

Physical Chemistry

Sep. 10th, 2023

Room B

Chaired by Masahiko Takahashi (Tohoku Univ.) and Yukiyoishi Ohtsuki (Tohoku Univ.)

Sep. 10th (Sun.)

10:00 – 10:30 Chaired by Yukiyoishi Ohtsuki (Tohoku University)

10B1 ◦Fuminori Misaizu (Tohoku University, Japan)
“Structures and reactions in gas-phase ions studied by ion mobility-mass spectrometry”

10:30 – 10:50 Chaired by Yukiyoishi Ohtsuki (Tohoku University)

10B2 ◦Shinji Kajimoto (Tohoku University / JST PRESTO, Japan)
“In situ Quantification of Biomolecular Concentration in Stress Granules Formed via LLPS in a Living Cell”

10:50 – 11:10 Chaired by Yukiyoishi Ohtsuki (Tohoku University)

10B3 ◦Takakazu Seki (Hirosaki University, Japan)
“Interfacial charge and chemical environment viewed from surface-specific vibrational spectroscopy”

11:10 – 11:30 Chaired by Yukiyoishi Ohtsuki (Tohoku University)

10B4 ◦Miyabi Hiyama (Gunma University / The University of Tokyo, Japan)
“Experimental and theoretical study for analogs of firefly-bioluminescence substrate”

11:30 – 11:45 Chaired by Yukiyoishi Ohtsuki (Tohoku University)

10B5 ◦Daiki Shibata, Shinji Kajimoto, Takakazu Nakabayashi
(Tohoku University / JST PRESTO, Japan)
“Observation of the molecular and viscoelastic change in protein droplets formed by liquid-liquid phase separation using Raman-Brillouin imaging”

11:45 – 12:00 Chaired by Yukiyoishi Ohtsuki (Tohoku University)

10B6 ◦Sihan Long, Yuuki Onitsuka, Masahiko Takahashi (Tohoku University, Japan)
“Development of a new pharmacological index by using the molecular orbital wavefunction in momentum space”

14:45 – 15:15 Chaired by Masahiko Takahashi (Tohoku University)

- 10B7 ○Darryl B. Jones (Flinders University, Japan)
“Investigations into the electronic structure of molecules and materials”

15:15 – 15:35 Chaired by Masahiko Takahashi (Tohoku University)

- 10B8 ○Hideo Ando, Yoshihide Nakao (Yamagata University / Kyushu Sangyo University, Japan)
“Nuclear Quantum Nature and Two-Site Disorder-Order Transition of Lithium in
[Li⁺@C₆₀]PF₆”

15:35 – 15:55 Chaired by Masahiko Takahashi (Tohoku University)

- 10B9 ○Yukihiro Shimizu, Masaki Yamaura (Tohoku University, Japan)
“Electron theoretical studies of strong metal-support interaction in chemical reactions
on catalysts”

15:55 – 16:15 Chaired by Masahiko Takahashi (Tohoku University)

- 10B10 ○Takuya Horio (Kyushu University, Japan)
“Time-resolved photoelectron imaging of isolated molecules and metal cluster
anions”

16:15 – 16:30 Chaired by Masahiko Takahashi (Tohoku University)

- 10B11 ○Shota Tsuru (RIKEN Center for Computational Science / Ruhr-University Bochum, Japan)
“Excited-state dynamics unveiled by X-ray transient absorption spectroscopy”

16:30 – 16:45 Chaired by Masahiko Takahashi (Tohoku University)

- 10B12 ○Tomotaro Namba, Yukiyo Ohtsuki (Tohoku University, Japan)
“Machine learning-based approach to predict control landscape maps of
laser-induced molecular alignment”