

***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

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