

The international symposium on Bioinorganic Chemistry 2018

Venue: Okazaki Conference Center, Institute for Molecular Science

Date: November 30th-December 1st, 2018

November 30th (Fri)

9:30 – 9:40 *Opening Remarks* **Osami SHOJI** (Nagoya University)

Chaired by Takashi MATSUO

Invited talks

9:40 – 10:00 **Satoshi ABE** (Tokyo Institute of Technology)

“In cell protein crystals containing organometallic Pd complexes”

10:00 – 10:20 **Norifumi KAWAKAMI** (Keio University)

“Enzyme immobilization in protein aggregates composed of a protein nanoparticle, TIP60”

10:20 – 10:40 **Shigeyuki MASAOKA** (Institute for Molecular Science)

“Pentanuclear iron catalysts for water oxidation”

10:40 – 11:00 *Break*

Chaired by Toshitaka MATSUI

Keynote Lecture

11:00 – 11:40 **Thomas M. Makris** (University of South Carolina)

“To be announced”

Invited talks

11:40 – 12:00 **Yoshihito SHIOTA** (Kyushu University)

“C-H bond activation by dicopper-oxo species”

12:00 – 12:20 **Hiroaki KOTANI** (University of Tsukuba)

“Redox Noninnocent Behavior of Tris(2-pyridylmethyl)amine Bound to Lewis Acidic Metal Ions Induced by C-H Deprotonation”

12:20 – 13:30 *Lunch Break*

Chaired by Norifumi KAWAKAMI

Invited talks

- 13:30 – 13:50 **Tasuku HIRAYAMA** (Gifu Pharmaceutical University)
“Development of fluorescent probes for the detection of Fe(II) ion in living cells”
- 13:50 – 14:10 **Taiho KAMBE** (Kyoto University)
“Physiology and biochemistry of zinc-requiring ectoenzymes”
- 14:10 – 14:30 **Masayasu TAKI** (Nagoya University)
“Design of new fluorophores for optical imaging”
- 14:30 – 14:50 *Break*

Chaired by Yutaka HITOMI

Keynote Lecture

- 14:50 – 15:30 **Christoph J. Fahrni** (Georgia Institute of Technology)
“Illuminating biological trace metals with high- and low-energy photons”
- 15:30 – 15:50 *Break*

Chaired by Yasuhiro FUNAHASHI

Invited talks

- 15:50 – 16:10 **Yoshiaki FURUKAWA** (Keio University)
“Copper in ALS: a neurodegeneration caused by metal deficiency in SOD1”
- 16:10 – 16:30 **Minoru KUBO** (University of Hyogo)
“Time-resolved IR analysis of the catalytic reaction pathway of NO reductase”
- 16:30 – 16:50 **Takashi FUJISHIRO** (Saitama University)
“X-ray crystallographic snapshots of sulfur mobilization to iron-sulfur cluster biosynthesis”
- 16:50 – 17:10 *Break*

Chaired by Shinobu ITOH

Special lecture

- 17:10 – 18:10 **Yoshihito WATANABE** (Nagoya University)
- 18:30 – 20:30 *Banquet*

December 1st (Sat)

Chaired by Yuichiro AIBA

Invited talks

- 9:30 – 9:50 **Nobutaka FUJIEDA** (Osaka Prefecture University)
“Cupin proteins as multipotent macromolecular ligands”
- 9:50 – 10:10 **Koji OOHORA** (Osaka University)
“Hemoprotein engineered with artificial heme analogues showing unique catalysis via the detectable active species”
- 10:10 – 10:30 **Takehiko TOSHA** (RIKEN SPring-8 center)
“Regulation of nitric oxide dynamics in microbial denitrification”
- 10:30 – 10:50 **Toshikazu ONO** (Kyushu University)
“Learning from vitamin B₁₂-mediated reactions: Cobalt(III)–carbon bond assisted catalytic C–H fluoroalkylation of arenes and heteroarenes”
- 10:50 – 11:10 *Break*

Chaired by Takehiko TOSHA

Keynote Lecture

- 11:10 – 11:50 **Lionel Cheruzel** (San Jose State University)
“To be announced”
- 11:50 – 13:00 *Lunch Break*

Chaired by Shinya ARIYASU

Invited talks

- 13:00 – 13:20 **Hitoshi UBE** (The University of Tokyo)
“Metal-mediated Molecular Gearing Systems based on Triptycene”
- 13:20 – 13:40 **Shin-ichiro KAWANO** (Nagoya University)
“Nanoporous Liquid Crystals and Double-Decker Cages Utilizing Shape-Persistent Metallomacrocyclic”
- 13:40 – 14:00 **Yuma MORIMOTO** (Osaka University)
“Detailed Characterization and Reactivity Studies of a Bis(μ -oxido)dinickel(III) Complex”
- 14:00 – 14:20 *Break*

Chaired by Takeshi UCHIDA

Invited talks

- 14:20 – 14:40 **Tomohiko INOMATA** (Nagoya Institute of Technology)
 “Immobilization of microbes on artificial siderophore complexes-modified substrates”
- 14:40 – 15:00 **Norifumi MURAKI** (Institute for Molecular Science)
 “The structure basis of the novel heme-iron uptake system in *Corynebacteria*”
- 15:00 – 15:20 **Satoshi NAGAO** (Nara Institute of Science and Technology)
 “NMR study on structures and dynamic properties of cytochrome *c* bound to lipid bicelles”
- 15:20 – 15:30 *Closing Remarks* **Shigetoshi AONO** (Institute for Molecular Science)