
- 1G1-17** Size-control of Gold Nanoparticles Using Hydroquinone (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○KODAMA, Yojiro; SHIBATA, Kenichi; AMEMIYA, Takashi
- 1G1-18** The Reaction Mechanism of Gold and Silver Nanoparticles Synthesis Using Benzenediol Derivative (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○OHARA, Yasuhiko; AMEMIYA, Takashi; SHIBATA, Kenich

## Tuesday, March 20, PM

Chair: ASahi, Tsuyoshi (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1G1-33, 1G1-35, 1G1-37)
- 1G1-33\*** Optical Trapping of Quantum Dots and Gold Nanocrystals at the Liquid-Liquid Interface (Grad. Sch. Sci., Osaka City Univ.) ○SHOJI, Tatsuya; NAKA, Shota; SATO, Kentaro; KAMEYAMA, Tatsuya; TORIMOTO, Tsukasa; TSUBOI, Yasuyuki
- 1G1-35\*** Non-Plasmonic Optical Trapping of Nanoparticles with Semiconductor Nano-structures: Nano-structured Semi-conductor-Assisted (NASSCA) Optical Tweezers (Grad. Sch. Sci., Osaka City Univ.) SHOJI, Tatsuya; MOTOTSUJI, Ayaka; UENOBO, Yuki; ○TSUBOI, Yasuyuki
- 1G1-37\*\*** Femtosecond Laser Trapping and Ejection Dynamics of Silica Nanoparticles due to Their Assembly Formation (National Chiao Tung University Taiwan) CHIANG, Wei-yi; USMAN, Anwar; SUGIYAMA, Teruki; HOFKENS, Johan; ○MASUHARA, Hiroshi

Chair: FUJITSUKA, Mamoru (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(1G1-40, 1G1-41, 1G1-42, 1G1-44)
- 1G1-40** Influence of gases in microbubbles on the OH radical generation for the microbubble/ultrasound system. (Dept. of Mater. Eng., NIT, Nagaoka College) ○MURAKAMI, Yoshinori; KOBAYASHI, Yuuma; MARUYAMA, Ryota
- 1G1-41** Time-resolved measurement of radical pairs by pulse magnetic field (Fac. Sci., Saitama Univ.; Grad. Sch. Sci., Eng., Saitama Univ.) ○IWATA, Nana; MAEDA, Kiminori
- 1G1-42\*** Electron transport in alkanes after ionization by femtosecond pulse radiolysis (ISIR, Osaka Univ.) ○KONDOH, Takafumi; GOHDO, Masao; NORIZAWA, Kimihiro; KAN, Koichi; YANG, Jinfeng; TAGAWA, Seichi; YOSHIDA, Yoichi
- 1G1-44\*** Unraveling a mechanism of nonlinear luminescence behavior in an organic - inorganic perovskite crystal by femtosecond transient absorption microscopy (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KATAYAMA, Tetsuro; SUENAGA, Harunobu; TAMAI, Naoto

Chair: KATAYAMA, Tetsuro (16 : 40~17 : 40)

- \* 16:30-16:40: interval for laptop PC connection.(1G1-47, 1G1-49, 1G1-51, 1G1-52)
- 1G1-47\*\*** Dynamics of electron transfer in gold nanoparticles/titanium dioxide system by transient absorption spectroscopy (CRIS, Hokkaido Univ.) ○LI, Jie; UENO, Kosei; SUN, Quan; OSHIKIRI, Tomoya; MISAWA, Hiroaki
- 1G1-49\*\*** Exciton dynamics in organic amorphous thin film studied by fluorescence transient hole-burning spectroscopy (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YAMADA, Kazuto; WATANABE, Kazuya; SUGIMOTO, Toshiki; MATSUMOTO, Yoshiyasu
- 1G1-51** Study on excited state relaxation process of perylene red nanoparticles by femtosecond transient absorption spectroscopy (Grad. Sch. Sci., Eng., Ehime Univ.) ○SASAKI, Shino; ISHIBASHI, Yukihide; ASahi, Tsuyoshi
- 1G1-52** Excited-State Properties of Radical Anions of C<sub>70</sub> and Its Derivatives (ISIR, Osaka Univ.; ISIR, Osaka Univ.) ○FUJITSUKA, Mamoru; LU, Chao; MAJIMA, Tetsuro

## Wednesday, March 21, AM

Chair: YAMAZOE, Seiji (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2G1-01, 2G1-02, 2G1-03, 2G1-04, 2G1-05)
- 2G1-01** Chemical characterization of transition-metal encapsulating Si16 cage

- nanocluster films produced by soft-landing method (Fac. Sci. Tech., Keio Univ.; KiPAS, Keio Univ.) ○NIKURA, Toshiaki; NAKAJIMA, Atsushi; TSUNOYAMA, Hironori; SHIBUTA, Masahiro; KAMOSHIDA, Toshiaki
- 2G1-02** Large-scale fine synthesis of transition metal encapsulating silicon cage nanocluster (Fac. Sci. Tech., Keio Univ.; ICR, Kyoto Univ.; KiPAS, Keio Univ.) ○TAKANO, Ryota; HIRATA, Naoyuki; TSUNOYAMA, Hironori; SHIBUTA, Masahiro; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro; NAKAJIMA, Atsushi
- 2G1-03** Cluster-size effect on characteristics of floating-gate memory devices based on thiolate-protected gold nanoclusters (Fac. Sci. Tech., Keio Univ.; Fac. Sci., TUS; KiPAS, Keio Univ.) ○YOKOYAMA, Takaho; HIRATA, Naoyuki; NEGISHI, Yuichi; TSUNOYAMA, Hironori; NAKAJIMA, Atsushi
- 2G1-04** Synthesis and properties of precisely size-controlled bismuth clusters using a dendrimer template. (Lab. Chem. Life Sci., Tokyo Tech.) ○IMAOKA, Shotaro; KAMBE, Tetsuya; WATANABE, Aiko; IMAOKA, Takane; YAMAMOTO, Kimihisa
- 2G1-05\*** Effect of Differences in Dendrimer Structures on Catalytic Activity of Size-Controlled Palladium Nanoparticles (JST-ERATO; Lab. Chem. Life Sci., Tokyo Tech.; Coll. of Liberal Arts, ICU) ○KITAZAWA, Hirokazu; ALBRECHT, Ken; CHUN, Wang Jae; IMAOKA, Takane; YAMAMOTO, Kimihisa

Chair: TOSHIKI, Sugai (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2G1-08, 2G1-09, 2G1-10, 2G1-11, 2G1-12)
- 2G1-08** Luminescence properties of europium(II) compounds ligated by inorganic and organic species (Fac. Sci. Tech., Keio Univ.; KiPAS, Keio Univ.) ○HIRATA, Naoyuki; TSUJI, Takashi; TSUNOYAMA, Hironori; NAKAJIMA, Atsushi
- 2G1-09** Ligand-field effect on photoluminescence properties of organoeuropium(II) sandwich clusters (Fac. Sci. Tech., Keio Univ.; ICR, Kyoto Univ.; KiPAS, Keio Univ.) ○TSUNOYAMA, Hironori; ABE, Kanako; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro; NAKAJIMA, Atsushi
- 2G1-10** Size-selective synthesis of gold-palladium alloy nanoclusters with an ultra-fine microfluidic reactor (Fac. Sci. Tech., Keio Univ.; Toshiba Machine; KiPAS, Keio Univ.) ○YAZU, Eriko; TSUNOYAMA, Hironori; TANAKA, Katsutoshi; NAKAJIMA, Atsushi
- 2G1-11** Introduction of a Single Heterometal Atom into Polymer-Stabilized Gold Superatoms and Characterization of Hydrogenation Catalysis (Grad. Sch. Sci., The Univ. of Tokyo) ○HASEGAWA, Shingo; HAYASHI, Shun; TAKANO, Shinjiro; YAMAZOE, Seiji; TSUKUDA, Tatsuya
- 2G1-12\*\*** CO<sub>2</sub> Fixation to Epoxide Catalyzed by Decanobate Cluster [Nb<sub>10</sub>O<sub>28</sub>]<sup>6-</sup>: A Kinetic and Theoretical Study (Grad. Sch. Sci., The Univ. of Tokyo; Grad. Sch. Sci. Eng., TMU; ESICB, Kyoto Univ.; CREST, JST) ○HAYASHI, Shun; YAMAZOE, Seiji; KOYASU, Kiichirou; TSUKUDA, Tatsuya

Chair: ARAKAWA, Masashi (11 : 20~11 : 50)

- \* 11:10-11:20: interval for laptop PC connection.(2G1-15, 2G1-16)
- 2G1-15#** Controlled cluster growth via hydride-doped gold-based superatoms (Fac. Sci., The Univ. of Tokyo; Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○HIRAI, Haru; TAKANO, Shinjiro; TSUKUDA, Tatsuya
- 2G1-16\*\*** Initial stage of formation of iridium oxide cluster anions (Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○KOYASU, Kiichirou; TOMIHARA, Ryohei; TSUKUDA, Tatsuya

## Wednesday, March 21, PM

Chair: MIYAJIMA, Ken (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2G1-28, 2G1-29, 2G1-30, 2G1-31, 2G1-32)
- 2G1-28** Valence-selective visible photodissociation spectroscopy of the heme involved in cytochrome c (Fac. Sci., Gakushuin Univ.) ○NAKAMURA, Yuri; KAWAUCHI, Norishi; ASAMI, Hiroya; KOHNO, Jun-ya
- 2G1-29#** DUV excitation dynamics of divalent lysozyme ions in the gas phase isolated by droplet-beam IR laser ablation (Grad. Sch. Sci. and Technol., Gakushuin Univ.) ○KAWAUCHI, Norishi; NAKAMURA, Yuri; ASAMI, Hiroya; KOHNO, Jun-ya
- 2G1-30** High sensitive Raman spectroscopy of electrostatically trapped single particle (Fac. Sci., Gakushuin Univ.) ○SHIRONO, Anna; ASAMI, Hiroya; KOHNO, Jun-ya
- 2G1-31#** Phosphorescence Spectra of Polyyne Molecules in Solid Organic Solvents (Fac. Sci. Eng., Kindai Univ.) SZCZEPANIAK, Urszula; OZAKI, Kazunori; SATA, Ryosuke; KITAMURA, Nozomu; OSAWA, Ayato; ○WAKABAYASHI, Tomonari
- 2G1-32\*\*** Effect of charge state of atomic gold on reactivity toward methyl iodide (Grad. Sch. Sci., The Univ. of Tokyo; Dept. Chem., Fudan Univ.; ESICB, Kyoto Univ.) ○MURAMATSU, Satoru; WU, Xuan; CHEN, Mohua; KOYASU, Kiichirou; ZHOU, Mingfei; TSUKUDA, Tatsuya

Chair: KOYASU, Kiichirou (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2G1-35, 2G1-36, 2G1-37, 2G1-38, 2G1-39)
- 2G1-35** Geometrical structures of calcium oxide cluster cations investigated by

ion mobility mass spectrometry (Sch. Sci., Tohoku Univ.) ○SAITO, Shu; HEBIGUCHI, Daiki; NAGATA, Toshiaki; NAKANO, Motoyoshi; MISAIZU, Fuminori

**2G1-36** Structures of aluminum oxide cluster cations studied by ion mobility mass spectrometry (Grad. Sch. Sci., Tohoku Univ.) ○HEBIGUCHI, Daiki; NAKANO, Motoyoshi; MISAIZU, Fuminori

**2G1-37** Reactions of Cerium Oxide Cluster Cations with NO Molecules Studied by Ion Mobility Mass Spectrometry (Grad. Sch. Sci., Tohoku Univ.; IEHE, Tohoku Univ.) ○NAGATA, Toshiaki; WU, Jenna; NAKANO, Motoyoshi; MISAIZU, Fuminori

**2G1-38** Low-temperature ion mobility-mass spectrometry of organic molecular ions produced by electrospray ionization (Grad. Sch. Sci., Tohoku Univ.) ○YABE, Kenta; NISHI, Yuito; MIYAZAKI, Shun; TAINAKA, Sota; OHSHIMO, Kejiro; MISAIZU, Fuminori

**2G1-39\*** Development of Ion Trap Ion Mobility System and Characterization of Nanomaterials (Fac. Sci., Toho Univ.) ○TOSHIKI, Sugai; HOSHINO, Yudai; MORITA, Hiroki; MIYAMOTO, Reona; HAMANO, Yuta; SOMEI, Kazumasa; JINNOUCHI, Ryota

Chair: TSUNOYAMA, Hironori (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(2G1-42, 2G1-43, 2G1-44, 2G1-45, 2G1-46)

**2G1-42** Size dependence of adsorption reactions on silver cluster cation  $Ag_n^+$  (Sch. Sci., Tohoku Univ.) ○KAJIYAMA, Tomotaka; OGAWA, Masato; IWASAKI, Wataru; YAMAMOTO, Hiroaki; TONA, Masahide; TSUKAMOTO, Keizo; OHSHIMO, Kejiro; MISAIZU, Fuminori

**2G1-43** Ultraviolet photodissociation study of molecular-adsorbed copper cluster cations (Grad. Sch. Sci., Tohoku Univ.) ○OGAWA, Masato; IWASAKI, Wataru; KAJIYAMA, Tomotaka; YAMAMOTO, Hiroaki; TONA, Masahide; TSUKAMOTO, Keizo; OHSHIMO, Kejiro; MISAIZU, Fuminori

**2G1-44** Size-dependent reactivity of transition-metal-doped silver cluster ions  $Ag_nM^+$  (M = Sc-Ni) toward NO molecules: Effect of the dopant element (Grad. Sch. Sci., Kyushu Univ.) ○HORIOKA, Masataka; KAWANO, Tomoki; MINAMIKAWA, Kento; NISHIURA, Jun; NISHIKAWA, Kyosuke; ARAKAWA, Masashi; TERASAKI, Akira

**2G1-45** Binary origins of odd-even alternation in size-dependent reactivity of  $Ag_nM^+$  (M = Co and Ni) with  $O_2$  (Fac. Sci., Kyushu Univ.) ○MINAMIKAWA, Kento; HORIOKA, Masataka; KAWANO, Tomoki; ARAKAWA, Masashi; TERASAKI, Akira

**2G1-46\*** Catalytic Properties of Low-Temperature NO Reduction Driven by Platinum Cluster Disks Bound to Silicon Substrate Surface (Cluster Res. Lab., Toyota Tech. Inst.; Cluster Res. Lab., Toyota Tech. Inst.) ○YASUMATSU, Hisato; FUKUI, Nobuyuki

## Thursday, March 22, AM

Chair: ASAMI, Hiroya (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3G1-01, 3G1-02, 3G1-03, 3G1-04, 3G1-05, 3G1-06)

**3G1-01** Reactivity of Gas Phase Ca-Mn-O Clusters with Water (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○MASUZAKI, Daigo; TAKEHASHI, Yuuma; MAFUNE, Fumitaka

**3G1-02\*** Reaction of platinum oxide clusters and hydrogen investigated by thermal desorption spectrometry in the gas phase (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○MIYAJIMA, Ken; YAMADA, Akari; MAFUNE, Fumitaka

**3G1-03** Infrared photodissociation spectroscopy of  $Ir_3(NO)_m^+$  (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○KOYAMA, Kohei; KUDOH, Satoshi; MAFUNE, Fumitaka

**3G1-04** Structural determination of NO adsorbed on the  $RhTa^+$  cluster using IRMPD (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○YAMAGUCHI, Masato; KOYAMA, Kohei; KUDOH, Satoshi; MIYAJIMA, Ken; BAKKER, Joost; MAFUNE, Fumitaka

**3G1-05** Photodissociation process of water-oxygen molecular complex ion studied by ion imaging technique (Grad. Sch. Sci., Tohoku Univ.) ○NAKASHIMA, Yuji; OKUTSU, Kenichi; ITO, Yuri; NAKANO, Motoyoshi; OHSHIMO, Kejiro; MISAIZU, Fuminori

**3G1-06** Ion imaging study on photodissociation processes of nitric oxide trimer cation (Grad. Sch. Sci., Tohoku Univ.) ○ITO, Yuri; NAKASHIMA, Yuji; OKUTSU, Kenichi; NAKANO, Motoyoshi; OHSHIMO, Kejiro; MISAIZU, Fuminori

Chair: OHSHIMO, Kejiro (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3G1-08, 3G1-10, 3G1-12)

**3G1-08\*\*** Size-dependent polymorphism in aluminum carbide clusters  $Al_nC_2^-$  (Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○TSURUOKA, Kazuyuki; KOYASU, Kiichiro; TSUKUDA, Tatsuya

**3G1-10\*\*** Collision induced dissociation of phosphine-protected gold clusters,  $[Au_{11}(PPh_3)_8X_2]^+$  (X=Cl, C<sub>2</sub>Ph) (Grad. Sch. Sci., The Univ. of Tokyo; ESICB, Kyoto Univ.) ○TOMIHARA, Ryohei; YAMAMOTO, Hiroki; TAKANO, Shinjiro; KOYASU, Kiichiro; TSUKUDA, Tatsuya

**3G1-12\*\*** Isomerization of  $[PdAu_8(PPh_3)_8]^{2+}$  in the gas phase (Grad. Sch. Sci., The Univ. of Tokyo; IIT Madras; ESICB, Kyoto Univ.) ○HIRATA, Keisuke; CHAKRABORTY, Papri; NAG, Abhijit; TAKANO, Shinjiro;

KOYASU, Kiichiro; TSUKUDA, Tatsuya; PRADEEP, Thalappil

Chair: HISHIKAWA, Akiyoshi (11 : 20~12 : 10)

\* 11:10-11:20: interval for laptop PC connection.(3G1-15, 3G1-17, 3G1-19)

**3G1-15\*\*** Momentum distribution of protons ejected from water dications prepared in an ultrashort intense laser field (Grad. Sch. Sci., The Univ. of Tokyo) ○SHO, Koh; KAORU, Yamanouchi; KAORU, Yamazaki; MANABU, Kanno; HIROHIKO, Kono

**3G1-17\*\*** Fourier transform vibrational spectroscopy of methanol cation using intense near infrared few-cycle laser pulses (Grad. Sch. Sci., The Univ. of Tokyo) ○ANDO, Toshiaki; IWASAKI, Atsushi; YAMANOUCHI, Kaoru

**3G1-19\*** CEP dependence of hydrogen migration in methanol in few-cycle laser fields (Grad. Sch. Sci., The Univ. of Tokyo) ○ZHANG, Qiqi; FUKAHORI, Shinichi; ANDO, Toshiaki; IWASAKI, Atsushi; RATHJE, Tim; PAULUS, Gerhard G.; YAMANOUCHI, Kaoru

## Thursday, March 22, PM

Chair: ISHIBASHI, Yukihide (13 : 20~14 : 30)

\* 13:10-13:20: interval for laptop PC connection.(3G1-27, 3G1-28, 3G1-30, 3G1-31, 3G1-33)

**3G1-27** Low field effects on the photochemical reaction of xanthone-DABCO in micellar solution (Fac. Sci., Saitama Univ.) ○MATSUO, Taisuke; MAEDA, Kiminori

**3G1-28\*** Fluorescence and solvent effect in TCNQ (Grad. Sch. of Eng., Muroran Inst. of Tech.) TAMAYA, Honami; NAKANO, Hideyuki; ○IIMORI, Toshifumi

**3G1-30** Photoresponse of cis-stilbene encapsulated in self-assembled nanocube (Grad. Sch. Sci. and Technol., Gakushuin Univ.) ○KAJITA, Mizuho; LIAO, Jingyuan; TAKAYA, Tomohisa; IWATA, Koichi; HIRAOKA, Shuichi

**3G1-31\*** Vibrational dynamics observed by wavepacket motion under photo-excitation of 9,9'-Bianthryl (Grad. Sch. Eng., Kanagawa Univ.) ○HASHIMOTO, Sena; YABUSHITA, Atsushi; IWAKURA, Izumi

**3G1-33** Dynamics of excited state under selective excitation of vibrational levels (Dept. of Material & Life Chem., Kanagawa Univ.) ○MURAKAMI, Takahiko; HASHIMOTO, Sena; YABUSHITA, Atsushi; IWAKURA, Izumi

Chair: MAEDA, Kiminori (14 : 40~15 : 30)

\* 14:30-14:40: interval for laptop PC connection.(3G1-35, 3G1-36, 3G1-38, 3G1-39)

**3G1-35** Quantum yield of triplet formation of thioguanosine derivatives and kinetics of singlet molecular oxygen formation. (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○TANABE, Shunsuke; MIYATA, Shoma; ISOZAKI, Tasuku; SUZUKI, Tadashi

**3G1-36\*** Creation of sodium pump rhodopsin working with longer-wavelength light (Grad Sch. Eng., Nagoya Inst. of Tech.; JST PRESTO) ○INOUE, Keiichi; NAKAMURA, Ryoko; KANDORI, Hideki

**3G1-38** What makes the diversity of photoreaction of BLUF protein PixD? (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TOKONAMI, Shunrou; NAKASONE, Yusuke; TERAZIMA, Masahide

**3G1-39** Origin of slow absorption change of photochemical reaction of BLUF photoreceptors (Dep. Chem., Sch. Sci., Kyoto Univ.) ○ONOSE, Morihiko; NAKASONE, Yusuke; TERAZIMA, Masahide

Chair: UENO, Kosei (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(3G1-41, 3G1-43, 3G1-44, 3G1-45)

**3G1-41\*\*** Dynamic Intensity Borrowing of Excited State Proton Transfer in Azobenzene Derivative (Grad. Sch. Eng. Sci., Osaka Univ.; HSER) ○YONEDA, Yusuke; ADITHYA, Lakshmana; SOTOME, Hikaru; MIYASAKA, Hiroshi

**3G1-43\*** Cycloreversion reaction of a fulgide derivative in higher excited states attained by stepwise two-photon absorption (Grad. Sch. Eng. Sci., Osaka Univ.) ○NAGASAKA, Tatsuhiro; SOTOME, Hikaru; YOKOYAMA, Yasushi; MIYASAKA, Hiroshi

**3G1-44** Microsecond study of isomerization reaction network observed by double-resonance 2D transient absorption spectroscopy pumped by white light and laser pulses (Grad. Sch. Sci., Kobe Univ.) YAMAZAKI, Ryokuhei; ○WADA, Akihide

**3G1-45\*** Laser-induced Transient Heating Effect for cycloreversion reaction of Diarylethene Nanoparticles (Grad. Sch. Sci., Eng., Ehime Univ.) ○ISHIBASHI, Yukihide; MASUDA, Keisuke; KITAGAWA, Daichi; KOBATAKE, Seiya; ASahi, Tsuyoshi

Chair: WADA, Akihide (16 : 50~17 : 50)

\* 16:40-16:50: interval for laptop PC connection.(3G1-48, 3G1-49, 3G1-51, 3G1-53)

**3G1-48** Photo-Induced Peptization of Silver Island Films (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○NAKAMURA, Keisuke; HAGA, Kosuke; SATO, Tomoo

**3G1-49\*** Molecular Configuration Dependent Optical Response of porphyrin-protected Metal Cluster (ICR, Kyoto Univ.) ○SAKAMOTO, Masanori; EGUCHI, Daichi; TERANISHI, Toshiharu

**3G1-51\*\*** Spectral properties of the strong coupling between microcavity and molecular vibrational modes (RIES, Hokkaido Univ.) ○UENO, Kosei;



OSHIKIRI, Tomoya; MISAWA, Hiroaki

- 3G1-53** Plasmon enhanced photo dimerization reaction of amino benzene thiol single molecular junction (Sch. Sci., Tokyo Tech.) ○MATSUZAWA, Yuya; KANEKO, Satoshi; NISHINO, Tomoaki; KIGUCHI, Manabu

## Friday, March 23, AM

Chair: KIGUCHI, Manabu (9 : 30 ~ 10 : 30)

\* 9:20-9:30: interval for laptop PC connection.(4G1-04, 4G1-06, 4G1-07, 4G1-08, 4G1-09)

- 4G1-04\*\*** Photoexcited Charge Carrier Dynamics of Interconnected TiO<sub>2</sub> Nanoparticles: Evidence of Enhancement of Charge Separation at Anatase-Rutile Particle Interfaces (Fac. Sci. Eng., Chuo Univ.) ○SOHN, Woon Yong; SHINGAI, Daiki; IDE, Yusuke; KATAYAMA, Kenji

- 4G1-06** Investigation of dependence of charge carrier kinetics on the surface structure of hematite films (Fac. Sci. Eng., Chuo Univ.) ○INABA, Mika; THORNE, James. E.; WANG, Duwei; SOHN, Woon Yong; KATAYAMA, Kenji

- 4G1-07** Laser Induced Luminescence from Commercially Available TiO<sub>2</sub> (Sch. Eng., Nihon Univ.) ○CHO, Yo-ka; KATOH, Ryuzi

- 4G1-08** Electrode current effect on absorption spectra of poly(phenylenevinylene) films prepared on transparent electrode (Sch. Eng., Nihon Univ.) ○SHIMADA, Kohei; KATOH, Ryuzi

- 4G1-09** Photoreactions of O<sub>2</sub> on nanostructured Pd(111) surfaces (Fac. Sci., TUS) ○HAMA, Naoki; PAN, Tianfang; HIDA, Ayako; TANABE, Hiroki; HAYASHI, Kazutaka; HOSOI, Syun; YOKOTA, Yukie; WATANABE, Kazuo

Chair: KATAYAMA, Kenji (10 : 40 ~ 11 : 40)

\* 10:30-10:40: interval for laptop PC connection.(4G1-11, 4G1-12, 4G1-14, 4G1-15)

- 4G1-11** Fluorescence Property of Metastable Phase of 9,10-Dichloroanthracene Crystals Prepared by Train Sublimation Method under Atmospheric Pressure Condition (Sch. Eng., Nihon Univ.) ○SATO, Kenta; KATOH, Ryuzi

- 4G1-12\*** Crystallization of hybrid organic-inorganic perovskite compounds under focused CW laser irradiation at the air-solution interface (RIES, Hokkaido Univ.) ○YUYAMA, Ken-ichi; BIJU, Vasudevanpillai

- 4G1-14** Subnanosecond relaxation dynamics of exciplex formed in benzene derivative liquids (Sch. Eng., Nihon Univ.) ○NIKAIDO, Shinsuke; SUENOBU, Tomoyoshi; NAKAGAWA, Tatsuo; KATOH, Ryuzi

- 4G1-15\*** Photochemical reaction on single water molecule bridging Cu electrode (Sch. Sci., Tokyo Tech.) ○KIGUCHI, Manabu; KANEKO, Satoshi

## Friday, March 23, PM

Chair: KAMIYA, Kazuhide (13 : 00 ~ 14 : 00)

\* 12:50-13:00: interval for laptop PC connection.(4G1-25, 4G1-27, 4G1-29)

- 4G1-25\*\*** Operando 3D-XAFS imaging of Local Chemical Compositions and Valence in PEFC Membrane Electrode Assembly with Pt<sub>3</sub>Co/C Cathode Catalyst (RCMS, Nagoya Univ.) ○TAN, Yuanyuan; MATSUI, Hirosuke; ISHIGURO, Nozomu; MAEJIMA, Naoyuki; URUGA, Tomoya; SAKATA, Tomohiro; SEKIZAWA, Oki; TADA, Mizuki

- 4G1-27\*\*** Visualization of Oxygen diffusion in Ce<sub>2</sub>Zr<sub>2</sub>O<sub>8</sub> Particles by Ptychography-XAFS (RIKEN Spring-8 Center; Grad. Sch. Eng., Osaka Univ.; RCMS, Nagoya Univ.) ○ISHIGURO, Nozomu; HIROSE, Makoto; SHIMOMURA, Kei; BURDET, Nicolas; MATSUI, Hirosuke; TAKAHASHI, Yukio; TADA, Mizuki

- 4G1-29\*** The effects of ions on the interface structure between carbon electrode and electrolyte (SACI, Kyoto Univ.; Grad. Sch. Sci., Kobe Univ.; Grad. Sch. Eng., Kyoto Univ.; Grad. Sch. Frontier Sci., The Univ. of Tokyo; Grad. Sch. Global Env. Studies, Kyoto Univ.) ○MINATO, Taketoshi; ARAKI, Yuki; UMEDA, Ken-ichi; ONISHI, Hiroshi; ABE, Takeshi; OGUMI, Zempachi

Chair: MINATO, Taketoshi (14 : 10 ~ 15 : 10)

\* 14:00-14:10: interval for laptop PC connection.(4G1-32, 4G1-34, 4G1-35, 4G1-36, 4G1-37)

- 4G1-32\*\*** Visualization of anisotropic crystalline phase variations inside Cr-supported FeOx dendrite crystals for oxygen storage process (Grad. Sch. Sci., Nagoya Univ.) ○MATSUI, Hirosuke; SUZUKI, Youya; ISHIGURO, Nozomu; TADA, Mizuki

- 4G1-34** Synthesis of Rh and Cr-supported ceria crystals with micrometer size and their redox property (Sch. Sci., Nagoya Univ.) ○WAKAMATSU, Kouhei; MATSUI, Hirosuke; ISHIGURO, Nozomu; MURATSUGU, Satoshi; TADA, Mizuki

- 4G1-35** Preparation of Pt-based nanocluster - polymer - carbon nanotube composite catalysts and evaluation of oxygen reduction reaction performances (Grad. Sch. Sci., Nagoya Univ.) ○ICHIHASHI, Kentaro; MIYAMOTO, Shota; MURATSUGU, Satoshi; TADA, Mizuki

- 4G1-36** Structural kinetics of oxidation process on PEFC Pt/C and Pt<sub>3</sub>Co/C cathode catalysts during voltage operation and gas exchange at cathode (Grad. Sch. Sci., Nagoya Univ.) ○OZAWA, Saki; MATSUI, Hirosuke; TAGUCHI, Masahiro; ISHIGURO, Nozomu; URUGA, Tomoya; SEKIZAWA, Oki; SAKATA, Tomohiro; HIGASHI, Kotaro; TADA, Mizuki

- 4G1-37** Local cell catalysts composed single-metal-atom-doped covalent

organic frameworks (RCSEC, Osaka Univ.) ○TATEBE, Tomomi; YAMAMURA, Shuhei; HARADA, Takashi; KAMIYA, Kazuhide; NAKANISHI, Syuji

Room G2  
Bldg. 11 1112

## Physical Organic Chemistry -Reaction Mechanism-

## Wednesday, March 21, AM

Chair: KITAGAWA, Toshikazu (10 : 00 ~ 10 : 50)

\* 9:50-10:00: interval for laptop PC connection.(2G2-07, 2G2-08, 2G2-10, 2G2-11)

- 2G2-07** Photochemical Indole Ring Formation from Sulfonamide Derivatives (Fac. of Sci., Okayama Univ. of Sci.) ○NAKAMOTO, Taiji; WAKAMATSU, Kan; YAMADA, Haruo

- 2G2-08\*** In-Cage Trapping of Carbocation Obtained in the Photosolvolysis of 2,3-Dialkylxy-naphthalene (Department of Environmental Science, Faculty of Science) ○USUI, Satoshi; KINUGAWA, Chihiro; FUJITA, Haruka; KUNIMINE, Takuya; MUROHASHI, Takahiro; SUZUKI, Takahiro

- 2G2-10** Control of Tetralin Formation During Oxidation of Alkene with Hypervalent Iodine (Grad. Sch. Mat. Sci., Univ. of Hyogo) ○HIGASHIDA, Keigo; FUJITA, Morifumi; SUGIMURA, Takashi

- 2G2-11** Photochemical Generation of OR Radical Species from Aryl Methyl Peroxides (Grad. Sch. Sci., Hiroshima Univ.) ○OYAMA, Ryoko; ABE, Manabu

Chair: USUI, Satoshi (11 : 00 ~ 11 : 50)

\* 10:50-11:00: interval for laptop PC connection.(2G2-13, 2G2-15, 2G2-16, 2G2-17)

- 2G2-13\*** Methane oxygenation with molecular oxygen by chlorine dioxide (IACS, Osaka Univ.; OTRI, Osaka Univ.) ○OHKUBO, Kei

- 2G2-15** Generation, Characterization of Diphenylcarbene Protected by Two Iodo and Two Trifluoromethyl Groups (Grad. Sch. Eng., Mie Univ.) ○KAWAMOTO, Yui; HIRAI, Katsuyuki; KITAGAWA, Toshikazu

- 2G2-16** Reactivity of Diradicals in Macrocyclic Ring System (Grad. Sch. Sci., Hiroshima Univ.) ○MIYAHARA, Aina; HATANNO, Sayaka; ABE, Manabu

- 2G2-17** Steric effect on the reactivity of singlet 2,2-dialkoxy-1,3-diyli (Grad. Sch. Sci., Hiroshima Univ.) ○AKISAKA, Rikuo; HATANNO, Sayaka; ABE, Manabu

## Wednesday, March 21, PM

Chair: OHGA, Yasushi (13 : 30 ~ 14 : 20)

\* 13:20-13:30: interval for laptop PC connection.(2G2-28, 2G2-30, 2G2-31, 2G2-32)

- 2G2-28\*\*** Excess vibrational energy labeling of an alkoxy radical intermediate (Dept. Chem., Texas A&M Univ.) ○KUROUCHI, Hiroaki; SINGLETON, Daniel

- 2G2-30\*\*** Kinetic Study on Dimerization Reaction of [60]Fullerene Based on Atomic-Resolution Real-Time Electron Microscopic Imaging (Grad. Sch. Sci., The Univ. of Tokyo) ○KOWASHI, Satori; OKADA, Satoshi; SCHWEIGHAUSER, Luca; YAMANOUCI, Kaoru; HARANO, Kouji; NAKAMURA, Eiichi

- 2G2-31** Kinetic analysis of the asymmetric List-Barbas-Mannich reaction in freeze concentrated solution (Sch. Sci., Tokyo Tech.) ○IJIHIMA, Kouji; HARADA, Makoto; FUKUHARA, Gaku; OKADA, Tetsuo

- 2G2-32** Monitoring of Electrochemical Dibromination of 4-Octyne in Non-aqueous Solvent by in situ Raman Spectroscopy Using Recycling Flow System (Grad. Sch. Sci. Eng., Kindai Univ.) ○MATSUMOTO, Kouichi; MITANI, Naoya; YAMAGUCHI, Kouji; FUKADA, Yoji; ENDO, Asuka; SATA, Ryosuke; HATANAKA, Miho; MORISAWA, Yusuke; ASHIMURA, Shigenori; WAKABAYASHI, Tomonari

Chair: NAKATA, Kazuhide (14 : 30 ~ 15 : 20)

\* 14:20-14:30: interval for laptop PC connection.(2G2-34, 2G2-35, 2G2-36, 2G2-37)

- 2G2-34** Synthetic Reaction of Substituted Truxenes and Related Compounds by Aldol Condensation in Ionic Liquids (Grad. Sch. Eng., Mie Univ.) AYOYAMA, Gaku; ○BANNNO, Satoshi; AOKI, Takashi; OKAZAKI, Takao; KITAGAWA, Toshikazu

- 2G2-35** The Solvent Effect in Diastereoselective Hydride Reduction of  $\alpha$ -Substituted Propiophenones. (Grad. Sch. Integrated Arts Sci., Kochi Univ.; Fac. Sci., Kochi Univ.; Center for Advanced Marine Core Research, Kochi Univ.) ○MAEDA, Koryo; SAIGO, Hikari; TABELI, Masaru; SHIGEHARA, Minoru; YAMASAKI, Chisako; KANENO, Daisuke; TSUDA, Masashi

- 2G2-36** Regioselectivity and Reaction Mechanism of Tricyanovinylating of Pyrrole Derivatives (Fac. Sci., Kochi Univ.; Grad. Sch. Integrated Arts Sci., Kochi Univ.; Center for Advanced Marine Core Research, Kochi Univ.)

○TAKAHASHI, Sora; ARISAWA, Saori; TANI, Ryota; KANENO, Daisuke; TSUDA, Masashi

**2G2-37\*** Computational Study on the solute-solvent coupling analysis in Solution Reaction Dynamics (Ind. Tech. Ctr. Nagasaki; Grad. Sch. Eng., Nagasaki Univ.) ○SHIGEMITSU, Yasuhiro; OHGA, Yasushi

Chair: KANENO, Daisuke (15 : 30~16 : 20)

\* 15:20-15:30: interval for laptop PC connection.(2G2-40, 2G2-41, 2G2-42, 2G2-43)

**2G2-40** Theoretical Studies on Oxidative Kinetic Resolution of Racemic Secondary Alcohols Using Chiral Ligand-Hybridized Nitroxyl Radical/Copper Cooperative Catalysis (Grad. Sch. Sci. Eng., Ibaraki Univ.; Grad. Sch. Pharm. Sci., Tohoku Univ.) ○KAWASHIMA, Kyohei; SASANO, Yusuke; KOGURE, Naoki; KASABATA, Koki; IWABUCHI, Yoshiharu; MORI, Seiji

**2G2-41** Quantum Chemical Study for the Pressure Effect on [4+4] Cycloaddition of Anthracene Cyclophane (Sch. Eng., Kyoto Univ.) ○NAKATANI, Kaho; FUKUDA, Ryoichi

**2G2-42** Computational approach to the mechanism of synthesis of point-fluorinated cycloalkenes with the Grubbs catalyst (Grad. Sch. Eng., Tottori Univ.) ○HAYASE, Shuichi; NOKAMI, Toshiki; ITOH, Toshiyuki

**2G2-43\*** Substituent Effects on the Gas-Phase Stabilities of Amino(phenylboronyl)methyl Anions (Sci. Res. Ctr., Hosei Univ.; IMCE, Kyushu Univ.) ○NAKATA, Kazuhide; FUJIO, Mizue

## Room G3

Bldg. 11 1113

### Analytical Chemistry

Tuesday, March 20, AM

#### Chromatography and Electrophoresis

Chair: HAYASHITA, Takashi (9 : 20 ~ 10 : 20)

\* 9:10-9:20: interval for laptop PC connection.(1G3-03, 1G3-04, 1G3-05, 1G3-06, 1G3-07, 1G3-08)

**1G3-03** Consideration of tube radial distribution chromatography based on phase separation multi-phase flow from height equivalent to a theoretical plate (Fac. Sci. Eng., Doshisha Univ.) ○MATSUSHITA, Chihiro; OGAWA, Kazuhiro; SUGAWA, Yuki; TSUKAGOSHI, Kazuhiko

**1G3-04** Development of tube radial distribution chromatography based on phase separation multi-phase flow caused by pressure loss (Grad. Sch. Eng., Doshisha Univ.) ○WADA, Susumu; NAKAYAMA, Yukari; TSUKAGOSHI, Kazuhiko

**1G3-05** Development of HP-TRDC and optical isomers separation (Grad. Sch. Eng., Doshisha Univ.) ○SANADA, Nobuyuki; OGAWA, Kazuhiro; NAKATA, Koyo; YAMADA, Kento; TSUKAGOSHI, Kazuhiko

**1G3-06** Observation of specific fluidic flow by using water/hydrophilic/hydrophobic organic solvent solution and three-to-one microchannel (Grad. Sch. Eng., Doshisha Univ.) ○MORI, Ryuki; NAKATA, Yuko; YAMAWAKI, Bun; TSUKAGOSHI, Kazuhiko

**1G3-07** Protein separation by extended-nano gradient chromatography (Grad. Sch. Eng., The Univ. of Tokyo) TOYODA, Kouto; ○SHIMIZU, Hisashi; MAWATARI, Kazuma; KITAMORI, Takehiko

**1G3-08** Molecular weight distribution of heavy metal ions bound with humic acids using gel electrophoresis (Grad. Sch. Sci., Eng., Saitama Univ.) ○MARUMO, Kazuki; SAITO, Takumi; SHIBUKAWA, Masami; SAITO, Shingo

Chair: SAITOH, Shingo (10 : 30~11 : 20)

\* 10:20-10:30: interval for laptop PC connection.(1G3-10, 1G3-12, 1G3-14)

**1G3-10\*** Effect of Properties of Activated Carbon and Silica Gel Sampling Agents on Organic Solvent Extraction Efficiency in Low Concentration Region (JOHAS) ○ABIKO, Hironobu

**1G3-12\*\*** Air-floating PM<sub>2.5</sub> Collection and Detection Device for Monitoring (Grad. Sch. Eng., Nagoya Univ.) ○SHIMADA, Taisuke; YASAKI, Hiroto; YASUI, Takao; HIBARA, Akihito; YANAGIDA, Takeshi; KAJI, Noritada; KANAI, Masaki; NAGASHIMA, Kazuki; KAWAI, Tomoji; BABA, Yoshinobu

**1G3-14** Recovery of Uranium Using Phosphate Type Fluorous Extractant (Sch. Eng., Tokai Univ.) ○HIROSE, Takaya; NAKAGAWA, Kouki; ASANUMA, Noriko; INAZU, Toshiyuki

#### Extraction, Adsorption and Ion Exchange

Chair: TSUKAGOSHI, Kazuhiko (11 : 30~12 : 30)

\* 11:20-11:30: interval for laptop PC connection.(1G3-16, 1G3-17, 1G3-19, 1G3-21)

**1G3-16** Ion-exchange selectivity for alkaline metal ions of metal-organic framework based on lanthanum (III) and tetrakisphosphonate (Grad. Sch. Sci., Eng., Saitama Univ.) ○ISO, Kohei; HANDA, Yuiko; SAITO, Shingo;

SHIBUKAWA, Masami

**1G3-17\*\*** Probing and controlling the interactions between polyhalogenated arenes and small molecules at the solid-liquid interfaces (Fac. Eng., Nagaoka Univ. of Tech.; Coll. Biosci. Biotechnol., Chubu Univ.) ○YAMAMOTO, Masanori; SATO, Kazunori; YAMAMOTO, Atsushi

**1G3-19\*\*** Laser-induced single sub-picolitter microparticle-based extraction/detection at single molecule-level (Grad. Sch. Sci., Hokkaido Univ.) ○MIURA, Atsushi; NOHARA, Riku; NOJIMA, Azumi; KITAMURA, Noboru

**1G3-21** Quantitative Enrichment Control in Microdroplet Pretreatment Utilizing Spontaneous Emulsification (Tokyo Tech.) ○ZHOU, Lin; FUKUYAMA, Mao; HIBARA, Akihito

Tuesday, March 20, PM

### Analytical Chemistry on Plasmonics

Chair: HASEGAWA, Takeshi (13 : 40~14 : 30)

\* 13:30-13:40: interval for laptop PC connection.(1G3-29, 1G3-31, 1G3-33)

**1G3-29\*\*** Manipulation the plasmon confinement by plasmonics-nanofluidics hybrid device and its application in IR spectroscopic study of nanoconfined water (RIKEN Center for Advanced Photonics) ○LE, Thu H. H.; TANAKA, Takuo

**1G3-31\*\*** Novel and facile fabrication method of AgNPs@Au-shelled flexible SERS substrate with a wide range of pH response (RIES, Hokkaido Univ.) ○INOSE, Tomoko; UEZONO, Shuhei; FORTUNI, Beatrice; TOYOUCHI, Shuichi; FUJITA, Yasuhiko; UMEMOTO, Kazuki; MASUHARA, Akito; UJI-I, Hiroshi

**1G3-33** A Consideration of ATR-FUV Spectra of Hydrated PMEA (Osaka Electro-Communication Univ.; Fac. Sci. Eng., Kindai Univ.; IMCE, Kyushu Univ.) ○NAKAJIMA, Yurika; UENO, Nami; MORISAWA, Yusuke; TANAKA, Masaru; MORITA, Shigeaki

### Analysis of Micro/Nano Space

Chair: KUNIMURA, Shinsuke (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(1G3-35, 1G3-36, 1G3-37, 1G3-38, 1G3-39, 1G3-40)

**1G3-35\*** Improvement of the image analysis methods in the surface elemental analysis based on the scanning probe microscopy: XANAM (Grad. Sch. Eng., Nagoya Univ.; Inst. for Cat., Hokkaido Univ.; Coll. of Liberal Arts, ICU; KEK) ○SUZUKI, Shushi; MUKAI, Shingo; CHUN, Wang-jae; NOMURA, Masaharu; ASAKURA, Kiyotaka

**1G3-36** Single-molecule chiral recognition based on conductance measurement using chiral molecular tips (Sch. Sci., Tokyo Tech.) ○MURAKAMI, Ryo; NISHINO, Tomoaki

**1G3-37** Effects of atomic layer coating on single-particle detections using solid-state micropores (ISIR, Osaka Univ.) ○HAYASHIDA, Tomoki; OHSHIRO, Takashito; TSUTSUI, Makusu; TANIGUCHI, Masateru

**1G3-38** Concentration of trace elements in the environmental water using freezing and melting process of eutectics of salt and water 2 (Fac. Sci., Kanagawa Univ.) ○ARAI, Masaru; NISHIMOTO, Yoko

**1G3-39** Effect of preparing condition on the Bactericidal effects of electrolyzed water containing hypochlorous acid (Fac. Sci., Kanagawa Univ.) ○MIZUSHIMA, Hiroki; MATSUMURA, Yuriko; IWASAWA, Atsuo; NISHIMOTO, Yoko

**1G3-40** Gelation and Water State Analysis of Methyl Cellulose Thermo Reversible Hydrogels containing Salt and Polyethylene Glycol (Fac. Sci., Kanagawa Univ.) ○ENDO, Ayumu; MOCHIDA, Shigeaki; NISHIMOTO, Yoko

Chair: HASHIMOTO, Takeshi (15 : 50~16 : 40)

\* 15:40-15:50: interval for laptop PC connection.(1G3-42, 1G3-44, 1G3-45, 1G3-46)

**1G3-42\*\*** Detection of the gum from a Japanese lacquer film (JEOL Ltd.) ○NIIMURA, Noriyasu; NISHIOKA, Hideo; TERASHIMA, Hiroshi; KAMO, Osamu; SHIMOIKEDA, Yuichi; SASAKAWA, Hiroaki

**1G3-44** Structure analysis of N-containing pharmaceutical compounds by the crystalline sponge method (Grad. Sch. Eng., The Univ. of Tokyo; ACCEL, JST) ○SAKURAI, Fumie; KIKUCHI, Takashi; FUJITA, Makoto

**1G3-45** Development of wavelength-tunable photothermal optical phase shift detection device for absorption spectrometry in microspace (Grad. Sch. Eng., The Univ. of Tokyo) ○SUGINO, Fumitosh; SHIMIZU, Hisashi; MIURA, Kiyotaka; MAWATARI, Kazuma; KITAMORI, Takehiko

**1G3-46** Development of simple and versatile molecule detection method for extended-nano spaces utilizing optical diffraction (Grad. Sch. Eng., The Univ. of Tokyo) ○TSUYAMA, Yoshiyuki; MAWATARI, Kazuma; KITAMORI, Takehiko

Wednesday, March 21, AM

### Immunoassay

Chair: HISAMOTO, Hideaki (9 : 20 ~ 10 : 20)

\* 9:10-9:20: interval for laptop PC connection.(2G3-03, 2G3-05)

- 2G3-03\*** Development of multi-biomarker testing kit using paper, film, and adhesive tape (Health Research Inst., AIST) ○FUCHIWAKI, Yusuke; TANAKA, Masato; GOYA, Kenji
- 2G3-05 CSJ Award for Technical Development** Development of Highly Sensitive Rapid Diagnosis Method by Using Silver Amplification Immunochromatography (FUJIFILM Corp.; FUJIFILM Corp.; FUJIFILM Corp.; FUJIFILM Corp.) ○OYAMADA, Takayoshi; MORI, Mikinaga; KATADA, Junichi; WADA, Atsuhiko

Chair: BABA, Yoshinobu (10 : 30~11 : 30)

\* 10:20-10:30: interval for laptop PC connection.(2G3-10)

- 2G3-10# CSJ Award for Creative Works** Development of the methods for imaging and optical control of biomolecules based on protein chemistry (Grad. Sch. Sci., The Univ. of Tokyo) ○OZAWA, Takeaki

### Wednesday, March 21, PM

#### Protein and Virus Analysis

Chair: SUEYOSHI, Kenji (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(2G3-34, 2G3-35, 2G3-37, 2G3-39)

- 2G3-34** Molecularly imprinted nanosensors for highly sensitive fluorescent detection of proteins (Grad. Sch. Eng., Kobe Univ.) ○TSUTSUMI, Katsuki; MIZUKAWA, Yuki; KITAYAMA, Yukiya; TAKEUCHI, Toshifumi
- 2G3-35\*#** Molecularly imprinted nano-cavities capable of size, shape and ligand binding domain recognition for proteins bearing high homologous amino acid sequences and sizes (Grad. Sch. Eng., Kobe Univ.) ○KAMON, Yuri; TAKEUCHI, Toshifumi
- 2G3-37\*** Sensitive detection of neuron specific enolase using a plasmonic chip functionalized by bioinspired polydopamine coating (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○TOMA, Mana; IZUMI, Shota; TAWA, Keiko
- 2G3-39** Influenza single-virus identification by machine-learning-driven resistive pulse analysis (ISIR, Osaka Univ.) ○TSUTSUI, Makusu; ARIMA, Akihide; ILVA, Harlisa; YOSHIDA, Takeshi; TANAKA, Masayoshi; YOKOTA, Kazumichi; TONOMURA, Wataru; TANIGUCHI, Masateru; OKOUCHI, Mina; WASHIO, Takashi; KAWAI, Tomoji

#### Protein and Peptide

Chair: MINAMI, Tsuyoshi (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(2G3-41, 2G3-43, 2G3-44, 2G3-45, 2G3-46)

- 2G3-41\*** Automated ELISA Using Capillary Electrophoresis Apparatus (Grad. Sch. Eng., Osaka Pref. Univ.) ○SUEYOSHI, Kenji; NINOMIYA, Nozomi; ENDO, Tatsuro; HISAMOTO, Hideaki
- 2G3-43** Interaction of ferrocenyl naphthalene diimide derivatives with human telomere DNA (Grad. Sch. Eng., KIT) ○SATO, Shinobu; TAKENAKA, Shigeori
- 2G3-44** Development of novel cyclic ferrocenylnaphthalene diimide for electrochemical telomerase assay (Grad. Sch. Eng., KIT) KANEYOSHI, Shuma; KAYANO, Shino; SATO, Shinobu; ○TAKENAKA, Shigeori
- 2G3-45** Ultra-Sensitive Assay of Protease Activity on Nanofibrous Substrates (R&D Center for Marine Biosciences, JAMSTEC) ○TSUDOME, Mikiko; DEGUCHI, Shigeru
- 2G3-46** Improvement of peptide modification method for influenza virus detection using boron-doped diamond electrode (Fac. Sci. Tech., Keio Univ.) ○MORIMOTO, Rika; UJIE, Michiko; MATSUBARA, Teruhiko; YAMAMOTO, Takashi; EINAGA, Yasuaki; SATO, Toshinori

#### Sugar and Vitamin

Chair: TOMA, Mana (16 : 50~17 : 30)

\* 16:40-16:50: interval for laptop PC connection.(2G3-48, 2G3-50, 2G3-51)

- 2G3-48\*#** Molecular Self-assembled Chemosensor Arrays for Simultaneous Detection of Saccharides (IIS, The Univ. of Tokyo) ○SASAKI, Yui; MINAMI, Tsuyoshi
- 2G3-50** Estimation of alpha-tocopherol levels in serums of patients received statin. (Saitama Prefectural University) ○KAMIZYO, Rie; HARIGAYA, Haruki; MATSUMOTO, Yurie; OOTAKI, Mai; HIROWATARI, Yuji
- 2G3-51** Electrochemical Detection of Phosphorus-containing Amino Acid Herbicides Based on Their Complexation with cupric ion and its redox reaction (Fac. Adv. Sci. Tech., Kumamoto Univ.; Forensic Sci. Lab., Nagasaki Pref. Police H. Q.) ○SHIMADA, Hiroshi; NOGUCHI, Shiori; KATSUDA, Yusuke; KITAMURA, Yusuke; NISHIYAMA, Katsuhiko; IHARA, Toshihiro

### Thursday, March 22, AM

#### Cell and Microbiology

Chair: NISHIZAWA, Seiichi (9 : 10 ~10 : 10)

\* 9:00-9:10: interval for laptop PC connection.(3G3-02, 3G3-03, 3G3-04, 3G3-05)

- 3G3-02** Dark-field microscopy imaging of bacteria using bacteriophage-modified gold nanoparticle aggregate as an optical probe (Fac. Sci., Kochi Univ.) ○MASASHI, Imai; WASHIO, Kazuya; NIKO, Yosuke; HADANO, Shingo; WATANABE, Shigeru; MATSUZAKI, Shigenobu; UCHIYAMA, Jumpei

- 3G3-03** Development of the method of single cell separation and detection for rapid microbiological analysis (Grad. Sch. Eng., Nagoya Univ.) ○UCHIDA, Kentaro; ONOSHIMA, Daisuke; YUKAWA, Hiroshi; ISHIKAWA, Kenji; HORI, Masaru; BABA, Yoshinobu

- 3G3-04** Development of exosome isolation method by porous glass device (Sch. Eng., Nagoya Univ.) ○AOKI, Keita; YUKAWA, Hiroshi; ONOSHIMA, Daisuke; YAMAZAKI, Shuji; KIHARA, Naoto; KOGUCHI, Ryohei; TAKAHASHI, Kumiko; ODAKA, Hidefumi; ISHIKAWA, Kenji; HORI, Masaru; BABA, Yoshinobu

- 3G3-05 CSJ Award for Outstanding Young Women Chemists** Design of Nano-and Micro-Structures and Creation of Novel Bioanalytical Technology (Grad. Sch. Eng., Osaka Pref. Univ.) ○TOKONAMI, Shiho

#### Nucleic-Acid Analysis

Chair: KAJI, Noritada (10 : 20~11 : 20)

\* 10:10-10:20: interval for laptop PC connection.(3G3-09, 3G3-10, 3G3-11, 3G3-12)

- 3G3-09** Development of red-emitting monomethine cyanine dye with selectivity for RNAs (Sch. Sci., Tohoku Univ.) ○YOSHINO, Yukina; SATO, Yusuke; NISHIWAZA, Seichi
- 3G3-10** Fluorescence sensing of double-stranded RNAs by triplex-forming PNA probes carrying two thiazole orange as base surrogates (Sch. Sci., Tohoku Univ.) ○MATSUSHITA, Fumika; TANABE, Takaaki; SATO, Takaya; SATO, Yukuke; NISHIZAWA, Seichi
- 3G3-11** Use of fluorescent triplex-forming peptide nucleic acid probes targeting dsRNA structures as the indicator for identifying new compounds to interfere with TLR3/dsRNA interactions (Sch. Sci., Tohoku Univ.) ○YANAGITA, Takuya; SATO, Yusuke; NISHIZAWA, Seichi
- 3G3-12# CSJ Award for Young Chemists** Design of Fluorescent Probes Capable of Binding to the Specific Sites in Nucleic Acids and Their Analytical Application (Grad. Sch. Sci., Tohoku Univ.) ○SATO, Yusuke

### Asian International Symposium - Analytical Chemistry -

#### Thursday, March 22, PM

Chair: Hibara, Akihide (13 : 00~14 : 20)

- 3G3-25# Opening Remarks / Closing Remarks** Opening remarks (Saitama Univ.) ○Shibukawa, Masami (13:00~13:10)
- 3G3-26# Keynote Lecture** Bioanalytical Chemistry with Nanomaterials: From Nanofabrication to Analytical Devices (National Taiwan Univ.) ○Liao, Wei-Ssu (13:10~13:40)
- 3G3-29# Invited Lecture** Ion exchange in coordination polymers based on phosphate ligands (Saitama Univ.) ○Handa, Yuiko (13:40~14:00)
- 3G3-31# Invited Lecture** Cell-sized liposome as soft micro-reactor and detector (The Univ. of Tokyo) ○Toyota, Taro (14:00~14:20)

Chair: Toda, Kei (14 : 30~15 : 40)

- 3G3-34# Keynote Lecture** Study of nucleic acid modifications by chemical labeling - mass spectrometry analysis (Wuhan Univ.) ○Yuan, Bifeng (14:30~15:00)
- 3G3-37# Invited Lecture** Mass spectrometric measurements of fast radical reactions at the air-water interface (National Institute for Environmental Studies) ○Enami, Shin-ichi (15:00~15:20)
- 3G3-39# Invited Lecture** Sample pretreatments for droplet microfluidics by using nanodroplet formation (Tohoku Univ.) ○Fukuyama, Mao (15:20~15:40)

Chair: Nishizawa, Seiichi (15 : 50~17 : 10)

- 3G3-42# Keynote Lecture** Novel electrochemical and colorimetric sensors for clinical and environmental applications (Srinakharinwirot Univ.) ○Siangproh, Weena (15:50~16:20)
- 3G3-45# Invited Lecture** Integrated electrode array device for cell analysis (Tohoku Univ.) ○Ino, Kosuke (16:20~16:40)
- 3G3-47# Invited Lecture** Single bacterium and cell analysis by microfluidic palpation devices (Nagoya Univ.) ○Kaji, Noritada (16:40~17:00)
- 3G3-49# Opening Remarks / Closing Remarks** Closing remarks (Kyoto Univ.) ○Hasegawa, Takeshi (17:00~17:10)

### Analytical Chemistry

#### Friday, March 23, AM

#### Nucleic-Acid Analysis

Chair: OHSHIRO, Takahito (9 : 10 ~9 : 40)

\* 9:00-9:10: interval for laptop PC connection.(4G3-02, 4G3-03, 4G3-04)

- 4G3-02** Design of amphipathic  $\alpha$ -helix peptide-based fluorescent probes targeting exosomes (Sch. Sci., Tohoku Univ.) ○MOGAMI, Kenta; TAKAHASHI, Kenta; SATO, Yusuke; NISHIZAWA, Seiti
- 4G3-03** Design of siRNA binding PNA probes integrated with pyrene unit and evaluation of their functions for siRNA sensing (Sch. Sci., Tohoku Univ.) ○TAKAHASHI, Yuki; TANABE, Takaaki; SATO, Takaya; SATO, Yusuke; NISHIZAWA, Seichi
- 4G3-04** Oxide nanowire device for analyzing urinary microRNAs (Grad. Sch. Eng., Nagoya Univ.) ○NAGANAWA, Tsuyoshi; YASUI, Takao; YANAGIDA, Takeshi; KAJI, Noritada; NAGASHIMA, Kazuki; BABA, Yoshinobu

### Nucleic Acid and Fluorescence Probe

Chair: TOYOTA, Taro (9 : 50 ~ 10 : 50)

- \* 9:40-9:50: interval for laptop PC connection.(4G3-06, 4G3-08, 4G3-09, 4G3-10, 4G3-11)
- 4G3-06\*** Development of Single Signal Analysis Method for Single-Molecule Tunnel-current based sequencing (Osaka Univ.) ○OHSHIRO, Takahito; YOSHIDA, Takashi; TAKAAI, Takayuki; KOMOTO, Yuuki; WASHIO, Takashi; TANIGUCHI, Masateru
- 4G3-08<sup>#</sup>** Detection of Cell-Free Circulating Methylated DNA for Early Diagnosis of Cancer by Microheater-Nanowires (Grad. Sch. Eng., Nagoya Univ.) ○TAKAHASHI, Hiromi; YASUI, Takao; SHINJO, Keiko; SHIMADA, Taisuke; KAJI, Noritada; OKAMOTO, Akimitsu; BABA, Yoshinobu
- 4G3-09** In vivo fluorescence imaging of the interaction between transplanted stem cells and immune cells confirmed by quantum dots (Grad. Sch. Eng., Nagoya Univ.) ○KITAMURA, Koudai; YUKAWA, Hiroshi; SATOU, Kazuhide; ARIMOTO, Tomoko; ONOSHIMA, Daisuke; ISHIKAWA, Tetsuya; BABA, Yoshinobu
- 4G3-10** Design and Evaluation of Boronic Acid Fluorophore Vesicle for Selective Saccharide Recognition (Sci. Tec., Sophia Univ.; Sci. Tec., Sophia Univ.) ○ENDO, Miwa; NODOMI, Nana; TSUCHIDO, Yuji; HASHIMOTO, Takeshi; HAYASHITA, Takashi
- 4G3-11** Influence of introduction of nitro group on metal recognition and inclusion behavior of dpa type azoprobe supramolecular complexes (Sci. Tec., Sophia Univ.) ○TAKAMOTO, Yoshiki; OKADA, Sousuke; TSUCHIDO, Yuji; HASHIMOTO, Takeshi; HAYASHITA, Takashi

### Micro-Fluidics and Flow Analysis

Chair: NIWA, Osamu (11 : 00 ~ 12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(4G3-13, 4G3-14, 4G3-15, 4G3-16, 4G3-17, 4G3-18)
- 4G3-13** A method of packaging biomaterials into a glass microfluidic chip (RIKEN QBiC) ○FUNANO, Shunichi; OTA, Nobutoshi; SATO, Asako; TANAKA, Yo
- 4G3-14** Role of Micro-channel Deformability in Single-cell Deformability Analysis Device (Grad. Sch. Eng., Nagoya Univ.) ○SUZUKI, Taiki; KAJI, Noritada; YASUI, Takao; BABA, Yoshinobu
- 4G3-15** Development of UV excitation photothermal optical phase shift microscopy for sensitive detection of biomolecules (Grad. Sch. Eng., The Univ. of Tokyo) ○TAKEDA, Shigenori; SHIMIZU, Hisashi; MAWATARI, Kazuma; KITAMORI, Takehiko
- 4G3-16** Proton transfer mechanism in extended-nano space (Grad. Sch. Eng., The Univ. of Tokyo) ○ISOGAI, Kohei; MAWATARI, Kazuma; KITAMORI, Takehiko
- 4G3-17** High-throughput imaging flow cytometry on a mirror-embedded microfluidic chip with machine learning (Grad. Sch. Sci., The Univ. of Tokyo) ○MIURA, Taichi; MIKAMI, Hideharu; OZEKI, Yasuyuki; GODA, Keisuke
- 4G3-18** High-sensitivity fluorescence imaging flow cytometry with a scanned line-focus excitation beam (Grad. Sch. Sci., The Univ. of Tokyo) ○HASHIMOTO, Yuta; MIURA, Taichi; MIKAMI, Hideharu; OZEKI, Yasuyuki; GODA, Keisuke

**Room G4**  
Bldg. 11 1122

### Organic Chemistry -Reaction and Synthesis- Organic Photochemistry

Tuesday, March 20, PM

Chair: ITOH, Akichika (13 : 00 ~ 14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(1G4-25, 1G4-26, 1G4-27, 1G4-28, 1G4-29, 1G4-30)
- 1G4-25** Development of Stereoselective Paterno-Buchi Reaction (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○II, Hiromi; WATANABE, Yasutaka; SUGA, Takuya; SOETA, Takahiro; UKAJI, Yutaka

- 1G4-26** Diastereodifferentiating [2+2]Photocycloaddition Reaction of Intramolecular Naphthoquinone-Olefin Systems (Grad. Sch. Eng., Osaka Univ.) ○ISHIKAWA, Hiroki; MORI, Tadashi
- 1G4-27** Stereoselective radical addition to alkene bearing oxazolidinone as chiral auxiliary via photoinduced decarboxylation (Grad. Sch. Eng., Univ. of Fukui) ○ISAKA, Yuta; YOSHIMI, Yasuharu
- 1G4-28** Photoinduced decarboxylative radical addition of cyclic amino acids by memory of chirality (Grad. Sch. Eng., Univ. of Fukui) ○OZAKI, Yui; YOSHIMI, Yasuharu
- 1G4-29** Examination of Supramolecular asymmetric photo-heterodimerization of 2-anthracene carboxylate and 2,6-anthracene dicarboxylate mediated by human serum albumin and reaction mechanism (Grad. Sch. Sci., Tohoku Univ.) ○FUJISHIRO, Yuya; TOYOOKA, Sota; OKUGI, Mitsuru; NISHIJIMA, Masaki; ARAKI, Yasuyuki; SAKAMOTO, Seiji; INOUE, Yoshihisa; WADA, Takehiko
- 1G4-30<sup>#</sup>** Supramolecular asymmetric photochirogenesis mediated by synthetic antibody: New ligand design in phage display technique for [4+4] photo-dimerization of 2-anthracenecarboxylate (IMRAM, Tohoku Univ.; IUC & Dept. Appl. Chem., Osaka Univ.; Grad. Sch. Eng., Osaka Univ.) ○YOSPANYA, Wijak; SAKAMOTO, Seiji; ARAKI, Yasuyuki; NISHIJIMA, Masaki; INOUE, Yoshihisa; WADA, Takehiko

Chair: WADA, Takehiko (14 : 10 ~ 15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(1G4-32, 1G4-33, 1G4-34, 1G4-35, 1G4-36)
- 1G4-32** Synthesis of  $\alpha$ ,  $\alpha$ -difluoroalkanoate via the Metal-free Visible-Light mediated Radical Difluoroacetylation of Terminal Alkenes (Grad. Sch. Eng., Tottori Univ.) ○FURUKAWA, Yuji; NOKAMI, Toshiki; ITOH, Toshiyuki
- 1G4-33<sup>#</sup>** Ortho-Alkylation of Pyridine N-Oxide by Photo-Catalyzed Alkene Cleavage (Grad. Sch. Eng., Kyoto Univ.) ○ZHOU, Wang; MIURA, Tomoya; MURAKAMI, Masahiro
- 1G4-34** O-Alkylation of serine and threonine by photoinduced decarboxylation (Grad. Sch. Eng., Univ. of Fukui) ○YAMAMOTO, Takashi; YOSHIMI, Yasuharu
- 1G4-35** Development of arylalkoxylation of olefins via photoredox catalysis (Gifu Pharm. Univ.) ○TANAKA, Wakako; YAMAGUCHI, Eiji; TADA, Norihiro; ITOH, Akichika
- 1G4-36<sup>#</sup>** Metal-free photocatalytic fluoroalkylation of olefins with diarylaminoanthracene catalysts (Lab. Chem. Life Sci., Tokyo Tech.) ○NOTO, Naoki; KOIKE, Takashi; AKITA, Munetaka

Chair: MAEDA, Hajime (15 : 20 ~ 16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(1G4-39, 1G4-40, 1G4-41, 1G4-43, 1G4-44)
- 1G4-39** Ring expansion of macrocyclic lactones by photoinduced decarboxylation (Grad. Sch. Eng., Univ. of Fukui) ○IWASAKI, Tomoya; YOSHIMI, Yasuharu
- 1G4-40** Development research of new photoredox copper catalyst driven by visible light (Gifu Pharm. Univ.) ○MATSUO, Kazuki; YAMAGUCHI, Eiji; TADA, Norihiro; ITOH, Akichika
- 1G4-41\*** Photooxygenation of aromatic substrates by azafluorenone derivatives as photoredox catalysts (Grad. Sch. Eng., Osaka Univ.; IACS, Osaka Univ.; OTRI, Osaka Univ.; Sch. Env. Sci. Eng., KUT) ○ASAHARA, Haruyasu; HORIKAWA, Yurie; YOKOYAMA, Soichi; OHKUBO, Kei; NISHIWAKI, Nagatoshi
- 1G4-43** Synthesis of non-charged organic redox photocatalyst and its reaction (Grad. Sch. Eng., Univ. of Fukui) ○FURUTANI, Toshiaki; YOSHIMI, Yasuharu
- 1G4-44** Development of intermolecular C-C/C-O bond forming reaction using visible light with molecular iodine (Gifu Pharm. Univ.) ○MAEJIMA, Saki; YAMAGUCHI, Eiji; TADA, Norihiro; ITOH, Akichika

Chair: YOSHIMI, Yasuharu (16 : 30 ~ 17 : 30)

- \* 16:20-16:30: interval for laptop PC connection.(1G4-46, 1G4-47, 1G4-48, 1G4-49, 1G4-50, 1G4-51)
- 1G4-46** Aromatic Bromination with Potassium Bromide via Photoredox Catalysis (ICR, Kyoto Univ.; Sch. Eng., Kyoto Univ.) ○IWAKAMI, Mako; IWAMOTO, Takahiro; NAKAMURA, Masaharu
- 1G4-47** Development of visible light responsive selenonium ylide as a carbene precursor (Gifu Pharm. Univ.) ○INAGAWA, Hisamori; YAMAGUCHI, Eiji; TADA, Norihiro; ITOH, Akichika
- 1G4-48** Development of synthetic methods of Polycyclic Aromatic Hydrocarbons with Organophotocatalysts (Gifu Pharm. Univ.) ○ABE, Ayaka; YAMAGUCHI, Eiji; TADA, Norihiro; ITOH, Akichika
- 1G4-49** Development of Intramolecular Photocycloaddition Reactions of Alkenes to 1,8a-Position of Naphthalene Ring (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.; Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Mat. Sci., NAIST) ○KUBO, Yuta; NAKASHIMA, Ryota; MIZUNO, Kazuhiko; FURUYAMA, Taniyuki; SEGI, Masahito; MAEDA, Hajime
- 1G4-50** Photo-Fries Rearrangement of Phenanthryl Esters (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○II, Kouya; FURUYAMA, Taniyuki; SEGI, Masahito; MAEDA, Hajime
- 1G4-51** Photochemical conversion of furoxans to  $\alpha$ -ketoesters and its application (Grad. Sch. Sci., Kobe Univ.) ○EGUCHI, Shuhei; HAYASHI, Masahiko; MATSUBARA, Ryosuke

## Wednesday, March 21, AM

Chair: IKEDA, Hiroshi (9 : 30 ~ 10 : 30)

- \* 9:20-9:30: interval for laptop PC connection.(2G4-04, 2G4-05, 2G4-06, 2G4-07, 2G4-08, 2G4-09)
- 2G4-04** Synthesis and Optical Properties of Aza-Substituted Fused-Boron Ketoiminates (Grad. Sch. Eng., Kyoto Univ.) ○WATANABE, Aoi; SUENAGA, Kazumasa; TANAKA, Kazuo; CHUJO, Yoshiki
- 2G4-05** Synthesis and evaluation of novel AIE dyes having Pyridine N-Oxide. (FIRST, Konan Univ.) ○SHIMADA, Naoaki; MURASHIMA, Takaya
- 2G4-06** Synthesis and optical properties of novel chiral cyclic compound with bispyrene unit (Grad. Sch. Eng., Tokyo Denki Univ.) ○IKEDA, Shintaro; MIYASAKA, Makoto
- 2G4-07** Synthesis of Novel Pyrrole Derivatives: Applications for Staining of a Poly(hydroxyalkanoate) Producer (NIT, Kitakyushu College) ○OKAWARA, Toru; MIZUNO, Kohei; KUNITAKE, Kiko; OKAO, Natsumi; TAKEHARA, Kenji
- 2G4-08** Characterization of firefly luciferase active site with dehydroxyluciferin derivatives (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○ARITOSHI, Seira; YAMAJI, Minoru; MAKI, Shojiro; HIRANO, Takashi
- 2G4-09** Study on factors for high efficiency of imidazopyrazinone chemiluminescence : correlation between intramolecular steric effect and chemical excitation efficiency (Grad. Sch. Sci. Eng., The Univ. of Electro-Communications) ○KANAI, Yuki; MAKI, Shojiro; HIRANO, Takashi

Chair: HIRANO, Takashi (10 : 40 ~ 11 : 40)

- \* 10:30-10:40: interval for laptop PC connection.(2G4-11, 2G4-12, 2G4-14, 2G4-15, 2G4-16)
- 2G4-11** Substituent Effects of the amide moiety on the ESIPF fluorescence behavior of 3-amido-substituted phthalimides (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Grad. Sch. Sci. Tech., Gunma Univ.; Adv. Sci. Res. Center, Okayama Univ.) ○ITANI, Kazumasa; YAMAJI, Minoru; OTA, Hiroshi; OKAMOTO, Hideki
- 2G4-12<sup>#</sup>** Organic Radical Light-emitting Diode Utilizing "Excited State C-C Bond Cleavage-Luminescence" of Methylenecyclopropanes (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○MATSUI, Yasunori; TAKABATAKE, Keita; FUKUDOME, Jun; NIWA, Akitsugu; OHTA, Eisuke; NAITO, Hiroyoshi; IKEDA, Hiroshi
- 2G4-14** C-C bond formation reaction using C<sub>60</sub> as a photoredox catalyst (Grad. Sch. Sci. Tech., Nihon Univ.) ○YAMAZAKI, Yuta; HAYAKAWA, Mamiko; AOYAMA, Tadashi; OUCHI, Akihiko
- 2G4-15** Photoelectrochemical properties of dyes adsorbed on semiconductor nanosheets (Grad. Sch. Urban Environmental Sci., TMU) ○SONOTANI, Amane; SANO, Keito; OHNISHI, Ryota; SHIMADA, Tetsuya; TAKAGI, Shinsuke
- 2G4-16** Design and application of the dyes releasing singlet oxygen by NIR irradiation (Fac. Eng., The Univ. of Tokyo) ○DEWA, Wakako; OKAMOTO, Akimitsu

Chair: OUCHI, Akihiko (11 : 50 ~ 12 : 30)

- \* 11:40-11:50: interval for laptop PC connection.(2G4-18, 2G4-19, 2G4-20, 2G4-21)
- 2G4-18<sup>#</sup>** Temperature, concentration and solvent dependence in chromic behaviors of diflavinylenes induced by aggregation based control of  $\pi$ -conjugated platform (Grad. Sch. Eng. Sci., Osaka Univ.) ○LI, Zimeng; KAWAMORITA, Soichiro; NAOTA, Takeshi
- 2G4-19** Development of new indenone-based photolabile protecting group with two-photon absorption ability (Grad. Sch. Sci., Hiroshima Univ.) ○SASAKI, Miyu; ABE, Manabu
- 2G4-20** Design and Synthesis of Near IR Two-photon responsive molecule with D- $\pi$ -D structure: Application to New Coumarin Based Caged Compound (Grad. Sch. Sci., Hiroshima Univ.) ○CHITOSE, Youhei; ABE, Manabu; LIN, Tzu-chau; CLAUDIN, Katan
- 2G4-21** Synthesis of caged Methyl- $\beta$ -Cyclodextrin and its application to simulated biological membrane. (Grad. Sch. Mat. Sci., NAIST) ○MAEHARA, Shohei; TAKAHASHI, Katsuhiko; MORIMOTO, Tsumoru; YASUHARA, Kazuma; NISHIYAMA, Yasuhiro; KAKIUCHI, Kiyomi

**Room G5**  
Bldg. 11 1123

Organic Chemistry -Reaction and Synthesis-  
Heteroatom Compounds

Tuesday, March 20, AM

Chair: IMOTO, Hiroaki (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1G5-08, 1G5-09, 1G5-10, 1G5-11, 1G5-12, 1G5-13)

- 1G5-08** Asymmetric Desymmetrization of *cis*-1,2-Diols by Chiral Boronic Acid/N-Methylimidazole Cooperative Catalytic System (Grad. Sch. Sci., Chiba Univ.) ○HOSAKA, Yusei; KUWANO, Satoru; ARAI, Takayoshi
- 1G5-09** Radical Hydroboration of Alkynes with N-Heterocyclic Carbene Boranes (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○SHIMOI, Masaki; WATANABE, Takashi; TANIGUCHI, Tsuyoshi; MAEDA, Katsuhiko; CURRAN, Dennis
- 1G5-10** Synthesis and Properties of Linear Boron Compounds by Using Boryllithium (Grad. Sch. Eng., Nagoya Univ.) ○YAGI, Atsumi; KISU, Haruki; YAMASHITA, Makoto
- 1G5-11** Synthesis and photophysical properties of BN-substituted pyrene (Grad. Sch. Mat. Sci., NAIST) ○MATSUMOTO, Akinobu; BETTINGER, Holger; ARATANI, Naoki; YAMADA, Hiroko
- 1G5-12** Synthesis and structure of 9,10-dihydro-9-aza-10-boraanthracene (Grad. Sch. Eng., Nagoya Univ.) ○ISHIKAWA, Yutaro; NEMA, Shinya; HAYASHI, Kohei; SUZUKI, Katsunori; YAMASHITA, Makoto
- 1G5-13** Synthesis and properties of tetraaryldiborane(4) dianion and its copper complex (Grad. Sch. Eng., Nagoya Univ.) ○SEIJI, Akiyama; YAMASHITA, Makoto

Chair: SUZUKI, Katsunori (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1G5-15, 1G5-16, 1G5-17, 1G5-18, 1G5-19, 1G5-20)
- 1G5-15** Regio-selective Cyanation of (Z)-(1,2-Dibromo-2-arylviny)ltriisopropylsilane with Suppression of Halogen Elimination (Grad. Sch. Sci. Tech., Ryukoku Univ.) ○ENDO, Naoki; IWASAWA, Tetsuo
- 1G5-16** Stereo-defined Synthesis of Tetrasubstituted Olefins via Vicinal Dihaloalkenyl Scaffolds (Grad. Sch. Sci. Tech., Ryukoku Univ.) ○ENDO, Naoki; IWASAWA, Tetsuo
- 1G5-17** Synthesis of Chiral Pyrene-substituted BINAP and Its Metal Nanoparticle Composite (Grad. Sch. Sci. Eng., Kindai Univ.) ○SAKAI, Kiichi; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 1G5-18** Synthesis and Photoredox Reactions of Chiral Copper Complexes (Grad. Sch. Sci. Eng., Kindai Univ.) ○KAJIWARA, Yuu; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 1G5-19** Activation of 2-vinylindoles by 2-iodoimidazolium salt catalyst for [4+2] cycloaddition reaction (Grad. Sch. Sci., Chiba Univ.) ○SUZUKI, Takumi; KUWANO, Satoru; ARAI, Takayoshi
- 1G5-20<sup>#</sup>** The Structural Design of 5-Iodo-triazolium Salts for Halogen-Bonding Catalysis (Fac. Sci. Eng., Chuo Univ.) HARAGUCHI, Ryosuke; HOSHINO, Shun; ○FUKUZAWA, Shin-ichi

## Tuesday, March 20, PM

Chair: UCHIYAMA, Yosuke (13 : 30 ~ 14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1G5-28, 1G5-29, 1G5-30, 1G5-31, 1G5-32)
- 1G5-28** Synthesis of a Haxaphenylbenzene Bearing a Perfluorohexyl Group (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○SUZUKI, Seima; AGOU, Tomohiro; KUBOTA, Toshio; FUKUMOTO, Hiroki; NAKAGAWA, Hayato; MORISHITA, Kazuki
- 1G5-29** Synthesis of sugar-conjugate chlorin derivative for PDT (Grad. Sch. Eng., Osaka Pref. Univ.) ○YAMAGUCHI, Hiroaki; NOMOTO, Akihiro; YANO, Shigenobu; OGAWA, Akiya
- 1G5-30** Synthesis of Fluorine-containing Heteroaromatic Compounds Using Mallory Reaction (1) (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○TAMURA, Yuuki; FUKUMOTO, Hiroki; KUBOTA, Toshio; AGOU, Tomohiro
- 1G5-31** Synthesis of Fluorine-containing Heteroaromatic Compounds Using Mallory Reaction (2) (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○SATOMI, Akira; FUKUMOTO, Hiroki; AGOU, Tomohiro; KUBOTA, Toshio
- 1G5-32<sup>#</sup>** Preparation of alkynylphosphoryl compounds via a palladium-catalyzed dehydrogenative coupling of terminal alkynes with P(O)H compounds (IRC3, AIST) ○HAN, Li-biao; CHEN, Tieqiao

Chair: HOSHIMOTO, Yoichi (14 : 40 ~ 15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1G5-35, 1G5-36, 1G5-37, 1G5-38, 1G5-39, 1G5-40)
- 1G5-35** Syntheses and Property of Hexafluorocyclopentane-fused Conjugated Heteroles (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○NEMOTO, Seiya; AGOU, Tohiro; FUKUMOTO, Hiroki; KUBOTA, Toshio
- 1G5-36** Convenient synthesis and synthesis application of  $\beta$ -substituted vinylsilanes (Fac. Eng., Kindai Univ.) ○YAMAMOTO, Takaya; IKAWA, Masataka; OKADA, Yoshiharu
- 1G5-37** The cross-coupling of diaryl ditelluride with arylboronic acid using CuTC(copper(I)-thiophene-2-carboxylate) under mild conditions (Sch. Sci., Tokai Univ.) KOGUCHI, Shiniti; ○SHIBUYA, Yuga
- 1G5-38** Synthesis and application of the optically active phosphine ligands (Kindai Univ.) ○TAKAGI, Yuta; OKADA, Yoshiharu
- 1G5-39** Synthesis of Group 11 Transition Metal Complexes Bearing a Highly Fluorinated Phosphine Ligand (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○WADA, Nao; AGOU, Tomohiro; FUKUMOTO, Hiroki; KUBOTA, Toshio
- 1G5-40** Wittig reaction using a non-stabilized phosphonium ylide bearing a phosphaheteratriptycene skeleton with benzaldehyde and observation of intermediates (Sch. Sci., Kitasato Univ.) KUNIYA, Suguru; WATANABE,

Ryo; OHTSUKI, Takemaru; UCHIYAMA, Yosuke

Chair: AGO, Tomohiro (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(1G5-42, 1G5-43, 1G5-44, 1G5-45, 1G5-46, 1G5-47)

**1G5-42** Synthesis of Arsole-Fused Heteropentacenes (KIT) ○FUJII, Toshiaki; TANAKA, Susumu; IMOTO, Hiroaki; NAKA, Kensuke**1G5-43** Syntheses of organoarsenic ligands by using practical carbon-arsenic bond formation reactions (KIT) ○KONISHI, Masafumi; SASAKI, Hiroshi; IMOTO, Hiroaki; NAKA, Kensuke**1G5-44** Selective Synthesis of Amino-Substituted Cyclotriphosphazene Derivatives (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Technical Development Department, Otsuka Chemical Co., Ltd) TOZA, Ryohei; ○KUROBOSHI, Manabu; TANAKA, Hideo; HAMA, Hiroshi**1G5-45** Selective Synthesis of Thio-Substituted Cyclotriphosphazene Derivatives by Nucleophilic Substitution of Hexachlorocyclotriphosphazene with Thiols (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MIKASA, Masaki; KUROBOSHI, Manabu; TANAKA, Hideo**1G5-46<sup>#</sup>** Synthesis and Structure of a Phosphinoboronate Ester Bearing a Fused Ring Framework (Grad. Sch. Sci., The Univ. of Tokyo) ○KANO, Naokazu; O'BRIEN, Nathan**1G5-47** Synthesis and Application to Reactions of Cage-Shaped Phosphite (Grad. Sch. Eng., Osaka Univ.) KONISHI, Akihito; ○TOMITA, Kazuma; YASUDA, Makoto

## Wednesday, March 21, AM

Chair: MURAOKA, Hiroki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2G5-01, 2G5-02, 2G5-03, 2G5-04, 2G5-05, 2G5-06)

**2G5-01** Synthesis and Solid-State Fluorescence Properties of Pentaarylarsoles (KIT) ○URUSHIZAKI, Aya; KAWASHIMA, Ikuo; IMOTO, Hiroaki; NAKA, Kensuke**2G5-02** Preparation and Optical and Electrochemical Properties of Phthalocyanines with Four or Eight Diphenylphosphino, Diphenylphosphineoxide, and Diphenylphosphinesulfide Groups (#Organization for Research Promotion, Iwate Univ.) ○KIMURA, Takeshi**2G5-03** Synthesis and properties of bismuth-containing  $\pi$ -conjugated compounds (Grad. Sch. Eng., Hiroshima Univ.) ○YAMAJI, Kosuke; ADACHI, Yohei; OHSHITA, Joji**2G5-04** Optical Properties of Axially Chiral 1,1'-Binaphthyl Substituted Diphosphene (Grad. Sch. Sci., Osaka Pref. Univ.) ○URA, Rikako; TSURUSAKI, Akihiro; KAMIKAWA, Ken**2G5-05** Reactivity of a Stable Dialkylidistibene bearing Triptycyl Framework (Coll. Sci., Rikkyo Univ.) ○NISHINO, Ryohei; MINOURA, Mao**2G5-06** Synthesis and Properties of Luminescent [7]Thiaheterohelicene Derivatives (Grad. Sch. Sys. Eng., Wakayama Univ.) ○KONDO, Satoshi; OSUGA, Hideji; SAKAMOTO, Hidefumi

Chair: HIRABAYASHI, Kazunori (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2G5-08, 2G5-09, 2G5-10, 2G5-11, 2G5-12, 2G5-13)

**2G5-08** Synthesis and properties of linear- and star-shaped D- $\pi$ -A molecules with a pyrazine core (Fac. Sci. Eng., Iwate Univ.) ○IWABUCHI, Naoki; MURAOKA, Hiroki; OGAWA, Satoshi**2G5-09** Synthesis and Properties of Poly(arylene sulfide) Containing Biphenyl Units (Fac. Sci. Eng., Iwate Univ.) ○SATO, Hiroki; MURAOKA, Hiroki; OGAWA, Satoshi**2G5-10** Synthesis, Isomerization, and Photo physical Property of Conjugated Sulfine (Thioiketone S-Oxide) Incorporated in a Rigid Skeleton (Grad. Sch. Sci., Eng., Saitama Univ.) ○EBINA, Ryota; NAKATA, Norio; ISHII, Akihiko**2G5-11** Synthesis and Characterization of Tetrathienylethylene Derivatives Functionalized with Aryl Groups (Fac. of Sci. and Engin., Iwate Univ.) ○OKUBO, Akihiro; MURAOKA, Hiroki; OGAWA, Satoshi**2G5-12** Synthesis and Structural Characterization of Porphyrin Derivatives with Sulfur Axial Ligands. (#Organization for Research Promotion, Iwate Univ.) ○MURAOKA, Yusuke; KIMURA, Takeshi**2G5-13** Synthesis of Selenosugar Derivatives Having Heteroatom Functional Groups via Cycloaddition Reaction of Selenoaldehydes (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○TANAKA, Shintaro; FURUYAMA, Taniyuki; MAEDA, Hajime; SEGI, Masahito

Chair: NAKAHODO, Tsukasa (11 : 20~11 : 40)

\* 11:10-11:20: interval for laptop PC connection.(2G5-15, 2G5-16, 2G5-17, 2G5-18, 2G5-19, 2G5-20)

**2G5-15** Synthesis and Characterization of Aryl-functionalized Dibenzothienotetraphenylene Derivatives (Fac. Sci. Eng., Iwate Univ.) ○SATO, Keita; MURAOKA, Hiroki; OGAWA, Satoshi**2G5-16** Synthesis and Properties of Dimers of Dibenzobarrelene-Incorporated 1,4-Di(2-thienyl)-1-thio-1,3-butadiene Derivative (Grad. Sch. Sci., Eng., Saitama Univ.) ○MURAKAMI, Natsuki; NAKATA, Norio; ISHII, Akihiko

Chair: NAKAHODO, Tsukasa (11 : 40~11 : 50)

**2G5-17** Synthesis and Structures of Unsaturated Thiocrown Ethers Possessing *p*-Substituted Benzene Rings and *cis*-Double Bonds (Grad. Sch. Sci. Eng., TMU) ○KAMIMAKI, Eri; HIRABAYASHI, Kazunori; SHIMIZU, Toshio

Chair: NAKAHODO, Tsukasa (11 : 50~12 : 20)

**2G5-18** Methylation Reactions of 15 and 18-Membered Unsaturated Thiocrown Ethers (Grad. Sch. Sci. Eng., TMU) ○NAKASHIZUKA, Masahito; HIRABAYASHI, Kazunori; SHIMIZU, Toshio**2G5-19** Synthesis of dipeptide models of thioredoxin reductase (Sch. Sci., Tokai Univ.) ○SHIMODAIRA, Shingo; KATSUMATA, Kenji; IWAOKA, Michio**2G5-20** Study on Observation and Reactivity of a Selenocysteine-derived Selenenic Acid by Utilizing an Internal Selenocysteine Model (Sch. Sci., Tokyo Tech.) ○MASUDA, Ryosuke; SASE, Shohei; GOTO, Kei

## Wednesday, March 21, PM

Chair: YORIMITSU, Hideki (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(2G5-28, 2G5-31, 2G5-32, 2G5-33)

**2G5-28** Young Scholar Lectures of CSJ Anionic Activation of Chemical Species towards Heteroatom-introducing Reactions (Grad. Sch. Pharm., The Univ. of Tokyo) ○HIRANO, Keiichi**2G5-31** Synthesis of Phosphate esters via selective transesterification of tris (2,2,2-haloethyl)phosphate (Grad. Sch. Eng., KIT) ○TSUBAKI, Kota; SHIMOOKA, Hirokazu; KITAMURA, Mitsuru; OKAUCHI, Tatsuo**2G5-32** Versatile Synthesis of Alkylphosphines Derivative from Alkenylphosphines. (Grad. Sch. Sci., Eng., Ehime Univ.) ○SOGABE, Shota; OHTA, Hidetoshi; HAYASHI, Minoru**2G5-33** Synthesis of Benzocyclobutenones via Photo-Induced Cyclization of (*o*-Alkylbenzoyl)phosphonates (Grad. Sch. Eng., Kyoto Univ.) ○KAWASAKI, Tairin; YANO, Takaaki; ISHIDA, Naoki; MURAKAMI, Masahiro

## Thursday, March 22, AM

Chair: NAGAHORA, Noriyoshi (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3G5-01, 3G5-02, 3G5-03, 3G5-04, 3G5-05, 3G5-06)

**3G5-01** Synthesis of P-Chiral Organophosphorus Compounds by Reacting Grignard Reagents with Phosphonochalcogenoates having a Binaphthyl Group (Fac. Eng., Gifu Univ.) ○SUGIYAMA, Aya; KUWABARA, Kazuma; MURAI, Toshiaki**3G5-02** An addition of H-phosphine oxides to alkynes under photoirradiation (IRC3, AIST) ○SAGA, Yuta; HAN, Li-biao**3G5-03** Defluorinative Extended Pummerer Reaction of Ketene Dithioacetal Monoxides with Fluorinated Phenols (Dep. Chem., Sch. Sci., Kyoto Univ.) ○OKAMOTO, Koichi; HORI, Mitsuki; NOGI, Keisuke; YORIMITSU, Hideki**3G5-04** Transformation of Alkenyl Sulfoxides based on Extended Pummerer Reaction (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HORI, Mitsuki; NOGI, Keisuke; YORIMITSU, Hideki**3G5-05** Indium-Catalyzed Reductive Conversion of Dibenzyl Ethers to Dibenzyl Sulfides Using Elemental Sulfur (Fac. Sci. Technol., TUS) ○TAKADA, Koji; KATAYAMA, Masahiro; OGIWARA, Yohei; SAKAI, Norio**3G5-06** X type zeolites catalyzed sulfide exchange reaction (Fac. Sci., Kyushu Univ.) ○TAKAKURA, Kei; KIMURA, Moemi; YAMOTO, Eiji; MURAYAMA, Haruno; TOKUNAGA, Makoto

Chair: TAJIMA, Tomoyuki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3G5-08, 3G5-09, 3G5-10, 3G5-11, 3G5-12, 3G5-13)

**3G5-08** Synthesis of heterohelicenes by means of [3,3] sigmatropic rearrangement (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YANAGI, Tomoyuki; NOGI, Keisuke; YORIMITSU, Hideki**3G5-09** Approach to seleno-calix[4]thiophene having transannular interaction (Grad. Sch. Sci. Eng., Kindai Univ.) ○PAN, Yang; NAKAHODO, Tsukasa; FUJIHARA, Hisashi**3G5-10** Synthesis and characterization of dications of acenes containing sulfur or selenium atoms (Fac. Sci., Fukuoka Univ.) ○KUSHIDA, Tomoko; NAGAHORA, Noriyoshi; SHIOJI, Kosei; OKUMA, Kentaro**3G5-11** Synthesis and Properties of 5-aminothiazole having hydroxy group on an aromatic group at the 2-position (Fac. Eng., Gifu Univ.) ○YOSHIHARA, Mari; NAKASHIMA, Naoto; YAMAGUCHI, Kirara; MURAI, Toshiaki**3G5-12** Synthesis and Photophysical Properties of thiazoles having bis (trifluoromethyl) group at the 2-position. (Fac. Eng., Gifu Univ.) ○TAKAGI, Hokuto; YAMAGUCHI, Kirara; HAYANO, Teppi; MURAI, Toshiaki**3G5-13** Synthesis and Properties of 5-aminothiazoles Having no Substituents at the 4-position (Fac. Eng., Gifu Univ.) ○TAKEKOSHI, Kazuma; YAMAGUCHI, Kirara; HAYANO, Teppi; MURAI, Toshiaki

# Room H1

Bldg. 11 1131

## Organic Chemistry -Reaction and Synthesis- Organometallic Compounds

Tuesday, March 20, AM

Ni

Chair: MUTO, Kei (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(1H1-01, 1H1-02, 1H1-03, 1H1-05, 1H1-06)

**1H1-01<sup>#</sup>** Nickel-Mediated Decarbonylation of *N*-acylpyrrole Derivatives (Grad. Sch. Eng., Osaka Univ.) ○MORIOKA, Toshifumi; SAKAMOTO, Yuki; CHATANI, Naoto; TOBISU, Mamoru

**1H1-02** Development of Decarboxylative Amination of Aryl Carbamates and Its Mechanistic Studies (Grad. Sch. Eng., Osaka Univ.; Grad. Sch. Eng., Osaka Univ.) TOBISU, Mamoru; ○NISHIZAWA, Akihiro; IWAI, Tomohiro; SAWAMURA, Masaya; CHATANI, Naoto

**1H1-03<sup>#</sup>** Ni-Catalyzed Reductive Cleavage of Carbon-Oxygen Bonds in Anisole Derivatives Using Diisopropylaminoborane (Grad. Sch. Eng., Osaka Univ.) ○IGARASHI, Takuya; HAITO, Akira; CHATANI, Naoto; TOBISU, Mamoru

**1H1-05<sup>#</sup>** Nickel- and Photoredox-Catalyzed Cross-Coupling Reactions of Vinyl Halides with 4-Alkyl-1,4-Dihydropyridines (Grad. Sch. Eng., The Univ. of Tokyo) ○GUO, Xifeng; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki

**1H1-06** Transformation of Cyclopropyl Imines via Six-Membered Aza-Nickelenolate Complexes (Grad. Sch. Eng., Osaka Univ.) ○UEDA, Yuugo; TAMAKI, Takashi; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke

Chair: TOBISU, Mamoru (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(1H1-08, 1H1-10, 1H1-12, 1H1-13)

**1H1-08<sup>#</sup>** Defluorinative Arylation of Fluoroalkenes via Transition Metal-Catalyzed Fluorine Elimination (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○WATABE, Yota; FUJITA, Takeshi; ICHIKAWA, Junji

**1H1-10<sup>#</sup>** Cyanation of Aryl Halides Using Acetonitrile as the Cyano Source Catalyzed by Nickel Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○UEDA, Yohei; KAWAKAMI, Tomomi; TSURUGI, Hayato; MASHIMA, Kazushi

**1H1-12** Ni(0)-Catalyzed Pauson-Khand and Cycloisomerization reactions of Enynes (Sch. Eng., Osaka Univ.) ○NISHIMURA, Chika; ONISHI, Akira; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke

**1H1-13** Asymmetric Allylic Alkylation with Allylamine Mediated by a Nickel/Diphosphine Catalyst (Grad. Sch. Eng. Sci., Osaka Univ.) ○SHOJI, Koya; HIGASHIDA, Kosuke; NAGAE, Haruki; MASHIMA, Kazushi

Chair: YAMAGUCHI, Junichiro (11 : 20 ~ 12 : 30)

\* 11:10-11:20: interval for laptop PC connection.(1H1-15, 1H1-16, 1H1-17, 1H1-18, 1H1-19)

**1H1-15** Nickel-Catalyzed Oxidative Cycloaddition of 2-Phenylindoles with Alkynes (Grad. Sch. Eng., Osaka Univ.) ○OBATA, Atsushi; CHATANI, Naoto

**1H1-16** Nickel-Catalyzed Oxidative Cycloaddition of 2-Phenylbenzimidazole with Alkynes (Grad. Sch. Eng., Osaka Univ.) OBATA, Atsushi; ○SASAGAWA, Akane; CHATANI, Naoto

**1H1-17** Nickel-Catalyzed Desulfonylative Transformation of Diaryl Sulfones into Biaryls (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TAKAHASHI, Fumiya; NOGI, Keisuke; YORIMITSU, Hideki

**1H1-18<sup>#</sup>** C—O Bond Cleavage of Esters using Ni(0)/NHC Complex (Grad. Sch. Eng., Osaka Univ.) ○YU, Tinghui; SAKAGUCHI, Hironobu; OHASHI, Masato; OGOSHI, Sensuke

**1H1-19 CSJ Award for Young Chemists** Development of Organometallic Catalysts with Structural Flexible Carbene Ligands (Grad. Sch. Eng., Osaka Univ.) ○HOSHIMOTO, Yoichi

Tuesday, March 20, PM

Pd

Chair: NAKAO, Yoshiaki (13 : 40 ~ 14 : 40)

\* 13:30-13:40: interval for laptop PC connection.(1H1-29, 1H1-30, 1H1-31, 1H1-32)

**1H1-29** Palladium-Catalyzed Mizoroki-Heck Reaction of Aryl Sulfoniums (Dep. Chem., Sch. Sci., Kyoto Univ.) ○UNO, Daisuke; MINAMI, Hiroko; OTSUKA, Shinya; NOGI, Keisuke; YORIMITSU, Hideki

**1H1-30** Palladium-Catalyzed Carbonylation of Aryl Sulfoniums with CO Gas (Dep. Chem., Sch. Sci., Kyoto Univ.) ○MINAMI, Hiroko; NOGI,

Chair: SASE, Shohei (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3G5-15, 3G5-16, 3G5-17, 3G5-18, 3G5-19, 3G5-20)

**3G5-15** Extended Pummerer Reaction of Vinyl Sulfoxides with Anilines by Means of Flow Microreactor (Dep. Chem., Sch. Sci., Kyoto Univ.) ○INUKAI, Tomoaki; BARALLE, Alexandre; YANAGI, Tomoyuki; NOGI, Keisuke; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi; YORIMITSU, Hideki

**3G5-16** Sequential Addition of Organometallic Reagents to Selenocoumarin (Fac. Eng., Gifu Univ.) ○IKEYAMA, Yoshiki; SHIBAHARA, Fumitoshi; MURAI, Toshiaki

**3G5-17** Synthesis and Property of Dialkylaluminum Anion (Grad. Sch. Eng., Nagoya Univ.; Grad. Sch. Sci. Eng., Chuo Univ.) ○KURUMADA, Satoshi; TAKAMORI, Shuhei; YAMASHITA, Makoto

**3G5-18** Synthesis and Reaction of a Stable Germylene bearing Triptycyl Framework (Coll. Sci., Rikkyo Univ.) ○SUZUKI, Fumiaki; MINOURA, Mao

**3G5-19** Dispersion of SWCNT Using a Poly(amidoamine) Dendrimer Having Mercaptoundecahydrododecaborate Terminals (Grad. Sch. Env. Life Sci., Okayama Univ.) ○TAJIMA, Tomoyuki; ISIMOTO, Kango; YAMAGAMI, Masahiro; MICHIE, Hiroyuki; TAKAGUCHI, Yutaka

**3G5-20** Fabrication of a Sugar and Mercaptoundecahydrododecaborate Conjugate with Single-Walled Carbon Nanotube (Grad. Sch. Env. Life Sci., Okayama Univ.) ○YAMAGAMI, Masahiro; ISIMOTO, Kango; TAJIMA, Tomoyuki; MICHIE, Hiroyuki; TAKAGUCHI, Yutaka

Thursday, March 22, PM

Chair: KANO, Naokazu (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3G5-28, 3G5-30, 3G5-32)

**3G5-28<sup>#</sup>** Syntheses and Reactivities of Compounds Containing Boron-Boron Multiple Bonds (Grad. Sch. Sci., Hiroshima Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○MORISAKO, Shogo; SHANG, Rong; YAMAMOTO, Yohsuke; MATSUI, Hiroshi; NAKANO, Masayoshi

**3G5-30<sup>#</sup>** Synthesis, Structure, and Reaction of Germylenes Bearing a Bulky Ferrocenyl Group (ICR, Kyoto Univ.) ○SUZUKI, Yuku; SASAMORI, Takahiro; GUO, Jing-dong; NAGASE, Shigeru; TOKITOH, Norihiro

**3G5-32<sup>#</sup>** Synthesis of Monodentate Arsenic Ligands; Application for Cu-Free Sonogashira Cross-Coupling Reaction (KIT) ○TANAKA, Susumu; IMOTO, Hiroaki; NAKA, Kensuke

Chair: YAMASHITA, Makoto (14 : 40 ~ 15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3G5-35, 3G5-37, 3G5-39)

**3G5-35<sup>#</sup>** Metal-free reductive deoxygenation of nitro compounds by organosilicon reducing reagents. (Grad. Sch. Eng. Sci., Osaka Univ.) ○BHATTACHARJEE, Argha; HOSOYA, Hiromu; TSURUGI, Hayato; MASHIMA, Kazushi

**3G5-37<sup>#</sup>** Kinetic Stabilization of Highly Reactive Group 14 Elements Compounds Utilizing Triptycyl Framework (Coll. Sci., Rikkyo Univ.) ○YUKIMOTO, Mariko; MINOURA, Mao

**3G5-39<sup>#</sup>** Synthesis and Property of the Stable Digermbenzenes (ICR, Kyoto Univ.; Grad. Sch. Nat. Sci., Nagoya City Univ.; FIFC, Kyoto Univ.) ○SUGAHARA, Tomohiro; GUO, Jing-dong; SASAMORI, Takahiro; NAGASE, Shigeru; TOKITOH, Norihiro

Chair: SASAMORI, Takahiro (15 : 50 ~ 16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(3G5-42, 3G5-44, 3G5-46, 3G5-47)

**3G5-42<sup>#</sup>** Frustrated Lewis Pair-Catalyzed Reductive Alkylation of Amines with Hydrogen (Grad. Sch. Eng., Osaka Univ.) ○KINOSHITA, Takuya; HAZRA, Sunit; HOSHIMOTO, Yoichi; OGOSHI, Sensuke

**3G5-44<sup>#</sup>** Metal-free Oxidative Coupling of Benzylamines Using Salicylic Acid Derivatives and Its Application to Blue Dye Synthesis (Grad. Sch. Eng., Osaka Pref. Univ.) ○DONG, Chunping; KODAMA, Shintaro; NOMOTO, Akihiro; UESHIMA, Michio; OGAWA, Akiya

**3G5-46** Triarylmethane Dye Synthesis Using a Heteropoly Acid Catalyzed-Hydrogen Peroxide Oxidation System (Sch. Eng., Osaka Pref. Univ.) ○YAMAMOTO, Yuki; KODAMA, Shintaro; YAMAMOTO, Mika; UESHIMA, Michio; NOMOTO, Akihiro; OGAWA, Akiya

**3G5-47** Aryl Iodide Synthesis by Homolytic Aromatic Substitution Using Aryl Hydrazines and Molecular Iodine (Sch. Eng., Osaka Pref. Univ.) ○MITA, Soichiro; DONG, Chunping; NAKAMURA, Kentaro; TANIGUCHI, Toshihide; KODAMA, Shintaro; MIZUNO, Takumi; OGAWA, Akiya

Keisuke; YORIMITSU, Hideki

- 1H1-31** Palladium-Catalyzed Insertion of Isocyanides into Heteroaryl Sulfides (Dep. Chem., Sch. Sci., Kyoto Univ.) OOTSUKA, Shinya; NOGI, Keisuke; YORIMITSU, Hideki
- 1H1-32<sup>#</sup>** Young Scholar Lectures of CSJ New Chemical Transformations of Oragnosulfones through C-SO<sub>2</sub> Activation (WPI-ITbM, Nagoya Univ.) ONAMBO, Masakazu

Chair: NOGI, Keisuke (14 : 50~15 : 50)

- \* 14:40-14:50: interval for laptop PC connection.(1H1-36, 1H1-37, 1H1-38, 1H1-39, 1H1-40, 1H1-41)
- 1H1-36** Palladium(II)-Mediated Regioselective Arylation of Mesoionic Tetrazolium Amides (Grad Sch. Eng., Nagoya Inst. of Tech.) ONARA, Hiroki; HIRASHITA, Tsunehisa; ARAKI, Shuki
- 1H1-37** Pd-catalyzed C(sp<sup>3</sup>)-H arylation reactions using bulky carboxylic acid ligands under mild reaction conditions (Sch. Eng., Kyoto Univ.) OOTSUKA, Naoya; TANJI, Yutaka; FUJIHARA, Tetsuaki; TSUJI, Yasushi
- 1H1-38** Palladium-Catalyzed ortho-Selective C-H Iodination of Benzamide Derivatives under Anodic Oxidation Conditions (Fac. Sci. Tech., Keio Univ.) OSANO, Katsuya; KOCHI, Takuya; KAKIUCHI, Fumitoshi
- 1H1-39** Pd-Catalyzed Dearomative C-C Bond Formation of Aromatic Alcohols (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) OKOMATSUDA, Masaaki; MUTO, Kei; YAMAGUCHI, Junichiro
- 1H1-40** NHC/Pd Catalyzed Cross-Coupling Reactions of Nitroarenes (Grad. Sch. Eng., Kyoto Univ.) OKASHIHARA, Myuto; SEMBA, Kazuhiko; NAKAO, Yoshiaki
- 1H1-41** Pd-Catalyzed Coupling Reaction of 3-Hydroxy-4-Pentenoic Acid as Conjugated Diene Equivalent with Aldehyde (Grad. Sch. Eng., Nagasaki Univ.) OKOROGI, Riho; NINOKATA, Ryo; ONODERA, Gen; FUKUDA, Tsutomu; KIMURA, Masanari

Chair: MUTO, Kei (16 : 00~16 : 50)

- \* 15:50-16:00: interval for laptop PC connection.(1H1-43, 1H1-44, 1H1-45, 1H1-46, 1H1-47)
- 1H1-43** Palladium/Copper-Cocatalyzed Regioselective Ring-Opening C-Si Bond-Forming Cross-Coupling of 2-Arylazirines with Silyboranes (Grad. Sch. Eng., Osaka Univ.) OSHIBUTA, Kaoru; TAKEDA, Youhei; MINAKATA, Satoshi
- 1H1-44** Pd/NHC-Catalyzed Regioselective and Enantiospecific Ring-Opening Suzuki-Miyaura Arylation of Aziridine-2-carboxylic Acid Esters (Grad. Sch. Eng., Osaka Univ.) OTAKEDA, Youhei; MATSUNO, Tetsuya; MINAKATA, Satoshi
- 1H1-45<sup>#</sup>** Construction of N-Heterocyclic Molecules via Transition Metal-Catalyzed N-O Bond Cleavage of Isoxazoles (Grad. Sch. Eng., Kyoto Univ.) OEGUCHI, Akira; SASAKI, Masumi; NANYA, Atsushi; OKAMOTO, Kazuhiro; OHE, Koichi
- 1H1-46** Development of PEPSI-type Imidazo[1,5-a]pyridine Carbenes—Pd complexes and Application to Catalysis (Fac. Eng., Gifu Univ.) OHANAGATA, Sachiya; IMAI, Masahiko; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 1H1-47** Synergistic Palladium/Copper-Catalyzed Csp<sup>3</sup>-Csp<sup>2</sup> Cross-Couplings Using Aldehydes as Latent  $\alpha$ -Alkoxyalkyl Anion Equivalents (Graduate School of Medical Sciences, Kanazawa University) OTAKEDA, Mitsutaka; YABUSHITA, Kenya; YASUDA, Shigeo; OHMIYA, Hirohisa

Chair: TAKEDA, Youhei (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1H1-49, 1H1-50, 1H1-51, 1H1-52, 1H1-53, 1H1-54)
- 1H1-49<sup>#</sup>** Palladium Enolate Umpolung: Approach to  $\alpha$ -Aminocarbonyl Compounds (ISIR, Osaka Univ.) ONOMOTO, Yuya; TAKENAKA, Kazuhiro; SASAI, Hiroaki
- 1H1-50** Synthesis and Application of P,Olefin Type Chiral Ligands Using Chiral Amines as Chiral Sources. (Grad. Sch. Eng., Chiba Univ.) MINO, Takashi; OYUDA, Junpei; YAMAGUCHI, Daiki; SAITO, Hironori; TANAKA, Junya; YOSHIDA, Yasushi; SAKAMOTO, Masami
- 1H1-51** Cycloisomerization of 1,n-Dienes via Chain-Walking Catalyzed by Chiral Bioxazoline Palladium Complexes (Fac. Sci. Tech., Keio Univ.; I2CNER, Kyushu Univ.) OSHIGEKANE, Masayuki; HAMASAKI, Taro; UCHIDA, Tatsuya; KAKIUCHI, Fumitoshi; KOCHI, Takuya
- 1H1-52<sup>#</sup>** Enantioselective Synthesis of Nitrogen Heterocycles via aza-Wacker-type Reaction Catalyzed by Pd-SPRIX Complex (ISIR, Osaka Univ.) OSEN, Abhijit; TAKENAKA, Kazuhiro; SASAI, Hiroaki
- 1H1-53<sup>#</sup>** Enantioselective Synthesis of Bicyclic Pyrrolidine Derivatives via One-Pot Organo and Palladium Catalysis Relay (ISIR, Osaka Univ.) OMOHON CHAKI, Bijan; BAI, Jianfei; TAKENAKA, Kazuhiro; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 1H1-54** Synthesis of Chiral Triazolidene-Pd-Complexes Bearing Ferrocene-based Planar Chirality and Application in Asymmetric Suzuki-Miyaura Cross-Coupling Reactions. (Fac. Sci. Eng., Chuo Univ.) OYAMAZAKI, Tatsuro; HOSHINO, Shun; HARAGUCHI, Ryosuke; FUKUZAWA, Sin'ichi

Chair: TAKENAKA, Kazuhiro (18 : 10~19 : 00)

- \* 18:00-18:10: interval for laptop PC connection.(1H1-56, 1H1-57, 1H1-58, 1H1-59, 1H1-60)

- 1H1-56** Palladium-Catalyzed Regioselective Allylic Etherification Reaction of Trifluoromethyl Group Substituted Unsymmetrical 1,3-Disubstituted Allylic Carbonates (Coll. Hum. Sci., Nihon Univ.; Grad. Sch. Integrated Basic Sci., Nihon Univ.) OISHIBASHI, Yuki; HANAKAWA, Taisyun; TSUJI, Hiroaki; KAWATSURA, Motoi
- 1H1-57** Reductive amination of  $\alpha$ -keto esters catalyzed by alkyne-derivatives stabilized Pd-nanoparticles (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) OSAMI, Hiroki; ARAI, Noriyoshi; OHKUMA, Takeshi
- 1H1-58** Synthesis of a Polystyrene-Cross-Linking Trialkylphosphine and Its Application to Pd-Catalyzed Cross-Coupling Reactions (Fac. Sci., Hokkaido Univ.) ORASHIMA, Junya; IWAI, Tomohiro; SAWAMURA, Masaya
- 1H1-59** Direct C(sp<sup>2</sup>)-H Benzoylation and Allylation of Aldehydes by Synergistic N-Heterocyclic Carbene/Palladium Catalysis (Graduate School of Medical Sciences, Kanazawa University) OISHII, Takuya; TAKEMOTO, Syunsuke; HARUKI, Hiroki; YASUDA, Shigeo; OHMIYA, Hirohisa
- 1H1-60** Palladium-Catalyzed Aminocarbonylation of Aryl Halides with Formamide Acetals (LCCMS, IMS) OHIRATA, Shuichi; OSAKO, Takao; UOZUMI, Yasuhiro

## Wednesday, March 21, AM

### Ce

Chair: KINOSHITA, Hidenori (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2H1-01, 2H1-03, 2H1-04, 2H1-05)
- 2H1-01<sup>#</sup>** Catalytic Aerobic Oxidation of Alcohols to Aldehydes by Cerium Complexes with Pentadentate Schiff-base Ligands (Osaka Univ.) OSHIRASE, Satoru; SHINOHARA, Koichi; IKEDA, Yuri; TSURUGI, Hayato; MASHIMA, Kazushi

### Sn

- 2H1-03** Asymmetric  $\alpha$ -Azidation of  $\beta$ -Ketoesters Using Chiral Tin Alkoxide Catalysts (Grad. Sch. Sci., Chiba Univ.) ORUSSELL, Go Martin; HORIGUCHI, Moe; YAMASHITA, Yoshiki; UCHIYAMA, Chika; YANAGISAWA, Akira
- 2H1-04<sup>#</sup>** (*E*)-Selective Synthesis of Enamides by Radical Coupling Reaction of Alkyl Halides with  $\alpha$ -Amido Allylic Stannanes (Graduate School of Engineering, Osaka University) OSUZUKI, Kensuke; NISHIMOTO, Yoshihiro; YASUDA, Makoto

### In

- 2H1-05<sup>#</sup>** Synthesis of  $\beta$ -Alkoxyalkenylmetals by Regio- and Stereoselective Carbometalation of Alkynyl Ethers (Grad. Sch. Eng., Osaka Univ.) OKANG, Kyounghmin; NISHIMOTO, Yoshihiro; YASUDA, Makoto

Chair: SUMIDA, Yuto (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2H1-08, 2H1-09, 2H1-10, 2H1-11, 2H1-12, 2H1-13)
- 2H1-08** Indium-Catalyzed Isomerization of N-Alkylpropargylamines to trans-N-Alkylideneallylamines (Grad. Sch. Eng., Osaka Univ.) FUKUMOTO, Yoshiya; AMANO, Yuki; CHATANI, Naoto
- 2H1-09<sup>#</sup>** Synthesis of Pyrlium Derivatives Bearing Carbon-Indium Bond by Intramolecular Oxymetalation (Grad. Sch. Eng., Osaka Univ.) OKITA, Yuji; NISHIMOTO, Yoshihiro; YASUDA, Makoto
- 2H1-10** Synthesis of Multi-Substituted  $\alpha$ -Pyrone Including Carbon-Indium Bonds Using Oxidation and Its Application to Organic Reactions (Grad. Sch. Eng., Osaka Univ.) KITA, Yuji; OYATA, Tetsuji; NISHIMOTO, Yoshihiro; YASUDA, Makoto

### Al

- 2H1-11** Substitution of anionic aluminabenzene via reaction with electrophile (Grad. Sch. Eng., Nagoya Univ.) OKUNO, Masaki; SUZUKI, Katsunori; NAKAMURA, Taichi; YAMASHITA, Makoto

### B

- 2H1-12** Synthesis of  $\alpha$ -Amino Acylborons as an Adaptor Unit for the Attachment to Peptides (FCC, Hokkaido Univ.) OTAKAHASHI, Rina; TAGUCHI, Junpei; BODE, Jeffrey W.; ITO, Hajime
- 2H1-13** Synthesis of acylboron compounds by Cu(I)-catalyzed borylation of aldehyde and following oxidation (FCC, Hokkaido Univ.) OTAKEUCHI, Takumi; TAGUCHI, Junpei; ITO, Hajime

Chair: NISHIMOTO, Yoshihiro (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2H1-15, 2H1-16, 2H1-17, 2H1-18, 2H1-19)
- 2H1-15** Allylation Reaction Using Functionalized Allylboronates for Stereoselective Synthesis of 1,2-Diol Derivatives (Grad. Sch. Chem. Sci. Technol., TUS; Grad. Sch. Chem. Sci. Technol., TUS) OFUJISHIRO, Takafumi; ENDO, Kohei
- 2H1-16** Diboartive Dimerization of Substituted Pyrazines (Grad. Sch. Eng.,



Kyoto Univ.) OKABASAWA, Kosuke; OHMURA, Toshimichi; SUGINOME, Michinori

**2H1-17** Synthetic Application of Alkynyl-B(dan): Transformation of the C-B (dan) Bond (Sch. Sci. Eng., Meiji Univ.) OTANI, Tomohiro; SAWATSUGAWA, Yuuki; TAKAHASHI, Naomi; HASHIMOTO, Sadahiro; SUGIURA, Tetsuya; TSUCHIMOTO, Teruhisa

**2H1-18** Synthetic Application of Alkynyl-B(dan): Synthesis of  $\pi$ -Conjugated Organic Molecules (Sch. Sci. Eng., Meiji Univ.) OSAWATSUGAWA, Yuuki; TANI, Tomohiro; TSUCHIMOTO, Teruhisa

**2H1-19\*** A recyclable organoboron compound for alkyl transfer reaction (RIKEN CLST) OSUMIDA, Yuto; HOSOYA, Takamitsu

### Wednesday, March 21, PM

#### Nb

Chair: SUZUKI, Katsunori (13 : 30~14 : 40)

\* 13:20-13:30: interval for laptop PC connection.(2H1-28, 2H1-29, 2H1-30, 2H1-31, 2H1-32, 2H1-33, 2H1-34)

**2H1-28** niobium catalyzed cycloaddition of nitrile leading to triazine derivatives (Fac. Chem. Materials and Bioeng., Kansai Univ.) SHIRAIISHI, Yuta; FUJI, Maito; OBORA, Yasushi

**2H1-29** Niobium catalyzed ring opening metathesis polymerization of norbornenes (Fac. Chem. Materials and Bioeng., Kansai Univ.) ARATANI, Shunsuke; FUJI, Maito; SOTANI, Taichi; SANDA, Fumio; OBORA, Yasushi

#### Sc

**2H1-30** Scandium Catalyzed Polymerization of Siloxy-substituted Butadiene (RIKEN) OSAITO, Yusuke; NISHIURA, Masayoshi; HOU, Zhaomin

**2H1-31\*** C-H Activation Involved Copolymerization of Ethylene with para-Methoxystyrene Catalyzed by Scandium Complexes (RIKEN CSRS) WANG, Haobing; YANG, Yang; NISHIURA, Masayoshi; HOU, Zhaomin

**2H1-32\*** Scandium-catalyzed Dearomatic Annulation of Aryl Quinolines with Alkynes via C-H activation (RIKEN CSRS) LOU, Shaojie; NISHIURA, Masayoshi; HOU, Zhaomin

**2H1-33** Sc(OTf)<sub>3</sub>-Catalyzed Direct Thiocyanation and Isothiocyanation of Benzylic Alcohols with Trimethylsilylthiocyanate (Grad. Sch. Eng., Kyoto Univ.) DI, Yuanjun; KONDO, Teruyuki

#### Yb

**2H1-34** Rare-earth-metal-catalyzed synthesis of 2-thioxo-2,3-dihydroquinazolin-4(1H)-ones by condensation/cyclization reaction of 2-aminobenzamides with isothiocyanates (Grad. Sch. Eng., Kyoto Univ.) MIYABE, Taishi; DI, Yuanjun; KIMURA, Yu; KONDO, Teruyuki

### Thursday, March 22, AM

#### Pd

Chair: HARAGUCHI, Ryosuke (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(3H1-01, 3H1-02, 3H1-03, 3H1-04, 3H1-05, 3H1-06)

**3H1-01** The intramolecular hydro-oxycarbonylation of 2-alkynylbenzoic acids catalyzed by calix[4]arene-25,27-diylidiphosphine Pd(II) complexes (Grad. Sch. Eng., Tohoku Univ.) TANAKA, Miho; ITO, Akito; YASUTA, Yoshihiro; TANAKA, Shinya; HATTORI, Tetsutaro

**3H1-02** Palladium-catalyzed Synthesis of 1,3-Dienes from Propargyl Ethers with Oxygen Nucleophiles (Fac. Sci. Technol., TUS) SATO, Kazuya; OGIWARA, Yohei; SAKAI, Norio

**3H1-03** Straightforward Addition of Arenes to Alkynes by Palladium/ carboxylic Acid Dual Catalyst (Grad. Sch. Sci. Eng., Chuo Univ.) FURUYA, Yu-ki; MINAMI, Yasunori; KODAMA, Tatsuro; HIYAMA, Tamejiro

**3H1-04** Palladium-catalyzed Intramolecular Alkenylation of Propargylarenes Leading to Indenes (Fac. Sci. Eng., Chuo Univ.) SAKAMAKI, Takumi; MINAMI, Yasunori; HIYAMA, Tamejiro

**3H1-05** Direct Acylation of Azoles Using Benzoyl Fluorides by Palladium/ Copper Catalysis (Fac. Sci. Technol., TUS) IINO, Yurika; OGIWARA, Yohei; SAKAI, Norio

**3H1-06** Palladium-Catalyzed Transformation of Acyl Fluorides into Aldehydes Using Hydrosilane (Fac. Sci. Technol., TUS) SAKURAI, Yuka; OGIWARA, Yohei; SAKAI, Norio

Chair: OGIWARA, Yohei (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3H1-08, 3H1-10, 3H1-12, 3H1-13)

**3H1-08\*\*** Room Temperature Pd-Catalyzed C-H Arylation Reactions using Tri (cyclohexylmethyl)acetic Acid as a Ligand (Grad. Sch. Eng., Kyoto Univ.) TANJI, Yutaka; FUJIHARA, Tetsuaki; TSUJI, Yasushi

**3H1-10\*\*** Formylation of Organozinc Reagents with Thioformates (Grad. Sch. Sci. Eng., Chuo Univ.) HARAGUCHI, Ryosuke; TANAZAWA, Sho-go; KUSAKABE, Akinori; FUKUZAWA, Shin-ichi

**3H1-12** Development of Semi-Reduction of Alkynes Using Formic Acid

(Grad. Sch. Chem. Sci. Technol., TUS) IWASAKI, Riku; ENDO, Kohei

**3H1-13** Development of New Al-Pd Bimetallic Complexes for Efficient Hydrosilylation Reactions (Sch. Sci., Tokyo Tech.) SHIOZUKA, Akira; SAITO, Narumasa; TAKAYA, Jun; IWASAWA, Nobuharu

Chair: KAMIKAWA, Ken (11 : 20~12 : 30)

\* 11:10-11:20: interval for laptop PC connection.(3H1-15, 3H1-18, 3H1-19, 3H1-20, 3H1-21)

**3H1-15** Young Scholar Lectures of CSJ Palladium-Catalyzed Annulative  $\pi$ -Extension Reaction (ILAS, Nagoya Univ.) ITO, Hideto

**3H1-20\*** Palladium-catalyzed synthesis of allenic oligomers/polymers (Grad. Sch. Tech. Ind. Soc. Sci., Tokushima Univ.; Inst. for Cat., Hokkaido Univ.) CHEN, Yenchou; WANG, Yue; NAKANO, Tamaki; OGASAWARA, Masamichi

**3H1-19** Synthesis of Bisbenzofuroprazines and Trithiatruzenes by Palladium-Catalyzed Intramolecular Cyclization (Grad. Sch. Eng., Osaka Univ.) NAKAMURA, Shotaro; NISHII, Yuji; MIURA, Masahiro

**3H1-20\*** Palladium-Catalyzed Synthesis of allenic oligomers/polymers (Grad. Sch. Eng., Osaka Univ.) FUKUZUMI, Keita; NISHII, Yuji; MIURA, Masahiro

**3H1-21\*** Synthesis of 2,2'-Bis(methylthio)-1,1'-Biphenyl to Dibenzothiophenes via the Cleavage of Two C-S Bonds (Grad. Sch. Eng., Osaka Univ.) MASUYA, Yoshihiro; KAWASHIMA, Yuki; FUJIMOTO, Hayato; CHATANI, Naoto; TOBISU, Mamoru

### Thursday, March 22, PM

#### Pt

Chair: ENDOU, Kouhei (13 : 40~14 : 40)

\* 13:30-13:40: interval for laptop PC connection.(3H1-29, 3H1-30, 3H1-31, 3H1-32, 3H1-33, 3H1-34)

**3H1-29** DMF-protected Fe-Pt combined nanoparticles catalyst for olefin hydrosilylation with tertiary silanes (Fac. Chem. Materials and Bioeng., Kansai Univ.; ISIR, Osaka Univ.) TANAKA, Tatsuya; AZUMA, Ryusei; LIN, Xianjin; SUZUKI, Takeyuki; OBORA, Yasushi

**3H1-30** Platinum-catalyzed Silylene Insertion to Allylic and Propargylic Ethers by Using Hydrodisilanes (Sch. Eng., Kyoto Univ.) OKAMOTO, Kazuhiro; OOTSUKI, Naoto; OHE, Kouichi

**3H1-31** Mechanistic Studies on Zwitterionic Platinum-Catalyzed Cross-Coupling Reactions (Grad. Sch. Eng., Kyoto Univ.) OKAMOTO, Kazuhiro; WATANABE, Hiroyuki; FUNASAKA, Satoshi; SASAKURA, Kohei; OHE, Kouichi

**3H1-32** Hydrative Dimerization of Alkynylsilanes to  $\alpha, \beta$ -Unsaturated Ketones by PtCl<sub>2</sub>/CuCl/LiCl Catalyst System (Grad. Sch. Sci., Eng., Saitama Univ.) TAHARA, Yuki; KINOSHITA, Hidenori; MIURA, Katsukiyo

#### Cu

**3H1-33** Copper-Catalyzed Regioselective Hydroamination of Vinylphosphines with Electrophilic Amination Reagents (Grad. Sch. Eng., Osaka Univ.) TAKATA, Tatsuaki; NISHIKAWA, Daiki; HIRANO, Koji; MIURA, Masahiro

**3H1-34** Copper-Mediated Decarboxylative C-H Alkylation of Benzamides with Malonic Acid Monoesters (Grad. Sch. Eng., Osaka Univ.) TAKAMATSU, Kazutaka; HIRANO, Koji; MIURA, Masahiro

Chair: OKAMOTO, Kazuhiro (14 : 50~15 : 50)

\* 14:40-14:50: interval for laptop PC connection.(3H1-36, 3H1-37, 3H1-38, 3H1-39, 3H1-40, 3H1-41)

**3H1-36** Asymmetric Conjugate Addition Reaction Using Multinuclear Copper Catalyst: Synthesis of Trifluoromethyl and Methyl Substituted Quaternary Carbon Center (Grad. Sch. Chem. Sci. Technol., TUS) ASAKURA, Masayuki; ENDO, Kohei

**3H1-37** Asymmetric Conjugate Addition of Organozinc Reagents to Acyclic  $\alpha$ -Silyl- $\alpha, \beta$ -unsaturated Carbonyl compounds Using Multinuclear Copper Catalyst (Grad. Sch. Chem. Sci. Technol., TUS) YOKOYAMA, Miho; ENDO, Kohei

**3H1-38** Cu-catalyzed cascade reaction via 1,3-alkoxy rearrangement-Michael addition (Grad. Sch. Sci., Tohoku Univ.) TASHIRO, Hiroki; ISHIDA, Yasuhiro; NAKAMURA, Itaru; TERADA, Masahiro

**3H1-39** Asymmetric Direct Alkynylation of  $\alpha$ -Ketoesters with Terminal Alkynes Catalyzed by Chiral Prolinol-Phosphine-Copper Complexes (Fac. Sci., Hokkaido Univ.; Coll. Sci., Ibaraki Univ.; Grad. Sch. Med. Sci., Kanazawa Univ.) FUJIOKA, Akane; SCHWARZER C., Martin; ISHII, Takaoki; OHMIYA, Hirohisa; MORI, Seiji; SAWAMURA, Masaya

**3H1-40** Asymmetric Synthesis of  $\alpha$ -Methylene- $\beta$ -Lactams Catalyzed by Chiral Prolinol-Phosphine-Copper Complexes (Fac. Sci., Hokkaido Univ.) IMAI, Koji; TAKAYAMA, Yurie; MURAYAMA, Hiroaki; SAWAMURA, Masaya

**3H1-41** Copper-Catalyzed Sulfonylation of Alkenes Using Thiols (Sch. of Med., Fukushima Med. Univ.) TANIGUCHI, Nobukazu

Chair: OOHASHI, Masato (16 : 00~17 : 10)

- \* 15:50-16:00: interval for laptop PC connection.(3H1-43, 3H1-45, 3H1-46, 3H1-48, 3H1-49)
- 3H1-43\*\*** Synthesis of ynamines via C(sp)-N bond formation (Fac. of Eng., Okayama Univ. of Sci.) ○OKUDA, Yasuhiro; GOTO, Daisuke; HORIKAWA, Yoshihiro; OHNO, Shinsuke; ORITA, Akihiro
- 3H1-45** Copper-Catalyzed Boracarboxylation of 1,3-Dienes (Grad. Sch. Eng., Kyoto Univ.) ○INOKUCHI, Masaki; FUJIHARA, Tetsuaki; TSUJI, Yasushi
- 3H1-46\*\*** Development of Asymmetric Copper Catalysis with Phenol-NHC Chiral Ligands: A Case of Allylic Coupling with Organoboron Reagents (Fac. Sci., Hokkaido Univ.; Inst. Pharm. Sci. Kanazawa Univ.) ○YASUDA, Yuto; OHMIYA, Hirohisa; SAWAMURA, Masaya
- 3H1-48** Copper-Catalyzed Asymmetric Hydrosilane Reductions with Phenol-NHC Chiral Ligands (Fac. Sci., Hokkaido Univ.) ○MIMURA, Shohei; YASUDA, Yuto; SAWAMURA, Masaya
- 3H1-49** Copper-catalyzed Cross-coupling Reaction Between Aryl(triethyl)silanes and Alkyl Halides (Grad. Sch. Sci. Eng., Chuo Univ.) ○KOMIYAMA, Takeshi; MINAMI, Yasunori; HIYAMA, Tamejiro

Chair: OKUDA, Yasuhiro (17 : 20~18 : 30)

- \* 17:10-17:20: interval for laptop PC connection.(3H1-51, 3H1-52, 3H1-53, 3H1-55, 3H1-56, 3H1-57)
- 3H1-51** Cu(I)-Catalyzed Pentafluoroethylation of Iodoarenes in the Presence of TFE (Grad. Sch. Eng., Osaka Univ.) ○ISHIDA, Naoyoshi; ANDO, Kota; HASHIMOTO, Yu; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- 3H1-52** Cu-catalyzed Ring-opening Silylation of Benzofurans (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SAITO, Hayate; NIGI, Keisuke; YORIMITSU, Hideki
- 3H1-53\*\*** Selective Aerobic Oxidation of Benzyl Bromides to Benzaldehydes With a Polymer-Supported Copper Catalyst (LCCMS, IMS; ACCEL, JST) ○OSAKO, Takao; TSUCHIMOTO, Tatsushi; TAZAWA, Aya; UOZUMI, Yasuhiro

## V

- 3H1-55#** Chiral Vanadium Complex-catalyzed Enantioselective Oxidative Coupling Reactions of Polycyclic Phenols (ISIR, Osaka Univ.) ○SUGIZAKI, Akimasa; SAKO, Makoto; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 3H1-56#** Chiral Vanadium Complex-catalyzed Enantioselective Oxidative Coupling Reactions of Hydroxycarbazoles (ISIR, Osaka Univ.) ○SAKO, Makoto; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 3H1-57#** Chiral Vanadium Complex-catalyzed Enantioselective Oxidative Coupling Reactions of Monocyclic Phenols (ISIR, Osaka Univ.) ○AOKI, Takanori; SAKO, Makoto; TAKIZAWA, Shinobu; SASAI, Hiroaki

## Friday, March 23, AM

## Co

Chair: HASHIMOTO, Toru (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(4H1-01, 4H1-02, 4H1-03, 4H1-04, 4H1-05, 4H1-06)
- 4H1-01** Cobalt-Catalyzed Reduction of Aryl Sulfones to Arenes by means of Alkylmagnesium Reagent (Dep. Chem., Sch. Sci., Kyoto Univ.) ○FUKUDA, Junichi; NOGI, Keisuke; YORIMITSU, Hideki
- 4H1-02#** Cobalt(II)-Catalyzed Chelation-Assisted C-H Iodination of Aromatic Amides with I<sub>2</sub> (Grad. Sch. Eng., Osaka Univ.) ○KOMMAGALLA, Yadagiri; YAMAZAKI, Ken; YAMAGUCHI, Takuma; CHATANI, Naoto
- 4H1-03** DFT Study of Co-Catalyzed Intramolecular Hydroacylation Involving Cyclopropane Cleavage (Coll. Sci., Rikkyo Univ.) ○MORI, Yuto; YOSHIKAI, Naohiko; YAMANAKA, Masahiro; TSUTSUMI, Ryosuke
- 4H1-04** Reduction of Nitriles with Hydrosilanes Catalyzed by Cobalt Isocyanide Catalysts (IMCE, Kyushu Univ.) ○SANAGAWA, Atsushi; NAGASHIMA, Hideo
- 4H1-05** Synthesis of Azabicyclic Compounds via Cobalt-Catalyzed N-O Bond Cleavage of N,O-Heterocycles (Grad. Sch. Eng., Kyoto Univ.) ○MATSUSHITA, Gaku; SHIMBAYASHI, Takuya; OKAMOTO, Kazuhiro; OHE, Kouichi
- 4H1-06** Cobalt-Catalyzed Oxidative Coupling of Tertiary Aromatic Amines with TBHP Leading to  $\beta$ -Aminoketone Derivatives and Its Application to the Synthesis of  $\beta$ -Aminoester Derivatives (Fac. Sci. Technol., TUS) ○MURAOKA, Takuya; MUTSURO, Akihiro; MATSUMOTO, Shun; OGIWARA, Yohei; SAKAI, Norio

## Fe

Chair: HATA, Takeshi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(4H1-08, 4H1-09, 4H1-10, 4H1-11, 4H1-12)
- 4H1-08** Oxidation of Aromatic Alcohols Catalyzed by Non-Heme Iron Amido complexes (ICR, Kyoto Univ.; Grad. Sch. Eng., Kyoto Univ.) ○SHANOH, Takafumi; TAKAYA, Hikaru; ITO, Masato; NAKAMURA, Masaharu
- 4H1-09** Synthesis and Applications of Phosphine-Olefin Ligands Having

- Planar-Chiral Ferrocene Scaffold (Grad. Sch. Tech. Ind. Soc. Sci., Tokushima Univ.; Inst. for Cat., Hokkaido Univ.; Aichi Univ. of Educ.) ○URYU, Mizuhiko; NAKAJIMA, Kiyohiko; OGASAWARA, Masamichi
- 4H1-10** Iron-Catalyzed Chemoselective N-Arylation of Diarylamines (Sch. Eng., Kyoto Univ.) ○TOYODA, Takahiro; AOKI, Yuuma; TAKAYA, Hikaru; NAKAMURA, Masaharu
- 4H1-11** Development of C-H Borylation of Arenes Catalyzed by Pyrrole-Based Pincer-Iron Complexes (Grad. Sch. Eng., The Univ. of Tokyo) ○KATO, Takeru; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki
- 4H1-12\*\*** Synthesis of  $\gamma$ -Lactones by Iron-Catalyzed Annulation of Styrenes with  $\alpha$ -Bromocarboxylic Acids (RIIS, Okayama Univ.; Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○IWASAKI, Masayuki; MIKI, Natsumi; NISHIHARA, Yasushi

Chair: TAKAYA, Hikaru (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4H1-15, 4H1-16, 4H1-17, 4H1-19)
- 4H1-15** Stereoselective Synthesis of (Halovinyl)phosphonates via the Nucleophilic Addition of Trialkylphosphites to 1-Halo-1-alkynes and Their Utilization (Sch. Life Sci. Tech., Tokyo Tech.) ○TANAKA, Katsuki; SHINOHARA, Yuki; SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu
- 4H1-16** FeCl<sub>2</sub>-mediated Regio- and Stereoselective Deoxygenation of 2,4-Alkadienyl Carboxylates with a Mixed Butyl-Furyl Grignard Reagent. (Sch. Life Sci. Tech., Tokyo Tech.) MIYANAKA, Kento; ○HARADA, Tomona; SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu
- 4H1-17\*\*** Synthesis of Tetrahydropyrrrolizine via Iron-Catalyzed Cycloaddition of Alkene-Tethered Oxime Esters with Michael Acceptors (Grad. Sch. Eng., Kyoto Univ.) ○SHIMBAYASHI, Takuya; OKAMOTO, Kazuhiro; OHE, Kouichi
- 4H1-19\*\*** Synthesis of Phosphorous-Heterocycles Based on Transition Metal-Catalyzed Cycloaddition Reactions of Phosphaalkynes (Grad. Sch. Eng., The Univ. of Tokyo) ○NAKAJIMA, Kazunari; LIANG, Wenbin; SAKATA, Ken; NISHIBAYASHI, Yoshiaki

## Friday, March 23, PM

## Rh

Chair: ARISAWA, Mieko (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4H1-28, 4H1-29, 4H1-30, 4H1-31, 4H1-32, 4H1-33)
- 4H1-28** Synthesis of New  $\pi$ -Conjugated Polymers by Rhodium-Catalyzed Stitching Polymerization of 1,5-Diynes (Grad. Sch. Eng. Sci., Osaka Univ.) ○IKEDA, Sho; SHINTANI, Ryo
- 4H1-29** Catalytic Synthesis of New Silicon-bridged  $\pi$ -Conjugated Compounds via 1,4-Rhodium Migration (Grad. Sch. Eng. Sci., Osaka Univ.) ○MIWA, Takuya; SHINTANI, Ryo
- 4H1-30** Rh-Catalyzed Regioselective Alkynylthiolation of Alkynes by Sulfur-Directed C-S Bond Cleavage (Sch. Advanced Sci. Eng., Waseda Univ.) ○MITAKE, Akihito; AKIYAMA, Yosuke; KANYIVA, Kyalo Stephen; SHIBATA, Takanori
- 4H1-31** Rh-Catalyzed Regioselective Intermolecular Alkenyl- and Arylthiolation of Alkynes Initiated by Sulfur-Directed C-S Bond Cleavage (Sch. Advanced Sci. Eng., Waseda Univ.) ○SUGIYAMA, Hayato; MITAKE, Akihito; KANYIVA, Kyalo Stephen; SHIBATA, Takanori
- 4H1-32** C2-Selective Alkylation of Pyridine by a Rhodium Complex Bearing an X-type Aluminum Ligand (Grad. Sch. Eng., Kyoto Univ.) ○HARA, Naofumi; NAKAO, Yoshiaki
- 4H1-33** Synthesis of Naphtho[1,8-bc]pyran Derivatives through Rhodium-Catalyzed Multiple Annulative Coupling of Isoxazoles with Alkynes (Grad. Sch. Eng., Osaka Univ.) ○NOGUCHI, Teppei; NISHII, Yuji; MIURA, Masahiro

Chair: ISHIDA, Naoki (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4H1-35, 4H1-36, 4H1-37, 4H1-38, 4H1-39, 4H1-40)
- 4H1-35** Rhodium-catalyzed Synthesis of Heteroaryldialkylphosphines by Phosphinylation of Heteroaryl Sulfides (Tohoku Univ.) ARISAWA, Mieko; ○TAZAWA, Takeru; YAMAGUCHI, Masahiko
- 4H1-36** Rhodium-catalyzed Insertion Reaction of PhP Group of Pentaphenylcyclopentaphosphine and Disulfides (Grad. Sch. Pharm. Sci., Tohoku Univ.) ARISAWA, Mieko; ○SAWAHATA, Kyosuke; YAMADA, Tomoki; YAMAGUCHI, Masahiko
- 4H1-37** Rhodium-Catalyzed Thiophosphorylation Reaction of Disulfides (Grad. Sch. Pharm. Sci., Tohoku Univ.) ARISAWA, Mieko; ○FUKUMOTO, Kohei; YAMAGUCHI, Masahiko
- 4H1-38** Rhodium-Catalyzed Intermolecular Cross-Cyclotrimerization of Non-Activated Terminal and Internal Alkynes and Its Application to Synthesis of Multi-Functionalized Cycloparaphenylene (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NISHIGAKI, Shuhei; SHIBATA, Yu; TANAKA, Ken
- 4H1-39** Synthesis of Cage-Like Molecules by Rhodium-Catalyzed Alkyne Cyclotrimerization (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○HAYASE, Norihiko; SHIBATA, Yu; TANAKA, Ken
- 4H1-40** Asymmetric Synthesis of Unsymmetrical Helicene-Like Molecules by

Rhodium-Catalyzed Cycloaddition Reactions (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KINOSHITA, Suzuka; YAMANO, Ryota; SHIBATA, Yu; TANAKA, Ken

## Room H2

### Bldg. 11 1132

## Organic Chemistry -Reaction and Synthesis- Organometallic Compounds

Tuesday, March 20, AM

### Ru

Chair: KOCHI, Takuya (9 : 00 ~ 9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(1H2-01, 1H2-02, 1H2-03, 1H2-04, 1H2-05)
- 1H2-01** Synthesis of 1-Arylnaphthalenes by Ruthenium-Catalyzed Electrocyclization of 2-Alkynylstyrenes (Fac. Sci., TUS) ○WATANABE, Takuma; ABE, Haruka; MUTOH, Yuichiro; SAITO, Shinichi
- 1H2-02** Reaction path analysis of CO<sub>2</sub> reduction by Ru complex using quantum chemical calculation (Fac. Eng., The Univ. of Tokyo) ○MATSUDA, Tomoki; MISAWA, Nana; YAMASHITA, Koichi
- 1H2-03** (Z)-Selective hydroboration of terminal alkynes catalyzed by a ruthenium-NHC complex (Fac. Sci., TUS) ○YAMAMOTO, Kensuke; MUTOH, Yuichiro; SAITO, Shinichi
- 1H2-04** A Heterogeneous Ru Catalyst for Site-selective C-H Borylation (Fac. Eng., Kitami Inst. of Tech.) ○MAEDA, Yuna; KANEDA, Noeru; MURATA, Miki
- 1H2-05** Photoredox-Catalyzed Decarboxylative Amination Reaction (Grad. Sch. Sci., Nagoya Univ.) ○SAKAKIBARA, Yota; ITO, Eri; FUKUSHIMA, Tomohiro; MURAKAMI, Kei; ITAMI, Kenichiro

Chair: ICHIKAWA, Junji (10 : 00 ~ 10 : 50)

- \* 9:50-10:00: interval for laptop PC connection.(1H2-07, 1H2-10, 1H2-11)
- 1H2-07** CSJ Award for Young Chemists in Technical Development Catalytic Production of 1,1-Difluoroolefins from Fluoroolefins (ASAHI GLASS CO., LTD.) ○TAKAHIRA, Yusuke
- 1H2-10** Introduction of Haloaryl Groups via Cleavage of Aromatic Carbon-Oxygen Bonds by Ruthenium Catalysts and Its Application (Grad. Sch. Sci. Tech., Keio Univ.) ○YAMADA, Kohei; SUZUKI, Yusuke; KOCHI, Takuya; KAKIUCHI, Fumitoshi
- 1H2-11** Ruthenium-Catalyzed Carbonylation of Carbon-Hydrogen Bonds in 4-Aryl-1,2,3-triazoles (Grad. Sch. Eng., Osaka Univ.) ○HAITO, Akira; YAMAGUCHI, Mao; CHATANI, Naoto

Chair: CHATANI, Naoto (11 : 00 ~ 12 : 00)

- \* 10:50-11:00: interval for laptop PC connection.(1H2-13)
- 1H2-13<sup>#</sup>** CSJ Award for Creative Works Development of Asymmetric Reactions Catalyzed by Ruthenium Complexes with Two Kinds of Ligands (Grad. Sch. Eng., Hokkaido Univ.) ○OHKUMA, Takeshi

Tuesday, March 20, PM

### Cu

Chair: ITO, Hajime (13 : 10 ~ 14 : 10)

- \* 13:00-13:10: interval for laptop PC connection.(1H2-26, 1H2-29, 1H2-30, 1H2-31)
- 1H2-26** CSJ Award for Young Chemists Development of Transition-Metal-Catalyzed Reactions for Expedient Preparation of Molecular Probes (RIKEN CLST) ○NIWA, Takashi
- 1H2-29<sup>#</sup>** Synthesis of  $\alpha$ -Fluoroimines by Copper-Catalyzed Reactions of Diarylacetylenes and *N*-Fluorobenzenesulfonamide (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; ERATO, Nagoya Univ.) ○YIP, Shu Jan; YOSHIDOMI, Tetsushi; MURAKAMI, Kei; ITAMI, Kenichiro
- 1H2-30** Copper-catalyzed Cyclic Silyl Imine Synthesis from Allene, Silylborane and Nitrile. (Grad. Sch. Eng., Kyoto Univ.) ○MATSUDA, Yuki; YAMAGUCHI, Tatsuya; FUJIHARA, Tetsuaki; TSUJI, Yasushi
- 1H2-31** Copper-catalyzed regioselective silylformylation and boraformylation of 1,3-dienes. (Grad. Sch. Eng., Kyoto Univ.) ○KANAYAMA, Kazutaka; SAWADA, Ayumi; FUJIHARA, Tetsuaki; TSUJI, Yasushi

Chair: HIRANO, Koji (14 : 20 ~ 15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(1H2-33, 1H2-34, 1H2-35, 1H2-37, 1H2-38)
- 1H2-33** Copper(I)-Catalyzed Stereoselective Allylation of Carbonyl Compounds with Allylboronates Bearing a Silyl Group (Grad. Sch. Eng., Hokkaido Univ.) ○HAYASHI, Yuta; IWAMOTO, Hiroaki; ITO, Hajime
- 1H2-34** Copper(I)-Catalyzed Intramolecular Alkylboration of Allenes (Grad. Sch. Eng., Hokkaido Univ.) ○OZAWA, Yu; IWAMOTO, Hiroaki; ITO,

Hajime

- 1H2-35<sup>#</sup>** Development of Chiral Bisphosphine Ligand Design Method for Copper(I)-catalyzed Enantioselective Markovnikov Hydroboration of Aliphatic Terminal Alkenes (Grad. Sch. Eng., Hokkaido Univ.) ○IWAMOTO, Hiroaki; IWAMOTO, Tsuneo; ITO, Hajime
- 1H2-37<sup>#</sup>** Copper-Catalyzed Intramolecular Asymmetric Suzuki-Miyaura Coupling of  $\alpha$ -Aminoalkylboronic esters with Helically Chiral Polyquinoline-Based Bipyridine Ligand (Grad. Sch. Eng., Kyoto Univ.) ○YOSHINAGA, Yukako; YAMAMOTO, Takeshi; SUGINOME, Michinori
- 1H2-38** Synthesis of Aryl Thienyl Ethers by Fe/Cu-Cocatalyzed Etherification and Their Transformation to Thienobenzofurans (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○ASADA, Takuya; INADA, Tomohiro; MITSUDO, Koichi; SUGA, Seiji

### Rh

Chair: MURATA, Kei (15 : 30 ~ 16 : 40)

- \* 15:20-15:30: interval for laptop PC connection.(1H2-40, 1H2-41, 1H2-42, 1H2-43, 1H2-45, 1H2-46)
- 1H2-40** Synthesis of Benzofuranymethylidenebenzoxasiloles by Rhodium-Catalyzed Cycloisomerization and Their Photophysical Properties (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○NAMBA, Tomoya; SHIBATA, Yu; TANAKA, Ken
- 1H2-41** Computational study of reaction mechanism in rhodium-catalyzed cycloisomerization of 2-silylethynyl phenols leading to benzoxasiloles (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○HAYASHI, Yoshihiro; NAMBA, Tomoya; KAWAUCHI, Susumu; SHIBATA, Yu; TANAKA, Ken
- 1H2-42** Rhodium-Catalyzed Asymmetric [2+2+1] Cycloaddition of 1,6-Enynes with Cyclopropylideneacetamides (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SUZUKI, Shunsuke; NAKAMURA, Yu; NISHIGAKI, Shuhei; MASUTOMI, Koji; SHIBATA, Yu; TANAKA, Ken
- 1H2-43<sup>#</sup>** Chiral counterion-directed Cp\*Rh(III)-catalysis for asymmetric conjugated addition of 2-phenylpyridines via C-H activation (Grad. Sch. Life Sci., Hokkaido Univ.) ○SATAKE, Shun; KURIHARA, Takumaru; NISHIKAWA, Keisuke; MOCHIZUKI, Takuya; HATANO, Manabu; ISHIHARA, Kazuaki; YOSHINO, Tatsuhiko; MATSUNAGA, Shigeki
- 1H2-45<sup>#</sup>** Rhodium(I)-Catalyzed Bidentate-Chelation-Assisted Carbon-Hydrogen Alkylation of 1-Naphthylamine with Styrene Derivatives (Grad. Sch. Eng., Osaka Univ.) ○REJ, Supriya; CHATANI, Naoto
- 1H2-46** Enantioselective Synthesis of 3,5-Diaryl-2-pyrazolines from *NH*-tetrazoles and styrenes (Grad. Sch. Eng., Kyoto Univ.) ○NAKAMURO, Takayuki; HAGIWARA, Kohei; MIURA, Tomoya; MURAKAMI, Masahiro

Chair: SHIBATA, Yu (16 : 50 ~ 17 : 50)

- \* 16:40-16:50: interval for laptop PC connection.(1H2-48, 1H2-49, 1H2-50, 1H2-51, 1H2-52, 1H2-53)
- 1H2-48** Rhodium-Catalyzed Dehydrogenative Coupling of Aromatic Carboxylic Acids with Unsaturated Compounds (Grad. Sch. Sci., Osaka City Univ.) ○KADA, Takeshi; ○SAKAI, Asumi; SATOH, Tetsuya; HAYASHI, Yoshihiro; KAWAUCHI, Susumu; MIURA, Masahiro
- 1H2-49** Intramolecular Reaction for the Synthesis of Dihydrofluoranthene Derivatives via C-C Bond Activation of Biphenylenes (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○ITO, Takeharu; TAKANO, Hideaki; KANYIVA, Kyalo-stephen; SHIBATA, Takanori
- 1H2-50<sup>#</sup>** Rhodium- or Iridium-Catalyzed Enantioselective C(sp<sup>3</sup>)-H Borylation with Chiral Monophosphine Ligands (Fac. Sci., Hokkaido Univ.) ○REYES, Ronald; HARADA, Tomoya; IWAI, Tomohiro; SAWAMURA, Masaya
- 1H2-51** A Versatile Catalytic Method for the Synthesis of C-N-Linked Di(heteroaryl)s Using Heteroaryl Ethers and *N*-Benzoyl Azole/Heterocyclic Amides (Grad. Sch. Pharm. Sci., Tohoku Univ.) ○TANII, Saori; ARISAWA, Mieko; YAMAGUCHI, Masahiko
- 1H2-52** Rh-catalyzed Synthesis of Indenylamine Derivatives from *N*-[1-(*o*-Bromoethynyl)phenyl]alkyl]imides with Retention of the Optical Purities of the Latter (Sch. Life Sci. Tech., Tokyo Tech.) IKEDA, Joe; ○SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu
- 1H2-53** anti-Markovnikov Hydroamination of Terminal Alkynes with Primary Amines Catalyzed by an 8-Quinololato Rhodium Catalyst (Fac. Sci. Tech., Keio Univ.) ○MORIMOTO, Yoshihiko; HAMADA, Moe; KOCHI, Takuya; KAKIUCHI, Fumitoshi
- Chair: IWAI, Tomohiro (18 : 00 ~ 19 : 00)
- \* 17:50-18:00: interval for laptop PC connection.(1H2-55, 1H2-56, 1H2-57, 1H2-58, 1H2-59, 1H2-60)
- 1H2-55** Formation of  $\alpha$ -Monosubstituted Propargylamines from Terminal Alkynes and Secondary Amines Using a Rhodium/Copper Tandem Catalytic System (Fac. Sci. Tech., Keio Univ.) ○TAKANO, Shotaro; KOCHI, Takuya; KAKIUCHI, Fumitoshi
- 1H2-56** Optimization of Visible Light-Driven Hydrocarboxylation by the Combined Use of Rh(I) and Photosensitizer Catalysts (Sch. Sci., Tokyo Tech.) ○NUMASAWA, Nobutsugu; SHIMOMAKI, Katsuya; MURATA, Kei; IWASAWA, Nobuharu
- 1H2-57** Rh-catalyzed cross-coupling reaction of cyclic ethers with Grignard reagents (Grad. Sch. Eng., Osaka Univ.) ○ISHIGA, Wataru; IWASAKI, Takanori; KAMBE, Nobuaki

- 1H2-58<sup>#</sup>** Rhodium Catalyzed Alkylation of Carbon-Hydrogen Bonds in Aromatic Amides with *N*-vinylphthalimide (Grad. Sch. Eng., Osaka Univ.)  
 ○HE, Qiyuan; CHATANI, Naoto
- 1H2-59** Preparation of 2,3-Dihaloindoles from a Rh Catalyst and *o*-(2,2-Dihalovinyl)aryl Azides (Sch. Life Sci. Tech., Tokyo Tech.) HATA, Takeshi; KANAI, Yuki; ○ABE, Tepei; SHIGETA, Masayuki; URABE, Hirokazu
- 1H2-60** Rh-catalyzed Cyclization of Sulfonotriazoles Having an Oxime Side Chain (Sch. Life Sci. Tech., Tokyo Tech.) ○MASUYAMA, Aiori; WATABE, Kaori; SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu

Wednesday, March 21, AM

Li

Chair: KOMEYAMA, Kimihiro (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2H2-01, 2H2-02, 2H2-03, 2H2-05, 2H2-06)
- 2H2-01** Ring-Opening Lithiation of Indoles with Lithium Metal. (Dep. Chem., Sch. Sci., Kyoto Univ.) ○TSUCHIYA, Shun; SAITO, Hayate; NOGI, Keisuke; YORIMITSU, Hideki

Na

- 2H2-02** Preparation of Arylsodium Compounds from Aryl Chlorides Using Sodium Dispersion and Its Application to Cross-Coupling Reactions (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○NAKAJIMA, Hiroataka; ASAKO, Sobi; TAKAI, Kazuhiko

Ge

- 2H2-03<sup>\*\*</sup>** Utilization of Chelated Germyl Enolates toward Synthesis of Functionalized Compounds: Diastereoselective Aldol Reaction and Transformation of Germanium-Carbon Bond (Sch. Eng., Osaka Univ.) ○MINAMI, Yohei; KONISHI, Akihito; YASUDA, Makoto
- 2H2-05** Synthesis and property of PAH (polycyclic aromatic hydrocarbons) substituted germabenzene (Grad. Sch. Eng., Nagoya Univ.) ○KAIYA, Canon; SUZUKI, Katsunori; YAMASHITA, Makoto

Bi

- 2H2-06** *O*-vinylation reaction of various phenols with trivinylbismuthine. (Coll. Sci., Ibaraki Univ.) ○ABE, Yukihisa; IWAKAMI, Yuki; SATO, Itaru

Chair: KANYIVA, Kyalo Stephen (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2H2-08, 2H2-09, 2H2-10, 2H2-11, 2H2-12, 2H2-13)
- 2H2-08** Study of the unique coupling reactions using the concerted bismuth catalysis (Fac. Integrated Arts and Sci., Tokushima Univ. Grad. Sch.) ○KUSAKA, Ryo; OHMURA, Satoshi; MIYOSHI, Norikazu; UENO, Masaharu

Re

- 2H2-09** Regioselective Homologation of Arenes through Rhenium-Catalyzed Deoxygenative Aromatization of 7-Oxabicyclo[2.2.1]hepta-2,5-dienes (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○OGITA, Takuya; MURAI, Masahito; TAKAI, Kazuhiko
- 2H2-10** Hydropropargylation Reaction of Enamides by Using  $\alpha, \beta$ -Unsaturated Carbene Complex as a Key Intermediate (Sch. Sci., Tokyo Tech.) ○ARIO, Akane; WATANABE, Shoya; IWASAWA, Nobuharu
- 2H2-11** Hydroboration of Allenes Catalyzed by Rhenium Complexes Bearing a *PGeP*-Pincer Type Ligand (Sch. Sci., Tokyo Tech.) ○MURAKAMI, Momoka; SUGIMOTO, Tadahiyo; TAKAYA, Jun; IWASAWA, Nobuharu

Au

- 2H2-12** Mechanistic Studies on Gold-Catalyzed Skeletal Rearrangement of *O*-Propargylic Oximes via N-O Bond Cleavage (Grad. Sch. Sci., Tohoku Univ.) ○SHIGA, Keigo; NAKAMURA, Itaru; TERADA, Masahiro
- 2H2-13** Gold-Catalyzed Cyclization-Intermolecular Methylene Transfer Sequence of *O*-Homopropargylic Oximes (Grad. Sch. Sci., Tohoku Univ.) ○HIRAYAMA, Arinobu; GIMA, Shinya; NAKAMURA, Itaru; TERADA, Masahiro

Chair: NAKAMURA, Itaru (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2H2-15, 2H2-16, 2H2-17, 2H2-18, 2H2-19, 2H2-20)
- 2H2-15** Catalytic Dearomative Spirocyclization of Phenols via Gold Carbeneoid Species Prepared from Ynamides (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○ITO, Mamoru; KAWASAKI, Ryosuke; KANYIVA, Stephen Kyalo; SHIBATA, Takanori
- 2H2-16** Synthesis of Dibenzodiazocine Derivatives via Gold(I)-Catalyzed 8-*exo-dig* Selective Cycloisomerization (Sch. Advanced Sci. Eng., Waseda Univ.) ○TAKAKI, Asahi; INOUE, Daisuke; ITO, Mamoru; KANYIVA,

- Stephen Kyalo; SHIBATA, Takanori
- 2H2-17** Gold(I)-Catalyzed Synthesis of Fluorine-Substituted Alkylidene-pyrrolidines: [2 + 3] Cycloaddition of Difluoroallenes with Aziridines (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) FUCHIBE, Kohei; ○SAKON, Kazuki; SUTO, Kyosuke; ICHIKAWA, Junji
- 2H2-18** Asymmetric Synthesis by Gold-Catalyzed Intramolecular Hydroarylation and Chiroptical Property of Higher-Order Carbohelicenes (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○SATO, Masakazu; SHIBATA, Yu; TANAKA, Ken
- 2H2-19** Gold(I)-Catalyzed Asymmetric [4+2] Annulation of Enynones via Pyrylium Intermediates (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KOSHIKAWA, Takumi; SATOH, Masakazu; MASUTOMI, Koji; SHIBATA, Yu; TANAKA, Ken
- 2H2-20** Design, Synthesis, and Catalytic Activity of Novel NHC-Au(I) Complexes (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○OKI, Yuta; USUI, Kensuke; YOSHIDA, Takuya; OKITSU, Naoya; HIROI, Aya; SUMIYA, Hiroki; TAKAMI, Nana; NAKADA, Masahisa

Wednesday, March 21, PM

Ag

Chair: TAKAYA, Jun (13 : 30 ~ 14 : 40)

- \* 13:20-13:30: interval for laptop PC connection.(2H2-28, 2H2-29, 2H2-30, 2H2-31, 2H2-32, 2H2-33)
- 2H2-28** Ag-Catalyzed Conjugate Addition of 1-Tetrazolyl Group to Nitroolefins (Sch. Life Sci. Tech., Tokyo Tech.) ○OKURA, Koki; SAGA, Kohei; SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu
- 2H2-29** Synthesis and Reactivity of Silver Perfluoroalkoxide Complexes (Grad. Sch. Eng., Osaka Univ.) ○HASHIMOTO, Yu; OHASHI, Masato; OGOSHI, Sensuke
- 2H2-30** Ag-Catalyzed Benzylic Isocyanation (Sch. Eng., Hokkaido Univ.) ○TANGE, Yuji; YURINO, Taiga; OHKUMA, Takeshi
- 2H2-31** Oxidative cleavage of 1,3-diols catalyzed by silver acetylides (Dept. Chem., Tokyo Med. Univ.) ○ISHIKAWA, Shingo; FUGAMI, Keigo

Cr

- 2H2-32** Chromium-Catalyzed Directed Allylation of C(sp<sup>3</sup>)-H Bonds (Grad. Sch. Sci., The Univ. of Tokyo) ○SATO, Takenari; ILIES, Laurean; NAKAMURA, Eiichi
- 2H2-33<sup>\*\*</sup>** Molybdenum-Catalyzed Deoxygenative Cyclization of Carbonyl Compounds (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○ASAKO, Sobi; ISHIHARA, Seina; HIRATA, Keiya; TAKAI, Kazuhiko

Thursday, March 22, AM

Ru

Chair: TAKAHASHI, Kohei (9 : 00 ~ 9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(3H2-01, 3H2-02, 3H2-03, 3H2-04)
- 3H2-01** Highly Stereoselective Asymmetric Cyclopropanation Reaction of Diazo Acetonitrile by using a Novel Chiral Ruthenium Catalyst (Dept. Env. Life Sci., TUT) ○INOUE, Hayato; CHANTHAMATH, Soda; SHIBATOMI, Kazutaka; IWASA, Seiji
- 3H2-02** Ruthenium Catalyzed Allylic Amination of Chiral Tertiary Allylic Acetates (Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○MIZUNO, Shota; TERASAKI, Shou; SHINOZAWA, Toru; TSUJI, Hiroaki; KAWATSURA, Motoi
- 3H2-03<sup>#</sup>** Highly Chemo- and Stereoselective Asymmetric Intramolecular C-H Insertion Reactions Catalyzed by Ru(II)-Pheox Complex (TUT) ○PHAN, Nga Thi Thanh; CHANTHAMATH, Soda; SHIBATOMI, Kazutaka; IWASA, Seiji
- 3H2-04<sup>\*\*</sup>** Ruthenium-Catalyzed Chemo- and Enantioselective Hydrogenation of Isoquinoline Carbocycles (Fac. Sci., Kyushu Univ.) ○JIN, Yushu; MAKIDA, Yusuke; UCHIDA, Tatsuya; KUWANO, Ryoichi

Rh

Chair: FUJITA, Takeshi (10 : 00 ~ 11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(3H2-07, 3H2-08, 3H2-09, 3H2-10, 3H2-11, 3H2-12)
- 3H2-07** Construction of Cycloheptafluorene Structure via Rhodium-Catalyzed Annulation of Aromatic Carboxylic Acid (Osaka Pref. Univ.) FUKUYAMA, Takahide; ○HIRATA, Daiji; SAKATE, Takuya; RYU, Ilhyong
- 3H2-08** Synthesis of Five-Membered Silacarboranes through Catalytic Rhodium Silylanoid Formation-Based [2+2+1] Cyclization of 1,6-Enynes (Grad. Sch. Eng., Kyoto Univ.) ○SASAKI, Ikuo; OHMURA, Toshimichi; SUGINOME, Michinori
- 3H2-09** Rhodium(III)-Catalyzed Decarboxylative and Oxidative Annulation of Benzoic Acids with Diynes (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○HONJO, Yusaku; SHIBATA, Yu; TANAKA, Ken
- 3H2-10** Synthesis of Trisubstituted Indenyl-Rhodium(III) Complexes by

Reductive Complexation and Their Application to C-H Functionalization (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TERASAWA, Jyunichi; SHIBATA, Yu; TANAKA, Ken

**3H2-11** Modified Cp Rh(III) Complex-Catalyzed C-H Functionalization of N-Acyloxamides with Alkynes Involving Formal Lossen Rearrangement (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○YAMADA, Takayuki; SHIBATA, Yu; TANAKA, Ken

**3H2-12** Oxidative C-H Functionalization of Benzamides Catalyzed by Cp Rhodium(III) Catalysts with Pendant Amides (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○YOSHIMURA, Ryo; SHIBATA, Yu; YAMADA, Takayuki; TANAKA, Ken

Chair: OHMURA, Toshimichi (11 : 10~12 : 10)

\* 11:00-11:10: interval for laptop PC connection.(3H2-14, 3H2-16, 3H2-17, 3H2-18, 3H2-19)

**3H2-14<sup>##</sup>** Rhodium-Catalyzed Reduction and Alkynylation of Carbon-Oxygen Bonds in Aryl Carbamates Using Alcohols (Grad. Sch. Eng., Osaka Univ.) ○YASUI, Kosuke; HIGASHINO, Masaya; CHATANI, Naoto; TOBISU, Mamoru

**3H2-16** [2+2+1] Cycloaddition of Dienes Using an alpha-Diketone as a Carbonyl Source (Grad. Sch. Mat. Sci., NAIST) MORIMOTO, Tsumoru; ○YAMAGUCHI, Yoshiko; YAMADA, Hiroko; KAKIUCHI, Kiyomi

**3H2-17** Rh(I)-Catalyzed Asymmetric Cyclohydroformylation of Enynes with Formaldehyde (Grad. Sch. Mat. Sci., NAIST) MORIMOTO, Tsumoru; ○AKIYAMA, Naoto; ABE, Makoto; KAKIUCHI, Kiyomi

**3H2-18<sup>#</sup>** Rhodium-Catalyzed Intramolecular C-H Functionalization of Acceptor/acceptor Carbenoids Generated from 4-Acyl-1-sulfonyl-1,2,3-triazoles (Grad. Sch. Eng., Kyoto Univ.) ○ZHAO, Qiang; MIURA, Tomoya; MURAKAMI, Masahiro

**3H2-19** Rh(I)-Catalyzed [4 + 2] Cyclization of Biphenylenes with Vinyl Acetates via C-O Bond Activation: Synthesis of Substituted Phenanthrenes (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) WATABE, Yota; ○TAKEISHI, Masahumi; FUJITA, Takeshi; ICHIKAWA, Junji

## Thursday, March 22, PM

### Ir

Chair: TAKEUCHI, Ryo (13 : 20~14 : 20)

\* 13:10-13:20: interval for laptop PC connection.(3H2-27)

**3H2-27<sup>#</sup>** CSJ Award for Creative Works Development and Application of New Iridium Catalysts for Efficient Dehydrogenative Reactions of Organic Molecules (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○FUJITA, Ken-ichi

Chair: NISHII, Yuji (14 : 30~15 : 30)

\* 14:20-14:30: interval for laptop PC connection.(3H2-34, 3H2-36, 3H2-37, 3H2-38, 3H2-39)

**3H2-34<sup>##</sup>** Hydroxoiridium-Catalyzed Regioselective Hydroarylation of Conjugated Dienes via  $\pi$ -Allyliridium Intermediates (Dep. Chem., Sch. Sci., Kyoto Univ.; Grad. Sch. Sci., Osaka City Univ.) ○NAGAMOTO, Midori; YORIMITSU, Hideki; NISHIMURA, Takahiro

**3H2-36** Direct Aromatic C-H Silylation Catalyzed by Iridium Complex and Phosphin-Borane Ligand (Grad. Sch. Eng., Nagasaki Univ.) ○ANOYAMA, Keita; ONODERA, Gen; KIMURA, Masanari

**3H2-37** Hydroxylation of Terminal Allenes Catalyzed by Iridium(I) Complex (Fac. Sci., Nara Women's Univ.) ○SAMOTO, Shoko; URA, Yasuyuki; KATAOKA, Yasutaka

**3H2-38** Development of Chiral Bicyclic NHC-Phosphine Ir Complexes for Catalytic Asymmetric Transfer Hydrogenation of Imines (Grad. Sch. Sci., Chiba Univ.) ○SHISHIDO, Daichi; YOSHIDA, Kazuhiro

**3H2-39** Environmentally Benign Synthesis of Acetic Acid from Ethanol-Water Solution Catalyzed by Iridium Complexes (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○KUWAHARA, Masato; YOSHIDA, Masato; FUJITA, Ken-ichi

Chair: NISHIMURA, Takahiro (15 : 40~16 : 40)

\* 15:30-15:40: interval for laptop PC connection.(3H2-41, 3H2-44, 3H2-46)

**3H2-41** CSJ Award for Young Chemists Selective Functionalization of Hydrocarbons Based on the Generation of Reactive Organometallic Species (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MURAI, Masahito

**3H2-44<sup>##</sup>** Iridium-Catalyzed C-H Dimesitylborylation of Benzofurans with Silyldimesitylborane (Grad. Sch. Eng., Hokkaido Univ.) ○SHISHIDO, Ryosuke; SASAKI, Ikuo; SEKI, Tomohiro; ISHIYAMA, Tatsuo; ITO, Hajime

**3H2-46** Iridium Complex-Catalyzed Alkylation of Methyl Group on N-Heterocycles with Alcohols (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○ONODA, Mitsuki; FUJITA, Ken-ichi

Chair: MATSUNAMI, Asuka (16 : 50~17 : 50)

\* 16:40-16:50: interval for laptop PC connection.(3H2-48, 3H2-49, 3H2-50, 3H2-51, 3H2-52, 3H2-53)

**3H2-48** Synthesis of Poly(borylmethyl)siloxanes through Catalytic Multiple C(sp<sup>3</sup>)-H Borylation of Methylsiloxanes Followed by Degradation-Reconstruc-

tion (Grad. Sch. Eng., Kyoto Univ.) ○EMURA, Kazuki; OHMURA, Toshimichi; SUGINOME, Michinori

**3H2-49** Asymmetric Transfer Hydrogenation of Ketones Catalyzed by Chiral Prolinol-Phosphine-Iridium Complexes (Fac. Sci., Hokkaido Univ.) ○MURAYAMA, Hiroaki; SAWAMURA, Masaya

**3H2-50<sup>#</sup>** Transfer Hydrogenation of Alkenes Using 1,4-Dioxane as a Hydrogen Source Catalyzed by a Polystyrene-Cross-Linking Bisphosphine-Iridium Complex (Fac. Sci., Hokkaido Univ.) ○ZHANG, Deliang; IWAI, Tomohiro; SAWAMURA, Masaya

**3H2-51** An iridium-catalyzed reductive nucleophilic addition to secondary amide (Fac. Sci. Tech., Keio Univ.) ○TAKAHASHI, Yoshito; YOSHII, Risa; SATO, Takaaki; CHIDA, Noritaka

**3H2-52** Ir-catalyzed synthesis of  $\alpha$ -methyl aryl esters using methanol as the C1 source (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○TSUKAMOTO, Yuya; ITOH, Satoshi; OBORA, Yasushi

**3H2-53** Iridium-Catalyzed sp<sup>3</sup> C-H Dialkylation of Aminomethyl Groups with Alkenes (Grad. Sch. Sci., Osaka City Univ.) ○HATTORI, Hiroshi; NISHIMURA, Takahiro

Chair: MURAI, Masahito (18 : 00~18 : 50)

\* 17:50-18:00: interval for laptop PC connection.(3H2-55, 3H2-56, 3H2-57, 3H2-58, 3H2-59)

**3H2-55** Steric and Electronic Properties of Planar Chiral Seven-membered Cyclic (Amino)(ferrocenyl)carbene Ligands (Grad. Sch. Sci., Chiba Univ.) ○SHIKATA, Yuta; YASUE, Risa; YOSHIDA, Kazuhiro

**3H2-56** Development of Planar Chiral N-Heterocyclic Carbene Ligands Bearing FeCp\* Group (Grad. Sch. Sci., Chiba Univ.) ○YASUE, Risa; SHIKATA, Yuta; YOSHIDA, Kazuhiro

**3H2-57** Iridium-Catalyzed Enantioselective Allylation of 1,3-Diketones (Coll. Sci. Eng., Aoyama Gakuin Univ.) MATSUNAMI, Asuka; ○MIYAKE, Shohei; TAKEUCHI, Ryo

**3H2-58** Iridium-Catalyzed Enantioselective Allylation of Indoles via Kinetic Resolution of Allyl Alcohols (Coll. Sci. Eng., Aoyama Gakuin Univ.) MATSUNAMI, Asuka; ITOU, Yuta; ○YASUMURA, Yuki; KITOU, Suzuka; SAEKI, Chiho; TAKEUCHI, Ryo

**3H2-59** Iridium-Catalyzed Enantioselective Inter- and Intramolecular C-H Conjugate Addition of Anilide Derivatives (Sch. Advanced Sci. Eng., Waseda Univ.) ○ONODA, Sahoko; KURITA, Hisaki; KANYIVA, Kyalo Stephen; SHIBATA, Takanori

## Friday, March 23, AM

### Zn

Chair: NAGAE, Haruki (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4H2-01, 4H2-02, 4H2-03, 4H2-04, 4H2-05, 4H2-06)

**4H2-01** Studies on asymmetric recognition in addition reaction of organozinc reagent to aldehyde using chiral alcohols (Grad. Sch. Eng., Osaka Univ.) ○NISHIO, Miho; IWASAKI, Takanori; KAMBE, Nobuaki

**4H2-02** Zinc-catalyzed synthesis of acylsilanes using carboxylic acids and silylboranes promoted by pivalic anhydride (Grad. Sch. Eng., Kyoto Univ.) ○TATSUMI, Kenta; FUJIHARA, Tetsuaki; TSUJI, Yasushi

### Sr

**4H2-03** Application and Development of Strontium-Mediated Alkylation of Amide Compounds (Fac. Integrated Arts and Sci., Tokushima Univ. Grad. Sch.) ○KIMURA, Shohdai; KUBO, Shigeki; OHMURA, Satoshi; UENO, Masaharu; MIYOSHI, Norikazu

### Y

**4H2-04<sup>#</sup>** Yttrium-Catalyzed sp<sup>3</sup> C-H Silylation of Methyl Sulfides with Hydrosilanes (Organometallic Chemistry Laboratory) ○LUO, Yong; HOU, Zhaomin

### W

**4H2-05** Tungsten-Catalyzed Synthesis of Fluorenes via Deoxygenative Cyclization of Carbonyl Compounds (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○HIRATA, Keiya; ISHIHARA, Seina; ASAKO, Sobi; TAKAI, Kazuhiko

**4H2-06** Machine Learning Approach for Prediction of Reaction Yield in Tungsten-catalyzed Epoxidation of Alkene with Hydrogen Peroxide (IRC3, AIST; AIRC, AIST; CD-FMat, AIST) ○YADA, Akira; NAGATA, Kenji; ANDO, Yasunobu; MATSUMURA, Tarojiro; ICHINOSEKI, Sakina; SATO, Kazuhiko

### Mn

Chair: ASAKO, Sobi (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4H2-08, 4H2-09, 4H2-10, 4H2-11, 4H2-12, 4H2-13)

**4H2-08** Catalytic Esterification of N,N-dialkylamides Mediated by Manganese

Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) OKATO, Daiki; HIRAI, Takahiro; SOMA, Shusei; NAGAE, Haruki; MASHIMA, Kazushi

- 4H2-09** Studies of Substrate Scope for Catalytic Esterification of Simple Amides Using Manganese Complexes (Sch. Eng. Sci., Osaka Univ.) OSOMA, Shusei; KATO, Daiki; HIRAI, Takahiro; NAGAE, Haruki; MASHIMA, Kazushi
- 4H2-10** Mechanical Studies for Catalytic Esterification of Stable Amides Using Manganese Complexes having 1,3-Diketone Ligand (Grad. Sch. Eng. Sci., Osaka Univ.) OHIRAI, Takahiro; KATO, Daiki; SOMA, Shusei; NAGAE, Haruki; MASHIMA, Kazushi
- 4H2-11** Synthesis of the phosphine-olefin ligands based on a planar-chiral transition metal complex and their application to asymmetric reactions (Grad. Sch. Sci., Osaka Pref. Univ.) OHYA, Naoki; TSENG, Ya-yi; TSURUSAKI, Akihiro; KAMIKAWA, Ken

## Ir

- 4H2-12** Iridium-Catalyzed  $sp^3$  C-H Alkylation of Indoline Derivatives with Terminal Alkenes (Grad. Sch. Sci., Osaka City Univ.) ONAKAMURA, Ikumi; YAMAUCHI, Daisuke; NISHIMURA, Takahiro
- 4H2-13** Convenient Method for the Generation of Deuterium Gas Catalyzed by an Iridium Complex and Its Application to the Deuteration of Organic Compounds (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ONOMOTO, Akane; KAJITA, Shunpei; FUJITA, Ken-ichi

Chair: IWASAKI, Takanori (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(4H2-15, 4H2-16, 4H2-17, 4H2-18, 4H2-19, 4H2-20)
- 4H2-15** Iridium-Catalyzed Enantioselective Hydroarylation of Chromene Derivatives with Aromatic Ketones (Grad. Sch. Sci., Osaka City Univ.) OSAKAMOTO, Kana; NISHIMURA, Takahiro
- 4H2-16** Iridium-Catalyzed Synthesis of Tribenzosilolepin Derivatives by Intramolecular Cross Dehydrogenative Coupling (Sch. Advanced Sci. Eng., Waseda Univ.) UNO, Ninna; SASAKI, Tomoya; KANYIVA, Kyalo-stephen; SHIBATA, Takanori
- 4H2-17** Iridium-Catalyzed Direct C(sp<sup>3</sup>)-H bond Silylation of 2-Alkyl-1,3-azoles at the  $\alpha$ -Position in the 2-Alkyl group with Hydrosilanes (Grad. Sch. Eng., Osaka Univ.) FUKUMOTO, Yoshiya; MATSUBARA, Nao; HIRANO, Masaya; CHATANI, Naoto
- 4H2-18** Iridium-Catalyzed Dehydrogenative/Decarbonylative Coupling of Salicylaldehydes with Alkynes (Grad. Sch. Sci., Osaka City Univ.; Grad. Sch. Eng., Osaka Univ.; Sch. Mater. & Chem. Tech., Tokyo Tech.) YAMANE, Shintaro; HINOUE, Tomoaki; USUKI, Yoshinosuke; HAYASHI, Yoshihiro; KAWAUCHI, Susumu; MIURA, Masahiro; SATOH, Tetsuya
- 4H2-19** Asymmetric Synthesis of 3-Hydroxydihydrobenzofuran Derivatives through Iridium-Catalyzed Intramolecular Addition of Methoxy C(sp<sup>3</sup>)-H Bond (Grad. Sch. Eng., Kyoto Univ.) OKUSAKA, Satoshi; TORIGOE, Takeru; OHMURA, Toshimichi; SUGINOME, Michinori

## Ni

- 4H2-20** Synthesis of Novel N-Heterocyclic Carbenes (NHCs) for Ni-Catalyzed para-Selective Hydroarylation Reactions (Grad. Sch. Eng., Kyoto Univ.) OEBARA, Tomohiro; SEMBA, Kazuhiko; NAKAO, Yoshiaki

Friday, March 23, PM

## Ru

Chair: UENO, Satoshi (13 : 30 ~ 14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(4H2-28, 4H2-29, 4H2-30, 4H2-31, 4H2-32, 4H2-33)
- 4H2-28** Enantioselective Synthesis of anti-1,2-Oxaborinan-3-enes from 1,1-Di(boryl)alk-3-enes and Aldehydes Using Ruthenium and Chiral Phosphoric Acid Catalysts (Grad. Sch. Eng., Kyoto Univ.) ONAKAHASHI, Junki; SHIRATORI, Yota; MIURA, Tomoya; MURAKAMI, Masahiro

## Ni

- 4H2-29** An Allylation reaction of Aldehydes with (Z)-Allylboronates Generated by Nickel-catalyzed Double Bond Transposition of 1,1-Di(boryl)alk-3-ene (Sch. Eng., Kyoto Univ.) OSHIRATORI, Yota; NAKAHASHI, Junki; MIURA, Tomoya; MURAKAMI, Masahiro
- 4H2-30** Cross-Coupling Reactions with Organolithium Compounds Catalyzed by a Polystyrene-Cross-Linking Bisphosphine-Nickel Complex (Fac. Sci., Hokkaido Univ.) ARIMA, Nozomi; IWAI, Tomohiro; SAWAMURA, Masaya
- 4H2-31** Carbon-Fluorine Bond Cleavage Using Ni(0)/NHC Complexes (Sch. Eng., Osaka Univ.) OIMIYA, Hiroto; ANDRELLA, Nicholas Orlando; HOSHIMOTO, Yoichi; OHASHI, Masato; OGOSHI, Sensuke
- 4H2-32** Decarbonylative C-P bond formation by Ni Catalysis (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) OISSHIKI, Ryota; MUTO, Kei; YAMAGUCHI, Junichiro
- 4H2-33** Ni-Catalyzed Decarbonylative Alkylation of Aromatic Esters (Grad.

Sch. Advanced Sci. Eng., Waseda Univ.) OOKITA, Toshimasa; MUTO, Kei; YAMAGUCHI, Junichiro

Chair: SEMBA, Kazuhiko (14 : 40 ~ 15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(4H2-35, 4H2-36, 4H2-37, 4H2-38, 4H2-39, 4H2-40)
- 4H2-35** Nickel-Catalyzed Hydroboration of Olefins (Dept. of Chem. Eng., NIT, Nara College) KAMEI, Toshiyuki; ONISHINO, Soshi; SHIMADA, Toyoshi
- 4H2-36** Nickel-Catalyzed Carbohalogenation of Alkynes (Grad. Sch. Eng., Kyoto Univ.) OTAKAHASHI, Toshifumi; KURAHASHI, Takuya; MATSUBARA, Seiji
- 4H2-37** Nickel-Catalyzed Reaction of Azaarenes with Silyllithium (Dep. Chem., Sch. Sci., Kyoto Univ.) OYAMAGISHI, Hiroki; TSUCHIYA, Shun; NOGI, Keisuke; YORIMITSU, Hideki
- 4H2-38** Ni-catalyzed regioselective C-O bond functionalization of *peri*-Xanthhenoxanthene : Synthesis of 8-functionalized binaphthols (Dept. of Chem. Eng., NIT, Nara College) KAMEI, Toshiyuki; MATSUYAMA, Naoki; SHIMADA, Toyoshi
- 4H2-39** Nickel-Catalyzed C-H Borylation of *peri*-Xanthhenoxanthenes (Dept. of Chem. Eng., NIT, Nara College) KAMEI, Toshiyuki; ONISHINO, Soshi; SHIMADA, Toyoshi
- 4H2-40** Three-Component Coupling Reaction of Tetrafluoroethylene, Imines, and Hydrosilanes via Aza-Nickelacycle Intermediate (Grad. Sch. Eng., Osaka Univ.) OONO, Takafumi; SHIRATAKI, Hiroshi; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke

## Room H3

Bldg. 11 1133

Organic Chemistry -Reaction and Synthesis-  
Heterocyclic Compounds

Tuesday, March 20, AM

Chair: IIDA, Keisuke (9 : 00 ~ 10 : 10)

- \* 8:50-9:00: interval for laptop PC connection.(1H3-01, 1H3-02, 1H3-03, 1H3-04, 1H3-05, 1H3-06)
- 1H3-01** Asymmetric Michael addition reaction of pyrroline ester to alkenyl isoxazole using Silver/ThioClickFerrophos (Fac. Sci. Eng., Chuo Univ.) OKATO, Shuma; FUKUZAWA, Shin-ichi; HARAGUCHI, Ryosuke
- 1H3-02** Synthesis of C<sub>2</sub>-symmetric planar-chiral bipyridine and its application to catalytic asymmetric cyclopropanation (Sch. Advanced Sci. Eng., Waseda Univ.) OTADANO, Ayumu; KANOMATA, Nobuhiro
- 1H3-03** Enantioselective aldol reaction of isatins using di-amino alcohol organocatalyst (Grad. Sch. of Eng., Muroran Inst. of Tech.) OSEKI, Kento; U.V., Subba Reddy; SEKI, Chigusa; UWAI, Kouji; KWON, Eunsang; OKUYAMA, Yuko; TOKIWA, Michio; TAKESHITA, Mitsuhiro; NAKANO, Hiroto
- 1H3-04** Organocatalytic Enantioselective Sequential C-C Bond Forming Reaction in Flow System. (ISIR, Osaka Univ.) OH. D., Piyumi Wathasala; KISHI, Kenta; CHEN, Qingwen; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 1H3-05** Chiral Pyrrolidine-Imidazolium Ionic Liquids catalyst for Asymmetric Synthesis (Grad. Sch. Eng., Oita Univ.) OHIRAI, Tatsuya; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuichi
- 1H3-06** Development of New Spiro-type Chiral Ligands Bearing A Functional Side Arm (ISIR, Osaka Univ.) ONIIDA, Yasuaki; TAKENAKA, Kazuhiro; SASAI, Hiroaki

Chair: OTANI, Takashi (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1H3-08, 1H3-09, 1H3-10, 1H3-11, 1H3-12, 1H3-13)
- 1H3-08** Synthesis of Zinc 20-Hetero-Substituted Chlorophyll Derivatives and Their Self-aggregation (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; OKISHI, Masashi
- 1H3-09** Synthesis of chlorophyll derivatives with an additional exo-cyclic ring and their physical properties (Coll. Life Sci., Ritsumeikan Univ.) TAMIAMI, Hitoshi; DOI, Marie
- 1H3-10** *In vivo* and *in vitro* preparation of divinyl-13<sup>2</sup>,17<sup>3</sup>-cyclophosphorbiide-*a* enol (Grad. Sch. Life Sci., Ritsumeikan Univ.) OKINOSHITA, Yusuke; KASHIYAMA, Yuichiro; TAMIAMI, Hitoshi
- 1H3-11** Synthetic study of derivatives of azahelicenes (Grad. Sch. Eng., KIT) ANDO, Hiromasa; FUKUMA, Hiroaki; KOBAYASHI, Mitsuaki; SHIMOOKA, Hirokazu; OKAUCHI, Tatsuo; KITAMURA, Mitsuru
- 1H3-12** Highly Site-selective Direct Functionalization of Soluble Oxa[7] helicenes and Their Stereochemical Behaviors (Fac. Adv. Sci. Tech., Kumamoto Univ.; Grad. Sch. Sci. & Tech., Kumamoto Univ.; IMCE, Kyushu Univ.) ARAE, Sachie; KOBAYASHI, Ryo; KATAOKA, Tenmyo; IMOTO, Yuki; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; IRIE, Ryo
- 1H3-13** Stereochemical Properties of Benzodiheterole-containing Aza-hetero-

helicenes (Fac. Adv. Sci. Tech., Kumamoto Univ.; Grad. Sch. Sci. & Tech., Kumamoto Univ.; IMCE, Kyushu Univ.) ○ARAE, Sachie; MORI, Takaaki; NAKANO, Shotaro; IMAZATO, Taishi; HAMAMOTO, Nobutsugu; FUJIMOTO, Hitoshi; IGAWA, Kazunobu; TOMOOKA, Katsuhiko; IRIE, Ryo

Chair: SOETA, Takahiro (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1H3-15, 1H3-16, 1H3-17, 1H3-18, 1H3-19)
- 1H3-15** Facile Synthesis of Polyaza[7] and [9]helicenes from p-Phenylenediamine and Their Characterization (Sch. Advanced Sci. Eng., Waseda Univ.) ○IWASHIMIZU, Chisaki; BABA, Takumi; OTANI, Takashi; KANYIVA, Kyalo-stephen; SHIBATA, Takanori
- 1H3-16** Enantioselective synthesis of 3-benzoyloxy pyrroloindolines catalyzed by aminoiminophenol-copper complex (Grad. Sch. Sci., Chiba Univ.) ○MAKINO, Hiroki; IIDA, Keisuke; ARAI, Takayoshi
- 1H3-17** Development of Planar Chiral N-Heterocyclic Carbene Ligands Bearing CoC4Ph4 Group (Grad. Sch. Sci., Chiba Univ.) ○KUSHIMA, Midori; YASUE, Risa; YOSHIDA, Kazuhiro
- 1H3-18** Development of an oxazoline-forming trifluoromethylation of allylamides by using Togni reagent (Syn. Org. Chem. Lab., RIKEN; RIKEN CSRS) ○SEKINE, Daisuke; KAWAMURA, Shintaro; SODEOKA, Mikiko
- 1H3-19**<sup>#</sup> Development of a synthetic method for perfluoroalkylated N-heterocycles directed toward construction of compound libraries (RIKEN CSRS; Syn. Org. Chem. Lab., RIKEN) ○KAWAMURA, Shintaro; DOSEI, Kento; VALVERDE, Elena; USHIDA, Kiminori; SODEOKA, Mikiko

## Tuesday, March 20, PM

Chair: HARAGUCHI, Ryosuke (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1H3-28, 1H3-30, 1H3-31, 1H3-32, 1H3-33)
- 1H3-28**<sup>#</sup> Phosphorylation of Carbon-Oxygen Bond with N-Phosphine Oxide-Substituted Imidazolylidenes (Grad. Sch. Eng., Osaka Univ.) ○ASADA, Takahiro; HAZRA, Sunit; HOSHIMOTO, Yoichi; OGOSHI, Sensuke
- 1H3-30** Preparation of N-Heterocyclic Carbenes with Fluorine-Containing Groups at the 4,5-Positions (Grad. Sch. Eng., Osaka Univ.) ○ANDO, Kota; KIKUSHIMA, Kotaro; OHASHI, Masato; OGOSHI, Sensuke
- 1H3-31** Synthesis and Application of NHCs Having Axial Chirality Adjacent to Carbene Carbon (Fac. Eng., Gifu Univ.) ○TOTANI, Shogo; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 1H3-32** Hetero-Diels-Alder reaction of acylnitroso compounds with hypoidite (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○URAOKA, Saki; SHINOHARA, Ikumi; SAITO, Akio
- 1H3-33** Synthesis of Oxazoles Concomitant with Introduction of Carbon Functional Groups by Hypervalent Iodine Catalyst (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TAKEMOTO, Yusuke; ASARI, Naoki; TAKAHASHI, Shunsuke; SAITO, Akio

Chair: ARAE, Sachie (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1H3-35, 1H3-36, 1H3-37, 1H3-38, 1H3-39)
- 1H3-35** Development of Planar Chiral Five-membered Cyclic (Amino) (ferrocenyl)carbene Ligands (Grad. Sch. Sci., Chiba Univ.) ○TAKAGAKI, Waka; SHIKATA, Yuta; YOSHIDA, Kazuhiro
- 1H3-36** Catalytic Asymmetric Alkylation of Nitroolefins Utilizing Multi-Functional NHC Ligand (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○HATANAKA, Yuichi; ISHIZAKA, Tomohiro; SOETA, Takahiro; UKAJI, Yutaka
- 1H3-37** Pyridine-catalyst-induced formal [2+2+2] cycloaddition for synthesis of 3,4-dihydro-2H-pyrans. (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○TATEISHI, Keiichi; NOGUCHI, Keiichi; SAITO, Akio
- 1H3-38** Enyne cycloisomerization of electron deficient alkynes (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○SATO, Daisuke; NAKANISHI, Yuki; SAITO, Akio
- 1H3-39**<sup>#</sup> Oxadiazoles and Fused-Triazoles Syntheses Using Diverted Umpolung Amide Synthesis (Dept. of Chem., Vanderbilt Univ.) ○TOKUMARU, Kazuyuki; BERA, Kalisankar; JOHNSTON, Jeffrey

Chair: SHIMIZU, Yohei (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1H3-42, 1H3-43, 1H3-45, 1H3-46, 1H3-47)
- 1H3-42** Synthesis of 3-fluorofurans by ring-expansion reaction of fluorinated cyclopropanes (Grad. Sch. Sci. Tech., Gunma Univ.) ○MATSUMURA, Chihori; SUGIISHI, Tsuyuka; AMII, Hideki
- 1H3-43**<sup>#</sup> One-pot [2+2] cyclization-nucleophilic addition of ortho-alkynyl-O-allyl phenol leading to cyclobuta[*c*]chromene derivatives (Sch. Pharm., Osaka Univ.) ○OHNO, Shohei; AVENA, Ramon; FUJIOKA, Hiromichi; ARISAWA, Mitsuhiro
- 1H3-45** Synthesis of 3-allylbenzofuran *via* annulation of 2-alkynylphenol and allylic acetate (Grad. Sch. Eng., Chiba Univ.) ○WATANABE, Kohei; MINO, Takashi; ISHIKAWA, Eri; YOSHIDA, Yasushi; SAKAMOTO, Masami
- 1H3-46** Stereoselective Diels-Alder reaction between furan and alkyne (Fac. Sci. Tech., Keio Univ.) ○OGURA, Akihiro; ○MORIYA, Kojiro;

HORIGOME, Hiroki; TAKAO, Ken-ichi

- 1H3-47**<sup>#</sup> Regio- and Diastereoselective Photodimerization Reactions of Chiral Coumarin-3-Carboxamides (School of Pharm. Kitasato Univ.) ○ITOH, Kennosuke; ODATE, Fumiya; KARIKOMI, Takuma; MIYAMORI, Tsutomu; KAMIYA, Hideaki; YOZA, Kenji; SUGA, Hiroyuki; FUJII, Hideaki; TOKUNAGA, Ken

Chair: ITOH, Kennosuke (17 : 00~18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1H3-49, 1H3-50, 1H3-51, 1H3-52, 1H3-53, 1H3-54)
- 1H3-49** Synthesis of benzodioxane derivatives from diazaphthoquinones (Grad. Sch. Eng., KIT) ○NISHIMURA, Tomoaki; OTSUKA, Kota; SHIMOOKA, Hirokazu; OKAUTI, Tatsuo; KITAMURA, Mitoru
- 1H3-50** Synthesis of Six-Membered Cyclic Carbonate from Carbon Dioxide and Oxetane Catalyzed by Metal Salts (Fac. Eng., TUS) ○NAKAMURA, Ryo; SUGIMOTO, Hiroshi
- 1H3-51** Substituent Effect on the Reactivity of Kinetically Stabilized Nitrile N-oxide (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○ISHII, Ayumu; TSUTSUBA, Toyokazu; SOGAWA, Hiromitsu; TAKATA, Toshikazu
- 1H3-52** An expeditious synthesis of 3-substituted sialic acid derivatives via copper-catalyzed stereoselective propargylation of unprotected sugar (Grad. Sch. Pharm., The Univ. of Tokyo) ○MAJIMA, Sohei; ISHIZAWA, Kouhei; WEI, Xiao-feng; SHIMIZU, Yohei; KANAI, Motomu
- 1H3-53** Synthesis and optical resolution of bromoazalamarin N derivatives (Grad. Sch. Eng., Nagasaki Univ.) ○YAMASHITA, Kentaro; FUKUDA, Tsutomu; ONODERA, Gen; KIMURA, Masanari; IWAO, Masatomo
- 1H3-54** Enantioselective Cycloadditions between Aliphatic Nitrile Oxides and 2-Hydroxystyrenes Catalyzed by a Chiral Amine-urea (Fac. Eng., Shinshu Univ.; Sch. Med., Hyogo Coll. Med.) ○KOYAMA, Masato; ESAKI, Hiroyoshi; FUKUSHIMA, Kazuaki; TODA, Yasunori; SUGA, Hiroyuki

## Wednesday, March 21, AM

Chair: SHIGETA, Masayuki (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(2H3-01, 2H3-02, 2H3-03, 2H3-04, 2H3-05, 2H3-06)
- 2H3-01** Construction of trifluoromethyl group substituted 1,3-Oxathiine Derivatives by the Organocatalyst (Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○YAMAZAKI, Sae; SONEHARA, Taro; TSUJI, Hiroaki; KAWATSURA, Motoi
- 2H3-02** Reaction of 2-alkylidene-3,1-benzoxathiin-4-ones with nitrile oxides (Grad. Sch. Fac. Sci. Technol., TUS; IRC3, AIST) ○KURITA, Kojiro; SAKAI, Norio; SHIMIZU, Masao
- 2H3-03** Synthesis of 1-phosphazulene (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○OKAMOTO, Kohei; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 2H3-04**<sup>#</sup> Novel Synthesis of Thiochromenes *via* Oxidative Ring Closure of  $\alpha$ ,  $\beta$ -Unsaturated Carbodithioates (Fac. Eng., Iwate Univ.) ○ALAM, Md. Ashraf; SHIMADA, Kazuaki
- 2H3-05** Synthesis of Fluorescent Ionic Liquid with 5-Aminothiazole Scaffold (Grad. Sch. Eng., Oita Univ.) ○UTSUNOMIYA, Yuki; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuichi
- 2H3-06** Cross-coupling reaction of heteroaromatic compounds using 2,2'-diiodopyrrole derivatives (Grad. Sch. Sci., Eng., Saitama Univ.) ○OTSUKA, Koki; ISHIMARU, Yoshihiro

Chair: YOSHIMATSU, Mitsuhiro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(2H3-08, 2H3-09, 2H3-10, 2H3-11, 2H3-12, 2H3-13)
- 2H3-08** Photo-induced Intermolecular Coupling Reaction of Acylsilanes with Isocyanates (Fac. Sci., Gakushuin Univ.; Sch. Sci., Tokyo Tech.) ○ONO, Eita; IJIMA, Fukutaro; KOBAYASHI, Teruki; OHYAMA, Tomoya; ISHIDA, Kento; IWASAWA, Nobuharu; KUSAMA, Hiroyuki
- 2H3-09** Synthesis of Substituted Pyrroles Utilizing Ylide Formation between Siloxycarbenes and Imine Derivatives (Fac. Sci., Gakushuin Univ.) ○NISHIKAWA, Dai; ADEGAWA, Minoru; ISHIDA, Kento; KUSAMA, Hiroyuki
- 2H3-10** Highly Regioselective Alkylation of Tetrazoles at their 2-Positions with Alcohol by the Mitsunobu Reaction. (Sch. Life Sci. Tech., Tokyo Tech.) ○OKURA, Koki; ○SAGA, Kohei; SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu
- 2H3-11** One-Pot Transformation of Aryl bromides into 5-Aryltetrazoles and 3-Arylisoxazoles. (Grad. Sch. Sci., Chiba Univ.) ○KOBAYASHI, Eiji; TOGO, Hideo
- 2H3-12** One-Pot Preparation of 4-Arylthiaoles and Aromatic Amides from Arenes. (Graduate School of Science and Engineering, Chiba University) ○YAMAMOTO, Takahiro; TOGO, Hideo
- 2H3-13** Kinetic Resolution of Alcohols by Bronsted Base-free Asymmetric Acyl Transfer Reaction Utilizing Acid-combined Chiral N-Aryl Imidazole Catalyst (Grad. Sch. Eng., TUS) ○SUZUKI, Koki; MATSUURA, Kodai; KIYOTA, Yuki; IRIE, Ryo; YAMAKI, Ryota; TAKAHATA, Hiroki; IMAHORI, Tatsushi

Chair: TSUJI, Hiroaki (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(2H3-15, 2H3-16, 2H3-17,

2H3-18, 2H3-20)

- 2H3-15** Nitrile Hydration Reaction Using CuI-MeNO<sub>2</sub>-DBU System (Grad. Sch. Edu., Gifu Univ.; Grad. Sch. Edu., Gifu Univ.) ○KUWABARA, Jun; YOSHIMATSU, Mitsuhiro
- 2H3-16** Substituent Effect on [6+1] Annulation of 2-Cyano-1-propargylindoles with Reformatsky Reagents (Fac. Edu., Gifu Univ.) ○HIOKA, Ryoya; FEBRIA, Elvy Susanti; YOSHIMATSU, Mitsuhiro
- 2H3-17** Development of Efficient Method for the Syntheses of N,S-Ketal Containing Heterocycles Using Propargyl Cations (Fac. Edu., Gifu Univ.) ○MISHIMA, Naoya; OGAWA, Takahiro; YOSHIMATSU, Mitsuhiro
- 2H3-18\*** One-Pot Synthesis of 1,3-Dihetarylazoles via Propargyl Cations (Fac. Edu., Gifu Univ.) SATO, Eri; TODA, Takafumi; ○YOSHIMATSU, Mitsuhiro
- 2H3-20\*** Facile synthesis of spirooxindoles via an enantioselective organocatalyzed sequential reaction (ISIR, Osaka Univ.) ○KUSABA, Miki; KISHI, Kenta; TAKIZAWA, Shinobu; BAI, Jian-fei; SASAI, Hiroaki

## Wednesday, March 21, PM

Chair: SENGOKU, Tetsuya (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(2H3-28, 2H3-29, 2H3-30, 2H3-31, 2H3-32, 2H3-33)
- 2H3-28** Azo coupling reaction between mesoionic N-nitroso-1,3-diphenyltetrazolium-5-amide and arenes in the presence of Lewis acids (Grad Sch. Eng., Nagoya Inst. of Tech.) ○HORI, Masakazu; HIRASITA, Tsunehisa; ARAKI, Shuki
- 2H3-29** Functionalization of mesoionic 1,3-disubstituted tetrazolium-5-olates via lithiation (Grad Sch. Eng., Nagoya Inst. of Tech.) ○MAENO, Masamitsu; HIRASHITA, Tsunehisa; ARAKI, Syuki
- 2H3-30** Synthesis of substituted bicyclopyrroles and their oligomers (Fac. Eng., Utsunomiya Univ.) ○ASAKURA, Minenari; OBA, Toru; ITO, Satoshi
- 2H3-31** Synthesis of asymmetric 5,15-disubstituted Tetrabenzopyrrolines (Fac. Eng., Utsunomiya Univ.) ○NAMAI, Katsuya; OGAWA, Takafumi; OBA, Toru; ITO, Satoshi
- 2H3-32** Efficient Synthesis of Polysubstituted Pyrroles Utilizing [1,2]-Phosphabrook Rearrangement (Grad. Sch. Sci., Tohoku Univ.) ○IINO, Akio; ISHIKAWA, Sho; KONDOH, Azusa; TERADA, Masahiro
- 2H3-33** Pd-catalyzed Intermolecular Cascade Reaction between O-Homoallyl Oxime and Maleimides (Tohoku Univ.) ○ASOU, Takato; NISHIGAI, Yuuki; ZHANG, Dong; NAKAMURA, Itaru; TERADA, Masahiro

Chair: KONDOH, Azusa (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(2H3-35, 2H3-36, 2H3-37, 2H3-38, 2H3-39, 2H3-40)
- 2H3-35** Formation of Azaspirolactams via Electrophilic Amide Allylation of 3-Heterosubstituted Oxindoles (Fac. Eng., Shizuoka Univ.) SENGOKU, Tetsuya; ○HAYASHI, Daichi; MAKINO, Koki; TAKAHASHI, Masaki; YODA, Hidemi
- 2H3-36** Catalytic Enantioselective Propargylation of Aldehyde with New Stannylated Allenyl Amides (Graduate School of Engineering, Shizuoka University) SENGOKU, Tetsuya; ○AI, Keisuke; IKEDA, Ikuhei; TAKAHASHI, Masaki; YODA, Hidemi
- 2H3-37** Development of Aerobic Oxidative Sulfenylation of Indoles with Flavinium-Iodine Catalysts (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○OHKADO, Ryoma; ISHIKAWA, Tatsuro; IIDA, Hiroki
- 2H3-38** Synthesis of Pyrazole-3-triflones via [3+2] cycloaddition reaction with triflyl-diazo methane equivalent (Grad Sch. Eng., Nagoya Inst. of Tech.) ○GONDO, Satoshi; PULAKESH, Das; TOKUNAGA, Etsuko; SUMII, Yuji; SHIBATA, Norio
- 2H3-39** Synthesis of *trans*-tetrafluorosulfanyl pyridine derivatives (Fac. Eng. Nagoya Inst. of Tech.) ○NIINA, Kiyoteru; DAS, Prajwalita; TOKUNAGA, Etsuko; SHIBATA, Norio
- 2H3-40** Convergent synthesis of 2-amino-5-acyldihydropyrimidines using Weinreb amide (Fac. Pharm., Yasuda Women's Univ.) ○NISHIMURA, Yoshio; KUBO, Takanori; CHO, Hidetsura

Chair: YOKOYAMA, Soichi (15 : 50~16 : 30)

- \* 15:40-15:50: interval for laptop PC connection.(2H3-42, 2H3-43, 2H3-44, 2H3-45)
- 2H3-42** Shot-step synthesis of planar chiral bridged nicotinate having [10] parapyridinophane skeleton (Sch. Advanced Sci. Eng., Waseda Univ.) MIYASHITA, Yusuke; ○ONO, Yuki; KANOMATA, Nobuhiro
- 2H3-43** Straightforward syntheses of nitrogen-containing cyclophanes and their planar-chirality inversion (Sch. Advanced Sci. Eng., Waseda Univ.) ○MIYASHITA, Yusuke; KAKINUMA, Masaki; NAKAJIMA, Mamoru; KANOMATA, Nobuhiro
- 2H3-44** Synthesis and Catalytic Activity of Macrocyclic DMAP Analogues. (Grad. Sch. Sci., TUS) ○YANO, Hikaru; MUTOH, Yuichiro; SAITO, Shinichi
- 2H3-45** Aerobic Baeyer-Villiger Oxidation Catalyzed by a N5-Unmodified Neutral Flavin (Tokushima Univ., Dept. Appl. Chem.) ○KITA, Hazuki; YAMANOMOTO, Ken; ARAKAWA, Yukihiko; MINAGAWA, Keiji; IMADA, Yasushi

Chair: NISHIMURA, Yoshio (16 : 40~17 : 20)

- \* 16:30-16:40: interval for laptop PC connection.(2H3-47, 2H3-48, 2H3-49, 2H3-50)
- 2H3-47** Modification of the Pyridine Framework Using 3,5-Dinitropyridinium Ion as a Key Intermediate (Sch. Env. Sci. Eng., KUT) ○KURODA, Yasuyuki; YOKOYAMA, Soichi; NISHIWAKI, Nagatoshi
- 2H3-48** Facile Synthesis of Onychine Derivatives (Sch. Env. Sci. Eng., KUT) ○ARITA, Mao; YOKOYAMA, Soichi; ASAHARA, Haruyasu; NISHIWAKI, Nagatoshi
- 2H3-49** Activation of Aromatic Ring by Stearic Repulsion between Substituents (Sch. Env. Sci. Eng., KUT) ○IWAI, Kento; YOKOYAMA, Soichi; NISHIWAKI, Nagatoshi
- 2H3-50\*** Preparative Method for Tetrahydroquinolines Using Povarov-type Reaction Photochemically Catalyzed by Cr(III)/bipyridine Complex (Hokkaido Univ.) ○ARAI, Noroyoshi; OHKUMA, Takeshi

## Thursday, March 22, AM

Chair: YASUI, Eiko (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3H3-01, 3H3-02, 3H3-03, 3H3-04, 3H3-05)
- 3H3-01** Development of a new Synthetic Method of a-Carbolines Using 2-Aminopyridine Synthesis (Grad. Sch. Eng., Mie Univ.) ○SHIMADA, Satoshi; HACHIYA, Iwao; SHIMIZU, Makoto
- 3H3-02** Synthetic study of 2-substituted-3-aminopyridine using the Pd catalyst (Grad. Sch. Eng., KAIT) ○SENSUI, Hideto; NODA, Takeshi
- 3H3-03** Site-Specific PEGylation of protein using ENGase (Sch. Eng., Tokai Univ.) ○NAKANO, Takayuki; GOTO, Kohtarō; TANAKA, Tomohiro; MIZUNO, Mamoru; MATSUDA, Akio
- 3H3-04\*** Facile Syntheses of PET Radiotracers [<sup>11</sup>C]Tetrazoles and [<sup>11</sup>C]Triazines by Utilizing Palladium-Mediated <sup>11</sup>C-Cyanation of (Hetero)Arylborens (RIKEN CLST) ○ZHANG, Zhouen; NIWA, Takashi; WATANABE, Yasuyoshi; HOSOYA, Takamitsu
- 3H3-05\*\*** Development of Flavinium-Resins as Readily Available Oxidation Organocatalysts (Tokushima Univ., Dept. Appl. Chem.) ○OONISHI, Takahiro; ARAKAWA, Yukihiko; MINAGAWA, Keiji; IMADA, Yasushi

Chair: NISHIWAKI, Nagatoshi (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3H3-08, 3H3-09, 3H3-10, 3H3-12, 3H3-13)
- 3H3-08** Friedel-Crafts Cyclization of Cyclic Acetylene-cobalt Complex Concomitant with Removal of Cobalt (Fac. Eng., Kogakuin Univ.) ○YAMANAKA, Keiya; SAKATA, Yuuki; YASUI, Eiko; NAGUMO, Shinji
- 3H3-09** Mn(III)-Based Oxidative Cyclization of 1,1-Diphenylethene with N,N'-Dimethylmalonamide (Grad. Sch. Sci. & Tech., Kumamoto Univ.) ○SHIMOISHI, Ryutarō; NISHINO, Hiroshi
- 3H3-10\*\*** Photocatalytic N-Alkylation of Amines over Pd/TiO<sub>2</sub> for Functionalization of Heterocycles and Pharmaceutical Intermediates (Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○WANG, Lyuming; NOYORI, Ryoji; SAITO, Susumu; NAKA, Hiroshi
- 3H3-12\*** Development and Application of Organocatalyzed Stereoselective Umpolung Double Michael Reaction (ISIR, Osaka Univ.) ○KISHI, Kenta; TAKIZAWA, Shinobu; SASAI, Hiroaki
- 3H3-13** Studies of a Novel [4+3] Cycloaddition Reaction Using 3-Hydroxy-2-Pyrone (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○YANAGISAWA, Takamune; SUZUKI, Takahiro; TANINO, Keiji

Chair: TAKIZAWA, Shinobu (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3H3-15, 3H3-16, 3H3-18, 3H3-19, 3H3-20)
- 3H3-15** Synthesis of benzodiazepine derivatives (Sch. Adv. Eng., Kogakuin Univ.) ○YASUI, Eiko; TSUDA, Junpei; NAGUMO, Shinji
- 3H3-16\*** Direct Aziridination of Nitroalkenes and the Subsequent Isomerization Leading to Nitroenamines (Sch. Env. Sci. Eng., KUT) HAO, Feiyue; YOKOYAMA, Soichi; ASAHARA, Haruyasu; ○NISHIWAKI, Nagatoshi
- 3H3-18** Synthesis of Tricyclic Benzazocines by Aza-Prins Reaction with Ketones (Fac. Sci., TUS) ○TSUKAZAKI, Rei; KATAMURA, Tomohiro; MUTOH, Yuichiro; SAITO, Shinichi
- 3H3-19** Synthesis of Novel Opioid Receptor Ligands through Baeyer-Villiger Type Oxidation by Oxygen (WPI-IIS) ○HINO, Tsubasa; WATANABE, Yoshikazu; YATA, Masahiro; MOGI, Yuzo; NAGASE, Hiroshi
- 3H3-20** Design and synthesis of novel unnatural morphinan derivatives and their pharmacologies (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○HIO, Keita; KUTSUMURA, Noriki; OKADA, Takahiro; NAGUMO, Yasuyuki; NAGASE, Hiroshi

## Thursday, March 22, PM

Chair: MUTOH, Yuichiro (13 : 30~14 : 20)

- \* 13:20-13:30: interval for laptop PC connection.(3H3-28, 3H3-30, 3H3-31, 3H3-32)
- 3H3-28\*** Synthesis of Tricyclic Compounds by Amide Formation/Intramolecular Diels-Alder Reaction of Electron Deficient Alkenyl Carboxylic Acid and Arylpropenamines (Nara Univ. of Educ.; Grad. Sch. Eng., Osaka Pref. Univ.) ○SUGIURA, Hirotaka; YAMAZAKI, Shoko; OGAWA, Akiya



- 3H3-30** Development of direct arylation reaction of heteroarenes using catalytic amount of cobaltocen (Gifu Pharm. Univ.) ○KASHIMA, Yayoi; YAMAGUCHI, Eiji; TADA, Norihiro; ITOH, Akichika
- 3H3-31** Synthesis of Dibenzo-Annulated difuso-Diaza- and Oxaza-centrotri-quinacenes from 2,2'-Spirobindan-1,1'-diones (Col. Eng. Sci., Yokohama Natl. Univ.; Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○UENO, Ko; KURAUCHI, Kento; TAKUMA, Shunsuke; TACHI, Kanako; HOSHINO, Yujiro; HONDA, Kiyoshi
- 3H3-32** Microwave assisted Michael addition between heteroaromatic amines and chalcone (Coll. Sci. Eng., Kanto Gakuin Univ.) ○LEEANANSAKSIRI, Siriawat; TAKAHASHI, Kie; IIDA, Hirokazu

## Room H4

Bldg. 11 1141

### Organic Chemistry -Reaction and Synthesis- Aliphatic and Alicyclic Compounds

Tuesday, March 20, AM

Chair: SHIINA, Isamu (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1H4-01, 1H4-02, 1H4-03, 1H4-04, 1H4-06)
- 1H4-01** Diastereoselective synthesis of tetralin-fused spirooxindoles by internal redox reaction (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○MACHIDA, Mizuki; MORI, Keiji
- 1H4-02** Development of structure divergent synthesis based on minute control of coordination site by the selection of acid catalysts. (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○YOKOO, Kazuma; MORI, Keiji
- 1H4-03** Construction of 7-6-fused-cyclic skeleton by sequential hydride shift triggered double C-H bond functionalization (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○KATAOKA, Miyabi; MORI, Keiji
- 1H4-04\*** Synthesis of Molecularly Imprinted Polymer with Halogen Bonding-based Molecular Recognition Sites and Application to Catalysis (IMS) ○YAMANISHI, Katsunori; WATANABE, Taku; MOMIYAMA, Norie
- 1H4-06** Halogen Bond-based DMAP Imprinting Polymer Catalyzed Rearrangement Reaction of *o*-Acylloxy Benzofuranone in Water (LCCMS, IMS; Sch. Physical Sci., SOKENDAI) ○WATANABE, Taku; YAMANISHI, Katsunori; MOMIYAMA, Norie
- Chair: MORI, Keiji (10 : 10 ~ 11 : 10)
- \* 10:00-10:10: interval for laptop PC connection.(1H4-08, 1H4-09, 1H4-10, 1H4-11, 1H4-12, 1H4-13)
- 1H4-08** Copper-Catalyzed C-N Bond Formation of Indolyl (Aryl)Iodonium Imides via Rearrangement of Imides (Grad. Sch. Sci., Chiba Univ.) ○WATANABE, Kazuhiro; MORIYAMA, Katsuhiko
- 1H4-09** Remote Iodo-Amination of 2-Methylindole Derivatives Using Iodine Reagents (Grad. Sch. Sci., Chiba Univ.) ○HAMADA, Tsukasa; ISHIDA, Kazuma; TOGO, Hideo; MORIYAMA, Katsuhiko
- 1H4-10** Mechanistic Studies on Copper-Catalyzed Domino Rearrangement Reaction of *ortho*-Substituted *N*-Alkoxy Anilines (Grad. Sch. Sci., Tohoku Univ.) ○ISHIDA, Yasuhiro; NAKAMURA, Itaru; TERADA, Masahiro
- 1H4-11** Cu-catalyzed cascade-type 1,3-alkoxy rearrangement-Diels-Alder-reaction (Sch. Sci., Tohoku Univ.) ○MASUKAWA, Kazuki; ISHIDA, Yasuhiro; NAKAMURA, Itaru; TERADA, Masahiro
- 1H4-12** Catalytic Nucleophilic Aromatic Substitution Reaction Utilizing [1,2]-Phospha-Brook Rearrangement (Grad. Sch. Sci., Tohoku Univ.) ○AOKI, Takuma; KONDOH, Azusa; TERADA, Masahiro
- 1H4-13** Bronsted Base-Catalyzed Umpolung Intramolecular Cyclization of Alkynyl Imines (Grad. Sch. Sci., Tohoku Univ.) ○KONDOH, Azusa; TERADA, Masahiro

Chair: MANDAI, Hiroki (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1H4-15, 1H4-16, 1H4-17, 1H4-18, 1H4-19, 1H4-20)
- 1H4-15** Development of Intramolecular Diels-Alder Reaction Forming Large-Membered Ring (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○HIROKI, Shimoda; TAKAHIRO, Shibata; MASAHISA, Nakada
- 1H4-16** Asymmetric Aza-Diels-Alder Reaction of Imines and Dienes Utilizing In Situ Formation of Cationic Iron(III) Lewis Acid (Grad. Sch. Eng., Kyoto Univ.) ○TOMIFUJI, Rei; KURAHASHI, Takuya; MATSUBARA, Seiji
- 1H4-17** Optimization of the Kinetic Resolution of Racemic 2-Hydroxyacetals by the Asymmetric Esterification Using MA-BTM Combined System (Fac. Sci., TUS) ○MURATA, Takatsugu; NAKATA, Kenya; TAKAMA, Manami; SHIINA, Isamu
- 1H4-18** Formal Total Synthesis of (+)-Drugmacidin D by the Dynamic Kinetic Resolution of Racemic 2-Arylalkanoic Acid Using MA-BTM Combined System (Fac. Sci., TUS) SHIINA, Isamu; ○YOKOYAMA, Yuka; MURATA, Takatsugu; NAKATA, Kenya
- 1H4-19** Generation and Amplification of Solid-state Chirality of *o*-Tolylglycine Nitrile in the Strecker Reaction between Three Achiral Reagents (Fac.

Sci., TUS) ○AIBA, Shohei; TAKAMATSU, Naoya; TOKUNAGA, Yuji; KAWASAKI, Tsuneomi

- 1H4-20** Enantioselective Synthesis of Benzhydrylamine with Hydrogen Isotope (D/H) Chirality and Its Use for Asymmetric Strecker Amino Acids Synthesis as a Source Chirality (Fac. Sci., TUS) ○KUBO, Hiroki; NISHIYAMA, Satoshi; TOKUNAGA, Yuji; KAWASAKI, Tsuneomi

Tuesday, March 20, PM

Chair: HATANO, Manabu (13 : 30 ~ 14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1H4-28, 1H4-30, 1H4-32)
- 1H4-28\*** Development and Mechanistic Study of Bifunctional Phosphonium Salt-Catalyzed Coupling Reactions of Carbon Dioxide with Epoxides (Fac. Eng., Shinshu Univ.; Sch. Med., Hyogo Coll. Med.) ○TODA, Yasunori; KOMIYAMA, Yutaka; ESAKI, Hiroyoshi; FUKUSHIMA, Kazuaki; SUGA, Hiroyuki
- 1H4-30\*** Organocatalytic Decarboxylative Functionalization of Carboxylic Acids (TUT) ○KITAHAARA, Kazumasa; KATADA, Misaki; IWASA, Seiji; SHIBATOMI, Kazutaka
- 1H4-32\*** Asymmetric Total Synthesis of Latanoprost (Grad. Sch. Sci., Tohoku Univ.; Grad. Fac. Life Sci., Hokkaido Univ.) ○KAWAUCHI, Genki; UMEMIYA, Shigenobu; TANIGUCHI, Tohru; MONDE, Kenji; HAYASHI, Yujiro

Chair: SHIBATOMI, Kazutaka (14 : 40 ~ 15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(1H4-35, 1H4-37, 1H4-38, 1H4-39)
- 1H4-35\*** Chiral U-Shaped Supramolecular Catalysts for Multiselective Diels-Alder Reaction (Grad. Sch. Eng., Nagoya Univ.) ○SAKAMOTO, Tatsuhiko; HATANO, Manabu; ISHIHARA, Kazuaki
- 1H4-37** Enantioselective Aza-Friedel-Crafts Reaction of Indoles with Ketimines Catalyzed by Chiral Potassium Binaphthylidylsulfonates (Grad. Sch. Eng., Nagoya Univ.) ○MOCHIZUKI, Takuya; HATANO, Manabu; ISHIHARA, Kazuaki
- 1H4-38** Enantioselective Aza-Friedel-Crafts Reaction of 2-Methoxyfuran with alpha-Ketimino Esters Catalyzed by Chiral C<sub>1</sub>-Symmetric Bis(phosphoric acid) (Grad. Sch. Eng., Nagoya Univ.) ○KAWAKAMI, Taro; YASUKOCHI, Shotaro; HATANO, Manabu; ISHIHARA, Kazuaki
- 1H4-39\*** Development of Chiral Organosuperbase Catalyst Consisting of Guanidine and Phosphazene (Tohoku Univ.) ○OISHI, Masafumi; KONDOH, Azusa; TERADA, Masahiro

Chair: MORI, Keiji (15 : 50 ~ 16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(1H4-42, 1H4-44, 1H4-45, 1H4-46, 1H4-47)
- 1H4-42\*** Mechanistic Studies on Iodopentafluorobenzene Accelerated Addition Reactions of Allyl-, Crotyl-, and Prenylsilatranes to *N*-Heteroaromatics (LCCMS, IMS; Sch. Physical Sci., SOKENDAI) ○IZUMISEKI, Atsuto; NAKASHIMA, Fumio; YANG, Tao; EHARA, Masahiro; TUZUKI, Seiji; MOMIYAMA, Norie
- 1H4-44** Synthesis and Evaluation of Halogen Bond Donor Catalysts with Diiodoperfluoroaryls as the Mother Skeleton (LCCMS, IMS; Sch. Physical Sci., SOKENDAI) ○NAKASHIMA, Fumio; IZUMISEKI, Atsuto; MOMIYAMA, Norie
- 1H4-45** Synthesis of novel cinchona alkaloid-peptide hybrid catalyst and their application to asymmetric reaction (TUT) ○KUBO, Yuki; HARAGUCHI, Naoki; ITSUNO, Shinichi
- 1H4-46** Asymmetric Michael addition of active methylene compounds to nitroalkens catalyzed by amino alcohol organocatalyst (Sch. Eng., Muroran Inst. of Tech.) ○SANNABE, Haruka; NAKANO, Hiroto
- 1H4-47** Development of asymmetric epoxidation reaction of 2,3-disubstituted 1,4-naphthoquinone derivatives using guanidine-bisurea bifunctional organocatalyst (Fac. Eng., Tokyo Univ. of Agri. and Technol.; Fac. Sci., TUS) ○ORIHARA, Tatsuya; KAWAGUCHI, Masaki; HOSOYA, Keisuke; ODAGI, Minami; NAGASAWA, Kazuo

Chair: HARAGUCHI, Naoki (17 : 00 ~ 18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(1H4-49, 1H4-50, 1H4-51, 1H4-52, 1H4-53, 1H4-54)
- 1H4-49** Asymmetric Synthesis of 2-substituted Tetrahydroquinolines by Reduction of Nitro Compounds and Enantioselective Reductive Amination (Fac. Sci., Gakushuin Univ.) ○KOBAYASHI, Nanako; SUGA, Takuya; AKIYAMA, Takahiko
- 1H4-50** Kolbe-Schmitt Reaction on Resorcinols mediated by Organic Base (Fac. Sci. Tech., Keio Univ.) SADAMITSU, Yuta; ○OKUMURA, Akira; SAITO, Kodai; YAMADA, Tohru
- 1H4-51** Asymmetric Synthesis of 2-Cyclopentenones based on the Chirality Transfer of Decarboxylative Nazarov Cyclization (Fac. Sci. Tech., Keio Univ.) ○KOMATSUKI, Keiichi; KOZUMA, Akane; SAITO, Kodai; YAMADA, Tohru
- 1H4-52** Effect of E : Z ratio of substrate in phase-transfer catalyzed asymmetric umpolung reaction of  $\alpha$ -iminoamides (Grad. Sch. Eng., Chiba Univ.) ○HIROSHIGE, Tomohiko; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 1H4-53** Phase-transfer catalyzed asymmetric synthesis of chiral animals

through umpolung reaction of  $\alpha$ -iminoamides (Grad. Sch. Eng., Chiba Univ.; Fac. Eng., Chiba Univ.) ○OMORI, Kazuki; YOSHIDA, Yasushi; HIROSHIGE, Tomohiko; MINO, Takashi; SAKAMOTO, Masami

**1H4-54** Development of stacked-arene based organocatalyst (Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○OTAWA, Yuna; INOUE, Aiko; MORI, Keiji

### Wednesday, March 21, AM

Chair: KUWANO, Satoru (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2H4-01, 2H4-02, 2H4-03, 2H4-04, 2H4-05, 2H4-06)

**2H4-01<sup>#</sup>** Asymmetric synthesis of tritylpyrrolidine derivatives and their application to asymmetric benzyloxylation (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SHIMOGAKI, Mio; MARUYAMA, Hiroki; HOMMA, Chihiro; KANO, Taichi; MARUOKA, Keiji

**2H4-02<sup>#</sup>** Chiral amine-catalyzed asymmetric conjugate addition of aldehydes to  $\alpha$ -phenylselenoenones as formal Z-allylating agents (Dep. Chem., Sch. Sci., Kyoto Univ.) ○HOMMA, Chihiro; MARUYAMA, Hiroki; KANO, Taichi; MARUOKA, Keiji

**2H4-03<sup>#</sup>** Catalyst-controlled diastereoselectivity switch in formation of dihydropyrans (Dep. Chem., Sch. Sci., Kyoto Univ.) ○MARUYAMA, Hiroki; HOMMA, Chihiro; KANO, Taichi; MARUOKA, Keiji

**2H4-04** Enantioselective allylic chlorination by a chiral electrophilic selenium catalyst (Dep. Chem., Sch. Sci., Kyoto Univ.) ○NAGAOKA, Hitoshi; HASHIMOTO, Takuya; MARUOKA, Keiji

**2H4-05<sup>#</sup>** A chiral iodine catalyst for enantioselective hydrative dearomatization (Dep. Chem., Sch. Sci., Kyoto Univ.) ○SHIMAZAKI, Yuto; OMATSU, Yamato; HASHIMOTO, Takuya; MARUOKA, Keiji

**2H4-06** Organic Base-Catalyzed [5+2] Cycloadditions between Oxidopyrylium Ylides and Alkenes (Fac. Eng., Shinshu Univ.) ○SHIMIZU, Masahiro; IWAI, Taichi; TODA, Yasunori; SUGA, Hiroyuki

Chair: AMII, Hideki (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2H4-08, 2H4-09, 2H4-10, 2H4-11)

**2H4-08** Experimental verification of stereocontrol mechanism of entropy-dependent asymmetric aza-Friedel-Crafts reaction using guanidine-bisthiourea organocatalyst (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.; Coll. Sci., Rikkyo Univ.) ○KAWAGUCHI, Masaki; NAKANO, Katsuhiko; HOSOYA, Keisuke; ODAGI, Minami; YAMANAKA, Masahiro; NAGASAWA, Kazuo

**2H4-09** Theoretical Study on Guanidine-Bisthiourea Bifunctional Organocatalysis in Entropy-Driven Asymmetric Friedel-Crafts Reaction (Grad. Sch. Sci., Rikkyo Univ.; Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○NAKANO, Katsuhiko; KAWAGUCHI, Masaki; HOSOYA, Keisuke; ODAGI, Minami; NAGASAWA, Kazuo; YAMANAKA, Masahiro

**2H4-10** Asymmetric Mannich Reaction of Malononitrile with N-Boc Imines Using Halogen Bonding Donor/Organic Base Combined Catalyst (Grad. Sch. Sci., Chiba Univ.) ○KUWANO, Satoru; SUZUKI, Takumi; ARAI, Takayoshi

**2H4-11** Young Scholar Lectures of CSJ Development of Chemoselective Reactions by Exploiting Characteristic Feature of Copper(I) Catalyst (Fac. Sci., Hokkaido Univ.) ○SHIMIZU, Yohei

### Wednesday, March 21, PM

Chair: YAJIMA, Tomoko (13 : 00 ~ 13 : 50)

\* 12:50-13:00: interval for laptop PC connection.(2H4-25, 2H4-26, 2H4-27, 2H4-28, 2H4-29)

**2H4-25** Palladium-Catalyzed Regioselective Stannylation of Difluoroallenes (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○HIDANO, Tomohiro; IMAOKA, Hisanori; FUCHIBE, Kohei; ICHIKAWA, Junji

**2H4-26** Synthetic application of CF<sub>3</sub>-containing allenes (Grad. Sch. Fac. Eng., Tokyo Univ. of Agri. and Technol.) ○KAMURA, Yuma; KAWASAKI-TAKASUKA, Tomoko; YAMAZAKI, Takashi

**2H4-27** Substitution reaction on an asymmetric sp<sup>3</sup> carbon center attached with a fluoroalkyl group via fluorine-containing  $\pi$ -allylpalladium complex (KIT) ○KAWAZOE, Machiko; YAMADA, Shigeyuki; KONNO, Tsutomu

**2H4-28** Efficient approaches to various cyclic compounds with a tetrafluoroethylene fragment based on the intramolecular cyclization (KIT) ○MORISHITABARA, Suguru; NISHI, Yuji; YAMADA, Shigeyuki; KONNO, Tsutomu

**2H4-29** Novel synthesis of various fluorine-containing indenols based on cobalt-catalyzed [2+3] cycloaddition (KIT) ○YOSHIDA, Kazuhiro; KUMON, Tatsuya; YAMADA, Shigeyuki; KONNO, Tsutomu

Chair: KONNO, Tsutomu (14 : 00 ~ 14 : 40)

\* 13:50-14:00: interval for laptop PC connection.(2H4-31, 2H4-32, 2H4-33, 2H4-34)

**2H4-31** Trifluoromethylthiolation with CF<sub>3</sub>-DAST under Metal-free Conditions (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○YOSHIOKA, Takuya; SAIDALIMU, Ibrahim; TOKUNAGA, Etsuko; SHIBATA, Norio

**2H4-32** Pre-Catalyst Effects in Catalytic Difluoromethylation (Sch. Mater. &

Chem. Tech., Tokyo Tech.) ○HORI, Kaishi; MOTOHASHI, Hirotaka; SAITOU, Daichi; MIKAMI, Koichi

**2H4-33** Synthesis of *o*-(difluoromethyl)benzoates via benzocyclobutenone intermediates (Grad. Sch. Sci. Tech., Gunma Univ.; Grad. Sch. Sci. Tech., Gunma Univ.) ○OSHIMA, Takuya; KOMODA, Kazuki; SUGIISHI, Tsuyuka; AMII, Hideki

**2H4-34** Enantioselective difluoromethylation of MBH-fluorides via C-F bond activation (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○UNO, Hiroto; WANG, Jiandong; TOKUNAGA, Etsuko; SHIBATA, Norio

Chair: SHIBATA, Norio (17 : 00 ~ 17 : 40)

\* 16:50-17:00: interval for laptop PC connection.(2H4-49, 2H4-50, 2H4-51, 2H4-52)

**2H4-49** Organic dye catalyzed Visible Light induced Perfluoroalkylation-Cyclization (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○SANO, Moeke; YAJIMA, Tomoko

**2H4-50** Enamine Catalyzed Photoinduced Perfluoroalkylation of Olefines (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○MURASE, Mao; YAJIMA, Tomoko

**2H4-51** Synthesis and Structure of Crown Ethers Bearing Perfluorocyclopentene Units (I) (Coll. Eng., Ibaraki Univ.) ○FUKUMOTO, Hiroki; NAKASHIMA, Shinnosuke; AGO, Tomohiro; KUBOTA, Toshio

**2H4-52** synthesis and structure of Crown Ethers Bearing Perfluorocyclopentene Units (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○NAKASHIMA, Shinnosuke; HUKUMOTO, Hiroki; KUBOTA, Toshio; AGO, Tomohiro

### Thursday, March 22, AM

Chair: HIRANO, Koji (9 : 00 ~ 10 : 10)

\* 8:50-9:00: interval for laptop PC connection.(3H4-01, 3H4-02, 3H4-03, 3H4-04, 3H4-05, 3H4-06)

**3H4-01** Assessment of 4-methyltetrahydropyran (4-McTHP): Applications as an organic reaction solvent as well as degradation mechanisms under the radical reaction conditions (Fac. Eng., OIT) ○TAMURA, Tomoki; MASUYAMA, Araki; KOBAYASHI, Shoji

**3H4-02** Photochemical radical addition of alcohols to olefins using sunlight and *t*-Bu<sub>2</sub>O<sub>2</sub> (Coll. Sci. Tech., Nihon Univ.; Coll. Sci. Tech., Nihon Univ.) ○HAYAKAWA, Mamiko; MASHIMO, Hiroshi; UCHIDA, Kou; AOYAMA, Tadashi; OUCHI, Akihiko

**3H4-03** Development of *sp*<sup>3</sup> C-H functionalization using novel sulfonamide HAT catalysts (Grad. Sch. Pharm., The Univ. of Tokyo) ○SAKAI, Kentaro; TANAKA, Hirotaka; KAWAMURA, Atsushi; OISAKI, Kounosuke; KANAI, Motomu

**3H4-04** Photocatalytic Keto-difluoromethylation of Olefins (Lab. Chem. Life Sci., Tokyo Tech.) ○NAKAYAMA, Yoshiki; ANDO, Gaku; KOIKE, Takashi; AKITA, Munetaka

**3H4-05** Catalytic photo-oxidation of saturated hydrocarbons within a photo-responsive hollow complex and an electron-accepting co-catalyst (Grad. Sch. Eng., The Univ. of Tokyo) ROTA MARTIR, Diego; ○ADACHI, Kiyohiro; TAKEZAWA, Hiroki; FUJITA, Makoto

**3H4-06** Organocatalytic intermolecular [2+2] cycloaddition of norbornadienes by a stable organic radical compound (Grad. Sch. Eng., Tokyo City Univ.) ○KYOKANE, Shuji; TANAKA, Yusuke; SHIOTSUKI, Masashi

Chair: KOBAYASHI, Shoji (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(3H4-08, 3H4-09, 3H4-10, 3H4-11, 3H4-13)

**3H4-08** Sequential Generation of Imidoyl Radicals from Bis(silyl)imines through Photo-Induced Single Electron Transfer Processes and Their Coupling Reaction with Unsaturated Carbonyls (Fac. Sci., Gakushuin Univ.) ○MATSUDA, Ryota; OHYAMA, Tomoya; ISHIDA, Kento; KUSAMA, Hiroyuki

**3H4-09<sup>#</sup>** Synthesis of Diarenopentalenes: Consecutive Photo-induced Preparation of Hydrogen Iodide and Its Addition to Sondheimer-Wong Diyne (Fac. of Eng., Okayama Univ. of Sci.) ○AKIHIRO, Orita; TAKANORI, Nishida; YASUHIRO, Okuda; TAKAFUMI, Hagihara; KAN, Wakamatsu

**3H4-10** vic-Diphosphination of Alkenes under Visible-Light-Promoted Photo-redox Catalysis (Grad. Sch. Eng., Osaka Univ.) ○OTOMURA, Nobutaka; OKUGAWA, Yuto; HIRANO, Koji; MIURA, Masahiro

**3H4-11<sup>#</sup>** Aromatic radical cations generated by iron(III) salts which induce [4+2] and [2+2] cycloadditions (Grad. Sch. Eng., Nagoya Univ.; Inst. Adv. Res., Nagoya Univ.) ○HORIBE, Takahiro; OHMURA, Shuhei; ISHIHARA, Kazuaki

**3H4-13** Catalytic Aminium Radical Cation-initiated Synthesis of 1-Arylcyclopent-1-enes from Styrenes and Dienes (Sch. Eng., Nagoya Univ.) ○HIRAMATSU, Rin; OHMURA, Shuhei; HORIBE, Takahiro; ISHIHARA, Kazuaki

Chair: KOIKE, Takashi (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(3H4-15, 3H4-17, 3H4-19)

**3H4-15<sup>#</sup>** Visible green light-promoted radical cation Diels-Alder reaction catalyzed by thioxanthylum-based organophotoredox catalysts (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○TANAKA, Kenta; HOSHINO, Yujiro; HONDA, Kiyoshi

**3H4-17<sup>#</sup>** Development of Flavin-Amine Integrated Catalysts for Dual Photo-

redox and Enamine Catalysis (Tokushima Univ., Dept. Appl. Chem.)  
 ○TAGAMI, Takuma; ARAKAWA, Yukihiko; MINAGAWA, Keiji;  
 IMADA, Yasushi

**3H4-19<sup>#</sup>** Generation of  $\alpha$ -Iminy Radicals from  $\alpha$ -Bromo *N*-Sulfonylimines by Photoredox Catalyst and Application to Various Radical Reactions (Sch. Eng., Osaka Univ.) ○ESUMI, Naoto; SUZUKI, Kensuke; NISHIMOTO, Yoshihiro; YASUDA, Makoto

### Thursday, March 22, PM

Chair: MIYAGAWA, Masamichi (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(3H4-28, 3H4-29, 3H4-30, 3H4-31, 3H4-32)

**3H4-28** Phthalimide by Photofluorination of C-H Bond (Univ. of Shizuoka) ○EGAMI, Hiromichi; MASUDA, Shuya; KAWATO, Yuji; HAMASHIMA, Yoshitaka

**3H4-29** Selective point fluorinated Carboxylates Synthesis of using Mukaiyama aldol reaction (Fac. Eng., Tottori Univ.) ○KURODA, Kana; HAYASHI, Shihō; NOKAMI, Toshiki; ITOH, Toshiyuki

**3H4-30** Reactions of  $\alpha$ -Fluorobenzyl Dianion Equivalents (Grad. Sch. Sci. Tech., Gunma Univ.) ○TAGAMI, Yuta; KITAHARA, Taku; ONO, Masaki; SUGIISHI, Tsuyuka; MATSUBARA, Seiji; AMII, Hideki

**3H4-31** [4+2] Cycloaddition of fluorinated benzocyclobutenone derivatives with carbonyl compounds (Grad. Sch. Sci. Tech., Gunma Univ.) ○KOMODA, Kazuki; TANAKA, Ibuki; SUGIISHI, Tsuyuka; AMII, Hideki

**3H4-32<sup>#</sup>** Fluorinated diazoalkanes and beyond (RWTH Aachen University) ○HOCK, Katharina Julia; KOENIGS, Rene Michael

Chair: ITOH, Toshiyuki (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(3H4-35, 3H4-36, 3H4-37, 3H4-38, 3H4-39, 3H4-40)

**3H4-35** Stereochemistry of  $\alpha$ -fluoro- $\beta$ , $\gamma$ -unsaturated esters by Horner-Wadsworth-Emmons reaction (Grad. Sch. Sci. Eng., Univ. of Toyama) ○YOKOYAMA, Hajime; NAKAI, Yuya; MIYAZAWA, Masahiro

**3H4-36<sup>#</sup>** Development of Tandem Enantioselective Intramolecular Rauhut Currier Reaction and Aldol Condensation Promoted by Peptide Catalyst (IIS, The Univ. of Tokyo) ○YINGQI, Tian; ZHAONAN, Du; KENGO, Akagawa; KAZUAKI, Kudo

**3H4-37<sup>#</sup>** Enantioselective Direct Mannich-Type Reaction of 2-Benzylpyridine *N*-Oxide Catalyzed by Chiral Bis(guanidino)iminophosphorane Organosuperbase (Grad. Sch. Sci., Tohoku Univ.) ○HU, Qiupeng; KONDOH, Azusa; TERADA, Masahiro

**3H4-38<sup>#</sup>** Enantioselective Friedel-Crafts Alkylation Reaction of Indoles with non-activated  $\beta$ -Alkyl- $\beta$ -Nitrostyrenes Catalyzed by Chiral BINOL Phosphates (Fac. Sci., Gakushuin Univ.) ○KANEKO, Mio; IBÁÑEZ SÁNCHEZ, Ignacio; AKIYAMA, Takahiko

**3H4-39** 1,3-Dipolar Cycloadditions between Carbonyl Ylides and Imines Catalyzed by a Rhodium Complex and Lewis Acid Binary System (Fac. Eng., Shinshu Univ.) ○KAKU, Wakatake; TURUOKA, Makoto; TODA, Yasunori; SUGA, Hiroyuki

**3H4-40** Chiral Lewis Acid-Catalyzed Asymmetric Cycloaddition Reactions between Cyclic Azomethine Ylides and *N*-Acryloyl Pyrazolidinone (Fac. Eng., Shinshu Univ.) ○YOSHIWARA, Masahiro; YAMAGUCHI, Takaaki; TODA, Yasunori; SUGA, Hiroyuki

Chair: SAITO, Akio (15 : 50~16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(3H4-42, 3H4-44, 3H4-46, 3H4-47)

**3H4-42<sup>#</sup>** Site-selective Transformation of Carbonyl-neighboring Azido Group to Clickable Functional Group (Grad. Sch. Mat. Sci., NAIST) ○YOKOI, Taiki; UEDA, Tomomi; TANIMOTO, Hiroki; KAKIUCHI, Kiyomi

**3H4-44<sup>#</sup>** Chiral Nucleophilic Amidophosphate-Catalyzed Enantioselective Halocyclization (Grad. Sch. Eng., Nagoya Univ.) ○LU, Yanhui; NAKATSUJI, Hidefumi; OKUMURA, Yukimasa; ISHIHARA, Kazuaki

**3H4-46** Selenium-Iodine Cooperative Catalysts for Chlorocyclization of Tryptamine Derivatives with NCS (Grad. Sch. Eng., Nagoya Univ.) ○OHMURA, Shuhei; HORIBE, Takahiro; ISHIHARA, Kazuaki

**3H4-47** Halogen-Based Lewis Acid-Thiourea Lewis Base Cooperative Catalysts for Iodochlorination of Alkenes with In-situ Generated Iodine Monochloride (Grad. Sch. Eng., Nagoya Univ.) ○TSUJI, Yasutaka; HORIBE, Takahiro; ISHIHARA, Kazuaki

Chair: TANIMOTO, Hiroki (17 : 00~17 : 30)

\* 16:50-17:00: interval for laptop PC connection.(3H4-49, 3H4-51)

**3H4-49\*** Halogen Atom Controlled Dehalolactonization Reaction of Keto Acids using Basic Catalyst (R-GIRO; Coll. Pharm. Sci., Ritsumeikan Univ.) ○CHINA, Hideyasu; NISHIGUCHI, Kaishi; KOJIMA, Yusuke; DOHI, Toshifumi

**3H4-51\*** 3-Aryl-2,3,4,5,6,7-hexahydro-1*H*-inden-1-ones: Novel one-pot methodology for synthesis and evaluation of antimicrobial activity (Dept. of Chem., Advanus Therapeutics Ltd., India) ○PATI, Hari; MOGER, Manjunath

### Friday, March 23, AM

Chair: HORIBE, Takahiro (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4H4-01, 4H4-02, 4H4-03, 4H4-05, 4H4-06)

**4H4-01** EtAlCl<sub>2</sub> and 2,6-dibromopyridine-mediated acylation of alkenes with acid chlorides (Grad. Sch. Eng., Tohoku Univ.) ○KUNISAWA, Tsukasa; YOSHII, Yuuji; TANAKA, Shinya; HATTORI, Tetsutaro

**4H4-02<sup>#</sup>** *N*-PFB-PyBidine- Zn(OAc)<sub>2</sub>-Catalyzed Asymmetric Chlorination of  $\beta$ -Ketoesters. (Grad. Sch. Sci., Chiba Univ.) ○MA, Junma; ARAI, Takayoshi; SHIRASUGI, Mayu

**4H4-03<sup>#</sup>** Chiral Lewis Acid-Single Walled Carbon Nanotube (SWNT)-Integrated Catalysts Enabled an Efficient Reaction in Water (Grad. Sch. Sci., The Univ. of Tokyo) ○KITANOSONO, Taku; XU, Pengyu; KOBAYASHI, Shu

**4H4-05** Development of immobilized chiral 2,2'-bipyridine ligands for enantioselective reactions in water (Grad. Sch. Sci., The Univ. of Tokyo) ○LU, Fangqiu; MASUDA, Koichiro; KITANOSONO, Taku; KOBAYASHI, Shu

**4H4-06** Development of photo-responsive chiral 2,2'-bipyridine ligands for photochemical reactions in water (Grad. Sch. Sci., The Univ. of Tokyo) ○NISHIMURA, Yuma; KITANOSONO, Taku; KOBAYASHI, Shu

Chair: ASANO, Keisuke (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4H4-08, 4H4-09, 4H4-10, 4H4-11, 4H4-12, 4H4-13)

**4H4-08** Function of chiral bis(aminoimino)binaphthol-zinc trinuclear complex in catalytic asymmetric iodolactonization and its application to desymmetrization (Grad. Sch. Sci., Chiba Univ.) ○HORIGANE, Kodai; KAMEI, Yuto; YAMANAKA, Masahiro; ARAI, Takayoshi

**4H4-09** Pictet-Spengler Reaction Promoted by Halogen Bond Donor (Fac. Sci., Gakushuin Univ.) ○TANAKA, Yoshihiro; MIYAGAWA, Masamichi; AKIYAMA, Takahiko

**4H4-10<sup>#</sup>** Development of Pyrene-based Scandium Lewis Acid Catalyst (School of Science, The University of Tokyo) ○ZHANG, Dongxin; KITANOSONO, Taku; KOBAYASHI, Shu

**4H4-11<sup>#</sup>** Cyclocondensation reactions in water catalyzed by solid acid catalysts (School of Science, The University of Tokyo) ○CHO, Soo Min; KITANOSONO, Taku; KOBAYASHI, Shu

**4H4-12** Intramolecular Cyclopropanation Using Immobilized Chiral Catalyst (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○HOSHINO, Yunosuke; UWAMORI, Masahiro; NAKADA, Masahisa

**4H4-13** Aziridination of Olefins with Sulfamate Esters as Nitrogen Sources Using *tert*-butyl hypoiodite (Sch. Eng., Osaka Univ.) ○NAKAMURA, Shogo; KIYOKAWA, Kensuke; MINAKATA, Satoshi

Chair: KIYOKAWA, Kensuke (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4H4-15, 4H4-16, 4H4-17, 4H4-18, 4H4-19, 4H4-20)

**4H4-15** trans-Cyclooctenes as Catalysts in Halolactonization (Grad. Sch. Eng., Kyoto Univ.) ○SHITAMICHI, Kenta; ASANO, Keisuke; MATSUBARA, Seiji

**4H4-16** Optically Active trans-Cyclooctenes as Ligands in Rhodium-catalyzed Asymmetric 1,4-Addition (Grad. Sch. Eng., Kyoto Univ.) ○NAGANO, Tagui; EINARU, Shunsuke; SHITAMICHI, Kenta; ASANO, Keisuke; MATSUBARA, Seiji

**4H4-17** Acid-catalyzed Chirality-transferring Intramolecular Friedel-Crafts Reaction of  $\alpha$ -Hydroxy- $\alpha$ -alkenylsilanes (Grad. Sch. Sci., Osaka City Univ.) ○KUBOTA, Shunnichi; AKAGI, Wataru; IKEDA, Naoko; HIGASHINO, Masato; SHINADA, Teturo; OHUNE, Yasuhumi; NISHIMURA, Takahiro; SAKAGUCHI, Kazuhiko

**4H4-18** Synthesis of Spiro[2.3]hexane by Catalytic Annulation of Methylene-cyclopropane with Activated Alkene (Grad. Sch. Eng., Osaka Univ.) ○SHIMAZU, Junya; SUZUKI, Itaru; SHIBATA, Ikuya

**4H4-19** the unprecedented thermal cyclization reaction between diazoketone and olefin (Sch. Advanced Sci. Eng., Waseda Univ.) ○UDAGAWA, Yutaro; HOSOKAWA, Seiji

**4H4-20** Me<sub>3</sub>P-promoted alcoholysis of  $\alpha$ , $\beta$ -unsaturated imides and  $\alpha$ , $\beta$ -unsaturated ester (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○SATO, Haruka; HOSOKAWA, Seiji

### Friday, March 23, PM

Chair: HACHIYA, Iwao (13 : 40~14 : 40)

\* 13:30-13:40: interval for laptop PC connection.(4H4-29, 4H4-30, 4H4-31, 4H4-33, 4H4-34)

**4H4-29** Construction of Axial Chirality via Halogenation of 1-(3-Hydroxyphenyl)-2-naphthonitriles Using Bifunctional Organocatalysts (Grad. Sch. Eng., Kyoto Univ.) ○WADA, Yuuki; MATSUMOTO, Akira; ASANO, Keisuke; MATSUBARA, Seiji

**4H4-30** Asymmetric Formation of Optically Active Tetrahydropyrans via Simultaneous Construction of Three Chiral Centers (Grad. Sch. Eng., Kyoto Univ.) ○KURIMOTO, Yosuke; ASANO, Keisuke; MATSUBARA, Seiji

**4H4-31<sup>#</sup>** Asymmetric Cycloetherification via Cyanation of Acylsilanes Using Bifunctional Organocatalysts (Grad. Sch. Eng., Kyoto Univ.)

- MATSUMOTO, Akira; ASANO, Keisuke; MATSUBARA, Seijiro  
**4H4-33** Substituent effect of anilines or benzylamine toward Michael addition using under microwave irradiation (Graduate School of Engineering, Kanto Gakuin University) ○OKAWA, Mitsuki; TAKAHASHI, Kie; IIDA, Hirokazu  
**4H4-34<sup>#</sup>** Direct asymmetric Michael reaction of  $\alpha, \beta$ -unsaturated aldehydes and ketones catalyzed by two secondary amine catalysts (Grad. Sch. Sci., Tohoku Univ.) ○UMEKUBO, Nariyoshi; TERUNUMA, Takahiro; HAYASHI, Yujiro

Chair: IIDA, Hirokazu (14 : 50~15 : 50)

- \* 14:40-14:50: interval for laptop PC connection.(4H4-36, 4H4-37, 4H4-38, 4H4-39, 4H4-40, 4H4-41)  
**4H4-36** Highly stereoselective oxy-homo-Michael reaction and 1,5-addition to enantioenriched donor-acceptor cyclopropanes (Fac. Textile Sci. Technol., Shinshu Univ.) ○SAITO, Taichi; NISHII, Yoshinori  
**4H4-37** Chiral transfer ring opening cyclization of enantioenriched donor-acceptor cyclopropanes and its application to total synthesis of bioactive lignin amide. (Fac. Textile Sci. Technol., Shinshu Univ.) ○TAKAKI, Naoya; YAMADA, Satoshi; NISHII, Yoshinori  
**4H4-38** Hydrogenolysis of enantioenriched donor-acceptor cyclopropanes using Pd-catalysts or other metal catalysts. (Fac. Textile Sci. Technol., Shinshu Univ.) NISHII, Yoshinori; ○OTA, Ryotaro  
**4H4-39** Synthesis of DACN Derivatives with Thia-Michael Reactive Moiety and Their Reactions (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) KAWASAKI, Yuuya; ○SETO, Yuuki; KAWAHARA, Shintarou; AOYAMA, Shin; IGAWA, Kazunobu; TOMOOKA, Katsuhiko  
**4H4-40** Synthesis of *N*-Fmoc-amino-acid-DACN and Its Application (IMCE, Kyushu Univ.; Fac. Eng., Kyushu Univ.) KAWASAKI, Yuuya; ○KAWAHARA, Shintarou; SETO, Yuuki; IGAWA, Kazunobu; TOMOOKA, Katsuhiko  
**4H4-41** Synthesis of DACN-containing Polymer and Click Reaction Thereof (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.) IGAWA, Kazunobu; ○YAMANAKA, Yuki; AOYAMA, Shin; KAWASAKI, Yuuya; TOMOOKA, Katsuhiko

Chair: IGAWA, Kazunobu (16 : 00~17 : 00)

- \* 15:50-16:00: interval for laptop PC connection.(4H4-43, 4H4-44, 4H4-45, 4H4-46, 4H4-47, 4H4-48)  
**4H4-43** Desymmetrization of *meso*-1,4-Dioxane Derivatives by Asymmetric Reductions and Its Application (Grad. Sch. Eng., Mie Univ.) ○YAMAMOTO, Kenta; HACHIYA, Iwao; SHIMIZU, Makoto  
**4H4-44** Nanoporous Gold Catalyst for Hydrogen-Transfer Reductive Amination of Carbonyl Compounds with Formic Acid (Fac. Textile Sci. Technol., Shinshu Univ.) ○MIYAUCHI, Masato; KAVTHE, Rahul; ASAO, Naoki  
**4H4-45<sup>#</sup>** Development of Bidentate Diphosphine Ligands of Highly Active Ru Catalysts for Practical Hydrogenation of Carboxylic Acids (Grad. Sch. Sci., Nagoya Univ.) ○YOSHIOKA, Shota; NARUTO, Masayuki; NOYORI, Ryoji; SAITO, Susumu  
**4H4-46** Development of Hydrogenation of  $\alpha$ -Amino Aldehydes to Optically Active  $\beta$ -Amino Alcohols via Ru- $\alpha$ -Aminocarboxylates as Catalyst Prototypes (Grad. Sch. Sci., Nagoya Univ.) ○SAITO, Akari; YOSHIOKA, Shota; NOYORI, Ryoji; SAITO, Susumu  
**4H4-47** Asymmetric Reduction of Trifluoromethylated Alkynylketimine by Chiral Phosphoric Acid (Fac. Sci., Gakushuin Univ.) ○TAKASHIMA, Kensuke; MIYAGAWA, Masamichi; AKIYAMA, Takahiko  
**4H4-48** Enantioselective Nucleophilic Addition Reaction of Heteroaromatics to Trifluoromethylated N-H Ketimines by Means of Chiral Phosphoric Acid (Fac. Sci., Gakushuin Univ.) ○YOSHIDA, Masaru; MIYAGAWA, Masamichi; AKIYAMA, Takahiko

## Room H5

### Bldg. 11 1142

## Organic Chemistry -Reaction and Synthesis- Aliphatic and Alicyclic Compounds

Tuesday, March 20, AM

Chair: OHMATSU, Kohsuke (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(1H5-01, 1H5-02, 1H5-03, 1H5-04, 1H5-05, 1H5-06)  
**1H5-01<sup>#</sup>** Asymmetric 1,3-Dipolar Cycloaddition by Means of Chiral Phosphoric Acid (Fac. Sci., Gakushuin Univ.) ○JIN, Yuan; AKIYAMA, Takahiko  
**1H5-02** Organic synthesis using BDMS from HBr/1,4-dioxane (Grad. Sch. Sci., Osaka Pref. Univ.) ○YUBATA, Kotaro; MATSUBARA, Hiroshi; ISHIKAWA, Shin-ichi  
**1H5-03** Enantioselective Addition Reaction of Allyl Alcohols to Imines Catalyzed by Chiral Bronsted Base (Grad. Sch. Sci., Tohoku Univ.) ○TEDUKA, Hikaru; AKAHIRA, Shiori; KONDOH, Azusa; TERADA, Masahiro

- 1H5-04** Direct  $\alpha$ -Acetylation of Cyclic Nitrones Using Acetylacetone as a Pronucleophile (Tokushima Univ., Dept. Appl. Chem.) ○NGUYEN, Thi Tuyet Mai; IWAI, Kensuke; ARAKAWA, Yukihiro; MINAGAWA, Keiji; IMADA, Yasushi  
**1H5-05** Enantioselective Propargylic Substitution Reaction Catalyzed by Chiral Bronsted Acid (Grad. Sch. Sci., Tohoku Univ.) ○TAKANO, Kyohei; OTA, Yusuke; KIKUCHI, Jun; TERADA, Masahiro  
**1H5-06** Enantioselective Addition Reaction of Vinyl Azide as a Synthone of Amide Enolate Catalyzed by Chiral Strong Bronsted Acid (Grad. Sch. Sci., Tohoku Univ.) ○NAKANISHI, Taishi; KIKUCHI, Jun; KAGA, Atsushi; CHIBA, Shunsuke; TERADA, Masahiro

Chair: HORIBE, Takahiro (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(1H5-08, 1H5-09, 1H5-10, 1H5-11, 1H5-12, 1H5-13)  
**1H5-08<sup>#</sup>** Chiral Bronsted acid catalyzed asymmetric allylic alkylation of *N*-Methyl Indoles (Tohoku Univ.) ○GUPTA, Yogesh; KIKUCHI, Jun; TERADA, Masahiro  
**1H5-09** Chiral Amide-1,2,3-triazole As An Anion-Binding Supramolecular Bronsted Acid (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○SUZUKI, Ryuhei; FURUKAWA, Yukino; OHMATSU, Kohsuke; OOI, Takashi  
**1H5-10** Asymmetric Michael Addition to an Allenic Diester via Dynamic Kinetic Resolution (Grad. Sch. Eng., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; CREST, JST) ○YAMADA, Kohei; KAWAI, Yamada; URAGUCHI, Daisuke; OOI, Takashi  
**1H5-11** The kinetic resolution of  $\gamma$ -substituted 2,3-butadienoic acid esters through catalytic asymmetric Michael reaction (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○NOBORI, Yumiko; YAMADA, Kohei; URAGUCHI, Daisuke; OOI, Takashi  
**1H5-12** Kinetic Resolution of  $\alpha$ -Substituted  $\alpha$ -Nitrolactones Promoted by Bronsted Acid catalysts (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○NAKAO, Ryota; SAKAKURA, Akira  
**1H5-13** Thioureas and Thiophosphoric Amides as Highly Active Catalysts for Selective Bromocyclization of Geranyl Derivatives (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○TERAZAKI, Miyuki; SHIOMOTO, Keiichi; SAKAKURA, Akira

Chair: ARAKAWA, Yukihiro (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(1H5-15, 1H5-17, 1H5-18, 1H5-19, 1H5-20)  
**1H5-15<sup>#</sup>** Chiral Strong Bronsted Acid-Catalyzed Asymmetric Addition Reaction of Azlactone to Styrene Derivatives (Grad. Sch. Sci., Tohoku Univ.) ○KIKUCHI, Jun; TERADA, Masahiro  
**1H5-17** Enantioselective  $\alpha$ -Fluorination Reaction Induced by Chiral  $\pi$ -Cu (II) Catalysts (Graduate School of Engineering, Nagoya Univ.) ○NISHIMURA, Kazuki; WANG, Yanzhao; OGURA, Yoshihiro; YAMAKAWA, Katsuya; ISHIHARA, Kazuaki  
**1H5-18<sup>#</sup>** Chiral Cu(II) Complex-Catalyzed Enantioselective [1,3] Rearrangement of Allylnaphthyl Ethers (Grad. Sch. Eng., Nagoya Univ.) ○YAO, Lu; ISHIHARA, Kazuaki  
**1H5-19** Chiral Iron(III)-silver(I) Cooperative Catalysts for Enantioselective Conia-ene Reaction (Grad. Sch. Eng., Nagoya Univ.) ○SAKAKIBARA, Masato; HORIBE, Takahiro; ISHIHARA, Kazuaki  
**1H5-20** Chiral Diphosphine Oxide-Iron(II) Catalysts for Enantioselective Oxidative Coupling Reaction of 2-Naphthols (Grad. Sch. Eng., Nagoya Univ.) ○NAKAGAWA, Keita; HORIBE, Takahiro; ISHIHARA, Kazuaki

Tuesday, March 20, PM

Chair: URAGUCHI, Daisuke (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(1H5-28, 1H5-29, 1H5-30, 1H5-31, 1H5-32)  
**1H5-28** Through Visible Light-Sensitized Triplet Energy Transfer Process. Intermolecular Coupling Reaction of Alkanoylsilanes with Boronic Esters (Fac. Sci., Gakushuin Univ.) ○YAMAZAKI, Hokuto; HAGIWARA, Chihiro; ISHIDA, Kento; KUSAMA, Hiroyuki  
**1H5-29** C-C bond formation using Benzothiazoline as efficient benzylating agents under thermal/photoredox condition (Fac. Sci., Gakushuin Univ.) ○MORIYAMA, Kaworuko; IBANEZ SANCHEZ, Ignacio; AKIYAMA, Takahiko  
**1H5-30** Generation of  $\alpha$ -Aminoalkyl Radicals from Sodium  $\alpha$ -Aminoalkanesulfonates and a Hypervalent Iodine(III) Reagent (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YOSHII, Tomomi; SAKAMOTO, Ryu; MARUOKA, Keiji  
**1H5-31** Radical addition-cyclization of *N*-arylacrylamides with aliphatic aldehydes by the photolysis of hypervalent iodine(III) reagent (Dep. Chem., Sch. Sci., Kyoto Univ.) ○NAOMICHI, Hiram; RYU, Sakamoto; KEIJI, Maruoka  
**1H5-32<sup>#</sup>** Lewis acid-catalyzed synthesis of cyclic carbamates from *N*-Boc-protected aminals and alkynes (Dep. Chem., Sch. Sci., Kyoto Univ.) ○YASUMOTO, Kento; KANO, Taichi; MARUOKA, Keiji

Chair: FUKUYAMA, Takahide (14 : 30~15 : 20)

- \* 14:20-14:30: interval for laptop PC connection.(1H5-34, 1H5-35, 1H5-36, 1H5-37, 1H5-38)

**1H5-34** Photo-induced Generation of Radical Ion Pairs for Catalytic Bond Formation Reaction (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) ○IMAIZUMI, Naoki; ARAMAKI, Yoshitaka; OOI, Takashi

**1H5-35** Development of a Hexacoordinated Chiral Phosphate Ion: Molecular Design, Synthesis, and Application to Asymmetric Catalysis (WPI-ITbM, Nagoya Univ.; Grad. Sch. Eng., Nagoya Univ.; CREST, JST) URAGUCHI, Daisuke; ○SASAKI, Hitoshi; KIMURA, Yuto; OOI, Takashi

**1H5-36** Synthesis and Properties of a Chiral Hexacoordinated Phosphorus Compound Directed toward Application for Catalysis (Grad. Sch. Eng., Nagoya Univ.; WPI-ITbM, Nagoya Univ.; CREST, JST) ○KIMURA, Yuto; SASAKI, Hitoshi; URAGUCHI, Daisuke; OOI, Takashi

**1H5-37** Reductive Coupling Reaction between Alcohols and Electron-Deficient Alkenes via Direct C-OH Bond Cleavage Utilizing Low-Valent Titanium (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○SHIMAZU, Shoma; SUGA, Takuya; UKAJI, Yutaka

**1H5-38** Decarboxylative Oxyfunctionalization of Carboxylic Acids Using Iodine/Hypervalent Iodine System (Grad. Sch. Eng., Osaka Univ.) ○OKUMATSU, Daichi; KIYOKAWA, Kensuke; MINAKATA, Satoshi

Chair: KANO, Taichi (15 : 30~16 : 20)

\* 15:20-15:30: interval for laptop PC connection.(1H5-40, 1H5-41, 1H5-42, 1H5-43, 1H5-44)

**1H5-40** Transition Metal-Free Intramolecular Heck Carbonylation Reaction (Grad. Sch. Sci., Osaka Pref. Univ.) ○BANDO, Takanobu; FUKUYAMA, Takahide; RYU, Ilhyong

**1H5-41** Synthesis of secondary alkylboron compounds having polar functional groups by using atom-transfer radical reaction (Grad. Sch. Sci., Osaka Pref. Univ.) ○MORISAKI, Takahiro; UEDA, Mitsuhiro; RYU, Ilhyong

**1H5-42** Decatungstate Photocatalyzed Site-Selective Alkylation of Esters (Fac. Sci., Osaka Pref. Univ.) FUKUYAMA, Takahide; ○SAKAMOTO, Karen; RYU, Ilhyong

**1H5-43<sup>#</sup>** Photocatalytic Carbonylation of Hypervalent Bis-Catecholato Silicon Compounds (Grad. Sch. Sci., Osaka Pref. Univ.) ○CARTIER, Alex; FUKUYAMA, Takahide; OLLIVIER, Cyril; FENSTERBANK, Louis; RYU, Ilhyong

**1H5-44** Nickel Complex/TiO<sub>2</sub> Hybrid Catalysts for Photocatalytic Aminocarbonylation with Formamides (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.) ○MORI, Shogo; AOKI, Takahiro; NAKA, Hiroshi; NOYORI, Ryoji; SAITO, Susumu

Chair: NAKA, Hiroshi (16 : 30~17 : 30)

\* 16:20-16:30: interval for laptop PC connection.(1H5-46, 1H5-47, 1H5-48, 1H5-49, 1H5-51)

**1H5-46** Enantioselective Electrophilic Cyanation of Boron Enolates (Grad. Sch. Eng., Osaka Univ.; Coll. Sci., Rikkyo Univ.) ○NAGATA, Takaya; TAMAKI, Atsuko; KIYOKAWA, Kensuke; YAMANAKA, Masahiro; MINAKATA, Satoshi

**1H5-47** Regioselective Synthesis of  $\beta$ ,  $\gamma$ -Unsaturated Nitriles by the Reaction of Allylic Boranes with Electrophilic Cyanating Reagents (Grad. Sch. Eng., Osaka Univ.) ○HATA, Shotaro; KIYOKAWA, Kensuke; MINAKATA, Satoshi

**1H5-48** Electrophilic Cyanation of Allylic Boranes Prepared by Hydroboration of Cyclic Conjugated Dienes (Sch. Eng., Osaka Univ.) ○KAINUMA, Shunpei; KIYOKAWA, Kensuke; MINAKATA, Satoshi

**1H5-49<sup>#</sup>** Enantioselective Cyanation of Ketones and  $\alpha$ , $\beta$ -Unsaturated Carbonyl Compounds Catalyzed by Chiral Lithium Phosphoryl Phenoxide (Grad. Sch. Eng., Nagoya Univ.) ○YAMAKAWA, Katsuya; HATANO, Manabu; ISHIHARA, Kazuaki

**1H5-51** Enantioselective Strecker-type Reaction of Aldimines Catalyzed by Chiral Lithium Binaphthylidylsulfonates (Grad. Sch. Eng., Nagoya Univ.) ○NISHIO, Kosuke; HATANO, Manabu; ISHIHARA, Kazuaki

Chair: MINAKATA, Satoshi (17 : 40~18 : 40)

\* 17:30-17:40: interval for laptop PC connection.(1H5-53, 1H5-54, 1H5-55, 1H5-56, 1H5-57, 1H5-58)

**1H5-53** Asymmetric Hydrogenation of Allylic Alcohols through Formal Dynamic Kinetic Resolution (DKR) (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○OKABE, Yuki; ARAI, Noriyoshi; OHKUMA, Takeshi

**1H5-54** Racemization of Axially Chiral BINAM Derivatives Catalyzed by Chiral Phosphoric acid (Fac. Sci., Gakushuin Univ.) ○YAMAMOTO, Kota; EBIHARA, Takuya; MIYAGAWA, Masamichi; AKIYAMA, Takahiko

**1H5-55** Dynamic Kinetic Resolution of Axially Chiral BINAM Derivatives Catalyzed by Chiral Phosphoric Acid (Fac. Sci., Gakushuin Univ.) ○EBIHARA, Takuya; YAMAMOTO, Kota; MIYAGAWA, Masamichi; AKIYAMA, Takahiko

**1H5-56** Kinetic resolution of planar-chiral [n]paracyclophanes catalyzed by resin-supported peptide catalysts (IIS, The Univ. of Tokyo) ○HIGUCHI, Junichi; AKAGAWA, Kengo; KUDO, Kazuaki

**1H5-57** Chiral hydrogen-bond donor organocatalysts to a carbon dioxide fixation reaction (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) TAKAISHI, Kazuto; ○OKUYAMA, Takafumi; KADOSAKI, Shota; MAEDA, Chihiro; EMA, Tadashi

**1H5-58** Chiral Macrocyclic Organocatalysts for the Kinetic Resolution of

Epoxides with Carbon Dioxide (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○HIYOSHI, Mahoko; OKURA, Chiaki; MAEDA, Chihiro; TAKAISHI, Kazuto; EMA, Tadashi

## Wednesday, March 21, AM

Chair: UYANIK, Muhammet (9 : 00~10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(2H5-01, 2H5-02, 2H5-03, 2H5-05, 2H5-06)

**2H5-01** Catalytic Amide Synthesis from Ketones via Beckmann rearrangement (Grad. Sch. Sci. Tech., Ryukoku Univ.) ○HASWEGAWA, Genna; OISHI, Naoki; HYODO, Kengo; UCHIDA, Kingo

**2H5-02<sup>#</sup>** Diastereoselective Synthesis of  $\alpha$ -Amino Amide Using the Umpolung Reaction of  $\alpha$ -Hydrazono Ester (Grad. Sch. Eng., Mie Univ.) ○NAKAMURA, Yusuke; MIZOTA, Isao; SHIMIZU, Makoto

**2H5-03<sup>#</sup>** New Dimension of Bromated Base-catalyzed Addition Reactions of Weakly Acidic Carbon Pronucleophiles (Grad. Sch. Sci., The Univ. of Tokyo) ○YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**2H5-05** Development of Strong Base-catalyzed Addition Reactions of Weakly Acidic Compounds to C-C/C-N Double Bonds (Grad. Sch. Sci., The Univ. of Tokyo) ○IGARASHI, Ryo; SUZUKI, Hirotsugu; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**2H5-06** Chiral Calcium-catalyzed Asymmetric Epoxidation of Olefins Using Hydrogen Peroxide (Grad. Sch. Sci., The Univ. of Tokyo) ○FUSHIMI, Seiya; MACOR, Joseph; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

Chair: KIYOKAWA, Kensuke (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(2H5-08, 2H5-10, 2H5-11, 2H5-12)

**2H5-08<sup>#</sup>** Strong Base-catalyzed C-C Bond Formation of Alkylarenes with Olefins (Grad. Sch. Sci., The Univ. of Tokyo) ○SATO, Io; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**2H5-10** Development of Stereoselective Addition Reactions of Alkylarenes with Imines Enabled by Strong Base Catalysts (Grad. Sch. Sci., The Univ. of Tokyo) ○HIRATA, Tsubasa; SATO, Io; SUZUKI, Hirotsugu; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**2H5-11** Development of Catalytic Direct-type Allylation of Imines with Propylene (Grad. Sch. Sci., The Univ. of Tokyo) ○FUKUYAMA, Ryota; SATO, Io; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

**2H5-12<sup>#</sup>** Umpolung Reaction of  $\alpha$ -Imino Thioesters and the Subsequent C-C Bond Formation with the Unexpected Alkylthio Rearrangement (Grad. Sch. Eng., Mie Univ.) ○MIZOTA, Isao; SHIMIZU, Makoto

Chair: HYODO, Kengo (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(2H5-15, 2H5-16, 2H5-17, 2H5-18, 2H5-19, 2H5-20)

**2H5-15** Chiral hypoidite-catalyzed enantioselective cascade aminocyclization to 2-acylpiperazines (Grad. Sch. Eng., Nagoya Univ.) ○IWATA, Hirokazu; UYANIK, Muhammet; ISHIHARA, Kazuaki

**2H5-16** Chiral hypoidite-catalyzed enantioselective oxidative aminospicyclization of indole derivatives (Grad. Sch. Eng., Nagoya Univ.) ○TANAKA, Hiroki; UKEGAWA, Naoya; UYANIK, Muhammet; ISHIHARA, Kazuaki

**2H5-17** Oxidation of Fluorine Containing Alcohols and Related Compounds Using Sodium Hypochlorite Pentahydrate (Fac. Sci. Tech., SIST; Iharanikkei Chemical Industry) ○SUZUKI, Katsuya; NAKAKURA, Kana; SAITO, Katsuya; KIMURA, Yoshikazu; KIRIHARA, Masayuki

**2H5-18** Bromination of Side Chains of Aromatic Ring Using Sodium Hypochlorite Pentahydrate and Bromide Ion (Fac. Sci. Tech., SIST) ○ADACHI, Kouta; AKIYAMA, Tomomi; MORI, Hiromitsu; NANBA, Yuko; KIRIHARA, Masayuki

**2H5-19** Oxygenation of C-H Bonds at Tertiary Carbon Centers Using Iodine Oxidants (Grad. Sch. Eng., Osaka Univ.) ○KIYOKAWA, Kensuke; ITO, Ryo; MINAKATA, Satoshi

**2H5-20** Catalytic Bromoetherification of Alkenylalcohols by Aerobic Oxidation of Bromide Ion (Grad. Sch. Sci., Chiba Univ.) ○TOMIZUKA, Akihiko; HAMADA, Tsukasa; MORIYAMA, Katsuhiko

## Wednesday, March 21, PM

Chair: KAWASAKI, Tsuneomi (13 : 40~14 : 40)

\* 13:30-13:40: interval for laptop PC connection.(2H5-29, 2H5-30, 2H5-32, 2H5-33, 2H5-34)

**2H5-29** Asymmetric Acyl Rearrangement of Oxindole Derivatives Using Helically Chiral Poly(quinoline-2,3-diyl)s Bearing 4-Dialkylaminopyrid-3-yl Pendants (Grad. Sch. Eng., Kyoto Univ.) ○TAKAHASHI, Takuya; MURAKAMI, Ryo; YAMAMOTO, Takeshi; SUGINOME, Michinori

**2H5-30<sup>#</sup>** Kinetic Resolution of Secondary Alcohols Using Chirality-Switchable Helical Poly(quinoline-2,3-diyl)s Bearing 4-Dialkylaminopyrid-3-yl Pendants (Grad. Sch. Eng., Kyoto Univ.) ○MURAKAMI, Ryo; YAMAMOTO, Takeshi; SUGINOME, Michinori

**2H5-32** Acylation Reaction by Chiral DMAP Derivatives (1): Kinetic Resolution of 3-Hydroxy-3-Substituted Oxindole Derivatives (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○MANDAI, Hiroki; SHIOMOTO, Ryuhei; SUGA, Seiji

- 2H5-33** Acylation Reaction by Chiral DMAP Derivatives (2): Desymmetrization of 1,3-Diols (Grad. Sch. Nat. Sci. Technol., Okayama Univ.)  
○ASHIHARA, Kosuke; MANDAI, Hiroki; SUGA, Seiji
- 2H5-34** Acylation Reaction by Chiral DMAP Derivatives (3): Site-selective Acylation of Carbohydrates (Grad. Sch. Nat. Sci. Technol., Okayama Univ.)  
○YAMAMOTO, Tomoya; ABE, Kenko; MANDAI, Hiroki; SUGA, Seiji

## Thursday, March 22, AM

Chair: HAYASHI, Hiroki (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(3H5-01, 3H5-02, 3H5-03, 3H5-04, 3H5-05, 3H5-06)
- 3H5-01** The synthesis of bulky ethers from the reaction of 2-bromoamides and alcohols in the presence of cesium carbonate (Grad. Sch. Sci. Tech., Yamaguchi Univ.)  
○NISHIKATA, Takashi; TAKEUCHI, Kentaro
- 3H5-02** Chiral Macrocyclic Lithium Binaphtholate Catalysts for Enantioselective Alkynyl Addition to Ketones (Grad. Sch. Eng., Nagoya Univ.)  
○TABATA, Yuji; YAMAKAWA, Katsuya; YAMASHITA, Kenji; HATANO, Manabu; ISHIHARA, Kazuaki
- 3H5-03** Transesterification Catalyzed by Highly Active Quaternary Ammonium Salts (Grad. Sch. Eng., Nagoya Univ.)  
○TOH, Kohei; TABATA, Yuji; HATANO, Manabu; ISHIHARA, Kazuaki
- 3H5-04** Nucleophilic Substitution Reaction of Chiral Alkoxysilane with Organometallic Reagent (IMCE, Kyushu Univ.; Fac. Eng., Kyushu Univ.; Grad. Sch. Sci., Eng., Tokyo Tech.; Grad. Sch. Eng. Sci., Kyushu Univ.)  
IGAWA, Kazunobu; ○NOZAKI, Sora; TAKADA, Junko; SHIGEMATSU, Kazuki; MIYASAKA, Shoji; TOMOOKA, Katsuhiko
- 3H5-05** Asymmetric Synthesis of Hetero-functionalized Chiral Silacyclopentanes (Grad. Sch. Eng. Sci., Kyushu Univ.; IMCE, Kyushu Univ.)  
○KUROO, Akihiro; IGAWA, Kazunobu; TOMOOKA, Katsuhiko
- 3H5-06** Asymmetric Autocatalysis Initiated by Chiral Crystal of Achiral *o*-Terphenyl (Fac. Sci., TUS)  
○YONEMITSU, Kento; KAWASAKI, Tsunemi; SOAI, Kenso

Chair: ARAKAWA, Yukihiko (10 : 10 ~ 11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(3H5-08, 3H5-09, 3H5-10, 3H5-11, 3H5-12, 3H5-13)
- 3H5-08** Synthesis of 3-Amino-2-pyrone by Tandem *N*-Alkylation/vinylogous Aldol Reaction of  $\beta, \gamma$ -Alkenyl  $\alpha$ -Iminoester (Grad. Sch. Eng., Mie Univ.)  
○NAKAHAMA, Kenta; MIZOTA, Isao; SHIMIZU, Makoto
- 3H5-09** Stereoselective substitution of alkyl phosphates with diphenylmethyl anions (Sch. Life Sci. Tech., Tokyo Tech.)  
○SHINOHARA, Riku; WADA, Kyohei; KAWASHIMA, Hidehisa; OGAWA, Narihito; KOBAYASHI, Yuichi
- 3H5-10** Asymmetric Claisen Rearrangement utilizing Umpolung Reaction of  $\alpha$ -Imino Allyl esters (Grad. Sch. Eng., Mie Univ.)  
MIZOTA, Isao; ○AOKI, Takashi; SHIMIZU, Makoto
- 3H5-11** Ruthenium-catalyzed asymmetric oxidative coupling of 2-naphthols (Grad. Sch. Sci., Kyushu Univ.; Kyushu Univ.)  
○UENO, Takamasa; HAYASHI, Hiroki; UCHIDA, Tatsuya
- 3H5-12<sup>#</sup>** Hypoiodite-catalyzed oxidative generation of quinone methides and application to tandem reactions (Grad. Sch. Eng., Nagoya Univ.)  
○NISHIOKA, Kohei; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 3H5-13** Hypervalent organoiodine(V)-catalyzed highly efficient and selective oxidation of alcohols (Sch. Eng., Nagoya Univ.)  
○KONDO, Ryutarō; UYANIK, Muhammet; ISHIHARA, Kazuaki

Chair: KAWASHIMA, Hidehisa (11 : 20 ~ 12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(3H5-15, 3H5-17, 3H5-19, 3H5-20)
- 3H5-15<sup>#\*</sup>** Design of Peptide-Containing N5-Unmodified Neutral Flavins That Catalyze Aerobic Oxygenations (Tokushima Univ.)  
○YAMANOMOTO, Ken; KITA, Hazuki; ARAKAWA, Yukihiko; MINAGAWA, Keiji; IMADA, Yasushi
- 3H5-17<sup>#\*</sup>** Hypoiodite-catalyzed oxidative  $\alpha$ -azidation of carbonyl compounds (Grad. Sch. Eng., Nagoya Univ.)  
○SAHARA, Naoto; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 3H5-19** Chiral hypohalite-catalyzed enantioselective dearomatizative cycloamination (Grad. Sch. Eng., Nagoya Univ.)  
○KATADE, Outa; SAHARA, Naoto; UYANIK, Muhammet; ISHIHARA, Kazuaki
- 3H5-20** Chiral hypohalite-catalyzed enantioselective dearomatizative spirocyclization (Sch. Eng., Nagoya Univ.)  
○KATO, Takehiro; SAHARA, Naoto; UYANIK, Muhammet; ISHIHARA, Kazuaki

## Thursday, March 22, PM

Chair: SUZUKI, Takahiro (13 : 30 ~ 14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(3H5-28, 3H5-29, 3H5-30, 3H5-31, 3H5-32, 3H5-33)
- 3H5-28** Synthesis, and Stereochemical Behavior of Ten-membered Diallylic Amides (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.)  
○HAYASHI, Jun-ichi; HORIKAWA, Shintaro; IGAWA, Kazunobu; TOMOOKA, Katsuhiko
- 3H5-29** Synthesis and Stereochemical Behavior of 6-Substituted 3-aza[7]

orthopyridinophene (IMCE, Kyushu Univ.)  
ANO, Yusuke; YOSHIOKA, Yukari; ○TANAKA, Sumire; KAWASAKI, Yuuya; IGAWA, Kazunobu; TOMOOKA, Katsuhiko

- 3H5-30** Efficient Synthesis of Medium-sized *E*-Cyclic Molecules via Photochemical Isomerization in the Presence of AgNO<sub>3</sub>-Impregnated Silica-gel (IMCE, Kyushu Univ.; Grad. Sch. Eng. Sci., Kyushu Univ.)  
○YOSHIDA, Yuki; MACHIDA, Kouhei; IGAWA, Kazunobu; TOMOOKA, Katsuhiko
- 3H5-31** Effect of Solvation Behavior of Ionic Liquids on Optical Properties of Aminobenzopyranoxanthenes (Grad. Sch. Eng., Oita Univ.)  
○ENOKI, Shinji; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuichi
- 3H5-32** Synthesis of the AIE dye-DNA conjugate and the study on application possibility for biosensing. (FIRST, Konan Univ.)  
MURASHIMA, Takashi; ○TANI, Tomoki
- 3H5-33** Development of a novel cleavable linker for drug delivery system (Grad. Sch. Pharm., The Univ. of Tokyo)  
○TATSUMI, Toshifumi; ITO, Kei; SHIMIZU, Yohei; KANAI, Motomu

Chair: YAZAKI, Ryo (14 : 40 ~ 15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(3H5-35, 3H5-36, 3H5-37, 3H5-38, 3H5-39, 3H5-40)
- 3H5-35** Synthesis of novel ascofuranone derivatives having an alkyl type linker (Fac. Eng., Tottori Univ.)  
○KASAHARA, Kenta; II, Yasuyuki; YAMAMOTO, Masaichi; KITA, Kiyoshi; IZAWA, Hironori; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki
- 3H5-36** Synthesis of novel ascofuranone derivatives having an amine type linker (Fac. Eng., Tottori Univ.)  
○IWASAKI, Ryo; ANBIRU, Yoshihide; YAMAMOTO, Masaichi; KITA, Kiyoshi; IZAWA, Hironori; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki
- 3H5-37** Synthesis of novel ascofuranone derivatives having anti-trypanosome alternative oxidase activity (Fac. Eng., Tottori Univ.)  
○NISHIDA, Shohei; IKEDA, Kouhei; KUMAMOTO, Izumi; YAMAMOTO, Masaichi; KITA, Kiyoshi; IZAWA, Hironori; IFUKU, Shinsuke; MORIMOTO, Minoru; SAIMOTO, Hiroyuki
- 3H5-38** Convenient Synthesis of 3-Hydroxy-3-trifluoromethylindoles Possessing the Electron-donating Groups (Grad. Sch. Nat. Sci. & Tech., Gifu Univ.)  
○NAKAJIMA, Takaya; INUZUKA, Toshiyasu; FUNABIKI, Kazumasa
- 3H5-39** Mechanism of the Inversion of Olefinic Stereochemistry of Lithio (bromo)enamides and Its Application to the Stereoselective Synthesis of Poly-substituted Enamides (Sch. Life Sci. Tech., Tokyo Tech.)  
○FUJISAWA, Kazuki; KOSAKA, Kyohei; SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu
- 3H5-40** Trifluoroacetic Acid-Water Mixture for Conversion of Esters to Carboxylic Acids (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.)  
○BANNO, Tomomi; OKABE, Hiroyuki; NOYORI, Ryoji; NAKA, Hiroshi

Chair: KENTARO, Okano (15 : 50 ~ 16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(3H5-42, 3H5-43, 3H5-44, 3H5-45, 3H5-46, 3H5-47)
- 3H5-42** New Synthesis of Enamides from *N,N*-Divinylamides and 1,1-Dichloro or Dimethoxyalkanes in the Presence of TiCl<sub>4</sub> (Sch. Life Sci. Tech., Tokyo Tech.)  
MIZUMOTO, Shiina; ○SHIGETA, Masayuki; HATA, Takeshi; URABE, Hirokazu
- 3H5-43** Transfer Dehydration of Primary Amides Using Electron-Deficient Nitriles (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.)  
○OKABE, Hiroyuki; ISOGAWA, Takahiro; NARAOKA, Asuka; NOYORI, Ryoji; NAKA, Hiroshi
- 3H5-44** Transfer Hydration of Cyanohydrins (Grad. Sch. Sci., Nagoya Univ.; RCMS, Nagoya Univ.)  
○KANDA, Tomoya; NOYORI, Ryoji; NAKA, Hiroshi
- 3H5-45** Studies on the Asymmetric Synthesis of (*S*)-(-)-Ligustiphenol (Grad. Sch. Eng., Yokohama Natl. Univ.)  
○HAYASHI, Hiroki; FENG, Weizou; ITO, Suguru; ASAMI, Masatoshi
- 3H5-46** Biomimetic Synthesis of Polyketides using a Solid Support (IIS, The Univ. of Tokyo)  
○TAKEUCHI, Yuta; AKAGAWA, Kengo; KUDO, Kazuaki
- 3H5-47** Synthesis of Asymmetric Lactide with Amino Group (Sch. Eng., Tokai Univ.)  
○MAEKAWA, Naoki; INAZU, Toshiyuki

Chair: URABE, Hirokazu (17 : 00 ~ 18 : 00)

- \* 16:50-17:00: interval for laptop PC connection.(3H5-49, 3H5-51, 3H5-52, 3H5-54)
- 3H5-49<sup>\*</sup>** Design of reversal of the diastereoselectivity in the electrophilic addition controlled by the earliness (or lateness) of the transition states. (Fac. Eng., Gifu Univ.; Grad. Sch. Nat. Sci. & Tech., Gifu Univ.)  
○NARUSE, Yuji
- 3H5-51** Development of Asymmetric Hydrolysis of Amino Acid Esters Using Ion-Pairing Catalysts and Analysis of the Reaction Mechanism by Rapid Conformation Search Method (Fac. Sci., Kyushu Univ.)  
○KOBAYASHI, Kaoru; WAKAFUJI, Koudai; FURUTACHI, Yuhō; YAMAMOTO, Eiji; KMACHI, Takashi; TOKUNAGA, Makoto
- 3H5-52<sup>\*</sup>** Studies on Enantioselective Total Synthesis of Cytelenin A (Sch. Advanced Sci. Eng., Waseda Univ.)  
○UWAMORI, Masahiro; OSADA, Ryunosuke; SUGIYAMA, Ryōji; HOSHINO, Yunosuke; TEZUKA, Haruka; NAGATANI, Kotaro; NAKADA, Masahisa

**3H5-54** Stereoselective Construction of 1,2-Diol Derivatives Derived from Polyunsaturated Fatty Acids (Sch. Life Sci. Tech., Tokyo Tech.)  
○TANABE, Shuhei; KOBAYASHI, Yuichi

Chair: NAKA, Hiroshi (18 : 10~19 : 00)

\* 18:00-18:10: interval for laptop PC connection.(3H5-56, 3H5-57, 3H5-58, 3H5-59, 3H5-60)

**3H5-56<sup>#</sup>** *Ortho*-Substituent Effect on 2,4-Bis(trifluoromethyl)phenylboronic Acid Which Catalyzes a Dehydrative Condensation between Carboxylic Acids and Amines (Grad. Sch. Eng., Nagoya Univ.) ○WANG, Ke; LU, Yanhui; ISHIIHARA, Kazuaki

**3H5-57** Chiral Amine-Boronic Acid Cooperative Catalysts for Enantioselective 1,4-Addition of  $\alpha$ ,  $\beta$ -Unsaturated Carboxylic Acids with Cycloalkanones (Sch. Eng., Nagoya Univ.) ○HAZEYAMA, Takashi; NAKATA, Yuto; LU, Yanhui; TSUJI, Yasutaka; HORIBE, Takahiro; ISHIIHARA, Kazuaki

**3H5-58** Umpolung Reaction of  $\alpha$ -Hydrazonoester: Synthesis of  $\alpha$ -Aminoamide and Total Synthesis of Bioactive Compound (Grad. Sch. Eng., Mie Univ.) ○MIZUTANI, Shunsuke; MIZOTA, Isao; SHIMIZU, Makoto

**3H5-59** Stereoselective ozonolysis to afford  $\alpha$ ,  $\beta$ -dihydroxy aldehydes from  $\gamma$ -TMS-allylic alcohols (Sch. Life Sci. Tech., Tokyo Tech.) ○SAITO, Shun; KOBAYASHI, Yuichi

**3H5-60** Catalytic Desymmetrization of *meso*-N-Ns Aziridines Using Chloramine Salts as Nucleophiles (Grad. Sch. Eng., Osaka Univ.) ○YAMAMOTO, Kenya; MINAKATA, Satoshi

### Friday, March 23, AM

Chair: IGAWA, Kazunobu (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(4H5-01, 4H5-02, 4H5-03, 4H5-05)

**4H5-01** New method for synthesis of gem-divinyl compounds and its application to construction of bicyclic carbon skeletons (Fac. Sci., Hokkaido Univ.) ○OGURA, Ryota; SATO, Kazuto; TANINO, Keiji

**4H5-02** Synthetic Study of *ent*-Kaurene Diterpenoid Kamebanin (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○KANNO, Ayaka; SUZUKI, Takahiro; TANINO, Keiji

**4H5-03<sup>#</sup>** Chemoselective Oxidative Cross-Enolate Coupling Reaction (Grad. Sch. Pharm., Kyushu Univ.) ○YAZAKI, Ryo; TANAKA, Takafumi; TANAKA, Tsukushi; OHSHIMA, Takashi

**4H5-05<sup>#</sup>** Single-step synthesis of deoxypropionate motif in natural products by stereospecific oligomerization of propylene (Grad. Sch. Eng., The Univ. of Tokyo) ○MURAYAMA, Toshiki; OTA, Yusuke; NOZAKI, Kyoko

Chair: SHIGETA, Masayuki (10 : 10~11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(4H5-08, 4H5-10, 4H5-11, 4H5-13)

**4H5-08<sup>#</sup>** Reductive Approach to Nitrones from N-Siloxyamides and N-Hydroxyamides (Fac. Sci. Tech., Keio Univ.) ○KATAHARA, Seiya; FUJITA, Kanami; KOBAYASHI, Shoichiro; MATSUMOTO, Tsutomu; SATO, Takaaki; CHIDA, Noritaka

**4H5-10** Generation of cyclohexynes from enol triflate through deprotonation by Aluminate base. (Grad. Sch. Eng., Kobe Univ.) ○YUKIOKA, Taro; HIOKI, Yuto; OKANO, Kentaro; MORI, Atunori

**4H5-11<sup>#</sup>** Development of generation of cycloalkyne and cycloallene using magnesium bisamides (Grad. Sch. Eng., Kobe Univ.) ○HIOKI, Yuto; OKANO, Kentaro; MORI, Atunori

**4H5-13** Efficient synthesis of precursors for cycloalkyne and cycloallene by rearrangement of silyl enol ether and isomerization of enolate (Grad. Sch. Eng., Kobe Univ.) ○INOUE, Kazuki; NAKURA, Ryo; OKANO, Kentaro; MORI, Atunori

Chair: SATO, Takaaki (11 : 20~12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(4H5-15, 4H5-17, 4H5-18, 4H5-19, 4H5-20)

**4H5-15<sup>#</sup>** Copper-catalyzed Carboxylation Reactions of Aryl Silanes with Carbon Dioxide (Grad. Sch. Sci., The Univ. of Tokyo) ○YOO, Woo-jin; KOBAYASHI, Shu

**4H5-17<sup>#</sup>** Synthesis of Butenolides via trans-Hydroalumination/Carboxylation of Propargyl Alcohols (Grad. Sch. Sci., The Univ. of Tokyo) ○CHEN, Wenlong; NGUYEN, Thanh Vu Quang; YOO, Woo-jin; KOBAYASHI, Shu

**4H5-18<sup>#</sup>** Efficient Synthesis of  $\alpha$ -Trifluorinated Carboxylic Acids via Fluorocarboxylation of  $\beta$ ,  $\beta$ -Difluoroalkenes (Grad. Sch. Sci., The Univ. of Tokyo) ○RODRIGUEZ-SANTAMARIA, Jose Alberto; NGUYEN, Thanh Vu Quang; YOO, Woo-jin; KOBAYASHI, Shu

**4H5-19** Biological Evaluation of the Modified Tamoxifen Derivatives Prepared by the Reductive Coupling Reaction in the Presence of the Low-valent Titanium Reagent (Fac. Sci., TUS) SHIINA, Isamu; SHIBATA, Natsumi; ○TSUCHIYA, Kaho; NAKATA, Kenya

**4H5-20** Synthesis of the Modified Tamoxifen Derivatives Having Amino Group and Its Peptide Conjugated Compounds (Fac. Sci., TUS) SHIINA, Isamu; ○SHIBATA, Natsumi; TSUCHIYA, Kaho; NAKATA, Kenya

### Friday, March 23, PM

Chair: TANABE, Yoo (13 : 30~14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(4H5-28, 4H5-30, 4H5-31, 4H5-32)

**4H5-28<sup>#</sup>** Controlling regioselectivity in the aerobic oxidative hetero-coupling of catechols (Syn. Org. Chem. Lab., RIKEN; RIKEN CSRS; RIKEN CEMS) ○SUGAWARA, Masumi; HOJO, Daiki; SAWAMURA, Mikio; HASHIZUME, Daisuke; SOHTOME, Yoshihiro; SODEOKA, Mikio

**4H5-30** Preparation of 3-Aryl-2-germyl-1,3-butadiene Using gem-Dizinc Species (Grad. Sch. Eng., Kyoto Univ.) ○TAKAHASHI, Satoshi; MATSUBARA, Seijiro

**4H5-31** Development of selective synthetic reaction of multi-substituted cubane (Grad. Sch. Eng., Kyoto Univ.) ○KATO, Yumi; MATSUBARA, Seijiro

**4H5-32<sup>#</sup>** Insertion reactions in C-H bonds - from chemical applications towards promiscuous enzymes (RWTH Aachen University) ○KOENIGS, Rene Michael

Chair: IMAHORI, Tatsushi (14 : 40~15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(4H5-35, 4H5-37, 4H5-38, 4H5-39, 4H5-40)

**4H5-35<sup>#</sup>** Ester metathesis overview and cyclopropanation of aliphatic esters and alcohols with a homogeneous Ru(II) catalyst. (OIST) ○KHASKIN, Eugene; JANKINS, Tanner; DUBEY, Abhishek; FAYZULLIN, Robert

**4H5-37<sup>#</sup>** Direct Catalytic Alcoholysis of Unactivated 8-Aminoquinoline Amides (Grad. Sch. Pharm., Kyushu Univ.) DEGUCHI, Toru; ○XIN, Hailong; MORIMOTO, Hiroyuki; OHSHIMA, Takashi

**4H5-38** Practical syntheses of (*Z*)-3-arylbut-2-enoates and (*Z*)-2-arylbut-2-enoates: Two subjects in *Organic Syntheses* (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○TSUTSUMI, Takeshi; ASHIDA, Yuichiro; NAKATSUJI, Hidefumi; TANABE, Yoo

**4H5-39** (*E*)-, (*Z*)-stereocomplementary syntheses of tetra-substituted conjugated dienes using one-pot Miyaura-Ishiyama borylation of enol tosylates and Suzuki-Miyaura cross-coupling (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○HANATANI, Yutaro; TAKEMOTO, Taichi; TANABE, Yoo; NAKATSUJI, Hidefumi

**4H5-40** (*E*), (*Z*)-Stereocomplementary syntheses of multi-substituted conjugated dienes utilizing stereoretentive Miyaura-Ishiyama borylation and Suzuki-Miyaura cross-coupling (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○TAKEMOTO, Taichi; HANATANI, Yutaro; NAKATSUJI, Hidefumi; TANABE, Yoo

Chair: NAKATSUJI, Hidefumi (15 : 50~16 : 20)

\* 15:40-15:50: interval for laptop PC connection.(4H5-42, 4H5-44)

**4H5-42<sup>\*</sup>** It is method to create from Ethanol to Methanol. (Office kano) ○KANO, Hiroshi

**4H5-44** Stimuli-responsive acid-base combined catalyst switching intermolecular self deactivation and intramolecular cooperative activation (Grad. Sch. Eng., TUS) ○KAWAGUCHI, Akihiro; IMAHORI, Tatsushi

## Room H6

Bldg. 11 1143

### Organic Chemistry -Reaction and Synthesis-High-Throughput Synthesis

#### Wednesday, March 21, AM

Chair: MIYAMURA, Hiroyuki (9 : 10 ~ 10 : 10)

\* 9:00-9:10: interval for laptop PC connection.(2H6-02, 2H6-03, 2H6-04, 2H6-05, 2H6-06, 2H6-07)

**2H6-02** Development of Highly Reactive Aminating Reagents for Flow Amination of Functional Organolithiums (Grad. Sch. Eng., Kyoto Univ.) ○YONEKURA, Yuya; KIM, Heejin; YOSHIDA, Jun-ichi

**2H6-03** Synthesis of Functional Arylazides Using Flow Microreactors (Grad. Sch. Eng., Kyoto Univ.) ○AIZAWA, Yoko; ICHINARI, Daisuke; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

**2H6-04** Lithiation of 5,5'-Dibromo-2,2'-bithiophene Using Flow Microreactors (Sch. Eng., Kyoto Univ.) ○JIANG, Yiyuan; YAMASHITA, Hiroki; TAKABAYASHI, Naofumi; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

**2H6-05** Umpolung of  $\alpha$ -Sulfoxyimino Ester Using a Flow System (Grad. Sch. Eng., Mie Univ.) ○FUKUMOTO, Shinya; MIZOTA, Isao; HACHIYA, Iwao; SHIMIZU, Makoto

**2H6-06** Environmental-friendly hydrogenation using fine bubble flow method (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○HIO, Takuya; SATO, Kohei; NARUMI, Tetsuo; MASE, Nobuyuki

**2H6-07** High efficiency photo-oxidation reaction using fine bubble flow method (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○NAGAI,

Kohei; SATO, Kohei; NARUMI, Tetsuo; MASE, Nobuyuki

Chair: MASE, Nobuyuki (10 : 20~11 : 20)

- \* 10:10-10:20: interval for laptop PC connection.(2H6-09, 2H6-10, 2H6-11, 2H6-13)
- 2H6-09<sup>#</sup>** Diels-Alder Reactions under Continuous-flow Conditions Using Zeolite Catalysts (IRC3, AIST) ○SRINIVAS, Venu; ONOZAWA, Shun-ya; SHIMADA, Shigeru; SATO, Kazuhiko; KOBAYASHI, Shu
- 2H6-10** Effect of Spacers in Supported Quaternary Ammonium Hydroxides on Activity and Stability for Continuous-flow Base-catalyzed Aldol Reactions (Grad. Sch. Sci., The Univ. of Tokyo) ○NAKAMURA, Yosuke; SAITO, Yuki; ISHITANI, Haruro; KOBAYASHI, Shu
- 2H6-11<sup>\*\*</sup>** Development of Heterogeneous Catalysts for Continuous-flow C-C Bond Formation and Hydrogenation Reactions for Multistep Syntheses of Fine Chemicals (Grad. Sch. Sci., The Univ. of Tokyo) ○SAITO, Yuki; ISHITANI, Haruro; KOBAYASHI, Shu
- 2H6-13<sup>\*\*</sup>** Asymmetric 1,4-Addition of Arylboronic Acids to Enones Catalyzed by an Amphiphilic Resin-Supported Homochiral Diene Rhodium Complex in Water (Sch. Physical Sci., SOKENDAI; LCCMS, IMS; ACCEL, JST) ○SHEN, Guanshuo; OSAKO, Takao; NAGAOSA, Makoto; UOZUMI, Yasuhiro

Chair: TANAKA, Hiroshi (11 : 30~12 : 30)

- \* 11:20-11:30: interval for laptop PC connection.(2H6-16, 2H6-17, 2H6-18, 2H6-20)
- 2H6-16<sup>\*</sup>** Control of Tandem Isomerizations of *o*-Lithiated Aryl Benzyl Ethers in Flow (Grad. Sch. Eng., Kyoto Univ.) ○KIM, Heejin; LEE, Hyune-jea; KIM, Dong-pyo; YOSHIDA, Jun-ichi
- 2H6-17<sup>#</sup>** Sequential Difunctionalization of 2,5-Norbornadiene Using Flow Microreactor (Grad. Sch. Eng., Osaka Univ.) ○YIN, Zuoyufan; SAKURAI, Hidehiro; KIM, Heejin; YOSHIDA, Jun-ichi
- 2H6-18<sup>\*</sup>** Development of new flow microwave reactor and its application to rapid and energy saving synthesis of functional materials. (Minerva Light Lab.) ○MATSUMURA, Takeko; YAMASHITA, Kazunori; KISHI, Munetaka
- 2H6-20<sup>\*</sup>** Microwave-Assisted Chemical Synthesis of Gold Nanoparticles in Bulk Nano Babble Water (Minerva Light Lab.) ○FUKUOKA, Takao; UEDA, Yoshikatsu; TOKUDA, Yomei; KISHIHARA, Mitsuyoshi; YAMASHITA, Kazunori; NAKAGAWA, Atsushi; MATSUMURA, Takeko

### Wednesday, March 21, PM

Chair: OSAKO, Takao (13 : 40~14 : 40)

- \* 13:30-13:40: interval for laptop PC connection.(2H6-29, 2H6-30, 2H6-31, 2H6-32, 2H6-33, 2H6-34)
- 2H6-29** Deprotonation of dibromothiophenes controlled by microflow (Grad. Sch. Eng., Kobe Univ.; Grad. Sch. Eng., Kyoto Univ.) ○TADA, Rikako; YAMANE, Yoshiaki; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi; OKANO, Kentaro; MORI, Atsunori
- 2H6-30** Halogen dance reaction of bromothiophenes on gold nanoparticles (Grad. Sch. Eng., Kobe Univ.) ○AOKI, Masato; MIYAGAWA, Naoki; SUZUKI, Toyoko; OKANO, Kentaro; MORI, Atsunori
- 2H6-31** Integration of Derivatization of Hydroquinones and Hydrogenation of Quinones Using Metal Nanoparticle Catalysts under Continuous-flow Conditions (Grad. Sch. Sci., The Univ. of Tokyo) ○TOBITA, Fumiya; MIYAMURA, Hiroyuki; SUZUKI, Aya; KOBAYASHI, Shu
- 2H6-32<sup>#</sup>** Oxidative amide synthesis from alcohols and amines by bifunctional heterogeneous catalysts that contain bases and metal nanoparticles (Grad. Sch. Sci., The Univ. of Tokyo) ○LIU, Changhui; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 2H6-33** Study on Nucleophilic Aromatic Substitution Reactions Under Emulsion Conditions by Microreactor Technology (WINTEC) ○SAITO, Akane; MORI, Hajime
- 2H6-34** Synthesis of Functional Arylboronic Acids Using Flow Microreactors (Grad. Sch. Eng., Kyoto Univ.) ○AIZAWA, Yoko; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

### Thursday, March 22, AM

Chair: UEDA, Mitsuhiro (9 : 00 ~9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(3H6-01, 3H6-02, 3H6-03, 3H6-04, 3H6-05)
- 3H6-01<sup>#</sup>** Reductive amination in flow: from simple functionalization to continuous synthesis of pharmaceuticals (Grad. Sch. Sci., The Univ. of Tokyo) ○LAROCHE, Benjamin; ISHITANI, Haruro; KOBAYASHI, Shu
- 3H6-02** Effect of Solid Supports and Modifiers on Activity of Heterogeneous Precious Metal Catalysts in Continuous-flow Hydrogenation (Grad. Sch. Sci., The Univ. of Tokyo) ○ISHITANI, Haruro; FURIYA, Yuichi; KOBAYASHI, Shu
- 3H6-03** Development of photocatalytic C-C bond-forming reactions using a supported polyoxotungstate as a heterogeneous photocatalyst (Grad. Sch. Sci., The Univ. of Tokyo) ISHITANI, Haruro; OKUMURA, Arisa; SAITO, Yuki; KOBAYASHI, Shu
- 3H6-04** Study on the Mixing and Emulsification Ability of Various Micro-Mixers (WINTEC) ○MORI, Hajime; NISHIYAMA, Yasuhiro; SAITO,

Akane

- 3H6-05** Development of Continuous-flow Direct Amidation using Heterogeneous Lewis Acid Catalysts (IRC3, AIST) ○ICHITSUKA, Tomohiro; KOURUMURA, Nagatoshi; ONOZAWA, Shun-ya; SHIMADA, Shigeru; SATO, Kazuhiko; KOBAYASHI, Shu

Chair: ISHITANI, Haruro (10 : 00~10 : 50)

- \* 9:50-10:00: interval for laptop PC connection.(3H6-07, 3H6-08, 3H6-09, 3H6-10, 3H6-11)
- 3H6-07** Hydroboration Reactions Using the Phase-vanishing Method (Grad. Sch. Sci., Osaka Pref. Univ.) ○YOSHIKI, Tomo; MATSUBARA, Hiroshi
- 3H6-08** Organic synthesis with CO gas using the PV method (Grad. Sch. Sci., Osaka Pref. Univ.) ○ADACHI, Yusuke; MATSUBARA, Hiroshi
- 3H6-09** Generation of Functional Alkylolithiums Using Flow Microreactors and Applications to Synthesis of Telechelic Polymers (Grad. Sch. Eng., Kyoto Univ.) ○YAMASHITA, Hiroki; HIROSE, Katsuyuki; TSUCHIHASHI, Yuta; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 3H6-10** Selective Mono Addition of Organolithiums to Dialdehydes Using Flow Microreactors (Grad. Sch. Eng., Kyoto Univ.) ○YAMASHITA, Hiroki; ISHIUCHI, Satoshi; IMAI, Keita; TAKAHASHI, Yusuke; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 3H6-11** Chemoselective Reactions of Functional Organolithiums with Functional Acid Halides Using Flow Microreactors (Grad. Sch. Eng., Kyoto Univ.) ○SASATSUKI, Kengo; MIUCHI, Nobuyuki; ISHIUCHI, Satoshi; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

### Thursday, March 22, PM

Chair: ARISAWA, Mitsuhiro (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(3H6-25, 3H6-26, 3H6-27, 3H6-28, 3H6-29, 3H6-30)
- 3H6-25<sup>#</sup>** Reductive Cross-amination between Aniline or Nitroarene Derivatives and Alkylamines Catalyzed by Polysilane-immobilized Metal Nanoparticles (Grad. Sch. Sci., The Univ. of Tokyo) ○SUZUKI, Aya; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 3H6-26<sup>#</sup>** Development of dehydrogenation of organic hydrides catalyzed by immobilized metal nanoparticles in flow systems (Grad. Sch. Sci., The Univ. of Tokyo) ○ZHU, Zhiyuan; SUZUKI, Aya; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 3H6-27** Continuous Operations of Anionic Polymerization of Styrene Using a Flow Microreactor System (Grad. Sch. Eng., Kyoto Univ.) ○ENDO, Yuta; NAKAHARA, Yuichi; KATO, Keisuke; FURUSAWA, Mai; SHIMAZAKI, Toshiya; ITO, Toshihide; OTAKE, Masakazu; ARAI, Hidenori; TODA, Naoya; OHTSUKA, Keita; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi
- 3H6-28<sup>#</sup>** Continuous-flow Friedel-Crafts acylation using metal-incorporated solid acids based on beta-zeolite (Grad. Sch. Sci., The Univ. of Tokyo) ○RAO, Xiaofeng; ISHITANI, Haruro; KOBAYASHI, Shu
- 3H6-29** Enantioselective continuous-flow 1,4-addition reaction with a chiral nickel/mesoporous silica composite catalyst (Grad. Sch. Sci., The Univ. of Tokyo) ○KANAI, Kan; ISHITANI, Haruro; KOBAYASHI, Shu
- 3H6-30<sup>#</sup>** Stereoselective Direct-type 1,4-Addition Reactions of Simple Esters and Amides Using Solid Superbases (Grad. Sch. Sci., The Univ. of Tokyo) ○BORAH, Parijat; YAMASHITA, Yasuhiro; KOBAYASHI, Shu

Chair: YAMASHITA, Yasuhiro (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(3H6-32, 3H6-34, 3H6-35, 3H6-36)
- 3H6-32<sup>#</sup>** Continuously irradiating microwave-assisted metal nanoparticles-catalyzed ligand-free Suzuki-Miyaura coupling of aryl chlorides (Grad. Sch. Pharm. Sci., Osaka Univ.) ○AKIYAMA, Toshiaki; YAMADA, Makito; OHKI, Yuuta; TAKAHASHI, Naoyuki; FUJIOKA, Hiromichi; SATO, Yoshihiro; ARISAWA, Mitsuhiro
- 3H6-34** Reaction control of radical perfluoroalkylation by flow microreactors. (Grad. Sch. Sci. Tech., Gunma Univ.) ○WATANABE, Tokiwa; ARAI, Ryosuke; SONOYAMA, Masashi; AMII, Hideki
- 3H6-35** One-flow Synthesis of Functionalized Fullerenes PCBM (Grad. Sch. Sci., Osaka Pref. Univ.) ○FUKUYAMA, Takahide; UEDA, Mitsuhiro; RYU, Ilhyong
- 3H6-36<sup>#</sup>** Rapid and Mild Synthesis of Amino Acid *N*-Carboxy Anhydrides Using Basic-to-Acidic Flash Switching in a Micro-flow Reactor (Lab. Chem. Life Sci., Tokyo Tech.) ○OTAKE, Yuma; NAKAMURA, Hiroyuki; FUSE, Shinichiro

Chair: YAMADA, Yoichi M. A. (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(3H6-39, 3H6-40, 3H6-42, 3H6-44)
- 3H6-39<sup>#</sup>** Chiral rhodium nanoparticle catalyzed asymmetric 1,4-addition of aryl boronic acids to  $\beta, \gamma$ -unsaturated- $\alpha$ -ketoesters (Grad. Sch. Sci., The Univ. of Tokyo) ○MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 3H6-40<sup>#</sup>** Development of Chiral Ligand Immobilized Heterogeneous Rh Nanoparticle Catalysts and Application to Flow Systems (Grad. Sch. Sci., The Univ. of Tokyo) ○MIN, Hyemin; MIYAMURA, Hiroyuki; YASUKAWA, Tomohiro; NISHINO, Kohei; KOBAYASHI, Shu
- 3H6-42<sup>#</sup>** N-doped Carbon Incarcerated Cobalt Nanoparticle Catalysts for Oxygenation of Olefins (Grad. Sch. Sci., The Univ. of Tokyo)



○YASUKAWA, Tomohiro; KOBAYASHI, Shu

- 3H6-44<sup>#</sup>** N-Doped Carbon Incorporated Cobalt/Copper Nanoparticle Catalysts for Aerobic Oxidative Esterifications (Grad. Sch. Sci., The Univ. of Tokyo)  
○YANG, Xi; YASUKAWA, Tomohiro; KOBAYASHI, Shu

Chair: FUKUYAMA, Takahide (16 : 30~17 : 30)

- \* 16:20-16:30: interval for laptop PC connection.(3H6-46, 3H6-47, 3H6-48, 3H6-49, 3H6-50, 3H6-51)
- 3H6-46** Huisgen Cycloaddition with Acetylene Gas Using a Self-Assembled Poly(Imidazole-Copper) Catalyst (CSRS, Green Nanocatalysis Research Team, RIKEN) ○OHNO, Aya; YOSHIDA, Hiroshi; SATO, Takuma; MASE, Toshiaki; UOZUMI, Yasuhiro; YAMADA, Yoichi M. A.
- 3H6-47<sup>#</sup>** Production of Bio Hydrofined Diesel by Hydrogenative Decarboxylation of Carboxylic Acids with Silicon Nanowire Array-Supported Rhodium Nanoparticles (CSRS, Green Nanocatalysis Research Team, RIKEN) ○BAEK, Heeyoel; YAMADA, Yoichi M. A.; UOZUMI, Yasuhiro
- 3H6-48** Development of Heterogeneous Rh Catalysts for Asymmetric Arylation and Application to Flow Reaction Systems (Grad. Sch. Sci., The Univ. of Tokyo) ○KUREMOTO, Tatsuya; YASUKAWA, Tomohiro; MIN, Hyemin; MIYAMURA, Hiroyuki; KOBAYASHI, Shu
- 3H6-49** Development of Heterogeneous Ir Catalysts for Asymmetric Hydrogenation of Imines (Grad. Sch. Sci., The Univ. of Tokyo) YASUKAWA, Tomohiro; ○MASUDA, Ryusuke; KOBAYASHI, Shu
- 3H6-50** Control of Fries and [2,3]-Wittig Rearrangements Using Flow Microreactors (Grad. Sch. Eng., Kyoto Univ.) ○INOUE, Keita; KIM, Heejin; YOSHIDA, Jun-ichi
- 3H6-51** Selectivity Control Using Flow Microreactors. Reactions of Organolithiums with Difunctional Electrophiles (Institute for innovation, Ajinomoto Co., Inc.) ○NAKAHARA, Yuichi; ISHIOUCHI, Satoshi; IMAI, Keita; NAGAKI, Aiichiro; YOSHIDA, Jun-ichi

Chair: FUSE, Shinichiro (17 : 40~18 : 20)

- \* 17:30-17:40: interval for laptop PC connection.(3H6-53, 3H6-54, 3H6-55, 3H6-56)
- 3H6-53** Oxidative coupling of hydroxyarenes under continuous-flow conditions (IRC3, AIST) ○HAYASHI, Kazushi; ONOZAWA, Shun-ya; SHIMADA, Shigeru; SATO, Kazuhiko; KOBAYASHI, Shu
- 3H6-54** Development of flow oxidation reactions with singlet oxygen using a heterogeneous photosensitizer (Grad. Sch. Sci., The Univ. of Tokyo; IRC3, AIST) ○MASUDA, Koichiro; WANG, Yao; ONOZAWA, Shun-ya; SHIMADA, Shigeru; SATO, Kazuhiko; KOBAYASHI, Shu
- 3H6-55** Heterogeneous Platinum-catalyzed Selective Oxidation of Allylic Alcohols to  $\alpha$ ,  $\beta$ -Unsaturated Carbonyl Compounds with Hydrogen Peroxide under Flow Conditions (IRC3, AIST) ○YADA, Akira; KON, Yoshihiro; EDURE, Kazumasa; NAKASHIMA, Takuya; SATO, Kazuhiko; KOBAYASHI, Shu
- 3H6-56** Evaluation of Catalytic Activity : Immobilized Palladium Catalysts for Continuous-flow Suzuki-Miyaura Coupling (IRC3, AIST) ○SUZUKI, Naoto; ICHITSUKA, Tomohiro; KOUMURA, Nagatoshi; MASUDA, Koichiro; ONOZAWA, Shun-ya; SHIMADA, Shigeru; SATO, Kazuhiko; KOBAYASHI, Shu

## Room 11

Bldg. 12 1231

### Energy and Related Chemistry, Geo and Space Chemistry

Tuesday, March 20, PM

#### Secondary Battery

Chair: YAMADA, Atsuo (13 : 00~14 : 00)

- \* 12:50-13:00: interval for laptop PC connection.(111-25, 111-26, 111-27, 111-28, 111-29)
- 111-25** Development of Positive Electrode Material for Rechargeable Aluminum Battery with Iron Oxide(III) (Grad. Sch. Eng., Osaka Pref. Univ.) ○NAGAO, Hiroshi; HIGUCHI, Eiji; CHIKU, Masanobu; INOUE, Hiroshi
- 111-26** Development of Na<sub>2</sub>S-TiS<sub>2</sub> active materials and their application to all-solid-state sodium secondary batteries (Grad. Sch. Eng., Osaka Pref. Univ.) SAKUDA, Atsushi; ○NASU, Akira; OTOYAMA, Misae; HAYASHI, Akitoshi; TATSUMISAGO, Masahiro
- 111-27** Mechanochemical synthesis of Na-Sb alloy negative electrode for all-solid-state sodium batteries (Grad. Sch. Eng., Osaka Pref. Univ.) HAYASHI, Akitoshi; ○ANDO, Taka; YUBUCHI, So; SAKUDA, Atsushi; TATSUMISAGO, Masahiro
- 111-28** Preparation and characterization of co-sintered positive electrodes NaCrO<sub>2</sub>-NASICON-Na<sub>3</sub>BO<sub>3</sub> for all-solid-state sodium batteries (Grad. Sch. Eng., Osaka Pref. Univ.) HAYASHI, Akitoshi; ○YANO, Ayako; ASANO, Takamasa; SUZUKI, Kenji; NOI, Kousuke; NISHIMURA, Masaki; SAKUDA, Atsushi; TATSUMISAGO, Masahiro

- 111-29<sup>#</sup>** Evaluation of Reaction Distributions in Composite Positive Electrode Layers of All-Solid-State Lithium Batteries by Raman Imaging (Grad. Sch. Eng., Osaka Pref. Univ.) ○OTOYAMA, Misae; SAKUDA, Atsushi; HAYASHI, Akitoshi; TATSUMISAGO, Masahiro

Chair: SAGANE, Fumihiro (14 : 10~15 : 20)

- \* 14:00-14:10: interval for laptop PC connection.(111-32, 111-34, 111-36, 111-37, 111-38)
- 111-32<sup>#</sup>** Electrochemical Quartz Crystal Microbalance Study on the Deposition Efficiency of Lithium Peroxide under the Presence of Quinone Derivatives (GREEN, NIMS) ○TOMITA, Kentaro; NOGUCHI, Hidenori; UOSAKI, Kohei
- 111-34<sup>#</sup>** Enhanced reductive stability of hydrate-melt electrolytes for high-voltage aqueous lithium-ion batteries (Grad. Sch. Eng., The Univ. of Tokyo) ○YAMADA, Yuki; KO, Seongjae; SODEYAMA, Keitaro; TATEYAMA, Yoshitaka; YAMADA, Atsuo
- 111-36** Dynamic changes of charge-transfer resistance at Li metal / Li<sub>7</sub>La<sub>3</sub>Zr<sub>2</sub>O<sub>12</sub> interfaces during electrochemical Li dissolution / deposition cycles (Sch. Eng. Sci., Osaka Univ.) ○KUSUMOTO, Takayoshi; KOSHIKAWA, Hiroyuki; KOMORI, Yasuhiro; KAMIYA, Kazuhide; MATSUDA, Shoichi; NAKANISHI, Shuji
- 111-37** Dissolution of poorly-soluble lithium compounds by using zwitterions (Sci. Tec., Sophia Univ.; Toyota Motor Corp.) ○FUJITA, Masahiro; OKAYAMA, Shinobu; KIKUCHI, Kyoko; HAYASHI, Satomi; ISHII, Keigo; ISHII, Jun; HANABUSA, Hideki; HAYASHI, Ayane; MITSUI, Chiaki; YAMADA, Hiromasa

#### Redox flow cell

- 111-38** Development of flow cell for high-output and variable output (Grad. Sch. Eng., Utsunomiya Univ.) ○YOSHIHARA, Sachio; HANZAWA, Yuuya

#### Solid Electrolytes

Chair: CHIKU, Masanobu (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(111-40, 111-41, 111-43, 111-44, 111-45)
- 111-40** Synthesis and lithium ion batteries performance of LiF-NixMn1-xO composite positive electrode (Grad. Sch. Sci. Technol., Shizuoka Univ.) ○KIMURA, Noritaka; IZUMI, Yusuke; NASU, Hiromasa; ARAI, Juichi; KOBAYASHI, Kenkichi; TOMITA, Yasumasa
- 111-41<sup>\*</sup>** Electronic Conductivity Measurements of Spinel-Type Positive Electrode Active Material Using All-Solid-State Thin-Film Batteries (Grad. Sch. Eng., Nagoya Univ.) ○YAMAMOTO, Takayuki; SATO, Morihiro; MOTOYAMA, Munekazu; IRIYAMA, Yasutoshi
- 111-43** Synthesis of Li<sub>2</sub>NaPS<sub>4</sub> via an ion-exchanging technique (Grad. Sch. Eng., Osaka Pref. Univ.) SAKUDA, Atsushi; ○CHEN, Jin; YUBUCHI, So; HOTEHAMA, Chie; HAYASHI, Akitoshi; TATSUMISAGO, Masahiro
- 111-44<sup>\*</sup>** Preparation and characterization of lithium ion conductive Li-Sb-S solid electrolytes (Grad. Sch. Eng., Osaka Pref. Univ.) HAYASHI, Akitoshi; ○KIMURA, Takuya; KATO, Atsataka; HOTEHAMA, Chie; SAKUDA, Atsushi; TATSUMISAGO, Masahiro
- 111-45** Mechanochemical synthesis and characterization of Li<sub>2</sub>S-Li<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub> glass electrolytes. (Grad. Sch. Eng., Osaka Pref. Univ.; Advanced Research Div., Panasonic Corp.) HAYASHI, Akitoshi; ○INOUE, Ayane; SHIGENO, Manari; NAGAO, Kenji; SAKUDA, Atsushi; NISHIO, Yusuke; SAKAIDA, Masashi; TATSUMISAGO, Masahiro

Wednesday, March 21, AM

#### Solar cells

Chair: WAKAMIYA, Atsushi (9 : 00 ~ 10 : 20)

- \* 8:50-9:00: interval for laptop PC connection.(211-01, 211-03, 211-05, 211-06, 211-07, 211-08)
- 211-01<sup>\*</sup>** Electric properties of high light-absorbing solar cells using strong coupling between Fabry-Pérot nanocavity of bilayer thin film and plasmon (RIES, Hokkaido Univ.) ○NAKAMURA, Keisuke; OSHIKIRI, Tomoya; SHI, Xu; UENO, Kosei; MISAHA, Hiroaki
- 211-03<sup>#</sup>** PbS quantum dot /ZnO nanowire solar cells operating in a wide range of the solar spectrum (RCAST, The Univ. of Tokyo) ○WANG, Haibin; NAKAZAKI, Jotaro; KUBO, Takaya; SEGAWA, Hiroshi
- 211-05** Investigation of functions of the nanostructure in porous silicon solar cells (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○YOGAI, Ryoji; MURAKAMI, Kazuki; ZHANG, Xiaomei; HASEGAWA, Kei; IHARA, Manabu
- 211-06** Nano Surface Control of Double Layer Porous Si and Evaluation of Si Thin Film Properties Grown by Rapid Vapor Deposition for Monocrystalline Thin Film Si Solar Cell Fabrication (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○MATSUURA, Akira; SHIBAHARA, Ryotaro; FUJITA, Makoto; TAKAZAWA, Chiaki; HASEGAWA, Kei; NODA, Suguru; IHARA, Manabu
- 211-07** High cohesive property of  $\beta$ -1-isomer of [70]PCBM fullerene in blend film with PffBT4T-2OD polymer (Grad. Sch. Eng., Kyoto Univ.; WPI-

iCeMS, Kyoto Univ.) OIGARASHI, Kensho; UMEYAMA, Tomokazu; IMAHORI, Hiroshi

- 211-08** Synthesis and derivatization of novel donor-acceptor linked molecules bearing triphenylamine and benzothiadiazole moieties, and application to single absorber organic solar cells (Grad. Sch. Eng., Osaka Univ.) OOKUDA, Yuki; KATAGIRI, Chiho; SUENOBU, Tomoyashi; NAKAYAMA, Ken-ichi

Chair: HASEGAWA, Kei (10 : 30~12 : 00)

- \* 10:20-10:30: interval for laptop PC connection.(211-10, 211-12, 211-13, 211-14, 211-16, 211-18)
- 211-10\*** Fabrication of Sn-Based Perovskite Solar Cells Using Solvent-Coordinated SnX<sub>2</sub> Complexes (ICR, Kyoto Univ.) OZAKI, Masashi; LIU, Jiewei; YAKUMARU, Shinya; HANDA, Taketo; KANEMITSU, Yoshihiko; MURATA, Yasujiro; WAKAMIYA, Atsushi
- 211-12** Electronic and Photophysical Properties of Ion-mixed AsN<sub>3</sub> Perovskite Materials (ICR, Kyoto Univ.) OYAKUMARU, Shinya; LIU, Jiewei; OZAKI, Masashi; NISHIKUBO, Ryosuke; SAEKI, Akinori; HANDA, Taketo; KANEMITSU, Yoshihiko; MURATA, Yasujiro; WAKAMIYA, Atsushi
- 211-13\*** Performance And Characteristic Analysis of Perovskite Solar Cells (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OTAKAHASHI, Saemi; UCHIDA, Satoshi; SEGAWA, Hiroshi
- 211-14\*** Highly Stabilized Perovskite Solar Cells by Li<sup>+</sup>-Encapsulated Fullerene Salt as Both Dopant and Anti-Oxidant (NENU) OUENO, Hiroshi; JEON, Il; SEO, Seungju; MARUYAMA, Shigeo; MATSUO, Yutaka
- 211-16\*** Thermoelectric properties of PEDOT:PSS controlled by doping level (Grad. Sch. Eng., Hiroshima Univ.) OIMAE, Ichiro; SHI, Mengyan; OYOYAMA, Yousuke; HARIMA, Yutaka
- 211-18** Mechanistic study of radicals production by He atmospheric plasma irradiation of water (KIT) OSAKURAI, Yasuhiro; YAMAMOTO, Naoko; YABUTA, Yuki; KAMEI, Ryuichiro; KAMEI, Ayami; SATO, Hiroki; MIYAKE, Yusuke; KANAORI, Kenji; TAJIMA, Kunihiko

### Wednesday, March 21, PM

#### Fuel cells

Chair: YAMAUCHI, Miho (13 : 10~14 : 00)

- \* 13:00-13:10: interval for laptop PC connection.(211-26, 211-28, 211-30)
- 211-26\*** Design of Carbon Nanotube-based Non-Pt Fuel Cell Catalyst (I<sup>2</sup>CNER, Kyushu Univ.) ONAKASHIM, Naotoshi
- 211-28\*** Formation of Frenkel defect cluster by addition of mixed conducting promoter Ba 2 In 1.7 (Zn 0.5, Zr 0.5) 0.3 O 5 for improving anode performance of IT-SOFC (NIT, Tsuruoka College; GREEN, NIMS) OITO, Shigeharu; SATO, Takaya; SUZUKI, Akira; ANDRII, Rednyk; ISAKA, Noriko; OKUBO, Hiroshi; MORI, Toshiyuki
- 211-30** Construction of a mixed entropy battery using the biphasic zwitterion salt-aqueous solution system showing LCST-type phase transition (Fac. Eng., Tokyo Univ. of Agri. and Technol.) OSATO, Risa; SHIBATA, Hiroki; OHNO, Hiroyuki; NAKAMURA, Nobuhumi

#### Hydrogen and oxygen generation

Chair: NAKAMURA, Nobufumi (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(211-32, 211-34, 211-35, 211-36)
- 211-32\*** Catalytic performances of metal cluster-loaded LDH nanosheet electrodes for oxygen evolution reaction (I<sup>2</sup>CNER, Kyushu Univ.) OKITANO, Sho; YAMAUCHI, Miho
- 211-34** Development of ammonia borane-polymer composite materials for hydrogen storage (Grad. Sch. Eng., Tokyo City Univ.; Sch. Eng., Tokyo City Univ.) OTAKIZAWA, Yuya; NIWA, Atsushi; NAKAYAMA, Kimihiko; SHIOTSUKI, Masashi
- 211-35** Ammonia Synthesis Using Water Electrolysis with Phosphate Electrolytes, Hydrogen-Permeable Membranes, and Ru Catalysts. (Fac. Eng., Fukuoka Univ.) OIMAMURA, Kanako; KUBOTA, Jun
- 211-36\*** Electrocatalytic Activities of Perovskite-type Mixed-anion Compounds (Grad. Sch. Eng., Kyoto Univ.) OMIYAZAKI, Kohei; MIYAHARA, Yuto; FUKUTSUKA, Tomokazu; ABE, Takeshi

### Thursday, March 22, AM

#### Plasmonic photochemistry

Chair: KUBO, Takaya (9 : 30 ~ 10 : 20)

- \* 9:20-9:30: interval for laptop PC connection.(311-04, 311-06, 311-07, 311-08)
- 311-04\*** Fabrication of high-absorption plasmonic photoanode with microhole array (RIES, Hokkaido Univ.) OSHIKIRI, Tomoya; UENO, Kosei; MISAWA, Hiroaki
- 311-06** Establishment of plasmonic hydrogen evolution reaction system using p-type semiconductor (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) OFUJII, Momoko; MINAMIMOTO, Hiro; LI, Xiaowei; MURAKOSHI, Kei

### Hydrogen Production

- 311-07\*** Photocatalytic hydrogen production using a dibenzo-BODIPY-incorporated phenothiazine as a panchromatic photosensitizer (Grad. Sch. Urban Environmental Sci., TMU; Research center for hydrogen energy-based society (ReHES)) OSURYANI, Okta; MAEDA, Yumi; MULYANA, Jacob Yan; KUBO, Yuji
- 311-08\*** Photoelectrochemical Visible Light Zero Bias Hydrogen Generation with Membrane-Based Cells Designed for Decreasing Overall Water Electrolysis Voltage and Water Dissociation (17) (Dept. of Applied Chem. and Biochem., NIT, Fukushima College) OSAKAMAKI, Kenji; WATANABE, Ayana; MATSUDA, Honoka; USUI, Sayuri; SAKASHITA, Wakana; KATO, Ryoko; ENDO, Haruka; SATO, Masataka

Chair: UENO, Kosei (10 : 30~11 : 30)

- \* 10:20-10:30: interval for laptop PC connection.(311-10, 311-12, 311-13, 311-14, 311-15)
- 311-10\*** Development of an iridium aqua complex catalyst for high-pressure hydrogen gas generation from formic acid (RCPT, AIST) OIGUCHI, Masayuki; HIMEDA, Yuichiro; KAWANAMI, Hajime
- 311-12** One-pot synthesis of two-dimensional sheet-like MoS<sub>2</sub> electrode by hydrothermal electrodeposition and its HER catalytic activity (Grad. Sch. Environmental Studies, Tohoku Univ.) OKATAHIRA, Syusuke; KOBAYASHI, Hiroaki; NAKAYASU, Yuta; HONMA, Itaru

### Photochemistry

- 311-13** Hydrogen Evolution Reaction on Metal Silicide Electrocatalysts in Alkaline solution (Grad. Sch. Eng., Osaka Pref. Univ.; Osaka Pref. Univ.) OKATAISHI, Tomoyoshi; CHIKU, Masanobu; HIGUCHI, Eiji; INOUE, Hiroshi

### Hydrogen Production

- 311-14** Hydrogen generation by mechanochemical reaction between metal and water: relation of reaction products and the hydrogen generation. (Grad. Sch. Sci., Hiroshima Univ.) OYAMAMOTO, Takuya; NAKANO, Yasuhiro; SAITOW, Ken-ichi
- 311-15** Large amounts of hydrogen generated from mechanochemical reaction between H<sub>2</sub>O and Si particles: how dangling bonds, specific surface area, and temperature affect the reaction? (Fac. Sci., Hiroshima Univ.) OHTA, Haruhisa; UEDA, Taiki; SAITOW, Ken-ichi

## Room 12

Bldg. 12 1232

### Materials Chemistry

Tuesday, March 20, AM

#### Low Dimensional Materials

Chair: OKAMURA, Hiroaki (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(112-01, 112-02, 112-03, 112-04, 112-06)
- 112-01** Structural changes of Pt complexes by in situ UV-Vis and XAFS measurements in the process of Ni-Pt nanocubes formation (Sch. Eng., The Univ. of Shiga Pref.) OTANIGUCHI, Kaneyuki; JEYADEVAN, Balachandran; MIYAMURA, Hiroshi; SUZUKI, Kazumasa; CUYA, Jhon
- 112-02** Development for Ag nanowires preparation with high aspect ratio in alcohol reduction system. (Sch. Eng., The Univ. of Shiga Pref.) OTERADA, Kohei; SUGIYAMA, Shintaro; CUYA, Jhon; MATSUMOTO, Takatoshi; IDA, Shohei; SUZUKI, Kazumasa; MIYAMURA, Hiroshi; JEYADEVAN, Balachandran
- 112-03** Synthesis of Co-Pt nanoparticles using alcohol reduction method for multifunctional magnetic materials (Sch. Eng., The Univ. of Shiga Pref.) OKATAGIRI, Mayu; CUYA, Jhon; SUZUKI, Kazumasa; MIYAMURA, Hiroshi; JEYADEVAN, Balachandran
- 112-04\*** Molecular Recognition using Azacrown Ether Groups for Photoluminescence Modulation of Single-walled Carbon Nanotubes (Grad. Sch. Eng., Kyushu Univ.; I<sup>2</sup>CNER, Kyushu Univ.) OSHIRAKI, Tomohiro; ONITUSKA, Hisashi; NAKASHIMA, Naotoshi
- 112-06** Photoluminescence Wavelength Shift by Imine Bond Formation on Aromatic Aldehyde Modified Single-Walled Carbon Nanotubes (Grad. Sch. Eng., Kyushu Univ.) OSHIGA, Tamehito; NAKASHIMA, Naotoshi; SHIRAKI, Tomohiro

Chair: SELYANCHYN, Roman (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(112-08, 112-10, 112-11, 112-12)

- 112-08<sup>#</sup>** Ultra Stable Gold Nanoparticles Modified by Bidentate N-Heterocyclic Carbene Ligands (WPI-ITbM, Nagoya University) ○MAN, Renee; LI, Henry; NAMBO, Masakazu; CRUDDEN, Cathleen
- 112-10** A simple preparation method of gold nanoparticles immobilizing two different ligands; evaluation of physical properties of the particles responsible for pH and metal ion (Grad. Sch. Sci., Eng., Kagoshima Univ.) ○ISHIKAWA, Takumi; ONITSUKA, Satoaki; HAMADA, Toshiyuki; OKAMURA, Hiroaki
- 112-11** Influence of interfacial energy on the formation of crystalline barium titanate thin films at organic liquid surfaces (Grad. Sch. Eng., KIT) ○SHIMOOKA, Hirokazu; KUWABARA, Makoto; KITAMURA, Mitsuru
- 112-12** Fabrication of platinum nanocones using track-etched membranes as templates : shape control (Sch. Sci. Tech., Gunma Univ.) ○SATO, Yuma; KOSHIKAWA, Hiroshi; YAMAMOTO, Shunya; SUGIMOTO, Masaki; SAWADA, Shin-ichi; YAMAKI, Tetsuya

### Inorganic Materials

Chair: GUNJI, Takahiro (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(112-14, 112-16, 112-17, 112-18, 112-19)
- 112-14<sup>#</sup>** Expanding Hybrid-Perovskite Structures: Molecular Approaches to Exploring New Properties in Semiconductive Materials (Dep. Chem., Stanford Univ.) ○UMEYAMA, Daiki; LIN, Yu; KARUNADASA, Hemamala
- 112-16<sup>#</sup>** Enhanced fuel generation from electrochemical reduction of oxalic acid and electrochemical oxygen vacancy formation (I<sup>2</sup>CNER, Kyushu Univ.) SUN, Yu; KITANO, Sho; SADAKIYO, Masaaki; KATO, Kenichi; ○YAMAUCHI, Miho
- 112-17** Sensing of lactic acid with Nafion-coated mesoporous Pd films (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○BABA, Daisuke; YAMAUCHI, Yusuke; ASAH, Toru
- 112-18** Degradation behavior of aminopropyl-modified mesoporous silica nanoparticles in aqueous media (Sch. Advanced Sci. Eng., Waseda Univ.) UCHIDA, Saki; ○KAYO, Mayumi; YAMAMOTO, Eisuke; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki
- 112-19<sup>#</sup>** Preparation of Highly Porous Gold Nanoparticle Crystals Interconnected with Carbon (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○CHENG, Lulu; YAMAMOTO, Eisuke; MORI, Seiya; KURODA, Yoshiyuki; SHIMOJIMA, Atsushi; WADA, Hiroaki; KURODA, Kazuyuki

### Tuesday, March 20, PM

#### Composite Materials

Chair: SHIMOJIMA, Atsushi (14 : 20~15 : 20)

- \* 14:10-14:20: interval for laptop PC connection.(112-33, 112-34, 112-35, 112-36, 112-38)
- 112-33<sup>#</sup>** Synthesis of Polymeric Silane Coupling Agents Consisting of Two Polymerizable Blocks and Their Physical Properties (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○HACHIKEN, Tomomi; YAMAUCHI, Sakie; FUCHIGAMI, Kiyomi; KANEKO, Kousuke; HANASAKI, Tomonori
- 112-34** Laser Pyrolysis of Polymer Films Embedded with Metal-Organic Frameworks for Supercapacitors (Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○TAJIMA, Shinya; HIRAI, Kenji; SADA, Kazuki
- 112-35** Surface modification of titanate nanosheets with redox-active organic molecules and their electrochemical properties (Grad. Sch. Sci. Tech., Keio Univ.; PRESTO, JST) ○HAYASHI, Tatsuya; IMAI, Hiroaki; OAKI, Yuya
- 112-36<sup>#</sup>** Hybrid Thin films Composed of Organic Polymers and Layered Compounds with Large Interlayer Spacings (Grad. Sch. Eng., The Univ. of Tokyo) ○KAJIYAMA, Satoshi; KATASE, Fumiya; KATO, Takashi
- 112-38** Preparation and application of bulk-type porous silica supported by zinc oxide (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○HASHI, Masahiro; YAMAMOTO, Kazuki; TSUKADA, Satoru; GUNJI, Takahiro

Chair: TANAKA, Kazuo (15 : 30~16 : 30)

- \* 15:20-15:30: interval for laptop PC connection.(112-40, 112-41, 112-42, 112-43, 112-44)
- 112-40** Preparation of metal complex/proton conductor hybrids as hydrogen generator (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○TAKEMASA, Midori; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 112-41** Synthesis of polyhedral oligomeric silsesquioxanes using alkoxysilane and iron chloride (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○OGAWA, Takuya; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 112-42** Synthesis of cage-silsesquioxane having azulene as a side chain (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○KOKAJI, Takashi; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 112-43** Synthesis of side chain functional polysilsesquioxane using formic acid (Fac. Sci. Technol., TUS; Grad. Sch. Eng., Hiroshima Univ.) ○SUZUKI, Yudai; TSUKADA, Satoru; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 112-44<sup>#</sup>** Synthesis of polysiloxanes starting from pentaethoxydisiloxane (Fac. Sci. Technol., TUS) ○ABE, Iori; YAMAMOTO, Kazuki; GUNJI, Takahiro

Chair: UEMURA, Takashi (16 : 40~17 : 40)

- \* 16:30-16:40: interval for laptop PC connection.(112-47, 112-49, 112-50, 112-51)
- 112-47<sup>#</sup>** Synthesis and properties of cross-linked cage octasilicate polymers (Fac. Sci. Technol., TUS) ○IGARASHI, Takahiro; YAMAMOTO, Kazuki; GUNJI, Takahiro
- 112-49<sup>#</sup>** Synthesis and Evaluation of Polyurethane-Conjugated Polymer Hybrid Elastomers Based on POSS (Grad. Sch. Eng., Kyoto Univ.) ○KATO, Keigo; GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiaki
- 112-50<sup>#</sup>** Synthesis and Properties of Luminophores-Integrated POSS Possessing Flexible Side-Chains (Grad. Sch. Eng., Kyoto Univ.) ○NARIKIYO, Hayato; GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiaki
- 112-51<sup>\*</sup>** Development of optical sensing materials composed of polyhedral oligomeric silsesquioxane networks for discriminating chemical composition and sizes of particle (Grad. Sch. Eng., Kyoto Univ.) ○NAKAMURA, Ryota; NARIKIYO, Hayato; GON, Masayuki; TANAKA, Kazuo; CHUJO, Yoshiaki

### Wednesday, March 21, AM

#### Carbon Materials

Chair: OHKUBO, Takahiro (9 : 00 ~ 9 : 50)

- \* 8:50-9:00: interval for laptop PC connection.(212-01, 212-02, 212-03, 212-04)
- 212-01** Enhancement of the electric double-layer capacitance in boron-doped diamond (Fac. Sci. Tech., Keio Univ.) ○TAKAGI, Kazuaki; NATSUI, Keisuke; WATANABE, Takeshi; EINAGA, Yasuaki
- 212-02** Application of heavily boron-doped diamond electrodes for secondary batteries (Fac. Sci. Tech., Keio Univ.) ○MIZUNUMA, Miho; WATANABE, Takeshi; EINAGA, Yasuaki
- 212-03** Graphite imaging using edge-selective functionalization (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○SAITO, Yusuke; YAMAGUCHI, Hiroyuki; FUJINAMI, Tatsuo; MATSUBARA, Ryousuke; SHIMOMURA, Masaru; KUBONO, Atsushi; MASE, Nobuyuki
- 212-04<sup>#</sup>** Controlling thermal cyclization of polyacrylonitrile in coordination nanospaces toward functional carbon materials (Grad. Sch. Eng., Kyoto Univ.; CREST, JST; WPI-iCeMS, Kyoto Univ.) ○KITAO, Takashi; HONGU, Ryoto; KITAGAWA, Susumu; UEMURA, Takashi

#### Low Dimensional Materials and Carbon Materials

Chair: EINAGA, Yasuaki (10 : 00~11 : 00)

- \* 9:50-10:00: interval for laptop PC connection.(212-07, 212-08, 212-09, 212-11)
- 212-07** Direct DNA coupling to graphene oxide by phosphoramidite chemistry (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○YAMAGUCHI, Naoto; NISHINA, Yuta; KUZUYA, Akinori; OHYA, Yuichi
- 212-08** Synthesis and Characterization of Graphene Oxide / Carbon nanohorn composite (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○ONO, Yusuke; OHKUBO, Takahiro; GOTOH, Kazuma; NISHINA, Yuta; CHEN, Wang; KURODA, Yasushige
- 212-09<sup>#</sup>** Metal Organic Framework Mediated Synthesis of Graphene Nanoribbon (Grad. Sch. Eng., Kyoto Univ.) ○MACLEAN, Michael; KITAO, Takashi; HONGU, Ryoto; KITAGAWA, Susumu; UEMURA, Takashi
- 212-11<sup>#</sup>** Highly concentrated SWCNT inks and its application (X-Breed, Shinshu Univ.) STEVIC, Dragana; ○KUKOBAT, Radovan; KANEKO, Katsumi

#### Organic Materials and Polymer Materials

Chair: OHYA, Yuichi (11 : 10~12 : 00)

- \* 11:00-11:10: interval for laptop PC connection.(212-14, 212-17, 212-18)
- 212-14<sup>#</sup>** Young Scholar Lectures of CSJ Development of Materials Chemistry for Design of Deformations (Fac. Sci., Hokkaido Univ.) ○KOKADO, Kenta
- 212-17** Development of novel light-emitting molecules with a V-shaped or Y-shaped molecular structure (KIT) YAMADA, Shigeyuki; ○TANAKA, Tsuyoshi; KONNO, Tsutomu
- 212-18** Development of novel solid-state light-emitting polymer incorporating light-emitting mesogen into the polymer side-chain (KIT) YAMADA, Shigeyuki; ○MITSUDA, Akira; KONNO, Tsutomu

### Wednesday, March 21, PM

Chair: KOKADO, Kenta (13 : 10~14 : 00)

- \* 13:00-13:10: interval for laptop PC connection.(212-26, 212-27, 212-28, 212-29, 212-30)
- 212-26** Synthesis of Polymers Bearing Ferulic Acid Derivatives and Their Characteristic Changes by UV Irradiation (Grad. Sch. S. Eng., Wakayama Univ.) ○TAKASHIMA, Airo; ATARASHI, Hironori; OSUGA, Hideji; SAKAMOTO, Hidenori
- 212-27** Binaphthyl framework polybenzimidazole linked porous polymers for carbon dioxide capture materials (Grad. Sch. Eng., Tokyo Denki Univ.) ○USTUNOMIYA, Iku; MIYASAKA, Makoto

- 212-28** Inscription of Molecular Alignment Patterns in Polymer Films by Scanning Wave Photopolymerization and Evaluation of Thermal Stability (Lab. Chem. Life Sci., Tokyo Tech.) ○SATO, Manabu; HISANO, Kyohei; AKAMATSU, Norihisa; SHISHIDO, Atsushi
- 212-29** Mechanical Analysis of Crosslinked Liquid Crystal Polymer Films with Three-Dimensional Orientation (Lab. Chem. Life Sci., Tokyo Tech.) ○FUJISAWA, Aki; HISANO, Kyohei; AKAMATSU, Norihisa; SHISHIDO, Atsushi
- 212-30** Fabrication of Molecularly Aligned Thin Polymer Films by Scanning Wave Photopolymerization for Liquid Crystal Alignment Layer (Lab. Chem. Life Sci., Tokyo Tech.) ○KOBAYASHI, Yoshiaki; HISANO, Kyohei; AKAMATSU, Norihisa; SHISHIDO, Atsushi

### Organic Materials

Chair: YOSHIDA, Hiroaki (14 : 10~15 : 10)

- \* 14:00-14:10: interval for laptop PC connection.(212-32, 212-34, 212-36, 212-37)
- 212-32\*** Reversible Single-Crystal-to-Single-Crystal Phase Transition of a Luminescent Gold Complex Induced by Mechanical Stimulation and Solvent Vapor (Grad. Sch. Eng., Hokkaido Univ.) ○SEKI, Tomohiro; SUMITANI, Toshiki; JIN, Mingoo; ITO, Hajime
- 212-34\*** Development of N-Heteroacene-based Functional Materials (Fac. Eng., Kagawa Univ.) ○ISODA, Kyosuke; SATO, Yuika; TAKAHASHI, Hinako; TAKAZAKI, Shota
- 212-36** Development of air-stable photon upconversion supramolecular systems (Grad. Sch. Eng., Kyushu Univ.; CMS, Kyushu Univ.; PRESTO, JST) ○HARUKI, Rena; YANAI, Nobuhiro; KIMIZUKA, Nobuo
- 212-37** Photocatalytic activity of covalent triazine framework which has narrow band gap (Sch. Eng. Sci., Osaka Univ.) ○UEDA, Mao; HARADA, Takashi; KAMIYA, Kazuhide; NAKANISHI, Shuji

Chair: ISODA, Kyosuke (15 : 20~16 : 20)

- \* 15:10-15:20: interval for laptop PC connection.(212-39, 212-41, 212-43)
- 212-39\*** Chiral bulk photovoltaic effect in the high-ordered liquid-crystalline phase of a  $\pi$ -conjugated ferroelectric liquid crystal (Fac. Eng., Kagawa Univ.) ○SEKI, Atsushi; FUNAHASHI, Masahiro
- 212-41\*** Alkylthionation of Thienoacenes to Tune the Picking, Molecular Orientation and Semiconducting Properties (CEMS, RIKEN) ○WANG, Chengyuan; NAKAMURA, Hiroshi; TAKIMIYA, Kazuo
- 212-43\*** Organic Batteries Using Multiple-Oxidation-State Hexaphyrin as an Active Electrode Material (Grad. Sch. Eng., Nagoya Univ.) ○SHIN, Jiyoung; SHINOKUBO, Hiroshi; AWAGA, Kunio

Chair: HARADA, Takashi (16 : 30~17 : 20)

- \* 16:20-16:30: interval for laptop PC connection.(212-46, 212-48, 212-49, 212-50)
- 212-46\*** Separate Fabrication of Cucurbit[6]uril Nanofibers with different crystallinity (Fac. Textile Sci. Technol., Shinshu Univ.; Grad. Sch. Eng., Osaka Univ.) ○YOSHIDA, Hiroaki; MIYAZAWA, Koki; KIDA, Toshiyuki
- 212-48** Creation of Novel Superhydrophobic Materials Composed of Cyclodextrin (Fac. Textile Sci. Technol., Shinshu Univ.) ○SUGIYAMA, Yuji; YOSHIDA, Hiroaki
- 212-49** Sol-Gel Reaction in Porous Organic Cages (Grad. Sch. Eng., Kyoto Univ.; CREST, JST) ○KONDO, Hiroki; KITAO, Takashi; UEMURA, Takashi
- 212-50** Development of new synthetic route for ester free trimethylene carbonate derivatives (Grad. Sch. Mat. Sci., NAIST) ○NOBUOKA, Hiroaki; AJIRO, Hiroharu

### Thursday, March 22, AM

#### Composite Materials

Chair: FUNAHASHI, Masahiro (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(312-01, 312-02, 312-04, 312-05, 312-06)
- 312-01\*** Study on the decomposition of Metal Organic Framework(Cu-BTC) by the steam (Advanced Research Div., Panasonic Corp.) ○ZHANG, Jin; MORITA, Masashi
- 312-02\*** Molecular dynamics simulations of the structure and the analyses of detachment force at the interface between graphene and resin (Grad. Sch. Eng., Yokohama Natl. Univ.; MITSUBISHI GAS CHEMICAL COMPANY, INC.) ○MORI, Kazuki; NOMOTO, Sukeharu; MATSUMOTO, Nobuhiko; KOHNO, Yuji

#### Ionic Liquid

- 312-04** Design of an acyl donor for the acylation of cellulose using ionic liquids (Grad. Sch. Eng., Tottori Univ.) ○KITAGAWA, Akihisa; TAKESHITA, Tokio; NOKAMI, Toshiki; ITOH, Toshiyuki
- 312-05** Elucidation of rhodium extraction mechanism using amino-substituted task-specific ionic liquids (Sch. Eng., Tohoku Univ.) ○HANZAWA, Chisato; KANIE, Kiyoshi; MURAMATSU, Atsushi
- 312-06** Design of hydrated ionic liquids to dissolve and refold aggregated

Concanavalin A (Fac. Eng., Tokyo Univ. of Agri. and Technol.; Sch. Pharm., TUPLS) ○ROKA, Nakano; NAKABA, Risa; OHNO, Hiroyuki; NAKAMURA, Nobuhuni; HUIJITA, Kyouko

### Others

Chair: NAKAMURA, Nobufumi (10 : 10~10 : 40)

- \* 10:00-10:10: interval for laptop PC connection.(312-08, 312-10)
- 312-08\*\*** Cold crystallisation: Material that can store low quality heat (Fac. Sci., TUS) ○MIYAMURA, Kazuo; OTANI, Hidetsugu; ISHIKAWA, Toru; YOSHIDA, Takashi
- 312-10\*** Synthesis of self-assembled 3D hybrid materials (Institut Charles Gerhardt Montpellier; Sorbonne Universite; Fac. Sci. Eng., Waseda Univ.) ○REY, Nadège; CARENCO, Sophie; OUALI, Armelle; PORTEHAULT, David; CARCEL, Carole; SHIMOJIMA, Atsushi; KURODA, Kazuyuki; SANCHEZ, Clément; WONG CHI MAN, Michel

### Asian International Symposium - Advanced Nanotechnology -

Thursday, March 22, PM

Chair: Torimoto, Tsukasa (13 : 20~14 : 40)

- 312-27\*** Opening Remarks / Closing Remarks Opening Remarks (Kyoto Univ.) ○Teranishi, Toshiharu (13:20~13:30)
- 312-28\*** Keynote Lecture Coupling Solar Energy into Catalytic Reactions through Nanostructure Design (Univ. of Science and Technology of China) ○Xiong, Yujie (13:30~14:00)
- 312-31\*** Invited Lecture Photoconversion of CO<sub>2</sub> and Water Using Sunlit Copper and Iron Mixed Oxides Films: Achieving Selectivity, Efficiency, and Durability (Kyungpook National Univ.) ○Park, Hyunwoong (14:00~14:20)
- 312-33\*** Invited Lecture Multi-transition Metal based Heterostructural Nanoparticle Catalysts for Oxygen Evolution Reaction (Kyoto Univ.) ○Saruyama, Masaki (14:20~14:40)

Chair: Abe, Ryu (14 : 40~16 : 10)

- 312-35\*** Invited Lecture Two-Dimensional Materials and Their Use in Membrane Applications (Hanyang Univ.) ○Park, Ho Bum (14:40~15:00)
- 312-37\*** Invited Lecture Improvement of Seebeck Coefficient of Thermocell by Supramolecular Interaction (Kyushu Univ.) ○Yamada, Teppei (15:00~15:20)
- 312-39\*** Keynote Lecture Engineering Bismuth Vanadate Particles for Improved Photocatalytic and Photoelectrochemical Activities (Univ. of New South Wales) ○Ng, Yun Hau (15:20~15:50)
- 312-42\*** Invited Lecture Highly Catalytic Activity of Subnanometer Metal Clusters for Hydrocarbon Oxidation Reactions (Tokyo Tech.) ○Huda, Miftakul (15:50~16:10)

Chair: Fujikawa, Shigenori (16 : 10~17 : 20)

- 312-44\*** Invited Lecture Near Infrared-to-visible Photon Upconversion (Kyushu Univ.) ○Yanai, Nobuhiro (16:10~16:30)
- 312-46\*** Invited Lecture In-vivo Evaluations of Additive Manufactured Scaffolds of Poly(caprolactone) and Hydroxyapatite for Osteochondral Defect (Chung Yuan Christian Univ.) ○Hsieh, Ming-Fa (16:30~16:50)
- 312-48\*** Invited Lecture Polypeptide-based Micelles to Modify Plant Cells (RIKEN) ○Numata, Keiji (16:50~17:10)
- 312-50\*** Opening Remarks / Closing Remarks Closing Remarks (Kyushu Univ.) ○Katayama, Yoshiki (17:10~17:20)

## Room 13

Bldg. 12 1233

### Functions of Materials

Tuesday, March 20, AM

Chair: KOBAYASHI, Yoichi (9 : 00 ~10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(113-01, 113-02, 113-03, 113-04, 113-05)
- 113-01** Photochromism of a diarylethene derivative having aza-crown ether on the side chain (Grad. Sch. Eng., Yokohama Natl. Univ.) ○TAKEGUCHI, Ayaka; NAKAGAWA, Tetsuya; YOKOYAMA, Yasushi
- 113-02** Highly Enantioselective Photochromism of C<sub>2</sub>-Connected Bisthiényl-ethenes in Human Serum Albumin (Grad. Sch. Eng., Yokohama Natl. Univ.) ○SAEKI, Yuri; NAKAGAWA, Tetsuya; YOKOYAMA, Yasushi
- 113-03** Photochromic and fluorescent properties of a diarylethene derivative having an orthogonal  $\pi$ -conjugation system (Grad. Sch. Eng., Yokohama Natl. Univ.) ○MIYASAKA, Yosuke; OTOMO, Yutarō; YOKOYAMA, Yasushi; NAKAGAWA, Tetsuya

- 113-04** Photochromic property of a spirodiarylethene derivative having a cyclopentadithiophene moiety (Grad. Sch. Eng., Yokohama Natl. Univ.)  
○KATO, Nagara; YOKOYAMA, Yasushi; NAKAGAWA, Tetsuya
- 113-05\*** Cycloreversion Reaction Dynamics of a Fluorescent Diarylethene Derivative Initiated by Off-Resonant Simultaneous Two-Photon Excitation (Grad. Sch. Eng. Sci., Osaka Univ.) ○SOTOME, Hikaru; NAGASAKA, Tatsuiro; MORIMOTO, Masakazu; IRIE, Masahiro; MIYASAKA, Hiroshi

Chair: NAKAGAWA, Tetsuya (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(113-08, 113-09, 113-10, 113-11)
- 113-08** Synthesis and thermal bleaching reactivity of diarylethenes exhibiting photochromism at low temperature (Grad. Sch. Eng., Osaka City Univ.)  
○NAKAI, Yoshihiro; KITAGAWA, Daichi; KOBATAKE, Seiya
- 113-09** Substituent effect in turn-on mode fluorescent diarylethene derivatives (Coll. Sci., Rikkyo Univ.) ○IWAI, Ryota; MORIMOTO, Masakazu; IRIE, Masahiro
- 113-10** Stealth photochromism based on bisanthracene (Grad. Fac. Eng., Yokohama Natl. Univ.) ○KOBAYASHI, Mao; YOKOKURA, Rino; UBUKATA, Takashi
- 113-11\*** Young Scholar Lectures of CSJ Stepwise Two-Photon Photochromic Molecules toward Realization of Photosynergetic Effects (Coll. Life Sci., Ritsumeikan Univ.) ○KOBAYASHI, Yoichi

Chair: UBUKATA, Takashi (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(113-15, 113-16, 113-17, 113-19)
- 113-15** Luminescence behavior of liquid-crystalline non- $\pi$ -conjugated gold complexes (Coll. Life Sci., Ritsumeikan Univ.) ○OZAKI, Kazuhisa; NIIMI, Ryoko; FUJISAWA, Kaori; TSUTSUMI, Osamu
- 113-16** Aggregation-Induced Emission from Mixed Valence Gold(I/III) Complexes (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○TAMAKI, Yusaku; FUJISAWA, Kaori; TSUTSUMI, Osamu
- 113-17\*\*** Photoluminescence and Thermal Stability of Cyclic Tri Nuclear Gold (I) complexes with N-Heterocyclic Carbene ligand (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○SATHYANARAYANA, Arruri; NAKAMURA, Shin-ya; SRINIVAS, Katam; PRABUSANKAR, Ganesan; TSUTSUMI, Osamu
- 113-19\*\*** Thermal and Photo-triggered Phase Transition of Chiral Photochromic Salicylidene-naphthylethylamine crystal (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○TANIGUCHI, Takuya; SUGIMOTO, Ryota; KOMIYA, Jun; SATO, Hiroyasu; KOSHIMA, Hideko; ASAH, Toru

## Tuesday, March 20, PM

Chair: FUJIKI, Michiya (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(113-28, 113-29, 113-30, 113-32)
- 113-28** Development of Chiral Stationary Phases Capable of Switching Resolution Abilities Based on Coil-to-Helix Transition (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○AWATA, Seiya; KUDO, Tomoya; ISHIDATE, Ryoma; MAEDA, Katsuiro; KANOH, Shigeyoshi; IKAI, Tomoyuki
- 113-29** Analysis of dynamic exchange properties of the ion-exchanger (Toray Industries, Inc.) ○MIYAMOTO, Ryoma; KOZAKI, Yoichiro; HIRANABE, Ryuichiro; HATAHIRA, Satoko; KIMURA, Masahiro
- 113-30\*** Adsorption behavior of 4-methyl-imidazole on zeolites (R&D Div., Kirin Co., Ltd.; RCPT, AIST) HASHIMOTO, Yoshikazu; ○NAGASE, Takako; SATO, Koichi; NAGANUMA, Hiroyuki; YOSHIDA, Aruto
- 113-32\*\*** Control of molecular orientation in thin films of nanosegregated liquid-crystalline semiconductors (Fac. Eng., Kagawa Univ.) ○FUNAHASHI, Masahiro; TAKAOKA, Shunsuke

Chair: HIGASHIGUCHI, Kenji (14 : 40~15 : 40)

- \* 14:30-14:40: interval for laptop PC connection.(113-35, 113-37, 113-38, 113-39, 113-40)
- 113-35\*** The origin of circularly polarized luminescence (CPL) from C3-facial and C1-meridional Eu(FOD)<sub>3</sub> endowed with  $\alpha$ -pinene, BINAP, and BINAPO (Grad. Sch. Mat. Sci., NAIST) JALILAH, Abd Jalil; ○FUJIKI, Michiya
- 113-37\*** Handedness Tunable Circularly Polarized Luminescence of Hydrogen-Bonded Supramolecular system (Grad. Sch. Sci., Rikkyo Univ.)  
○KANSAKU, Yaoki; SUZUKI, Nozomu; FUJIKI, Michiya; YAMANAKA, Masahiro
- 113-38** Enhancement of circularly polarized luminescence from chiral Eu(III) complex by the addition of alkylammonium ion. (Fac. Eng., Chiba Univ.)  
○MIYAZATO, Mayu; MANO, Akane; MINAMI, Haruki; NAKAMURA, Kazuki; KOBAYASHI, Norihisa
- 113-39** Luminescent Behavior of a Chiral Iridium(III) Complex Adsorbed on Synthetic Saponite (Grad. Sch. Sci., Eng., Ehime Univ.; Fac. Medicine, Toho Univ.) ○TAKIMOTO, Kazuyoshi; WATANABE, Yutaka; YAMAGISHI, Akihiko; SATO, Hisako
- 113-40** Synthesis and properties of dithienogermole-containing polysilsesquioxane films. (Grad. Sch. Eng., Hiroshima Univ.) ○SHIGEOKA, Kenta; ADACHI, Yohei; OHSHITA, Joji

Chair: NAKANO, Hideyuki (15 : 50~16 : 50)

- \* 15:40-15:50: interval for laptop PC connection.(113-42, 113-43, 113-45, 113-47)
- 113-42** Visible-to-UV photon upconversion based on aqueous supramolecular assembly (Grad. Sch. Eng., Kyushu Univ.) ○KAWASHIMA, Yusuke; KOUNO, Hironori; YANAI, Nobuhiro; KIMIZUKA, Nobuo
- 113-43\*\*** Development of near infrared-to-visible photon upconversion molecular systems (Grad. Sch. Eng., Kyushu Univ.; CMS, Kyushu Univ.; PRESTO, JST) ○KOUNO, Hironori; YANAI, Nobuhiro; KIMIZUKA, Nobuo
- 113-45\*\*** Photophysical properties of the cast solids for near-infrared-to-visible triplet-triplet annihilation upconversion (IFMRI, AIST) ○ABULIKEMU, Aizitaili; SAKAGAMI, Yusuke; KAMADA, Kenji; KUZUHARA, Daiki; YAMADA, Hiroko
- 113-47** Emission behavior of pyrene derivatives in network polymer (Fac. Eng., Chiba Univ.) ○MIURA, Haruka; WAKUSHIMA, Akiko; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

Chair: MORIMOTO, Masakazu (17 : 00~17 : 50)

- \* 16:50-17:00: interval for laptop PC connection.(113-49, 113-50, 113-51, 113-52, 113-53)
- 113-49** Photoinduced Morphological Transformation and Bilayer Formation Composed of Amphiphilic Diarylethene (Grad. Sch. Eng., Kyoto Univ.)  
○KOTANI, Yasunobu; HIGASHIGUCHI, Kenji; MATSUDA, Kenji
- 113-50** Effect of Phase Separation on Morphological Change of Supramolecular Assembly Composed of Amphiphilic Diratylethenes Having Ester and Amide Linkers (Grad. Sch. Eng., Kyoto Univ.) ○SAKAKIBARA, Seiya; HIGASHIGUCHI, Kenji; YOTSUJI, Hajime; MATSUDA, Kenji
- 113-51** Photomechanical Behaviors of the Films of Azobenzene-based Amorphous Molecular Materials Prepared on Soft Surfaces (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○KITANO, Ayame; ICHIKAWA, Ryota; NAKANO, Hideyuki
- 113-52** Photoinduced Shape Changes of Mixed Molecular Glass Particles Containing Azobenzene-based Photochromic Amorphous Molecular Materials Fixed in Agar Gel (Grad. Sch. of Eng., Muroran Inst. of Tech.)  
○NAKANO, Hideyuki; ICHIKAWA, Ryota; UKAI, Hiroyasu; KITANO, Ayame
- 113-53** Reversible Fluorescence Change of Amorphous Molecular Material -Organic Acid Hybrid Films (Grad. Sch. of Eng., Muroran Inst. of Tech.)  
○KITAMURA, Yuya; NAKANO, Hideyuki

## Wednesday, March 21, PM

Chair: KITAGAWA, Daichi (12 : 40~13 : 40)

- \* 12:30-12:40: interval for laptop PC connection.(213-23, 213-25, 213-27, 213-28)
- 213-23\*\*** Storage and dynamics of CO<sub>2</sub> into porous coordination polymer controlled by ligand dynamics (Tech. Ind. Soc. Sci, Tokushima Univ.; WPI-iCeMS, Kyoto Univ.) ○INUKAI, Munehiro; MASANORI, Tamara; HORIKE, Satoshi; HIGUCHI, Masakazu; SUSUMU, Kitagawa; NAKAMURA, Koichi
- 213-25\*\*** Direct growth of Large Prussian Blue crystal membranes on porous support: Growth mechanism and characterization (I<sup>2</sup>CNER, Kyushu Univ.)  
○SELYANCHYN, Roman; OKEDA, Risa; KANAKOGI, Keisuke; FUJIKAWA, Shigenori; KIMIZUKA, Nobuo
- 213-27** Direct growth of Large Prussian Blue crystal membrane on porous support and application for CO<sub>2</sub> separation (Fac. Eng., Kyushu Univ.)  
○OKEDA, Risa; SELYANCHYN, Roman; KANAKOGI, Keisuke; FUJIKAWA, Shigenori; KIMIZUKA, Nobuo
- 213-28** Development of Narrow-Bandgap Molecules Based on Lactam-Containing Fused Aromatic Systems and Their Application in Organic Solar Cells (IFRC, Kyushu Univ.; Fac. Eng., Kyushu Univ.) ○SATO, Narumi; FURUKAWA, Seichi; YASUDA, Takuma

Chair: SELYANCHYN, Roman (13 : 50~14 : 50)

- \* 13:40-13:50: interval for laptop PC connection.(213-30, 213-32, 213-34)
- 213-30\*\*** Benzo[1,2-*b*:4,5-*b'*]dipyrrrole Sulfonate Salts as Neutral Dopant-Free Hole-transporting Materials for Perovskite Solar Cells (Grad. Sch. Sci., The Univ. of Tokyo) ○SHANG, Rui; ZHOU, Zhongmin; NISHIOKA, Hiroki; HALIM, Henry; FURUKAWA, Shunsuke; NAKAMURA, Eiichi
- 213-32\*\*** Polymeric *p*-Type Dopant with Permanent Doping Durability for Transparent Carbon Electrodes (Grad. Sch. Eng., The Univ. of Tokyo)  
○JEON, Il; OKADA, Hiroshi; MARUYAMA, Shigeo; MATSUO, Yutaka
- 213-34\*\*** Solid-state white-light emission from single luminophore (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○YOUNIS, Osama; TSUTSUMI, Osamu

Chair: TAKAMI, Shizuka (15 : 00~16 : 00)

- \* 14:50-15:00: interval for laptop PC connection.(213-37, 213-38, 213-39, 213-40, 213-41)
- 213-37** Luminescent properties of chiral liquid-crystalline polymers (Coll. Life Sci., Ritsumeikan Univ.) ○HARADA, Shohei; MITSUHASHI, Fumika; FUJISAWA, Kaori; TSUTSUMI, Osamu
- 213-38** Evaluation of band structure in plasmonic photoelectric conversion electrode (Sch. Sci., Hokkaido Univ.) ○SUZUKI, Shinya; YASUDA, Kensuke; LI, Xiaowei; ZHOU, Ruifeng; MINAMIMOTO, Hiro;

MURAKOSHI, Kei

- 213-39\*** Synthesis and photophysical characterization of positively charged NIR dyes for dye-sensitized solar cells. (KIT) ○PRADHAN, Anusha; KAPIL, Gaurav; HAYASE, Shuzi; PANDEY, Shyam
- 213-40\*** Glycine-HCl Modulated Growth of Oriented Lead Perovskite Crystals for Efficient Solar Cells (Fac. Sci., The Univ. of Tokyo) ○QIANG, Ziyue; HALIM, Henry; SHANG, Rui; NAKAMURA, Eiichi
- 213-41\*** Liquid-Crystalline Phthalocyanine Derivatives Bearing Oligosiloxane Moieties: Influence of Aggregation Structures on Carrier Transport Properties (Grad. Sch. Eng., Kagawa Univ.) ○YAMAOKA, Ryutarō; FUNAHASHI, Masahiro

Chair: TSUTSUMI, Osamu (16 : 10~17 : 10)

- \* 16:00-16:10: interval for laptop PC connection.(213-44, 213-45, 213-46, 213-47, 213-48, 213-49)
- 213-44** Photochromism of Diarylethene Derivative Having Pyrazole Ring (Fukuoka Ind. Tech. Ctr.) ○SAITA, Shingo; ISAYAMA, Munetoshi
- 213-45** Synthesis and photochromic properties of 1-thiazolyl or 1-thienyl-2-vinyl-2-phenylthiazole derivatives (NIT, Niihama College; Hyogo Univ. of Teacher Educ.; Grad. Sch. Mat. Sci., NAIST) ○TAKAMI, Shizuka; NISHIYAMA, Minoru; MIZUNO, Masaki; YAMAGUCHI, Tadatsugu; HASHIMOTO, Yuichiro; KAWAI, Tsuyoshi
- 213-46** Dependence of crystallization-induced emission enhancement of diarylethenes on alkyl chain length (Grad. Sch. Eng., Osaka City Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○NAKAHAMA, Tatsumoto; KITAGAWA, Daichi; SOTOME, Hikaru; ITO, Syoji; MIYASAKA, Hiroshi; KOBATAKE, Seiya
- 213-47** Synthesis and photoluminescence switching of quantum dots coated with photoresponsive diarylethenes (Grad. Sch. Eng., Osaka City Univ.) ○YAMADA, Rie; KITAGAWA, Daichi; KOBATAKE, Seiya
- 213-48** Fluorescence photoswitching of fluorescent crystalline diarylethenes (Grad. Sch. Sci. & Tech., Kumamoto Univ.; Grad. Sch. Eng., Osaka City Univ.) ○ISHIDA, Sanae; KITAGAWA, Daichi; KOBATAKE, Seiya; KIM, Sunnam; OGATA, Tomonari; KURIHARA, Seiji; FUKAMINATO, Tsuyoshi
- 213-49** Surface plasmon assisted photoisomerization and control of needle-shaped crystal growths of a diarylethene by a plasmonic chip. (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○KADOYAMA, Taiga; NISHIMURA, Ryo; TOMA, Mana; UCHIDA, Kingo; TAWA, Keiko

## Thursday, March 22, AM

Chair: ABE, Jiro (9 : 00 ~ 10 : 00)

- \* 8:50-9:00: interval for laptop PC connection.(313-01, 313-02, 313-03, 313-04, 313-05, 313-06)
- 313-01** Solid emission color changes of BODIPY in polymer chain with different composition ratio (Grad. Sch. Eng., Osaka City Univ.) ○SHIMIZU, Katsuya; KITAGAWA, Daichi; KOBATAKE, Seiya
- 313-02** Emitting Behaviors of 1-Alkanoylaminopyrenes Dispersed in Poly(vinyl acetate) Film (Grad. Sch. of Eng., Muroran Inst. of Tech.) ○TAKAHASHI, Hiroki; NAKANO, Hideyuki
- 313-03** Rotation of niobate nanosheet induced by irradiation of a circularly polarized laser beam (Fac. Sci., Yamaguchi Univ.) ○HIGASHI, Yuki; IKEDA, Akira; NAGASHITA, Takashi; TOMINAGA, Makoto; SUZUKI, Yasutaka; KAWAMATA, Jun; KUMAMOTO, Takuya; NAKATO, Teruyuki
- 313-04** Solvent effect of thermal bleaching reaction of diarylethene derivatives in the presence of acid (Grad. Sch. Eng., Osaka City Univ.) ○SAKURAI, Momoka; KITAGAWA, Daichi; KOBATAKE, Seiya
- 313-05** Effect of solvents on photochromic properties of 3-deoxyanthocyanidin, a plant-derived pigment (Sch. Biosci. Biotech., TUT) ○TASAKI, Kumiko; MIHARA, Mai; KOUNO, Yoshiumi; SHIBATA, Masashi
- 313-06** Molecular-orbital consideration on the effect of electron-donating/withdrawing strength on peak position of two-photon absorption spectrum. (IFMRI, AIST) ○KITA, Hanayo; KAMADA, Kenji

Chair: KOBATAKE, Seiya (10 : 10~11 : 10)

- \* 10:00-10:10: interval for laptop PC connection.(313-08, 313-09, 313-10, 313-11, 313-12, 313-13)
- 313-08** Two-Photon-Induced Stepwise Photochromism of Novel Bisnaphthopyrans (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○INAGAKI, Yuki; MUTOH, K; ABE, Jiro
- 313-09** Photocontrol of Stepwise Two-Photon Induced Photochromism by Using the Valence Isomerization Process between Biradical and Quinoid (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○TOSHIMITSU, Shota; MUTOH, Katsuya; ABE, Jiro
- 313-10** Wavelength-Selective Photoresponse of a Biphotochromic Molecule Composed of Positive and Negative Photochromic Sites (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○TOKUNAGA, Ayako; MUTOH, Katsuya; ABE, Jiro
- 313-11** Wavelength-Selective Negative Photochromism (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○ARAI, Kaho; MUTOH, Katsuya; ABE, Jiro
- 313-12** Non-linear Visible-light Response of Fast Negative Photochromic Compound (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○YONEKAWA, Izumi; MUTOH, Katsuya; ABE, Jiro
- 313-13** Development of pyrene based two-photon fluorescence probe for

mitochondrial membrane potential (Fac. Sci., Kochi Univ.; Fac. Sci., Yamaguchi Univ.) ○SEKI, Hitomi; ASAMURA, Naoya; ONISHI, Shozo; SUZUKI, Yasutaka; KAWAMATA, Jun; KANENO, Daisuke; HADANO, Shingo; WATANABE, Shigeru; NIKO, Yosuke

Chair: KAMADA, Kenji (11 : 20~12 : 20)

- \* 11:10-11:20: interval for laptop PC connection.(313-15, 313-17, 313-18, 313-20)
- 313-15\*\*** Synthesis and Optical Characterization of Luminescent Dyes Presenting an Excited-State Intramolecular Proton Transfer (ESIPT) (Grad. Sch. Eng., Nagoya Univ.; CNRS/Univ. of Strasbourg) ○MASSUE, Julien
- 313-17** Photoresponsive Behavior of Polymer-Stabilized Dye-Doped Liquid Crystals by Irradiation with Patterned Polarized Light (Lab. Chem. Life Sci., Tokyo Tech.) ○MATSUMOTO, Kosuke; USUI, Koji; HISANO, Kyohei; AKAMATSU, Norihisa; SHISHIDO, Atsushi
- 313-18\*** Investigation of resonance energy transfer processes in a self-assembly composed of quantum dots and inorganic nanosheet through electron tomography (Grad. Sch. Eng., Hokkaido Univ.) ○ISHIDA, Yohei; AKITA, Ikumi; YONEZAWA, Tetsu
- 313-20** Oxidative Cycloreversion Reaction of Photochromic Terarylenes on Quantum Dot Surface (Grad. Sch. Mat. Sci., NAIST) ○YAMAMOTO, Hajime; ASATO, Ryosuke; KUNO, Jumpei; NAKASHIMA, Takuya; KAWAI, Tsuyoshi

## Thursday, March 22, PM

Chair: MUTOH, Katsuya (13 : 30~14 : 30)

- \* 13:20-13:30: interval for laptop PC connection.(313-28, 313-30, 313-31, 313-32, 313-33)
- 313-28\*** Solvatochromism and Dual Fluorescence of the Amine-Ketone Dye Linked by a Nonconjugated Moiety (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) KURAMOTO, Yutaro; NAKAGIRI, Takanobu; MATSUI, Yasunori; OHTA, Eisuke; ○IKEDA, Hiroshi
- 313-30** Photoinduced Change in Emitting Color of 1,4-Bis(2-cyano-2-[4-[5-(4-methylphenyloxy)pentyl]oxy]phenyl)ethenyl)-2,5-dimethoxybenzene in the Solid State (Grad. Sch. of Eng., Muroran Inst. of Tech.; RIES, Hokkaido Univ.) ○KANEKO, Ryohei; SAGARA, Yoshimitsu; TAMAOKI, Nobuyuki; NAKANO, Hideyuki
- 313-31\*** Synthesis and Evaluation of Solid-State Emissive Compounds Based on *o*-Carborane (Grad. Sch. Eng., Kyoto Univ.) ○UEMURA, Kyoya; TANAKA, Kazuo; CHUJO, Yoshiaki
- 313-32** Photo-properties of a Fast Spin-state Switching System Triggered by Photolysis (Grad. Sch. Sci., Hiroshima Univ.) ○TANABE, Chika; HATANO, Sayaka; ABE, Manabu
- 313-33** Speedup of Photomechanical Bending of Salicylideneaniline Crystals (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) KOMIYA, Jun; TANIGUCHI, Takuya; YAMANAKA, Daiki; FURUBE, Akihiro; SUGIYAMA, Haruki; UEKUSA, Hidehiro; SATO, Hiroyasu; ○KOSHIMA, Hideko; ASAH, Toru

Chair: MATSUURA, Kazunori (14 : 40~15 : 50)

- \* 14:30-14:40: interval for laptop PC connection.(313-35, 313-36, 313-37, 313-38, 313-39, 313-40)
- 313-35** Effects of adsorbed sulfur particles on zeta potential of flat sheet surface (ITCO; Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○NIGO, Hideyuki; TSUNESADA, Takeshi; TSUTSUMI, Hiromori
- 313-36** The self-assembly properties of elastin-derived (FPGVG)<sub>n</sub> peptide analogs aiming for development of basic materials as pH- and temperature-responsive hydrogels. (Fac. Arts and Sci., Kyushu Univ.) ○SUYAMA, Keitaro; TATSUBO, Daiki; MAEDA, Iori; NOSE, Takeru
- 313-37** Self-association and metal binding properties of novel trimeric analogs of elastin-derived peptide (FPGVG)<sub>n</sub> (Grad. Sch. Sci., Kyushu Univ.) ○MAWATARI, Mika; TATSUBO, Daiki; SUYAMA, Keitaro; MAEDA, Iori; NOSE, Takeru
- 313-38** Fabrication of High Strength Collagen Films Based on Self-Assembly of Collagen Induced by Surface Relief Template (Lab. Chem. Life Sci., Tokyo Tech.) ○AIZAWA, Miho; OTA, Megumi; KISHINO, Masayuki; AKAMATSU, Norihisa; FUJIKAWA, Shigenori; SHISHIDO, Atsushi
- 313-39** Correlation between interfacial structure and function of biocompatible polymer with intermediate water (Grad. Sch. Eng., Kyushu Univ.) ○UEDA, Tomoya; KITAHARA, Yoko; MURAKAMI, Daiki; TANAKA, Masaru
- 313-40\*\*** Development of temperature- and pH-responsive smart polymer materials for therapeutic and diagnostic applications (Fac. Sci. Tech., Keio Univ.; Fac. Pharm., Keio Univ.) ○HIRUTA, Yuki; KANDA, Yuki; KATSUYAMA, Naoya; KANAZAWA, Hideko

# Room I4

Bldg. 12 1234

## Applications of Materials

Tuesday, March 20, AM

### Hybrid Materials

Chair: SAKAI, Toshio (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(114-01, 114-02, 114-03, 114-04, 114-05)

- 114-01** Preparation and Application of Fluorinated Aliphatic Alcohol/Organic Phosphonic Acids/Magnetite Composites (Grad. Sch. Sci. Tech., Hirosaki Univ.; UNIMATEC) ○YAMASHITA, Katsumi; KANEMI, Yoshiyama; KIJIMA, Tetsushi; KOKIN, Keisuke; SAWADA, Hideo
- 114-02** Preparation of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Magnetite Composites - Application to the Separation of Oil and Water (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○OKADA, Seigo; YAMASHITA, Katsumi; SAWADA, Hideo
- 114-03** Preparation and Property of Fluoroalkyl End-capped Oligomer/Cellulose Nanofiber Composite Films (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○ENDO, Yui; OIKAWA, Yuri; SAWADA, Hideo
- 114-04** Preparation and Property of Fluoroalkyl End-capped Oligomer Composites Gels (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○YASUTA, Masato; KATAYAMA, Shinsuke; SAWADA, Hideo
- 114-05\*** Preparation and Property of Fluoroalkyl End-capped Oligomer Composites Gels Containing Gluconamide Units (Grad. Sch. Sci. Tech., Hirosaki Univ.; Kanto Denka Kogyo Co., Ltd.) ○KATAYAMA, Shinsuke; YASUTA, Masato; FUJII, Shogo; SAWADA, Hideo

Chair: FUNABIKI, Kazumasa (10 : 10 ~ 11 : 10)

\* 10:00-10:10: interval for laptop PC connection.(114-08, 114-10, 114-11, 114-12, 114-13)

- 114-08\*** Preparation and Properties of Fluoroalkyl End-capped Oligomer/Boric Acid/Poly(vinyl alcohol) Composite Films (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○AOMI, Yuta; SAWADA, Hideo
- 114-10** Preparation of Liquid Marbles by Using Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Cellulose Fiber Composites (Fac. Sci. Tech., Hirosaki Univ.; Grad. Sch. Sci. Tech., Hirosaki Univ.) ○YAMAMOTO, Shunta; OIKAWA, Yuri; SAWADA, Hideo
- 114-11** Adsorption of Radical Polymerizable Monomers by Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Cyclodextrin Polymer Composites (Fac. Sci. Tech., Hirosaki Univ.; Grad. Sch. Sci. Tech., Hirosaki Univ.; Kankyo Kogaku Co., Ltd.) ○MORIMOTO, Takanobu; YAMASHITA, Katsumi; SUZUKI, Junichi; SAWADA, Hideo
- 114-12** LCST behavior of fluoroalkyl end-capped acrylic acid oligomer/alkyl modified cellulose nanocomposites (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○SATO, Ryouta; OIKAWA, Yuri; SAWADA, Hideo
- 114-13** Complexation of Organic Phase-change Materials with Silicone Rubber (Fac. Eng., Shinshu Univ.) ○ITO, Ai; SAKAI, Toshio

### Functional Dye

Chair: SAWADA, Hideo (11 : 20 ~ 12 : 20)

\* 11:10-11:20: interval for laptop PC connection.(114-15, 114-16, 114-17, 114-18, 114-19)

- 114-15** pH-Responsiveness of Near-Infrared Cyanine Dyes Having Anionic Substituents (Sch. Eng., Kyoto Univ.) ○TANAKA, Kouki; MU, Huiying; KOJIMA, Kentaro; MIKI, Koichi; OHE, Kouichi
- 114-16\*** Preparation of Self-Assemblies Containing pH-Responsive Near-Infrared Cyanine Dyes (Grad. Sch. Eng., Kyoto Univ.) ○MU, Huiying; TAKAHASHI, Yuki; TESHIMA, Naoto; MIKI, Koichi; OHE, Kouichi
- 114-17** Novel Synthesis and Photoluminescent Properties of Bis-Cyclometalated Bismuth(III) Complexes (Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Sci., Osaka Pref. Univ.) ○OKAMURA, Naoki; MAEDA, Takeshi; FUJIWARA, Hideki; YAGI, Shigeyuki
- 114-18** Photo-Sensitized Singlet Oxygen Generation by Bridged Bithiophene Dimers Bearing Electron-Withdrawing Terminal Groups (Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Eng., Hiroshima Univ.) ○HAYASHI, Yuichiro; BAN, Ayaka; GOTO, Yusuke; MAEDA, Takeshi; YAGI, Shigeyuki; ENOKI, Toshiaki; OYAMA, Yousuke; OHSHITA, Joji
- 114-19\*** Analysis of solid-state aggregation structure of supramolecular mechanochromic luminophore (Grad. Sch. Eng., Univ. of Hyogo) ○KONDO, Mizuho; YAMOTO, Taku; KITAMURA, Chitoshi; KAWATSUKI, Nobuhiro

Tuesday, March 20, PM

Chair: KAWATSUKI, Nobuhiro (13 : 30 ~ 14 : 30)

\* 13:20-13:30: interval for laptop PC connection.(114-28, 114-30, 114-31,

114-32, 114-33)

- 114-28\*\*** Study on electronic states of organic dyes using several molecular orbital calculation methods (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○HWANG, Ji-yong; JINDO, Takumi; MATSUMOTO, Shinya
- 114-30** Application of thiophene-fused BODIPY dyes to near-infrared dye-sensitized solar cells (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; ○KIMURA, Kosei; FUNABIKI, Kazumasa
- 114-31** Synthesis of pyrrolopyrrole based dyes (Gifu Univ.) KUBOTA, Yasuhiro; ○KOIDE, Kenta; FUNABIKI, Kazumasa
- 114-32** Synthesis and photophysical properties of anthraquinone bisboron complexes (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; ○MIZUNO, Yuka; AKATA, Hiroki; FUNABIKI, Kazumasa; MATSUI, Masaki
- 114-33** Synthesis and photophysical properties of croconium dyes (Fac. Eng., Gifu Univ.) KUBOTA, Yasuhiro; ○TANIUCHI, Yusuke; FUNABIKI, Kazumasa

Chair: KUBO, Yuji (14 : 40 ~ 15 : 40)

\* 14:30-14:40: interval for laptop PC connection.(114-35, 114-36, 114-37, 114-38, 114-39, 114-40)

- 114-35** Self-assembly n-type semiconductor based on 9,9'-bifluorenylidene (Grad. Sch. Sci. Technol., Shinshu Univ.) ○KURIBAYASHI, Kengo; NAKANISHI, Takashi; KIMURA, Mutsumi
- 114-36** Synthesis and Optical Properties of Pyridine-Boron Complex as an Optical Sensor for Water (Fac. Eng., Hiroshima Univ.) ○TSUMURA, Shuhei; IMAE, Ichiro; OYAMA, Yousuke
- 114-37** Fluorine-Induced Novel Synthesis of Trimethine Cyanine Dyes and Its Good Fluorescence Properties (Grad. Sch. Nat. Sci. & Tech., Gifu Univ.) ○SAITO, Yuki; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa
- 114-38** Development of Near Infrared Absorbing Dye Polymer for Its Use to Dye-Sensitized Solar Cell (Grad. Sch. Nat. Sci. & Tech., Gifu Univ.) ○YANAGAWA, Ryuta; KUBOTA, Yasuhiro; FUNABIKI, Kazumasa
- 114-39** Synthesis of Squaraine Dyes Bearing Carbamate Groups and Evaluation of Their Thermal Degradation (Grad. Sch. Eng., Osaka Pref. Univ.) ○KUWANO, Yuuki; MAEDA, Takeshi; YAGI, Shigeyuki
- 114-40** Crystal structure and optical properties of a solvated crystal of a bisazomethine dye having dipropylamino groups (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○MATSUMOTO, Shinya; MINAMI, Takaya

Chair: KIMURA, Mutsumi (15 : 50 ~ 16 : 50)

\* 15:40-15:50: interval for laptop PC connection.(114-42, 114-43, 114-44, 114-45, 114-46, 114-47)

- 114-42** Formation of Naphthalocyanine Aggregates and Their Photoacoustic Signal Intensity (Sch. Eng., Kyoto Univ.) ○IMAIZUMI, Naoto; MIKI, Koichi; OHE, Kouichi
- 114-43** A naphthalimide chemodosimeter showing fluorescence response toward hydrogen peroxide (Urban Environmental Sci., TMU) ○MOCHIDA, Wakana; SATTA, Yusuke; KUBO, Yuji
- 114-44** Preparation of AIE-active boronate dots to aim for multicolor emissive materials (Urban Environmental Sci., TMU) ○HOSHI, Mitsuki; KANEKO, Naoyoshi; KUBO, Yuji
- 114-45** Development of N-annulated perylene bisimide excimer-doped nanoemulsions (Grad. Sch. Integrated Arts Sci., Kochi Univ.) ○SEKIDA, Shinya; KAMEYAMA, Tomoe; NIKO, Yosuke; HADANO, Shingo; WATANABE, Shigeru
- 114-46** Preparation of crystalline thin films of several 2,5-diamino-3,6-dicyanopyrazine dyes having monosubstituted benzyl groups (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○KISHI, Yoko; INOUE, Kazunari; AKUNE, Yoko; MATSUMOTO, Shinya
- 114-47** Shape Controlled TiO<sub>2</sub> Particles for Foundation (Sumitomo Osaka Cement Company, Limited) ○YAKUBO, Teppei; ITO, Naoko; ITAGAKI, Tetsuro

Wednesday, March 21, AM

### Sensors

Chair: MAENOSONO, Shinya (9 : 00 ~ 10 : 00)

\* 8:50-9:00: interval for laptop PC connection.(214-01, 214-03, 214-04, 214-05, 214-06)

- 214-01\*** Development of the ultra-sensitive gas sensor using graphene (TOSHIBA CORP.; ISIR, Osaka Univ.) ○HIROHISA, Miyamoto; MITSUHIRO, Oki; KOH, Yamada; HIROKO, Nakamura; MASAKI, Atsuta; REIKO, Yoshimura; YASUSHI, Shinjo; NORIKAZU, Osada; YASUSHI, Kanai; TAKAO, Ono; KAZUHIKO, Matsumoto
- 214-03\*** Stable piezoresistive response of PDMS/CNT composite for Strain Sensing (Fac. Eng., Shinshu Univ.) ○AHUJA, Preety; AKIYAMA, Shingo; KANEKO, Katsumi
- 214-04** Evaluation of Flexibility by Strain Analysis of Bending Polymer Films (Lab. Chem. Life Sci., Tokyo Tech.) ○TOKUMITSU, Kayoko; TAGUCHI, Ryo; AKAMATSU, Norihisa; FUJIKAWA, Shigenori; SHISHIDO, Atsushi
- 214-05\*** Cell Isolation and Surface Receptor Profiling Platform for Single Leukocytes (Grad. Sch. Eng., Osaka Univ.) ○ESPULGAR, Wilfred Villariza; ONO, Tsuyoshi; CHEN, Zhu; SAITO, Masato; KOYAMA,

Shohei; TAKAMATSU, Hyota; TAMIYA, Eiichi

- 214-06<sup>#</sup>** Microfluidic Chip for Single cell Granzyme B Measurement (Grad. Sch. Eng., Osaka Univ.) ○BRIONES, Jonathan; ESPULGAR, Wilfred; YOSHIKAWA, Hiroyuki; SAITO, Masato; KOYAMA, Shohei; TAKAMATSU, Hyouta; TAMIYA, Eiichi

Chair: NAKAMURA, Kazuki (10 : 10~11 : 00)

- \* 10:00-10:10: interval for laptop PC connection.(214-08, 214-09, 214-10, 214-11, 214-12)

- 214-08** Development of Novel Fluorescent Molecular Probes for the Highly Sensitive Detection of Neurotransmitters (AIST) ○SUZUKI, Yoshio; TANAKA, Mutsuo

- 214-09<sup>#</sup>** Mid-infrared germanium-suspended-membrane photonic integrated circuits for low-cost and portable molecular fingerprinting (Fac. Sci. Eng., Toyo Univ.) ○CHENG, Zhenzhou; XIAO, Ting-hui; ZHAO, Ziqiang; ZHOU, Wen; TAKENAKA, Mitsuru; TSANG, Hon Ki; GODA, Keisuke

### Environmental and Life Science

- 214-10** Effect of Surface Modification and Cell Binding Specificity of Magnetic-Plasmon Composite Nanoparticles on Magnetic Separation Efficiency (Sch. Mat. Sci., JAIST) ○WANG, Youren; TAKAHASHI, Mari; DERRICK, Mott; MAENOSONO, Shinya

- 214-11** Fabrication of Polysaccharide Nanosheets and Their Controlled Release of Odor Molecules (Grad. Sch. of Eng., Tokai Univ.) ○TSUCHIYA, Shoko; NAKAGAWA, Atsushi; OKAMURA, Yosuke

- 214-12** Modification Effect of Ozone Fine Bubble Water Acidified with Sulfuric Acid (Ms&Seri, Kanto Gakuin Univ.) ○NAKABAYASHI, Yuki; TSUZINO, Shun; UMEDA, Yasuhi; TASHIRO, Katsuhiko; HONMA, Hideo; KOZAI, Hiroaki

### Materials for Display

Chair: SHISHIDO, Atsushi (11 : 10~12 : 10)

- \* 11:00-11:10: interval for laptop PC connection.(214-14, 214-15, 214-16, 214-17, 214-18, 214-19)

- 214-14** Improving Photochemical Properties of (AgIn)<sub>x</sub>Zn<sub>2(1-x)</sub> Nanoparticles with Formation of Core-Shell Structure (Grad. Sch. Eng., Nagoya Univ.) ○TAKIYAMA, Takayuki; KAMEYAMA, Tatsuya; KUWABATA, Susumu; TORIMOTO, Tsukasa

- 214-15** The mechanism of high-efficiency light emitting in organic electro-luminescence(EL) element with DABNA as a light-emitting molecule (Grad. Sch. Eng., Kyoto Univ.; ESICB, Kyoto Univ.) ○ITOH, Shunsuke; SATO, Tohru; HATAKEYAMA, Takuji

- 214-16** Development of composite type electrochromic device of ferrocene ionic liquid and viologen ionic liquid (Fac. Eng., Nagasaki Univ.) ○URANAKA, Kazuaki; TAHARA, Hironobu; MURAKAMI, Hiroto

- 214-17** Effect of silver ion supply to the electrode on morphologies of silver deposit and optical properties of silver deposition-based electrochromism (Fac. Eng., Chiba Univ.) ○SUGITA, Takanori; TODA, Souma; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

- 214-18** Redox behavior and Electrochemiluminescence properties of electrolyte solution containing acene derivatives. (Fac. Eng., Chiba Univ.) ○MATSUMOTO, Shogo; ICHIKAWA, Takuya; ICHIHARA, Kazuki; NAKAMURA, Kazuki; KOBAYASHI, Norihisa

- 214-19** Reflective-emissive representation by combining AC-driven blue electrochemiluminescence with silver electrodeposition based electrochromism (Fac. Eng., Chiba Univ.) KOBAYASHI, Norihisa; ○ENOMOTO, Koshin

### Wednesday, March 21, PM

#### Materials for Battery and Cell

Chair: KUNIMOTO, Masahiro (13 : 20~14 : 20)

- \* 13:10-13:20: interval for laptop PC connection.(214-27, 214-29, 214-30, 214-31)

- 214-27<sup>\*</sup>** Electrochemical properties of rechargeable batteries using Co and Mn-based MOFs including disulfide ligands as cathode materials (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○SHIMIZU, Takeshi; WANG, Heng; MATSUMURA, Daiju; YOSHIKAWA, Hirofumi

- 214-29** Synthesis and electrochemical performance evaluation of composite materials based on quinone polymers for Li-ion batteries (Grad. Sch. Eng., Tokyo Denki Univ.) ○YAMAMOTO, Junpei; YABUCHI, Naoaki; MIYASAKA, Makoto

- 214-30** Improvement of Charge/Discharge Capacity of Lithium-Air Battery by Control of Pore Size of Carbon Nanotube Electrode (Grad. Sch. Eng., Kyushu Univ.) ○MATSUMOTO, Masamichi; EGUCHI, Masato; ISHIHARA, Tatsumi; FUJIGAYA, Tsuyohiko

- 214-31<sup>#</sup>** Withdrawn

Chair: HORIKE, Satoshi (14 : 30~15 : 00)

- \* 14:20-14:30: interval for laptop PC connection.(214-34, 214-36)

- 214-34<sup>\*</sup>** Influence of Ionomer and Carbon Support for Improved PEMFC Performance at Extended Temperature (Grad. Sch. Eng., Kyushu Univ.) ○NAKAYAMA, Rei; CHOI, Euji; FUJIGAYA, Tsuyohiko

- 214-36<sup>#</sup>** Optimization of flow type reactor for efficient extraction of B for production of high purity silica (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○YELCHUR, Akash Venkata; MIMURA, Masaki; KUNIMOTO, Masahiro; FUKUNAKA, Yasuhiro; HOMMA, Takayuki

## Room P Sports Hall Arena

Tuesday, March 20, AM

(10 : 00~11 : 30)

### Physical Organic Chemistry -Structures and Properties-

#### Stereochemistry

- 1PA-001** Effect of cation- $\pi$  interaction in nucleophilic addition reaction to 7-Benzonorbornenone (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○MAEDA, Yuki; YAMADA, Shinji

- 1PA-002** Change in CD Spectra on the Basis of the Change in the Conformer Equilibrium of Molecular Balances by Addition of an Acid (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○OMATA, Riko; YAMAMOTO, Natsuo; MORI, Tadashi; YAMADA, Shinji

- 1PA-003** Syntheses of open-cage fullerene with C-fulleroid by various oxidant (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○MIZUNUMA, Ryo; SUZUKI, Tsukasa; KABE, Yoshio

- 1PA-004** Regioselective Hydroamination of Open-Cage Ketolactam Derivatives of C<sub>60</sub> and Water Encapsulation (Grad. Sch. Fac. Sci., Kanagawa Univ.; IRC3, AIST) TANAKA, Teruhiko; ○MORIMOTO, Kohei; TAKAHASHI, Toshikazu; FUKAYA, Norihisa; CHOI, Jun-chul; KABE, Yoshio; SUZUKI, Ayumi

#### Novel $\pi$ -conjugated system

- 1PA-005** Synthesis and properties of star shaped molecule possessing imidazo [1,2-a]pyridine (Chiba Inst. of Tech.) ○TAKESHI, Akimoto; SHIMASAKI, Toshiaki

- 1PA-006** Luminescence Change Found in Complexation of Donor-acceptor Dyes with Lectins (NIT, Kurume College) ○HIGUCHI, Ayato; KOGA, Sawako; ISHI-I, Tsumoto

- 1PA-007** Synthesis and properties of star-shaped trifluorenylbenzene derivative terminated with electron donating or electron withdrawing groups (Chiba Inst. of Tech.) ○SUZUKI, Shuhei; SHIMASAKI, Toshiaki; TERAMOTO, Naozumi; SHIBATA, Mitsuhiro

- 1PA-008** Crystal Structures of 3-Methylpyrrolo[2,3-b]tropolone and Its Copper (II) Complex (Fac. Eng., Hokkai Gakuen Univ.; IMCE, Kyushu Univ.) ○KUBO, Kanji; MATSUMOTO, Taisuke; MORI, Akira

- 1PA-009<sup>#</sup>** Synthesis and Properties of Phenanthrene-fused Dehydro[28]- and [36]annulenes (Sch. Eng., The Univ. of Shiga Pref.) ○KATO, Shin-ichiro; KUMAGAI, Ryo; HOSSAIN, Md. Zakir; NAKAMURA, Yosuke

- 1PA-010** Synthesis of new bowl-shaped  $\pi$ -conjugated compounds composed of thiophene and azulenes (IMCE, Kyushu Univ.; Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○HIRATA, Takuma; TERAOKA, Takaaki; MURAFUJI, Toshihiro; GOTO, Kenta; TANI, Fumito

- 1PA-011** Synthesis of  $\pi$ -extended polycyclic aromatic hydrocarbons with helical topology using bay-region-selective annulation (Grad. Sch. Eng., Kyoto Univ.) ○ABE, Shinya; HIROSE, Takashi; MATSUDA, Kenji

- 1PA-012** Synthesis and properties of helicene triptycenes (Grad. Sch. Sci., Osaka Pref. Univ.) ○KAWANISHI, Koki; TAKAHASHI, Yusuke; TSURUSAKI, Akihiro; KAMIKAWA, Ken

- 1PA-013** Synthesis and properties of new helicene compound including orthoquinone and azulenes (IMCE, Kyushu Univ.; Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○KAJIMURA, Hiroto; MURAFUJI, Toshihiro; GOTO, Kenta; TANI, Fumito

- 1PA-014** Synthesis and Theoretical Studies of Hexapole Helicene bearing [5] and [7]Helicene Substructures (Graduate School of Science, Osaka Prefecture University) ○HOSOKAWA, Tomoka; ASADA, Toshio; TSURUSAKI, Akihiro; KAMIKAWA, Ken

- 1PA-015** Synthesis of a stable trimethylenemethane derivative composed of fluorenyl units. (Sch. Sci., Osaka Univ.) ○SUGA, Yuki; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi

- 1PA-016<sup>#</sup>** Synthesis of S-shaped diaza [10] helicene by palladium-catalyzed double dehydrogenative C-H coupling reaction (Grad. Sch. Sci., Osaka Pref. Univ.) ○KAWASHIMA, Takahiro; TAKAHASHI, Yusuke; TSURUSAKI, Akihiro; KAMIKAWA, Ken

- 1PA-017<sup>#</sup>** Synthesis and Properties of 1,1',9,9',10,10'-biphenoxazine (Grad. Sch. Sci., Osaka City Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○MIYAMAE, Takayuki; HARAGUCHI, Makoto; SUZUKI, Shuichi; TACHI, Yoshimitsu; KOZAKI, Masatoshi; OKADA, Keiji

- 1PA-018<sup>#</sup>** Syntheses and Solid State Absorption Spectra of Dithiacyclopentene



- Tetramers (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○UEDA, Kazumasa; CHUJO, Koki; KUSANAGI, Hiroki
- 1PA-019** Derivatization of triphosphasumanenes and fabrication of anisotropic self-assembled monolayer (Grad. Sch. Sci., Eng., Saitama Univ.) ○SUDA, Yuki; FURUKAWA, Shunsuke; SHIDARA, Yusaku; FUJIMORI, Atsuhiko; SAITO, Masaichi
- 1PA-020** Development of spin transfer type C-C bond formation reactions to synthesize polycyclic aromatic hydrocarbons (Grad. Sch. Sci., Osaka Univ.) ○OKUDA, Tomoki; HIRAO, Yasukazu; NISHIUCHI, Tomohiko; KUBO, Takashi
- 1PA-021<sup>#</sup>** Alkyl Chain Length Dependent 2D-Assembled Structure of Hexaazatriphenylene Derivatives (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○ONO, Toshinori; HINOKIMOTO, Akira; TANAKA, Daisuke
- 1PA-022** Synthesis and Properties of Naphthalene-bridged Bis(cyanostilbene) Derivatives (Fac. Eng., FUT; Org. Educ.FUT) ○OGAWA, Takuro; KURATA, Hiroyuki
- 1PA-023** Synthesis of Carbazole Dimers Annulated in Various Manners (Grad. Sch. Sci. Tech., Gunma Univ.) ○YUMOTO, Keita; YAMAMOTO, Koji; NAKAMURA, Yosuke
- 1PA-024** Synthesis of  $\pi$ -Extended Corannulene (Grad. Sch. Mat. Sci., NAIST) ○ASATSUKE, Koshiro; ARTANI, Noki; YAMADA, Hiroko
- 1PA-025<sup>#</sup>** Systematic Synthesis of Spiro-Type Heterasumanenes and Their Structures and Properties (Grad. Sch. Sci., Eng., Saitama Univ.) ○YAMAGISHI, Ken; HAYASHI, Keisuke; FURUKAWA, Shunsuke; SAITO, Masaichi
- 1PA-026** Synthesis of new thiophene-fused porphycenes (IMCE, Kyushu Univ.) ○YANO, Ryosuke; KAWANO, Yuta; GOTO, Kenta; TANI, Fumito
- 1PA-027** Synthesis of nitrogen-doped large acene precursors (Grad. Sch. Mat. Sci., NAIST) ○SATO, Shizuka; HAYASHI, Hironobu; YAMADA, Hiroko
- 1PA-028<sup>#</sup>** Synthesis and Physical Properties of Congested Anthracene Dimer with Axial chirality (Sch. Sci., Osaka Univ.) ○YAMANO, Masashi; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi
- 1PA-029** Synthesis and oxidative annelation of V-shaped oligoarenes having multiple 9-phenylanthracene units (Sch. Sci., Tokyo Tech.) ○OTA, Seiya; TOYOTA, Shinji; TSURUMAKI, Eiji
- 1PA-030** Control of the Photophysical Properties by Through-Space Conjugated System and Self-Assembly of Fluorescent Calix[4]arene (Fac. Eng., Univ. of Yamanashi) ○TSUJI, Naoya; TAKAHASHI, Masaki; OBATA, Makoto
- 1PA-031** Synthesis and Properties of Phenothiazine Derivatives Bearing Various Aromatics via Ethynylene Spacers at 1,9-Positions (Sch. Sci. Tech., Gunma Univ.) ○SEKI, Katsuya; YAMAMOTO, Kouji; NAKAMURA, Yosuke
- 1PA-032** Synthesis of azaacene derivatives via  $\alpha$ -diketone type heptacene precursors (Grad. Sch. Mat. Sci., NAIST) ○KATO, Yuki; HAYASHI, Hironobu; YAMADA, Hiroko
- 1PA-033** Synthesis and structures of 1,8-anthrylene acyclic and cyclic oligomers (Sch. Sci., Tokyo Tech.) ○FUJISE, Kei; SAIBARA, Toyoaki; TSURUMAKI, Eiji; IWANAGA, Tetsuo; TOYOTA, Shinji
- 1PA-034<sup>#</sup>** Synthesis and property of  $N,N'$ -diaryl-2,7-diazapyrenium ions. (Sch. Eng., Univ. of Hyogo) ○MORINAGA, Kouhei; KATAYAMA, Koji; NISHIDA, Jun-ichi; KAWASE, Takeshi
- 1PA-035** Synthesis of Dibenzo[*b,e*]phosphindolizine-4-sulfide (Grad. Sch. Sci., Osaka Pref. Univ.) ○MATSUMOTO, Hiroyo; TSURUSAKI, Akihiro; KAMIKAWA, Ken
- 1PA-036<sup>#</sup>** Syntheses and Optical Properties Associated with Structural Recombination of Polyaryl Compounds Incorporating Imidazole Ring (Grad. Sch. Eng., Chiba Univ.) ○TSUJII, Ryo; AKAZOME, Motohiro; MATSUMOTO, Shoji
- 1PA-037<sup>#</sup>** Characterization and formation mechanism of quinacridonequinone BF<sub>2</sub> complex (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○MORIYA, Kouichirou; SHIMADA, Ryohei; ONO, Katsuhiko
- 1PA-038** Synthesis and Properties of Acyclic and Macrocyclic Compounds Composed of Pyrimidine and Phenothiazine (Grad. Sch. Sci. Tech., Gunma Univ.; Sch. Eng., The Univ. of Shiga Pref.) ○OSHIMA, Yuki; KATO, Shin-ichiro; YAMAMOTO, Koji; NAKAMURA, Yosuke
- 1PA-039<sup>#</sup>** Synthesis and Optical Properties of Benzo[*d*][1,3]thiazinium Salts by Iodo-cyclization Reaction (Grad. Sch. Eng., Chiba Univ.) ○KAWAMURA, Kentaro; AKAZOME, Motohiro; MATSUMOTO, Shoji
- 1PA-040<sup>#</sup>** Synthesis and Properties of (1,3-Diketono)boron Difluoride Derivatives Having  $\pi$ -Extended Triphenylamine (Grad. Sch. Eng., Nagoya Inst. of Tech.) ○SAKURA, Yuki; BANNO, Keisuke; ONO, Katsuhiko
- 1PA-041** Synthetic Study of Diaryl(benzimidazolyl)boranes via Intramolecular Cyclization Reactions Utilizing Reactivity of the Amino Group (Grad. Sch. Sci. Eng., Univ. of Toyama) ○KAWAGUCHI, Shusei; YOSHINO, Junro; HAYASHI, Naoto; HIGUCHI, Hiroyuki
- 1PA-042<sup>#</sup>** Synthesis, Properties, and Self-association of 2,4,5,7,9,10-Hexaethynylpyrenes (Sch. Eng., The Univ. of Shiga Pref.) ○KANO, Haruka; IRISAWA, Ken-ichi; KATO, Shin-ichiro; KITAMURA, Chitoshi; NAKAMURA, Yosuke
- 1PA-043<sup>#</sup>** Investigation on optical resolution of diporphyrin with chrysene-like bridge (ADRES, Ehime Univ.) ○AKINARI, Ryoya; KAWAMOTO, Naoki; MORI, Shigeki; TAKASE, Masayoshi; OKUJIMA, Tetsuo; UNO, Hidemitsu
- 1PA-044** Synthesis of regioselectively <sup>13</sup>C isotope-labeled  $\pi$ -electronic organic compounds for the development of triplet DNP method (Fac. Eng., Aichi Inst. of Tech.; Fac. Eng., Aichi Inst. of Tech.) ○OSADA, Koji; NAKAMURA, Yushi; ICHIGO, Naoki; NEGORO, Makoto; KAGAWA, Akinori; KITAGAWA, Masahiro; MURATA, Tsuyoshi; MORITA, Yasushi
- 1PA-045** Synthesis and fluorescence Properties of Water-soluble Ladder-type Stibenes Bridged with Phosphinic Acids (Graduate School of Science, Nagoya University) ○NAKASHIMA, Natsuki; FUKAZAWA, Aiko; OGASAWARA, Hiroaki; ITO, Emi; LIN, Chi-yen; YAMAGUCHI, Shigehiro
- 1PA-046<sup>#</sup>** Photophysical properties of a newly designed  $\lambda^5$  phosphinine (Grad. Sch. Sci., Eng., Ehime Univ.) ○HASHIMOTO, Naoki; OHTA, Hidetoshi; HAYASHI, Minoru
- 1PA-047** Fluoride-Ion-Responsive Emission Color Changes and Ratiometric Viscosity-Sensitivity of a Fluorescent Urea Derivative (Fac. Eng., Univ. of Yamanashi) ○ENAMI, Yusuke; TAKAHASHI, Masaki; OBATA, Makoto
- 1PA-048** Studies on the Synthesis of Multi-Radicals Substituted Benzenes with Neighboring Positions (Grad. Sch. Sci., Osaka Univ.) ○MORIWAKI, Makyo; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi
- 1PA-049<sup>#</sup>** Syntheses, structures and properties of novel alicyclic hydrocarbon-substituted nitroxide radicals. (Coll. Hum. Sci., Nihon Univ.; Grad. Sch. Integrated Basic Sci., Nihon Univ.) ○IKEZAKI, Takumi; OGIHARA, Kazuya; ONODERA, Yuya; IWAHORI, Fumiyasu
- 1PA-050** Synthesis and physical properties of mixed valence salts of trioxotriangulene derivatives with metal ion (Fac. Eng., Aichi Inst. of Tech.) ○KARASAWA, Mikoto; MURATA, Tsuyoshi; MORITA, Yasushi
- 1PA-051<sup>#</sup>** Synthesis and Properties of Trioxyltriphenylamine Monothio- and Monoimino- Analogues (Grad. Sch. Sci., Osaka City Univ.) ○YOKOYAMA, Naoki; TANAKA, Nobuaki; SUZUKI, Shuichi; KOZAKI, Masatoshi; SHIOMI, Daisuke; SATO, Kazunobu; TAKUI, Takeji; OKADA, Keiji
- 1PA-052<sup>#</sup>** Synthetic Study on a new Phenalenyl Radical Derivative with Trifluoromethyl Groups (Grad. Sch. Sci., Osaka Univ.) ○TERADA, Kazuki; NISHIUCHI, Tomohiko; HIRAO, Yasukazu; KUBO, Takashi
- 1PA-053** Synthesis and Physical Properties of Trioxotriangulene Derivatives having Chiral Oxazoline Groups (Fac. Eng., Aichi Inst. of Tech.) ○NISHIKAWA, Kouhei; MURATA, Tsuyoshi; MORITA, Yasushi
- 1PA-054** Organic Rechargeable Batteries Using Molecular Conductors (DCNQI)<sub>2</sub>M as Cathode Active Materials (Osaka Electro-Communication Univ.) ○FUJITA, Kazuhiko; AONUMA, Shuji
- 1PA-055** Fabrication and Characterization of Organic Field-Effect Transistors Using BDH-TTP and Its Analogs (Grad. Sch. Mat. Sci., Univ. of Hyogo; Coll. Sci., Ibaraki Univ.) ○NISHIMOTO, Hiroshi; KADOYA, Tomofumi; KUBO, Kazuya; TAJIMA, Hiroyuki; NISHIKAWA, Hiroyuki; YAMADA, Jun-ichi

## Photo physical properties

- 1PA-056** Design and Properties of Strong Blue Emissive Donor-Acceptor Type Carbostryl Derivatives (Osaka Kyoiku Univ.) ○HORI, Kazushige; YANI, Keita; HATANAKA, Atsushi; KODAMA, Hidehiko
- 1PA-057<sup>#</sup>** Synthesis of DNA probes containing photo-sensitizer and caged molecule (Sch. Life Sci. Tech., Tokyo Tech.) ○TAKESHITA, Leo; MASAKI, Yoshiaki; SEIO, Kohji
- 1PA-058<sup>#</sup>** Kinetic Analysis of Photon Upconversion by Using Intramolecular Triplet-Triplet Annihilation (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○KANO, Masaya; MATSUI, Yasunori; OHTA, Eisuke; IKEDA, Hiroshi
- 1PA-059<sup>#</sup>** Synthesis of naphthalimide derivatives with extended conjugation and their interaction with DNA (Coll. Sci. Tech., Nihon Univ.) ○YAMANO, Tae; OTSUKI, Joe; SUGAWA, Kosuke
- 1PA-060** Photochemical behavior of 3-(2-benzothiazolyl)coumarin derivatives having a nitro group (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○IKUTA, Naoya; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 1PA-061** Synthesis and Spectroscopic Properties of Acetylene-Substituted Pentacene Assemblies (Fac. Sci. Tech., Keio Univ.) ○SUZUKI, Yudai; SAKAI, Hayato; HASOBE, Taku
- 1PA-062** Quantification of substituent effects of multi-substituted phenyl groups: determination of apparent  $\sigma_p$  values based on the imidazopyrazinone chemiluminescence systems (Fac. Sci., Toho Univ.) ○NOJO, Yuta; HIGASHI, Shoko; SASAKI, Kaname; SAITO, Ryota
- 1PA-063<sup>#</sup>** Optical properties of (3,6-di-*tert*-butylcarbazole)-1-azobenzenes substituted with an electron withdrawing group (Osaka Kyoiku Univ.) ○MORIMOTO, Mai; TANEDA, Masatsugu
- 1PA-064** Circularly polarized luminescence (CPL) of chiral bipyrene fluorophores (Fac. Sci. Eng., Kindai Univ.; Grad. Sch. Sci. Eng., TMU) ○TAKAMURA, Kenya; KAJI, Daiki; RAJBANGSHI, Subas; MIMURA, Yuki; SUGIURA, Ken-ichi; IMAI, Yoshitane
- 1PA-065** Preparation of chiral biarylhydrogen phosphate-metal hybridised luminophore emitting circularly polarized luminescence (CPL) (Fac. Sci. Eng., Kindai Univ.; ORIST; NIMS; Grad. Sch. Mat. Sci., NAIST) ○NAKAJIMA, Gaku; HARA, Nobuyuki; NAKANISHI, Syoma; SHIZUMA, Motohiro; TAJIMA, Nobuo; FUJIKI, Michiya; IMAI, Yoshitane
- 1PA-066** Synthesis and Structural Properties of Peptide-Substituted Pentacene Derivatives (Fac. Sci. Tech., Keio Univ.) ○SATO, Shin; SAKAI, Hayato; HASOBE, Taku

- 1PA-067** Mechanochromic Luminescence of *N*-Substituted Phenanthroimidazolylbenzothiadiazoles (Grad. Sch. Eng., Yokohama Natl. Univ.) ITO, Suguru; ○TAKAHASHI, Shohei; NAGAI, Sayaka; UBUKATA, Takashi; ASAMI, Masatoshi
- 1PA-068** Synthesis of *N*-Aryl Naphthalimide Substituted with Alkyl Chain and Consideration of Its Fluorescence Behaviour (Dept. of Chem. & Mater. Sci., NIT, Gunma College) ○SAWAGUCHI, Reo; NAKAJIMA, Satoshi
- 1PA-069** Synthesis and Evaluation of Aggregation Induced Emitting Compounds with Star shaped frameworks. (Tokyo Denki Univ.) ○NAGAHORI, Tomomi; ADACHI, Naoya

### Molecular recognition

- 1PA-070** Synthesis of Novel  $\alpha$ -Cyclodextrin Dimers Bearing Multiple Linkers and Examination of their Inclusion Ability (Sch. Eng., Osaka Univ.) ○KAZAMA, Ai; IGUCHI, Hitomi; SHIGEMITSU, Hajime; KIDA, Toshiyuki
- 1PA-071<sup>#</sup>** Inclusion and Orientation of Guest Molecules in Columnar Liquid Crystals of Macrocycles (Sch. Sci., Nagoya Univ.) ○TOMITA, Kyohei; KAWANO, Shin-ichiro; TANAKA, Kentaro
- 1PA-072<sup>#</sup>** Molecular Recognition Properties of a Tetrathiafulvalene Derivative Containing Fused Crown Ether Rings for Basic Amino Acid Derivatives (Fac. Sci., Shinshu Univ.) ○TANIGUCHI, Yumika; OHTA, Akira
- 1PA-073<sup>#</sup>** Construction of Porous Frameworks with Assembled Hydrophilic Groups and Preparation of Nanoclusters (Grad. Sch. Eng., The Univ. of Tokyo) ○MORITA, Eri; DOMOTO, Yuya; FUJITA, Makoto
- 1PA-074** Guest Recognition and Structural Conversion of Macrocyclic Dinuclear Cobalt(III) Metallohost Having Bifunctional Ligands at the Axial Coordination Sites (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○NAGASHIMA, Koki; SAKATA, Yoko; AKINE, Shigehisa
- 1PA-075<sup>#</sup>** Synthesis of a new pyridine-benzimidazole based ligand and application of its Ni(II) complex to the identification of chiral carboxylates (Fac. Eng., Yamagata Univ.; Grad. Sch. Sci., Eng., Yamagata Univ.) ○KUBOTA, Atsuko; ABE, Chihiro; KATAGIRI, Hiroshi
- 1PA-076** Synthesis of a Guanidine Having an Anthracene Unit (KIT) ○OOE, Masashi; MURA, Ryosuke; KUSUKAWA, Takahiro
- 1PA-077** Synthesis and metal ion recognition properties of noncyclic polyether compounds with aromatic amide termini (Grad. Sch. Sci. Eng., Tokyo Denki Univ.) ○MAEDA, Kazuya; ADACHI, Naoya
- 1PA-078<sup>#</sup>** Synthesis and Properties of a Bis(1,3-benzodithiole)-type Redox-responsive Host Bearing  $\pi$ -Acceptor Units for a Guest Recognition Site (Fac. Sci., Shinshu Univ.) ○SAKURAI, Daisuke; OHTA, Akira
- 1PA-079** Synthesis of a Diamidine Having 9-(Diphenylmethylene)fluorene Unit (KIT) ○TSUJIMOTO, Shinya; TESSEMA, Eyob Ashenafi; HOSHIHARA, Yuki; KUSUKAWA, Takahiro

### Supramolecules

- 1PA-080** Crystallization of 3-[4-(Diethylboryl)phenyl]pyridine (Fac. Health Sci., SUMS; Grad. Sch. Sci., Nagoya Univ.) ○WAKABAYASHI, Shigeharu; OHKI, Yasuhiro
- 1PA-081** Construction of a New Metallonanobelt by Using a Rigid Bent Ligand Having a Quinoxaline Scaffold (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○FURUKAWA, Yoshiki; SAKATA, Yoko; AKINE, Shigehisa
- 1PA-082** Synthesis of bis(tetra-armed cyclen)s having chromophore as side-arms and structures of their silver(I) complex (Fac. Sci., Toho Univ.) ○KANO, Masaya; IWASE, Mike; KACHI-TERAJIMA, Chihiro; IKEDA, Mari; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PA-083** Synthesis of tri- and penta(tetra-armed cyclen)s and Structures of their Metal Complexes (Graduate School of Science, Toho University) ○NEMOTO, Fumika; IWASE, Mike; IKEDA, Mari; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PA-084<sup>#</sup>** Structural analysis of Ag<sup>+</sup> complex with L-shaped tris(tetra-armed cyclen) (Fac. Sci., Toho Univ.) ○HORITA, Hiroki; IKEDA, Mari; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PA-085** Inclusion of alkyl nitriles by a styrylmethyl-armed cyclen/Ag<sup>+</sup> complex (Fac. Sci., Toho Univ.) ○TEMMA, Honoka; KAMO, Shinji; IWASE, Mike; IKEDA, Mari; KUWAHARA, Shunsuke; HABATA, Yoichi
- 1PA-086** Helical Lanthanide Complexes Having Thiophene Oligomer (Fac. Sci., TUS; PRESTO, JST) ○SUKO, Natsumi; YUASA, Junpei
- 1PA-087** Metal-Driven Assembly of Bridging Ligands with Long Alkyl Chains (Fac. Sci., TUS; PRESTO, JST) ○KIRIAKE, Kota; YUASA, Junpei
- 1PA-088<sup>#</sup>** Composition of the boric acid sensor using the spiropyran derivative (Grad. Sch. Eng., KIT) ○TAMAMUSHI, Yuta; TSUGE, Akihiko; ARAKI, Koji; TOYOSE, Yasushi
- 1PA-089<sup>#</sup>** Elucidation of Eu (III) complex with crown ether site and its functional evaluation (Grad. Sch. Eng., KIT) ○MATONO, Kyosuke; ARAKI, Kouji; TUGE, Akihiko; TOYOSE, Yasushi
- 1PA-090<sup>#</sup>** Functional evaluation of cyclic hosts with boric acid recognition ability (Grad. Sch. Eng., KIT) ○AKINO, Yasuhiro; ARAKI, Koji; TOYOSE, Yasushi; TUGE, Akihiko
- 1PA-091** Synthesis of Cyclodextrin Derivatives with Seven Amide Groups and Its Unique Molecular Structure Formed by Hydrogen Bonds (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; TREMS, Univ. of Tsukuba) ○YONEMURA,

- Sota; NAKAMURA, Takashi; NABESHIMA, Tatsuya
- 1PA-092** Syntheses and Properties of New Rotaxanes Having a Wheel Based on Macrocyclic Dinuclear Metallohost Containing Various Kinds of Metal Ions (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.) ○KAMEZAWA, Mayu; KOBAYASHI, Seiya; SAKATA, Yoko; AKINE, Shigehisa
- 1PA-093** Preparation of Dumbbell-type Nanostructure by the Use of Bisresorcin[4]arene (Coll. Industrial Tech., Nihon Univ.) SHIMIZU, Shoichi; ○KUMAGAI, Takuya
- 1PA-094** Structure of inclusion complexes of cylindrical cryptand based on dibenzo-26-crown-8 (Fac. Sci., Toho Univ.) ○MATSUMOTO, Yuka; ABO, Kinsuke; IKEDA, Mari; HABATA, Yoichi; KUWAHARA, Syunsuke
- 1PA-095<sup>#</sup>** Construction of porous layered assembly of sterically-crowded, hexagonally-networked frameworks (Grad. Sch. Eng., Osaka Univ.) ○HISAKI, Ichiro; IKENAKA, Nobuaki; TSUZUKI, Seiji; TOHNAI, Norimitsu
- 1PA-096** Control of aggregation properties of amphiphilic chiral salen complexes having metallohelix scaffold (Grad. Sch. Nat. Sci. Technol., Kanazawa Univ.; NIMS) ○NOMURA, Keisuke; SAKATA, Yoko; MORI, Taizo; NAKANISHI, Waka; ARIGA, Katsuhiko; AKINE, Shigehisa
- 1PA-097** Studies on Synthesis and Dynamic Behaviors of an Amphiphilic Dipyrrolylbenzene Derivatives Bearing Chiral Substituent Groups in Vortex Flows (Grad. Sch. Sci., Kobe Univ.) ○YANAI, Masaki; FURUSHO, Yoshio; TSUDA, Akihiko
- 1PA-098<sup>#</sup>** Control of supramolecular polymerization in microflow space (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) ○KITAMURA, Akitomo; MATSUO, Shiori; NUMATA, Munenori
- 1PA-099** Control of intramolecular interaction in the dimerized metalloporphyrin (Grad. Sch. Sci., TUS) ○WADA, Kohei; YOSHIMOTO, Mizuki; ENOMOTO, Masaya
- 1PA-100** Synthesis of 5,15-diarylporphyrin and investigation of its aggregation behavior (Dept. of Chem. & Mater. Sci., NIT, Gunma College) ○TANAKA, Masato; NAKAJIMA, Satoshi
- 1PA-101** Self-aggregates of amphiphilic chlorophyll derivatives possessing acetyl groups at the 3- and 8-positions (Fac. Sci. Tech., Ryukoku Univ.; Grad. Sch. Life Sci., Ritsumeikan Univ.) ○HOSOMI, Naohiro; SASAKI, Takaaki; TAMIAKI, Hitosi; MIYATAKE, Tomohiro
- 1PA-102<sup>#</sup>** Self-assembly of metal-peptide complexes via sequence design of proline and glycine combinations. (Grad. Sch. Eng., The Univ. of Tokyo) ○SABUROMARU, Yuta; AKINAGA, Shuji; SAWADA, Tomohisa; FUJITA, Makoto
- 1PA-103** Synthesis of Acridine Derivatives Having Metal Binding Affinity (Fac. Sci., TUS; PRESTO, JST) ○KOIDE, Shota; YUASA, Junpei
- 1PA-104** Supramolecular Self-assembly of Helical Metal Complexes Bearing a Tetrapodal Scaffold (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○MOROZUMI, Takuma; MATSUOKA, Ryota; NABESHIMA, Tatsuya
- 1PA-105** Construction of Supramolecular Liquid-Crystalline Complexes through Multi-Component Self-Assembly (Grad. Sch. Eng., The Univ. of Tokyo; WPI-AIMR, Tohoku Univ.) ○UCHIDA, Junya; YOSHIO, Masafumi; SATO, Sota; YOKOYAMA, Hiroyuki; FUJITA, Makoto; KATO, Takashi
- 1PA-106<sup>#</sup>** Development of Liquid-Crystalline Squaramides (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.; Grad. Sch. Eng., The Univ. of Tokyo; IBB, Tokyo Med. and Dental Univ.) ○PARK, Soyoung; URUSHIBARA, Ko; UCHIDA, Junya; KAGECHIKA, Hiroyuki; KATO, Takashi; TANATANI, Aya
- 1PA-107** Synthesis of Fe (II), Cu (I) complexes with Metal Binding Properties (Grad. Sch. Sci., TUS; PRESTO, JST) ○MIYAZAWA, Haruka; YUASA, Junpei
- 1PA-108** Construction of Linear and Cyclic Daisy Chains based on Imine-bridged Rotaxanes (Fac. Sci., TUS) ○MOROHASHI, Shintaro; SUGINO, Hiroyoshi; ONO, Kosuke; KAWAI, Hidetoshi
- 1PA-109** Construction of a Molecular Ratchet Consisting of Optically and Thermally Responsive [2]Rotaxane (Grad. Sch. Eng. Sci., Osaka Univ.) HIROSE, Keiji; ○ONODA, Chie; TAKABAYASHI, Ryo; OKADA, Shizuka; TOBE, Yoshito
- 1PA-110** Construction of novel on-off gelling system utilizing dynamic covalent bonding (KIT) ○TAKEMORI, Yuki; MORIGUCHI, Tetsuji; ARAKI, Koji; TSUGE, Akihiko
- 1PA-111** Design of a bent  $\beta$ -sheet conformation via D-amino acid and its self-assembly (Grad. Sch. Eng., The Univ. of Tokyo) ○HISADA, Yutaro; YAMAGAMI, Motoya; SAWADA, Tomohisa; FUJITA, Makoto
- 1PA-112<sup>#</sup>** Charged oligomer enhancing the activity of protic catalyst in membranes of a model protocell. (Fac. Sci., Kanagawa Univ.) ISHII, Ibuki; NISHIYAMA, Hitoki; MIURA, Kotoe; ○SUZUKI, Kentaro; SUGAWARA, Tadashi
- 1PA-113** Coordination-driven Folding and Assembly of Oligopeptides with a Hydroxyl Group Side Chain (Fac. Eng., The Univ. of Tokyo) ○TAMIYA, Kenki; SAITOU, Ami; SAWADA, Tomohisa; FUJITA, Makoto
- 1PA-114<sup>#</sup>** Kinetic Control by Additives in Non-Equilibrium Supramolecular Polymerization of Pyrene-substituted Diamides (Grad. Sch. Sci., Nagoya Univ.; WPI-ITbM, Nagoya Univ.) ○TAKAMATSU, Aiko; MATSUMOTO, Kentaro; OGI, Soichiro; YAMAGUCHI, Shigehiro
- 1PA-115** Systematic Synthesis of  $\beta$ -Diketone Ligands by Combination of Diels-Alder and Claisen Condensation Reactions (Fac. Sci., TUS; PRESTO, JST) ○KASHIWAGI, Sota; YUASA, Junpei

## Nanostructures

- 1PA-116<sup>#</sup>** Synthesis and properties of molecular architectures based on silane catecholite bond (Fac. Sci., Kanagawa Univ.) ○KAWAKAMI, Yoshiteru; OKAMOTO, Kazuhiko; NIKAIIDO, Shingo; KABE, Yoshio
- 1PA-117** Synthesis of undecacene precursors (Grad. Sch. Mat. Sci., NAIST) ○OTOMO, Satoru; HAYASHI, Hironobu; YAMADA, Hiroko
- 1PA-118** Synthesis, structure, and properties of giant macrocyclic oligothiophene 14-mer (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○MISHIMA, Keigo; SHIMIZU, Hideyuki; OTANI, Hiroyuki; IYODA, Masahiko
- 1PA-119** Supramolecular syntheses by alkene metathesis reaction of polyalkenyl compounds as dynamic covalent chemistry (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○AMAKASU, Toru; SATO, Yuto; KABE, Yoshio
- 1PA-120** Construction of Benzofuran-based Macrocycles with a Hydrophilic Pore (Fac. Sci., TUS) ○FUJISAKI, Kohei; MASEGUCHI, Fuzuki; ONO, Kosuke; KAWAI, Hidetoshi
- 1PA-121<sup>#</sup>** Tuning the topology of one dimensional supramolecular polymers by modification of the  $\pi$ -conjugated moiety (IGPR, Chiba Univ.) ○KITAMOTO, Yuichi; PAN, Ziyang; PRABHU, Deepak D.; YAGAI, Shiki
- 1PA-122<sup>#</sup>** Study on Synthesis of Amphiphilic Two-Dimensional Polymer by Photocycloaddition at Air/Water Interface (Grad. Sch. Eng. Sci., Osaka Univ.; Sch. Sci. Eng., Meiji Univ.; ISIR, Osaka Univ.) ○IRITANI, Kohei; UNO, Yuki; KUNIMOTO, Kazuki; TAHARA, Kazukuni; HIROSE, Keiji; TOBE, Yoshito
- 1PA-123<sup>#</sup>** Two-Dimensional Self-Assembly of Alkoxyated Dehydrobenzo[14]annulene Derivative at the Liquid/Solid Interfaces (Sch. Sci. Eng., Meiji Univ.) ○ANZAI, Masaru; TAHARA, Kazukuni
- 1PA-124** Encapsulation of a Diarylethene Derivative with Permethylenated  $\gamma$ -Cyclodextrin Toward STM Observation of Molecular Conductance Switching (Grad. Sch. Eng., Kyoto Univ.) ○SHIRAKAMI, Kento; HIROSE, Takashi; MATSUDA, Kenji
- 1PA-125<sup>#</sup>** Formation of supramolecular nanosheet self-assembled from DNA and inosinic acid-bearing amphiphilic molecule (NARO) ○IWAURA, Rika
- 1PA-126<sup>#</sup>** Periodic Chemical Functionalization of Graphite Surfaces Using Porous Self-Assembled Monolayers Formed by Intermolecular Hydrogen Bonds as Templating Masks (Grad. Sch. Eng. Sci., Osaka Univ.; Sch. Sci. Eng., Meiji Univ.; PRESTO, JST; Department of Chemistry, KU Leuven; ISIR, Osaka Univ.) ○KUBO, Yuki; TAHARA, Kazukuni; HIRSCH, Brandon E.; HIROSE, Keiji; DE FEYTER, Steven; TOBE, Yoshito
- 1PA-127** High pressure effect on a synthetic membrane with isoprenoid module in hydrophobic alkyl chain (Fac. Eng., Oita Univ.) ○ABE, Yudai; NOBUOKA, Kaoru; OHGA, Yasushi; ISHIKAWA, Yuichi
- 1PA-128** Organic pigments derived from ferulic acid with improved thermostability (WINTEC) ○MORI, Megumi; SAOMOTO, Hitoshi; MAEDA, Takuya; TOKINO, Seiji
- 1PA-129** Band structure analysis of nanographene by Photoemission Yield Spectroscopy in Air (Adv. Mater. Dev. Sec., Tokyo Metropolitan Ind. Tech. Res. Inst.) ○FUJIMAKI, Yasuto; WATANABE, Hiroto; HAYASHI, Kosei; OGUMI, Keisuke

## Physical Organic Chemistry -Reaction Mechanism-

- 1PA-131<sup>#</sup>** Synthesis reaction and photophysical properties of *N*-substituted 1H-benz[*de*]isoquinolinium ion (Grad. Sch. Eng., Univ. of Hyogo) ○KATAYAMA, Koji; NISHIDA, Jun-ichi; KAWASE, Takeshi
- 1PA-132<sup>#</sup>** Electron-Transfer Promoted Substitution of C<sub>60</sub> Chloride by 1,3-Bis(dimethylamino)benzene and Subsequent Intramolecular Cyclization (Fac. Eng., Mie Univ.) ○MATSUDA, Ryohei; NISHIO, Sakina; TADA, Koji; KITAGAWA, Toshikazu

## Organic Chemistry -Reaction and Synthesis-Organic Photochemistry

- 1PA-135<sup>#</sup>** Synthesis and Evaluation of Photophysical Properties of Dimeric Imidazo[1,5-*a*]pyridinium Salts (Tokushima Univ.) ○YAGISHITA, Fumitoshi; NII, Chiho; TEZUKA, Yoshihiko; TABATA, Atsushi; NAGAMUNE, Hideaki; UETA, Shoko; KAWAMURA, Yasuhiko
- 1PA-136<sup>#</sup>** Photoaddition of alcohol to xanthine derivatives in the presence of Pt-TiO<sub>2</sub> (Dept. of Chem. Sci. & Eng., NIT, Miyakonjo College) ○HIGASHI, Yusuke; YAMASHITA, Toshiaki; YASUDA, Masahide
- 1PA-137<sup>#</sup>** Substitution Position Effect of Two Diphenylanthracenes on Triplet-Triplet Annihilation-Photon Upconversion (Grad. Sch. Eng., Osaka Pref. Univ.; The Research Inst. for Molecular Electronic Devices, Osaka Pref. Univ.) ○KOKITA, Yuto; MATSUI, Yasunori; KURAMOTO, Yutaro; OHTA, Eisuke; IKEDA, Hiroshi
- 1PA-138** Development of the Photocatalyst for Efficient Generation of Radical (Grad. Sch. Sci., Kobe Univ.) ○YABUTA, Tatsushi; MD IDROS, Ubaidah Afiq; HAYASHI, Masahiko; MATSUBARA, Ryosuke
- 1PA-139<sup>#</sup>** Preparation of transition metal complexes based on NNN-type pincer ligand incorporating imidazo[1,5-*a*]pyridine moiety and their photofunctionality (Tokushima Univ.) YAGISHITA, Fumitoshi; ○IKAMI, Shun; SHIMOKAWA, Souta; KAWAMURA, Yasuhiko

- 1PA-140<sup>#</sup>** Synthesis and Fluorescence Properties of a Series of Amino-substituted 1,8-Naphthalimides (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; Grad. Sch. Sci. Tech., Gunma Univ.) ○WANG, Lei; YAMAJI, Minoru; OKAMOTO, Hideki
- 1PA-141<sup>#</sup>** Coupling reactions of alcohol, electron-donor alkene, and electron-acceptor alkene by photoinduced electron transfer (Grad. Sch. Eng., Univ. of Fukui) ○TANAKA, Yosuke; YOSHIMI, Yasuharu
- 1PA-142** Study on the oxygenation reaction mechanism of firefly bioluminescence (Sci. Eng., The Univ. of Electro-Communications) ○ITO, Shinichi; MAKI, Shojiro; HIRANO, Takashi
- 1PA-143<sup>#</sup>** Photophysical Properties of Imidazo[1,5-*a*]pyridines Possessing *o*-Hydroxyphenyl Group and Their Boron Complexes (Fac. Eng., Tokushima Univ.) YAGISHITA, Fumitoshi; ○HOSHI, Keita; KINOUCHI, Takashi; TEZUKA, Yoshihiko; KAWAMURA, Yasuhiko
- 1PA-144** Synthesis of novel solid fluorescent compounds based on *N*-arylcabazole (Grad. Sch. Sci., Kobe Univ.) ○KAIBA, Tomoaki; YABUTA, Tatsushi; UCHINO, Takashi; HAYASHI, Masahiko; MATSUBARA, Ryosuke
- 1PA-145** Stereoselective Photodimerization Reaction of Alkylideneoxazolone (Fac. Eng., Chiba Univ.) ISHIKAWA, Hiroki; ○BAN, Kazuma; UEMURA, Naohiro; YOSHIDA, Yasushi; KASASIMA, Yoshio; MINO, Takashi; SAKAMOTO, Masami
- 1PA-146** Study on the color modulation mechanism of firefly bioluminescence: fluorescence property of amino-substituted oxyluciferins (Sci. Eng., The Univ. of Electro-Communications) ○HIRAGA, Shiori; KAKIUCHI, Michio; MAKI, Shojiro; HIRANO, Takashi
- 1PA-147<sup>#</sup>** Analysis of Redox Properties of Dy Molecules on Clay (Grad. Sch. Urban Environmental Sci., TMU) ○OMOTE, Kazushi; KUMASAKA, Mitsuhiko; MIZUNO, Jyunya; TAKAGI, Shinsuke; SHIMADA, Tetsuya; TACHIBANA, Hiroshi
- 1PA-148<sup>#</sup>** Photochemical Coupling Reaction between Isoquinoline-*N*-oxide and Tetracoordinate Benzylboron Reagent (Fac. Sci. Eng., Shimane Univ.) ○TAKAHASHI, Sotaro; WATABE, Hajime; SUZUKI, Masaaki; NISHIGAICHI, Yutaka

## Organic Chemistry -Reaction and Synthesis-Organic Electron Transfer Chemistry

- 1PA-151<sup>#</sup>** C-C bond cleavage reactions in a fuel cell (Fac. Eng., Tokyo Polytechnic Univ.) ○TAKAHASHI, Yuya; OKANO, Mitsutoshi
- 1PA-152** Chemical and electrochemical generation of solvated electrons in cyclic amide solvents (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○OGATA, Manami; WATANABE, Yohei; TAJIMA, Toshiki

Tuesday, March 20, AM

(12 : 30~14 : 00)

## Physical Chemistry -Properties-

## Physical Properties

- 1PB-001** Synthesis of Novel Donor-Acceptor-type Organic Molecules having ortho-Benzoquinone-fused TTF Skeleton and the Substituent Effects (ISSP, The Univ. of Tokyo; Fac. Sci., TUS) ○TERAOKA, Natsumi; UEDA, Akira; YOKOMORI, So; ENOMOTO, Masaya; MORI, Hatsumi
- 1PB-002** Synthesis and crystal structure of manganese and cobalt complexes with dmit-(COOH)<sub>2</sub> (Coll. Hum. Sci., Nihon Univ.) ○NAKAJIMA, Ryota; ZHOU, Biao
- 1PB-003** Development of new multi-functional materials using TTF derivatives substituted with a 1,3,4-thiadiazole ring (Grad. Sch. Sci., Osaka Pref. Univ.) YAMAGUCHI, Minayo; ○FUJIWARA, Hideki
- 1PB-004<sup>#</sup>** Design of molecular group showing exponential increase in transmission probability based on quantum chemical calculation (IMCE, Kyushu Univ.) ○HASHIMOTO, Wataru; TSUJI, Yuta; YOSHIZAWA, Kazunari
- 1PB-005** Crystal structure and physical properties of racemic ( $\pm$ )-DM-MeDH-TTP salts (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○MIYAMOTO, Sho; SHIGA, Takuya; OSHIO, Hiroki; NISHIKAWA, Hiroyuki
- 1PB-006** Fabrication and properties of thin-film transistor composed of salphen metal complexes (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○WACHI, Atsushi; KANESAKA, Aoba; SHIGA, Takuya; OSHIO, Hiroki; SHIMAZAKI, Yuichi; CHIKAMATSU, Masayuki; AZUMI, Reiko; NISHIKAWA, Hiroyuki
- 1PB-007** Properties and electronic states of paramagnetic metal complexes with Schiff base-type TTF-ligands (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○KANESAKA, Aoba; WACHI, Atsushi; SHIGA, Takuya; OSHIO, Hiroki; NISHIKAWA, Hiroyuki
- 1PB-008** The relationship between the multistep phase transition and magnetism on organic-inorganic layered perovskite like compound (Fac. Sci., Hiroshima Univ.) ○TSUCHIYA, Naoto; AOKI, Saya; NAKAYAMA, Yuki; MARYUNINA, Kseniya; NISHIHARA, Sadahumi; SUZUKI, Takashi; INOUE, Katsuya
- 1PB-009** Multicolor emission from the ESIPT fluorophore of BTImP showing ditopic recognition (Grad. Sch. Phot. Sci., CIST; IMRAM, Tohoku Univ.)

- TSUCHIYA, Saki; SAKAI, Ken-ichi; KAWANO, Keiichi; NAKANE, Yuta; KIKUCHI, Takemitsu; AKUTAGAWA, Tomoyuki
- 1PB-010** Chiral separation of asparagine from supersaturated solution (Fac. Sci., Yamagata Univ.) ○MORIMOTO, Hiroyuki; UNOURA, Kei; NABIKA, Hideki
- 1PB-011** Molecular structure and thin-film formation in the rotator phase of phosphonium perfluoroborate (NIT, Yonago College) TODA, Horoki; TANIGUCHI, Nanako; ○TANAKA, Susumu
- 1PB-012<sup>#</sup>** Tuning crystallinity of solicyclideneaniline derivatives by increase of aromatic rings (HITec) ○ACHIRA, Hiroto
- 1PB-013** Encapsulation of saline solution by tetrahydrofuran clathrate hydrates and inclusion migration under temperature gradient (Sch. Sci. Eng., Meiji Univ.) ○NAGASHIMA, Kazushige; ISHIZAKI, Osamu
- 1PB-014** Evaluation of Thermal Conductivities of Li<sub>2</sub>([15]crown-5)[Ni(dmit)<sub>2</sub>(H<sub>2</sub>O)<sub>2</sub>] and Li<sub>2</sub>([18]crown-6)[Ni(dmit)<sub>2</sub>(H<sub>2</sub>O)<sub>4</sub>] having Ion Channel Structures (Fac. Sci., Hiroshima Univ.) ○NISHIMURA, Takumi; ICHIHASHI, Katsuya; KONNO, Daisuke; MARYUNINA, Kseniya; INOUE, Katsuya; NISHIHARA, Sadafumi
- 1PB-015** Study of Sol-Gel Phase Transition of Polysaccharides by Rotational Relaxation of PEG-modified Green Fluorescent Protein (Grad. Sch. Eng., Osaka City Univ.) ○MIURA, Ryo; YAMASAKI, Mayo; KOMETANI, Noritsugu
- 1PB-016** Echo of precessional motion caused by shear flow inversion in the nematic phase of 8CB. (Fac. Sci., Fukuoka Univ.) ○KOOGA, Masashi; IMANISHI, Ryusei; NEGITA, Keishi
- 1PB-017** NMR study on phase behavior and dynamics of ammonium-based ionic liquids (Fac. Sci., Chiba Univ.) ○NISHISATO, Kenta; FUJII, Kouzou; MORITA, Takeshi; NISHIKAWA, Keiko
- 1PB-018** Partially ordered state observed in the ionic liquid (C<sub>6</sub>mim) PF<sub>6</sub> (Fac. Sci., Fukuoka Univ.) ○KOIKE, Takushi; IDEGOMORI, Teruya; NEGITA, Keishi
- 1PB-019<sup>#</sup>** Physical properties and low-frequency spectra of ionic liquid/poly(ethylene glycol) mixtures (Fac. Sci., Chiba Univ.; Grad. Sch. Sci., Chiba Univ.) ○ANDO, Masatoshi; SHIROTA, Hideaki
- 1PB-020<sup>#</sup>** Preparation and Properties of Photochromic Ionic Liquids Containing Ionic Spiropyrans (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi; Grad. Sch. Eng., Tokyo Univ. of Sci., Yamaguchi) ○FUNASAKO, Yusuke; OKADA, Hirochika; INOKUCHI, Makoto
- 1PB-021<sup>#</sup>** Dynamics of nanofluids investigated by Inelastic X-ray scattering (Fac. Sci., Fukuoka Univ.) ○YOSHIDA, Koji; YAMAGUCHI, Toshio; KAMAZAWA, Kazuya; FUKUSHIMA, Yoshiaki; UCHIYAMA, Hiroshi; TSUTSUI, Satoshi; YANO, Kazuhisa
- 1PB-022<sup>#</sup>** Fluorescence image analysis of single molecules at polymer/substrate interfaces (Grad. Sch. Sci., Josai Univ.) ○ISHIKAWA, Mitsuru; TAKAHASHI, Taihei; HAYASHI, Yuichiro; UWADA, Takayuki
- 1PB-023** Construction and Luminescence Control of New Hybrid Systems using of Semiconductor Nanoplatelets - Diarylethene Derivatives (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○USUI, Yuta; SHIBAYAMA, Daiki; KINOSHITA, Ken; UEMOTO, Kenta; KATAYAMA, Teturo; MORIMOTO, Masakazu; IRIE, Masahiro; TAMAI, Naoto
- 1PB-024<sup>#</sup>** Surface- and Interface- Selective Local Valence Electronic States of Ultrathin HfSi<sub>2</sub>/Si(110) Films (Fac. Sci., Ehime Univ.; KEK; SOKENDAI) ○KOYAMA, Daisuke; YAMASAKI, Masahiro; KAKIUCHI, Takuhiro; NAGAOKA, Shinichi; MASE, Kazuhiko
- 1PB-025<sup>#</sup>** Correlation between Emission Behavior of a Single Quantum Dot and Pulse-Width of Excitation Laser (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○YANO, Nanako; MASUO, Sadahiro
- 1PB-026<sup>#</sup>** Valence electronic of plicene thin films on metal substrates studied by UPS, MAES, and first-principles calculation (Grad. Sch. Arts and Sci., The Univ. of Tokyo) HIGUCHI, Takafumi; ○ISONO, Kousuke; KOITAYA, Takanori; AOKI, Masaru; SHUDO, Ken-ichi; MASUDA, Sigeru
- 1PB-027<sup>#</sup>** Evaluation of Photoluminescence Behaviors of CsPbBr<sub>3</sub>/I<sub>3</sub> Perovskite Single Quantum Dots with Different Br/I Ratio. (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○YOSHIMURA, Hiroyuki; YAMAUCHI, Mitsuaki; MASUO, Sadahiro
- Excitation Pulse on the Reaction Amount (Grad. Sch. Eng. Sci., Osaka Univ.) ○TACHII, Yuka; SOTOME, Hikaru; KOBATAKE, Seiya; MIYASAKA, Hiroshi
- 1PB-034** Photoalignment of guest fluorescent molecules in azobenzene polymer liquid crystal thin film (Grad. Sch. Eng. Sci., Osaka Univ.) ○NISHIYAMA, Yumi; HIRATSUKA, Kengo; HASHIMOTO, Takuma; KURIHARA, Seiji; FUKAMINATO, Tsuyoshi; ITO, Shouji; MIYASAKA, Hiroshi
- 1PB-035** Elucidation of cyclization and cycloreversion reaction dynamics of a dithiazolylarylene derivative by means of time-resolved absorption and fluorescence measurements (Grad. Sch. Eng. Sci., Osaka Univ.) ○SEI, Ryosuke; FUJIMOTO, Shingo; NAGASAKA, Tatsuhiko; SOTOME, Hikaru; KAWAI, Tsuyoshi; MIYASAKA, Hiroshi
- 1PB-036** Fabrication and Characterization of Dye-Sensitized Solar Cell containing a Noncarboxylated Dye Compound (Fac. Eng., FUT) ○TAKESHITA, Tatsuya; MIYAGAWA, Keisuke; UMEDA, Takao; HARA, Michihiko
- 1PB-037** Laser photoionization of Ferimzone in the presence of cyclodextrin (Grad. Sch. Eng., FUT) ○SASAKI, Mio; MINOSAKI, Chika; YANO, Atsushi; TAKESHITA, Tatsuya; HARA, Michihiko
- 1PB-038** Photoionization of Spiropyrans/Cyclodextrin inclusion complex by using Two-Laser Pulse irradiation. (Grad. Sch. Eng., FUT) ○YANO, Atsushi; MINOSAKI, Chika; SASAKI, Mio; TAKESHITA, Tatsuya; HARA, Michihiko
- 1PB-039<sup>#</sup>** Laser chemistry for Eu recovery (Grad. Sch. Sci., Osaka City Univ.) ○NOBUAKI, Nakashima; TOMOYUKI, Yatsuhashi; KENJI, Sakota; IZUMI, Iwakura; KEIICHI, Yokoyama
- 1PB-040** Suppression of molecular motion in Saccharide glasses observed by Red-edge effect (Coll. Life Sci., Ritsumeikan Univ.) ○TOYO, Atsushi; NAGASAWA, Yutaka; OTA, Chikashi
- 1PB-041** Relationship between trans → cis isomerization and excited state lifetime of indigo derivatives (Coll. Life Sci., Ritsumeikan Univ.) ○TANI, Syuntaro; NAKAGAWA, Hirofumi; MATSUMOTO, Akifumi; DAICHO, Ayako; OTA, Chikashi; NAGASAWA, Yutaka
- 1PB-042** Solvent polarity dependent structural modulation of N,N-Dimethyl-lindoaniline (Coll. Life Sci., Ritsumeikan Univ.) ○OTA, Chikashi; MATSUMOTO, Akifumi; DAICHO, Ayako; ○NAGASAWA, Yutaka
- 1PB-043** The relationship between molecular symmetry and structural heterogeneity of Triphenylmethane dyes (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○NAKAGAWA, Hirofumi; MATSUMOTO, Akifumi; DAICHO, Ayako; OTA, Chikashi; NAGASAWA, Yutaka
- 1PB-044** Femtosecond transient absorption measurement of nonfluorescent cyclophosphoribide-a enol (Coll. Life Sci., Ritsumeikan Univ.; FUT) ○SUGIHARA, Keita; OTA, Chikashi; NAGASAWA, Yutaka; KINOSHITA, Yusuke; KASHIYAMA, Yuichiro; TAMIYAKI, Hitoshi
- 1PB-045** Attempt of crystallization of protein using molecular alignment by enhanced electric field and dimerization reaction (Sch. Sci. Tech., Gunma Univ.) ○OTSUKA, Remina; HORIUCHI, Hiroaki; OKUTSU, Tetsuo
- 1PB-046** Comparison of Surface Plasmon Resonance Effects by Gold with Silver Nanoparticles in Protein Crystallization. (Sch. Sci. Tech., Gunma Univ.) ○ITO, Asuka; HORIUCHI, Hiroaki; OKUTSU, Tetsuo
- 1PB-047** Kinetics study of triplet states involved in triplet-triplet annihilation upconversion in thin films using transient absorption spectroscopy (Grad. Sch. Sci. Eng., Univ. of Toyama) ○SUGISHITA, Rintaro; IWAMURA, Munetaka; NOZAKI, Koichi
- 1PB-048<sup>#</sup>** Size Effect on Photochemical Conversion Process of Aqueous Quinacridone Nanoparticles, as Revealed by Femtosecond Transient Absorption Spectroscopy (Grad. Sch. Sci., Eng., Ehime Univ.) ○OMODA, Hiroki; ISHIBASHI, Yukihide; KIHARA, Ryo; ASAH, Tsuyoshi
- 1PB-049<sup>#</sup>** The electrolytic deposition of Neptunium on the electrode surface (NSEC, JAEA) ○OUCHI, Kazuki; OTOBE, Haruyoshi; KITATSUJI, Yoshihiro
- 1PB-050** Catalytic reaction of palladium catalyst at water-liquid crystal interface (Fac. Sci., Hokkaido Univ.; Grad. Sch. Chem. Sci. and Eng., Hokkaido Univ.) ○MIYAFUSA, Kouhei; KAGEYAMA, Yoshiyuki; TAKEDA, Sadamu

## Physical Chemistry -Chemical Kinetics and Dynamics-

- 1PB-029<sup>#</sup>** Computational Studies on the Reactions of Indenyl Radical with Oxygen Atom and Molecular Oxygen (ETRI, AIST) ○TSUCHIYA, Kentaro; OGUMA, Mitsuharu
- 1PB-030<sup>#</sup>** Polarized UV absorption of the polyvinyl alcohol film with highly oriented polyene molecules (Grad. Sch. Sci. Eng., Kindai Univ.; Grad. Sch. Mat. Sci., NAIST) ○SATA, Ryosuke; MORISAWA, Yusuke; HATANAKA, Miho; WAKABAYASHI, Tomonari
- 1PB-031** Analysis of reactivity of gold-copper clusters with oxygen and nitric oxide using temperature-programmed desorption in the gas phase (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○ABE, Manami; YAMAGUCHI, Masato; KUDO, Satoshi; MIYAJIMA, Ken; MAFUNE, Fumitaka
- 1PB-032** Spatiotemporal Fluorescence Measurement on the Basis of Pump-Dump Scheme (Grad. Sch. Eng. Sci., Osaka Univ.) ○OKAMOTO, Shunsuke; MURAMATSU, Masayasu; ITO, Syoji; MIYASAKA, Hiroshi
- 1PB-033** Multiphoton Cycloreversion Reaction of a Diarylethene Derivative Using Coherent Molecular Vibration : The Effect of Wavelengths of the First

## Colloid and Interface Chemistry

- 1PB-053** Adsorption Behavior of DNA-immobilized Gold Nanoparticles to the Glass Surface Treated with Aminosilane. (Fac. Eng., Shinshu Univ.) ○IMAMURA, Seika; MAEDA, Mizuo; KANAYAMA, Naoki
- 1PB-054<sup>#</sup>** Characterization of monodispersed FeCo<sub>2</sub>O<sub>4</sub>@Ag particles with super magnetism (Coll. Sci. Tech., Nihon Univ.) ○HARA, Shuta; AISU, Junpei; IKAKE, Hiroki; SHIMIZU, Shigeru
- 1PB-055<sup>#</sup>** Synthesis and Optical Properties of Metal Organic Structure (MOF) - Plasmonic Metal Nanoparticle Composite (Coll. Sci. Tech., Nihon Univ.) KUMAGAI, Tomohiro; ○SUGIMOTO, Daiki; EGUCHI, Takumi; SUGAWA, Kousuke; OTSUKI, Joe
- 1PB-056** Preparation of metal nano particle from crystalline peptide metal complexes (Fac. Sci., Ochanomizu Univ.; PRESTO, JST) ○NITANAI, Yukari; NAKAGAWA, Yuki; MIYAKE, Ryosuke
- 1PB-057** Gap mode induced photo-oxidation of p-alkylthiophenol (Fac. Sci., Saitama Univ.) FUTAMATA, Masayuki; AKAI, Keitaro; ○TABELI, Kanae
- 1PB-058<sup>#</sup>** Rapid heating solvothermal synthesis of ultrafine nanoparticles and

- formation of their porous thin layer films (Grad Sch. Eng., KUT)  
 ○KUMABE, Yoshitaka; OHTANI, Masataka; KOBIRO, Kazuya
- 1PB-059** Shape-dependent self-assembly of gold nanoparticles via electrostatic interaction (Grad. Sch. Med., Eng., Univ. of Yamanashi) ○SAKATA, Aya; SHINMORI, Hideyuki
- 1PB-060<sup>#</sup>** Hydrothermal Synthesis of Monodispersed Magnetite Nanoparticles controlled in Size and Shape under a Highly Condensed System (IMRAM, Tohoku Univ.) ○SHEN, Chen; KANIE, Kiyoshi; NAKAYA, Masafumi; MURAMATSU, Atsushi
- 1PB-061** Synthesis of Cd-free Quantum Dots using Micro Flow Reactor (ULVAC Inc.) ○HIRAKAWA, Masaaki; NAGAKUBO, Junki; NISHIHASHI, Tsutomu
- 1PB-062<sup>#</sup>** Structural formation of soft colloids (Fac. Eng., Gifu Univ.) ○TERAO, Takamichi
- 1PB-063<sup>#</sup>** Generation of Triplet-Triplet Annihilation-based Upconversion reaction in hollow nanoparticles and their properties (Coll. Sci. Tech., Nihon Univ.) ○YOSHINARI, Satoshi; JIN, Syota; TAKESHIMA, Naoto; SUGAWA, Kosuke; OTSUKI, Joe
- 1PB-064<sup>#</sup>** Preparation and Optical Properties of Fullerene C70 Assemblies Using Aliphatic Diamine Molecules (Coll. Sci. Tech., Nihon Univ.) ○KUROSE, Yusaku; SUGAWA, Kousuke; AKIYAMA, Tsuyoshi; OTSUKI, Joe
- 1PB-065<sup>#</sup>** Fabrication of Organic Nanoparticle Colloids Having Strong Near-Infrared Absorption by Nanosecond Laser Fragmentation in Pluronic F127 Aqueous Solution (Grad. Sch. Sci., Eng., Ehime Univ.) ○HIMEDA, Taisei; KIHARA, Ryo; ASAHU, Tsuyoshi
- 1PB-066<sup>#</sup>** Effect of the addition of surfactants for the formation BPEA and CBPEA organic nanoparticles using the laser ablation in solution. (Dept. of Mater. Eng., NIT, Nagaoka College) ○MIKAMI, Kazuya; AIZUKA, Marie; MURAKAMI, Yoshinori
- 1PB-067** Withdrawn
- 1PB-068<sup>#</sup>** Water-responsive supramolecular nanovesicles: Preparation and formation process (NRI, AIST) ○DING, Wuxiao; KOGISO, Masaki
- 1PB-069** Stable dispersion behavior in water of hydrophobicity humic substances associated with breaking supramolecular (Chiba Inst. of Tech.) ○MITSUGUCHI, Mai; EGUCHI, Toshihiko; YAZAWA, Yuki
- 1PB-070** Synthesis and characterization of naphthalenediimide derivatives that can interact with electron donors in lipid membrane (Grad. Sch. Eng., Hiroshima Univ.) ○KONDO, Ryuji; SUGIKAWA, Kouta; IKEDA, Atsushi
- 1PB-071** Development and properties of antibiotic-introduced  $\beta$ -1,3-glucan derivatives (Fac. Eng., Sojo Univ.) KIMURA, Mai; ○ISHIDA, Kazuma; TAMARU, Shun-ichi; SHINKAI, Seiji
- 1PB-072** Synergistic enhancement of the stimuli-responsive function for polymer/supramolecule hybrid gels (Grad. Sch. Eng., Sojo Univ.) TOUNOUE, Yuki; ○KURODA, Naofumi; SHIMOKAWA, Takuya; TAMARU, Shun-ichi; SHINKAI, Seiji
- 1PB-073<sup>#</sup>** Porphyrin Assemblies in the Pores of Periodic Mesoporous Organosilica (PMO) (Coll. Sci. Tech., Nihon Univ.) ○FUJITA, Daiki; OTSUKI, Joe; SUGAWA, Kosuke
- 1PB-074** Synthesis and gelation behaviors of 6-monosubstituted  $\beta$ -cyclodextrin derivatives bearing a hydrophobic group (Fac. Eng., Yamagata Univ.) ○SATO, Kazuki; KUMADA, Yu; KARUBE, Nobuyuki; SATO, Kazuaki; ITO, Kazuaki
- 1PB-075** Galation behaviors and external stimulus responsibility of anthracene derivatives (Fac. Eng., Yamagata Univ.) ○MURAYAMA, Ryota; YAMAGUCHI, Hiroka; SATO, Kazuaki; ITO, Kazuaki
- 1PB-076<sup>#</sup>** Structural color materials from chromonic molecular assemblies (Grad. Sch. Sci., TUS) ○SHIRAI, Tatsuya; NAKAMURA, Keita; NAKA, Yumiko; LE, Khoa; SASAKI, Takeo
- 1PB-077<sup>#</sup>** Hydrogels with chromonic cross-linkers (Grad. Sch. Chem. Sci. Technol., TUS) ○NAKAMURA, Keita; YOSHIOKA, Kai; SHIRAI, Tatsuya; SHIRAI, Tatsuya; NAKA, Yumiko; LE, Khoa; SASAKI, Takeo
- 1PB-078<sup>#</sup>** Liquid Crystalline Semiconductors Based on Chiral Dimeric Oligo(p-Phenylene Vinylene) Units as a Fluorophore (Grad. Sch. Eng., Kagawa Univ.) ○SHIMAOKA, Eigo; FUNAHASHI, Masahiro
- 1PB-079<sup>#</sup>** Liquid-crystalline semiconductor based on chiral phenylterthiophene dimer bearing oligosiloxane units at the terminal positions of the alkyl side chains (Fac. Eng., Kagawa Univ.) ○AOKI, Takuya; FUNAHASHI, Masahiro
- 1PB-080** Relation between temperature range of liquid crystal and water contents in symmetrical 1,3-dialkylimidazolium bromide (Grad. Sch. Eng., Soka Univ.) ○MAETA, Nobuyuki; ABE, Kazuma; SHINOMIYA, Teruo; ITO, Masato
- 1PB-081** Synthesis of pyrene derivatives and naphthalene diimide derivatives with OEG chains: LCST behaviors of CT complexes (Grad. Sch. Sci., Eng., Yamagata Univ.) ○HASHIMOTO, Yuji; ARAI, Masato; SATO, Kazuaki; ITO, Kazuaki
- 1PB-082** Synthesis and LCST behavior of  $\beta$ -cyclodextrin derivative bearing a gallic acid with OEG chains (Fac. Eng., Yamagata Univ.) ○KUMADA, Yu; SATO, Kazuaki; ITO, Kazuaki
- 1PB-083** LCST behaviors of anthracene derivative and the photodimer bearing OEG chains (Fac. Eng., Yamagata Univ.) ○YAMAGUCHI, Hiroka; SATO, Kazuaki; ITO, Kazuaki
- 1PB-084** Control of singlet oxygen generation by oxygen fine bubble (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○NISHIMURA, Yoshinobu; ARAI, Tatsuo
- 1PB-085** Electrodeposition of waterborne carbon black paint containing hydrolyzable emulsifiers and application to modified electrodes (Grad. Sch. Sci. Technol., Shinshu Univ.; Fac. Textile Sci. Technol., Shinshu Univ.) ○AMANO, Yuta; ITOH, Yoshihiro
- 1PB-086** Surface Activities and Hydrolyzabilities of Betaine-Ester Containing Surfactants (Fac. Textile Sci. Technol., Shinshu Univ.; Grad. Sch. Sci. Technol., Shinshu Univ.) ○ITO, Yoshihiro; KUDO, Yuma
- 1PB-087** Preparation of TiO<sub>2</sub> thin films using mixed Langmuir monolayer of long-chain alkylamine and perfluorocarboxylic acid as a reaction field and evaluation of the microstructure (Grad. Sch. Eng., Tokyo City Univ.) ○KATO, Hiroya; TAKAHASHI, Masashi
- 1PB-088** Coadsorption self-assembled monolayers of trithiocyanuric acid and benzenethiol on an evaporated silver film (Coll. Industrial Tech., Nihon Univ.) ○ISHITSUKA, Megumi; OSAKA, Naoki
- 1PB-089<sup>#</sup>** The Electrochemical behavior of Dopamine by Thiol-modified Gold Electrodes (Dept. Mat. Sci. Eng., Nat. Def. Acad.) ○OZAWA, Shinichiro; ABE, Hiroshi
- 1PB-090<sup>#</sup>** Electrochemical Detection of Metal Ions with Self-Assembled Monolayer of the Triad Compound Consisting of Tripod-Shaped Trithiol, Bipyridine, and Ferrocene (Grad. Sch. Eng., Mie Univ.) ○TABATA, Hiroki; KITAGAWA, Toshikazu
- 1PB-091** Construction of spontaneous amide formation system as the origin of protein (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○MATSUO, Muneyuki; KURIHARA, Kensuke
- 1PB-092<sup>#</sup>** Construction of excited energy transfer reaction space using lipid domain (Fac. Sci., Kyushu Univ.) ○KOSHIIYAMA, Tomomi; INOUE, Yuki; HATAE, Tatsuru; OHBA, Masaaki
- 1PB-093** Submicron-sized calcium molybdates synthesis using liposome as a template and its mechanism (Div. of Chem., Fac. Pure Appl. Sci., Univ. of Tsukuba) ○KURITA, Saori; YAMASAKI, Shinya; UTSUNOMIYA, Satoshi; SAKAGUCHI, Aya; SUEKI, Keisuke
- 1PB-094<sup>#</sup>** Determination of the locations of porphyrins in lipid membrane by NMR study (Grad. Sch. Eng., Hiroshima Univ.) ○TSUCHIYA, Yuki; SUGIKAWA, Kouta; IKEDA, Atsushi
- 1PB-095** Micromanipulation of Giant Lipid Membrane Vesicles (Grad. Sch. Sci. Technol., Shinshu Univ.) ○WATANABE, Yamato; OKUMURA, Yukihisa
- 1PB-096** Electroformation of Giant Lipid Membrane Vesicles (Grad. Sch. Sci. Technol., Shinshu Univ.) ○WATANABE, Haruki; OKUMURA, Yukihisa
- 1PB-097<sup>#</sup>** Enhancement of photon upconversion based on triplet-triplet annihilation on plasmonic Ag nanoparticle assemblies (Coll. Sci. Tech., Nihon Univ.) ○KURIHARA, Yuri; YOSHINARI, Satoshi; INOUE, Wataru; TAKESHIMA, Naoto; SUGAWA, Kousuke; OTSUKI, Joe
- 1PB-098** CO<sub>2</sub> adsorption at low temperature under light irradiation of ZnS introduced Faujasite (Fac. Sci. Tech., SIST) MURAMATSU, Yukino; MATSUOKA, Yuuki; KOIKE, Shougo; ○MAESHIMA, Yui; YAMAZAKI, Satoshi
- 1PB-099** Terminal sequence-selective aggregation and dispersion behavior of stem-loop DNA-immobilized microparticles (Fac. Eng., Shinshu Univ.) ○NAKAUCHI, Hiroya; MAEDA, Mizuo; KANAYAMA, Naoki
- 1PB-100<sup>#</sup>** Enhancement of Cu<sub>2</sub>O photocatalytic activity by plasmonic copper structure: Comparison with plasmonic gold structure (Coll. Sci. Tech., Nihon Univ.) ○YASUHARA, Keita; SUGAWA, Kosuke; TSUNENARI, Natsumi; OTSUKI, Joe
- 1PB-101<sup>#</sup>** Adsorption behavior of fullerene derivative on clay nanosheets (Urban Environmental Sci., TMU) ○FUTAMURA, Keisuke; NAKAZATO, Ryosuke; MOTOHASHI, Minoru; SHIMADA, Tetsuya; TAKAGI, Shinsuke
- 1PB-102<sup>#</sup>** Spectroscopic Analysis of Colloidal Solutions with Representative Layer Theory and Polarized Light Spectroscopy (Hitachi, Ltd.) ○NOJIMA, Akihiro; KAMBAYASHI, Takuya

## Materials Chemistry

- 1PB-105** Synthesis and water absorption characteristics of clay-P(NIPAAm-SA) nanocomposite gels (Grad. Sch. Eng., Tokyo Denki Univ.) ○MATSUI, Daichi; ISHIMARU, Shinichi
- 1PB-106** Adsorption and desorption behavior of Pb<sup>2+</sup> on Clay-P(NIPAAm-SA) under various conditions. (Grad. Sch. Eng., Tokyo Denki Univ.) ○HASHIMOTO, Yamato; ISHIMARU, Shinichi
- 1PB-107** Synthesis and Characterization of Clay-Polymer Nanocomposites for Application to Gel Electrolytes of Lithium Ion Batteries (Grad. Sch. Eng., Tokyo Denki Univ.) ○TAKAHASHI, Kazusa; ISHIMARU, Shin'ichi
- 1PB-108<sup>#</sup>** Low temperature synthesis of cubic phase CuFe<sub>2</sub>O<sub>4</sub> powder (AMCP, NIMS) ○KONGKAEW, Teerakorn; SAKURAI, Kenji
- 1PB-109** Development of high gas barrier and high heat resistance PET film by irradiating with UV to polysilazane coated film (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○ICHIKAWA, Kosei; OHISHI, Tomoji
- 1PB-110** Control of particle shape of rod type  $\epsilon$ -Fe<sub>2</sub>O<sub>3</sub> by sol-gel method (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○FUKUI, Jumpei; OHKOSHI, Shinichi; TOKORO, Hiroko
- 1PB-111** Low temperature synthesis of metal ion-doped titania nanocrystals and their applications for photofunctional composite thin film (Fac. Eng.,

- Gifu Univ.) ○IKUTA, Naoya; MANSEKI, Kazuhiro; SUGIURA, Takashi
- 1PB-112** Synthesis of Tetratitanium Heptoxide Nanoparticle (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○OHSHIRO, Hiroki; NAGATA, Iori; NASU, Tomomichi; OHKOSHI, Shin-ichi; TOKORO, Hiroko
- 1PB-113** Development of technology for forming fine copper wiring in the air on polyimide substrates using laser irradiation and glyoxylic copper complex (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○TAKAHASHI, Naoki; OHISHI, Tomoji
- 1PB-114<sup>#</sup>** Intercalation of aromatic compounds into pillared magadiite (Grad. Sch. Eng., Univ. of Hyogo) ○HIROHATA, Naoki; INAMOTO, Jun-ichi; MATSUO, Yoshiaki
- 1PB-115<sup>#</sup>** Solvothermal Synthesis of Barium Silicates from Silica (Grad. Sch. Sci. Tech., Gunma Univ.; Sch. Sci. Tech., Gunma Univ.) SAWAZAKI, Shohei; ○IWAMOTO, Shinji
- 1PB-116** Development of photo-superacid generator based on photochromic terarylene framework (Grad. Sch. Mat. Sci., NAIST) ○SHIMIZU, Daiya; NAKASHIMA, Takuya; MIZUTSU, Ryo; KAWAI, Tsuyoshi
- 1PB-117** Blue emitting materials by pi-conjugated fluorene arrays (Grad. Sch. Med., Eng., Univ. of Yamanashi) YAMAMOTO, Naoki; AMANO, Tatsuya; ○OGAWA, Kazuya
- 1PB-118** Development of amorphous organic salts to construct of emitting organic devices. (Grad. Sch. Eng., Sojo Univ.) ○KANADA, Takuya; TAMARU, Shun-ichi; SHINKAI, Seiji
- 1PB-119<sup>#</sup>** Ion-Responsive Emission Properties of Liquid-Crystalline Guanineliogthiophene Conjugates (Grad. Sch. Eng., The Univ. of Tokyo) ○GAN, Kian Ping; YOSHIO, Masafumi; SUGIHARA, Yuki; KATO, Takashi
- 1PB-120** Synthesis of Covalent Organic Frameworks Comprising Dehydrobenzoannulenes (Grad. Sch. Mat. Sci., NAIST) ○KARIMATA, Haru; SUZUKI, Mitsuharu; YAMADA, Hiroko
- 1PB-121<sup>#</sup>** Development of multi-color-emitting liquid-crystalline molecules based on precise control of aggregated structure and electron-density distribution (KIT) YAMADA, Shigeyuki; ○MORITA, Masato; KONNO, Tsutomu
- 1PB-122** Development of luminescent materials by using  $\beta$ -glucans as a mediator (Grad. Sch. Eng., Sojo Univ.) ○KAWAUCHI, Tomoko; TAMARU, Shun-ichi; SHINKAI, Seiji
- 1PB-123** Synthesis and mechanical property of polymers bearing hydrogen bonding and metal coordination units (Grad. Sch. Sci., Osaka Univ.) ○HIRASE, Tomohiro; TAKASHIMA, Yoshinori; YAMAGUCHI, Hiroyasu
- 1PB-124** Photoelectropolymerization of PEDOT in 3D titania electrodes and solar cell application (Fac. Eng., Gifu Univ.) ○UEYAMA, Ryota; MANSEKI, Kazuhiro; SUGIURA, Takashi
- 1PB-125** Preparation and application of new gels containing viologen units (Grad. Sch. Sci., Eng., Yamagata Univ.) ○SATO, Rikiya; HOSOKAWA, Tooru; SATO, Nozomi; SANBE, Shotaro; NAGANE, Takayuki
- 1PB-126** Novel synthesis of chiral light-emitting liquid-crystalline molecules and evaluation of their physical properties (KIT) YAMADA, Shigeyuki; ○MIYANO, Kazuya; KONNO, Tsutomu
- 1PB-127<sup>#</sup>** Preparation and Condition of Nanocarbon Material Composites Modified with Monoprotonated Porphyrin Dyes (ORIST) ○TAKAO, Yuko; MORIWAKI, Kazuyuki; MIZUNO, Takumi; OHNO, Toshinobu
- 1PB-128** One-Dimensional Molecular Ordering over Large Areas in Polymer Films by Scanning Wave Photopolymerization and Optimization of Photo-Irradiation Conditions (Lab. Chem. Life Sci., Tokyo Tech.) ○OTA, Megumi; HISANO, Kyohei; AKAMATSU, Norihisa; SASAKI, Takeo; SHISHIDO, Atsushi
- 1PB-129** Control of Reflected Light by Bending Cholesteric Liquid Crystal Films (Lab. Chem. Life Sci., Tokyo Tech.) ○KISHINO, Masayuki; USUI, Koji; HISANO, Kyohei; AKAMATSU, Norihisa; SASAKI, Takeo; SHISHIDO, Atsushi
- 1PB-130<sup>#</sup>** Synthesis of a siloxane-based dimer designed for dual frequency liquid crystals and investigating their electro rheological effect (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○MATSUOKA, Narumi; FUKUI, Takato; KANEKO, Kosuke; HANASAKI, Tomonori
- 1PB-131<sup>#</sup>** Formation of diode containing LbL film at its p-n interface by electrodeposition (ORIST) ○WATANABE, Mitsuru; TAMAI, Toshiyuki; NAKAHARA, Yoshio; YAJIMA, Setsuko
- 1PB-132** Fabrication of Conductive Carbon Nanotube Layer on Glass surface Coated with Photoreactive Silane Coupling Agent (Sch. Sci. Eng., CIST) ○TAKADA, Tomoya; KITAMURA, Yuichiro; ARAKAWA, Hiron; SATO, Takaya
- 1PB-133** Synthesis of functional fine unevenness particles and application for column chromatography (ORIST) ○HAYASHI, Hirokazu; YOSHIOKA, Yayoi; NAKASHIMA, Yoichi
- 1PB-134<sup>#</sup>** Synthesis of nano diamond by arc discharge (Dept. of Chem. & Bio. Eng., NIT, Hachinohe College) KAWAMURA, Shunsuke; FUKUMATSU, Takahiro; ○SAITO, Takayuki
- 1PB-135** Investigation of the optical properties of carbon nitride semiconductive compounds originated with the preparation conditions. (Grad. Sch. Sci. Tech., Yamaguchi Univ.) CHAEN, Hiroki; YANASE, Kousuke; ○SAKATA, Yoshihisa
- 1PB-136** Liquid phase exfoliation and dispersion of graphite using triphenylene derivatives (Fac. of Eng., Okayama Univ.) ○FUJINO, Mai; NISHINA, Yuta
- 1PB-137** Lithium-deposition/dissolution behavior on free-standing carbon

- nanotube papers (Fac. Eng., Shinshu Univ.) ○INADA, Naoki; SHIMIZU, Masahiro; ARAI, Susumu
- 1PB-138** Effect of heating rate on nano-structured carbonization of  $\gamma$ -cyclodextrin microcube (Sch. Sci. Eng., Univ. of Tsukuba) ○KANG, Seongjip; KIJIMA, Masashi; KAWASHIMA, Hidehisa
- 1PB-139<sup>#</sup>** Effects of addition of the Marimo Carbon on reactions of alkoxyxilanes (RCFM, NIMS) ○FUJII, Kazuko; NAKAGAWA, Kiyoharu; HASHIZUME, Hideo; SHIMOMURA, Shuichi; WAKAHARA, Takatsugu; ANDO, Toshihiro
- 1PB-140<sup>#</sup>** Plasmonic Helicoid Nanoparticles with Giant Far-field and Near-field Dissymmetry (Mater. Sci. Eng., Seoul Natl. Univ.) ○AHN, Hyo-yong; LEE, Hye-eun; LE, Khai Q.; OKAMOTO, Hiromi; NAM, Ki Tae
- 1PB-141<sup>#</sup>** Solution synthesis of Indium nitride quantum dots and its application to a nitride nanophosphors. (ULVAC, Inc.) ○NAGAKUBO, Junki; HIRAKAWA, Masaaki; NISHIHASHI, Tsutomu
- 1PB-142** Fabrication and Estimation of Podophyllotoxin-Hinokitiol Nanoparticles (NIT, Fukushima College) ○UMEZAWA, Hirohito; SHIMIZU, Kazue; TANITA, Keita; KOSEKI, Yoshitaka; KASAI, Hitoshi
- 1PB-143<sup>#</sup>** The synthesis of gold nanoparticles coated with fluorescent mesogenic groups and their physical properties (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○YAMASHITA, Kosuke; KANEKO, Kosuke; HANASAKI, Tomonori
- 1PB-144<sup>#</sup>** Production of composite gels of natural polysaccharides in room temperature ionic liquids by quantum beam irradiation (QuBS) ○KIMURA, Atsushi; NAGASAWA, Naotsugu; TAGUCHI, Mitsumasa
- 1PB-145** Physical properties of quaternary ammonium cation by DFT calculation (Grad. Sch. Eng., Utsunomiya Univ.) ○IWAI, Hidekazu; YONENAGA, Kazuki; MORITA, Takeshi
- 1PB-146<sup>#</sup>** Synthesis of DEME based ionic liquids and liquid crystalline behavior of their aqueous mixtures (Grad. Sch. Life Sci., Ritsumeikan Univ.) ○HORI, Momoko; NODA, Tomoka; KANEKO, Kosuke; YOSHIMURA, Yukihiko; HANASAKI, Tomonori

## Resources Utilization Chemistry

- 1PB-149<sup>#</sup>** Room Temperature-Oxidative Removal of Dibenzothiophene Derivatives in Fuel Oil by Use of Decatungstate Catalyst (Fac. Sci., Kanagawa Univ.) ○FUJITA, Yuya; OGI, Keisuke; MATSUKI, Yusuke; NOMIYA, Kenji; HORI, Hisao
- 1PB-150<sup>#</sup>** Adsorptive desulfurization of coal tar pitch with metallic adsorbents (RIEF, AIST) ○YAZU, Kazumasa
- 1PB-151** Development of CO<sub>2</sub> Reforming Activity by Using Non-Equilibrium Plasma and Ni-Based Catalytic Processes (Saitama Inst. of Tech.) ○YAMAZAKI, Ryo; ARITANI, Hirofumi; OGATA, Atsushi
- 1PB-152** Theoretical study of reaction mechanism of CO<sub>2</sub> reduction using tricarbonyliridium Re(I) complexes in the presence of triethanolamine (Grad. Sch. Sci. Eng., Univ. of Toyama) SUGIHARA, Ayumi; IWAMURA, Munetaka; ○NOZAKI, Koichi
- 1PB-153** Influences of condensed and conjugated structures in native lignin derivatives on photo-excited electron transfers (Grad. Sch. Comprehensive Scientific Research, Pref. Univ. of Hiroshima) ○YAMAMOTO, Masaki; OTAKE, Toshihito; AOYAGI, Mitsuru
- 1PB-154** Analysis of photo excited energy transfers of native lignin derivatives (Grad. Sch. Comprehensive Scientific Research, Pref. Univ. of Hiroshima) ○INOUE, Sara; YOSHINO, Tomoyuki; AOYAGI, Mitsuru
- 1PB-155<sup>#</sup>** Selective Chemical Modifications of lignins on lignocellulosic composites (Grad. Sch. Comprehensive Scientific Research, Pref. Univ. of Hiroshima) ○WATANABE, Nobuhiro; MITOMA, Yoshiharu; AOYAGI, Mitsuru
- 1PB-156** Analysis of aggregation behaviors of native lignin derivatives using viscosity (Fac. Life Env. Sci, Pref. Univ. of Hiroshima; Fac. Life Env. Sci, Pref. Univ. of Hiroshima) ○AZUMA, Shiho; AOYAGI, Mitsuru
- 1PB-157** Preparation of carboxymethylated network typed macromolecules directly from Wild herbaceous plants (Fac. Life Env. Sci, Pref. Univ. of Hiroshima) ○OKUSAKO, Yuki; MAESONO, Kento; AOYAGI, Mitsuru
- 1PB-158<sup>#</sup>** Separation of component materials from an oil-extracted Botryococcus residue by hydrothermal reaction (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○XU, Yifei; KAWASHIMA, Hidehisa; KIJIMA, Masashi
- 1PB-159** Study of the Biorefinery Technology using Agricultural Waste (NIT, Yonago College) ○YAMADA, Tomohiro; MURATA, Wakae; FUJII, Yuzo; MAEKAWA, Hirofumi; URUMA, Yoshiyuki
- 1PB-160** Evaluation of mechanical properties using cellulose nanofiber / recycling carbon fiber with a hybrid fiber reinforced plastic (Kanazawa Inst. of Tech.) ○KOMATANI, Naoya; ITO, Tsukasa; YOSHIMURA, Osamu; TANAKA, Hiroyuki; HASHIBA, Hiromi; SASAKI, Daisuke; TUKEGI, Takayuki
- 1PB-161<sup>#</sup>** Direct Conversion of Cellulose to Lactic Acid Using ZrO<sub>2</sub>-based Oxide Catalysts (RCPT, AIST) ○YAMAGUCHI, Aritomo; WATTANAPAPHAWONG, Panya; REUBROYCHAROEN, Prasert; SATO, Koichi; SATO, Osamu; MIMURA, Naoki
- 1PB-162** Catalytic supercritical water gasification of food waste (RCPT, AIST; Grad. Sch. Eng., Iwate Univ.) ○SATO, Osamu; MURAMATSU, Natsumi; YAMAGUCHI, Aritomo; SHIRAI, Masayuki; MIMURA, Naoki
- 1PB-163** Development of bio-based adhesive using reversible Diels-Alder reaction between furan and maleimide (ORIST) ○INOUE, Yohtarō;

TACHI, Hideki

- 1PB-164** Synthesis of plasticizer dioctyl terephthalate by alcoholysis of PET. (Yamaguchi Pref. Ind. Tech. Inst.) ○MIYAZAKI, Shogo
- 1PB-165<sup>#</sup>** Silicon film fabricated by electrodeposition on nonwoven fabric type CNT and its electrochemical property (Coll. Sci. Eng., Kanto Gakuin Univ.; Fac. Sci., TUS; Meikai Univ.; Dept. of Chem. & Bio. Eng., NIT, Ube College) ○TOMONO, Kazuaki; OGOMA, Takayoshi; YAMAWAKI, Takeru; KOUYAMA, Yuki; KAKIHARA, Shunta; TAMAKI, Yoshinori
- 1PB-166** Study on accumulation mechanism of palladium in unicellular algae by X-ray analyses (Sch. Eng., Tokyo Denki Univ.) YOSHIOKA, Naoki; NISHINOBU, Takuya; ○HOKURA, Akiko; KUMAGAI, Kazuhiro

Wednesday, March 21, AM

(10 : 00~11 : 30)

## Inorganic Chemistry

- 2PA-001<sup>#</sup>** Density functional study on the Am/Eu selectivity correlated to the bonding between Am or Eu and Group 15 elements (Grad. Sch. Sci., Hiroshima Univ.; NSEC, JAEA) ○KIMURA, Taiki; KANEKO, Masashi; MIYASHITA, Sunao; WATANABE, Masayuki; NAKASHIMA, Satoru
- 2PA-002<sup>#</sup>** Interaction of boric acid and phenylboronic acid with cross-linked dextran gel matrix (Fukuoka Univ. of Educ.) ○MIYAZAKI, Yoshinobu; ASADA, Kei; KAWASAKI, Yuma; MATSUOKA, Shiro; YOSHIMURA, Kazuhisa
- 2PA-003** Effects of calcination conditions on low-temperature formation of  $\alpha$ -alumina from polyhydroxoaluminum complex gels. (Grad. Sch. Sci. Technol., Shinshu Univ.; Fac. Eng., Shinshu Univ.) ○UEDA, Tasuku; YAMAGUCHI, Tomohiro; TARUTA, Seiichi
- 2PA-004<sup>#</sup>** Synthesis and Photocatalytic Properties of Perovskite-type Ba-CeO<sub>3</sub> (Dept. of Chem. & Mater. Sci., NIT, Gunma College) ○TAIRA, Nobuyuki; UBUKATA, Hiroki
- 2PA-005** Change of structure and physicochemical properties of glass by milling. (Grad. Sch. Eng., Kobe Univ.) ○KAJINAMI, Akihiko; KYOGUCHI, Takahiro; YAMANAKA, Yuuto; NARIAI, Hiroyuki
- 2PA-006<sup>#</sup>** Dielectric properties of black titanium oxides in terahertz region (Grad. Sch. Sci., The Univ. of Tokyo) ○HONDA, Satoru; NASU, Tomomichi; MIYAMOTO, Yasuto; TANAKA, Kenji; MAENO, Yuta; OHKOSHI, Shin-ichi
- 2PA-007<sup>#</sup>** Crystal Growth, Structure and Magnetic Properties of New Copper Hydroxy Salts with Geometrically Frustrated Magnetic Networks (Fac. Sci. and Technol., Seikei Univ.) ○FUJITA, Wataru; IWATA, Satoru
- 2PA-008<sup>#</sup>** Synthesis of methotrexate/layered double hydroxide and its cytotoxicity (Iwate Univ.) ○AISAWA, Sumio; OGAWA, Yugo; SANG, Jing; HIRAHARA, Hidetoshi
- 2PA-009** Intercalation of carboxylic acids by carbonate-type layered double hydroxide in acetonitrile (Kobe Pharm. Univ.) ○HAYASHI, Aki; NAKAHARA, Mika; DEGUCHI, Ayami; NAKAYAMA, Hirokazu
- 2PA-010** Synthesis of swelling Na-micas by a solid-state reaction under atmospheric conditions (Grad. Sch. Sci. Technol., Shinshu Univ.; Fac. Eng., Shinshu Univ.) ○OKUDE, Kazune; YAMAGUCHI, Tomohiro; TARUTA, Seiichi
- 2PA-011** Synthesis and hydrothermal treatment of fluorine paragonite mica ceramics using kaolinite (Grad. Sch. Sci. Technol., Shinshu Univ.; Fac. Eng., Shinshu Univ.) ○JINNO, Yuki; YAMAGUCHI, Tomohiro; TARUTA, Seiichi
- 2PA-012<sup>#</sup>** Preparation of Layer Structured Tungsten Cs<sub>4</sub> W<sub>11</sub>O<sub>35</sub> and Ion Exchange Products (NIT, Tokuyama College) ○OHASHI, Masao
- 2PA-013** Topotactic Oxidation of MoO<sub>2</sub> Nanosheets (SACI, Kyoto Univ.) ○FUKUDA, Katsutoshi; TOYODA, Satoshi; MATSUBARA, Eiichiro
- 2PA-014** Single-step solvothermal synthesis of monodispersed ZrO<sub>2</sub> nanoparticle assemblies with spherical porous morphology (Sch. Env. Sci. Eng., KUT) ○YAMAMOTO, Emi; OHTANI, Masataka; KOBIRO, Kazuya
- 2PA-015** One-step solvothermal synthesis of monodispersed CeO<sub>2</sub> nanoparticle assemblies with porous spherical morphology (Sch. Env. Sci. Eng., KUT) ○TANIGUCHI, Ayano; NGUYEN, Hien Thi Thu; OHTANI, Masataka; KOBIRO, Kazuya
- 2PA-016** One-step solvothermal synthesis of ZnO nanoparticle assemblies with hollow spherical morphology (Sch. Env. Sci. Eng., KUT) ○TSUJIMOTO, Takuya; OHTANI, Masataka; KOBIRO, Kazuya
- 2PA-017** Preparation of gold nanoparticle catalysts supported on TiO<sub>2</sub> nanoparticle assemblies with nano concave-convex surface and their catalytic properties (Sch. Env. Sci. Eng., KUT) ○HAYASHI, Kahoko; DURIYASART, Farkfun; IRIZAWA, Akito; OHTANI, Masataka; KOBIRO, Kazuya
- 2PA-018<sup>#</sup>** Rapid one-step synthesis of CoO hollow spherical nanoparticle assemblies by solvothermal reaction (Grad Sch. Eng., KUT) ○MORITOH, Daiki; OHTANI, Masataka; KOBIRO, Kazuya
- 2PA-019<sup>#</sup>** Withdrawn
- 2PA-020** Introduction of hetero transition metal atoms into the metal-organic nanocrystals and their physical properties control (Sch. Env. Sci. Eng., KUT) TAOMOTO, Mayuka; ○OHTANI, Masataka
- 2PA-021** Synthesis of core-shell metal-organic nanocrystals and their physical

properties control (Sch. Env. Sci. Eng., KUT) ○SETOGUCHI, Tamaka; OHTANI, Masataka

- 2PA-022** Photophysical properties control of organic dyes incorporated in metal-organic nanocrystals (Sch. Env. Sci. Eng., KUT) ○SAKAMOTO, Hikaru; OHTANI, Masataka
- 2PA-023** Facile synthesis of metal-organic nanocrystal assemblies and their physical properties (Sch. Env. Sci. Eng., KUT) ○OZAKI, Chiho; OHTANI, Masataka
- 2PA-024<sup>#</sup>** Synthesis of aluminum cobalt phosphate with GIS zeolite framework structure using 2-imidazolidinone as organic structure-directing agent (NITIC; IMR, Tohoku Univ.) ○MIURA, Hironobu; OHSHIMA, Eriko; SUGIYAMA, Kazumasa
- 2PA-025<sup>#</sup>** Relationship between synthesis temperature and crystalline morphology of ZSM-5 (Dept. Appl. Chem., Nat. Def. Acad.) ○KAMIYA, Natsumi; SHIKI, Takuya; SUZUKI, Shuto; NISHI, Koji
- 2PA-026** Preparation of boron phosphate and its application to flame retardant of polymer materials (Kanazawa Inst. of Tech.) ○GOTO, Fumiki; TSUYUMOTO, Isao
- 2PA-027** Structure and battery performance of LiF-transition metal oxide composite (Fac. Eng., Shizuoka Univ.; Yamaha Motor Co., Ltd.) IGO, Maino; KIMURA, Noritaka; ARAI, Juichi; ○TOMITA, Yasumasa
- 2PA-028<sup>#</sup>** DNA Films Containing the Artificial Nucleobase IMADAZOLE Mediate Charge Transfer in an Ag(I)-Responsive Way (University of Münster, Germany) ○LÉON, J. Christian; MÜLLER, Jens; KRAATZ, Heinz Bernhard
- 2PA-029<sup>#</sup>** Influence of the chirality of GNA nucleosides on the stability of DNA double helices with individual GNA-based base pairs (University of Muenster, Germany) ○ESCHER, Daniela; BISWARUP, Jash; MUELLER, Jens

## Coordination Chemistry, Organometallic Chemistry

- 2PA-031** Synthesis of a mixed-ligand cluster {(C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>(Ph<sub>2</sub>C<sub>2</sub>S<sub>2</sub>)<sub>2</sub>Fe<sub>4</sub>S<sub>4</sub>} and a new sulfur-rich cluster {(C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>(Ph<sub>2</sub>C<sub>2</sub>S<sub>2</sub>)<sub>2</sub>Fe<sub>4</sub>S<sub>5</sub>} by reaction of (C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>4</sub>, sulfur and diphenylacetylene (Grad. Sch. Symbiotic Syst. Sci. & Tech., Fukushima Univ.) ○INOMATA, Takanori; INOMATA, Shinji
- 2PA-032** Synthesis and property of dithiolene-bridged diiron complex Cp<sub>2</sub>Fe<sub>2</sub>{S<sub>2</sub>C<sub>2</sub>(CO<sub>2</sub>Me)<sub>2</sub>}<sub>2</sub> (Fac. Symbiotic Syst. Sci. & Tech, Fukushima Univ.) ○SATO, Hiroaki; INOMATA, Shinji
- 2PA-033<sup>#</sup>** Synthesis and magnetic property of grid-type new polynuclear iron complex with Schiff base ligand (Fac. Sci. Eng., Kindai Univ.) ○HIRAOKA, Saki; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-034** Preparation of Multi-nuclear Iron Clusters by the Reduction of Oxo-centered Trinuclear Iron Clusters with Bridging Carboxylate Ligands (Grad. Sch. Eng. Sci., Osaka Univ.) ○TORII, Ryuya; ODA, Hiroaki; REJ, Supriya; TSURUGI, Hayato; MASHIMA, Kazushi
- 2PA-035<sup>#</sup>** Synthesis and Reactivity of Cobalt Complexes with Isoquinoline-Based Ligands Derived from TPA (Fac. Sci., Nara Women's Univ.) ○ISHII, Tomoko; MATSUMOTO, Arimasa; MIKATA, Yuji
- 2PA-036** Preparation and crystal structure of coordination compounds constructed from tris (pyridyl phenyl) phosphine oxide and metal ions (Grad. Sch. Natural Sci., Konan Univ.) ○MATSUI, Yoshimichi; KATAGIRI, Kosuke
- 2PA-037** Synthesis of hexaazatriphenylene derivatives with branched alkoxy groups. (Sch. Sci. Tech., Kwansei Gakuin Univ.) ○KAJIHARA, Masaharu; HINOKIMOTO, Akira; TANAKA, Daisuke
- 2PA-038<sup>#</sup>** Synthesis and properties of a trinuclear copper(II) complex of a ligand with phthalocyanine and Schiff-base coordination sites (Grad. Sch. Fac. Sci. Eng., Shimane Univ.; Fac. of Sci., Okayama Univ. of Sci.) ○HANDA, Makoto; KANAGAWA, Kenichi; YANO, Natsumi; YAIRI, Haruki; OKUNO, Airo; MITSUMI, Minoru; KATAOKA, Yusuke
- 2PA-039<sup>#</sup>** Syntheses, structures and properties of novel polynuclear Cu(I) ethylene complexes with the related terpyridine ligands (Grad. Sch. Sci. Eng., Kindai Univ.; RIST, Kindai Univ.) ○YABUTA, Mahuyu; MAEKAWA, Masahiko; OKUBO, Takashi; KURODA-SOWA, Takayoshi
- 2PA-040** Syntheses and property of di-nuclear Cobalt complexes connect with triple bond (Fac. Sci. Eng., Kindai Univ.) ○MIBU, Takuto; SUENAGA, Yusaku
- 2PA-041<sup>#</sup>** Synthesis of novel dinuclear cobalt complexes of [2+2] macrocyclic ligands with a bis(imino)pyridine moiety (Grad. Sch. Sci. Tech., Meijo Univ.) ○SHIBATA, Yoshinori; NAGATA, Toshi
- 2PA-042** Structural analysis of macrocyclic Cu(II) complexes containing terminal amide pendant groups (Grad. Sch. Sci., TUS) ○OKAZAKI, Haruna; ISHII, Takehiro; NOMOTO, Kuniharu; MIYAMURA, Kazuo
- 2PA-043<sup>#</sup>** Synthesis of a Novel Tridentate Ligand with a Pyrazole Moiety and Its Zinc Complex (Grad. Sch. Sci. Tech., Meijo Univ.) ○ITO, Shoya; NAGATA, Toshi
- 2PA-044<sup>#</sup>** Bis-phenanthroline macrocyclic ligand bearing bulky side-chains: Metal complexation and self-organization (Grad. Sch. Sci., The Univ. of Tokyo) ○OU, Jugai; TASHIRO, Shohei; SHIONOYA, Mitsuhiro
- 2PA-045<sup>#</sup>** Syntheses, structures and properties of novel Cu(I) coordination polymers with multidentate nitrogen ligands (Fac. Sci. Eng., Kindai Univ.; RIST, Kindai Univ.) ○HAYASHI, Terumasa; MAEKAWA, Masahiko; OKUBO, Takashi; KURODA-SOWA, Takayoshi

- 2PA-046** Syntheses and Isomerization Reaction of Ru(II)-dmsO Complexes with a Scorpionate Ligand *N,N*-bis(2-pyridyl)(6-hydroxy-2-pyridyl)amine (Dept. of Sci. Tech., Meiji Univ.) OITO, Katsuki; TOYAMA, Mari; NAGAO, Noriharu
- 2PA-047** Synthesis and Properties of Ruthenium(II) Complexes of Sugar-conjugated Porphyrin Derivatives (Okayama Univ. of Sci.) OMIZUNO, Hiromu; AKASHI, Haruo
- 2PA-048** Syntheses and Reactions of Triply-Bridged Dinuclear Ru(III)-Ru(IV) Complexes Bridged by Two Oxido and an Oxygen Donor Anion (Sci. Tec., Sophia Univ.) OSUZUKI, Tomoyo; NAGAO, Hirotaka
- 2PA-049** Synthesis and Properties of Prochiral  $\mu_3$ -Oxido-triruthenium Acetate Complexes Coordinated by Phosphines (Grad. Sch. Sci., Kitasato Univ.) OSAIKI, Takahiro; YUGE, Hidetaka; YOSHIDA, Jun; KOIKE, Natsuki
- 2PA-050** Syntheses and Reactions of Nitrido-Bridged Dinuclear Ruthenium Complexes Having Pyridine as a Coexisting Ligand (Sci. Tec., Sophia Univ.) OSHIMIZU, Marika; SUZUKI, Tomoyo; NAGAO, Hirotaka
- 2PA-051** Photochemical CO<sub>2</sub> Reduction by Ruthenium Complexes Bearing a CNC-Type Pincer Ligand (Grad. Sch. Eng., Nagasaki Univ.) OSADAMITSU, Masahiro; MIURA, Yukari; ARIKAWA, Yasuhiro; HORIUCHI, Shinnosuke; SAKUDA, Eri; UMAKOSHI, Keisuke
- 2PA-052** Synthesis of novel triple-decker rare earth metal complex of porphyrin (ADRES, Ehime Univ.) OMIYAMOTO, Kan; KOBAYASHI, Tomohiro; MORI, Shigeki; TAKASE, Masayoshi; OKUJIMA, Tetsuo; UNO, Hidemitsu
- 2PA-053** Preparations of Dinuclear Molybdenum Complexes having Tp Ligands (Grad. Sch. Eng., Nagasaki Univ.) ONAGATA, Keisuke; ARIKAWA, Yasuhiro; HORIUCHI, Shinnosuke; SAKUDA, Eri; UMAKOSHI, Keisuke
- 2PA-054** The Synthesis of Pd(II)-8-Quinololin Cyclometalated Complexes Having bioactive substance as External Ligands (Kobe City Coll. Technol.) OMARUI, Nagisa; OHFUCHI, Shinichi
- 2PA-055** Syntheses of Multinuclear Pd(II) Complexes with Axial Chirality (Grad. Sch. Sci., Eng., Ehime Univ.) OGOTO, Yutarō; SATO, Hisako; WATANABE, Yutaka
- 2PA-056** Synthesis, Structure and Properties of Ir<sup>III</sup>-Pt<sup>II</sup> Hetero-nuclear Complex with Azophenine (Fac. Sci., Saitama Univ.) OYAMASHITA, Masamichi; OHNO, Keiji; SAKATA, Tetsuya; NAGASAWA, Akira; FUJIHARA, Takashi
- 2PA-057** Syntheses, crystal structures and properties of novel heterometallic polynuclear {Cu(I), Ag(I)}-Ir(III) complexes conducted by Ir(III) hydride metalloligands (Grad. Sch. Sci. Eng., Kindai Univ.; RIST, Kindai Univ.) OODA, Shoki; MAEKAWA, Masahiko; OKUBO, Takashi; KURODA-SOWA, Takayoshi
- 2PA-058** Synthesis and crystal structures of new octahedral rhenium cluster complexes with phenoxide ligands (Grad. Sch. Sci., Eng., Saitama Univ.) OKAWADA, Soshi; NAGASHIMA, Sayoko; KOBAYASHI, Hidehiko
- 2PA-059** Synthesis, crystal structure and properties of a metal-organic framework of tetraazamacrocyclic copper(II) complex with benzenetetracarboxylic acid (Grad. Sch. Sci. Technol., Shinshu Univ.) OMIZUTANI, Shingo; OHKI, Hiroshi; ISHIKAWA, Atsushi; TAKEUCHI, Akari
- 2PA-060** Development of cycloaddition reactions in chiral porous crystals composed of helical trinuclear Pd(II)-macrocyclic complexes (Grad. Sch. Sci., The Univ. of Tokyo) ONAKAJIMA, Shuhei; TASHIRO, Shohei; SHIONOYA, Mitsuhiko
- 2PA-061** Design and Synthesis of Molecular Shuttles Driven by Phosphate-Zn (II) Coordination (Fac. Pharm. Sci., TUS) OSEKINE, Yoshiaki; SAGA, Yutaka; AOKI, Shin
- 2PA-062** Synthesis and Electrochemical Properties of Novel Metallo-Supramolecular Polymers using Bisterpyridine Ligand with ethynylene Spacer Unit. (RCFM, NIMS) ONINOMIYA, Yoshikazu; HIGUCHI, Masayoshi
- 2PA-063** Synthesis, Crystal Structure and Physical Properties of Metal Organic Framework with Tetraazamacrocyclic (Grad. Sch. Sci. Technol., Shinshu Univ.) OHOSODA, Kensuke; OHKI, Hiroshi; ISHIKAWA, Atsushi; TAKEUCHI, Akari
- 2PA-064** One-dimensional Metal-Organic Framework (1D MOF) Generated through Superposition of Molecular Square Composed of Paddle Wheel Metal Complexes. (Sch. Sci., Nagoya Univ.) OYONEZAWA, Shumpei; KAWANO, Shin-ichiro; TANAKA, Kentaro
- 2PA-065** Expansion of Polymer-Metal-Organic Framework (polyMOF) Library (Grad. Sch. Sci., Kyushu Univ.; Dept. Chem. Biochem., UC San Diego) OHTSUBO, Yuta; PALOMBA, Joseph; AYALA, Sergio; OHBA, Masaaki; COHEN, Seth
- 2PA-066** Construction of Self-Assembled Porous Complexes Accumulating Rigid Inner Functional Groups (Fac. Eng., The Univ. of Tokyo) OMATSUO, Kohei; DOMOTO, Yuya; FUJITA, Makoto
- 2PA-067** Investigation of Acid/Base Orthogonal Reaction Systems Based on Site-Isolation Utilizing Self-Assembled Porous Complexes (Fac. Eng., The Univ. of Tokyo) OHORIE, Shumpei; DOMOTO, Yuya; FUJITA, Matoko
- 2PA-068** Switching of gas adsorption responding to the inclusion of guest molecules in a peptide Ni(II)-macrocyclic (Fac. Sci., Ochanomizu Univ.; PRESTO, JST) OUENO, Manami; TAKANO, Keiko; MIYAKE, Ryosuke
- 2PA-069** Evaluation of the Catalytic Activity of Dinuclear Systems for Oxalate Production from CO<sub>2</sub> (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) OTHURGOOD-PARKES, Kalum; SAKAI, Ken
- 2PA-070** Syntheses and reactivities of visible light-responsive ruthenium(II) and iridium(III) complexes with hydride acceptor ligands (Dept. of Material & Life Chem., Kanagawa Univ.) OYOSHIDA, Yukino; HASHIMOTO, Takuya; FUGO, Syunsuke; KOIDE, Yoshihiro; MATSUBARA, Yasuo
- 2PA-071** Multielectron and proton transfer reaction of iron (II) complex with redox-active tridentate ligand. (Fac. Sci. Eng., Chuo Univ.) ONISHIZAWA, Tadaaki; AKISAWA, Hideaki; WANG, Longkun; CHANG, Ryongsok; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 2PA-072** Photochemical Hydrogen Radical Generation of *o*-Phenylenediamine Iron(II) Complexes (Grad. Sch. Sci. Eng., Chuo Univ.) OKOIKE, Takuji; UCHIIYO, Daiki; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 2PA-073** Sensitizing properties in photochemical hydrogen generation using iridium complexes with ligands of terpyridine derivatives (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OKATO, Sora; IKUTA, Naoya; OKAZAWA, Atsushi; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 2PA-074** Crystal Structures and Electronic Properties of Divanadium Dinitrogen Complexes with Triamidoamine Ligands (Fac. Eng., Aichi Inst. of Tech.) OKOKUBO, Yoshiaki; KAIJTA, Yuji; TSUZUKI, Kazuki
- 2PA-075** Photo Cleavage Reaction of C(sp<sup>2</sup>)-Si Bonds Mediated by Iridium Complexes bearing the Ind-P Ligand (Fac. Sci., Nara Women's Univ.) OITAKURA, Ayaka; GOTO, Akane; TSUBAKIMOTO, Aya; URA, Yasuyuki; KATAOKA, Yasutaka
- 2PA-076** Synthesis of iridium complexes with ligands of coumarin derivatives and their application to photosensitized singlet oxygen generation (Grad. Sch. Arts and Sci., The Univ. of Tokyo) OMIYAGISHI, Yuna; IKUTA, Naoya; OKAZAWA, Atsushi; TAKIZAWA, Shin-ya; MURATA, Shigeru
- 2PA-077** Development of metal complexes as redox photosensitizers toward immobilization on semiconductors (Sch. Sci., Tokyo Tech.) OMURAKOSHI, Riho; TAMAKI, Yusuke; HAGA, Masa-aki; ISHITANI, Osamu
- 2PA-078** Electrochemical reduction of CO<sub>2</sub> by using rhenium (I) complexes possessing second coordination spheres designed for the catalysis (Dept. of Material & Life Chem., Kanagawa Univ.) OSHIMOJIMA, Miho; ONO, Kazuya; NOJIMA, Jo; OGATA, Mio; KOIDE, Yoshihiro; MATSUBARA, Yasuo
- 2PA-079** Photochemical multi-electron accumulation and photocatalytic CO<sub>2</sub> reduction using a hybrid-photosensitizer consisting of a ring-shaped Re(I) tetranuclear complex and polyoxometalate (Sch. Sci., Tokyo Tech.) OTAKAHASHI, Maria; YAMAZAKI, Yasuomi; ISHITANI, Osamu
- 2PA-080** Metal complexes having phosphine donors designed for selective photocatalytic CO<sub>2</sub> reduction in water: design, synthesis, characterization and their catalytic performance (Fac. Sci., Kyushu Univ.; I<sub>2</sub>CNER, Kyushu Univ.; CMS, Kyushu Univ.) OXIAN, Zhang; MIHAELA, Cibian; KEN, Sakai
- 2PA-081** Synthesis and Magnetic Properties of Valence Tautomeric Complex with Chiral Ligands (IMCE, Kyushu Univ.) OSEJIMA, Hibiki; KANEGAWA, Shinji; NAKANISHI, Takumi; SATO, Osamu
- 2PA-082** Halogen-substituent effect of new spin crossover Fe(III) complexes containing dicarboxylic acid (IMCE, Kyushu Univ.) ONAKANISHI, Takumi; SATO, Osamu
- 2PA-083** Control of the spin transition temperature in a series of mixed ligand complexes [Fe(qsal<sup>2F</sup>)<sub>x</sub>(qsal<sup>2Cl</sup>)<sub>2-x</sub>] (x = 0-2) (Fac. Sci. Eng., Kindai Univ.) OKAGOTANI, Takamasa; KIKUCHI, Sinitiro; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-084** Fluorine Introduction Effects in Iron(II) and Iron(III) Complexes with Hqsal<sup>nF</sup> Ligands -Influence on Structures and Magnetic Properties - (Grad. Sch. Sci. Eng., Kindai Univ.) OFUKUMASU, Tomohiro; OKUBO, Takashi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-085** The change of fluorescence property in mononuclear iron (II) complexes associated with their spin crossover behaviors (Fac. Sci. Eng., Kindai Univ.) ONAKAGAWA, Keisuke; OOKUBO, Takasi; MAEKAWA, Masahiko; KURODA-SOWA, Takayoshi
- 2PA-086** Observation of the charge transfer behavior of vanadium substituted iron mixed valence complex (n-C<sub>3</sub>H<sub>7</sub>)<sub>4</sub>N[Fe<sup>III</sup>Fe<sup>II</sup><sub>1-x</sub>V<sup>III</sup><sub>x</sub>(C<sub>2</sub>O<sub>4</sub>S<sub>2</sub>)<sub>3</sub>] by means of dielectric constant measurement (Fac. Sci., TUS) OKAWAMOTO, Fumihito; SHIDA, Norihiro; OKAZAWA, Atsushi; KOJIMA, Norimichi; ENOMOTO, Masaya
- 2PA-087** Observation of phonon modes in CsMnFe(CN)<sub>6</sub> Prussian blue analog (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) OFUJIWARA, Rei; UMETA, Yoshikazu; OHKOSHI, Shinichi; TOKORO, Hiroko
- 2PA-088** Chiral cyanido-bridged bimetal assemblies based on achiral building blocks (Grad. Sch. Sci., The Univ. of Tokyo) OHNO, Takuro; IMOTO, Kenta; NAKABAYASHI, Kouji; OHKOSHI, Shin-ichi
- 2PA-089** Synthesis of ionic conductive cyanide-bridged metal assemblies composed of pentacyanidonitrosylmolybdate metal assemblies (Grad. Sch. Sci., The Univ. of Tokyo) OSHIBATA, Yuya; IMOTO, Kenta; NAKAGAWA, Kosuke; KOMINE, Masaya; NAKABAYASHI, Kouji; OHKOSHI, Shin-ichi
- 2PA-090** Optical properties of Co-W cyanido-bridged metal assemblies exhibiting a thermal phase transition (Grad. Sch. Sci., The Univ. of Tokyo) OYOSHIDA, Takaya; OHNO, Takuro; IMOTO, Kenta; NAKABAYASHI, Kouji; OHKOSHI, Shin-ichi
- 2PA-091** Mixed-valent state and molecular fastener effect of Iodo-bridged 1D platinum complexes with long-chain alkane sulfonate ions (Coll. Sci., Rikkyo Univ.; Research Center for Smart Molecules, Rikkyo Univ.) OSHIRAI, Hirotaka; MATSUSHITA, Nobuyuki
- 2PA-092** Syntheses of redox-active platinum(II) complexes with ligands



- deprotonated fromo-phenylenediamine derivatives (Coll. Sci., Rikkyo Univ.; Research Center for Smart Molecules, Rikkyo Univ.) ○WARIISHI, Nobuyuki; MATSUSHITA, Nobuyuki
- 2PA-093<sup>#</sup>** Function pioneer of single-molecule magnet (Grad. Sch. Sci., Tohoku Univ.) ○SATO, Tetsu; KATO, Keichi; BREEDLOVE, Brian; YAMASHITA, Masahiro
- 2PA-094** Photochemical methanol dehydrogenation catalyzed by 2-aminophenol and 2-aminophenolato complexes (Fac. Sci. Eng., Chuo Univ.) ○KOIKE, Shota; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 2PA-095** Acceleration of the isomerization of glucose into fructose using porous coordination polymer (Fac. Sci. Tech., Kochi Univ.; Fac. Env. Earth Sci., Hokkaido Univ.; Sch. Sci., Univ. of Hyogo; RIES, Hokkaido Univ.) ○OCHI, Rika; NORO, Shin-ichiro; KUBO, Kazuya; NAKAMURA, Takayoshi
- 2PA-096** Isomerization reaction without addition of any reagents in *trans*-[Ru(N`N)(CO)<sub>2</sub>Cl<sub>2</sub>]-type complexes (N`N : polypyridyl ligands) (Grad. Sch. Symbiotic Syst. Sci. & Tech., Fukushima Univ.) ○KAINUMA, Shuya; ABE, Ryosuke; TAKASE, Tsugiko; OYAMA, Dai
- 2PA-097** Formaldehyde Formation from Organometallic Phthalocyanines by Red-Light Excitation (IIS, The Univ. of Tokyo) ○SAIBE, Yuki; MURATA, Kei; ISHII, Kazuyuki
- 2PA-098<sup>#</sup>** Amine-Promoted Reductive Dechlorination of a Dinuclear Rhodium Complex Supported by Tetrakisphosphine Ligand, *meso*-dppmpp (Fac. Sci., Nara Women's Univ.) ○NISHIGAKI, Mariko; MATSUI, Aya; NAKAMAE, Kanako; KURE, Bunsho; NAKAJIMA, Takayuki; TANASE, Tomoaki
- 2PA-099** Thermal Reactions of Metal Sulfide Clusters bearing Cyclic Metal-disulfide Skeleton (Fac. Sci. Eng., Chuo Univ.) ○KURIHARA, Kazuto; NAMIKI, Ryoya; CHANG, Ho-chol; MATSUMOTO, Takeshi
- 2PA-100<sup>#</sup>** Synthesis of Metal Complexes with Tris(oxazolynlmethyl)amine Ligand and Their Catalytic Activity for Alkane Oxidation (Fac. Eng., Kanagawa Univ.) ○NAKAZAWA, Jun; ENDO, Junpei; JYOZAWA, Naoki; TERAOKA, Ikumi; HIKICHI, Shiro
- 2PA-101<sup>#</sup>** Synthesis of novel coordination polymers using niobium(V) and characterization of their secondary battery properties (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○HAYASHIDA, Kento; SHIMIZU, Takeshi; YOSHIKAWA, Hirohumi; TANAKA, Daisuke
- 2PA-102** Reactions of Nitrosylruthenium Complexes Bearing Ethylbis(2-pyridylmethyl)amine coordinated as *fac*- and *mer*-fashion with Nucleophile (Sci. Tec., Sophia Univ.) ○OSAWA, Yutaro; SUZUKI, Tomoyo; NAGAO, Hirotsuka
- 2PA-103** Substitution and Photo-induced Hypodentate Formation Reaction of Ru(II) Complex Bearing a Branched Tetrapyridyl Diamine Ligand (Dept. of Sci. Tech., Meiji Univ.) ○ONAGA, Ryo; TOYAMA, Mari; NAGAO, Noriharu
- 2PA-104** Reduction of Trichloridoruthenium(III) Complex Bearing Ethylbis(2-pyridylethyl)amine (Sci. Tec., Sophia Univ.) ○NAGASHIMA, Mikio; SUZUKI, Tomoyo; NAGAO, Hirotsuka
- 2PA-105** Synthesis and Structure of Ru(II)-Proton Di-Nuclear Complex with an Unsymmetrical Bis-Bidentate Ligand dmpdpmda. (Dept. of Sci. Tech., Meiji Univ.) ○KISHIMOTO, Masato; TOYAMA, Mari; NAGAO, Noriharu
- 2PA-106** Nitrite Reduction Cycle on Dinuclear Ruthenium Complexes having Tp Ligands (Grad. Sch. Eng., Nagasaki Univ.) ○NAKAYAMA, Tomofumi; FUJINO, Hiroki; ARIKAWA, Yasuhiro; HORIUCHI, Shinosuke; SAKUDA, Eri; UMAKOSHI, Keisuke
- 2PA-107<sup>#</sup>** CO<sub>2</sub> reduction by a dinuclear ruthenium complex bridged by bis(bipyridylphenyl)anthracene (Grad. Sch. Sci., Rikkyo Univ.) ○OJIMA, Takumi; NAKAZONO, Takashi; WADA, Tohru
- 2PA-108<sup>#</sup>** Synthesis and Redox Properties of Ru Complexes with 2-(pyridin-2-yl)-1*H*-benzo[d]imidazole-4,7-dione (Fac. Sci. Eng., Chuo Univ.) ○WATANABE, Takumi; YANO, Genki; YOSHIKAWA, Kai; HAGA, Masaaki; SATAKE, Akiharu
- 2PA-109** Synthesis of new redox-active complex functionalized with oligoethylene glycoxy amido chains (Fac. Sci. Eng., Chuo Univ.) ○ECHIGO, Ryoya; OKADA, Koyuki; MATSUMOTO, Takeshi; CHANG, Ho-chol
- 2PA-110<sup>#</sup>** Application of chiral salen complexes including azo group for Dye Sensitized Solar Cell. (Fac. Sci., TUS) ○TANAKA, Shinosuke; SATO, Hiroki; ISHIDA, Youta; DENG, Yan Yang; HARAGUCHI, Tomoyuki; AKITSU, Takashiro; SUGIYAMA, Mutsumi; MOON, Dohyun
- 2PA-111<sup>#</sup>** Thermal behavior of Ni(salphen) derivatives introduced long alkoxy chains at *ortho* position (Grad. Sch. Chem. Sci. Technol., TUS) ○KASAHARA, Shigeo; HARAHOJI, Makoto; NOMOTO, Kuniharu; MIYAMURA, Kazuo
- 2PA-112** Synthesis of luminescent copper(I) complex by heterogeneous reaction (NIT, Tokyo College) ○MASAHARA, Shingo; IDE, Tomohito
- 2PA-113** Temperature dependence of emission in Cu(I) complexes bearing xantphos and phenanthroline ligands (Sch. Sci. Tech., Gunma Univ.) ○SUKA, Yuuki; YASUDA, Yoshifumi; TAYA, Izumi; ASANO, Motoko
- 2PA-114** Relaxation Mechanisms of Heteroleptic Cu(I) Complexes : Comparison of Mononuclear and Binuclear Complexes (Sch. Sci. Tech., Gunma Univ.) ○HASHIMOTO, Sho; YASUDA, Yoshifumi; ASANO, Motoko; TAKEDA, Hiroyuki; ISHITANI, Osamu
- 2PA-115** Emissive Property of Films Consisting of Cu(I) Multi-Nuclear Complexes Bridged by Tetradentate Ligands having Long Alkyl Phosphines (Sch. Sci., Tokyo Tech.) ○HIROYUKI, Takeda; OSAMU, Ishitani
- 2PA-116<sup>#</sup>** Withdrawn
- 2PA-117** Photoelimination Reactions of Two Cl Groups from Bis(1,10-phenanthroline)ruthenium(II) Complex bearing 4,4'-Bis(chloromethyl)-2,2'-bipyridine (bcm-bpy) (Dept. Chem., Konan Univ.) ○ASANO, Yuki; MATUOKA, Yumi; TOYAMA, Mari
- 2PA-118** Photocatalytic CO<sub>2</sub> reduction using the binuclear complex having an Os photosensitizer (Sch. Sci., Tokyo Tech.) ○NAKAMURA, Tamami; TAMAKI, Yusuke; ISHITANI, Osamu
- 2PA-119** Synthesis of Heteroleptic Iridium(III) Complexes with Phenyltriazole Ligand (IRC3, AIST) ○TAKAYASU, Satoshi; OSANAI, Sayo; NAKANISHI, Takahiro; KOIKE, Kazuhide; KONNO, Hideo
- 2PA-120** Circularly Polarized Luminescence from Coordination-Driven Chiral Lanthanide Assembly Having Bridging  $\beta$ -Diketone Ligands (Fac. Sci., TUS; PRESTO, JST) ○SATO, Miki; YUASA, Junpei
- 2PA-121** Supramolecular Europium Complexes Having Bringing  $\beta$ -Diketone Ligands Through Ethyne Spacer. (Fac. Sci., TUS; PRESTO, JST) ○TUYUKI, Takumi; YUASA, Junpei
- 2PA-122** Lanthanide Complexation and Luminescence Properties of Eu(III) Complexes in Aqueous Solution formed with Novel Tetradentate Ligand(s) Having IDA Moiety (Fac. Sci., Nara Women's Univ.) ○KOMORI, Yumi; KUDO, Mayumi; KATAOKA, Yumiko; KAJIWARA, Takashi
- 2PA-123<sup>#</sup>** Relation between Luminescent Properties and Structure in the Excited State of Platinum(II) Complex with Glycolate (Fac. Sci., Saitama Univ.) ○KOMURO, Masaya; FUJIHARA, Takashi; NAGASAWA, Akira; OHNO, Keiji; KUSANO, Yukiko
- 2PA-124** Photoluminescence properties of TADF-emitting three-coordinate gold(I) complexes (Fac. Eng., NIT; Lab. Chem. Life Sci., Tokyo Tech.) ○AINO, Masa-aki; OSAWA, Masahisa; TANAKA, Yuya; AKITA, Munetaka
- 2PA-125** Pressure effect on emission properties of Dicyanoaurate(I) oligomers of which counter cations are tetra-alkyl ammonium cations (Univ. of Toyama) ○IWAMURA, Munetaka; TAKEBAYASHI, Kahou; WAKABAYASHI, Ryo; NOZAKI, Koichi
- 2PA-126<sup>#</sup>** Synthesis and Reactions of Dichlorosilole with Bulky Aryl Substituents. (Grad. Sch. Sci., Eng., Saitama Univ.) ○TODA, Mizuki; FURUKAWA, Shunsuke; SAITO, Masaichi
- 2PA-127<sup>#</sup>** Synthesis of boron-substituted silyllithiums (Grad. Sch. Sci., Eng., Hosei Univ.) ○TANAKA, Kou; KAWACHI, Atsushi
- 2PA-128<sup>#</sup>** Reactions of (Dimesitylsilyl)dimesitylborane with Nucleophiles (Grad. Sch. Sci., Eng., Hosei Univ.) ○KOYANAGI, Ryota; KAWACHI, Atsushi
- 2PA-129** Theoretical Study on Improvement of One-Silicon Elongation Reaction with a Deprotonation-Nucleophilic Addition Sequence (Fac. Eng., Gifu Univ.) ○TAKAMORI, Atsushi; HIBINO, Hayata; KAMEYAMA, Hiroaki; NARUSE, Yuji
- 2PA-130** Effects of Transition Metals on Electron Donating Ability of Triple-decker-type Stannoles (Grad. Sch. Sci., Eng., Saitama Univ.) ○HAMADA, Junpei; FURUKAWA, Shunsuke; SAITO, Masaichi
- 2PA-131** Synthesis of Hydroxyapatite in liposomes (Fac. Sci., Kyushu Univ.) ○MAEDA, Michiko; KOSHIYAMA, Tomomi; OHBA, Masaaki
- 2PA-132<sup>#</sup>** Theoretical Examination on Absorption of Hydrogen Molecules to Metallocene Complexes (FIFC, Kyoto Univ.; Grad. Sch. Eng., Kyoto Univ.; Toyota Motor Corp.; Toyota Central R&D Labs., Inc.) ○TANAKA, Kazuyoshi; FUENO, Hiroyuki; SUTO, Hiroyuki; KITA, Takuji; MATSUMOTO, Mitsuru; KUZUYA, Takashi
- 2PA-133<sup>#</sup>** Synthesis and Properties of Lu(III) Complexes with Octamethylphthalocyanine (Fac. Sci., Kyushu Univ.) ○TAKAHASHI, Kazuhiro; SUENAGA, Masahiko
- 2PA-134<sup>#</sup>** Synthesis of zirconium(IV) complex with 3,5-di-*tert*-butylphenyl-substituted [OSSO]-type bis(phenolate) ligand and 1-hexene oligomerization. (Fac. Sci., Saitama Univ.) ○NAGAOKA, Shotaro; NAKAMURA, Kazuaki; NAKATA, Norio; ISHII, Akihiko
- 2PA-135** Synthesis of Zirconium and Hafnium Complexes Having a Phenoxide-Anilide Hybrid Ligand (Sch. Sci., Tokyo Tech.) KAWAGUCHI, Hiroyuki; ISHIDA, Yutaka; ○TAMURA, Akihiro
- 2PA-136<sup>#</sup>** Theoretical Study on Nitrogen Fixation Catalyzed by a Dimolybdenum Complex Bearing PCP-Type Pincer Ligands (IMCE, Kyushu Univ.) ○EGI, Akihito; TANAKA, Hiromasa; EIZAWA, Aya; ARASHIBA, Kazuya; KURIYAMA, Shogo; NAKAJIMA, Kazunari; NISHIBAYASHI, Yoshiaki; YOSHIKAWA, Kazunari
- 2PA-137<sup>#</sup>** Iron-Catalyzed Geminal Specific Dimerization of Terminal Alkynes (WPI-ITbM, Nagoya Univ.; Dept. Chem., Univ. of Toronto) ○OSTEN, Kimberly; LIANG, Quiming; SONG, Datong
- 2PA-138<sup>#</sup>** Hydrosilylation of ketone and aldehyde using iron(II) complex bearing mesoionic carbene ligand (Fac. Sci., Fukuoka Univ.) ○IKEDA, Hayao; KOGA, Yuji; MATSUBARA, Kouki
- 2PA-139<sup>#</sup>** Controlled radical polymerization by iron(III) complexes bearing Me<sub>3</sub>TACN ligands (Grad. Sch. Eng. Sci., Kyushu Univ.) ○II, Yuto; TAHARA, Atsushi; KAWAMURA, Mitsunobu; SUNADA, Yusuke; NAGASHIMA, Hideo
- 2PA-140** Theoretical Study of the Reaction between Ru Complexes with a Phosphine Ligand and Internal Alkynes (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○MANABE, Yuuka; TSUCHIDA, Noriko; TAKANO, Koichi; ISHII, Youichi; KODAMA, Shintaro; TAKANO, Keiko

- 2PA-141** Asymmetric Reductive Amination Reaction using Ruthenium Complex (NIT, Kurume College) ○MIYAMOTO, Hisakazu; KAJIKIYA, Showma; KIYONAGA, Tomokazu
- 2PA-142** Alkylation of Methyl Group of Heteroaromatic Compounds with Ru/In Dual Catalyst (Fac. Life Med. Sci., Doshisha Univ.) ○OE, Yohei; OHTA, Tetsuo
- 2PA-143** Synthesis of a Ruthenium Complex Containing a Polydenotate Amidine Ligand and Its Application to Hydrogen Transfer Reactions (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) ○MOMMAE, Tomoya; TSUKADA, Naofumi
- 2PA-144** Syntheses of Co(III) complexes having polypyridine ligand and their cytotoxicities against hypoxia tumor cells (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○SHIMONAKA, Yusuke; HAYASHI, Akitugu; NAKAI, Misaki; YANO, Shigenobu; OGAWA, Akiya; NAKABAYASHI, Yasuo
- 2PA-145** Theoretical Study of Cyclometalated Complexes Formed by Insertion of Alkynes into M-C Bonds (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○MIKI, Haruka; TAKANO, Keiko
- 2PA-146** Iridium-catalyzed Direct Cyclization of Aromatic Amines with Diols (Grad. Sch. Sci., Eng., Yamagata Univ.; Coll. Hum. Sci., Nihon Univ.; LCCMS, IMS) ○MINAKAWA, Maki; WATANABE, Kouichi; TOYODA, Satoru; UOZUMI, Yasuhiro
- 2PA-147** Dehydrogenation of Formic Acid by Iridium Catalyst with Azole Derivative Ligand (RIEF, AIST) ○ONISHI, Naoya; HIMEDA, Yuichiro
- 2PA-148** Withdrawn
- 2PA-149** Air-Stable Nickel(I) NHC Complexes bearing CF<sub>3</sub>-Substituted Triarylphosphine for Catalytic Applications (Fac. Sci., Fukuoka Univ.) ○FUJII, Takahiro; KOGA, Yuji; MATSUBARA, Kouki
- 2PA-150** Mechanistic Studies in Catalytic Amination Mediated by Monomeric Nickel(I) Amide species (Fac. Sci., Fukuoka Univ.) ○INATOMI, Takahiro; KOGA, Yuji; MATSUBARA, Kouki
- 2PA-151** Formation and characterization of Ni(II)-, Cu(II)-phenoxyl radical complexes formed by oxygen. (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○SUZUKI, Takashi; SATO, Akari; OSHITA, Hiromi; SHIMAZAKI, Yuichi
- 2PA-152** Study of Ni catalyzed allylation of aldehyde with allyl acetate (Gifu Pharm. Univ.) ○SUZUKI, Hiroyuki; YAMAGUCHI, Eiji; TADA, Norihiro; ITOH, Akichika
- 2PA-153** synthesis and reactivity of binuclear Cu-Pd complex containing the Cu photosensitizer (Grad. Sch. Sci. Eng., TMU) ○FUJIWARA, Tomoya; NOMURA, Kotohiro; INAGAKI, Akiko
- 2PA-154** Construction of solid catalyst by immobilization of organometallic complexes into *in vivo* protein crystals (Sch. Life Sci. Tech., Tokyo Tech.) ○ATSUMI, Kohei; ABE, Satoshi; UENO, Takafumi
- 2PA-155** Synthesis and Properties of Highly Strained *cis*-Bis(pi-extended-salicylaldehyde)platinum(II) Complexes (Grad. Sch. Eng. Sci., Osaka Univ.) ○RAIHAN, Md Al; TANAKA, Tomoya; SUZUKI, Shuichi; KOMIYA, Naruyoshi; NAOTA, Takeshi
- 2PA-156** Hydrosilylation of alkynes and dehydrogenation of amine-boranes catalyzed by pincer carbodiphosphorane-platinum complexes (Grad. Sch. Sci., Hiroshima Univ.) ○MIWA, Hiroto; OKITSU, Hiroyuki; IKEDA, Aya; KUBO, Kazuyuki; KUME, Shoko; MIZUTA, Tsutomu
- 2PA-157** Inclusion Properties of Tiara-Shaped Metal-Thiolate Macrocyclic Hosts with Metal Ions and Solvent Effects on Their Inclusion Complexation (Grad. Sch. Env. Sci., Hokkaido Univ.) ○FU, Huilin; SHICHIBU, Yukatsu; KONISHI, Katsuki
- 2PA-158** Interaction between bovine serum albumin and pd(II) and pt(II) complexes having 2,2',-6'',-2''-terpyridine derivative and their antitumor activities (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○SHIMADA, Kouyou; ASANO, Kyouhei; NAKAI, Misaki; YANO, Shigenobu; HUNAHASHI, Yasuhiro; NAKABAYASHI, Yasuo
- 2PA-159** Synthesis of Phosphine Ligand-supported 1,3,5-Trigold(I)benzene (Grad. Sch. Sci., The Univ. of Tokyo) ○WADA, Satoru; UBE, Hitoshi
- 2PA-160** Synthesis of dinuclear gold(I) complex with Carbene Exhibiting Four-Electron Donor Ability (Coll. Industrial Tech., Nihon Univ.) ○SHOTA, Tsurui; TAKAYOSHI, Fujii
- 2PA-161** Efficient Synthesis of Acyloxysilanes by Conversion of Alkoxy silanes and Its Application to Surface Modification (IRC3, AIST) ○YAMASHITA, Hiroshi; HATORI, Makiko; YOSHINAGA, Michiyo; SATO, Kazuhiko; IGARASHI, Masayasu
- 2PA-162** Selective coupling reaction of acetoxy silanes with silanols affording siloxane compounds (IRC3, AIST) ○SHINOHARA, Yoshihiro; YAMASHITA, Hiroshi; HATORI, Makiko; YOSHINAGA, Michiyo; SHIMADA, Shigeru; SATO, Kazuhiko; IGARASHI, Masayasu
- 2PA-163** Synthesis and Metal Complexation Behavior of 1,8-Naphthyridine Derivatives with Phosphine and Pyridine Moieties (Grad. Sch. Sci., Eng., Ehime Univ.) OHTA, Hidetoshi; ○ENOMOTO, Hirohito; KAWAKAMI, Hiroki; IMADA, Yuji; HAYASHI, Minoru
- 2PA-164** Synthesis and Metal Complexation Behavior of Benzo-Annulated Naphthyridine Derivatives with Phosphine Moieties (Grad. Sch. Sci., Eng., Ehime Univ.) OHTA, Hidetoshi; ○TAKAHAMA, Kohta; HAYASHI, Minoru
- 2PA-167** Photocurrent of nanoparticle substrates modified with water oxidation catalyst and perylene diimide derivatives (Grad. Sch. Sci. Tech., Nihon Univ.) ○KENGAKU, Kazuki; OTSUKI, Joe; SUGAWA, Kosuke
- 2PA-168** Efficient Synthesis and Thermoelectric Properties of Coordination Polymers with Benzenetetrathiol Derivative (Fac. Eng., OIT; PRESTO, JST; Grad. Sch. Mat. Sci., NAIST) ○UEDA, Kazuki; MURATA, Michihisa; TOYAMA, Nana; OKU, Mika; MURAOKA, Masahiro; ABE, Ryo; KOJIMA, Hirota; NAKAMURA, Masakazu
- 2PA-169** Synthesis and photochromic reaction behavior of 1,2-diheteroarylbenzene derivatives (Grad. Sch. Eng., Osaka City Univ.) ○TSUKAHARA, Naoya; KITAGAWA, Daichi; KOBATAKE, Seiya
- 2PA-170** Cycloreversion Reaction of a Diarylethene Derivative with a Methoxy Group: Effect of Activation Energy in the S<sub>1</sub> State and Branching Ratio at the Conical Intersection. (Sch. Eng. Sci., Osaka Univ.) ○FUJIMOTO, Shingo; SOUTOME, Hikaru; KOBATAKE, Seiya; MIYASAKA, Hiroshi
- 2PA-171** Cycloreversion Reaction of a Diarylethene Derivative with a Moderate Reaction Yield: Effect of Excitation Wavelength and Temperature on the S<sub>1</sub> State Dynamics (Sch. Eng. Sci., Osaka Univ.) ○KURATA, Tomoya; SOTOME, Hikaru; KOBATAKE, Seiya; MIYASAKA, Hiroshi
- 2PA-172** Thermal cycloreversion reactivity of diarylethenes having electron withdrawing substituent. (Grad. Sch. Eng., Osaka City Univ.) ○SATO, Yuta; KITAGAWA, Daichi; KOBATAKE, Seiya
- 2PA-173** Synthesis and optical properties of diarylethenes bearing two S,S-dioxidized benzothiophene groups (Grad. Sch. Eng., Osaka City Univ.) ○TAKAHASHI, Naoko; KITAGAWA, Daichi; KOBATAKE, Seiya
- 2PA-174** Effects of the Size of the pi-Conjugated System of the Ligand on Solid-State Coloring Behavior of Boronium Complexes Bearing a Dimine Ligand (Grad. Sch. Sci. Eng., Univ. of Toyama) ○HIRONO, Yoshito; YOSHINO, Junro; HAYASHI, Naoto; HIGUCHI, Hiroyuki
- 2PA-175** Structural Control of Photo-responsive Superhydrophobic Surface Mimicking the Double Roughness Structures of the Lotus Leaf (Grad. Sch. Sci. Tech., Ryukoku Univ.; Dept. of Chem., Asahikawa Med. Univ.; Fac. Eng., Yamagata Univ.; Sch. Pharm., TUPLS; RIKEN RINC) ○NISHIMURA, Ryo; MAYAMA, Hiroyuki; NONOMURA, Yoshimune; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro; UCHIDA, Kingo
- 2PA-176** Fabrication of photoinduced microcrystalline films consisting of two diarylethene derivatives with superhydrophilic and superhydrophobic properties. (Fac. Sci. Tech., Ryukoku Univ.; Coll. Sci., Rikkyo Univ.; Dept. of Chem., Asahikawa Med. Univ.; Sch. Pharm., TUPLS; RIKEN RINC) ○FUJIMOTO, Ayako; HYODO, Kengo; MORIMOTO, Masakazu; MAYAMA, Hiroyuki; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro; UCHIDA, Kingo
- 2PA-177** Synthesis of Photo Lewis Acid Generator Based on Photochromic Terarylene Backbone (Grad. Sch. Mat. Sci., NAIST) ○MIZUTSU, Ryo; HASHIMOTO, Yuichiro; KUNO, Jumpei; YAMADA, Miku; NAKASHIMA, Takuya; KAWAI, Tsuyoshi
- 2PA-178** Cell adhesion on diarylethene polymer surface (Grad. Sch. Sci. Tech., Ryukoku Univ.; BRD, AIST) ○HISHIDA, Tatsuya; SUMARU, Kimio; KANAMORI, Toshiyuki; HYODO, Kengo; UCHIDA, Kingo
- 2PA-179** Synthesis and Characterization of Photochromic Cyclic Tetraarylenes (Grad. Sch. Mat. Sci., NAIST) ○MATSUOKA, Shiori; HASHIMOTO, Yuichiro; YAMADA, Miku; NAKASHIMA, Takuya; KAWAI, Tsuyoshi
- 2PA-180** Synthesis and characterization of thiophene oxidized diarylethenes having electron withdrawing substituent (Grad. Sch. Eng., Osaka City Univ.) ○JINNO, Takeshi; TANAKA, Satoshi; KITAGAWA, Daichi; KOBATAKE, Seiya
- 2PA-181** Titanium dioxide based inorganic photochromic material blacken with ultraviolet rays and returns with visible light in a short time (FUJIKASEI Co.,Ltd.) ○NAMBA, Tomiyuki; SUZUKI, Fukuji; SHIO, Shoichiro
- 2PA-182** All-optical control of thermal reversibility and irreversibility in photochromic nature of diarylethenes (Col. Eng. Sci., Yokohama Natl. Univ.) ○KOBAYASHI, Hiroaki; ○OHTSUKI, Kazuaki; NAKAGAWA, Tetsuya; YOKOYAMA, Yasushi
- 2PA-183** Synthesis and Properties of Iridium Complexes based on Phenyltriazole Groups as Luminescent Ligands (Fac. Sci., Josai Univ.) ○WAKATSUKI, Daisuke; TAKEI, Miku; MUROGA, Masaki; HASHIMOTO, Masashi; KONNO, Hideo; KOIKE, Kazuhide
- 2PA-184** Circularly Polarized Luminescence (CPL) and its Excitation (CPLE) spectra from optically inactive Tb(III) and Eu(III) complexes with chiral 1-phenethylamine (Grad. Sch. Mat. Sci., NAIST) ○OGATA, Nanami; WANG, Laibing; JALILAH, Abd Jalil; FUJIKI, Michiya
- 2PA-185** High efficiency synthesis and fluorescent properties of latent pigments of diketopyrrolo-pyrrole pigments by microwave irradiation (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.; Aichi Univ. of Educ.; NSEC, JAEA) ○KIMURA, Yu; OHISHI, Tomoji; NAKAJIMA, Kiyohiko; WATANABE, Masayuki; AOYAGI, Noboru
- 2PA-186** One-step generation of circularly polarized luminescent (CPL) AIE molecule-cellulose composite films from achiral AIE molecules (Grad. Sch. Mat. Sci., NAIST) ○OKUBO, Asuka; FUJIKI, Michiya; WANG, Laibing
- 2PA-187** White Photoluminescence Property of Carbon Containing Microporous Silica (ORIST; Nitta Gelatin Inc.) ○DOHSHI, Satoru; TSUKAMOTO, Hiroshi; IDA, Hiroyuki
- 2PA-188** Substituent Effect on Circularly Polarized Luminescence (CPL) Property of Chiral bisamidine-Fluorescein Supramolecular Complex (Coll.

## Functions of Materials

- 2PA-167** Photocurrent of nanoparticle substrates modified with water oxidation catalyst and perylene diimide derivatives (Grad. Sch. Sci. Tech., Nihon

- Sci., Rikkyo Univ.) ○KANEKO, Kazuma; KANSAKU, Yaoki; SUZUKI, Nozomu; FUJIKI, Michiya; YAMANAKA, Masahiro
- 2PA-189<sup>#</sup>** Photoluminescence Control of Gold Complex by Crystallization (Coll. Life Sci., Ritsumeikan Univ.) ○KURODA, Yuki; NAKATA, Manami; FUJISAWA, Kaori; TSUTSUMI, Osamu; KAWABATA, Mie; AMEYAMA, Kei
- 2PA-190<sup>#</sup>** Syntheses and Optical Properties of Nanofibers Composed of Perylene-Substituted Lophine Derivatives (Coll. Life Sci., Ritsumeikan Univ.) ○USUI, Ryosuke; MASUO, Sadahiro; TAMAI, Naoto; KOBAYASHI, Yoichi
- 2PA-191** Synthesis and properties of 4-aryl-7-pyridinium-1,2,5-benzothiadiazole fluorescent dyes. (Grad. Sch. Eng., Kyushu Sangyo Univ.) ○TAHARA, Kazuki; NISHI, Kentaro; MIZUKI, Keiji; MATSUOKA, Yohei; KIYAMA, Ryoiti; ISOBE, Shin-ichi
- 2PA-192** Fluorescence photoswitching of fluorescence hexaphenylsilole nanoparticles doped with diarylethene (Grad. Sch. Sci., Eng., Ehime Univ.) WATANABE, Tomohiro; SASAKI, Shino; ISHIBASHI, Yukihide; FUKAMINATO, Teyoshi; ○ASAHI, Tsuyoshi
- 2PA-193** Photo-response enhancement of photochromic molecules with AuNPs immobilized on TiO<sub>2</sub> electrode. (Osaka. Pref. Univ. Coll. Tech.) ○NAKANO, Genta; AKIYAMA, Tsuyoshi; KAWAI, Tsuyoshi; HIGASHIDA, Suguru
- 2PA-194** Ligand designs of lanthanide complex intended enhanced emission effect by hybridization (ORIST) ○ONO, Ryohei; NAKAMURA, Masashi; MITAMURA, Koji; ENOMOTO, Hiroyuki; MATSUKAWA, Kimihiro; WATASE, Seiji
- 2PA-195** Synthesis and luminescence property of dinuclear gold(I) complex bridged by benzenedithiolate ligand (ORIST; Fac. Eng., OIT) ○NAKAGAWA, Satoshi; YOSHIHARA, Naoki; NAKAMURA, Masashi; MITAMURA, Koji; MASUYAMA, Araki; WATASE, Seiji
- 2PA-196** Micropatterning of zinc oxide thin film by laser writing (ORIST) ○KITAGAWA, Shinya; MITAMURA, Koji; SASAKI, Atsushi; NAKAMURA, Masashi; ENOMOTO, Hiroyuki; MATSUKAWA, Kimihiro; WATASE, Seiji
- 2PA-197** Optical trapping of smectite in colloidal state (Fac. Sci., Yamaguchi Univ.) ○YOSHIDA, Ayaka; NAGASHITA, Takashi; HIGASHI, Yuki; TOMINAGA, Makoto; TANI, Seiji; SUZUKI, Yasutaka; KAWAMATA, Jun
- 2PA-198** Thermochromic material consisting of organic compounds and a clay mineral (Fac. Sci., Yamaguchi Univ.) ○SHIOSAKI, Ayaka; TOMINAGA, Makoto; TANI, Seiji; SUZUKI, Yasutaka; KAWAMATA, Jun
- 2PA-199<sup>#</sup>** Syntheses and Optical Properties of Porphyrin-Coordinated CdS Nanocrystals (Coll. Life Sci., Ritsumeikan Univ.) ○UNO, Takuma; TAMAI, Naoto; KOBAYASHI, Yoichi
- 2PA-200<sup>#</sup>** Protein corona analysis of molecularly imprinted nanoparticles in serum (Grad. Sch. Eng., Kobe Univ.) ○KIGUCHI, Kentaro; KITAYAMA, Yukiya; TAKEUCHI, Toshifumi
- 2PA-201<sup>#</sup>** Cellular uptake of molecular imprinted nanogels into living cells (Fac. Eng., Kobe Univ.) ○HAYAKAWA, Natsuki; KITAYAMA, Yukiya; TAKEUCHI, Toshifumi
- 2PA-202** Evaluation of cell toxicity effects of ethidium bromide doped nanodiamond (Fac. Eng., KAIT) ○MORI, Mizuki; TAKAMURA, Takeji
- 2PA-203** Optimization of carbon materials for DDS carrier (Fac. Eng., Oita Univ.) ○SHIGETA, Daiya; NOBUOKA, Kaoru; KITAOKA, Satoshi; TOYODA, Masahiro; ISHIKAWA, Yuichi
- 2PA-204** An application of zeolites-organic polymer mixed adsorbents for reduction of 4-Methyl-imidazole in flow system (R&D Div., Kirin Co., Ltd.; RCPT, AIST) ○HASHIMOTO, Yoshikazu; NAGASE, Takako; SATO, Koichi; NAGANUMA, Hiroyuki; YOSHIDA, Aruto
- 2PA-205** Adsorption removal of dissolved boron in water (NIT, Tokyo College) ○HIRAYAMA, Yuya; IDE, Tomohito
- 2PA-206<sup>#</sup>** Urea-introduced ionic liquid for the extraction and separation of Pd (II) and Pt(IV) (ASRC, JAEA) ○UEDA, Yuki; SUGITA, Tsuyoshi; OKAMURA, Hiroyuki; NAGANAWA, Hirochika; SHIMOJO, Kojiro
- 2PA-207** Theoretical study of hydrogen storage in a truncated cube hydrocarbon (Sch. Sci., Tokai Univ.) ○SATO, Misaki; ISHIKAWA, Shigeru
- 2PA-208** Theoretical Study of Encapsulation of Helium, Nitrogen, and Neon Atoms in a Truncated Tetrahedron Hydrocarbon (Sch. Sci., Tokai Univ.) EBIHARA, Shota; YANAGI, Takumi; HAYASHI, Tokio; ○OKUMURA, Sayako; ISHIKAWA, Shigeru
- 2PA-209** Theoretical Study of Langmuir Isotherms of Methane and Carbon Dioxide Encapsulated in a Truncated Cube Hydrocarbon (Sch. Sci., Tokai Univ.) NISHI, Tatsuya; ISAWA, Shuhei; ○SUWA, Erika; ISHIKAWA, Shigeru
- halopyridine and protected amino acid (Sci. Tec., Sophia Univ.) ○MIKAGI, Ayame; TOKAIRIN, Dai; USUKI, Toyonobu
- 2PB-003** Chemical structure determination of the toxic substances and biological activities of the harmful phytoplankton, *Heterocapsa circularisquama* (Hiroshima Institute of Technology) ○HIRAGA, Yoshikazu; WATANABE, Kana; ISHII, Akiho; HATAOKA, Satoshi; YOSHIMOTO, Kanji; SUZUKI, Katsunori
- 2PB-004** Syntheses of natural insecticidal components, pyrethrins, from available synthetic pyrethroid intermediate (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○KAWAMOTO, Momoyo; SASAKI, Ryosuke; ASHIDA, Yuichiro; MATSUO, Noritada; NAKATSUJI, Hidehumi; TANABE, Yoo
- 2PB-005** Asymmetric Synthesis of JBIR-23,-24. (Grad. Sch. Sci. Eng., Univ. of Toyama) MIYAZAWA, Masahiro; ○OKUNO, Masataka; KUNICHIKA, Ko-ki; YOKOYAMA, Hajime
- 2PB-006** Synthetic study of Maresin 2 (Sch. Sci. Eng., Meiji Univ.) ○SATO, Hiroshi; OGAWA, Narihito
- 2PB-007** Development of new efficient synthetic method of flavan-3-ols (Sch. Sci., Tokyo Tech.) ○FUKUI, Kenichi; OHMORI, Ken; SUZUKI, Keisuke
- 2PB-008** Effect of enzymatic treatment on Japanese peppermint oil from Kitami (Fac. Eng., Kitami Inst. of Tech.) ○SHIMOTORI, Yasutaka; HOSHI, Masayuki; YAMADA, Reiji; KOHARI, Yoshihito; MURATA, Miki; NAGATA, Yuichi
- 2PB-009** Synthesis of Lactucopicrin (Fac. Eng., Kindai Univ.) ○WATANABE, Sayo; OKADA, Yoshiharu
- 2PB-010** Toward a total synthesis of Keronopsin (NIT, Yonago College) ○ABDUL, Jalil; URUMA, Yoshiyuki
- 2PB-011<sup>#</sup>** Synthetic Studies on Toxicodendane A (Grad. Sch. Sci., Osaka City Univ.) ○NAKATSUKASA, Hitoshi; FUKUYAMA, Yuuka; NISHIKAWA, Keisuke; MORIMOTO, Yoshiaki
- 2PB-012** Synthetic studies of *N*-acetylcolchicinol (Grad. Sch. Nat. Sci. Technol., Okayama Univ.) ○NAKANO, Yoichi; HAYAKAWA, Ichiro; SAKAKURA, Akira
- 2PB-013** Synthetic Study of Funiculosin and its Analogues for Investigating Agonist of Innate Immune Receptor TLR4/MD-2 (Grad. Sch. Sci. Tech., Keio Univ.) ○ZUI, Naoto; SATO, Keisuke; INUKI, Shinsuke; FUJIMOTO, Yukari
- 2PB-014** Synthesis of Ganglioside GM3 for Elucidating Cholesterol Effect on Glycan Orientation in Model Membranes (Graduate School of Science, Osaka University) ○SASAKI, Katsuaki; HANASHIMA, Shinya; MURATA, Michio
- 2PB-015** Synthesis of the trisaccharide library on gold nanoparticles to investigate the correlation between the trisaccharide structure and the activity. (Fac. of Sci., Okayama Univ. of Sci.) ○HYOUDOU, Mizuki; YAMANAKA, Yusuke; YAMADA, Haruo
- 2PB-016** Synthesis of Gg3 on the gold nanoparticles (Fac. of Sci., Okayama Univ. of Sci.) ○SATA, Yuuki; YAMANAKA, Yusuke; YAMADA, Haruo
- 2PB-017** Molecular Simulation of Peptides Using SAAP3D Force Field (Sch. Sci., Tokai Univ.) ○IWAOKA, Michio; MINEZAKI, Toshiya; SHIMOSATO, Taku; HOJO, Hironobu; ONUKI, Hiroyuki; HIROTA, Hiroshi
- 2PB-018** Design and Synthesis of Fluorinated and Non-fluorinated Glycopeptides for Anti-freezing Agents (Grad Sch. Eng., Nagoya Inst. of Tech.) SUMII, Yuji; ○HIBINO, Hayata; TOKUNAGA, Etsuko; SHIBATA, Norio
- 2PB-019** Bioactive Compounds from Marine Sponge (Grad. Sch. Sci., Eng., Ehime Univ.; ADRES, Ehime Univ.) ○INOUE, Yoshinari; SATOU, Seizou; KURAMOTO, Makoto; MORI, Shigeki; UNO, Hidemitsu
- 2PB-020** Searching for bioactive compounds from *Ircinia* sp. (Grad. Sch. Sci., Eng., Ehime Univ.; ADRES, Ehime Univ.) ○NAKAMOTO, Masahiro; KURAMOTO, Makoto; MORI, Shigeki; UNO, Hidemitsu
- 2PB-021** Screening of ER stress inhibitors from marine organisms. (Sch. Adv. Eng., Kogakuin Univ.) ○SATO, Keigo; HONMA, Ryo; MATSUNO, Kenji; OHNO, Osamu
- 2PB-022** Synthesis of chalcone derivatives to overcome castration-resistant prostate cancer (Grad.Sch. Med. Sci., Kanazawa Univ.; UNC-CH) ○SAITO, Yohei; MIZOKAMI, Atsushi; IZUMI, Koji; NAITO, Renato; GOTO, Masuo; NAKAGAWA-GOTO, Kyoko
- 2PB-023** Exploration of selective cytotoxic substances under nutrient starvation conditions from marine organisms (Sch. Adv. Eng., Kogakuin Univ.) ○NAGAYA, Yuki; ITO, Ami; MUKOUHATA, Issei; MATSUNO, Kenji; OHNO, Osamu

## Biofunctional Chemistry ; Biotechnology

### Lipid

- 2PB-025** Analysis of specific membrane property of diphtanoyl PC with methyl-branched fatty acids by solid state NMR measurement. (Grad. Sch. Sci., Osaka Univ.) ○ONO, Takuya; TSUCHIKAWA, Hiroshi; YAMAGAMI, Masaki; UMEGAWA, Yuichi; MURATA, Michio
- 2PB-026<sup>#</sup>** Development of Stimuli Responsive Alternating Amphiphilic Molecule Bearing Bipyridine Units (Sch. Life Sci. Tech., Tokyo Tech.) ○SONOBE, Hiroki; MURAOKA, Takahiro; KINBARA, Kazushi
- 2PB-027<sup>#</sup>** Domain formation by interaction between divalent salt and negatively charged lipid (Sch. Mat. Sci., JAIST) ○YAMAMOTO, Yogo; HIKICHI, Keita; SHIMOKAWA, Naofumi; TAKAGI, Masahiro

Wednesday, March 21, AM

(12 : 30~14 : 00)

## Natural Products Chemistry

- 2PB-001<sup>#</sup>** Synthetic study of desmosine bearing cyclic peptide for elucidation of natural crosslinking structures of elastin (Sci. Tec., Sophia Univ.) ○BAUT, Daria; WATANABE, Daisuke; SUZUKI, Rina; USUKI, Toyonobu
- 2PB-002** Investigation of Suzuki-Miyaura cross-coupling reaction between

- 2PB-028<sup>#</sup>** Permeation of Hydrogen Peroxide through lipid bilayer Characterized by Chemiluminescence Method (Grad. Sch. Sci., Eng., Yamagata Univ.) ○OUCHI, Yuya; TOMITA, Kazuo; SATO, Tomoaki; UNOURA, Kei; NABIKA, Hideki
- 2PB-029** Cell-penetrative activities of cationic polymers possessing ammonium or guanidinium groups (Fac. Sci. Tech., Ryukoku Univ.) ○HAYASHI, Yuri; MIYATAKE, Tomohiro
- 2PB-030<sup>#</sup>** Interaction between biomimetic membranes and low irritating surfactants (Sch. Mat. Sci., JAIST) ○SASAKI, Yousuke; TSUJINO, Yoshio; SHIMOKAWA, Naofumi; TAKAGI, Masahiro
- 2PB-031<sup>#</sup>** Thermo stability of oxidized cholesterol containing phase-separated domain. (Sch. Mat. Sci., JAIST) ○SHIMIZU, Makoto; ASANO, Keisuke; HAMAMURA, Taka; SHIMOKAWA, Naofumi; TAKAGI, Masahiro
- 2PB-032<sup>#</sup>** Deformation dynamics of stressed model biomembranes by low irritating surfactants. (Sch. Mat. Sci., JAIST) ○TAKAHASHI, Yuna; TSUJINO, Yoshio; SHIMOKAWA, Naofumi; TAKAGI, Masahiro
- 2PB-033<sup>#</sup>** Antioxidant properties of oryzanol-like compounds toward lipid hydroperoxides (NARO, FRI) ○TSUZUKI, Wakako; KOMBA, Shiro; KOTAKE-NARA, Eiichi
- 2PB-034<sup>#</sup>** Interfacial Polarity of Branch-Chained Phospholipid Membranes and Their Metal-Ion Adsorptivity: Comparison of Ether- and Ester-Linked Phospholipids (BRD, AIST) ○BABA, Teruhiko; KANAMORI, Toshiyuki
- 2PB-035<sup>#</sup>** Research on development of fluorescent probe of unsaturated fatty acid (Grad. Sch. Sci. Tech., Gunma Univ.) ○KUMAGAI, Madoka; SHINOZUKA, Kazuo; MORIGUCHI, Tomohisa

## Cell

- 2PB-036<sup>#</sup>** Poly(3,4-ethylenedioxythiophene)-Based Nanofibers for PC12 Cell Differentiation and Neurite Outgrowth by Electrical Stimulation (National Taiwan Univ.) ○TSAI, Nien-chen; YU, Jiashing
- 2PB-037<sup>#</sup>** Improvement of ionic liquid tolerance of *Escherichia coli* (Fac. Biotech. Life Sci., Sojo Univ.) ○HAYASHI, Shuhei; HARA, Kyosuke; YAMAMOTO, Shinjiro; MIYASAKA, Hitoshi
- 2PB-038<sup>#</sup>** Large-Droplet Microfluidics for Single-Cell Analysis of Mammals and Microalgae (Grad. Sch. Sci., The Univ. of Tokyo) ○SETYANINGRUM, Dwi Larasati; ISOZAKI, Akihiro; GODA, Keisuke
- 2PB-039<sup>#</sup>** Fiber Orientation Influence Growth and Neuronal Differentiation of Human Adipose-derived Stem Cells on Nanofibers (Che. Eng., National Taiwan University) ○TANG, Kao Chun; YU, Jiashing
- 2PB-040** Energy transfer efficiency of bacteriochlorophyll *c*, *d*, *e*, or *f* in the green sulfur bacterium *Chlorobaculum limnaeum* mutant cells (Kurume Univ. Sch. of Med.) ○HARADA, Jiro; SHIBATA, Yutaka; TERAMURA, Misato; MIZOGUCHI, Tadashi; KINOSHITA, Yusuke; YAMAMOTO, Ken; TAMIAMI, Hitoshi

## Environmental biotechnology

- 2PB-041<sup>#</sup>** Bioimaging of the cell stress by FRET based fluorescence changes using GFP-RFP fusion protein (TUT) ○KODAIRA, Masayuki; AKIMOTO, Takuo
- 2PB-042** Development of Method for Histidine Measurement Using Enzyme Reaction (Grad. Sch. Info. Sci., Hiroshima City Univ.) ○KUGIMIYA, Akimitsu; IWATO, Kouhei; HIDAKA, Miyu; SAITO, Toru; KOHDA, Jiro; NAKANO, Yasuhisa; TAKANO, Yu

## Medical biotechnology

- 2PB-043<sup>#</sup>** Synthesis of the tyramine-modified chondroitin sulfate for the surface functionalization of magnesium substrate (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○YOSHIKAWA, Mai; NISHIOKA, Satoru; HIRANO, Yoshiaki; KAKINOKI, Sachiyo
- 2PB-044** Synthetic study of near-infrared compatible photosensitizer (NIT, Yonago College) ○LOGHAPRIYA, Sivasamy; OMURA, Hayato; SUZUKI, Akihiro; KAMEYAMA, Masayuki; IWASA, Seiji; ONUMA, Kunishige; OKADA, Futoshi; URUMA, Yoshiyuki
- 2PB-045<sup>#</sup>** Bacterial photo-inactivation phenomenon of *Staphylococcus* (Fac. Bio. Eng., Toin Univ. of Yokohama) ○OGI, Haruka; HASUNUMA, Yuya; SAITO, Kiyoshi
- 2PB-046<sup>#</sup>** Research on correlation between the carotenoid pigments produced by *Staphylococcus aureus* and the bacterial photo-inactivation phenomenon (II) (Fac. Bio. Eng., Toin Univ. of Yokohama) ○NISHIMURA, Tomoya; SAITO, Kiyoshi; HASUNUMA, Yuya
- 2PB-047<sup>#</sup>** Oxidation of carbon monoxide by gold nanoparticles and their biological applications (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○TAKAHASHI, Miyuki; KURIHARA, Ryohsuke; TANABE, Kazuhito

## Sugar

- 2PB-048** Water-solubilization of Porphyrin Derivatives by  $\beta$ -(1,3-1,6)-D-Glucan and their Photodynamic Activities (Grad. Sch. Eng., Hiroshima Univ.) ○FUNADA, Rikushi; SUGIKAWA, Kouta; IKEDA, Atsushi
- 2PB-049** Development of Glucose-conjugated Pyrene derivatives for PDT (Sch. Life Sci. Tech., Tokyo Tech.) ○NAITOH, Hidenori; OZAKO, Yoshiki; KANAMORI, Takashi; OGURA, Shun-ichiro; YUASA, Hideya

- 2PB-050<sup>#</sup>** Glycoproteome analysis in neural stem cell under hypothermia condition by LC-Orbitrap MS (Coll. Sci. Tech., Nihon Univ.) ○SUZUKI, Yusuke; NOGUCHI, Kaoru; SHIMOYAMA, Rumi; HATTORI, Shinya; TAKEMURA, Taro; MINOWA, Takashi; KUSHI, Yasunori
- 2PB-051** Effects of stains on the viability of U937 cells (Coll. Sci. Tech., Nihon Univ.) ○NONOYAMA, Yuri; YOSHIDA, Takuma; HIRAOKA, Marina; HURUHATA, Susumu; SUZUKI, Yuusuke; KUSHI, Yasunori
- 2PB-052** Intermolecular glycosylation of amino acids-tethered glucose derivatives (Coll. Life Sci., Ritsumeikan Univ.; RIKEN) ○FUKUSHIMA, Katsuya; ONO, Shunsuke; ITO, Yukishige; TAKEDA, Yoichi
- 2PB-053<sup>#</sup>** Synthesis of *p*-Methoxyphenyl Sulfated GaIn<sub>3</sub> Derivatives and Their Inhibition of Japanese Encephalitis Virus Infection (Aichi Univ. of Educ.; The Univ. of Aizu) ○YANAGISAWA, Keiyo; HOR, Seanghai; SAKURAGI, Miho; YAMANAKA, Takashi; HIDARI, Kazuya; NAKANO, Hirofumi
- 2PB-054<sup>#</sup>** Synthesis of 2-Alkoxy-carbonylamino-4-azido-galactopyranoside Derivatives as Inhibitors Against Japanese Encephalitis Virus Infection (Department of Chemistry, Aichi Univ. of Educ.; Junior College Division, Univ. of Aizu) ○TAKAHASHI, Saya; KODAMA, Takumi; HOR, Seanghai; HIDARI, Kazuya; YAMANAKA, Takashi; NAKANO, Hirofumi
- 2PB-055<sup>#</sup>** Acid-catalyzed Esterification of Benzoic Acid in the Absence of Solvent and Its Application for Cyclodextrin (Aichi Univ. of Educ.) SIENG, Vanthay; TERAOKA, Masayuki; HINO, Kazuyuki; ○NAKANO, Hirofumi

## Low Molecular Weight Compounds

- 2PB-056** Optical properties of lipid membranes containing chlorophyll derivatives possessing a formyl group (Fac. Sci. Tech., Ryukoku Univ.) ○HORIUCHI, Ayu; NISHIMURA, Noriaki; MIYATAKE, Tomohiro
- 2PB-057<sup>#</sup>** Synthetic Pore-forming toxins Analogue for Permeability Alteration (OIST) ○HU, Xunwu; ZHANG, Ye
- 2PB-058** Enhancement Effects of Hyperthermia in the Ultrasound Therapy Using 5-Aminolevulinic Acid (Grad. Sch. Biosci. Bioind., Tokushima Univ.) ○KUSUHASHI, Yuki; KATSURA, Hanayo; FUTAWAKA, Mana; HAYASHI, Yumi; YAMADA, Hisatsugu; OSAKI, Tomohiro; ISHIZUKA, Masahiro; TANAKA, Tohru; YAMANAKA, Nobuyasu; KURAHASHI, Tsukasa; UTO, Yoshihiro
- 2PB-059** Sensitizing effect of 5-aminolevulinic acid and protoporphyrin IX for carbon beam (Grad. Sch. Biosci. Bioind., Tokushima Univ.) ○HANYU, Ayaka; KOUZAKI, Risa; UESHIMA, Kazuki; KANEKO, Tomoko; YAMADA, Hisatsugu; TOMINAGA, Masahide; SUGA, Masaki; YAMASHITA, Tomohiro; OKIMOTO, Tomoaki; UTO, Yoshihiro
- 2PB-060<sup>#</sup>** Isolation of *cis-trans* isomers of  $\beta$ -apo-8'-carotenol and their Stark absorption spectroscopic studies (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○INOUE, Taiki; SETO, Shota; HORIBE, Tomoko; URAGAMI, Chiasa; HORIUCHI, Kota; HASHIMOTO, Hideki
- 2PB-061<sup>#</sup>** Suppression against excess light exposure expressed by LHI Antenna Pigment-Protein Complexes from Purple Photosynthetic Bacteria (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○SATO, Hiroki; YUKIHIRA, Nao; FUJIWARA, Masazumi; SUGAI, Yoko; ALASTAIR.T, Gardiner; RICHARD J., Cogdell; HASHIMOTO, Hideki
- 2PB-062<sup>#</sup>** Isolation of *cis-trans* isomers of  $\beta$ -Apo-8'-carotenol and their time-resolved absorption spectroscopic study (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○HORIUCHI, Kota; URAGAMI, Chiasa; INOUE, Taiki; YUKIHIRA, Nao; HASHIMOTO, Hideki
- 2PB-063<sup>#</sup>** Reconstruction of various carotenoids into the LHI complex from a purple photosynthetic bacterium (Sch. Sci. Tech., Kwasei Gakuin Univ.) ○YUKIHIRA, Nao; SATO, Hiroki; FUJIWARA, Masazumi; ALASTAIR T, Gardiner; RICHARD J., Cogdell; HASHIMOTO, Hideki
- 2PB-064<sup>#</sup>** Synthesis and fluorescence of boron-quinolopyrrole complexes in comparison with boron-iminopyrrole complexes (Fac. Eng., Utsunomiya Univ.) OBA, Toru; ○TANAZAWA, Kimitaka; SHINOTSUKA, Ryo; NAKAMURA, Nana; TAMESUE, Shingo; ITO, Satoshi
- 2PB-065<sup>#</sup>** Structural analysis of radiation crosslinked gelatin using fluorescent labeling method (Sch. Sci. Tech., Gunma Univ.) ○YOSHIDA, Fumiya; TAGUCHI, Mitsumasa; KIMURA, Atsushi
- 2PB-066<sup>#</sup>** Development of Cancer-Cell-Specific Drug Delivery System with MMP-Activatable PEG-decorated Oligoarginine -Effects of PEG structure upon Cellular Membrane Permeability- (IMRAM, Tohoku Univ.) ○JIANG, Nan; SUGAI, Hiroka; MATSUSHIMA, Moeka; SAKAMOTO, Seiji; ISHIBASHI, Satoru; YAMAYOSHI, Asako; ARAKI, Yasuyuki; YOKOTA, Takanori; WADA, Takehiko
- 2PB-067** Synthesis and Functional Evaluation of a 2-Nitroimidazole-conjugated Phosphorylcholine Polymer (Grad. Sch. Tech. Ind. Soc. Sci., Tokushima Univ.) ○MIYAZAKI, Toyohisa; KUSUHASHI, Yuki; HANYU, Ayaka; SHIMADA, Hiroki; YAMADA, Hisatsugu; KONDO, Teruyuki; UTO, Yoshihiro

## Nucleic Acids

- 2PB-068<sup>#</sup>** Development of novel DNA photo-cross-linker with visible light (JAIST) ○SASAGO, Shinobu; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-069<sup>#</sup>** Study of 3-cyanovinylcarbazole mediated DNA photo-cross-linking by using uracil derivatives (Sch. Mat. Sci., JAIST) ○YAMAGUCHI, Tsubasa; KAWABATA, Hayato; NAKAMURA, Shigetaka; FUJIMOTO,

- Kenzo
- 2PB-070<sup>#</sup>** Photo-triggered double duplex DNA formation by ultrafast DNA photo-cross-linking (Sch. Mat. Sci., JAIST) ○MAEDA, Daisuke; KAWABATA, Hayato; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-071<sup>#</sup>** Conformational analysis of the modified oligonucleotides using molecular dynamics calculations (Sch. Eng., Nihon Univ.) ○YAMAZAKI, Sho; SEKIGUCHI, Masahiro; YAMAGISHI, Kenji
- 2PB-072<sup>#</sup>** Synthesis and properties of L-2,4-diaminobutyric acid (Dab) oligomer-conjugated antisense oligonucleotides (Fac. Pharm. Sci., TUS) ○SUENAGA, Taku; MAEDA, Yusuke; HARA, Rintaro; WADA, Takeshi
- 2PB-073<sup>#</sup>** Solid-phase synthesis of P-modified DNA from boranophosphate DNA (Fac. Pharm. Sci., TUS) ○NAMIOKA, Yukichi; IGARASHI, Ayumi; SATO, Kazuki; UEHARA, Sho; HARA, Rintaro; WADA, Takeshi
- 2PB-074<sup>#</sup>** Stereoselective synthesis of boranophosphate DNA by the boranophosphotriester approach (Fac. Pharm. Sci., TUS) ○IMAI, Hiroki; ABE, Takuma; UCHIYAMA, Naoki; SAITO, Keita; HARA, Rintaro; WADA, Takeshi
- 2PB-075<sup>#</sup>** Stereocontrolled synthesis of phosphorodiamidate morpholino oligonucleotides (Fac. Pharm. Sci., TUS) ○NISHINE, Yutaka; NIISAKA, Hidenori; HARA, Rintaro; WADA, Takeshi
- 2PB-076<sup>#</sup>** Development of environment-responsible oligonucleotides having bipyridine moieties (Grad. Sch. Sci. Tech., Gunma Univ.) ○KUWAHARA, Tatsuki; SHINOZUKA, Kazuo; MORIGUTI, Tomohisa
- 2PB-077<sup>#</sup>** Synthesis and function of oligodeoxynucleotides bearing long alkyl chain at nucleobase units (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○KAINUMA, Reina; KURIHARA, Ryohsuke; TANABE, Kazuhito
- 2PB-078<sup>#</sup>** Post-synthetic Modification of Oligonucleotides with Metal Ligands toward Metal-mediated Stabilization of DNA Three-way Junctions (Grad. Sch. Sci., The Univ. of Tokyo) ○FUSE, Nobuyuki; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiko
- 2PB-079<sup>#</sup>** Enzymatic synthesis of 5-hydroxy-2'-deoxyuridine oligomers towards DNA-templated metal assembly (Grad. Sch. Sci., The Univ. of Tokyo) ○XING, Tong; ZHANG, Wenxuan; NAKAMA, Takahiro; NISHIYAMA, Kotaro; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiko
- 2PB-080<sup>#</sup>** Synthesis of nucleic acids binding small molecules conjugated biotin and expansion to analysis of their binding RNA sequences (IMRAM, Tohoku Univ.) ○OJIMA, Kanna; ONIZUKA, Kazumitsu; TANNO, Kousuke; NAGATSUGI, Fumi
- 2PB-081<sup>#</sup>** Synthesis and Analysis of RNA Having an Acetyl amino Group at the 5' -End to Prepare an siRNA Modified with the Group at the 5' -Terminus (Teikyo. Univ. of Sci. Grad. Sch. Sci. and Eng.; Teikyo Univ. of Sci.) ○IWASE, Reiko; NISHIZAWA, Takuya; MAEKAWA, Tsuyohito
- 2PB-082<sup>#</sup>** Identification of hnRNP U as a G-quadruplex binding protein (Fac. Sci., Shizuoka Univ.) ○NOMOTO, Kenya; OYOSHI, Takanori
- 2PB-083<sup>#</sup>** Binding of photoionizable malachite green copolymer to c-MYC G-quadruplex (Dept. of Chem. Eng., NIT, Nara College) MATSUYAMA, Yugo; NISHIMOTO, Noriko; ○UDA, Ryoko
- 2PB-084<sup>#</sup>** Chemical Probe for Analyzing Human Telomere RNA G-quadruplex (Fac. Med., Univ. of Miyazaki) ○OTATSUME, Masaomi; ISHIZUKA, Takumi; XU, Yan
- 2PB-085<sup>#</sup>** Development of Nucleic Acid Sensors Utilizing Electrochemical Nucleic Acid Probes (Sch. Eng., Univ. of Hyogo) ○NISHIMURA, Hiroki; TAKADA, Tadao; YAMASHITA, Tomoya; NAKAMURA, Mitsunobu; YAMANA, Kazushige
- 2PB-086<sup>#</sup>** Construction of fluorescent nucleic acids possessing cyanine dyes within base pair stacks. (Sch. Eng., Univ. of Hyogo) ○NISHIDA, Koma; TAKADA, Tadao; HONDA, Yurika; NAKAMURA, Mitsunobu; YAMANA, Kazushige
- 2PB-087<sup>#</sup>** Photocurrent systems using DNA-scaffolded chromophore-aggregates (Grad. Sch. Eng., Univ. of Hyogo) JOMURA, Ayumi; ○NAKAMURA, Mitsunobu; TAKADA, Tadao; YAMANA, Kazushige
- 2PB-088<sup>#</sup>** Development of photo-cross-linking aptamers with 2'-O-diazirine modified nucleosides (KIT) ○TATSUMI, Soichi; HIROSE, Haruka; SUGIHARA, Yuta; KOBORI, Akio
- 2PB-089<sup>#</sup>** Molecular Simulation Analysis of the Binding Mechanism between RNA Aptamer and AML1 Protein. (Sch. Eng., Nihon Univ.) ○MASUKAWA, Keisuke; SEKIGUCHI, Masahiro; YAMAGISHI, Kenji
- 2PB-090<sup>#</sup>** Photochemical regulation of DNazyme activity using reversible DNA photo-cross-linking (Sch. Mat. Sci., JAIST) ○WATANABE, Yasuha; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-091<sup>#</sup>** Elucidation of DNA and RNA binding mechanism of RNA recognition motif (Fac. Sci., Shizuoka Univ.) ○MASUZAWA, Tatsuki; OYOSHI, Takanori
- 2PB-092<sup>#</sup>** Cleavage of P-modified RNA by metal ion complexes (Fac. Pharm. Sci., TUS) ○GOTO, Keisuke; IIDA, Tomoyoshi; HARA, Rintaro; WADA, Takeshi
- 2PB-093<sup>#</sup>** Metal assembly inside DNA duplexes possessing 5-carboxyuracil nucleobases as ligand moieties (Grad. Sch. Sci., The Univ. of Tokyo) ○SUZUKI, Akira; TAKEZAWA, Yusuke; SHIONOYA, Mitsuhiko
- 2PB-094<sup>#</sup>** Aggregate formation of oligodeoxynucleotides in the presence of PNA as hydrophobic units (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) ○MISU, Sotaro; KURIHARA, Ryohsuke; TANABE, Kazuhito
- 2PB-095<sup>#</sup>** Higher order structures of oligodeoxynucleotides possessing hydrophobic units in the aggregate (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○SATO, Ryugai; YAMAGUCHI, Masato; KURIHARA, Ryohsuke; TANABE, Kazuhito
- 2PB-096<sup>#</sup>** Effect of around the cytosine in photochemical C to U transition using reversible DNA photo-cross-linking in DNA strand (Sch. Mat. Sci., JAIST) ○HONDA, Nozomi; SETHI, Siddhant; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-097<sup>#</sup>** 19F NMR analysis of DNA B-Z transition using ODN probe containing trifluoromethylcytidine and trifluoromethylthymidine (Sch. Mat. Sci., JAIST) ○WANG, Chen; YANG, Hui; HIRATA, Chihiro; KERSAUDY, Florian; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-098<sup>#</sup>** Development of CpG DNA release system with X-ray irradiation (Sch. Mat. Sci., JAIST) ○MIHARA, Junichi; HURUSAWA, Mirei; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-099<sup>#</sup>** Detection of 5-methylcytosine DNA photo-cross-linking using 3-vinylcarbazole derivatives. (Sch. Mat. Sci., JAIST) ○NAKAJIMA, Ryo; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-100<sup>#</sup>** Synthesis of DNA aggregate with hydrophobic units and their functions in living cells (Coll. Sci. Eng., Aoyama Gakuin Univ.) ○TAKEMURA, Seiya; TANABE, Kazuhito; KURIHARA, Ryohsuke
- 2PB-101<sup>#</sup>** Construction of RNase H-oligonucleotide-RNase H conjugates using 2' -O-diazirine modified oligonucleotides. (KIT) SUGIHARA, Yuta; ○HIROSE, Haruka; TATSUMI, Soichi; KOBORI, Akio
- 2PB-102<sup>#</sup>** Development of wash free RNA FISH using photo-cross-linkable beacon probe (Sch. Mat. Sci., JAIST) ○HASHIMOTO, Misaki; KANO, Chinami; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-103<sup>#</sup>** Structure-specific binding of hnRNP1 to human telomere RNA (Fac. Med., Univ. of Miyazaki) ○TAKEDA, Yuma; LIU, Xiao; ISHIZUKA, Takumi; XU, Yan
- 2PB-104<sup>#</sup>** Comprehensive Analysis of the Antiangiogenic Effects of Endogenous Nucleic Acids, Rare Sugar Nucleic Acids, and Anti-cancer Nucleic Acids (Kagawa Sch. Pharm. Sci., Tokushima Bunri Univ.; Fac. Med., Kagawa Univ.) ○SAKAKIBARA, Norikazu; KONISHI, Ryoji; MARUYAMA, Tokumi; KATO, Yoshihisa; TSUKAMOTO, Ikuko
- 2PB-105<sup>#</sup>** Photo-triggered DNA transportation to inside of liposome via construction of DNA nanostructure on liposome surface (Sch. Mat. Sci., JAIST) ○UEHARA, Nobuharu; HASEGAWA, Takashi; NAKAMURA, Shigetaka; FUJIMOTO, Kenzo
- 2PB-106<sup>#</sup>** Efficient synthesis of pGp for chemical synthesis of stringent response compound ppGpp (Grad. Sch. Biosci. Biotech., Tokyo Tech.) ○OHNO, Kentaro; SUGIYAMA, Daiki; MASAKI, Yoshiaki; SEIO, Kohji

## Protein and Peptide

- 2PB-107<sup>#</sup>** Crystal Structure Analysis of Hydroxymethylbilane Synthase in Complex with Two Molecules of Porphobilinogen (Kurume Univ. Sch. of Med.; Grad. Sch. Eng., Kyushu Univ.; Yokohama Coll. of Pharmacy; Fac. Med., Univ. of Miyazaki) ○SATO, Hideaki; SUGISHIMA, Masakazu; TSUKAGUCHI, Mai; MASUKO, Takahiro; OMATA, Yoshiaki; WADA, Kei; HISAEDA, Yoshio; YAMAMOTO, Ken
- 2PB-108<sup>#</sup>** Spectroscopic evaluation of radiation damage on oxidized ferredoxin for precise X-ray crystal structure determination (IPR, Osaka Univ.) ○OHNISHI, Yusuke; TANAKA, Hideaki; OKUMURA, Hideo; BABA, Kiyoki; KAWANO, Yoshiaki; KUMASAKA, Takashi; KURISU, Genji
- 2PB-109<sup>#</sup>** Possible Novel Mechanism of Catalysis for Aryl-carboxylesterase EstAC, having a structural homology to  $\beta$ -lactamase (Sch. Eng., The Univ. of Shiga Pref.) ○TAKEHARA, Munenori; INOUE, Shigeki; HONDA, Takuya; KATO, Honami; SUGIYAMA, Katsunori; NISHIMURA, Masatoshi
- 2PB-110<sup>#</sup>** Structure and properties of Met16Tyr variant of pseudoazurin. (Coll. Sci., Ibaraki Univ.) ○SAITO, Yoshiyuki; YAMAGUCHI, Takahide; KOHZUMA, Takamitsu
- 2PB-111<sup>#</sup>** Function of N9F of Side-Loop in Blue Copper Protein, Pseudazurin (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○FUNAKUBO, Nodoka; YAMAGUCHI, Takahide; KOHZUMA, Takamitsu
- 2PB-112<sup>#</sup>** Structural diversity of antibody and the biological meaning. (RPP., Oita Univ.) ○HIFUMI, Emi; AKIYOSHI, Yoko; UDA, Taizo
- 2PB-113<sup>#</sup>** Cell adhesion to hydroxyapatite modified with a collagen model peptide having a phosphate group and a cell recognition sequence (Fac. Sci. Tech., Ryukoku Univ.) ○YAMAMOTO, Takumi; YAMASAKI, Masayuki; OHYANAGI, Manshi; TOMIZAKI, Kin-ya
- 2PB-114<sup>#</sup>** Effect of light irradiation on mineralization of noble metal ions by aromatic side chain-containing peptides (Fac. Sci. Tech., Ryukoku Univ.) ○UCHIYAMA, Takahiro; IMAI, Takahito; ASANO, Masahiro; TOMIZAKI, Kin-ya
- 2PB-115<sup>#</sup>** Minimization of peptides that selectively reduce gold ions in the presence of different noble metal ions (Fac. Sci. Tech., Ryukoku Univ.) ○TONODA, Tatsuki; IMAI, Takahito; ASANO, Masahiro; TOMIZAKI, Kin-ya
- 2PB-116<sup>#</sup>** Effect of surfactant-like peptides on gold nanoparticle synthesis. (Fac. Sci. Tech., Ryukoku Univ.) ○TSUKAMOTO, Naoyuki; IMAI, Takahito; TOMIZAKI, Kin-ya
- 2PB-117<sup>#</sup>** Synthesis of Carrier Peptide to Improve Nucleic Acid Release Activity (Fac. Sci. Tech., Ryukoku Univ.) ○UEMATSU, Yuta; KATAOKA, Shunnsuke; IMAI, Takahito; YAMASAKI, Masayuki; TOMIZAKI, Kin-ya
- 2PB-118<sup>#</sup>** Suppression of pathological protein aggregation by pegylated egg

- white proteins. (KIT) OHAMAWAKI, Taiga; WADA, Mei; WAKU, Tomonori; TANAKA, Naoki
- 2PB-119** Preparation of intracellular environment-responsive peptide nanofibers for antigen delivery (KIT) OTAKESHIMA, Saori; WAKU, Tomonori; TANAKA, Naoki
- 2PB-120** Preparation of peptide nano-assemblies possessing amphiphilic surface and characterization of interaction with cells. (KIT) OSAIGO, Tomoki; WAKU, Tomonori; TANAKA, Naoki
- 2PB-121** Construction of Myoglobin with cell-puncturing protein needles originated from T4 phages (Sch. Life Sci. Tech., Tokyo Tech.) OMANO, Megumi; ABE, Satoshi; UENO, Takafumi
- 2PB-122<sup>#</sup>** Molecular engineering design of protein needle - external protein complexes (Tokyo Tech.) ONGUYEN, Que Dan; HISHIKAWA, Yuki; PARK, Sam Jong; UENO, Takafumi
- 2PB-123<sup>#</sup>** Development of Branched-PEG Molecule which Regulates Protein Higher-Order Structures (Sch. Life Sci. Tech., Tokyo Tech.) OKAWAME, Mayu; MURAOKA, Takahiro; KINBARA, Kazushi
- 2PB-124<sup>#</sup>** Novel Reagents for Protein Modification and Purification with Enzymatically Cleavable Tag (Sch. Life Sci. Tech., Tokyo Tech.) OAOKI, Yusuke; M. WAWRO, Adam; MURAOKA, Takahiro; KINBARA, Kazushi
- 2PB-125<sup>#</sup>** Secondary structure evaluation of helical model peptides containing aromatic amino acids (Grad. Sch. Sci. Eng., Saga Univ.) OSHIGEDOMI, Keita; KODAMA, Hiroaki; OSADA, Satoshi
- 2PB-126** Ganglioside imaging on cell membrane by arginine derivative bearing Dansyl group (Grad. Sch. Eng., Tottori Univ.) OHISAMOTO, Kouichi; TANAKA, Tomoya; INABA, Hiroshi; MATUURA, Kazunori
- 2PB-127<sup>#</sup>** Adsorption behavior and enzymatic activity of peroxidase on the clay nano-sheets (Urban Environmental Sci., TMU) OARAI, Tatsumi; TABUCHI, Masahiro; SATO, Yurina; NISHINA, Haruka; SHIMADA, Tetsuya; TAKAGI, Shinsuke
- 2PB-128** Control of Enzyme Activity of Cytochrome P450 with Thermo-responsive Polymer Gels (Grad. Sch. Sci., Osaka Univ.; Grad. Sch. Sci., Nagoya Univ.) OKOHARA, Kenji; ONODA, Hiroki; SHOJI, Osami; YAMAGUCHI, Hiroyasu

## Chemical Biology

- 2PB-131<sup>#</sup>** Synthesis and functional evaluation of TLR2 ligand containing polar functional group in lipid chain (Grad. Sch. Sci. Tech., Keio Univ.; Grad. Sch. Pharm. Sci., Kyoto Univ.) OARAI, Yohei; INUKI, Shinsuke; FUJIMOTO, Yukari
- 2PB-132** Structure-activity relationship of the radish phototropism-regulating substance, Raphanusanin (Univ. of Tsukuba) OARAI, Atsushi; WATANABE, Ryoko; HORINOCHI, Taeko; WATANABE, Hidenori; SHIGEMORI, Hideyuki
- 2PB-133<sup>#</sup>** New synthetic method of reverse antibiotics nybomycin and evaluation of antibacterial activity of its derivatives (Microbial Chemistry Research Foundation) OATSUI, Takeshi; ITO, Yoshikazu; SASAKI, Kazushige; HAYASHI, Chigusa; IGARASHI, Masayuki; TAKAHASHI, Yoshiaki
- 2PB-134<sup>#</sup>** Synthesis and Evaluation of HDAC inhibitors utilizing intramolecular acyl transfer activation (Grad. Sch. Sci. Eng., Saga Univ.) KOUUCHI, Yuina; SAKITA, Syouta; KODAMA, Hiroaki; OSADA, Satoshi
- 2PB-135<sup>#</sup>** Fluorothalidomide: Studies of enantioselective biological activities including multiple myeloma, angiogenesis, and teratogenicity (Grad. Sch. Eng., Nagoya Inst. of Tech.) OTOKUNAGA, Etsuko; SHIBATA, Norio
- 2PB-136<sup>#</sup>** Design and Synthesis of Multifunctional Photoaffinity Probes to Map Protein-Protein Interaction Surface (Dept. of Chem., the Univ. of Hong Kong) OLIN, Jianwei; BAO, Xiucang
- 2PB-137<sup>#</sup>** Chemical functionalization of single-walled carbon nanotubes to control their PL properties for bioimaging application (Fac. of Edu., Tokyo Gakugei Univ.) OKONNO, Yui; TAMBO, Haruto; MAEDA, Yutaka; YAMADA, Michio; IIZUMI, Yoko; OKAZAKI, Toshiya
- 2PB-138<sup>#</sup>** Synthesis of novel complex lipids and their evaluation of the signaling through C-type lectin receptor Mincle (Fac. Sci. Tech., Keio Univ.; Grad. Sch. Pharm., Hokkaido Univ.) OMATSUMARU, Takanori; IKENO, Risa; SHUCHI, Yusuke; FURUKAWA, Atsushi; FUJIMOTO, Yukari; MAENAKA, Katsumi
- 2PB-139** Synthesis of Photoaffinity Labeling Probes for Elucidation of Antimicrobial Activity of Zerumbone. (Nagahama Institute of Bio-Science and Technology; Fac. Agr., Kindai Univ.) OIMAMURA, Sae; TAGAMI, Yuki; KITAYAMA, Takashi; KAWAI, Yasushi
- 2PB-140<sup>#</sup>** Design and functional evaluation of stimuli-responsive nitric oxide releasing molecular system (Coll. Sci. Eng., Aoyama Gakuin Univ.) OHOSONO, Takayuki; TANABE, Kazuhito; KURIHARA, Ryohsuke
- 2PB-141<sup>#</sup>** Development of fluorescent molecular probe for imaging tyrosine phosphatase activity in cell nuclei (Grad. Sch. Sys. Eng., Wakayama Univ.) OSAKAMOTO, Takashi
- 2PB-142** Inhibition of amyloid-aggregation by ladder-shape polyethers and analysis of its interaction (Grad. Sch. Sci., Osaka Univ.; ERATO, JST; Grad. Sch. Sci., The Univ. of Tokyo) OXIONG, Weiqi; HARA, Toshiaki; TSUCHIKAWA, Hiroshi; MURATA, Michio; SATAKE, Masayuki
- 2PB-143** New method for detection of intracellular protein-small molecule interactions based on organelle localization (Grad. Sch. Eng., Nagoya Inst. of

- Tech.; Fac. Eng. Nagoya Inst. of Tech.) OIKUTA, Masahiro; SUZUKI, Sachio; NAKAMURA, Akinobu; YOSHII, Tatsuyuki; TSUKIJI, Sinya
- 2PB-144** Fiber laser excitation two-photon fluorescence imaging by employing cyanine derivatives (Fac. Sci., Yamaguchi Univ.) ONISHI, Shozo; MATSUMOTO, Kazuya; ASAMURA, Naoya; MORITOMO, Hiroki; SUZUKI, Yasutaka; KAWAMATA, Jun
- 2PB-145** Development of novel NAMPT inhibitor with carborane as a hydrophobic 3D pharmacophore (Lab. Chem. Life Sci., Tokyo Tech.; Fac. Pharm. Sci., TUS; Institute for Theoretical Medicine, Inc.) OASAWA, Yasunobu; KATSURAGI, Kiyotaka; SATO, Akira; YOSHIMORI, Atsushi; TANUMA, Seiichi; NAKAMURA, Hiroyuki
- 2PB-146<sup>#</sup>** Development of pH sensors with OFF-ON-OFF type of fluorescence change (IBB, Tokyo Med. and Dental Univ.) OKOMATSU, Chihiro; HIRANO, Tomoya; NOJI, Yuki; OZAWA, Yusuke; KAGECHIKA, Hiroyuki
- 2PB-147<sup>#</sup>** Molecular insights into micromechanical properties of raft-targeted self-assembly (OIST) OGUANYING, Li; DINGZE, Mang; YE, Zhng
- 2PB-148<sup>#</sup>** Prodrugs of 5-fluorodeoxyuridine that are selectively activated in hypoxic cells (Grad. Sch. Sci., Eng., Aoyama Gakuin Univ.) OJIHO, Yota; KURIHARA, Ryohsuke; TANABE, Kazuhito
- 2PB-149<sup>#</sup>** Application of self-assembled vesicles prepared from anthraquinone-modified cyclodextrins as carriers of 1'-acetoxychavicol acetate and presentation of folic acid on the surfaces (Grad. Sch. Eng., Osaka City Univ.) OAZUMA, Hideki; FUKUDA, Chisa; NAGASAKI, Takeshi
- 2PB-150** Design and synthesis of new caged ryanodine receptor antagonists (Fac. Sci., Toho Univ.) OYOKOYAMA, Aika; SUZUKI, Akinobu; FURUTA, Toshiaki
- 2PB-151** Design, synthesis and their chemical properties of caged RyR agonists having cell type specificity (Fac. Sci., Toho Univ.) OAOKI, Hanami; FUNAYAMA, Mizuki; SUZUKI, Akinobu; FURUTA, Toshiaki
- 2PB-152** Design and synthesis of caged anisomycins which can be photo-activated in the presence of beta-galactosidase (Fac. Sci., Toho Univ.) OSHIMA, Kenta; OKAMOTO, Shiori; SUZUKI, Akinobu; FURUTA, Toshiaki
- 2PB-153** Development of photoresponsive trimethoprim derivatives (Grad. Sch. Eng., Nagoya Inst. of Tech.; Fac. Eng. Nagoya Inst. of Tech.) OTANAKA, Shohei; NAKAMURA, Akinobu; YOSHII, Tatsuyuki; TSUKIJI, Shinya
- 2PB-154<sup>#</sup>** Development of a novel ribosome display method for target identification of bioactive compounds (RIKEN Center for Life Science Technologies) TOGASHI, Ayano; SAKAI, Yuichi; HARA, Shuta; OWADA, Akira

## Analytical Chemistry

### Colorimetric and Spectroscopic Analysis

- 2PB-157<sup>#</sup>** Acetone sensing based on the reaction of 4-Nitrophenylhydrazine in a porous glass (Tohoku Inst. of Tech.) OSUZUKI, Yoshifumi; MARUO YAMADA, Yasuko
- 2PB-158<sup>#</sup>** Study on color test of various drugs by Marquis, Vanillin, and Mandelin reagents. (Sch. Eng., Nihon Univ.) OSUPPAPRUEK, Roongfa; INAMI, Takuto; SATO, Kenji
- 2PB-159<sup>#</sup>** Simple identification of poisonous mushroom and edible mushroom by color test (Sch. Eng., Nihon Univ.) OSATO, Kenji; ISHIDO, Nobuhiro
- 2PB-160<sup>#</sup>** Development of  $\mu$  PAD for Hexavalent Chromium Assay Using RGB Color Analysis (Fac. Eng., Tokyo Univ. of Sci., Yamaguchi) OASANO, Hitoshi; SHIRAIISHI, Yukihide
- 2PB-161<sup>#</sup>** XRD and IR analysis of food irradiation using low energy photons or other treatments. (Fac. Sci., TUS) SRIPHUTTHA, Satitaphorn; HARAGUCHI, Tomoyuki; OKAITSU, Takashiro; UMAKANTHAN, Umadevi
- 2PB-162** Rusting of steel observed in-situ with chemical imaging Raman (NISSAN ARC, LTD.) OMYALITSIN, Anton
- 2PB-163** Quantitative determination method for infrared spectra changing with the thermal degradation of resins using Mahalanobis-Taguchi system (Adv. Tech. R&D Center, Mitsubishi Electric Co.) ONOZUKI, Misa
- 2PB-164** Theoretical study of driftgrams in Ion Mobility Mass Spectrometry. I. Collision Cross-Sections of Cis/Trans Isomeric Ions (Grad. Sch. Human. Sci., Nara Women's Univ.) OKOBAYASHI, Yuki; KIHARA, Keishi; MOTOYAMA, Akira; TAKEUCHI, Takae
- 2PB-165<sup>#</sup>** Analysis of Secondary Metabolites from *Aspergillus nidulans* Using GC/MS VII. Effects of AN3275 Gene Deletion (Grad. Sch. Human. Sci., Nara Women's Univ.) OKATA, Chiaki; AKASHI, Tomohiro; KIMURA, Tomoko; TAKEUCHI, Takae

### Separation Science

- 2PB-166<sup>#</sup>** Direct determination of vitamin C and oxidized vitamin C by UV-HPLC (IBB, Tokyo Med. and Dental Univ.) OMIYAZAWA, Taiki; MATSUMOTO, Akira; GODA, Tatsuro; MIYAHARA, Yuji
- 2PB-167<sup>#</sup>** Kinetic analysis of cis-trans isomerization reactions for proline dipeptides by temperature-jump relaxation HPLC incorporated with heart-cut two-dimensional separation system (Grad. Sch. Sci., Eng., Saitama Univ.) OTAKAHASHI, Kenta; SHIBUKAWA, Masami; SAITO, Shingo

- 2PB-168** Wash-free protein gel stain using pyrene derivative (Sch. Life Sci. Tech., Tokyo Tech.) ○MORIYASU, Daiki; MIYAKAWA, Madoka; KANAMORI, Takashi; HAYASHI, Nobuhiro; YUASA, Hideya
- 2PB-169**<sup>#</sup> Selection of Aptamer Pairs for Development of High-affinity Bivalent DNA Aptamers Using Capillary Electrophoresis (Grad. Sch. Sci., Eng., Saitama Univ.) ○MIYAUCHI, Saori; WAKUI, Koji; YAMAGUCHI, Akane; SHIBUKAWA, Masami; YOSHIMOTO, Keitaro; SAITO, Shingo
- 2PB-170** Single cell imaging of transplanted stem cells in the whole transparent tissue by quantum dots (Sch. Eng., Nagoya Univ.) ○MIZUMAKI, Toshiaki; YUKAWA, Hiroshi; ONOSHIMA, Daisuke; UEDA, Hiroki; SUSAKI, Etsuo; BABA, Yoshinobu
- 2PB-171**<sup>#</sup> A study on simultaneous <sup>19</sup>F-NMR analysis of primary amines using fluorine-containing benzaldehyde (Fac. Life Med. Sci., Doshisha Univ.) ○HAMAGUCHI, Naoto; YOKOYAMA, Miki; OHTA, Tetsuo; OE, Yohei
- 2PB-172**<sup>#</sup> Colorimetric Poly-anion Sensors Utilizing the Dye-Displacement Strategy (Fac. Eng., Kitami Inst. of Tech.) NAKAHASHI, Hitoshi; ○KANEKIYO, Yasumasa
- 2PB-173** Selection and Design of mono- and bi-valent DNA aptamers with Extremely High anticoagulation ability by Microbeads-Assisted Capillary Electrophoresis(MACE) SELEX (Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○YAMAGUCHI, Akane; WAKUI, Kouji; YOSHITOMI, Toru; MIYAUCHI, Saori; TUCHIDA, Maho; SAITO, Shingo; SHIBUKAWA, Masami; YOSHIMOTO, Keitaro
- 2PB-174** In vivo imaging of exosomes derived from stem cells for regenerative medicine (Sch. Eng., Nagoya Univ.) ○KUMON, Yuka; YUKAWA, Hiroshi; ONOSHIMA, Daisuke; BABA, Yoshinobu
- 2PB-175** Development of microfluidic devices for capturing a single cell (Sch. Eng., Nagoya Univ.) ○MIZUKAMI, Naoya; KAJI, Noritada; YASUI, Takao; BABA, Yoshinobu
- 2PB-176**<sup>#</sup> Development of new rapid diagnostic system for differential diagnosis of uterine sarcoma (Univ. of Fukui) ○SAWAMURA, Hiroshi; MAENO, Mitsuo; YAMADA, Masami; MIZUTANI, Tetsuya; NISHIMURA, Kengo
- 2PB-177** Examination of conditions for hydrolysis of glucuronide conjugates using microwave. (Forensic Sci. Lab., Fukuoka Pref. Police H.Q.) ○HARAGUCHI, Shingo; WAKIGAWA, Kengo; MOHRI, Kazuko; SHIRAKI, Ryosuke; SUNAHARA, Eri; MORITA, Junichi; MATSUMOTO, Mitsushi; HISATOMI, Taketoshi
- 2PB-178**<sup>#</sup> Effect of solvation media on a reaction between nonanal and Schiff's reagent (Tohoku Inst. of Tech.) ○ABE, Natsumi; MARUO-YAMADA, Yasuko

### Sensor

- 2PB-179** Hydrophobic dye-liquid: Application for rapid and highly sensitive detection of heparin (Sch. Eng., Osaka Pref. Univ.) ○NISHIHATA, Toshiki; MIZUTA, Tatsumi; TAKAI, Shu; SUEYOSHI, Kenji; ENDO, Tatsuro; HISAMOTO, Hideaki
- 2PB-180** Hydrophobic dye-liquid : Application to microchannel array device for rapid and highly sensitive detection (Grad. Sch. Eng., Osaka Pref. Univ.) ○MIZUTA, Tatsumi; SUEYOSHI, Kenji; ENDO, Tatsuro; HISAMOTO, Hideaki
- 2PB-181**<sup>#</sup> Response Characteristics of Novel Colorimetric Sensors for Hypochlorite (Fac. Eng., Kitami Inst. of Tech.) ○MITANI, You; KANEKIYO, Yasumasa
- 2PB-182**<sup>#</sup> A Novel Electrochemical Detection Method for Nerve Agents Based on the Electron Transfer Promotion Effect of Thiocholine (Fac. Adv. Sci. Tech., Kumamoto Univ.) ○SHIMADA, Hiroshi; NOGUCHI, Shiori; KATSUDA, Yousuke; KITAMURA, Yusuke; NISHIYAMA, Katsuhiko; IHARA, Toshihiro
- 2PB-183** A simple and easy porous glass-based nitrogen dioxide sensing chip: basic research on a chip impregnated with Griess reagent. (Fac. Sci. Eng., Toyo Univ.) ○KONO, Masaki; SAGARA, Naoto; IZUMI, Katsuyuki; UTIYAMA, Masahiro; NAGASAWA, Hiroshi

### Analytical Chemistry on Organic Synthesis

- 2PB-184** Anion Recognition of Fluorescence Probe Based on Quinolinolato-Zinc(II) Complex (Osaka Kyoiku Univ.; ORIST) ○KUBONO, Koji; KADO, Kimiko; KASHIWAGI, Yukiyasu; TANI, Keita; YOKOI, Kunihiko
- 2PB-185** Evaluation of Modification Ratio and Electrochemical Sugar Recognition for Gold Nanoparticles Modified with Phenylboronic Acids and Ruthenium Complexes (Sci. Tec., Sophia Univ.) ○KITAMOTO, Yukihiro; SATO, Hiroki; KISHI, Yumino; ENDO, Akira; HASHIMOTO, Takeshi; GOTO, Takayuki; HAYASHITA, Takeshi
- 2PB-186**<sup>#</sup> Bacterial Recognition with Dendrimer Modified with Phenylazoboronic Acids (Sci. Tec., Sophia Univ.) ○TSURUFUSA, Riho; IKENO, Masaru; TSUCHIDO, Yuji; HASHIMOTO, Takeshi; HAYASHITA, Takashi
- 2PB-187** Stepwise elimination of peptides from nanowires by micro-heating (Sch. Eng., Nagoya Univ.) ○NAITO, Hiroki; YASUI, Takao; KAJI, Noritada; OKOCHI, Mina; TANAKA, Masayoshi; YANAGIDA, Takeshi; NAGASHIMA, Kazuki; BABA, Yoshinobu
- 2PB-188**<sup>#</sup> Evaluation of Fluorescent Probes Possessing Halogen/Cyclodextrin Complex for Saccharide Recognition in Water (Sci. Tec., Sophia Univ.) ○KASAHARA, Chisato; MIZUTA, Yuji; TSUCHIDO, Yuji;

- HASHIMOTO, Takeshi; HAYASHITA, Takashi
- 2PB-189** Synthesis and adsorption properties for metal ions of phosphorylated cellulose nanofibers (NIT, Kumamoto College) ○HAMABE, Yoko; UMEDA, Takashi; FUCHIZAKI, Kasumi; YAMAUCHI, Chisa
- 2PB-190**<sup>#</sup> Design and Supramolecular Function Evaluation of Dipeptide / Cyclodextrin Complex (Sci. Tec., Sophia Univ.) ○ISHIKAWA, Shun; FUJIWARA, Shoji; HASHIMOTO, Takeshi; HAYASHITA, Takashi
- 2PB-191**<sup>#</sup> Adsorption of Sc,Y and La from aqueous solution by chelating cellulose (Sch. Eng., Nihon Univ.) ○OKAMOTO, Kei; SATO, Kenji; AKAMA, Yoshihumi
- 2PB-192**<sup>#</sup> Design and Evaluation of Fluorescent probe / cyclodextrin complex possessing Saccharides recognition function (Sci. Tec., Sophia Univ.) ○KOMATSUZAKI, Maika; FUKUSHIMA, Manabu; HASHIMOTO, Takeshi; HAYASHITA, Takashi
- 2PB-193** Effect of preparing condition on the Bactericidal effects of hypochlorous acid solution (Fac. Sci., Kanagawa Univ.) MIZUSHIMA, Hiroki; ○SUGIHARA, Toshio; MATSUMURA, Yuriuko; IWASAWA, Atsuo; NISHIMOTO, Yoko
- 2PB-194** Improvement of analytical method of hexavalent chromium containing in polymers for the evidence of RoHS-compliance (Tokyo Metropolitan Ind. Tech. Res. Inst.) ○NAKAZAWA, Ryoji
- 2PB-195**<sup>#</sup> Study on analysis method of phthalates corresponding to RoHS directive (Tokyo Metropolitan Ind. Tech. Res. Inst.) ○HIRAI, Kazuhiko; NAKAZAWA, Ryoji; KAMEZAKI, Yu; KINOSHITA, Kenji; IKEDA, Saori
- 2PB-196** Molecular recognition using shape-memory nanowires (Sch. Eng., Nagoya Univ.) ○HORIUCHI, Masafumi; YASUI, Takao; YANAGIDA, Takeshi; NAGASHIMA, Kazuki; BABA, Yoshinobu
- 2PB-197** State Analysis of Methyl Cellulose Thermo Reversible Hydrogels containing Salt and Polyethylene Glycol (Fac. Sci., Kanagawa Univ.) ENDO, Ayumu; MOCHIDA, Shigeki; ○NAKANO, Satoshi; NISHIMOTO, Yoko
- 2PB-198** VOC-adsorption a properties of charcoals prepared from biomass (Fac. Sci., Kanagawa Univ.) KOMATSU, Misako; ○SHIGEMOTO, Takumi; NISHIMOTO, Yoko
- 2PB-199**<sup>#</sup> Flow-control system for microfluidic paper-based analytical devices based on pH-responsive polymers (Grad. Sch. Sci. Tech., Keio Univ.) ○INOUE, Ayumi; TAKAHASHI, Yuka; YAMADA, Kentaro; HIRUTA, Yuki; CITTERIO, Daniel

### Polymer

- 2PB-201** Effects of Solvents on the Radical Polymerization Initiated with Pyrrolidinium-based Ionic Liquids (Tohoku Seikatsu Bunka Univ.) ○SHUICHI, Kanno
- 2PB-202** Effect of particle size of DABCO- and DBU- intercalated  $\alpha$ -zirconium phosphate as latent thermal catalysts. (Fac. Eng., OIT) ○SHIMOMURA, Osamu; SUETOU, Rena; KUSU, Hideki; OHTAKA, Atsushi; NOMURA, Ryoki
- 2PB-203** Synthesis and properties of sequence-ordered copolymers composed of glycolic acid, trimethylene glycol, dicarboxylic acid component (Fac. Eng., Hiroshima Univ.) ○KUSU, Yuji; TANAKA, Ryo; NAKAYAMA, Yushou; SHIONO, Takeshi; KAWASAKI, Norioki; YAMANO, Naoko; NAKAYAMA, Atsuyoshi
- 2PB-204** Aggregation-induced emission properties of the amphiphilic block copolymer having tetraphenylethene group (Dept. Appl. Chem., Nat. Def. Acad.) ○YAMAMOTO, Shin-ichi; FARDANA, Muhammad; ONO, Tomoyuki; HAYASHI, Shotaro; KOIZUMI, Toshio
- 2PB-205** Synthesis of Versatile Phosphorous-containing  $\pi$ -Conjugated Polymers via Phosphonyl Anion-containing Polymers as Reactive Polymers. (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○HAYASHI, Yumiko; AOTA, Hirokazu; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi
- 2PB-206**<sup>#</sup> Synthesis of Titanafluorene and Its Transformation to Heterofluorene Derivatives (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○TANUDJAJA, Alvin; NISHIYAMA, Hiroki; INAGI, Shinsuke; TOMITA, Ikuyoshi
- 2PB-207** Exceptional photoresponses of upper critical solution temperature of polymer solutions using an azobenzene-doped liquid-crystalline solvent (RISC, AIST; Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba; ICR, Kyoto Univ.) ○KAWATA, Yuki; YAMAMOTO, Takahiro; KIHARA, Hideyuki; YAMAMURA, Yasuhisa; SAITO, Kazuya; OHNO, Kohji
- 2PB-208** Photoinduced swelling and shrinking of polymer physical gels in azobenzene-doped liquid crystals (IFMRI, AIST) ○KAWATA, Yuki; YAMAMOTO, Takahiro; MONOBE, Hirotsato; ASAKA, Kinji
- 2PB-209** Orientational Behavior and Thin Film Formation of Liquid Crystalline Polymers with Hydrophilic Skeletal Main-Chain (Fac. Eng., Oita Univ.) ○SANNOMIYA, Ayaka; YOSHIMI, Takeshi; UJIE, Seiji
- 2PB-210**<sup>#</sup> Syntheses and Evaluation of V-type Bio-based Polymers Using  $\delta$ -Truxinic Acid Derivatives (Sch. Mat. Sci., JAIST) ○NODA, Takumi; OKUDA, Junya; TAKADA, Kenji; KANEKO, Tatsuo
- 2PB-211**<sup>#</sup> Evaluation of conductivity in P3HT/matrix polymer alloy (Dept. of Chem. & Bio. Eng., NIT, Hachinohe College) ○HIRAI, Azuma; FUKUMATSU, Takahiro; SAITO, Takayuki
- 2PB-212** Nematic polyurethanes with an ionic network (Grad. Sch. Eng., Oita Univ.) ○WATANABE, Taiki; SHIMADA, Genichiro; YOSHIMI,

- Takeshi; NATA, Masanori; UIIE, Seiji
- 2PB-213<sup>#</sup>** Evaluation of Main Chain Structure of P3HT in P3HT+PEG Polymer Alloy (Dept. of Chem. & Bio. Eng., NIT, Hachinohe College) SUGISAWA, Naoki; OFUKUMATSU, Takahiro; SAITO, Takayuki
- 2PB-214<sup>#</sup>** Analysis of destruction mode of fluoro rubber O-rings under high-pressure hydrogen (Fukuoka Ind. Tech. Ctr.) OKIMURA, Taro; NOMIYAMA, Kazuko; HASUO, Haruumi; URAKAWA, Toshihiro; UCHIYAMA, Naoyuki; SAITA, Shingo
- 2PB-215** Fabrication of electrochemical / mechanoresponsive ionic polymer composite (Grad. Sch. Eng., Univ. of Hyogo) OIKEUCHI, Ryosuke; KONDO, Mizuho; KAKIBE, Kakibtakeshi; KISHI, Hajime; KAWATSUKI, Nobuhiro
- 2PB-216** Photoinduced Reorientation and SRG Formation in Diblock/Random Polymethacrylate Films Doped with N-Benzylideneaniline Carboxylic Acid (Grad. Sch. Eng., Univ. of Hyogo) OIKOMA, Hiromi; FUJI, Ryosuke; KONDO, Mizuho; KAWATSUKI, Nobuhiro
- 2PB-217** Photoinduced bending behavior of homogeneous alignment cross-linked liquid crystalline N-benzylideneaniline polymer film (Grad. Sch. Eng., Univ. of Hyogo) OKOTERA, Koichi; FUKAE, Ryohei; KONDO, Mizuho; KAWATSUKI, Nobuhiro
- 2PB-218** Influence of alkylene spacer length on photoaligned films with non-photoreactive liquid crystalline polymer and photosensitive derivatives (Sch. Eng., Univ. of Hyogo) OFUKUNAGA, Saki; KAWATSUKI, Nobuhiro
- 2PB-219** Cross-Linking Reaction of Natural Rubber with Acrylic Monomer from Castor Oil (Coll. Sci. Eng., Kanto Gakuin Univ.) OMATSUMO, Hiroto; KOUZAI, Hiroaki
- 2PB-220** Photoalignment of liquid crystalline polymer films with N-benzylideneaniline group by topological beams (Sch. Eng., Univ. of Hyogo) OWAKI, Nahomi; KAWATSUKI, Nobuhiro
- 2PB-221** Protein denaturation restraint ability and molecular recognition of trehalose glycopolymer (NIT, Toyama College) OTSUJI, Sotaro; NOGUCHI, Yumeno; FUKUDA, Tomohiro
- 2PB-222** Evaluation of metal capture capability of chelating resin having amidinourea and amidinothiourea Immobilized on porous polystyrene (Sch. Eng., Tokyo Denki Univ.) OTANAKA, Satomi
- 2PB-223** Analysis of inhomogeneous microstructure of reverse osmosis membrane by impedance spectroscopy (X-Breed, Shinshu Univ.) OTANAKA, Atsushi; KIMURA, Mutsumi; TATSUMI, Hirotsuke
- 2PB-224** In-situ observation of nonsolvent induced phase separation using small angle X-ray scattering measurement (Toray Industries, Inc.; Toray Research Center, Inc.) OEIMURA, Hiroki; SHIMURA, Shun; YASUDA, Takaaki; HANAKAWA, Masayuki; NAKADA, Masaru; OKADA, Kazuyuki; KIMURA, Masahiro
- 2PB-225<sup>#</sup>** Development of polymer membranes which contains host molecules with the ability to recognize bisphenol A (Dept. of Chem. & Bio. Eng., NIT, Hachinohe College) OKUDO, Shuto; NAVODA, Pinnaduwa; SATO, Kumiko; KIKUCHI, Yasuaki
- 2PB-226** Preparation of supramolecular hydrogels consisting of host-guest interactions and metal-ligand interactions and characterization of mechanical properties (Grad. Sch. Sci., Osaka Univ.) OSUZUKI, Yuna; TAKASHIMA, Yoshinori; HARADA, Akira; YAMAGUCHI, Hiroyasu
- 2PB-227** Preparation of supramolecular materials based on poly(acrylamide)s under solvent-free conditions and its physical properties (Sch. Sci., Osaka Univ.) OKANO, Nanami; TAKASHIMA, Yoshinori; HARADA, Akira; YAMAGUCHI, Hiroyasu
- 2PB-228** Synthesis and Properties Biodegradable Polyurethane with Lysine Triisocyanate. (Coll. Sci. Eng., Kanto Gakuin Univ.) AWAGAKUBO, Yosuke; KOUZAI, Hiroaki
- 2PB-229** Synthesis of Novel Polyurethane from Plant-based Curcumin (Coll. Sci. Eng., Kanto Gakuin Univ.) OTANI, Takuma; KOZAI, Hiroaki
- 2PB-230<sup>#</sup>** Development of functional polymer materials *via* charge transfer and  $\pi$ - $\pi$  interactions (Kobe City Coll. Technol.) OIKEDA, Yuki; NEMOTO, Tadamasu

Wednesday, March 21, PM

(15 : 00~16 : 30)

## Physical Chemistry -Structure- IR/Raman

- 2PC-001<sup>#</sup>** Reassignment of Vibrational Spectral Dependence on Probe Frequency in IR-UV Double Resonance Spectroscopy of 3-Aminopyridine-(Water-Methanol) Mixed Clusters (Fac. Sci., Fukuoka Univ.) OYAMADA, Yuji; NIBU, Yoshinori
- 2PC-002<sup>#</sup>** Matrix-isolation study of isoprene and its hydrated complex (RIEMT, AIST) OFUMIYUKI, Ito
- 2PC-003** Study of blinking surface-enhanced Raman scattering and fluorescence by super-resolution imaging (Sch. Sci. Tech., Kwansai Gakuin Univ.) OFUNAOKA, Misato; KITAHAMA, Yasutaka; OZAKI, Yukihiko
- 2PC-004<sup>#</sup>** Development of an Ultralow-Frequency Raman Microscope for Measurement of Intracellular Molecular Temperature (Sch. Sci. Tech., Kwansai Gakuin Univ.) OSHIMABATA, Yosuke; YASUDA, Mitsuru; SHIGETO, Shinsuke

- 2PC-005<sup>#</sup>** Low-temperature matrix infrared and quantum chemical computational studies of methyl nitrite-sulfur dioxide complex (Fac. Eng., Iwate Univ.) OSUZUKI, Eiichi; TANUMA, Moe; YASHIRO, Hitoshi
- 2PC-006<sup>#</sup>** Removal of Paramagnetic Effect on Spectra of Deuterium Solid-State NMR (Yamagata Univ.; AMCP, NIMS) OIJIMA, Takahiro; SHIMIZU, Tadashi
- 2PC-007<sup>#</sup>** Construction and Functional Characterization of Chiral Two-dimensional Supramolecular Sheets Composed of Achiral Organic Salts Having Long Alkyl Chains (Grad. Sch. Nanobiosci., Yokohama City Univ.) OSASAKI, Toshiyuki; SATO, Hisako; MIYATA, Mikiji; HISAKI, Ichiro; TOHNAI, Norimitsu
- 2PC-008<sup>#</sup>** Thermal ion desorption from cesium chloride under electric field (JAEA) OBABA, Yuji; SHIMOYAMA, Iwao
- 2PC-009** Structures and Electronic States of Carbon Bridged Methylpyridinimine Derivatives (Sch. Eng., Tokyo Denki Univ.) IWASAKI, Naoya; MOTOYOSHI, Manae; SUZUKI, Takayuki

## Organic Chemistry -Reaction and Synthesis- Aliphatic and Alicyclic Compounds

- 2PC-011<sup>#</sup>** Catalytic Asymmetric [3+2] Cycloaddition of  $\alpha$ -Ketoester Enolates and Nitrile Oxides (Syn. Org. Chem. Lab., RIKEN; RIKEN CSRS; UNC Chapel Hill) BARTLETT, Samuel; OSOHTOME, Yoshihiro; HASHIZUME, Daisuke; WHITE, Peter; SAWAMURA, Miki; JOHNSON, Jeffrey; SODEOKA, Mikiko
- 2PC-012** Transition-metal-cyanide-free preparation of aromatic nitriles from arenes (Chiba Univ.) OIMAHASE, Kohei; TOGO, Hideo
- 2PC-013** Synthesis of  $\beta$ -Lactams Having Multi-Functional Groups through Conjugate Addition Reactions of Dialkynyl Imines (Grad. Sch. Eng., Mie Univ.) HACHIYA, Iwao; OSATO, Koki; SHIMIZU, Makoto
- 2PC-014** The Umpolung Reaction of Iminoketone Having a Thiazoline Skeleton (Grad. Sch. Eng., Mie Univ.) MIZOTA, Isao; OSUZUKI, Wakana; SHIMIZU, Makoto
- 2PC-015<sup>#</sup>** Intramolecular Morita-Baylis-Hillman Reaction Using Chiral phosphine Catalysts and the Synthetic Application (Sch. Sci., Univ. of Hyogo) OHIGASHIO, Koichi; MISAKI, Tomonori; SUGIMURA, Takashi
- 2PC-016<sup>#</sup>** Synthesis of Oxindoles Using Umpolung Amination/Cyclization Reactions of 1H-Indazole-3-carboxylates (Grad. Sch. Eng., Mie Univ.) OMORI, Mayuko; MIZOTA, Isao; SHIMIZU, Makoto
- 2PC-017** Synthesis of  $\delta$ -Lactam by Tandem *N*-Alkylation/vinyllogous Mannich Reaction of  $\beta$ ,  $\gamma$ -Alkenyl  $\alpha$ -Iminoester (Grad. Sch. Eng., Mie Univ.) NAKAHAMA, Kenta; OSUZUKI, Misato; KAWANISHI, Mami; MIZOTA, Isao; SHIMIZU, Makoto
- 2PC-018** Stereoselective method for the preparation of *Z*-disubstituted- $\alpha$ ,  $\beta$ -unsaturated esters utilizing stereoretentive reduction reaction (Sch. Sci. Tech., Kwansai Gakuin Univ.) OYOSHITAKE, Daisuke; TAKEMOTO, Taichi; NAKATSUJI, Hidehumi; TANABE, Yoo
- 2PC-019** Ester enolate formation: Specific character of Ti-Claisen condensation (Sch. Sci. Tech., Kwansai Gakuin Univ.) OKAKUNO, Masatoshi; NAKATSUJI, Hidefumi; TANABE, Yoo
- 2PC-020<sup>#</sup>** A Study of Atrop-Diastereoselective Lactone Formation for The Synthesis of Axially Chiral Biphenyls (Sch. Pharm., TUPLS) OUDA, Hiroki; MAEDA, Takuya; TSURUTA, Erina; YUYAMA, Daisuke; FUJIMOTO, Yuuki; YANAI, Hikaru; YOKOJINA, Satoshi; MATSUMOTO, Takashi
- 2PC-021** Formation mechanism of aldehyde in barrel (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) OIMOTO, Kyosuke; SATO, Kohei; NARUMI, Tetsuo; MASE, Nobuyuki
- 2PC-022** Hydrogenation using bubble free gas dissolving method (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) OISHI, Chisa; SATO, Kohei; NARUMI, Tetsuo; MASE, Nobuyuki
- 2PC-023** Synthetic study on biologically active peptide using peptide hydrazide (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) OTANAKA, Shoko; SATO, Kohei; TASHIRO, Yosuke; NARUMI, Tetsuo; MASE, Nobuyuki
- 2PC-024** Development of diazo-based labeling reagents for high sensitive analysis of fatty acids by imaging mass spectrometry (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.; Fac. Med., Hamamatsu Univ. Sch. Med.) ODOI, Mizuki; SATO, Kohei; NARUMI, Tetsuo; SETOU, Mitsutoshi; MASE, Nobuyuki
- 2PC-025** Rapid reaction optimization method using microwave-assisted continuous flow reactor (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) OMATSUO, Keiya; VAMOSI, Péter; TAKEDA, Kazuhiro; SATO, Kohei; NARUMI, Tetsuo; MASE, Nobuyuki
- 2PC-026<sup>#</sup>** Radical Addition Reaction of Diiodomethyl *p*-Tolyl Sulfone(DMTS) to Alkenes (Grad. Sch. Eng., Chiba Univ.; Mitsui Chemicals, Incorporated) OTAKINO, Minoru; MATSUMOTO, Shoji; AKAZOME, Motohiro
- 2PC-027<sup>#</sup>** Cyclopropanation Reaction by Addition of Diiodomethyl *p*-Tolyl Sulfone (DMTS) or Iodoform to Electron-deficient Alkenes (Grad. Sch. Eng., Chiba Univ.; Mitsui Chemicals, Incorporated) OTAMURA, Kahori; TAKINO, Minoru; MATSUMOTO, Shoji; AKAZOME, Motohiro
- 2PC-028** Control of Chiral Space in Zinc Bisamidinate Catalyzed Asymmetric Addition of Et<sub>2</sub>Zn to  $\alpha$ -Ketoesters (Coll. Sci., Rikkyu Univ.) OKURITA, Tomomi; TATSUMI, Ryosuke; YAMANAKA, Masahiro
- 2PC-029** Development of new chiral 2,2'-bipyridine ligands bearing



- carboxamide groups (Coll. Sci., Rikkyo Univ.) OKIMURA, Akari; TUTUMI, Ryosuke; YAMANAKA, Masahiro
- 2PC-030<sup>#</sup>** Activation of amine-catalyzed nitroaldol reactions by silica gel or SBA-15 (Sch. Life Dent., The Nippon Dental Univ.) OTANEMURA, Kiyoshi
- 2PC-031<sup>#</sup>** Metal-Free Introduction of Electron-Deficient Nitrogen-Containing Heteroaromatics onto Cycloalkanes via Radical Pathway (Grad. Sch. Sci., Chiba Univ.) OZHOU, Luan; TOGO, Hideo
- 2PC-032<sup>#</sup>** Pictet-Spengler reaction using catalyst of supramolecular-type Bronsted acid (Grad. Sch. Eng., TUS) OMORI, Yuika; YAMASHITA, Kohei; HANDA, Shinya; SUGIMOTO, Hiroshi
- 2PC-033<sup>#</sup>** Synthetic Study of Bioactive Compounds Using Desymmetrization of *meso*-1,4-Dioxane Derivatives by Enantioselective Reductions (Fac. Eng., Mie Univ.) YAMAMOTO, Kenta; OYONEKAWA, Takumi; HACHIYA, Iwao; SHIMIZU, Makoto
- 2PC-034<sup>#</sup>**  $\alpha$ -Amination reaction of difluorosulfonylmethylketones using chiral guanidine catalysts (Sch. Sci., Univ. of Hyogo) OMATSUMOTO, Shuya; OKAMOTO, Tatsumasa; MISAKI, Tomonori; SUGIMURA, Takashi
- 2PC-035<sup>#</sup>** Asymmetric sequential Michael reactions of nitroalkenes and  $\gamma, \delta$ -unsaturated  $\beta$ -ketoesters by bis(imidazolidine)pyridine-metal catalyst (Grad. Sch. Sci., Chiba Univ.) OIMORI, Yuko; SHIMADA, Takuya; SHIRASUGI, Mayu; MA, Junma; ARAI, Takayoshi
- 2PC-036<sup>#</sup>** Generation of organocatalyst-incorporated *o*-quinodimethane and its asymmetric cycloaddition (Sch. Sci. Tech., Gunma Univ.) OMIZUHARA, Yuki; SANO, Hiroshi
- 2PC-037<sup>#</sup>** Consideration of reaction pathways in organocatalyzed asymmetric cycloadditions of *o*-quinodimethanes (Grad. Sch. Sci. Tech., Gunma Univ.) OYAMADA, Takahiro; SANO, Hiroshi
- 2PC-038<sup>#</sup>** Development of novel chiral supramolecular catalyst based on amidinium-carboxylate salt bridge (Coll. Sci., Rikkyo Univ.) OYAZAKI, Chikashi; TSUTSUMI, Ryosuke; YAMANAKA, Masahiro
- 2PC-039<sup>#</sup>** Stereoretentive Micheal addition using dehydration-type Ti-Claisen condensation products delivered from  $\alpha$ -heteroatom-substituted acetates (Sch. Sci. Tech., Kwansai Gakuin Univ.) OFUKUDA, Keigo; NAKATA, Kouhei; KAMADA, Risa; NAKATSUJI, Hidehumi; TANABE, Yoo
- 2PC-040<sup>#</sup>** Synthesis of figure-8-shaped twisted trisubstituted *trans*-cyclooctene derivative (Grad. Sch. Eng., TUS) OHOSOKAWA, Mayu; SHIBUI, Takahiro; SUGIMOTO, Hiroshi; HANDA, Shinya
- 2PC-041<sup>#</sup>** Umpolung Reaction of  $\gamma$ -Hydrazono  $\beta$ -Keto Ester (Grad. Sch. Eng., Mie Univ.) NAKAMURA, Yusuke; OMAEDA, Miki; MIZOTA, Isao; SHIMIZU, Makoto
- 2PC-042<sup>#</sup>** *N*-Alkylation / Coupling Reaction of  $\beta, \gamma$ -Unsaturated  $\alpha$ -Iminoester (Grad. Sch. Eng., Mie Univ.) MIZOTA, Isao; OFUSAYAMA, Ryou; KAWANISHI, Mami; SHIMIZU, Makoto
- 2PC-043<sup>#</sup>** Asymmetric Diels-Alder Reaction using Improved MacMillan Catalysts (Dept. Appl. Chem., Nat. Def. Acad.) OSENO, Noriyuki; ISHIMARU, Kaori
- 2PC-044<sup>#</sup>** Phosphoric Acid-catalyzed Friedel-Crafts-type Reaction of Cyclic *N*-Sulfonylaldimines (Sch. Pharm. Sci., Univ. Shizuoka) ONISHIBASHI, Kousuke; OTA, Yuya; KAWATO, Yuji; EGAMI, Hiromichi; HAMASHIMA, Yoshitaka
- 2PC-045<sup>#</sup>** Investigation for Novel Methods to Synthesize Benzocyclobutene (Osaka. Pref. Univ. Coll. Tech.) OYUKII, Ryusei; TUJIMOTO, Hidetaka
- 2PC-046<sup>#</sup>** Dibromination of active methylene compounds (Grad. Sch. Sci. Tech., Yamaguchi Univ.; Tosoh Finechem Corporation) OFUJII, Asami; YAMAMOTO, Hidetoshi; ISHIKAWA, Shin-ichi; MATSUMOTO, Yasuhiro
- 2PC-047<sup>#</sup>** Development of nucleophilic  $\alpha$ -(phenylthio)difluoromethylation (Grad. Sch. Sci. Tech., Gunma Univ.) OOGAKI, Naoto; KOMODA, Kazuki; SUGIISHI, Tsuyuka; AMII, Hideki
- 2PC-048<sup>#</sup>** Reactions of Trifluoromethyl Isobenzofurans with Quinones (Grad. Sch. Sci. Tech., Gunma Univ.) OMATSUMOTO, Yukari; HIKOBE, Yoshimasa; SHINADA, Shun; INABA, Masanori; NISHINA, Yuta; AMII, Hideki
- 2PC-049<sup>#</sup>** Synthesis of propeller-shaped molecules with C<sub>3</sub>-symmetry (Fac. Eng., TUS) OMORI, Kohei; KADOYA, Tomoka; OKABE, Gen; HANDA, Shinya; SUGIMOTO, Hiroshi
- 2PC-050<sup>#</sup>** Umpolung reaction of  $\beta, \gamma$ -unsaturated- $\alpha$ -hydrazonoester (Grad. Sch. Eng., Mie Univ.) ONAGATO, Toshiki; MIZOTA, Isao; SHIMIZU, Makoto
- 2PC-051<sup>#</sup>** Umpolung Reaction of *N*-Silyl  $\alpha$ -Imino Amide (Grad. Sch. Eng., Mie Univ.) HARAMIISHI, Tomoki; OYAMAMOTO, Daiki; MIZOTA, Isao; SHIMIZU, Makoto
- 2PC-052<sup>#</sup>** Novel ring-opening reaction of aziridines with thiols (Grad. Sch. Sci. Eng., Ibaraki Univ.) OTOYODA, Natsumi; ORIYAMA, Takeshi; ISOBE, Toshihiro
- 2PC-053<sup>#</sup>** Design of a new class of ruthenium complexes and their catalysis on oxidative functionalization (Fac. Sci., Kyushu Univ.; Kyushu Univ.) ODOIUCHI, Daiki; HAYASHI, Hiroki; UCHIDA, Tatsuya
- 2PC-054<sup>#</sup>** Synthesis and gelation behavior of trehalose-steroid composite low-molecular-weight organic gelators (Chiba Inst. of Tech.) ONISHIHARA, Taiga; SHIMASAKI, Toshiaki; TERAMOTO, Naozumi; SHIBATA, Mitsuhiro
- 2PC-055<sup>#</sup>** <sup>13</sup>C NMR studies to evaluate the interaction of amino acid derivatives with solvent in solution (Hiroshima Institute of Technology) OCHAKI, Saori; HIRAGA, Yoshikazu; HOSIDE, Ryouyusuke;

YOSHIMOTO, Kanji; NIWAYAMA, Satomi

- 2PC-056<sup>#</sup>** Development of stimuli-responsive chiral auxiliary switching the stereoselectivity (Grad. Sch. Eng., TUS) OJINDE, Akinori; IMAHORI, Tatsushi
- 2PC-057<sup>#</sup>** Reactions of monosaccharides and disaccharides induced by microwave irradiation (Dept. Sci., Naruto Univ. of Edu.) OMUNEGUMI, Toratane; NAKAMURA, Yoshihide

## Organic Chemistry -Reaction and Synthesis-Heteroatom Compounds

- 2PC-059<sup>#</sup>** Synthesis of chiral primary phosphines from binaphthoxy-substituted phosphonoselenoates (Fac. Eng., Gifu Univ.) OWADA, Ryota; MAEKAWA, Yuuki; IWATA, Koji; MURAI, Toshiaki
- 2PC-060<sup>#</sup>** Synthesis and application for organic electronic devices of silane-terminated donor and acceptor type self-assembled molecules (Fac. Sci. Eng., Iwate Univ.) OGAWA, Satoshi; OSHIMOMURA, Chihiro; NISHIKAWA, Takao; MURAOKA, Hiroki
- 2PC-061<sup>#</sup>** Development of the synthetic process for the naltrexamine-derived pharmaceutical TRK-130. (Toray Industries, Inc.) OMURAKAMI, Masanori; KANNO, Takami
- 2PC-062<sup>#</sup>** Synthesis and application of silyl-terminated triazine derivatives having various *N*-containing functional groups as molecular adhesive agent (Fac. Sci. Eng., Iwate Univ.; Sulfur Chemical Laboratory Inc.) MURAOKA, Hiroki; OERA, Shuichiro; KUDOU, Takahiro; MORI, Kunio; OGAWA, Satoshi
- 2PC-063<sup>#</sup>** Methoxylation of Aroyl Fluorides with Cyclopentyl Methyl Ether Mediated by Tetrabutylammonium difluorotriphenylsilicate (TBAT) (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; RIIS, Okayama Univ.) OWANG, Zhenhua; WANG, Xiu; NISHIHARA, Yasushi
- 2PC-064<sup>#</sup>** Methoxylation of Aroyl Fluorides with Tris(2,4,6-trimethoxyphenyl) phosphine via Carbon-Fluorine and Carbon-Oxygen Bond Cleavages under Metal-Free Conditions (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; RIIS, Okayama Univ.) OWANG, Xiu; WANG, Zhenhua; NISHIHARA, Yasushi
- 2PC-065<sup>#</sup>** Synthesis and Physical Properties of Extended  $\pi$ -Conjugated Molecules Having A Tetracoordinate Boron Atom at Ring Junction (Sch. Sci. Tech., Kwansai Gakuin Univ.) OABE, Hiroaki; ODA, Susumu; HATAKEYAMA, Takuji
- 2PC-066<sup>#</sup>** Synthesis and Characterization of Spiro-type Oligothiophene Derivatives Functionalized by Aryl Groups (Fac. Sci. Eng., Iwate Univ.) MURAOKA, Hiroki; OMATSUBARA, Yuuki; OGAWA, Satoshi
- 2PC-067<sup>#</sup>** Preparation and Electrochemistry of Phthalocyanine derivatives with Pyridylthio Groups (Center for Regional Collaboration in Research and Education, Iwate Univ.) OKUDO, Chiko; KIMURA, Takeshi
- 2PC-068<sup>#</sup>** Disilanes Possessing Convertible Substituents: Toward the Synthesis of New Silicon-containing Cyclic Compounds (ICR, Kyoto Univ.) OJUN-I, Yuta; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro
- 2PC-069<sup>#</sup>** Synthesis of Cyclic Carbonates from Carbon Dioxide and Styrene Oxide under Room Temperature and Atmospheric Pressure (ORIST) OMIHARA, Masatoshi; NAKAI, Takeo; ITO, Takatoshi; OHNO, Toshinobu; MIZUNO, Takumi
- 2PC-070<sup>#</sup>** Synthesis of new Nitrogen/Boron frustrated Lewis pair with a triarylbenzene framework (Grad. Sch. Sci. Tech., Meijo Univ.) ONAKAJO, Yuta; NAGATA, Toshi
- 2PC-071<sup>#</sup>** Synthesis and Reactions of Octakis(arylselanyl)naphthalene Dications toward the Creation of an Extended  $\sigma$ -Aromatic Compound (Grad. Sch. Sci., Eng., Saitama Univ.) OMIBU, Soshi; FURUKAWA, Shunsuke; SAITO, Masaichi
- 2PC-072<sup>#</sup>** Synthesis and Characterization of Alumaborane(6) Stabilized by the Bulky Rind Groups (Fac. Sci. Eng., Kindai Univ.) OKITABATA, Takuya; SADAMORI, Kazuya; HAYAKAWA, Naoki; MUROSAKI, Takahiro; MATSUO, Tsukasa
- 2PC-073<sup>#</sup>** Synthesis and reaction of new thiophenes having a bicyclo octadiene frame (Ehime Univ.) OINADA, Shoki; MISHIMA, Kazuhiro; TANI, Hiroyuki; MORI, Shigeki; UNO, Hidemitsu
- 2PC-074<sup>#</sup>** Synthesis of Oligophosphines via Sequential P-C cross Coupling (Grad. Sch. Sci., Eng., Ehime Univ.) OYUASA, Ryoki; OHTA, Hidetoshi; HAYASHI, Minoru
- 2PC-075<sup>#</sup>** Synthesis, Structure, and Reactivity of Amidinoheteroles and Its Tautomers (Sch. Sci., Kitasato Univ.; Dep. Chem., Alabama Univ.) OKIMURA, Shinobu; KUROTAKE, Takanori; SAWAMURA, Yukihiro; KIKUCHI, Yuichi; ABE, Shinya; UCHIYAMA, Yosuke; JASON W., Runyon; JOSHUA S., Dolphin; CHRISTOPH, Schinnen; ANTHONY J., Arduengo
- 2PC-076<sup>#</sup>** Synthesis and Self-Assembly of Chiral Fluorophore with Complexation Ability (Fac. Sci. Eng., Kindai Univ.) ONUMATA, Mizuna; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 2PC-077<sup>#</sup>** Ring-Closing Metathesis of Tris(2,6-divinylphenyl)phosphine (Grad. Sch. Sci., Osaka Pref. Univ.) OSHIMATANI, Hiroki; TSURUSAKI, Akihiro; KAMIKAWA, Ken
- 2PC-078<sup>#</sup>** Synthesis and Photo Chemical Reaction of Chiral Phenanthroline Copper Complex (Fac. Sci. Eng., Kindai Univ.) OKAMITANI, Kenta; NAKAHODO, Tsukasa; FUJIHARA, Hisashi
- 2PC-079<sup>#</sup>** Synthetic Study of FLPs with Flexible Skeleton Containing Aluminum and Phosphorus (ICR, Kyoto Univ.) OYANAGISAWA,

Tatsuya; MIZUHATA, Yoshiyuki; TOKITOH, Norihiro

**2PC-080<sup>#</sup>** Preparation of Dithiophosphole Rings Fused Phthalocyanine (Organization for Research Promotion, Iwate Univ.) KIMURA, Takeshi; OHTA, Kazuo

**2PC-081** Synthesis and properties of new calix selenides (Fac. Sci. Eng., Kindai Univ.) OKARIYA, Hidetoshi; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

**2PC-082** Synthesis and Chiral Emission of Chiral Phenanthroline-Lanthanide Complexes (Fac. Sci. Eng., Kindai Univ.) OYAMAMOTO, Chifuyu; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

**2PC-083** Synthesis and Function of Chiral Thiophene-modified Benzothiadiazole (Fac. Sci. Eng., Kindai Univ.) OISHII, Arisa; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

**2PC-084** The Reaction of 1,2-Dithiete with Conjugated Dienes (Grad. Sch. Sci. Eng., TMU) OMURAKAMI, Taiga; HIRABAYASHI, Kazunori; SHIMIZU, Toshio

**2PC-085** Synthesis and Properties of Novel PS<sub>2</sub>S<sub>3</sub>-type Heptadentate Ligand (Grad. Sch. Sci. Tech., Gunma Univ.) ONAKAJIMA, Tomoya; TAKEDA, Nobuhiro; UNNO, Masafumi

**2PC-086** Synthesis and Photo Function of Benzothiadiazole Bearing Metal Coordination Site (Fac. Sci. Eng., Kindai Univ.) OKANEGAE, Sakura; NAKAHODO, Tsukasa; FUJIHARA, Hisashi

**2PC-087** Synthesis of Ethynyl Quinoline polymer with Benzoyl Ester in Main Chain (Chiba Inst. of Tech.) OKAWAGUCHI, Shinji; SHIMASAKI, Toshiaki

**2PC-088<sup>#</sup>** The Synthesis of  $\delta$ -Ketocarboxylic acid and Indoles using Organic selenium compounds and Oxidants (Grad. Sch. Industrial Tech., Nihon Univ.) OYAMAMOTO, Yosuke; ICHIKAWA, Hayato

**2PC-089** One-pot Synthesis of 2-Substituted Indole by Hiyama Coupling using Palladium(0)-Catalyst (Fac. of Sci., Okayama Univ. of Sci.) OUEDA, Hikaru; YAMADA, Haruo

**2PC-090<sup>#</sup>** Optical Resolution and Photophysical Property of 1,4-Diphenyl-1-phosphino-1,3-butadiene Derivatives (Fac. Sci., Saitama Univ.) OHAYASHI, Yuki; KIKUSHIMA, Chiharu; NAKATA, Norio; OISHII, Akihiko

**2PC-091** Synthesis of Tetraalkylidigermene Bearing Triptycyl Framework (Coll. Sci., Rikkyo Univ.) OGOTO, Ryohei; YUKIMOTO, Mariko; MINOURA, Mao

**2PC-092** Synthesis and Reaction of 1,4-Diazadiene Bearing Bulky Ligands on the Nitrogens (Coll. Sci., Rikkyo Univ.) OLEE, Sanghee; MINOURA, Mao

## Organic Chemistry -Reaction and Synthesis- Organometallic Compounds

### Li

**2PC-095** Development of *ortho*-lithiation of *peri*-xanthenoxanthenes (Dept. of Chem. Eng., NIT, Nara College) KAMEI, Toshiyuki; OISHIBASHI, Hisayasu; SHIMADA, Toyoshi

**2PC-096** Stimuli-responsive BINOL based on Azobenzen (Fac. Eng., TUS) ONOJIRO, Yuta; IMAHORI, Tatsushi; OHASHI, Satoshi

### Sr

**2PC-097** Application of Strontium-Mediated Alkylation of Nitrogen-Containing Compounds (Fac. Integrated Arts and Sci., Tokushima Univ. Grad. Sch.) OISHII, Yusuke; TATEDA, Sawa; NISHIZAWA, Takahiro; OHMURA, Satoshi; UENO, Masaharu; MIYOSHI, Norikazu

**2PC-098** The Development of the New Synthetic Methods of Olefine Derivatives by Peterson Reaction Using Metallic Strontium (Fac. Integrated Arts Sci., Tokushima Univ.) OFUJITA, Mami; MIYAZAKI, Yasuaki; OHMURA, Satoshi; UENO, Masaharu; MIYOSHI, Norikazu

### Ba

**2PC-099** Selective Propargylation of Azo Compounds Using Metallic Barium (Grad. Sch. Sci., Chiba Univ.) OWATANABE, Kana; HEIMA, Toshihiko; YANAGISAWA, Akira

### Nb

**2PC-100** Catalytic Hydrodehalogenation of Haloalkanes by Niobium Complexes with Dianionic Ene-diamido Ligands (Grad. Sch. Eng. Sci., Osaka Univ.) OHOSOYA, Hiromu; NISHIYAMA, Haruka; TSURUGI, Hayato; MASHIMA, Kazushi

**2PC-101** Niobium chloride/diamine catalyzed [2+2+2] cycloaddition reaction to 1,3-cyclohexadiene derivatives (Fac. Chem. Materials and Bioeng., Kansai Univ.) OTERATANI, Kosei; KASHIMA, Koki; FUJI, Maito; OBORA, Yasushi

### Mo

**2PC-102** Synthesis of some ferrocene-containing polysiloxanes catalyzed by the silyl-molybdenum complex (Grad. Sch. Eng., Yokohama Natl. Univ.) OSHIKURA, Ken; MINATO, Makoto

**2PC-103** Synthesis of optically active polysiloxane by catalytic polymerization of secondary hydrosilanes containing a chiral group (Sch. Eng., Yokohama Natl. Univ.) OSHIMIZU, Takahiro; MINATO, Makoto

### Fe

**2PC-104** Synthesis of Isobenzofuranones by Iron-Catalyzed Addition of  $\alpha$ -Bromoesters to *o*-Vinylbenzoic Acids (Grad. Sch. Nat. Sci. Technol., Okayama Univ.; RII, Okayama Univ.) OKAZAO, Yasuki; MIKI, Natsumi; IWASAKI, Masayuki; NISHIHARA, Yasushi

**2PC-105<sup>#</sup>** Catalytic Asymmetric Synthesis of Planer-Chiral Ferrocenyl Complexes via Rh-Catalyzed Asymmetric Ring-Opening Reaction (Grad. Sch. Sci., Osaka Pref. Univ.) OISODA, Takamu; OHYA, Naoki; TSURUSAKI, Akihiro; KAMIKAWA, Ken

**2PC-106<sup>#</sup>** Synthesis of Onium-ferrate Salts and Their Application to the Cross-coupling of Alkyl Halides with Aryl Grignard Reagents (Grad. Fac. Eng., Yokohama Natl. Univ.) OMARUYAMA, Tsubasa; HASHIMOTO, Toru; YAMAGUCHI, Yoshitaka

### Ru

**2PC-107** A Heterogeneous Ru Catalyst for Site-selective C-H Silylation (Fac. Eng., Kitami Inst. of Tech.) OMURAKAMI, Emika; SUZUKI, Yuta; MURATA, Miki

**2PC-108<sup>#</sup>** Selective *N*-Alkylation of amines with ethylene glycol via Borrowing Hydrogen process (Grad. Sch. Life Med. Sci., Doshisha Univ.) OTOMIOKA, Shuhei; OHTA, Tetsuo; OE, Yohei

### Ir

**2PC-109** *N*-Alkylation and *N*-Heterocyclization of Aniline under Mild Conditions Catalyzed by NHC Iridium Complexes (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) OMORISHIMA, Namino; FUJITA, Ken-ichi

**2PC-110** Dehydrogenative Oxidation of Alcohols Catalyzed by Water-Soluble Iridium Complex Having a Functional Ligand (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) OWANG, Han; FUJITA, Ken-ichi

**2PC-111** Enantioselective Reduction of Ketone Catalyzed by [Ir(cod)2]BF<sub>4</sub>/Azolium System (Fac. Chem. Materials and Bioeng., Kansai Univ.) OTSUNOYAMA, Tatsuki; TERAMOTO, Hiro; SAKAGUCHI, Satoshi

**2PC-112** Catalytic Asymmetric Hydrosilylation Reaction Catalyzed by Ir Complex Bearing *N*-Heterocyclic Carbene Linked with Merrifield Resin Under Heterogeneous Conditions (Fac. Chem. Materials and Bioeng., Kansai Univ.) OHAYASHI, Daigo; KUSUMOTO, Takumi; SAKAGUCHI, Satoshi

**2PC-113** Catalytic asymmetric synthesis of cedarmycins using chiral Ir complex (ISIR, Osaka Univ.; Fac. Chem. Materials and Bioeng., Kansai Univ.) SUZUKI, Takeyuki; OKISHI, Nobuki; ADACHI, Yuki; ZHOU, Da-yang; ASANO, Kaori; OBORA, Yasushi

**2PC-114<sup>#</sup>** Iridium-Catalyzed [2+2+2] Cycloaddition of 1,8-Bis(1-alkynyl)naphthalene with Nitriles (Coll. Sci. Eng., Aoyama Gakuin Univ.) MATSUNAMI, Asuka; OTAKAMURA, Kaho; OTANI, Saki; OGASAWARA, Moe; NOMURA, Nozomi; TAKEUCHI, Ryo

**2PC-115** Catalytic asymmetric synthesis of enterolactone using Ir-catalyzed asymmetric Tishchenko type reaction (ISIR, Osaka Univ.) SUZUKI, Takeyuki; ADACHI, Yuki; KISHI, Nobuki; ZHOU, Da-yang; ASANO, Kaori; SASAI, Hiroaki

**2PC-116** Synthesis of *N*-Heterocycles from Glycerol and Diamines Catalyzed by Iridium Complexes (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) OTANAKA, Toshiaki; FUJITA, Ken-ichi

**2PC-117** Effect of Substituents in Iridium Catalyst on the Dehydrogenative Oxidation of Alcohols (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) OSHIMIZU, Mineyuki; KOBAYASHI, Daiki; YAMAGUCHI, Ryohei; FUJITA, Ken-ichi

### Pd

**2PC-118** Palladium-catalyzed direct alkylation of indoles (Grad. Sch. Integrated Sci. and Tech., Shizuoka Univ.) OMOCHIZUKI, Takuma; TSUKADA, Naofumi

**2PC-119<sup>#</sup>** Catalytic Asymmetric Mannich Reaction Using Optically Active PhosphoiminoBINOL- and PhenyliminoBINOL-Pd complexes (Grad. Sch. Sci., Chiba Univ.) ONAKAMURA, Ayu; SATO, Katsuya; ARAI, Takayoshi

**2PC-120** Allylic Substitution Reaction by Pd/Azolium Catalytic System: Switching of Enantioselectivity by Changing the *N*-Substituent on Chiral Ligand Precursor (Kansai Univ.) OFUKUMOTO, Kana; OKUNO, Megumi; SAKAGUCHI, Satoshi

**2PC-121** Reaction of Azolium Salt with Silver(I) Oxide Controlled by Substituent on Nitrogen Atom of Azolium (Fac. Chem. Materials and Bioeng., Kansai Univ.) OKAMIGUCHI, Kyohei; FUKUMOTO, Kana; SAKAGUCHI, Satoshi

**2PC-122** Development of One-Pot Sonogashira-Suzuki Tandem Coupling Reaction in water (Fac. Integrated Arts Sci., Tokushima Univ.) OTANI, Kazuki; HAYASHI, Toshiaki; OHMURA, Satoshi; MIYOSHI, Norikazu; UENO, Masaharu

- 2PC-123** Ti-Pd Alloys Catalyzed C-N bond formation via Hydrogen Autotransfer using Alcohols with Amines (Fac. Chem. Materials and Bioeng., Kansai Univ.; ISIR, Osaka Univ.) ○TAKAHASHI, Yuya; KONDO, Ryota; SUZUKI, Takeyuki; OBORA, Yasushi
- 2PC-124<sup>#</sup>** Stereoselective Synthesis of  $\delta$ -Silyl-Substituted *anti*-Homoallylic alcohols Using Palladium-Catalyzed Three-Component Reaction (Fac. Eng., Univ. of Toyama) ○MURAKAMI, Miki; HORINO, Yoshikazu; ABE, Hitoshi
- 2PC-125** Synthesis of Vinyl Ethers by Transesterification using DMF-protected Pd Nanoparticles Catalyst (Fac. Chem. Materials and Bioeng., Kansai Univ.; ISIR, Osaka Univ.) ○NAKATSUJI, Masato; ITOH, Satoshi; SUZUKI, Takeyuki; OBORA, Yasushi
- 2PC-126** Palladium-Catalyzed Asymmetric Allylic Alkylation of Indoles Using Axially Chiral Aminophosphine Ligands with 2-Adamantyl Group. (Grad. Sch. Eng., Chiba Univ.) MINO, Takashi; ○YAMAGUCHI, Daiki; EBISAWA, Toshibumi; YOSHIDA, Yasushi; SAKAMOTO, Masami
- 2PC-127<sup>#</sup>** Pd-Catalyzed Allylation of Aldehydes with Silyl-Substituted Allyl Acetates Proceeding through a Migration of Substituents on Silyl Group (Grad. Sch. Sci. Eng., Univ. of Toyama) ○HORINO, Yoshikazu; MUTSUURA, Itaru; ABE, Hitoshi

## Cu

- 2PC-128** Cu-catalyzed Conjugate Addition Reaction Using Hydroxy-amide-substituted NHC Ligand Precursor: Factors Affecting the Stereoselective Formation of Both Enantiomers (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○SHIMIZU, Satoki; NAKANO, Yuki; SAKAGUCHI, Satoshi
- 2PC-129** Synthesis of Chiral Bis(NHC) Ligand Precursor for Cu-catalyzed Enantioselective Conjugate Addition Reaction (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○TAKAHASHI, Natsumi; IWAI, Yuki; SAKAGUCHI, Satoshi

## Ag

- 2PC-130** Asymmetric N-Nitroso Aldol Reaction Catalyzed by a Chiral Phosphine-Silver Alkoxide (Grad. Sch. Sci., Chiba Univ.) ○KASAHARA, Shihō; TAKEISHI, Akihiro; YANAGISAWA, Akira

## Au

- 2PC-131** Thiolate-Protected Gold Nanoclusters as Catalyst for the Synthesis of Imines (Fac. Chem. Materials and Bioeng., Kansai Univ.) ○NAGATA, Tatsuki; ADACHI, Yurina; OBORA, Yasushi
- 2PC-132<sup>#</sup>** A cavitand-recessed type mono-Au catalyst for selective hydration of internal alkynes (Fac. Sci. Tech., Ryukoku Univ.) ○INOUE, Mami; ENDO, Naoki; IWASAWA, Tetsuo

## In

- 2PC-133** Synthesis of Heteroaryl[*b*]quinolines by Annulation of *o*-Acylanilines with Alkoxyheteroarenes: Studies on Reaction Conditions (Sch. Sci. Eng., Meiji Univ.) ○YONEKURA, Yūko; YONEKURA, Kyohei; SHINODA, Mika; TSUCHIMOTO, Teruhisa

## Sn

- 2PC-134<sup>#</sup>** Remote Asymmetric Induction from Chiral Allyl tin Reagent Containing a Phosphate Moiety (Grad. Sch. Fac. Sci. Eng., Shimane Univ.) ○SASAKI, Masanobu; NISHIO, Haruka; SUZUKI, Masaaki; NISHIGAITI, Yutaka

Organic Chemistry -Reaction and Synthesis-  
High-Throughput Synthesis

- 2PC-137** Umpolung of  $\alpha$ -Acyloxyimino Ester Using a Flow System (Grad. Sch. Eng., Mie Univ.) FUKUMOTO, Shinya; ○OTA, Kazuki; MIZOTA, Isao; HACHIYA, Iwao; SHIMIZU, Makoto

## Catalysts and Catalysis

- 2PC-139** Development of high active supported catalyst by photodeposition (Fac. Sci., Kochi Univ.) ○IKEUCHI, Kazuma; ONDA, Ayumu; YANAGISAWA, Kazumichi; IMAMURA, Kazuya
- 2PC-140<sup>#</sup>** Study of various catalysts for selective dehydrogenation of formic acid -Preparation and Activity evaluation- (NIT, Toyama College) ○TSUMORI, Nobuko; XU, Qiang
- 2PC-141** Reduction of high-concentration nitrate in water by Raney nickel catalyst (Grad. Sch. Sci. Eng., Univ. of Toyama) ○OSAWA, Tsutomu; SODENO, Arata
- 2PC-142<sup>#</sup>** Synthesis and characterization of Molybdenum Precursors for Hydrocracking of Vacuum Residue (Suncheon Univ.) ○CHOI, Byeongmin; CHUNG, Minchul; LEE, Chulwee; KWAK, Cheehun; JANG, Hyowon; KO, Youngsoo
- 2PC-143<sup>#</sup>** Dry reforming of methane over nickel supported on 12CaO 7Al<sub>2</sub>O<sub>3</sub> (Sch. Mater. & Chem. Tech., Tokyo Tech.) ○KARASHIMA,

Ryoya; KITANO, Masaaki; KISHIDA, Kazuhisa; KOBAYASHI, Yasukazu; HOSONO, Hideo

- 2PC-144<sup>#</sup>** Effect of support structure and property of silica-supported Pt-Co catalyst on selective oxidation of carbon monoxide (Kobe City Coll. Technol.) ○UEGAKI, Naoto; KUGAI, Junichiro
- 2PC-145<sup>#</sup>** Synthesis and evaluation of the high functional catalysts using silica nanospheres for CO oxidation reaction (NIT, Toyama College) ○TAKAMI, Yuki; TSUMORI, Nobuko
- 2PC-146** Aqueous synthesis of 5-hydroxymethyl-2-furaldehyde from commercial highly concentrated fructose syrup using industrial activated carbon catalysts (NSK CO., LTD.; Inst. for Cat., Hokkaido Univ.) ○NISHIMURA, Yuichi; HAMAGUCHI, Norihisa; TAKAGI, Hiroki; KOBAYASHI, Hirokazu; NAKAJIMA, Kiyotaka; FUKUOKA, Atsushi
- 2PC-147** Influence of ZSM-5 (Dept. Appl. Chem., Nat. Def. Acad.) ○SHIKI, Takuya; NISHI, Koji; KAMIYA, Natumi
- 2PC-148** Structural analysis of isomorphously substituted Fe-based zeolite BEA (Tosoh analysis and research center) ○KURASHIGE, Hirokazu; TANIMOTO, Noriyuki
- 2PC-149** Ru nanoparticle catalyst supported on TiO<sub>2</sub> with nanoscale concave-convex surface (1) -Direct proof of sintering resistance by in-situ TEM observations under heating conditions- (Sch. Env. Sci. Eng., KUT) ○OHTANI, Masataka; KOBIRO, Kazuya; MORIWAKI, Keiichiro; HAYASHI, Yukimi; KOBAYASHI, Miyuki
- 2PC-150** Ru nanoparticle catalyst supported on TiO<sub>2</sub> with nanoscale concave-convex surface (2) - Introduction of catalytic active site and their catalytic reactions- (Sch. Env. Sci. Eng., KUT) ○IMAI, Toru; OHOTANI, Masataka; KOBIRO, Kazuya; MORIWAKI, Keiitirou; HAYASHI, Yukimi; KOBAYASHI, Miyuki
- 2PC-151<sup>#</sup>** Bias-free water splitting by the combination of BiVO<sub>4</sub> photoanode with an organo-photocathode (Grad. Sch. Sci. Tech., Hirosaki Univ.; Lab. Chem. Life Sci., Tokyo Tech.; IMRAM, Tohoku Univ.) ○MURAKAMI, Takahiro; NAGAI, Keiji; KATO, Hideki; ABE, Toshiyuki
- 2PC-152** Effects of oxide precursors on nitridation processes of SrNbO<sub>2</sub>N photocatalysts (Graduate School of Engineering, The University of Tokyo; Grad. Sch. Eng., The Univ. of Tokyo) ○KODERA, Masanori; KATAYAMA, Masao; HISATOMI, Takashi; MINEGISHI, Tsutomu; DOMEN, Kazunari
- 2PC-153<sup>#</sup>** Study of synthesis and surface modification methods of Y<sub>2</sub>Ti<sub>2</sub>S<sub>2</sub>O<sub>5</sub> as a visible-light- active photocatalyst (Grad. Sch. Eng., The Univ. of Tokyo) ○IMAI, Kosuke; HISATOMI, Takashi; MINEGISHI, Tsutomu; KATAYAMA, Masao; DOMEN, Kazunari
- 2PC-154<sup>#</sup>** Excitation wavelength dependence of the charge-carrier dynamics in tantalum nitride powder (Toyota Central R&D Labs., Inc.) ○YAMANAKA, Ken-ichi; SUZUKI, Tomiko; SAEKI, Shu; MORIKAWA, Takeshi
- 2PC-155** Water splitting under visible light irradiation over Z-scheme photocatalyst thin film prepared by a solution synthetic method (Fac. Sci., TUS) ○ANDO, Motonori; IWASE, Akihiko; KUDO, Akihiko
- 2PC-156<sup>#</sup>** Solar-to-hydrogen peroxide conversion on resorcinol resin hybridized with activated carbon as photocatalysts (RCSEC, Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○TAKII, Takahiro; KOFUJI, Yusuke; SHIRAI, Yasuhiro; HIRAI, Takayuki
- 2PC-157** Synthesis of new layered niobium oxynitrides (Sch. Sci., Tokyo Tech.) ○WAKAYAMA, Haruki; OSHIMA, Takayoshi; MAEDA, Kazuhiko
- 2PC-158<sup>#</sup>** Improvement of photocatalytic activity under visible light irradiation by composite with Cu/WO<sub>3</sub> and Cu/N-TiO<sub>2</sub>. (Graduate School of Science and Technology) OHWAKI, Takeshi; YAMAKATA, Akira; VEQUIZO, Junie Jhon M.; ○IIHOSHI, Tomoya
- 2PC-159** Decolorization of photochromic molecules "T3-OH" using visible light responsible WO<sub>3</sub> photocatalyst. (Osaka. Pref. Univ. Coll. Tech.; Grad. Sch. Mat. Sci., NAIST) ○TANO, Ryosuke; ASATO, Ryosuke; MIZUTSU, Ryo; KAWAI, Tsuyoshi; HIGASHIDA, Suguru
- 2PC-160** Fabrication and visible light driven photocatalytic activity of TiO<sub>2</sub> thin-film modified with gold nanoparticles: effect of TiO<sub>2</sub> thickness (Osaka. Pref. Univ. Coll. Tech.) ○SHIMA, Kaho; AKIYAMA, Tsuyoshi; HIGASHIDA, Suguru
- 2PC-161** Measurements of internal quantum efficiency of tungsten(VI) oxide photoelectrode by photoacoustic effect (Grad. Sch. Life Sci. Sys. Eng., KIT) ○OKUZONO, Keita; MURAKAMI, Naoya
- 2PC-162<sup>#</sup>** Effect of Metal Cation Doping on the Au/TiO<sub>2</sub> Interface for Plasmonic Photocatalysis (RCSEC, Osaka Univ.; Grad. Sch. Eng. Sci., Osaka Univ.) ○IMAI, Jun; SHIRAI, Yasuhiro; HIRAI, Takayuki
- 2PC-163** Correlation between fine structure of Ag species in Ru(II)-complex/Ag/C<sub>3</sub>N<sub>4</sub> photocatalyst and CO<sub>2</sub> reduction activity under visible light (Sch. Sci., Tokyo Tech.) ○AN, Daehyeon; KURIKI, Ryo; ISHITANI, Osamu; MAEDA, Kazuhiko
- 2PC-164** Analysis of defect levels of titanium dioxide using double-beam infrared photoacoustic spectroscopy (Sch. Eng., KIT) ○SHINODA, Tatsuki; MURAKAMI, Naoya
- 2PC-165** TiO<sub>2</sub>-Photocatalytic Synthesis of Phenol from Benzene Using In-Situ Alkaline Extraction (Osaka. Pref. Univ. Coll. Tech.) ○HIGASHIDA, Suguru; TANIGUCHI, Ryota; HIROTA, Eri

## Theoretical Chemistry, Chemoinformatics, and Computational Chemistry

### Electronic Structure

- 2PC-167** Quantum chemical exploration for chemical properties of conical intersection (Sch. Advanced Sci. Eng., Waseda Univ.) ○INAMORI, Mayu; IKABATA, Yasuhiro; WANG, Qi; NAKAI, Hiromi
- 2PC-168<sup>#</sup>** The theoretical computation of vibronic coupling in polyenes as models of carotenoids (Kobe City Coll. Technol.) ○SAEKI, Nozomu; KUKI, Michitaka
- 2PC-169<sup>#</sup>** Theoretical study of the binding of a positron to CXY (X, Y=O, S) molecules (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○FURUSHIMA, Miku; KITA, Yukiumi; TACHIKAWA, Masanori
- 2PC-170** Electronic states of stable trioxitriphenylamine dimers as studied by quantum chemical calculations (Grad. Sch. Sci., Osaka City Univ.) ○MATSUI, Hiroki; SUGISAKI, Kenji; TOYOTA, Kazuo; SATO, Kazunobu; SHIOMI, Daisuke; TANAKA, Nobuaki; SUZUKI, Syuichi; OKADA, Keiji; TAKUI, Takeji
- 2PC-171** Theoretical analysis of H/D isotope effect on the positron binding to acetaldehyde molecule (International Coll. Arts Sci., Yokohama City Univ.) ○DOHI, Kaito; TACHIKAWA, Masanori; KITA, Yukiumi
- 2PC-172** Theoretical study on the third order nonlinear optical properties for dicationic diradical models (Dept. of Chem. Eng., NIT, Nara College) ○YOSHIDA, Wataru; YONEDA, Kyouhei; KISHI, Ryouhei; NAKANO, Masayoshi

### Chemical Reaction

- 2PC-173<sup>#</sup>** Theoretical study of dechlorination radical reactions by B12-TiO<sub>2</sub> (IMCE, Kyushu Univ.) ○IMAMURA, Kenji; SHIOTA, Yoshihito; SHIMAKOSHI, Hisashi; HISAEDA, Yoshio; YOSHIZAWA, Kazunari
- 2PC-174<sup>#</sup>** Aerobic Alcohol Oxidation on Gold Nanoparticles (IMCE, Kyushu Univ.) ○MIWA, Tetsuya; STAYKOV, Aleksandar; YOSHIZAWA, Kazunari
- 2PC-175** Theoretical Study on Photo-induced Process of 1-Methyl-3-(N-(1,8-Naphthalimidyl)Ethyl)Imidazolium Carboxylic Acid Species (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) ○OTAKA, Hidehito; OTSUKA, Takao; SUMITA, Masato; IZAWA, Hironori; MATSUI, Toru; MORIHASHI, Kenji

### Dynamics

- 2PC-176** Theoretical study of correlations between structures and catalytic activities in polymer-stabilized Au nano cluster catalysts (Grad. Sch. Sci., Osaka Univ.) ○ATO, Yoshinori; HAYASHI, Akihito; KAWAKAMI, Takashi; YAMANAKA, Shusuke; OKUMURA, Mitsutaka

### Bio-related

- 2PC-177<sup>#</sup>** Identification of substrate trafficking profiles for soluble methane monooxygenase (sMMO) by molecular dynamics simulation (IMCE, Kyushu Univ.) ○ATSUSHI, Izumi
- 2PC-178** Environmental effects on the stability of the salt bridge located in the antigen-antibody interface: A molecular dynamics study (RCAST, The Univ. of Tokyo; Grad. Sch. Arts and Sci., The Univ. of Tokyo) ○OKAJIMA, Ryo; YAMASHITA, Takefumi
- 2PC-179<sup>#</sup>** An application of an explicit water model to a glycoprotein-antibody complex (Coll. Liberal Arts Sci., Kitasato Univ.) ○UENO-NOTO, Kaori

### Materials

- 2PC-180** A theoretical study on transition states and reaction pathways of the epoxy-amine curing reaction (Fac. Eng., The Univ. of Tokyo) ○KOBAYASHI, Yoshinao; ISHIKITA, Hiroshi; YAMASHITA, Takehumi

### Simulation

- 2PC-181** Density Functional Tight Binding Parametrization and Its Application on Carrier Ion Dynamics in Electrolyte Solutions for Li-ion Batteries (Sch. Advanced Sci. Eng., Waseda Univ.) ○NISHIDA, Hideyuki; NISHIMURA, Yoshifumi; CHOU, Chien-pin; OKOSHI, Masaki; SAKTI, Aditya Wibawa; NAKAI, Hiromi
- 2PC-182** Analysis of protonation state of citric acid in aqueous solution (Sch. Sci. Eng., Univ. of Tsukuba) ○TANAKA, Yoshihiro; MATSUI, Toru
- 2PC-183** QM/MM study for class A  $\beta$ -lactamase and benzylpenicillin acylation reaction Variations in proton transfer between residues and their pK<sub>a</sub>s by some effects of surrounding environment (Grad. Sch. Pure Appl. Sci., Univ. of Tsukuba) KOMAI, Miho; ○MATSUI, Toru; MORIHASHI, Kenji
- 2PC-184<sup>#</sup>** Molecular-level analysis of work of adhesion through molecular dynamics simulation (Sch. Eng. Sci., Osaka Univ.) ○KIHARA, Kensuke; MATUBAYASI, Nobuyuki
- 2PC-185<sup>#</sup>** Multicanonical Monte Carlo simulation of ice VII (Chukyo Univ.) ○MUGURUMA, Chizuru
- 2PC-186<sup>#</sup>** Accuracy of solvation free energy evaluated from Ornstein-Zernike

integral equation theory (Grad. Sch. Sci., Eng., Ehime Univ.) ○MIYATA, Tatsuhiko; YABUKI, Naoya

### Mathematical Chemistry

- 2PC-187** Development of backflow correlation factor toward accurate anharmonic vibrational state analyses (Grad. Sch. Nanobiosci., Yokohama City Univ.) ○ISHII, Kiriko; TACHIKAWA, Masanori; KITA, Yukiumi

### Others

- 2PC-188** Search for relative configurations of cations and anions which constitute Ionic-Liquid - 1-Ethyl-3-methylimidazolium Nitrate - (Grad. Sch. Sys. Eng., Wakayama Univ.) HAMAGUCHI, Kouki; ○YAMAKADO, Hideo; TOKOYAMA, Hiroaki; OHNO, Koichi
- 2PC-189** Structural optimization of Prism-carbon sheet using VASP (Fac. Sys. Eng., Wakayama Univ.) ○OKI, Takuto; KODAYA, Yoshitomo; YAMAKADO, Hideo; TOKOYAMA, Hiroaki; OHNO, Koichi

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(10 : 00~11 : 30)

### Education and History of Chemistry

- 3PA-001** Extraction of caffeine using a domestic microwave oven and tea maker (The Univ. of Electro-Communications) ○WAKATSUKI, Youji; IMAI, Izumi
- 3PA-002** Green Sustainable Chemistry Supporting Realization of Sustainable Development Goals: Development of Color Chemistry Experiments and Video Teaching Materials (Fac. Sci., Toho Univ.) ○IMAI, Izumi; MITSUHASHI, Ryosuke; KOUNO, Fumi; MORI, Daiki; KITANO, Yuki
- 3PA-003** Development of a quick and visually appealing organic chemistry experiment: a substitution reaction of indigo (Fac. Sci., Toho Univ.) ○KOBAYASHI, Sayaka; IMAI, Izumi; WATANABE, Soichiro
- 3PA-004** Experimental teaching material for sulfonation using sulfuric acid silica gel (Grad. Sch. Sci., TUS) ○KURIKI, Ayumi; INOUE, Masayuki
- 3PA-005** Developing experimental teaching materials of decarboxylation using carboxylate and solid base (Grad. Sch. Sci., TUS) ○MAEDA, Toshikazu; INOUE, Masayuki
- 3PA-006** Identification of reducing sugars using chitin-supported gold (III) compound (Grad. Sch. Sci., TUS) ○MASUDA, Yasuhiro; INOUE, Masayuki
- 3PA-007** Development of teaching materials for experiencing molecules using sensory organs for elementary school (Fac. Edu., Ehime Univ.) ○FUKUDA, Nanaka; OHASHI, Atsushi
- 3PA-008** The Protection of Vegetable Oils from Photo-oxidation by Light Shielding (Grad. Sch. Sci., TUS) ○ITAGAKI, Meimi; INOUE, Masayuki
- 3PA-009** Development and evaluation of diverse learning materials using indigo dyeing (Fac. Edu., Ehime Univ.) ○DOI, Konomi; OHASHI, Atsushi
- 3PA-010** Generation of halogen and hydrogen halide using sulfuric acid on silica-gel (Fac. Sci., TUS) ○INOUE, Natsuki; INOUE, Masayuki
- 3PA-011** Development of chemical teaching materials for using acetic acid bacteria (Fac. Edu., Ehime Univ.) ○EDO, Shuto; OHASHI, Atsushi
- 3PA-012** Development of experimental teaching materials to synthesize salicylaldehyde from phenol (Grad. Sch. Sci., TUS) ○NAMIKI, Yuuki; INOUE, Masayuki
- 3PA-013** Repeatable pH Testing Tool Using blue pigment adsorbed on Zeolite (Fac. Edu. Culture, Univ. of Miyazaki) ○KUROKI, Chie; TANAKA, Tomoko; ARII, Hidekazu
- 3PA-014** Scientific Teaching Materials Using Photochromic Substance in Primary Education (Hyogo Univ. of Teacher Educ.; Kishiwada Municipal Yagi Elementary School) ○YAMAGUCHI, Tadatsugu; OODAIRA, Yoshino; KOWADA, Yoshiyuki; OZEKI, Toru; NATSUMEDA, Keiichi
- 3PA-015** Development of environmental education materials using crayons (Fac. Edu., Ehime Univ.) ○TSURUSAKI, Yukiko; OHASHI, Atsushi
- 3PA-016** Daniel Cell for Junior High School Chemistry (Fac. of Edu., Tokyo Gakugei Univ.) ○OKAMOTO, Lisa; MIYAUCHI, Takuya; KAMATA, Masahiro
- 3PA-017** The synthesis of binary alloy for visible crystal face in 50-minutes class (Kure high school) ○HIGASHIKAWA, Hiroyuki
- 3PA-018** Study of teaching materials based on the chemical education of foreign countries (Fac. Edu., Ehime Univ.) ○TOKUNAGA, Miki; OHASHI, Atsushi
- 3PA-019** Development of cooperative classes in the chemical laboratory utilizing tablet devices (Kobe City College of Technology; General Education) ○SATO, Hiroto; FUKUMOTO, Kozo; OSHIO, Aiko
- 3PA-020** Development of Chemical Teaching Materials Using Limonene Contained in Citrus Fruits (Hyogo Univ. of Teacher Educ.) ○NAKAJIMA, Shuhei; OZEKI, Toru; KOWADA, Yoshiyuki; TAKAMI, Shizuka; YAMAGUCHI, Tadatsugu
- 3PA-021** Fabrication of interference colored aluminum foil for experimental teaching material (Osaka. Pref. Univ. Coll. Tech.) ASANO, Kanako; KAWAKAMI, Taichi; ○NODA, Tatsuo
- 3PA-022** Examples of Science Education of the Admission and Education

Centre, Yokohama National University, 2017 (Yokohama Natl. Univ., Admiss. Edu. Ctr.) ○JINDO, Takumi; EBHARA, Osamu; KAMINOYAMA, Meguru

- 3PA-023<sup>#</sup>** Ball-Rolling Contraptions Fabricated from Readily Available Components for Illustrating the Basic Principles of Mass Analyzers (Osaka Sangyo Univ.) ○HORIKOSHI, Ryo
- 3PA-024** Development of educational materials that realize stoichiometry using catabolism of yeast (Grad. Sch. Edu., Ehime Univ.) ○SAIJOH, Shinsuke; OHASHI, Atsushi
- 3PA-025** Risk communication using food additives as teaching materials (Fac. Edu., Ehime Univ.) ○SHIGEKAWA, Hiroki; OHASHI, Atsushi
- 3PA-026** Visualization of chemical reactions in general chemistry course based on the quantum chemical calculations (Coll. Liberal Arts Sci., Kitasato Univ.) ○KOTA, Daigoku
- 3PA-027** Electric charge measurement on polystyrene microspheres to deepen recognition of particle nature of electrons: experiment for the students in science-teacher training course. (Hokkaido Univ. of Educ. Sapporo) ○NAKANO, Tomofumi; TAGUCHI, Satoshi
- 3PA-028** Development of Experimental Program for Pre-service Teacher Education: Towards Understanding Temperature Dependence on Decomposition of Hydrogenperoxide (Grad. Sch. of Edu., Tokyo Gakugei Univ.) ○HOSOE, Takashi; IKUO, Akira; KOKUSEN, Hisao; OGAWA, Haruo
- 3PA-029** Development of electronic lab-book for experimental learning program on fuel cell. (Fac. of Edu., Tokyo Gakugei Univ.) ○HAYASHI, Yoshiya; IKUO, Akira; OGAWA, Haruo
- 3PA-030** Radiochemical Experiment with Natural Radioactivity Radionuclide Separation from Spring Water Using Zeolite (Tokyo Gakugei Univ.) ○ONISHI, Kazuko; KOKUSEN, Hisao; KAMATA, Masahiro
- 3PA-031** Improvement of miniature rocket stoves for teaching materials and environmental education in cooperation with the community (National Institute of Technology, Yuge College) ○ITO, Takeshi
- 3PA-032** How to produce chemistry experiment workshops (NIT, Tsuyama College) ○HIROKI, Kazuaki
- 3PA-033** How to overcome the language problem facing the students from overseas in a faculty of science and engineering of the university for introductory science learning (Fac. Sci. Eng., Soka Univ.) ○ITO, Masato M.; SATO, Shinjiro

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(12 : 30~14 : 00)

## Applications of Materials

### Sensors

- 3PB-001** The low temperature formation of PS-Pd layered WO<sub>3</sub> thin film by the photo-assisted sol-gel method and its application to the H<sub>2</sub> sensor (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○UEGURI, Kenta; OHISHI, Tomoji
- 3PB-002<sup>#</sup>** Development of gas sensor using metal organic frameworks (MOFs) filled with fluorescent molecules (NIT, Tokyo College) ○YAMADA, Nishiki; IDE, Tomohito
- 3PB-003<sup>#</sup>** Local ion-selective measurements with nanopipettes and the application (Center for Promotion of Higher Edu., Kogakuin Univ.) ○TAKAMI, Tomohide; WATANABE, Haruka; IWATA, Futoshi

### Memory

- 3PB-004<sup>#</sup>** Dual Ion Beam Sputtered Zinc Oxide based memory devices with neuromorphic applications (Indian Institute of Technology, Indore) ○KUMAR, Amitesh; DAS, Mangal; BHARDWAJ, Ritesh; KHAN, Md Arif; MANDAL, Biswajit; HTAY, Myo Than; KRANTI, Abhinav; MUKHERJEE, Shaibal

### Materials for Display

- 3PB-005<sup>#</sup>** Synthesis and liquid crystal properties of phenyl mercaptobenzoates with a perfluoroalkyl group (Fac. Eng., Yamaguchi Univ.) ○YAMAGUCHI, Junya; ISOZAKI, Wataru; KAJIYAMA, Daiki; MORITA, Yuki; OKAMOTO, Hiroaki

### Electrical Parts

- 3PB-006** Preparation of a transparent wiring pattern using the photosensitive nanofiber (TITC) ○YOKOYAMA, Yoshiyuki; KISHIOKA, Takahiro
- 3PB-007** Electrostatic chucking characteristics and plasma resistivity of SmAlO<sub>3</sub> ceramic (Sumitomo Osaka Cement Company, Limited) ○KIMURA, Naoto; HIDAKA, Nobuhiro; OTOMO, Megumi; TAKAHASHI, Kentaro; KUGIMOTO, Hironori

### Materials for Battery and Cell

- 3PB-008<sup>#</sup>** Quantum Chemical Study of Sodium Insertion to Hard Carbon Electrode Materials (Nagasaki Institute of Applied Science; Sch. Sci., Tokai Univ.) YAMABE, Tokio; ○ISHIKAWA, Shigeru; SUGITA, Masaru;

MURAKAMI, Nobuaki

- 3PB-009<sup>#</sup>** Evaluation of power generation characteristics by polymer electrolyte fuel cell using polyvinyl alcohol electrolyte membrane containing heteropolyacid. (Fac. of Edu., Tokyo Gakugei Univ.) ○HAYASHI, Yoshiya; HASUO, Shintaro; IKUO, Akira; OGAWA, Haruo
- 3PB-010<sup>#</sup>** Effect of non-noble and noble metal addition to Pd catalysts on formic acid oxidation (Kobe City Coll. Technol.) ○MOTOISHI, Yuki; KUGAI, Junichiro

## Functional Dye

- 3PB-011** Soluble cobalt phthalocyanine pigment by introducing axial ligand and high-speed color filter film formation on flexible substrate by laser irradiation and inkjet method (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○IIZUKA, Ryo; OHISHI, Tomoji
- 3PB-012** Preparation and application of fluorescent oxadiazolopyridine dye bearing N-methylamine group (Grad. Sch. Eng., Kyushu Sangyo Univ.) ○HUI, Yan; NISHI, Kentaro; MIZUKI, Keiji; MATSUOKA, Yohei; KIYAMA, Ryoiti; ISOBE, Shin-ichiro
- 3PB-013** Synthesis and Preparation and immunostaining of short-wavelength fluorescent reagents based on triazolopyridine derivative (Grad. Sch. Eng., Kyushu Sangyo Univ.) ○GEJI, Yasuhito; FU, Wenqiang; NISHI, Kentaro; MIZUKI, Keiji; MATSUOKA, Yohei; KIYAMA, Ryoiti; ISOBE, Shin-ichiro
- 3PB-014** Crystal structure of two sensitizers for thermosensitive paper (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.; Functional Chemicals Group, Nippon Kayaku Co. Ltd.) ○KIKUCHI, Takuya; GONTANI, Saori; MIYANAGA, Kyohei; KURATA, Takaaki; AKATANI, Yoshiaki; MASTUMOTO, Shinya

## Adhesion and Surface Functions

- 3PB-015** Adhesion between living tissue and hydrogel utilizing in situ polymerization of linear polymer. (Grad. Sch. Eng., Utsunomiya Univ.) ○TAMESUE, Shingo; ENDO, Takuo
- 3PB-016<sup>#</sup>** Theoretical Study of the Influence of Temperature on Adhesion between Metal and Resin (IMCE, Kyushu Univ.) ○MURATA, Hiroyuki; TSUJI, Yuta; YOSHIZAWA, Kazunari
- 3PB-017<sup>#</sup>** Theoretical Study on the Adhesion Interaction at the Interface between Metal and Resin (IMCE, Kyushu Univ.) ○BABA, Taiki; MURATA, Hiroyuki; TSUJI, Yuta; YOSHIZAWA, Kazunari

## Environmental and Life Science

- 3PB-018<sup>#</sup>** The adsorption ability of chitosan nanofiber for isovaleric acid (Kanazawa Inst. of Tech.) ○SHIROTA, Hidetaka; OSAWA, Satoshi; TANIDA, Ikuhiro
- 3PB-019** Development of Phosphorus-doped Polycrystalline Diamond Electrodes for Electrochemical Reduction of Carbon Dioxide Dissolved in Aqueous Solution (Fac. Sci., Yamaguchi Univ.) ○SAITOH, Yu; NARAGINO, Hiroshi; WAKI, Yuta; SHIMIZU, Yuta; HONDA, Kensuke

## Hybrid Materials

- 3PB-020** Preparation of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Melamine Resin Composites - Application to the Surface Modification (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○AOMI, Yuta; SUZUKI, Junichi; SAWADA, Hideo
- 3PB-021** Morphology Control of Fluoroalkyl End-Capped Vinyltrimethoxysilane Oligomer/Magnesium Oxide Nanocomposite Particles (Grad. Sch. Sci. Tech., Hirosaki Univ.; Kanto Denka Kogyo Co., Ltd.; AIST) ○OIKAWA, Yuri; GOTO, Yuki; NISHIDA, Masakazu; SAWADA, Hideo
- 3PB-022** Adsorption of Low Molecular Weight Organic Compounds by Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Talc/Cross-linked Polystyrenes Composites (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○OIKAWA, Yuri; SAWADA, Hideo
- 3PB-023** Preparation of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Alkyl-modified Cellulose Composites - Application to the Surface Modification of a Variety of Fabrics (Grad. Sch. Sci. Tech., Hirosaki Univ.) ○YAMASHITA, Katsumi; SASAHARA, Shohei; SAWADA, Hideo
- 3PB-024** Adsorption of Organic Molecules by Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Micrometer Size-controlled Silica Particle Composites (Grad. Sch. Sci. Tech., Hirosaki Univ.; Kankyo Kougaku Co., Ltd.) ○CHIBA, Masaya; SUZUKI, Junichi
- 3PB-025** Preparation and Properties of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/Carrageenan Composites (Fac. Sci. Tech., Hirosaki Univ.; Grad. Sch. Sci. Tech., Hirosaki Univ.) ○AIZU, Shun; YASUTA, Masato; AOMI, Yuta; CHIBA, Masaya; SAWADA, Hideo
- 3PB-026** Development of organic-inorganic hybrid film containing latent pigments by microwave irradiation and photo-acid-generator for high performance flexible color filter (Grad. Sch. Eng. Sci., Shibaura Inst. of Tech.) ○KIMURA, Yu; OHISHI, Tomoji
- 3PB-027** Development of high speed film formation method of organic-inorganic color filter film containing latent pigment by using latent pigments and laser irradiation (Coll. Eng., Shibaura Inst. of Tech.) ○TAKAHASHI, Karin; OHISHI, Tomoji

- 3PB-028<sup>#</sup>** Modification of poly(styrene-co-butadiene) by using fluoroalkyl end-capped vinyltrimethoxysilane oligomer (Grad. Sch. Sci. Tech., Hiroasaki Univ.; R&D Center, Fujikura Composites) ○RATCHA, Arissara; TAKAHASHI, Rika; SAWADA, Hideo
- 3PB-029<sup>#</sup>** Synthesis and gelation ability of non-hydrogen bonding low molecular weight compounds having perfluoroalkyl group at both terminal positions (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○MURATA, Yuki; KODAMA, Yuka; HYODO, Kosuke; KANETADA, Kotaro; MORITA, Yuki; OKAMOTO, Hiroaki
- 3PB-030<sup>#</sup>** Synthesis and gelation ability of phenylbenzoate derivatives having fluoroalkyl and alkyl chains (Fac. Eng., Yamaguchi Univ.) ○KAWAMOTO, Yuta; OKAMOTO, Hiroaki; MORITA, Yuki; KANETADA, Koutarou; KAJIYAMA, Taiki
- 3PB-031<sup>#</sup>** Galation of ionic liquid by low molecular mass organic gellators having biphenyl ether derivatives (Grad. Sch. Sci. Tech., Yamaguchi Univ.) CAO, Banpeng; MORITA, Yuki; OKAMOTO, Hiroaki; ○FUJIMOTO, Yuki
- 3PB-032** Synthesis of organic-inorganic hybrid polymer (Styrene-vinyltriethoxysilane copolymer) and preparation of organic-inorganic hybrid patterned film containing latent pigment (Grad. Sch. Eng. Sci., Shibaaura Inst. of Tech.) ○OI, Miho; OHISHI, Tomoji

## Energy and Related Chemistry, Geo and Space Chemistry

- 3PB-035** Electrochemical Performance of Graphitic Carbon Nitride (Sch. Sci. Tech., Kwansai Gakuin Univ.) ○YOSHIKAWA, Hirofumi; SHIMIZU, Takeshi; KURIHARA, Masato; ARAI, Miyu
- 3PB-036** Analysis of Transient Current Measured in Relatively High Resistance Electrolyte (Toyota Central R&D Labs., Inc.) ○MORISHITA, Shinya
- 3PB-037<sup>#</sup>** Energy Transfer from Rhodamine B Derivative to Phthalocyanine dye for Light Harvesting in Dye-Sensitized Solar Cells (Grad. Sch. Chem. Sci. Technol., TUS) ○TAKEKUMA, Yuuya; NAGATA, Morio
- 3PB-038** Development of the dye-sensitized solar cells using malachite green derivatives and evaluation of their stability on titanium oxide interface (Grad. Sch. Sci., Osaka Pref. Univ.; Grad. Sch. Eng., Osaka Pref. Univ.) ○ARATA, Shuhei; HARLÉ, Jean-baptiste; KAMEGAWA, Takashi; MAEDA, Takeshi; NAKAZUMI, Hiroyuki; FUJIWARA, Hideki
- 3PB-039** Synthesis and Evaluation of Triphenylamine Derivatives for the Interfacial Modification of Perovskite/Hole Transport Layer in Perovskite Solar Cells (RCPV, AIST) ○FUNAKI, Takashi; ONOZAWA-KOMATSUZAKI, Nobuko; MURAKAMI, Takurou; KOGO, Atsushi; CHIKAMATSU, Masayuki
- 3PB-040<sup>#</sup>** Effect of aromatic nitrogen heterocycles treatment on the interface between perovskite and the hole transport material in perovskite solar cells (RCPV, AIST; Fac. Adv. Sci. Tech., Kumamoto Univ.; RCAST, The Univ. of Tokyo) ○ONOZAWA-KOMATSUZAKI, Nobuko; MURAKAMI, Takurou; FUNAKI, Takashi; KAZAOU, Said; CHIKAMATSU, Masayuki; TAMPO, Hitoshi; WANG, Wei-wei; SUGIMOTO, Manabu
- 3PB-041** Regioselective synthesis of [70]PCBM derivatives (ORIST) ○MATSUMOTO, Fukashi; SUMINO, Shuhei; IWAI, Toshiyuki; ITO, Takatoshi; OHNO, Toshinobu
- 3PB-042** Reaction optimization for the synthesis of methanofullerene derivatives (PCBMs) using sulfur ylide (ORIST) ○ITO, Takatoshi; IWAI, Toshiyuki; MATSUMOTO, Fukashi; SUMINO, Shuhei; MORIWAKI, Kazuyuki; OHNO, Toshinobu
- 3PB-043<sup>#</sup>** Synthesis of Amphiphilic Polyterphenyleneethynylene and Its Combination with Oxygen Evolving Catalysts (Faculty of Science and Technology) ○USHIDA, Yuta; NAGATA, Toshi
- 3PB-044<sup>#</sup>** Preparation of amphiphilic polypyrroles containing carboxylate groups and their composite with oxygen evolution catalyst (Grad. Sch. Sci. Tech., Meijo Univ.) ○KONNO, Yoshinori; NAGATA, Toshi
- 3PB-045<sup>#</sup>** Role of CO<sub>2</sub> as radical scavenger for improvement of sono-oxidation rate. (Grad. Sch. Eng., Meisei Univ.) ○ONO, Yuki; HARADA, Hisashi; TANAKA, Hisashi
- 3PB-046<sup>#</sup>** Solvent-free synthesis of guanidines using ultrasonic irradiation (SUMS) ○FUJITA, Mitsue; FURUSHO, Yoshio

## Environmental and Green Chemistry

- 3PB-049** Effect of Indonesian forest fires to air environment of Vietnam (Graduate School of Science and Technology) ○LY, Hoang Yen; SAKAMAKI, Fumio
- 3PB-050** Analysis of the SPM · PM<sub>2.5</sub> in Aichi (Graduate School of Science and Technology) ○TOMIMATSU, Makoto; SAKAMAKI, Fumio
- 3PB-051<sup>#</sup>** Decomposition of 3-Hydroxy-2-(trifluoromethyl)propanoic Acid (MAF-OH) in Subcritical Water (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○ASAI, Takuma; HORI, Hisao; BANERJEE, Sanjib; AMEDURI, Bruno
- 3PB-052<sup>#</sup>** Efficient Decomposition of Poly(vinylidene fluoride) in Low-temperature Subcritical Water in the Presence of Potassium Permanganate (Grad. Sch. Fac. Sci., Kanagawa Univ.) ○HONMA, Ryo; HORI, Hisao
- 3PB-053<sup>#</sup>** Improving chemiluminescence method for continuous measuring formaldehyde in the atmosphere (Grad. Sch. Eng., Osaka Pref. Univ.) ○NGUYEN NHU BAO, Chinh; TAKENAKA, Norimichi
- 3PB-054** Concentration of Volatile Organic Compounds Contained in the

- Atmosphere in Tokyo (Beauro of Environment, Tokyo Metropolitan Government) ○ISHII, Marina; ITO, Yuichi; YOSHIKAWA, Tokiko
- 3PB-055** Immobilization of Lead in Fly Ash by Inorganic compound (Nagoya Municipal Industrial Research Institute) ○HAYASHI, Tomoko; ONO, Satomi
- 3PB-056** Phosphate ion adsorption properties of allophane synthesized from rice husk ash (Fac. Eng., Saitama Inst. of Tech.) ○OTA, Saki; HATADA, Yuji; HONGO, Teruhisa
- 3PB-057** Synthesis of Magnetically Recoverable Imidazolium Hydrogen Carbonate and its Application to Catalytic Conversion (IRC3, AIST) ○FUJITA, Ken-ichi; FUJII, Akira; CHOI, Jun-Chul
- 3PB-058<sup>#</sup>** Study on solidification / molding technology of seedling soil for cell molding using biomass-derived polymer (Kanazawa Inst. of Tech.) ○SAKAI, Kohei; TSUKEGI, Takayuki; SHIMIZU, Kazufumi; OHNISHI, Asumi; NAGASAWA, Norio; SERIZAWA, Hiroaki; YOSHIMURA, Osamu
- 3PB-059<sup>#</sup>** Deoxygenation of Aromatic Alcohols with Supported Palladium Catalysts in Acidic 2-Propanol (RIEF, AIST) ○UKISU, Yuji
- 3PB-060** Study on carbon dioxide separation by the aromatic amine based polymer membrane aiming at improvement of CCS technology (Grad. Sch. Industrial Tech., Nihon Univ.) ○ANDO, Shun; FURUKAWA, Shigeki
- 3PB-061** Regioselective Carboxylation of 2-Naphthol under Supercritical Carbon Dioxide using Carbonates as a Catalyst (Grad. Sch. Industrial Tech., Nihon Univ.) ○ISHIZAWA, Shotaro; FURUKAWA, Shigeki
- 3PB-062** Water-resisting and Anti-dirt Coating Using Poly(vinyl butyral)-contained Methyltriethoxysilane Solution (Nagoya Municipal Industrial Research Institute) ○ONO, Satomi; KISHIKAWA, Nobuyuki; HAYASHI, Tomoko; KAWASE, Satoru
- 3PB-063** Study on the effect of Prussian Blue acting on photocatalyst and its reaction mechanism (Nagoya Municipal Industrial Research Institute) ○KISHIKAWA, Nobuyuki; KAWASE, Satoru; MATSUMURA, Daiki; ONO, Satomi
- 3PB-064** Composition analysis using Rietveld method for TiO<sub>2</sub> coatings containing cement (Nagoya Municipal Industrial Research Institute) ○KAWASE, Satoru; KISHIKAWA, Nobuyuki; HAYASHI, Tomoko; ONO, Satomi
- 3PB-065<sup>#</sup>** Development of a simple method of micro-analysis for environmental surveys using particulate chemical reagents and its application for education for sustainable development (ESD-J) ○AMAYA, Kazuo
- 3PB-066** Electrolytic treatment of p-nitrophenol by amorphous carbon film including nanocrystalline diamond (NIT) ○INOUE, Yuta; FUJIMOTO, Daisuke; HARA, Takeshi; TAKENAGA, Takumi; ONISHI, Masaya; NOJIRI, Yoshihiro

Thursday, March 22, PM

(15 : 00~16 : 30)

## Organic Chemistry -Reaction and Synthesis-Aromatic Compounds

- 3PC-001** Synthesis of Optically Active Phthalimide Analogues (Fac. Eng., Toyama Pref. Univ.) ○KAWASAKI, Masashi; KUROANAGI, Saki; ITO, Takuya; MORITA, Hiroyuki; TANAKA, Yasuo; TOYOOKA, Naoki
- 3PC-002<sup>#</sup>** Copper-Catalyzed Coupling Reactions of Aryl Halides and Phenols by 4,4'-Dimethoxy-2,2'-bipyridine and 4,7-dimethoxy-1,10-phenanthroline (Grad. Sch. Sci., Eng., Saitama Univ.) ○ZHAO, Yingying; WANG, Xiangyong; KODAMA, Koichi; HIROSE, Takuji
- 3PC-003<sup>#</sup>** Synthesis and reactions of keto-dimers obtained by oxidative coupling reaction of hydroxy-helicene derivatives (Grad. Sch. Eng., Utsunomiya Univ.) ○MATSUI, Yusuke; KIMURA, Takao; KARIKOMI, Michinori
- 3PC-004<sup>#</sup>** Synthesis and Properties of Optically Active Spirosilane Bearing Aryl Group (Sch. Sci., Kitasato Univ.) KAZIYAMA, Kazumasa; ○NISHI, Takane; NODA, Seina; YUGE, Hidetaka
- 3PC-005<sup>#</sup>** Stereospecific synthesis of poly-condensed oxygen-containing heterocyclic compounds using optically pure 2,2-diphenylquinone derivatives (Grad. Sch. Eng., Utsunomiya Univ.) ○HOSSAIN, Md. Sharif; KIMURA, Takao; KARIKOMI, Michinori
- 3PC-006** Synthesis and properties of tris-2,4,6-(dibenzoheterolyl)triazine derivatives (Chiba Inst. of Tech.) ○KOUGO, Kanji; SHIMASAKI, Toshiaki; TERAMOTO, Naozumi; SHIBATA, Mitsuhiro
- 3PC-007** Synthesis of triarylamines by copper catalysts (Grad. Sch. Sci., Eng., Saitama Univ.) ○LU, Yan; ZHAO, Yingying; KODAMA, Koichi; HIROSE, Takuji
- 3PC-008<sup>#</sup>** Synthesis of acene derivatives towards low-bandgap graphene nanoribbons (Grad. Sch. Mat. Sci., NAIST) ○ZHU, Juanjuan; HAYASHI, Hironobu; YAMADA, Hiroko
- 3PC-009<sup>#</sup>** Iodination Reaction of Aromatic Rings with ICl in Hydrochloric Acid Solution (Grad. Sch. Eng., Chiba Univ.; Mitsui Chemicals, Incorporated) ○KOYAMA, Syouchi; OSEKI, Takehisa; AKAZOME, Motohiro; MATSUMOTO, Shoji
- 3PC-010** Synthesis of bis-methanofullerene derivatives as single isomer (ORIST) ○SUMINO, Shuhei; IWAI, Toshiyuki; MATSUMOTO, Fukashi; MORIWAKI, Kazuyuki; ITO, Takatoshi; OHNO, Toshinobu
- 3PC-011** Synthesis of pyridine derivative bearing azulene and its properties

- (Fac. Eng., KAIT) YAMAGUCHI, Jun-ichi; ○RAIJU, Emi; SUGIYAMA, Sayuri
- 3PC-012** Transformation of ynone bearing azulene treating with tertiary amine into enamionone (Fac. Eng., KAIT) YAMAGUCHI, Jun-ichi; ○SEKITA, Honoka; HATSUMI, Azusa
- 3PC-013<sup>#</sup>** Development of regioselective polyolithiation of ferrocene and its application to synthesis of a double-layered COF (Grad. Sch. Sci., Eng., Saitama Univ.) ○HAYASHI, Keisuke; FURUKAWA, Shunsuke; SAITO, Masaichi
- 3PC-014<sup>#</sup>** Synthesis and chemical properties of water soluble 9-methylcyclohepta[*b*]pyrimido[5,4-*d*]pyrrole-8,10-dione derivatives (Grad. Sch. Symbiotic Syst. Sci. & Tech., Fukushima Univ.) ○MATSUURA, Taisuke; TAKAYASU, Tohru
- 3PC-015<sup>#</sup>** Synthesis and structure-activity relationship of new aryl propynoic acids with Wnt signaling inhibition (Iwate Univ.) KAWANO, Tomikazu; ○OGAWA, Shinpei; NISHIYA, Naoyuki; SUGAWARA, Aoi; MURAOKA, Hiroki; OGAWA, Satoshi
- 3PC-016<sup>#</sup>** Novel one-pot synthesis of polysubstituted cyclohexene derivatives by tandem reaction using benzylidene malononitriles (Grad. Sch. Sci. Eng., Ibaraki Univ.) ○ONIZAWA, Tsunaki; ORIYAMA, Takeshi
- 3PC-017<sup>#</sup>** Synthesis and Catalytic Reaction of Ruthenium(II) N-Confused Porphyrin Complexes with an Intramolecular Axial Ligand (Fac. Eng., Kyushu Univ.) ○FUKUYAMA, Kazuki; MIYAZAKI, Takaaki; MASHITA, Shunichi; DEGUCHI, Yuya; ISHIDA, Masatoshi; MORI, Shigeki; FURUTA, Hiroyuki
- 3PC-018** Synthesis and properties of extended  $\pi$ -conjugated molecules with electron acceptor skeleton (Fac. Eng. Nagoya Inst. of Tech.) ○TSUKAMOTO, Kenji; TAKAGI, Koji
- 3PC-019<sup>#</sup>** Thiocyanation of Aromatic Compounds with hypervalent Iodine reagent (Sch. Pharm. Sci., Univ. Shizuoka) EGAMI, Hiromichi; ○ITO, Yuta; TOYAMA, Akihiro; KAWATO, Yuji; HAMASHIMA, Yoshitaka
- ## Organic Chemistry -Reaction and Synthesis- Heterocyclic Compounds
- 3PC-021<sup>#</sup>** Mn(III)-Based Tandem Cyclization of 4-Acetyl-3-benzoyl-1-phenylhexane-1,5-dione (Kumamoto Univ. Faculty of Science) ○YASUTAKE, Yuma; NISHINO, Hiroshi
- 3PC-022<sup>#</sup>** Mn(III)-Based Oxidative Cyclization of 1,7-octadienes with malonamide (Kumamoto Univ. Faculty of Science) ○TACHIKAWA, Yuki; NISHINO, Hiroshi
- 3PC-023<sup>#</sup>** Mn(III)-Based Oxidative Cyclization of 2,2'-(phenylmethylene)bis(3-hydroxycyclopent-2-en-1-one) (Faculty of Science, Kumamoto University) ○TAKAYANAGI, Junpei; NISHINO, Hiroshi
- 3PC-024** Catalytic Enantioselective Formation of Azaspiro- $\gamma$ -Lactone via Ring Opening-Reclosure of Hydroxylactam (Graduate School of Engineering, Shizuoka University) SENGOKU, Tetsuya; ○TSUDA, Tamaki; TAKAHASHI, Masaki; YODA, Hidemi
- 3PC-025** Development of ZnBr<sub>2</sub>-catalyzed Enantioselective Allylation of ketones with  $\beta$ -amido allylboronates (Fac. Eng., Shizuoka Univ.) SENGOKU, Tetsuya; MAEGAWA, Ryunosuke; ○MIYOSHI, Ayako; TAKAHASHI, Masaki; YODA, Hidemi
- 3PC-026<sup>#</sup>** The Ring Expansion Reaction of 2-Alkenyl-Substituted Sulfonium Ylides (Kobe City Coll. Technol.) ○FUJII, Ikuya; IJUIN, Ryuu; UCHIMURA, Isami; KOIZUMI, Takuya
- 3PC-027<sup>#</sup>** Versatile Molecular Transformations of  $\beta$ -Diketones Using Imino Carbenoids (Kobe City Coll. Technol.) ○YABUUCHI, Yuto; SAKAI, Yuki; KOIZUMI, Takuya
- 3PC-028<sup>#</sup>** Selective syntheses of desmosines and their derivatives via Chichibabin pyridinium synthesis (Sci. Tec., Sophia Univ.) ○TANAKA, Nao; KURITA, Manami; MURAKAMI, Yuko; USUKI, Toyonobu
- 3PC-029** Quaternary Ammonium Salt-Catalyzed Carboxylative Cyclization of Propargylic Amines with CO<sub>2</sub> (IRC3, AIST) ○FUJII, Akira; CHOI, Jun-Chul; FUJITA, Ken-ichi
- 3PC-030<sup>#</sup>** One-Pot Preparation of Coumarin Derivatives with Hypervalent Iodines (Grad. Sch. Sci., Chiba Univ.) ○SASAKI, Teppei; TOGO, Hideo
- 3PC-031** Selectivity in Cyclization of Dissymmetrically Substituted 3-Aryl-2-propen-1-amines and Ethenetricarboxylate (Nara Univ. of Educ.; Grad. Sch. Eng., Osaka Pref. Univ.; Grad. Sch. Mat. Sci., NAIST) YAMAZAKI, Shoko; ○GO, Kakeru; SUGIURA, Hirotaka; OGAWA, Akiya; KAKIUCHI, Kiyomi
- 3PC-032** Preparation of mandelate type ionic liquids and their application to chiral Induction (Fac. Eng., Kindai Univ.) ○KITAOKA, Satoshi; YOSHIIKI, Tomohiro; NOBUOKA, Kaoru
- 3PC-033<sup>#</sup>** One-Pot Preparation of 3-Arylisoxazoles from Benzylic Chlorides (Grad. Sch. Sci., Chiba Univ.) ○IMAI, Taro; TOGO, Hideo
- 3PC-034** Synthesis of 3-Amino-2-pyridones Directed to the Synthesis of  $\beta$ -Carbolines (Grad. Sch. Eng., Mie Univ.) SHIMADA, Satoshi; ○MIURA, Ryoya; HACHIYA, Iwao; SHIMIZU, Makoto
- 3PC-035<sup>#</sup>** Skeletal diversity from *cis*-2-alkenylcycloalkane-1-ol (International Coll. Arts Sci., Yokohama City Univ.) ○NODA, Taiki; HLOKOANE, Oriël; ISHIKAWA, Yuichi; OIKAWA, Masato
- 3PC-036<sup>#</sup>** The synthesis of binaphthyl chiral selenides which has various aryl groups at 3,3' position and asymmetric bromolactonization reaction (Coll. Industrial Tech., Nihon Univ.) ○SHIBA, Kouhei; ICHIKAWA, Hayato
- 3PC-037<sup>#</sup>** One-Pot Preparation of 3-Arylisoxazoles from Electron-Rich Aromatics and Heteroaromatics (Fac. Sci., Chiba Univ.) ○NAKANO, Ryuta; TOGO, Hideo
- 3PC-038** A Facile and Convenient Synthetic Method for Novel Trifluoroacetylated Quinolins (Grad. Sch. Eng., Kobe Univ.) ○AMANO, Akio; OKADA, Etsuji
- 3PC-039** A Convenient Synthesis of Novel Fluorine-Containing Naphthoxazines Using Oxazine-Ring formation Reaction of 1-Dialkylamino-2-trifluoroacetylnaphthalenes (Grad. Sch. Eng., Kobe Univ.) ○TAKAYAMA, Kyohei; OKADA, Etsuji
- 3PC-040** Synthesis of Ladder-Type Fused Ring Compound Thienobisthiazole and Change in Fluorescence Emission by External Stimulation (Fac. Eng., Gifu Univ.) ○WADA, Ryuta; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3PC-041** A Facile and Convenient Synthetic Method for Novel Fluorine-Containing Quinolinoacridines (Grad. Sch. Eng., Kobe Univ.) ○INOUE, Naruaki; YAMAMOTO, Kazutaka; OKADA, Etsuji
- 3PC-042<sup>#</sup>** Synthesis and Wnt-signaling inhibition of novel dibenzopyranone derivatives (Faculty of Science and Engineering) KAWANO, Tomikazu; ○ABE, Tomomichi; NISHIYA, Naoyuki; SUGAWARA, Aoi; MURAOKA, Hiroki; OGAWA, Satoshi
- 3PC-043<sup>#</sup>** One-Pot Preparation of Phenanthridines from *o*-Cyanobiphenyls with Specific Character of Iodine (Grad. Sch. Sci., Chiba Univ.) ○KISHI, Atsushi; MORIYAMA, Katsuhiko; TOGO, Hideo
- 3PC-044<sup>#</sup>** Expanding substrate scope for the hetero-coupling reaction using stable carbon-centered radical species (Syn. Org. Chem. Lab., RIKEN; RIKEN CSRS) ○OHNISHI, Rikako; SUGAWARA, Masumi; SOHTOME, Yoshihiro; SODEOKA, Mikiko
- 3PC-045** Reaction of 9-Dimethylamino-8-trifluoroacetyloxazinobenzacridines with Anilines - Synthesis of a Precursor to Novel Fluorine-Containing Oxazinonaphthobenzophenanthrolines (Grad. Sch. Eng., Kobe Univ.) ○NAKADA, Tomohiro; INOUE, Naruaki; ADACHI, Taishi; OKADA, Etsuji
- 3PC-046** Synthesis of Chiral 5-Sulfinylimidazo[1,5-*a*]pyridine Carbenes and Its Applications (Fac. Eng., Gifu Univ.) ○HATTORI, Suzuka; SHIBAHARA, Fumitoshi; MURAI, Toshiaki
- 3PC-047** Stereoselective synthesis of (*E*)-*N*-substituted 1,2-benzothiazol-3(2*H*)-imine 1,1-dioxides by cyclization of 2-(aminosulfonyl)benzothioamide derivatives (Grad. Sch. Eng., Tottori Univ.) ○FUJIWARA, Daiki; KOBAYASHI, Kazuhiro
- 3PC-048** Synthesis of 2-(alkyl(or aryl)sulfonyl)-2*H*-1,4-benzothiazin-3(4*H*)-one derivatives carrying an alkyl(or aryl)sulfonyl substituent at the 2-position (Fac. Eng., Tottori Univ.) ○KAWANO, Kazuki; YAMASHITA, Keita; KOBAYASHI, Kazuhiro
- 3PC-049<sup>#</sup>** Synthesis of novel tetracyclic indolines using electrophilic indoles and 2-aminophenyl  $\alpha, \beta$ -unsaturated ketones (Grad. Sch. Sci., Chiba Univ.) ○SHIMADA, Takuya; ARAI, Takayoshi
- 3PC-050** Synthesis of thiochromane 1,1-dioxide derivatives by LDA-mediated cyclization of 2-(methylsulfonyl)styrene derivatives (Grad. Sch. Eng., Tottori Univ.) ○UEYAMA, Takuma; KOBAYASHI, Kazuhiro
- 3PC-051** Syntheses and Reactions of novel azaazulene derivatives (NIT, Kurume College) ○NONAKA, Takuya; KUROTOBI, Kei; MURATA, Yasujiro
- 3PC-052** Synthesis of Fluorescent Ionic Liquids Incorporated Benzofuran Scaffold (Fac. Eng., Oita Univ.) ○FUJIYOSHI, Taro; NOBUOKA, Kaoru; KITAOKA, Satoshi; ISHIKAWA, Yuuichi
- 3PC-053** Development of substitution group introduction method to the C11 position of saxitoxin derivatives (Tokyo Univ. of Agri. and Technol.) ○ADACHI, Kanna; HARADA, Daisuke; ISHIZUKA, Hayate; NAGASAWA, Kazuo
- 3PC-054** Regioselective Nucleophilic Substitution Reaction of 2,4-Dialkoxy-3-trifluoroacetylquinolines with Amines (Grad. Sch. Eng., Kobe Univ.) ○KIMURA, Hibiki; AMANO, Akio; OKADA, Etsuji
- 3PC-055** Synthesis of Highly Functionalized Fluorine-Containing 3,4-Dihydro-2*H*-pyrans and Their Reaction with Thiols (Grad. Sch. Eng., Kobe Univ.) ○MINAMOTO, Yuma; AMANO, Akio; OKADA, Etsuji
- 3PC-056** Development novel method for the synthesis of 5,6-dihydropyrazine-2(1*H*)-one and quinoxaline-2(1*H*)-one *O*-(*tert*-butyl)oximes (Coll. Sci. Tech., Nihon Univ.) ○TASHIRO, Kenshiro; HAYAKAWA, Mamiko; AOYAMA, Tadashi; OUCHI, Akihiko
- 3PC-057** One-pot synthesis of 3-hydroxybenzo[*b*]thiophen-2(3*H*)-one derivatives from benzenethiols and  $\alpha$ -keto esters (Fac. Eng., Tottori Univ.) ○MURAYAMA, Ikuma; NOGI, Takashi; KOBAYASHI, Kazuhiro
- 3PC-058** Base-Promoted Ring Contraction of 3-Silyl-2*H*-1-Benzopyran to 2-Substituted Benzofuran (Grad. Sch. Fac. Env. and Info. Sci., Yokohama Natl. Univ.) ○SUKEKAWA, Mayumi; TANAKA, Kenta; HOSHINO, Yujiro; HONDA, Kiyoshi
- 3PC-059** The Synthesis of 2-Amino-1,3-benzoselenazoles via Cyclization Reaction of Bis(2-aminophenyl)diselenide with Isothiocyanate. (Grad. Sch. Industrial Tech., Nihon Univ.) ○ISHIGAKI, Yui; ICHIKAWA, Hayato
- 3PC-060** One-pot synthesis of 2-isoxazoline derivatives using  $\alpha$ -nitroketones and alcohols in the presence of NaHSO<sub>4</sub>/SiO<sub>2</sub> (Coll. Sci. Tech., Nihon Univ.) ○HANZAWA, Takuya; HAYAKAWA, Mamiko; AOYAMA, Tadashi; ITOH, Ken-ichi; OUCHI, Akihiko
- 3PC-061<sup>#</sup>** Reaction of Tetrachloropyrimidopyrimidine (Cl<sub>4</sub>-pypm) with Ruppert-Prakash Reagent (Coll. Eng., Ibaraki Univ.) ○KAWANO, Rei;

- FUKUMOTO, Hiroki; AGOU, Tomohiro; KUBOTA, Toshio
- 3PC-062** Synthesis of 2-bromobicycloalkene and cross-coupling reaction without ring-opening (Sch. Eng., Tokyo Denki Univ.) ○FUJIMOTO, Akira; YAMAMOTO, Tetsuya; SHINOZAKI, Hiraku
- 3PC-063** Synthesis of Isoindoles with various substituents (Fac. Eng., Utsunomiya Univ.) ○SAKAMOTO, Risa; ASAKURA, Minenari; OBA, Toru; ITO, Satoshi
- 3PC-064** Synthesis of 2,3-Disubstituted Indole Derivatives via Palladium Catalyzed Annulation of *o*-Alkynylaniline with Allylic Acetate (Grad. Sch. Eng., Chiba Univ.) ○MASUDA, Chihiro; MINO, Takashi; WATANABE, Kohei; YOSHIDA, Yasushi; SAKAMOTO, Masami
- 3PC-065** Synthesis of soluble  $\pi$ -conjugated BODIPYs (Fac. Eng., Utsunomiya Univ.) ○HASHIMOTO, Saori; KAWAMATA, Yuki; OBA, Toru; ITO, Satoshi
- 3PC-066** Suppressing decarbonylation during the Stille coupling reactions of substituted benzoyl chlorides with an electron-deficient heterocyclic stannan (Fac. Sci., Toho Univ.) ○UNO, Sota; HIGASHI, Shoko; SASAKI, Kaname; SAITO, Ryota
- 3PC-067** Synthesis of novel 3-hydroxythiazol-2(3H)-thiones having substituents at the C5 and their zinc complexes. (Toho Univ.) ○WATANABE, Tatsuya; HIGASHI, Shoko; SASAKI, Kaname; SAITO, Ryota
- 3PC-068** synthesis of amido compounds by beckman rearrangement (Grad. Sch. Sci. Tech., Yamaguchi Univ.) ○TAKEUCHI, Yoshihiro; YAMAMOTO, Hidetoshi
- 3PC-069** Catalytic asymmetric benzylation in the presence of planar-chiral quaternary ammonium salt using alkoxide (Grad. Sch. Advanced Sci. Eng., Waseda Univ.) ○SATO, Wataru; KANOMATA, Nobuhiro
- Univ. of Tokyo) ○MURAMATSU, Tatsuya; OGURA, Masaru; YOSHIKAWA, Isao; HOUJOU, Hirohiko; MUTAI, Toshiki
- 3PC-086** Observation of the enantiomeric association mode change by cis-trans photoisomerization and polymorphic transition in solution for azobenzene derivatives (Grad. Sch. Human and Environ. Stud., Kyoto Univ.) ○TAKAHASHI, Hiroki; MOTOKAWA, Junko
- 3PC-087** Polymerization of Crystals and Liquid Crystals Composed of Diacetylene Carboxylic Acid and Alkylpyridine (Sch. Eng., Osaka Pref. Univ.) ○HATTORI, Yoshio; UEHARA, Fai; MATSUMOTO, Akikazu
- 3PC-088** Solid-state photodimerization of styrylpyridine with an asymmetric carbon (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○MURAI, Hirona; YAMADA, Shinji
- 3PC-089** Solid-state [2+2] photodimerization and photosolvent effect of co-crystal of styrylpyridine and naphthol derivatives (Grad. Sch. Of Humanities & Sci., Ochanomizu Univ.) ○MIYAMOTO, Momoyo; YAMADA, Shinji
- 3PC-090** Synthesis of diphenylamine and its nitroxide derivatives carrying stable organic radicals at *p*-position and their physicochemical properties (Fac. Sci. Tech., Keio Univ.) ○HARADA, Yutaro; Ikegami, Hiroki; MIURA, Youhei; YOSHIOKA, Naoki
- 3PC-091** synthesis of dihydroacridine derivatives carrying a verdazyl unit and their spectroscopic properties. (Fac. Sci. Tech., Keio Univ.) ○YANAGIMACHI, Ryo; MIURA, Youhei; YOSHIOKA, Naoki
- 3PC-092** Magneto-structural correlation of spin-localized nitroxide radical carrying a naphthalene framework (Fac. Sci. Tech., Keio Univ.) ○SUZUKI, Yutaro; SHIMIZU, Yuki; TAKAHASHI, Yusuke; MIURA, Youhei; YOSHIOKA, Naoki

## Organic Crystals

- 3PC-071<sup>#</sup>** The crystal structures of cyclic or spherical aromatic amides with hydrogen-bonding sites (CAI, Chiba Univ.) ○MASU, Hyuma; HIRAYAMA, Yuto; ITO, Norie; AZUMAYA, Isao
- 3PC-072** Control of structural stability and steric hindrance by molecular design of Porous Organic Salts composed of Sulfonic Acids and Amine (Sch. Eng., Osaka Univ.) ○TOMIMOTO, Atsunori; TSUCHIYA, Keiho; TOHNAI, Norimitsu; HISAKI, Ichiro
- 3PC-073<sup>#</sup>** Crystal structure construction of organic salts comprising proton, H<sup>+</sup>, as a counter cation (Coll. Sci., Rikkyo Univ.; Research Center for Smart Molecules, Rikkyo Univ.; Grad. Sch. Arts and Sci., The Univ. of Tokyo; The Toyota Physical and Chemical Research Institute) ○TANAKA, Rikako; OKAZAWA, Atsushi; KOJIMA, Norimichi; MATSUSHITA, Nobuyuki
- 3PC-074** Crystallization of Organic Compound induced by gold thin film (Sch. Sci. Tech., Gunma Univ.) ○YAMAKOSHI, Miki; HORIUCHI, Hiroaki; OKUTSU, Tetsuo
- 3PC-075** Construction of Single-Crystalline Hydrogen-Bonded Organic Framework with Permanent Helical Pore (Sch. Eng., Osaka Univ.) ○SUZUKI, Yuto; HISAKI, Ichiro; TONAI, Norimitsu
- 3PC-076<sup>#</sup>** Crystal Structures and Inclusion Ability of 1,1-Diphenyl-2-(tritylamino)alcohol Synthesized from Amino Acids (Grad. Sch. Eng., Chiba Univ.) ○MURAI, Sayaka; ISONO, Akira; MATSUMOTO, Shoji; AKAZOME, Motohiro
- 3PC-077<sup>#</sup>** Reduced nucleation of Mg nanocrystals around steps on diarylethene crystal surface (Osaka Kyoiku Univ.; TUPLS; RIKEN; Ryukoku Univ.) ○MATSUMOTO, Saki; YOKOJIMA, Satoshi; NAKAMURA, Shinichiro; UCHIDA, Kingo; TSUJIOKA, Tsuyoshi
- 3PC-078** Total optical resolution of succinimides via dynamic stereoselective crystallization (Grad. Sch. Eng., Chiba Univ.) ○ISHIKAWA, Hiroki; MASU, Hyuma; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 3PC-079** Preparation of Chirally Controlled Crystals of  $\alpha$ -Oxoamide using a Chiral Sources and Synthesis of Optically Active  $\beta$ -Lactams by Photocyclization (NIT, Kurume College) MIYAMOTO, Hisakazu; ○YAMAUCHI, Genta
- 3PC-080** Chirality control of spiroopyrans by dynamic crystallization (Grad. Sch. Eng., Chiba Univ.) ○SAITO, Rei; UEMURA, Naohiro; YOSHIDA, Yasushi; MINO, Takashi; SAKAMOTO, Masami
- 3PC-081** The absolute structure of 4-iodo-2-methyl-6-[alkylsulfanyl]phenol (Fac. Sci., Josai Univ.; Fac. Pha., Josai Univ.) ○TOMODA, Misa; MIYAMAE, Hiroshi; TAKEI, Takanori; HIGASHIHARA, Miwako; TAKAYAMA, Jun; SAKAMOTO, Takeshi
- 3PC-082** Circularly polarized luminescence (CPL) of chiral oligobinaphthyl fluorophores (Grad. Sch. Sci. Eng., Kindai Univ.; NIMS; Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ.) SATO, Takuya; HARA, Nobuyuki; YOSHIDA, Keishiro; TAJIMA, Nobuo; TSUBAKI, Kazunori; ○IMAI, Yoshitane
- 3PC-083** Circularly polarized luminescence (CPL) of chiral peptide-Eu (III) hybridised luminophore (Fac. Sci. Eng., Kindai Univ.; Grad. Sch. Sci. Eng., Kindai Univ.; ORIST; Grad. Sch. Mat. Sci., NAIST) ○YOSHIKAWA, Hiroki; MIMURA, Yuki; SATO, Takuya; SHIZUMA, Motohiro; KITAMATSU, Mizuki; FUJIKI, Michiya; IMAI, Yoshitane
- 3PC-084<sup>#</sup>** Crystal structure and luminescence behavior of anthracenyl(diphenyl)phosphine oxide (Dept. Chem., Konan Univ.) ○KATAGIRI, Kosuke; YAMAMOTO, Yukina; FUJIMOTO, Naoki
- 3PC-085** Polymorph-dependent luminescence of imidazopyridine derivative with 7-membered ring containing intramolecular hydrogen bond (IIS, The