

The 3rd IRCCS - The 2nd Reaction Infography Joint International Symposium: “Reaction Imaging Meets Materials Science”

Nagoya University
Noyori Materials Science Laboratory
January 31 - February 1, 2020

January 31 (Friday)

9:30-9:45 **Opening Remarks**
Yoshihito Watanabe (Nagoya Univ.)
Mizuki Tada (Nagoya Univ.)

Session I

Chair: Akiyoshi Hishikawa

9:45-10:25 François Légaré (INRS-EMT, Canada)
“Probing the insulator to metal phase transition in VO₂ using high harmonic spectroscopy”

10:25-10:55 Jiro Itatani (Univ. Tokyo)
“Intense infrared and mid-infrared sources for attosecond science: new opportunities at higher energies and in solids”

10:55-11:25 Hideki Hirori (Kyoto Univ.)
“Extreme nonlinear optical phenomena caused by strongly driving electronic states in solids”

11:25-12:05 Zhi Heng Loh (Nanyang Tech. Univ., Singapore)
“Ultrafast molecular dynamics of transient ions probed by femtosecond XUV and soft X-ray radiation”

Lunch @ chez Jiroud

Session II

Chair: Mizuki Tada

13:15-13:45 Shigeki Owada (JASRI / RIKEN)
“Current status of SACLA”

13:45-14:15 Mizuho Fushitani (Nagoya Univ.)
“Mapping electron correlations in nonlinear ionization of Xe 4d double-core-hole states by multielectron-ion coincidence spectroscopy”

14:15-14:45 Satoru Takakusagi (Hokkaido Univ.)
“Development of *operando* PTRF-XAFS technique for elucidating 3D structure-activity relationship in heterogeneous catalysis”

Break

Chair: François Légaré

Keynote Lecture

15:05-16:05 Kaoru Yamanouchi (Univ. Tokyo)
“Ultrafast molecular dynamics and ultrahigh resolution spectroscopy using ultrashort intense laser pulses”

Group Photo

Poster Session

16:30-17:30

Banquet

17:45-19:00 @ Restaurant “Hananoki”

February 1 (Saturday)

Session III

Chair: Ryotaro Matsuda

9:00-9:30 Iwao Matsuda (Univ. Tokyo)
“X-ray optospintronics at SACLA”

9:30-10:00 Toshiki Sugimoto (IMS)
“Infrared spectroscopy of water-assisted carrier trapping at TiO₂ photocatalyst surfaces with *distinct* morphologies”

10:00-10:30 Kenichi Shimizu (Hokkaido Univ.)
“Machine learning and DFT calculations for catalysis Informatics”

Break

Session IV

Chair: Susumu Saito

10:50-11:20 Takeru Torigoe (Kyushu Univ.)
“Iridium-catalyzed ortho-selective C–H borylation of thioanisole derivatives using simple bipyridine-type ligand”

11:20-11:50 Masaharu Nakamura (Kyoto Univ.)
“Exploring synthetic opportunities of iron catalysis in sustainable chemistry”

Lunch

Session V

Chair: Shigehiro Yamaguchi

- 13:10-13:40 Hideo Nagashima (Kyushu Univ.)
"Activation of H-H and H-Si bonds by transition metal-silicon linkage"
- 13:40-14:10 Osami Shoji (Nagoya Univ.)
"Hydroxylation of nonnative substrates catalyzed by cytochrome P450BM3 exploiting decoy molecules"
- 14:10-14:50 Soo Young Park (Seoul National Univ., Republic of Korea)
"Luminescent organic semiconductor"

Closing Remarks

Kunio Awaga (Nagoya Univ.)