

***The 2nd Japan-US Bilateral Meeting
on Coordination Chemistry***

Organized by

Japan Society of Coordination Chemistry (JSCC)

and

JSPS KAKENHI Scientific Research on Innovative Areas for

“Coordination Asymmetry”

September 15-16, 2017

Sapporo, Japan

Venue

Hokkaido University (N21W10, Kita-ku, Sapporo 001-0020, Japan)

on Sep. 15th (Fri)

Creative Research Institution (CRIS) (Room 05 213 (5th floor))

on Sep. 16th (Sat)

Institute for the Advancement of Higher Education, Hokkaido University



Access

From New Chitose Airport to JR Sapporo Station

JR (Rapid Airport Service) : 40 min

or

Express Bus Services (Hokuto, Chuo Bus): 70 -80 min.

From JR Sapporo Station to CRIS (Meeting sites in Sep. 15th)

Taxi : 15 min.

or

Chuo Bus (Nishi 51): 16 min. (Get off at Kita 21-jo Nishi 15-chome Bus Stop) + walk (5 min.)

or

Subway Nanboku Line: 3 min. (Get off at Kita 18-jo Station) + walk (20 min.)

or

Walk: 5 min. (to the Main Gate of Hokkaido University) + University Bus*: 10 min. (Get off in front of the CRIS Building)

*University Bus is available every 15 min. (8:30 - 18:30) during working days.

Program

Sep. 15th (Fri)

Venue: Creative Research Institution (CRIS), Room 05 213 (5th floor)

8:50-9:00 Opening remarks **Hiroki Oshio (Univ. of Tsukuba)**

Chair: Toshiharu Teranishi (Kyoto Univ.)

9:00-9:30 **Jeffrey R. Long (UC Berkeley)**
Cooperative Adsorption in Metal-Organic Frameworks

9:30-9:50 **Mitsuhiko Shionoya (Univ. of Tokyo)**
Dynamic Molecular Behaviors in Confined Supramolecular Spaces

9:50-10:10 **Makoto Fujita (Univ. of Tokyo)**
Self-assembly of Archimedean/non-Archimedean Solids under Mathematical
Restriction

10:10-10:25 *Coffee Break*

Chair: Jeffrey R. Long (UC Berkeley)

10:25-10:55 **Kenneth N. Raymond (UC Berkeley)**
Chiral Supramolecular Assemblies as Catalysis Containers

10:55-11:15 **Toshiharu Teranishi (Kyoto Univ.)**
Anisotropic Assembly of Nanoparticles for Photoenergy Conversion

11:15-11:45 **Seth M. Cohen (UC San Diego)**
polyMOF Hybrid Materials

11:45-12:05 **Susumu Kitagawa (Kyoto Univ.)**
Porous Coordination Polymers / Metal Organic Frameworks for Gas Science and
Technology

12:05-13:10 *Lunch*

Chair: Shin-ichi Ohkoshi (Univ. of Tokyo)

13:10-13:40 **T. David Harris (Northwestern Univ.)**
Metal-Semiquinoid Magnets: From Molecules to Materials

13:40-14:00 **Masahiro Yamashita (Tohoku Univ.)**
New Quantum Molecular Spintronics Based on Single-Molecule Magnets

- 14:00-14:20 **Hiroshi Kitagawa (Kyoto Univ.)**
Conductive Coordination Networks
- 14:20-14:50 **James K. McCusker (Michigan State Univ.)**
Vibronic Coherence as a Probe for Mechanism in the Ultrafast Excited-state Dynamics of Coordination Complexes
- 14:50-15:05 *Coffee Break*

Chair: T. David. Harris (Northwestern Univ.)

- 15:05-15:25 **Nobuo Kimizuka (Kyushu Univ.)**
Molecular Systems Chemistry for Photon Upconversion
- 15:25-15:45 **Shin-ichi Ohkoshi (Univ. of Tokyo)**
Functional Magnetic Material and Advanced Spectroscopy
- 15:45-16:15 **Mircea Dincă (MIT)**
Dynamic MOF SBUs as Active Sites for Small Molecule Reactivity and Catalysis
- 16:15-16:30 *Coffee Break*

Chair: Shigeyuki Masaoka (IMS)

- 16:30-17:00 **Paula L. Diaconescu (UCLA)**
Redox Switchable Catalysis Applied to Ring Opening Polymerization
- 17:00-17:20 **Ken Sakai (Kyushu Univ.)**
Molecular Catalysts and Photocatalysts for Water Oxidation and Reduction
- 17:20-17:40 **Osamu Ishitani (TIT)**
Photocatalytic Reduction of Low Concentration of CO₂
- 17:40-18:00 **Seiji Ogo (Kyushu Univ.)**
Biomimetic Hydrogen Activation
- 18:00-18:30 **Theodor Agapie (Caltech)**
Rational Synthesis of Complex Biological Active Site Models: Insights Regarding Function
- 18:30-18:40 Closing remarks **Hiroshi Nishihara (Univ. of Tokyo)**

Banquet

Sep. 16th (Sat)

Talks are incorporated in the programs of 67th JSCC conference

Session Aa

- 11:30-11:50 **JP-01 Kentaro Tanaka (Nagoya Univ.)**
Switchable Supramolecular Conjugates of Porphyrin and Phthalocyanine
- 11:50-12:10 **US-01 Seth M. Cohen (UC San Diego)**
MOF Nanomotors - Go Speedracer, Go!

Session Ab

- 11:30-11:50 **JP-02 Hitoshi Miyasaka (Tohoku Univ.)**
Porous Magnets for Magnetoionics and Gas Sensing
- 11:50-12:10 **US-02 Jeffrey R. Long (UC Berkeley)**
Lanthanide-Based Single-Molecule Magnets with High Blocking Temperatures

Session Ba

- 11:30-11:50 **JP-03 Shinya Hayami (Kumamoto Univ.)**
Spin-Crossover Tuning in Graphene Oxide Layers
- 11:50-12:10 **US-03 James K. McCusker (Michigan State Univ.)**
Spin Effects on Energy Transfer Dynamics in Transition Metal-based Donor-Acceptor Assemblies

Session C

- 11:10-11:30 **JP-04 Shigeyuki Masaoka (IMS)**
Pentanuclear Iron Catalysts for Water Oxidation
- 11:30-11:50 **US-04 Paula L. Diaconescu (UCLA)**
Redox Switchable Hydroelementation Reactions
- 11:50-12:10 **JP-05 Mizuki Tada (Nagoya Univ.)**
Regioselective Oxidation of Cholesterol Derivatives on Molecular Imprinted Ru Catalysts

Session Da

- 11:30-11:50 **US-05 Theodor Agapie (Caltech)**
Cleavage and Coupling of Carbon Monoxide with Molybdenum Complexes
- 11:50-12:10 **JP-06 Shinobu Itoh (Osaka Univ.)**
C(sp³)-H Bond Activation by Late Transition-metal Complexes Supported by Non-innocent Ligands

Session Ea

- 11:10-11:30 **US-06 T. David Harris (Northwestern Univ.)**
Spin-Modulated Responsive Magnetic Resonance Probes
- 11:30-11:50 **JP-07 Osami Shoji (Nagoya Univ.)**
Nonnative Substrate Hydroxylation Catalyzed by Cytochrome P450BM3 without any Mutagenesis
- 11:50-12:10 **US-07 Kenneth N. Raymond (UC Berkeley)**
Enzyme Like Host/Guest Accommodation in Chiral Supramolecular Assemblies

Session Fa

- 11:10-11:30 **JP-08 Sayaka Uchida (Univ. of Tokyo)**
Selective Ion Uptake and Conduction by Redox-Active Porous Ionic Crystals Based on Polyoxometalates
- 11:30-11:50 **US-08 Mircea Dincă (MIT)**
The Organic Secondary Building Unit: π -Stacking Interactions Define Topology in MOFs
- 11:50-12:10 **JP-09 Shin-ichiro Noro (Hokkaido Univ.)**
Light Metal Coordination Polymers using Organic Ligands with a Charge-Polarized Neutral Coordination Moiety