

The 17th Japan-Korea symposium on molecular science
"Advances in Materials and Molecular Sciences"

July 29-31, 2019 Nagoya, Japan.

Program

INVITED TALKS

July 29

13:00 - Registration
13:30 - 13:40 Opening Remarks **Maki Kawai**

Session 1 chair: **Akihito Ishizaki**

13:40 - 14:10 **Manho Lim (Pusan National University)**
Photodissociation Dynamics of Nitric Oxide from NO-Transporting Molecules

14:10 - 14:40 **Hideki Hashimoto (Kwansei Gakuin University)**
Great Mystery of Fucoxanthin, A Carotenoid from Okinawa Mozuku (Cladosiphon okamuranus TOKIDA)

14:40 - 15:10 **Tetsuro Kusamoto (Institute for Molecular Science)**
Photostable Organic Radicals with Unique Photofunctions

15:10 - 15:40 coffee break

Session 2 chair : **Satoshi Kera**

15:40 - 16:10 **Tae Kyu Kim (Yonsei University)**
Ultrafast Dynamics of Solvated Transition Metal Complexes Using Femtosecond X-ray Spectroscopy

16:10 - 16:40 **Yukiaki Ishida (The University of Tokyo)**
Laser ARPES for the Precise Detection of Slowest Photoelectrons

16:40 - 17:10 **Cheol Ho Choi (Kyungpook National University)**
MRSF-TDDFT: An Improved TDDFT for Ground and Excited State Properties

17:50 - group photo

18:00 - 20:00 Poster session (Stand-up dinner) @ Aoi-no-ma

July 30

Session 3 chair: Seung Min Park

- 9:00 - 9:30 **Akira Nakayama (The University of Tokyo)**
Role of the Acid-Base and Redox Sites on Catalytic Reactions at the Liquid/CeO₂ Interface
- 9:30 - 10:00 **Joonkyung Jang (Pusan National University)**
Molecular Structure and Dynamics of the Interfacial Water Probed by Atomic Force Microscopy
- 10:00 - 10:30 **Masanari Nagasaka (Institute for Molecular Science)**
Soft X-ray Absorption Spectroscopy of Liquid for Understanding Chemical Processes in Solution
- 10:30 - 11:00 coffee break

Session 4 chair : Tetsuro Kusamoto

- 11:00 - 11:30 **Hiroyuki Tamura (The University of Tokyo)**
Combined Electronic Structure and Quantum Dynamical Analysis for Charge Separation and Singlet Fission
- 11:30 - 12:00 **Myong Yong Choi (Gyeongsang National University)**
Observing the Invisible Conformers of Ortho-substituted Phenols: IR Induced Isomerization of Invisible Isomer (I5) Spectroscopy
- 12:00 - 12:30 **Seung Min Park (Kyung Hee University)**
Infrared Photodissociation of Ternary Cluster Ions: Structures and Branching Ratios
- 12:30 - 14:00 lunch
luncheon meeting (invited only)

Session 5 chair : Yukiaki Ishida

- 14:00 - 14:30 **Kenji Iida (Institute for Molecular Science)**
First-Principles Study of Heterostructures Consisting of Two-Dimensional Layered Materials under Light and Voltage Bias
- 14:30 - 15:00 **Jae Kyu Song (Kyung Hee University)**
Light-matter Interactions in Nano-materials
- 15:00 - 15:30 coffee break

Session 6 chair : Akira Nakayama

- 15:30 - 16:00 **Young Min Rhee (KAIST)**
Correctly Describing Vibrational Effects on Excitation Energy Transfer: How Much Quantum Nature Do We Need?
- 16:00 - 16:30 **Emi Minamitani (Institute for Molecular Science)**
Computation of Phonon Related Many-body Interactions in Semiconducting Materials
- 16:30 - 17:00 **Rakwoo Chang (Kwangwoon University)**
Understanding Unusual Dynamics in Polymer Melts
- (18:00 - 20:00 Organizing committee meeting)

July 31

Session 7 chair : Hiroyuki Tamura

- 9:00 - 9:30 **Masakazu Nakamura (Nara Institute of Science and Technology)**
Giant Seebeck Effect over 0.1 V/K - A Unique but Universal Phenomenon in Pure Organic Semiconductors
- 9:30 - 10:00 **Sang-Yong Ju (Yonsei University)**
Optical Changes of Isomeric Carbon Nanotube interacted with Chiral Flavin Mononucleotide and Its Applications
- 10:00 - 10:30 **Hiroshi Yamamoto (Institute for Molecular Science)**
Light-driven Molecular Switch for Reconfigurable Spin Filters
- 10:30 - 10:50 coffee break

Session 8 chair : Myong Yong Choi

- 10:50 - 11:20 **Jun Soo Kim (Ewha Womans University)**
Computational Design of a DNA-based Brownian Motor for Directional Nanoparticle Delivery
- 11:20 - 11:50 **Ryota Iino (Institute for Molecular Science)**
Visualizing Dynamic Motions of Protein Molecular Motors with Plasmonic Nanoprobes
- 11:50 - 12:20 **Jaeyoung Sung (Chung-Ang University)**
Chemical Dynamics in Living Cells
- 12:20 - Closing Remarks **Seung Min Park**
(13:00 - Advisory Committee Meeting)