

Program

Aug. 8 (Sun.)

13:10–13:20 Welcoming Remarks

13:20–14:00 Invited Lecture (IL-1)

Hirohisa Yoshida (Tokyo Metropolitan University, Japan)

14:00–14:40 Invited Lecture (IL-2)

Jean-Pierre Grolier (Blaise Pascal University, France)

14:40–15:00 Coffee Break

15:00–15:40 Invited Lecture (IL-3)

Manuel E. Minas da Piedade (University of Lisbon, Portugal)

15:40–16:20 Invited Lecture (IL-4)

Boris Sedunov (Russian New University, Russia)

16:20–18:00 Mixer (Poster can be mounted.)

Aug. 9 (Mon.)

9:10–9:30 Oral Presentation (O-1)

Shipra Baluja (Saurashtra University, India)

9:30–10:00 Oral Presentation (O-2)

Hiroshi Kobayashi (Advanced Industrial Science and Technology, Japan)

10:00–10:20 Oral Presentation (O-3)

Daisuke Takajo (Osaka University, Japan)

10:20–10:40 Coffee Break

10:40–11:00 Invited Lecture (IL-5)

Michael Frenkel (National Institute of Standards and Technology, USA)

11:00–11:20 Oral Presentation (O-4)

Hal Suzuki (Osaka University, Japan)

11:20–11:40 Oral Presentation (O-5)

Kouhei Ueda (Tokyo Institute of Technology, Japan)

11:40–12:00 Oral Presentation (O-6)

Keisuke Watanabe (Fukuoka University, Japan)

12:00–13:30 Lunch

13:30–15:00 Poster Session (with Refreshments)

15:00–15:40 Invited Lecture (IL-6)

Satoru Nakashima (Osaka University, Japan)

15:40–16:00 Oral Presentation (O-7)

Norio Kitadai (Osaka University, Japan)

16:00–16:30 Invited Lecture (IL-7)

Yuko Hosokoshi (Osaka Prefecture University, Japan)

16:30–17:00 Invited Lecture (IL-8)

Motohiro Nakano (Osaka University, Japan)

18:00–20:00 Banquet (at Senri Hankyu Hotel)

Aug. 10 (Tue.)

9:10–9:30 Oral Presentation (O-8)

Satoshi Yamashita (RIKEN, Japan)

9:30–9:50 Oral Presentation (O-9)

Natalia Górska (Osaka University, Japan)

9:50–10:10 Oral Presentation (O-10)

Xiao-Zheng Lan (Shandong Agricultural University, China)

10:10–10:30 Coffee Break

10:30–10:50 Oral Presentation (O-11)

Atsushi Nagoe (Tokyo Institute of Technology, Japan)

10:50–11:10 Oral Presentation (O-12)

Yuji Miyazaki (Osaka University, Japan)

11:10–11:30 Oral Presentation (O-13)

Yasuhiro Nakazawa (Osaka University, Japan)

11:30–11:40 Closing Remarks

Invited Lectures

IL-1

Arraignment Control of Hexagonally Packed Nano-Cylinder of Block Copolymer and Its Application as Nano-Reactors

T. Shiraishi, K. Takahashi, and H. Yoshida (Tokyo Metropolitan University)

IL-2

Thermodynamic Control of the Effects of Gas Pressure on the Isotropic Transition of Amphiphilic Liquid Crystalline Diblock Copolymers

T. Yamada, S. A. E. Boyer, H. Yoshida, and J.-P. E. Grolier (The University of Tokyo, MINES, Tokyo Metropolitan University, and Blaise Pascal University)

IL-3

Polymorphism and Solvatomorphism in 4'-Hydroxyacetophenone: Structure and Energetics

M. E. Minas da Piedade, C. E. Bernardes, and M. F. M. Piedade (Universidade de Lisboa and Instituto Superior Técnico)

IL-4

The Equilibrium Structure of Real Gases

B. Sedunov (Russian New University)

IL-5

Using State-Of-The-Art QSPR Methodology for Reliable Prediction of Critical Constants

M. Frenkel, A. Kazakov, C. D. Muzny, V. Diky, and R. D. Chirico (National Institute of Standards and Technology)

IL-6

Structures and Thermodynamic Properties of Interfacial Waters and Their Roles in Water-Rock-Organic Interactions on the Earth's Surface

S. Nakashima, N. Kitadai, T. Yokoyama, and M. Maeda (Osaka University and TA Instruments Japan)

IL-7

Specific Heat Study of an Organic Triradical BIPNNBNO Having $S = 1$ and $S = 1/2$

Y. Hosokoshi, T. Imazawa, C. R. Rotundu, T. Kanzawa, B. Andraka, and Y. Takano (Osaka Prefecture University, Lawrence Berkeley National Laboratory, and University of Florida)

IL-8

Heat Capacity Calorimetry as a Spectroscopy

— **A Case of Spin Cluster and Kambe Coupling Scheme** —

M. Nakano (Osaka University)

Oral Presentations

O-1

Direct Determination of Third Derivative of Gibb's Energy in Aqueous 2-Butoxyethanol and 1-Propanol Systems

S. Baluja, K. Yoshida, A. Inaba, K. Tozaki, and Y. Koga (Osaka University, Saurashtra University, Chiba University, and The University of British Columbia)

O-2

A Pressure-Driven Dispersion on the Sound Velocities of a Polymer Liquid

H. Kobayashi and Y. Fujita (AIST)

O-3

Phase Behavior and Morphology of Liquid Crystalline Material BBOA

D. Takajo, A. Inaba, E. Juszynska, and M. Massalska-Arodz (Osaka University and Polish Academy of Sciences)

O-4

Excess Rotational Entropy of Partially Deuterated Methyl Groups in Molecular Solids

H. Suzuki and A. Inaba (Osaka University)

O-5

Evidence for Proton Tunneling in Four-Oxygen Hydrogen-Bond Ring

K. Ueda and M. Oguni (Tokyo Institute of Technology)

O-6

Thermal Behaviors of the Water Confined within Silica Pores: The Effects of the Pore Size and Morphology

K. Watanabe and M. Oguni (Fukuoka University and Tokyo Institute of Technology)

O-7

Dehydration-Polymerization of Amino Acids Promoted by Hydration of Anhydrous Salts for the Chemical Evolution of Life

N. Kitadai, S. Nakashima, and T. Yokoyama (Osaka University)

O-8

The Deuteration Effect on Thermodynamic Behavior of Spin-Liquid States

S. Yamashita, T. Yamamoto, and Y. Nakazawa (RIKEN and Osaka University)

O-9

Phase Behavior of $[\text{Al}(\text{DMSO})_6](\text{NO}_3)_3$ and $[\text{Sr}(\text{DMSO})_4](\text{NO}_3)_2$ Studied by DSC and FT-MIR Methods

N. Górska, A. Inaba, and A. Migdal-Mikuli (Osaka University and Jagiellonian University)

O-10

Phase Behavior of Organic Liquids Confined in Nanochannels of MCM-41, SBA-15 and PMOs

X.-Z. Lan and H.-R. Pei (Shandong Agricultural University)

O-11

Second-Component-Doping Effect on the Thermal Behavior of Low-Temperature Water

A. Nagoe, Y. Kanke, and M. Oguni (Tokyo Institute of Technology)

O-12

Size Effect and Concentration Dependence of Magnetic Behavior of Ni(OH)₂ Monolayer Nanocluster in Amorphous SiO₂

Y. Miyazaki, T. Maruoka, Y. Ichiyanagi, H. Kawaji, T. Atake, and A. Inaba (Osaka University, Yokohama National University, and Tokyo Institute of Technology)

O-13

Low-Temperature Thermodynamic Properties of 2D Kagome Lattice in Volborthite

Y. Nakazawa, S. Yamashita, T. Moriura, H. Yoshida, Y. Okamoto, and Z. Hiroi (Osaka University, National Institute for Materials Science, and The University of Tokyo)

Poster Presentations

P-1

Gas-Like and Liquid-Like Structures in Supercritical Fluids

B. Sedunov (Russian New University)

P-2

Pair Interaction Parameters Dependence on the Molecular Structure

B. Sedunov (Russian New University)

P-3

Structure-Energetics Relationship in Hydrocarbon Molecules: Contribution to the Recent Debate on a (Very) Old Problem

R. M. Borges dos Santos, R. C. Santos, and J. A. Martinho Simões (Universidade de Lisboa, Universidade Nova de Lisboa, and Universidade do Algarve)

P-4

A New Method to Derive Structural Properties of Homogenous Mixtures from the Excess Gibbs Energy and Equilibrium Composition

R. Pajarre and P. Koukkari (VTT Technical Research Centre of Finland)

P-5

Dynamical Evolutions and Thermodynamic Properties of an Evaporation Process in N -Body Systems with Long-Range Attractive Potentials

N. Komatsu, T. Kiwata, and S. Kimura (Kanazawa University)

P-6

Low-Temperature Heat Capacity of Networked System of $[Mn_4]$ Single-Molecule Magnets

S. Yamashita, T. Fujisaki, Y. Nakazawa, M. Oguni, K. Nakata, M. Yamashita, and H. Miyasaka (RIKEN, Tokyo Institute of Technology, Tohoku University, and CREST-JST)

P-7

Thermodynamic Investigation of Coordination-Networked System of $[Mn_4]$ Single Molecule Magnets

O. Kubota, S. Fukuoka, Y. Nakazawa, K. Nakata, M. Yamashita, and H. Miyasaka (Osaka University and Tohoku University)

P-8

Construction of Relaxation Calorimetry Systems Equipped with Two Different Types of Dilution Refrigerators

S. Fukuoka, Y. Muraoka, S. Yamashita, T. Yamamoto, and Y. Nakazawa (Osaka University and Institute for Molecular Science)

P-9

Calorimetric Study on Phase Change of Quasi-1D Molecule-Based Magnets $[XBzPy][Ni(mnt)_2]$ ($X = F, Cl, Br, I$)

X.-Z. Lan, Y. Miyazaki, C.-G. Yang, X.-J. Ji, C.-X. Cheng, and A. Inaba (Shandong Agricultural University and Osaka University)

P-10

Successive Magnetic Phase Transitions of the Organic-Inorganic Composite Magnets $NNTOT^+ \cdot MCl_4^-$ ($M = Fe, Ga$)

Y. Miyazaki, X.-Z. Lan, M. Kuratsu, S. Suzuki, M. Kozaki, K. Okada, and A. Inaba (Osaka University, Shandong Agricultural University, and Osaka City University)

P-11

Structure and Thermal Behavior of $[\text{Co}(\text{NH}_3)_6](\text{BF}_4)_3$

N. Górska, A. Inaba, and E. Mikuli (Osaka University and Jagiellonian University)

P-12

Thermodynamic Properties of Liquid Crystalline Material 6O2OCB

H. Suzuki, A. Inaba, P. M. Zielinski, J. Sciesinski, and M. Massalska-Arodz (Osaka University and Polish Academy of Sciences)

P-13

Development of an Ultramicro Cell for Adiabatic Microcalorimeter

S. Arai, Y. Miyazaki, and A. Inaba (Osaka University)

P-14

Hydration Characteristics of Surrounding Ions in Aqueous Solution of Sodium Acetate by 1P-Probing Methodology

T. Kondo, A. Inaba, Y. Miyazaki, and Y. Koga (Osaka University and The University of British Columbia)

P-15

Experimental Determination of Third Derivative of G : Partial Molar Entropy-Volume Cross Fluctuation Density

K. Yoshida, S. Baluja, A. Inaba, K. Tozaki, and Y. Koga (Osaka University, Saurashtra University, Chiba University, and The University of British Columbia)

P-16

Effect of Au Ions on Phase Transition of PEO in Confined Space Formed by Amphiphilic Block Copolymer Acted as Nano-Reactor

R. Nakagawa and H. Yoshida (Tokyo Metropolitan University)

P-17

Characterization of Interface in Immiscible IR/BR Blends by DSC and AFM

J.-H. Jang, W. Yamada, and H. Yoshida (Tokyo Metropolitan University)

P-18

The Wave Functions of a Tunneling Proton in a Double Minimum Potential

T. Matsuo and S. Baluja (Osaka University and Saurashtra University)