# Japan-Italy Bilateral Symposium on Artificial Photosynthesis Using Metal Complexes

Sponsored by the Grant-in-Aid for Scientific Research on Innovative Areas (2017~2022):

## [Elucidation of the molecular mechanism of photosynthesis at high time

## and space resolution and development of artificial photosynthetic systems]

http://photoenergy-conv.net/index.html

Supported by the Japanese Photochemistry Association, Japan Society of Coordination Chemistry and the Photofunctional Complexes Research Association Japan.

October 2, 2017

Tokyo, Japan

Date: 2017 / 10 / 02 Mon. 10:00-18:00

Venue: Tokyo Institute of Technology, Ookayama Campus

W-8 building 10F Room 1001

\*The W-8 building is 5-min walk from Ookayama station

**Registration**: Pre-registration is not required.

No Registration Fee !



★Campus Map

# <Program>

### 10:00-10:05 Opening Remarks (Prof. Osamu Ishitani)

<Session 1 > Chairperson: Prof. Sebastiano Campagna

- 10:05-10:30 <u>Prof. Hiromu Kumagai (Tokyo Tech.)</u>
  "Hybrid Photoelectrochemical Systems Consisting of Molecular and Semiconductor Photocatalysts for CO<sub>2</sub> Reduction"
- 10:30-11:05 <u>Prof. Takahiko Kojima (Tsukuba Univ.)</u>
  "Photocatalytic CO<sub>2</sub> reduction and H<sub>2</sub> evolution using Ni(II) complexes"
- 11:05-11:50 <u>Prof. Paola Ceroni (Università di Bologna)</u> "Hybrid organic-inorganic light-harvesting antennae"
- 11:50-12:15 <u>Prof. Yusuke Tamaki (Tokyo Tech.)</u>
  "Development of Ru(II) redox photosensitizers: Toward visible-light absorption over a much wider range of wavelengths by singlet-to-triplet transitions"
- 12:15-13:45 Lunch Break
- <Session 2 > Chairperson: Prof. Osamu Ishitani
- 13:45-14:20 <u>Prof. Hitoshi Ishida (Kitasato Univ.)</u>
  "Photocatalytic CO<sub>2</sub> Reduction by Ruthenium Complexes: Toward Artificial Photosynthesis"
- 14:20-14:55 <u>Prof. Tohru Wada (Rikkyo Univ.)</u>"Mechanism of Water Oxidation Catalyzed by Dinuclear Ruthenium Complexes"
- 14:55-15:30 <u>Prof. Masayuki Yagi (Niigata Univ.)</u>
  "Development of water oxidation catalysts by metal complexes toward artificial photosynthesis"

#### 15:30-15:50 Coffee Break

# <Session 3 > Chairperson: Prof. Masayuki Yagi

- 15:50-16:35 <u>Prof. Sebastiano Campagna (Università di Messina)</u>
  "Multinuclear Ru(II) and Os(II) dendrimers at a glance: light-harvesting and photoinduced water oxidation"
- 16:35-17:00 <u>Prof. Hiroyuki Takeda (Tokyo Tech.)</u>"Photocatalytic CO<sub>2</sub> Reduction using Cu, Fe, and Mn Complexes"
- 17:00-17:35 <u>Prof. Ho-Chol Chang (Chuo Univ.)</u> "Photochemical Dehydration based on Iron(II) Complexes with Redox-active Ligands"
- 17:35-17:40 Closing Remarks (Prof. Osamu Ishitani)
- 17:40-17:50 Taking Photos