

# Joint Workshop between RCTES and IFJ PAN

*27, Mar., 2023, Osaka University, Japan*

*Room: B208 (Building B, Graduate School of Science) – Hybrid (Zoom)*

## Organizers:

Research Center for Thermal and Entropic Science (RCTES), Osaka University, Japan  
and

The Henryk Niewodniczański Institute of Nuclear Physics &  
Polish Academy of Sciences (IFJ PAN), Poland

Joining a Zoom Meeting: <https://us02web.zoom.us/j/85389857915>

Meeting ID: 853 8985 7915

Pass Code: 549251

Keynote Lecture: 30 min (25 min Talk + 5 min Discussion)

Oral Presentation: 15 min (12 min Talk + 3 min Discussion)

## Program

**Opening Remarks:** 15:00 – 15:10 (Japan), 8:00 – 8:10 (Poland)

Prof. Yasuhiro Nakazawa (Graduate School of Science & RCTES, Osaka University, Japan)

*Chair: Prof. Yasuhiro Nakazawa*

**Keynote Lecture 1:** 15:10 – 15:40 (Japan), 8:10 – 8:40 (Poland)

Prof. Yuko Ichiyanagi (Yokohama National University, Japan)

“Heat Dissipation and Relaxation Phenomena of Magnetic Nanoparticles for Biomedical Applications”

*Chair: Prof. Ewa Juszyńska-Galazka*

**Oral Presentation 1:** 15:40 – 15:55 (Japan), 8:40 – 8:55 (Poland)

Dr. Sujitra Tunsrichon (RCTES, Osaka University, Japan – Khon Kaen University, Thailand)

“Simultaneous Occurrence of Vapochromism and Vapoluminescence in Formaldehyde-Responsive Amino-Functionalized Copper(I) Coordination Polymers”

**Oral Presentation 2:** 15:55 – 16:10 (Japan), 8:55 – 9:10 (Poland)

Prof. Hal Suzuki (Kindai University, Japan)

“Calorimetry of Phase Transitions in Liquid Crystal under Steady Shear Flow”

**Oral Presentation 3:** 16:10 – 16:25 (Japan), 9:10 – 9:25 (Poland)

Prof. Yuji Miyazaki (RCTES, Osaka University, Japan)

“Low-Temperature Heat Capacities of Glassy Materials”

**Oral Presentation 4:** 16:25 – 16:40 (Japan), 9:25 – 9:40 (Poland)

Prof. Motohiro Nakano (RCTES, Osaka University, Japan)

“Critical Phenomena and Extended Phase Diagram of Mn(III) Spin-Crossover Complexes”

**Break:** 16:40 – 17:00 (Japan), 9:40 – 10:00 (Poland)

*Chair: Prof. Yuji Miyazaki*

**Keynote Lecture 2:** 17:00 – 17:30 (Japan), 10:00 – 10:30 (Poland)

Prof. Ewa Juszyńska-Gałązka (IFJ PAN, Poland – RCTES, Osaka University, Japan)  
“Role of Intermolecular Hydrogen Bond Structure in Diols”

*Chair: Prof. Satoshi Yamashita*

**Oral Presentation 5:** 17:30 – 17:45 (Japan), 10:30 – 10:45 (Poland)

M.Sc., Eng. Tomasz Tarnawski (IFJ PAN, Poland)

“Growth of PtNi Nanoparticle Films: Correlation between *In-Situ* Liquid Cell Transmission Electron Microscopy and Bulk Experiments”

**Oral Presentation 6:** 17:45 – 18:00 (Japan), 10:45 – 11:00 (Poland)

Ph.D. Juliusz Chjenka (IFJ PAN, Poland)

“Surface Nanoengineering for Photoactivity Tuning of TiO<sub>2</sub>”

**Oral Presentation 7:** 18:00 – 18:15 (Japan), 11:00 – 11:15 (Poland)

M.Sc., Eng. Oliwia Polit (IFJ PAN, Poland)

“Composite Particles Based on Cu and Fe Synthesized by Pulsed Laser Melting in Liquid Method”

**Break:** 18:15 – 18:30 (Japan), 11:15 – 11:30 (Poland)

*Chair: Prof. Hiroki Akutsu*

**Oral Presentation 8:** 18:30 – 18:45 (Japan), 11:30 – 11:45 (Poland)

Ph.D., Eng. Dominik Czernia (IFJ PAN, Poland)

“The Unconventional Methods of Tailoring Magnetic Properties in Molecular Magnets: Proton and Plasma Treatments”

**Oral Presentation 9:** 18:45 – 19:00 (Japan), 11:45 – 12:00 (Poland)

Ph.D. Naveen Kumar Chogondahalli Muniraju (IFJ PAN, Poland)

“Universal Fermi-Liquid Behavior and Superconductivity in Cuprates – A Transport and Optical Spectroscopic Study”

**Oral Presentation 10:** 19:00 – 19:15 (Japan), 12:00 – 12:15 (Poland)

Ph.D. Oleksander Tomchuk (IFJ PAN, Poland)

“SANS in Research of Nanostructured Materials”

**Oral Presentation 11:** 19:15 – 19:30 (Japan), 12:15 – 12:30 (Poland)

Prof. Małgorzata Jasiurkowska-Delaporte (IFJ PAN, Poland)

“Relaxation Processes and Crystallization Behavior of Liquid Crystals under Different Forms of Confinement”

**Break:** 19:30 – 19:45 (Japan), 12:30 – 12:45 (Poland)

*Chair: Prof. Daisuke Takajo*

**Oral Presentation 12:** 19:45 – 20:00 (Japan), 12:45 – 13:00 (Poland)

Ph.D., Eng. Marcin Piwowarczyk (IFJ PAN, Poland)

“Phase Situation of Selected Azo Compounds and Their Mixtures with Chiral Mesogens – Thermochromic Response”

**Oral Presentation 13:** 20:00 – 20:15 (Japan), 13:00 – 13:15 (Poland)

Ph.D., Eng. Krzysztof Siemek (IFJ PAN, Poland)

“Characterization of Lattice Defects by Positron Annihilation Spectroscopy”

**Oral Presentation 14:** 20:15 – 20:30 (Japan), 13:15 – 13:30 (Poland)

M.Sc. Svitlana Pastukh (IFJ PAN, Poland)

“Ab Initio Investigation of Electronic and Lattice Properties of  $\text{Cu}_2\text{P}_2\text{O}_7$ ”

**Closing Remarks:** 20:30 – 20:40 (Japan), 13:30 – 13:40 (Poland)

Prof. Magdalena Fitta (IFJ PAN, Poland)