

----- July 31, 2024 (Wednesday) Room A -----

[Chair : Greg Metha, Manabu Abe]

10:30-10:45 3A-01-OR

**Yudai Kawase<sup>1</sup>, \*Keisuke Obata<sup>1</sup>, Yuu Shioiri<sup>1</sup>, Tomohiro Higashi<sup>2</sup>, Kazuhiro Takanabe<sup>1</sup>** (1. *The University of Tokyo*, 2. *University of Miyazaki*)

Clarification of the electrochemical potential of electrocatalysts on particulate photocatalysts during water splitting

10:45-11:00 3A-02-OR

**\*Takashi Nakazono<sup>1</sup>, Ryo Mitsuda<sup>1</sup>, Yusuke Yamada<sup>1</sup>** (1. *Osaka Metropolitan University*)

Catalytic activity and mechanism of cobalt chlorin complex for photocatalytic water oxidation

11:00-11:15 3A-03-OR

**\*Ryuji Kato<sup>1</sup>, Yuuki Tomitsuka<sup>1</sup>, Takeru Saito<sup>1</sup>** (1. *Nihon University*)

Origin of luminescence of anatase TiO<sub>2</sub> photocatalysts

11:15-11:30 3A-04-OR

**\*Yusuke Seki<sup>1</sup>, Takashi Nakazono<sup>1</sup>, Yusuke Yamada<sup>1</sup>** (1. *Osaka Metropolitan University*)

Solubilization of a Coordination Polymer for Boosting Visible-Light-Driven Water Oxidation by Depolymerization

11:30-11:45 3A-05-OR

**\*Sunghan Choi<sup>1</sup>, Naoki Hosokawa<sup>2</sup>, Toshiya Tanaka<sup>2</sup>, Deahan Lee<sup>3</sup>, Ho-jin Son<sup>3</sup>, Osamu Ishitani<sup>1</sup>** (1. *Hiroshima University*, 2. *Tokyo Tech.*, 3. *Korea University*)

Red-light driven photocatalytic CO<sub>2</sub> reduction promoted by Os-Photosensitizer and Catalytic TiO<sub>2</sub>/Re(I) Particles

11:45-12:00 3A-06-OR

**\*Jingyu Wang<sup>1</sup>, Zhongjie Cai<sup>1</sup>, Can Wu<sup>1</sup>** (1. *Huazhong University of Science and Technology*)

Enhanced Adsorption for Photocatalytic Conversion of CO<sub>2</sub> at Low Concentration

12:00-12:15 3A-07-OR

**\*Vladimir Golovko<sup>1</sup>, Alex Yip<sup>2</sup>, Burapat Inceesungvorn<sup>3</sup>, Chung-Shin Lu<sup>4</sup>, Michael Reid<sup>1</sup>, Jon-Paul Wells<sup>1</sup>** (1. *University of Canterbury*, 2. *University of Canterbury*, 3. *Chiang Mai University*, 4. *National Taichung University of Science and Technology*)

Selected examples of the photoactive materials: from efficient photocatalysts operating under mild conditions to Ln-doped upconverting nanoparticles

----- July 31, 2024 (Wednesday) Room B -----

[Chair : Kazuhiko Maeda, Yuichiro Himeda]

10:30-11:00 3B-01-KL

**\*Yutaka Amao<sup>1</sup>** (*1.Osaka Metropolitan University*)

Biodegradable polymer precursor synthesis from carbon dioxide with photo/biocatalyst hybrid system

11:00-11:25 3B-02-IL

**\*Mio Kondo<sup>1</sup>** (*1.Tokyo Tech.*)

Molecular Assembly for Small Molecule Conversions

11:25-11:50 3B-03-IL

**\*Shoji Iguchi<sup>1</sup>, Shuying Wang<sup>1</sup>, Takechi Nakamoto<sup>1</sup>, Shimpei Naniwa<sup>1</sup>, Kentaro Teramura<sup>1</sup>** (*1.Kyoto University*)

Development of photocatalysts for selective conversion of CO<sub>2</sub> with H<sub>2</sub>O

11:50-12:15 3B-04-IL

**\*Megumi Okazaki<sup>1</sup>, Yasuomi Yamazaki<sup>2</sup>, Kazuhiko Maeda<sup>1</sup>** (*1.Tokyo Tech., 2.The University of Tokyo*)

A trigger potential proceeding water oxidation over metal oxide catalysts with Ru(II) photosensitizer complexes

----- July 31, 2024 (Wednesday) Room C -----

[Chair : Atsushi Wakamiya, Cojocarú Ludmila]

10:30-11:00 3C-01-KL

**\*Yanfa Yan<sup>1</sup>, Zhaoning Song<sup>1</sup>, Sheng Fu<sup>1</sup>, Nannan Sun<sup>1</sup>, Chongwen Li<sup>1</sup>, Lei Chen<sup>1</sup>**  
(1. *University of Toledo*)

Perovskite-perovskite tandem photoelectrodes for efficient solar water-splitting

11:00-11:25 3C-02-IL

**\*Jin Young Kim<sup>1</sup>** (1. *Seoul National University*)

Perovskite-based tandems: Perovskite/Si 2J and beyond

11:25-11:50 3C-03-IL

**\*Itaru Osaka<sup>1</sup>** (1. *Hiroshima University*)

Unconventional Polymer Order in Donor-Acceptor Blends: Efficient Charge Separation and Charge Transport in Organic Photovoltaics

11:50-12:05 3C-04-OR

**\*Hui-Hsu Gavin Tsai<sup>1</sup>, Jian-Ming Liao<sup>1</sup>** (1. *National Central University*)

Interpretable Machine Learning for Advanced High-Throughput Design of Non-Fullerene Ternary OSCs and Porphyrin-based DSCs

12:05-12:20 3C-05-OR

**\*Jean V. Manca<sup>1</sup>, Jeroen Hustings<sup>1</sup>, Nico Fransaert<sup>1</sup>, Allyson Robert<sup>1</sup>, Willem Awouters<sup>1</sup>, Marieke Vereycken<sup>1</sup>, Alessandro Romano<sup>1</sup>, Roland Valcke<sup>2</sup>** (1. *UHasselt, X-LAB*, 2. *UHasselt, Molecular and Physical Plant Physiology*)

Nature versus Emerging Photovoltaics & the Photovoltaic Girl with the Pearl Earring

----- July 31, 2024 (Wednesday) Room D -----

[Chair : Hiroko Yamada, Mahesh Hariharan]

10:30-11:00 3D-01-KL

**\*Mahesh Hariharan<sup>1</sup>** (1.IISER Thiruvananthapuram)

Null Excitonic Interaction in Greek Cross (+) Aggregate

11:00-11:25 3D-02-IL

**\*Hiroko Yamada<sup>1</sup>** (1.Kyoto University)

Synthesis of higher acenes using photoprecursor approach

11:25-11:50 3D-03-IL

**\*Kei Murata<sup>1</sup>, Yuki Saibe<sup>1</sup>, Mayu Uchida<sup>1</sup>, Mizuki Aono<sup>1</sup>, Ryuji Misawa<sup>1</sup>, Yoshiho Ikeuchi<sup>1</sup>, Kazuyuki Ishii<sup>1</sup>** (1.The University of Tokyo)

Red Light Uncaging of Alkyl Radicals from Organorhodium(III) Phthalocyanine Complexes

11:50-12:05 3D-04-OR

**\*Saemi Takahashi<sup>1, 2</sup>, Satoshi Uchida<sup>2</sup>, Hiroshi Segawa<sup>2, 1</sup>** (1.RATO, 2.The University of Tokyo)

Influence of Chloride Incorporation on Intermediate Phase and Crystallinity in Methylammonium Lead Halide Perovskites

12:05-12:20 3D-05-OR

**\*Han Zhong<sup>1</sup>, Hong Lin<sup>1</sup>** (1.Tsinghua University)

Modulating crystallization by crown ether for wide-bandgap perovskite solar cells

----- July 31, 2024 (Wednesday) Room E -----

[Chair : Osamu Ishitani, Masayuki Yagi]

10:30-11:00 3E-01-KL

**\*Hitoshi Tamiaki<sup>1</sup>, Yuna Mori<sup>1</sup>, Kengo Nakakuki<sup>1</sup>, Yamato Hashimoto<sup>1</sup>** (*1.Ritsumeikan University*)

Artificial light-harvesting systems as models of photosynthetic antennas in green bacteria

11:00-11:25 3E-02-IL

**\*Shigeyuki Masaoka<sup>1</sup>** (*1.Osaka University*)

Development of Molecular Catalysts for Photosynthetic Reactions

11:25-11:50 3E-03-IL

**\*Daisuke Kosumi<sup>1</sup>, Masatoshi Kida<sup>1</sup>, Yuma Hirota<sup>1</sup>, Keisuke Kawakami<sup>2</sup>, Koji Yonekura<sup>2</sup>, Nobuo Kamiya<sup>3</sup>** (*1.Kumamoto University, 2.SPring-8, RIKEN, 3.Osaka Metropolitan University*)

Quantum coherence in cyanobacterial photosynthetic antenna phycobilisome

11:50-12:15 3E-04-IL

**\*Miwa SUGIURA<sup>1</sup>** (*1.Ehime University*)

Tuning and role of chlorophylls bound to Photosystem II reaction center