

The 4th International Conference on MEXT Project of Integrated Research on
Chemical Synthesis & ICOMC 2014 Pre-symposium in Kyoto
“**Synthetic Approaches to New Chemical Functions**”

Date: July 10 (Thu) – 11 (Fri), 2014

Venue: Uji Obaku Plaza, Uji Campus, Kyoto University

Access Information: http://www.uji.kyoto-u.ac.jp/english/access_e.html

Organized by MEXT Project of Integrated Research on Chemical Synthesis
Supported by Joint Usage/Research Center of Institute for Chemical Research, Kyoto University

Program

July 10 (Thu)

- 13:00-13:10 Opening Remarks: **Naoki Sato** (The Director of ICR, Kyoto University)
- 13:10-13:50 **Werner Paulus** (Universite de Montpellier 2, France)
“Scaling of Structural and Electronic Ordering
in Non-stoichiometric Oxides: Where are the Limits?”
- 13:50-14:20 **Stephan Irle** (Nagoya University, Japan)
“Super-reduced Polyoxometalates: Excellent Molecular Cluster
Battery Components and Semipermeable Molecular Capacitors”
- 14:20-14:50 **Atsushi Fukuoka** (Hokkaido University, Japan)
“Refrigerator Catalyst: Oxidation of Ethylene by Platinum/Mesoporous Silica Catalysts”
- 14:50-15:20 Coffee Break
- 15:20-16:00 **Derec Sinclair** (University of Sheffield, UK)
“The Remarkable Influence of Non-stoichiometry
on the Electrical Properties of the Polar Perovskite $\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$ ”
- 16:00-16:20 **Katsuhiro Isozaki** (Kyoto University, Japan)
“Enhanced Catalysis of Gold Nanoparticles
Surrounded by Alkanethiol Self-Assembled Monolayers”
- 16:20-16:40 **Kenta Motobayashi** (Hokkaido University, Japan)
“Interfacial Structure of Ionic Liquids Near a Gold Electrode
and Its Potential Dependence: a Surface-Enhanced Infrared Study”
- 16:40-17:20 **Shinya Koshihara** (Tokyo Institute of Technology, Japan)
“Search for a Hidden Phase in Strongly
Correlated Systems Based on Ultrafast Structural Dynamics”
- 17:30-19:30 Reception

July 11 (Fri)

- 9:20-10:00 **Holger Braunschweig** (Universität Würzburg, Germany)
“Transfer, Metathesis and Catenation:
Reactivity Patterns Emerging from Borylene Complexes”
- 10:00-10:20 **Shohei Saito** (Nagoya University, Japan)
“Rigid-Flexible Hybrid π Materials for Dynamic Functions”
- 10:20-10:50 **Katsuhiko Tomooka** (Kyushu University, Japan)
“Recent Advances in the Chemistry of Dynamic Planar Chiral Molecules”
- 10:50-11:30 **Michael D. Fryzuk** (The University of British Columbia, Canada)
“New Ligand Designs Based on Nitrogen and Phosphorus Donors”
- 11:30-13:30 Group Picture, Lunch, and Poster Session
- 13:30-14:10 **Takao Ikariya** (Tokyo Institute of Technology, Japan)
“Recent Progress in Bifunctional Molecular Catalysis”
- 14:10-14:30 **Takashi Kamachi** (Kyushu University, Japan)
“Toward Rational Design of Organocatalysts: DFT-Based Conformation Analysis”
- 14:30-15:00 **Norihiro Tokitoh** (Kyoto University, Japan)
“Synthesis of a Dialumene-Benzene Adduct and Its Reactivity
as a Synthetic Equivalent of Low-valent Aluminum Species”
- 15:00-15:40 **Gerhard Erker** (Universität Münster, Germany)
“Frustrated Lewis Pairs: Some Metal
Reminiscent Chemistry of Main Group Element Compounds”
- 15:40-15:45 Closing Remarks: **Fumiyuki Ozawa** (The Conference Chair, ICR, Kyoto University)