

JULY 26 WED

ROOM A

Chair : Haruo Inoue and Hiroshi Ikeda

9:00 AM - 9:45 AM

[PL07] Mechanism of light-induced water-splitting in natural photosynthesis

*Jian-Ren Shen¹ (1. Okayama Univ. (Japan))

Chair : Haruo Inoue and Hiroshi Ikeda

9:45 AM - 10:30 AM

[PL08] Photoredox mechanisms and photocatalyst development

*Oliver Wenger¹ (1. Univ. of Basel, Switzerland (Switzerland))

ROOM B

ROOM C

ROOM D

BREAK

BREAK

Chair : Yasunori Matsui

11:00 AM - 11:15 AM

[S1-36-CL] Morphology-dependent fluorescence of complex emulsions as real-time flow sensors

*Che-Jen Lin¹, Narani Rakesh¹, Po-Chun Chang¹, Sofani Gebreyesus², Hsiung-Lin Tu² (1. National Dong Hwa Univ. (Taiwan), 2. Academia Sinica (Taiwan))

Chair : Marine Louis

11:00 AM - 11:20 AM

[S9-01-IL] Hard and soft lanthanide coordination polymers for future luminescent materials

*Yasuchika Hasegawa¹ (1. Hokkaido Univ. (Japan))

Chair : Kosei Ueno

11:00 AM - 11:15 AM

[S3-34-CL] Polymer Domain Immobilization for Improved Stability in Non-Fullerene Based Organic Solar Cells

*Kyungkon Kim¹ (1. Ewha Womans Univ. (Korea))

Chair : Sadahiro Masuo

11:00 AM - 11:20 AM

[S7-01-IL] Nanoscopic imaging of polymer microgel environments using fluorescence spectra and lifetimes

*Dominik Wöll¹, Silvia P. Centeno¹, Oleksii Neveskyi¹, Ashvini Purohit¹, Pia Lenssen¹, Eric Siemes¹ (1. RWTH Aachen Univ. (Germany))

11:15 AM - 11:35 AM

[S1-37-IL] Cancelled

Chair : Marine Louis

11:20 AM - 11:35 AM

[S9-02-CL] A Comprehensive Study of the Structural and Optoelectronic Characteristics of $(\text{NH}_4)_3\text{Sb}_2\text{I}_9$ Single Crystals

*Donato Valli¹, Martin Ottesen², Martin Bremholm², Steffen Wiedmann³, Paul Tinnemans³, Joris Van de Vondel¹, Elke Debroye¹, Maarten Roeffaers¹, Johan Hofkens¹, Masoumeh Keshavarz¹ (1. KU Leuven (Belgium), 2. Aarhus Univ. (Denmark), 3. Radboud Univ. (Netherlands))

Chair : Kosei Ueno

11:15 AM - 11:30 AM

[S3-35-CL] Mid-infrared selective optical sorting of microspheres based on molecular vibrational resonance

*Yoshua Albert Darmawan¹, Takuma Goto¹, Taiki Yanagishima², Takao Fuji¹, Tetsuhiro Kudo¹ (1. Toyota Technological Institute (Japan), 2. Kyoto Univ. (Japan))

Chair : Sadahiro Masuo

11:20 AM - 11:35 AM

[S7-02-CL] Nanoscale Characterization of Blended Recycled Polymers through Hydrogen-Bond Assisted Single Molecule Fluorescence Imaging

*Chao-Chun Hsu¹, Albert Manfred Brouwer¹, Daniel Bonn² (1. van 't Hoff Institute for Molecular Sciences ,Univ. of Amsterdam (Netherlands), 2. van der Waals-Zeeman Institute, Univ. of Amsterdam (Netherlands))

JULY 26 WED

ROOM A

Chair : Yasunori Matsui

11:35 AM - 11:50 AM

[S1-38-CL] Study on photodecarbonylation of heptacene diketone using freeze-trapping ESR method

Mikaru Masuda¹, Joel Hao Jorolan^{1,2}, Hironobu Hayashi³, Hiroko Yamada⁴, Tomoaki Miura¹, *Tadaaki Ikoma¹ (1. Niigata Univ. (Japan), 2. Mindanao State Univ. - Iligan Inst. of Tech. (Philippines), 3. National Inst. for Materials Sci. (Japan), 4. Kyoto Univ. (Japan))

Chair : Yasunori Matsui

11:50 AM - 12:05 PM

[S1-39-CL] In-Situ Observation of Vapor-Induced Structural Transformation Dynamics of Novel Rhenium(I) Molecular Crystals

*Yuki Matsuda¹, Ryota Nakamura¹, Yoshiki Ozawa¹, Keishiro Tahara¹, Toshikazu Ono², Nobuto Yoshinari³, Takumi Konno³, Kunihisa Sugimoto⁴, Shintaro Kobayashi⁵, Shogo Kawaguchi⁵, Masaaki Abe¹ (1. Univ. of Hyogo (Japan), 2. Kyushu Univ. (Japan), 3. Osaka Univ. (Japan), 4. Kindai Univ. (Japan), 5. Japan Synchrotron Radiation Research Institute (JASRI) (Japan))

ROOM B

Chair : Marine Louis

11:35 AM - 11:50 AM

[S9-03-CL] Unveiling the Origin of Red Photoluminescence in Silver-Titanosilicate Phosphors for LED Applications

*Giacomo Romolini¹, Li Sun¹, Didier Grandjean¹, Francesco d'Acapito^{2,3}, Cristina Martin⁴, Loredana Latterini⁵, Maarten B. J. Roeffaers¹, Johan Hofkens^{1,6} (1. KU Leuven (Belgium), 2. CNR-IOM-OGG (Italy), 3. ESRF - LISA (France), 4. Universidad de Castilla-La Mancha (Spain), 5. Università degli Studi di Perugia (Italy), 6. Max Planck Institute for Polymer Research (Germany))

Chair : Marine Louis

11:50 AM - 12:05 PM

[S9-04-CL] Single-Fluorophore-Based Organic Crystals with Distinct Conformers Enabling Wide-Range Excitation-Dependent Emissions

*Xiaogang Liu¹ (1. Singapore Univ. of Technology and Design (Singapore))

ROOM C

Chair : Kosei Ueno

11:30 AM - 11:45 AM

[S3-36-CL] Role of microstructure on exciton dynamics in low-dielectric environment

*JaeHong Park¹ (1. Department of Chemistry and Nanoscience, Ewha Womans Univ. (Korea))

Chair : Kosei Ueno

11:45 AM - 12:05 PM

[S3-37-IL] Bio-inspired optical cavities for strong light-matter interactions

*James Andell Hutchison¹, Jianfei Yu¹, Laura Ospina-Rozo², Devi Stuart-Fox², Ann Roberts³ (1. School of Chemistry, Univ. of Melbourne (Australia), 2. School of Biosciences, Univ. of Melbourne (Australia), 3. School of Physics, Univ. of Melbourne (Australia))

ROOM D

Chair : Sadahiro Masuo

11:35 AM - 11:50 AM

[S7-03-CL] Improved super-resolution imaging with cucurbituril-encapsulated fluorophores

*Liza Briant¹, Alexandre Fürstenberg¹ (1. Department of Physical Chemistry / Department of Inorganic and Analytical Chemistry (Switzerland))

Chair : Sadahiro Masuo

11:50 AM - 12:05 PM

[S7-04-CL] Taking Ultrafast Transient Absorption Microscopy to Widefield

*Martin Hörmann¹, Federico Visentin¹, Andrea Zanetta², Johann Osmond³, Giulia Grancini², Niek F. van Hulst^{3,4}, Matz Liebel³, Giulio Felice Cerullo^{1,5}, Franco Valduga de Almeida Camargo⁵ (1. Politecnico di Milano (Italy), 2. Univ. of Pavia (Italy), 3. ICFO (Spain), 4. CREA (Spain), 5. IFN-CNR (Italy))

LUNCH BREAK

LUNCH BREAK

Chair : Che-Jen Lin and Tadaaki Ikoma

1:30 PM - 1:45 PM

[S1-40-CL] Polymorphic and Polymetallic Europium (III) Coordination Compounds based on Tris-*b*-diketonate Ligands toward Visible Circularly Polarized Luminescence-

*Tsuyoshi Kawai¹, Yan Bin Tan¹, Pablo Reine¹, Marine Louis¹ (1. Nara Institute of Science and Technology (Japan))

Chair : Minoo Tasbihi and Akihiko Kudo

1:30 PM - 1:45 PM

[S5-05-CL] Photoreduction of CO₂ on Composite Bi₂WO₆/Cu₂O

*Ren-Jang Wu¹, Yu-Cheng Zhang¹ (1. Providence Univ. (Taiwan))

Chair : Kirk S Schanze and Tatsuto Yui

1:30 PM - 1:55 PM

[S6-01-KL] Photophysics and Electron Transfer Reactivity of Organic Ion Radicals

*Kirk S Schanze¹ (1. Univ. of Texas at San Antonio (USA))

Chair : Tamitake Itoh and Thomas Basché

1:30 PM - 1:50 PM

[S7-05-IL] Nanoscale photophysical properties and real-time *in situ* dynamics of halide perovskite films and nanocrystals

*Martin Vacha¹, Anubha Agarwal¹, Xiayan Wu¹, Toranosuke Takagi¹, Shun Omagari¹ (1. Tokyo Institute of Technology (Japan))

JULY 26 WED

ROOM A

Chair : Che-Jen Lin and Tadaaki Ikoma

1:45 PM - 2:00 PM

[S1-41-CL] Antenna effect of ytterbium complex having low-lying ligand-to-metal charge-transfer state

*Atsuko Masuya-Suzuki¹, Ryo Tsunashima¹, Nobuhiko Iki² (1. Yamaguchi Univ. (Japan), 2. Tohoku Univ. (Japan))

Chair : Che-Jen Lin and Tadaaki Ikoma

2:00 PM - 2:15 PM

[S1-42-CL] Hexadentate molecular structure of the lanthanide complexes for the luminescence variety

*Miki Hasegawa¹, Hitomi Omagari¹ (1. Aoyama Gakuin Univ. (Japan))

Chair Che-Jen Lin and Tadaaki Ikoma

2:15 PM - 2:30 PM

[S1-43-CL] Transient absorption spectroscopic analysis of energy transfer process in the upconversion system based on polymer composite

*Yasunori Matsui¹, Takumi Takahashi¹, Masaya Kanoh¹, Takuya Ogaki¹, Hiroshi Ikeda¹ (1. Osaka Metropolitan Univ. (Japan))

Chair : Che-Jen Lin and Tadaaki Ikoma

2:30 PM - 2:45 PM

[S1-44-CL] Hydrogen Bonding-Induced H-Aggregation for Fluorescence Turn-On of the GFP Chromophore

*Shih-Sheng Sun¹ (1. Institute of Chemistry, Academia Sinica (Taiwan))

ROOM B

Chair : Minoo Tasbihi and Akihiko Kudo

1:45 PM - 2:05 PM

[S5-06-IL] Design of Metal-Organic Frameworks and Reaction Systems for Efficient Photocatalytic H₂O₂ Production

*Hiromi Yamashita¹, Yoshifumi Kondo¹, Yasutaka Kuwahara¹, Kohsuke Mori¹ (1. Osaka Univ. (Japan))

Chair : Minoo Tasbihi and Akihiko Kudo

2:05 PM - 2:20 PM

[S5-07-CL] Supramolecular Control of Intermolecular Singlet Fission within Aqueous Colloidal Nanoparticles

*Ilias Papadopoulos¹, Joseph Ka-Ho Hui¹, Masa-aki Morikawa^{1,3}, Kenji Kaneko¹, Kiyoshi Miyata², Ken Onda², Nobuo Kimizuka^{1,3} (1. Graduate School of Engineering, Kyushu Univ. (Japan), 2. Graduate School of Science, Kyushu Univ. (Japan), 3. Center for Molecular Systems (CMS), Kyushu Univ. (Japan))

Chair : Minoo Tasbihi and Akihiko Kudo

2:20 PM - 2:40 PM

[S5-08-IL] A critical view on photoelectrochemical conversion technologies for solar fuels production

*Vincent Artero¹ (1. Univ. Grenoble Alpes, CNRS, CEA, IRIG, Laboratoire de Chimie et Biologie des Métaux (France))

Chair : Minoo Tasbihi and Akihiko Kudo

2:40 PM - 2:55 PM

[S5-09-CL] Photoinduced Transmembrane Electron Transfer in Phospholipid Bilayer

*Novitasari Sinambela¹, Andrea Pannwitz¹ (1. Univ. of Ulm (Germany))

ROOM C

Chair : Kirk S Schanze and Tatsuto Yui

1:55 PM - 2:10 PM

[S6-02-CL] Cancelled

Chair : Kirk S Schanze and Tatsuto Yui

2:10 PM - 2:25 PM

[S6-03-CL] Heavy-Atom Hydrogen-Bond Interactions Enable Photo-Aerobic Selenium-π-Acid-Catalyzed Enantioselective Reconstitutive Alkene Oxygenations

Sooyoung Park¹, *Eduard Frank¹, Elias Harrer¹, Julia Rehbein¹, Alexander Breder¹ (1. Institute for Organic Chemistry, Univ. of Regensburg (Germany))

Chair : Kirk S Schanze and Tatsuto Yui

2:25 PM - 2:45 PM

[S6-04-IL] 2-(4-Nitrophenyl)-1*H*-indolyl-3-methyl chromophore: A versatile photocage that responds to visible-light one-photon and near-infrared-light two-photon excitations

*Manabu Abe¹ (1. Hiroshima Univ. (Japan))

Chair : Kirk S Schanze and Tatsuto Yui

2:45 PM - 3:00 PM

[S6-05-CL] Functionalized Benzothiadiazole Non-Fused A-D-A'-D-A Small Molecules for Effective Electron Mobilities and Metal-free Photocatalysis

*Narendra Pratap Tripathi¹, Sanchita Sengupta² (1. IISER Mohali (India), 2. IISER Mohali (India))

ROOM D

Chair : Tamitake Itoh and Thomas Basché

1:50 PM - 2:05 PM

[S7-06-CL] Rapid Raman spectroscopy for single nanoparticles

*Sou Ryuzaki¹, Rintaro Matsuda², Keisuke Imaeda¹, Kosei Ueno¹ (1. Hokkaido Univ. (Japan), 2. Kyushu Univ. (Japan))

Chair : Tamitake Itoh and Thomas Basché

2:05 PM - 2:30 PM

[S7-07-KL] Visualizing mechanical contact and friction using fluorescent molecules

*Albert M Brouwer¹, Chao Chun Hsu¹, Begüm Demirkurt¹, Bart Weber², Daniel Bonn¹ (1. Univ. of Amsterdam (Netherlands), 2. Advanced Research Center for Nanolithography (Netherlands))

Chair : Tamitake Itoh and Thomas Basché

2:30 PM - 2:45 PM

[S7-08-CL] Primeval optical evolving matter by optical binding inside and outside the photon beam

*Roger Bresolí Obach^{1,2}, Chih-Hao Huang³, Boris Louis², Jui-Kai Chen², Tetsuhiro Kudo⁴, Rafael Camacho⁵, Ivan G. Scheblykin⁶, Teruki Sugiyama³, Johan Hofkens², Hiroshi Masuhara³ (1. Institut Químic de Sarrià, Universitat Ramon Llull (Spain), 2. Katholieke Universiteit Leuven (Belgium), 3. National Yang Ming Chiao Tung Univ. (Taiwan), 4. Toyota Technological Institute (Japan), 5. Sahlgrenska Academy (Sweden), 6. Lund Univ. (Sweden))

JULY 26 WED

ROOM A

Chair : Che-Jen Lin and Tadaaki Ikoma

2:45 PM - 3:00 PM

[S1-45-CL] Inorganic Chain Mediated Excitonic Properties in One-Dimensional Lead Halide Hybrid Perovskites

*Chen Xue¹, Sadafumi Nishihara², Kiyonori Takahashi¹, Ruikang Huang¹, Takayoshi Nakamura¹ (1. Hokkaido Univ. (Japan), 2. Hiroshima Univ. (Japan))

Chair : Che-Jen Lin and Tadaaki Ikoma

3:00 PM - 3:15 PM

[S1-46-CL] Fluorescence modulation through click chemistry

*Jean Rouillon¹, Carlos Benitez-Martin¹, Morten Grøtli², Joakim Andréasson¹ (1. Chalmers, Univ. of Technology (Sweden), 2. Univ. of Gothenburg (Sweden))

ROOM B

Chair : Minoo Tasibihi and Akihiko Kudo

2:55 PM - 3:10 PM

[S5-10-CL] Identification of Dominant Factors Contributing to Photocurrent Density of BiVO₄ Photoanodes Using Machine Learning
*Kenji Katayama¹, Kazuki Kobayashi¹, Yuya Nagai¹, Zhenhua Pan¹ (1. Chuo Univ. (Japan))

Chair : Minoo Tasibihi and Akihiko Kudo

3:10 PM - 3:25 PM

[S5-11-CL] Electron Transfer in Preassembled Photocatalysts based on Earth-Abundant Metals – A Quantum Chemical Perspective
Jia-Wei Wang¹, Georgina E. Shillito², *Stephan Kupfer² (1. Barcelona Institute of Science and Technology,(Spain), 2. Friedrich Schiller Univ. (Germany))

ROOM C

Chair : Kirk S Schanze and Tatsuto Yui

3:00 PM - 3:15 PM

[S6-06-CL] Establishment of the determination method for electron potentials of surface-modified metal oxide nanoparticles with Ru(II) photosensitizer
*Megumi Okazaki^{1,2}, Yasuomi Yamazaki³, Osamu Ishitani¹, Kazuhiko Maeda¹ (1. Tokyo Inst. of Tech. (Japan), 2. Japan Society for the Promotion of Science (Japan), 3. Univ. of Tokyo (Japan))

ROOM D

Chair : Tamitake Itoh and Thomas Basché

2:45 PM - 3:00 PM

[S7-09-CL] Lifetime Blinking in InP/ZnSexS1-x/ZnS Quantum Dots – Auger Recombination Suppression via Shell Engineering

*Yu Jin Lee¹, Dae-Yeon Jo², Taehee Kim¹, Jungho Jo², Jumi Park¹, Heesun Yang², Dongho Kim¹ (1. Yonsei Univ. (Korea), 2. Hongik Univ. (Korea))

Chair : Tamitake Itoh and Thomas Basché

3:00 PM - 3:15 PM

[S7-10-CL] Cancelled

BREAK

BREAK

Chair : Ken-ichi Yuyama

3:45 PM - 4:00 PM

[S9-05-CL] Phthalimide-Based Charge Transfer Chromophores for Thermally Activated Delayed Fluorescence

*Pria Ramkissoon¹, Sanchari Debnath², Ulrike Salzner³, Christopher Hall¹, Trevor Smith¹, Satish Patil² (1. Univ. of Melbourne (Australia), 2. Indian Institute of Science (India), 3. Bilkent Univ. (Turkey))

Chair : Ken-ichi Yuyama

4:00 PM - 4:15 PM

[S9-06-CL] Exploring new pathways towards increased spatial resolution

*Carlos Benitez-Martin¹, Jean Rouillon¹, Prabhakar Cherkupally², Morten Grøtli², Uwe Pischel³, Joakim Andréasson¹ (1. Chalmers Univ. of Technology (Sweden), 2. Univ. of Gothenburg (Sweden), 3. Univ. of Huelva (Spain))

Chair : Stefan Haacke

3:45 PM - 4:10 PM

[S5-12-KL] Heterogeneous photocatalysts for artificial photosynthesis aiming at carbon neutral
*Akihiko Kudo¹ (1. Tokyo Univ. of Science (Japan))

Chair : Manabu Abe

3:45 PM - 4:05 PM

[S6-07-IL] Surface-Fixation Induced Emission (S-FIE) of Organic Dyes on the Inorganic Flat Surface

Hakan Mori¹, Kyosuke Arakawa¹, Tamao Ishida¹, Tetsuya Shimada¹, Eietsu Hasegawa², *Shinsuke Takagi¹ (1. Tokyo Metropolitan Univ. (Japan), 2. Niigata Univ. (Japan))

Chair : Dominik Wöll

3:45 PM - 4:05 PM

[S7-11-IL] The energy gap law at work: Emission yield and rate fluctuations of single NIR emitters

*Thomas Basché¹ (1. Department of Chemistry, Johannes Gutenberg-Univ. (Germany))

Chair : Manabu Abe

4:05 PM - 4:20 PM

[S6-08-CL] Light intensity-dependence analysis of photocatalytic oxygen reduction by platinized tungsten(VI) oxide

*Mai Takashima¹, Chiharu Yamada², Bunsho Ohtani^{3,2} (1. Nagoya Univ. (Japan), 2. Hokkaido Univ. (Japan), 3. touché NPO (Japan))

Chair : Dominik Wöll

4:05 PM - 4:20 PM

[S7-12-CL] Correlation between Single-Photon Emission and Size of Cesium Lead Bromide Perovskite Nanocrystals

*Sadahiro Masuo¹, Hina Igarashi¹, Mitsuaki Yamauchi² (1. Kwansei Gakuin Univ. (Japan), 2. Kyoto Univ. (Japan))

JULY 26 WED

ROOM A

Chair : Ken-ichi Yuyama

4:15 PM - 4:35 PM

[S9-07-IL] Three-State Negative Photochromism with a Single Photochromic Unit

*Jiro Abe¹ (1. Aoyama Gakuin Univ. (Japan))

Chair : Ken-ichi Yuyama

4:35 PM - 4:50 PM

[S9-08-CL] Transient Energy-resolved Photoluminescence Study of FAPbBr₃/Semiconductors Interfaces: TiO₂ vs SnO₂

*Xinjian Geng¹, Yawen Liu¹, Xianshao Zou¹, Erik M.J. Johansson¹, Jacinto Sá^{1,2} (1. Uppsala Univ. (Sweden), 2. Polish Academy of Sciences (Poland))

ROOM B

Chair : Stefan Haacke

4:10 PM - 4:25 PM

[S5-13-CL] Understanding the Charge Transportation in Different Interfacial Contact of Bi₂WO₆/WO₃ Heterojunction for Photo-Water Oxidation

*Hoi Ying Chung¹, Yun Hau Ng¹ (1. City Univ. of Hong Kong (Hong Kong))

Chair : Stefan Haacke

4:25 PM - 4:40 PM

[S5-14-CL] Plasmonic Nanoarchitectures to Concentrate Light for Efficient Nitrogen-to-Ammonia Conversion

*Hiang Kwee Lee¹ (1. Nanyang Technological Univ. (Singapore))

Chair : Stefan Haacke

4:40 PM - 4:55 PM

[S5-15-CL] Mystery solved: Multiscale approach reveals the first step in the molecular self-assembly of an artificial light-harvesting complex

*Mónica Karen Espinoza Cangahuala¹, Thomas la Cour Jansen¹ (1. Zernike Institute for Advanced Materials, Univ. of Groningen (Netherlands))

ROOM C

Chair : Manabu Abe

4:20 PM - 4:45 PM

[S6-09-KL] Controlling Photochemical Processes via Confinement: Space as a Tool in Photochemistry

*Vaidhyanathan Ramamurthy¹ (1. Univ. of Miami (USA))

Chair : Dominik Wöll

4:20 PM - 4:35 PM

[S7-13-CL] Electromagnetic enhancement induced by subradiant plasmon resonance examined by asymmetric silver nanoparticle dimers

*Tamatake Itoh¹, Yamamoto S. Yuko² (1. National Institute of Advanced Industrial Science and Technology (AIST) (Japan), 2. Japan Advanced Institute of Science and Technology (JAIST) (Japan))

Chair : Dominik Wöll

4:35 PM - 4:50 PM

[S7-14-CL] Luminescent lanthanide complexes reveal tunable second harmonic generation and sub-terahertz Raman response

*Kunal Kumar¹, Olaf Stefanczyk¹, Koji Nakabayashi¹, Kenta Imoto¹, Yurie Oki¹, Shin-ichi Ohkoshi¹ (1. The Univ. of Tokyo (Japan))