

Scientific Program

Oral Session (Convention hall C)

7th November, 2023 (Tuesday)

9:00		<i>Opening</i>
<i>Chair</i>	Wei-Hong Zhu	
9:20 – 9:50	IL1 Stefan Hecht (Humboldt-Universität zu Berlin)	Xolography for Volumetric 3D Printing
9:50 – 10:10	CL1 Guillaume Laurent (ENS Paris-Sacaly)	Quantitative Phase Imaging for Photochromism and Plasmonic Materials
10:10 – 10:30	CL2 Kazuharu Uchiyama (University of Yamanashi)	Nano-Photoisomerization by Optical Near-Field Excitations
10:30 – 10:50		<i>Coffee Break</i>
<i>Chair</i>	Keitaro Nakatani	
10:50 – 11:30	KL1 Hiroshi Miyasaka (Osaka University)	Photochemical Processes in Higher Excited States Produced by Multiphoton Absorption and Multiple Excitation
<i>Chair</i>	Sadahiro Masuo	
11:30 – 11:50	CL3 Yang Zhang (North Carolina State University)	Unraveling Single-Molecule Conformational Changes of Photoswitchable Fluorophores using High-Throughput Single-Molecule Spectroscopy and Deep Learning
11:50 – 12:10	CL4 Julien Mallétoit (ENS Paris-Saclay)	From Solution to Solid State, Negative photochromic Secrets of DASA Compounds Revealed by Dedicated Spectroscopies
12:10 – 13:10		<i>Lunch Time</i>
<i>Chair</i>	Françisco Raymo	
13:10 – 13:40	IL2 Wiktor Szymanski (University Medical Center Groningen)	Photopharmacology: Light Responsive Molecules for Image-Guided Pharmacotherapy
13:40 – 14:00	CL5 Michel Sliwa (Université de Lille)	The photo-activation of Orange Carotenoid Protein: a Light Intensity Dependent Photochromism

14:00 – 14:30	IL3 Katarzyna Matczyszyn (Wroclaw University of Science and Technology)	Two-photon Absorption and Two-photon-induced Isomerization of Azobenzene Compounds and Their Interactions with DNA
	<i>Chair</i> Kingo Uchida	
14:30 – 14:50	CL6 Juan XIE (ENS Paris Saclay)	Development of Photoswitchable Ligands Targeting Pseudomonas Aeruginosa Virulence Factors LecA and LecB
14:50 – 15:10	CL7 Yukihide Ishibashi (Ehime University)	Amplification of Cycloreversion Reaction of Diarylethene Nanocolloids Induced by Intense Laser Pulse
15:10 – 15:40	IL4 Chiara Bertarelli (Politecnico di Milano)	Light-responsive Membrane-targeted Dyes for Cell Membrane Stimulation
15:40 – 16:10		<i>Coffee Break</i>
	<i>Chair</i> Wictor Szymanski	
16:10 – 16:40	IL5 Kingo Uchida (Ryukoku University)	Phototunable Cell Killing by Photochromic Diarylethene
16:40 – 17:00	CL8 Marta Dudek (Wroclaw University of Science and Technology)	Modulation of G-quadruplex Functions Using Photoresponsive Ligands - in vitro and Cellular Studies
17:00 – 17:20	CL9 Jon Beves (UNSW Sydney)	Metastable Merocyanine Photoacids for Visible- light Control of Self-assembly
17:20 – 17:40	CL10 Paola Moretti (Politecnico di Milano)	Design of DASAs Photoswitches for Biological Applications
17:40 – 18:00	CL11 Ryoko M. Uda (National Institute of Technology, Nara college)	Photo-triggered Adsorption of DNA on PVC Films Containing Malachite Green Derivative
18:10 – 19:50		<i>Poster</i> (18:10 – 19:00: odd number, 19:00 – 19:50: even number)

8th November, 2023 (Wednesday)

Chair Stephane Rigaut

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|---------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 – 9:30 | IL6 Wei-Hong Zhu
(East China University of
Science and Technology) | Sterically Hindered Diarylethenes with Intrinsic
Chirality: Enantiospecific Transformation and
Reversible Photo-Superstructures |
| 9:30 – 9:50 | CL12 Kenji Matsuda
(Kyoto University) | π -Extended [5]Helicene as an All-Hydrocarbon P-
Type Photochromic Compound |
| 9:50 – 10:10 | CL13 P. K. Hashim
(Hokkaido University) | Phenylazothiazoles as Visible-Light
Photoswitches |
| 10:10 – 10:30 | CL14 Julien Boixel
(Université de Rennes) | Pyrene-based Dithyenylenes: toward the
Photocontrol of Intramolecular Excimer for Non-
destructive Readout |
| 10:30 – 10:50 | CL15 Dennis Chung-Yang Huang
(Hokkaido University) | Construction of Functionalized Red-Light
Photoswitches by Selective Copper-Catalyzed
Indigo N-Arylation |
| 10:50 – 11:20 | | <i>Coffee Break</i> |
| | <i>Chair</i> Tsuyoshi Kawai | |
| 11:20 – 12:00 | KL2 Vivian Wing-Wah Yam
(The University of Hong
Kong) | Design and Assembly Strategies Towards
Photofunctional Molecular Materials and
Memories |
| 12:00 – 12:30 | IL7 Stephane Rigaut
(Université de Rennes) | Photocontrol of Lanthanide NIR Luminescence |
| 12:30 – 13:30 | | <i>Lunch Time</i> |
| | <i>Chair</i> Kasper Moth-Poulsen | |
| 13:30 – 14:00 | IL8 Ivan Aprahamian
(Dartmouth College) | Hydrazone-Based Functional Materials |
| 14:00 – 14:20 | CL16 Aurelie Perrier
(Université Paris Cité) | Modelling the Photonastic Phenomenon: In Silico
Insight into the Coupling between the
Photochemical Reaction and the Polymer
Environment |
| 14:20 – 14:40 | CL17 Masakazu Morimoto
(Rikkyo University) | Turn-on Mode Fluorescent Diarylethenes: Design
Strategy for Controlling the Photoswitching
Performance |
| 14:40 – 15:00 | CL18 Denis Frath
(ENS de Lyon) | Photo/Redox-responsive Supramolecular
Materials Based on Viologens |

15:00 – 15:20	CL19 Takashi Ubukata (Yokohama National University)	Photoresponsive Molecules with Two Photodimerizable Moieties
15:20 – 15:50	<i>Coffee Break</i>	
	<i>Chair</i> Seiya Kobatake	
15:50 – 16:20	IL9 Wesley Brown (University of Groningen)	Elucidation of Degradation Pathways in Nitrospiro- and Nitrospirothio-pyrans – from Excited State Dynamics to Product Analysis
16:20 – 16:40	CL20 Nawel Goual (ENS Paris-Saclay)	Influence of the Chlorination of Disperse Red 1 Derivatives: Synthesis, Spectroscopic Studies and Theoretical Calculations
16:40 – 17:00	CL21 Melody Boetius (University Medical Center Groningen)	Molecular Engineering of Visible-light Responsive Iminothioindoxyl Photoswitches
17:00 – 17:30	IL10 Tsuyoshi Fukaminato (Kumamoto University)	Molecular Design Strategies toward Efficient Visible Light Photochromism in Diarylethene-perylenebisimide Dyads
17:30 – 17:50	CL22 Naoki Aratani (Nara Institute of Science and Technology)	Novel Synthetic Method and Photochromic Reactions of Dibenzodimethyldihydropyrenes
18:00 – 19:40	<i>Poster</i> (18:00 – 18:50: odd number, 18:50 – 19:40: even number)	

9th November, 2023 (Thursday)

	<i>Chair</i> Oliver Dumele	
9:00 – 9:30	IL11 Jiro Abe (Aoyama Gakuin University)	Three-state Negative Photochromism
9:30 – 9:50	CL23 Shizuka Takami (National Institute of Technology, Niihama College)	Fluorescence Properties of Thienylvinylthiazole Derivatives
9:50 – 10:10	CL24 Yasuo Norikane (National Institute of Advanced Industrial Science and Technology)	Photochemically Induced Crystal-Melt Transition: Crawling Motion, Solar Energy Storage and Beyond
10:10 – 10:40	IL12 Kaspar Moth-Poulsen (The Institute of Materials Science of Barcelona)	Solar Energy Conversion and Energy Storage Materials
10:40 – 11:00	<i>Coffee Break</i>	

	<i>Chair</i> Jiro Abe	
11:00 – 11:40	KL3 Paolo Samori (Université de Strasbourg)	Multifunctional Supramolecular Electronics: from Multiresponsive Organic Devices to Multilevel Memories
	<i>Chair</i> Hideyuki Nakano	
11:40 – 12:10	IL13 Oliver Dumele (Humboldt-Universität zu Berlin)	All-organic Photochemical Spin-State Switching
12:10 – 12:30	CL25 Tsuyoshi Tsujioka (Osaka Kyoiku University)	Giant Surface Potential of Vapor-deposited Diarylethene Films
12:30		<i>Lunch time</i>
18:00		<i>Banquet at Nara Royal Hotel</i>

10th November, 2023 (Friday)

	<i>Chair</i> Shiki Yagai	
9:00 – 9:30	IL14 Rémi Métivier (ENS Paris-Saclay)	Beyond Fluorescence Photoswitching: Unraveling the Dynamics of Multichromophoric Materials
9:30 – 9:50	CL26 Junji Zhang (East China University of Science and Technology)	Highly Efficient Visible-light-driven Diarylethenes Enabled by Charge-transfer Complex Crystal Sensitizers
9:50 – 10:10	CL27 Shohei Saito (Kyoto University)	Dual-emissive Force Probe for Simultaneous Monitoring of Polymer Chain Stretching and Strain-induced Crystallization by Ratiometric Fluorescence Imaging
10:10 – 10:30	CL28 Dennis Kwaria (National Institute of Advanced Industrial Science and Technology)	Heterogenously Halogenated Azobenzenes Showing Visible-Light Photoisomerization- induced Crystal-Liquid Transition
10:30 – 10:50		<i>Coffee Break</i>

	<i>Chair</i> Stefan Hecht	
10:50 – 11:30	KL4 Quan Li (Southeast University)	Light-Directing Liquid Crystalline Materials: From Dynamic Photonics to Deformable Soft Systems and Beyond
	<i>Chair</i> Ivan Aprahamian	
11:30 – 12:00	IL15 Shiki Yagai (Chiba University)	Photocontrol over Curvature in Supramolecular Polymers
12:00 – 12:20	CL29 Koichiro Saito (National Institute of Advanced Industrial Science and Technology AIST)	Dynamics of Photoinduced Crawling Motion of Azobenzene Crystals Containing Nano/microparticles
12:20 – 13:20		<i>Lunch Time</i>
	<i>Chair</i> Masakazu Morimoto	
13:20 – 13:40	CL30 Shuai Huang (Southeast University)	Photocontrolled Liquid Crystal Elastomers Enabled by Molecular Switches
13:40 – 14:00	CL31 Shodai Hasebe (Waseda University)	Diverse Crystal Actuation of Salicylideneaniline Derivatives by Photoisomerization, Photothermal Effect, and Natural Vibration
14:00 – 14:30	IL16 Seiya Kobatake (Osaka Metropolitan University)	Usual and Unusual Photomechanical Behaviors of Photochromic Diarylethene Crystals
14:30		<i>Closing</i>

Poster Session (Room 204)

November 7th, 2023 (Tuesday)

18:10 ~ 19:50 (odd: 18:10 ~ 19:00, even: 19:00~19:50)

1PO-01	Keegan McGehee	A Visible Light Chromophore Bound in a Loaded Spring Conformation: The Photosalient Effect of Trans Tetra-ortho-Bromo Azobenzene
1PO-02	Issei Ikariko	Boosting Visible Light Photochromism of Diarylethene-Perylenebisimide Dyads by Introducing a Ketone Spacer
1PO-03	Makoto Saikawa	Particle Transport by Crawling Azobenzene Crystal
1PO-04	Shota Hamatani	Diarylethene Photoswitches Undergoing 6π Azaelectrocyclic Reaction: Disrotatory Thermal Cycloreversion
1PO-05	Keita Shimizu	Elucidation of the Mechanism of Unique Photoinduced Two-step Bending Behavior of Diarylethene Crystals
1PO-06	Yusuke Morimoto	Acceleration of Thermal Bleaching Reaction of a Diarylbenzene Having Methoxy Groups by Proton Coordination
1PO-07	Masashi Araki	Isolation and Structure Determination of Minor Byproducts Produced by Photochromic Reaction of a Diarylethene
1PO-08	Sogo Kataoka	Microscopic Observation of the Photochemical Reaction of Anthracene Derivatives in Single Crystals
1PO-09	Lorette Fernandez	Norbornadienes Derivatives: Characterization and Devices
1PO-10	Kenta Tamaki	Photo-reversible Supramolecular Polymorph Transformation Leading to Hard and Soft Hydrogen-bonded Materials
1PO-11	Yuqi Tang	Luminescent Molecules for Photodynamic and Photothermal Immunotherapy
1PO-12	Genki Kawai	Concentration and Light-intensity Dependent Photochromic Reactions of a Perylene-substituted Rhodamine spirolactam
1PO-13	Mayu Kimura	Photochromic Cu-Doped ZnS Nanocrystals Dispersed in Organic Solvents
1PO-14	Yuki Nakai	Controlling the Photochromism of Titanium Dioxide Nanocrystals by Supramolecular Gel
1PO-15	Sota Fujisaki	Spatiotemporal Control of Photochromic Reaction in Anthraquinone Using Supramolecular Gel
1PO-16	Tomoya Seri	Ultrafast Bond Dissociation Dynamics of Phenoxy-Imidazolyl Radical Complex Derivatives
1PO-17	Ruiji Li	Photoinduced Changes in Aromaticity Control the Photoreactivity of Diarylethene Switches
1PO-18	Kota Ninomiya	Formation of Photoinduced Surface Relief Grating in Ether-linked Bisanthracene Thin Films
1PO-19	Tomoki Kitano	Helix Inversion in Photochromism of Binaphthylethene
1PO-20	Karin Uchida	Synthesis and Photoreaction of 1-Azaanthracene

1PO-21	Yusuke Yamaoto	Light-driven Twisting Behavior of Liquid Crystal Alignment by Pyrenylethene with Binaphthyl Skeleton
1PO-22	Kenji Higashiguchi	Asymmetric Tetrylene Showing Two Types of Photocyclization
1PO-23	Jacob Lyngé Elholm	Discovery of Photochromic Molecules for Energy Storage
1PO-24	Taichi Muto	Synthesis and Spectroscopic Properties of a Diarylethene-subporphyrine Hybrid
1PO-25	Kaito Takahata	Syntheses and Photoresponsivity of a Tetrathiazole-based Tetradentate Photochromic Ligand and Their Copper(II) and Zinc(II) Complexes
1PO-26	Mihoko Yamada	Syntheses of Diarylethene Derivatives with a Curved Aromatic Corannulene and Their Photochromic Behavior
1PO-27	Yuya Miyoshi	Improvement of Photoinduced Surface Relief in Bisanthracene Thin Films by Modification of a Connecting Group
1PO-28	Kai Nishikawa	Synthesis and Photochromism of Diarylethenes Forming Intramolecular Hydrogen Bonds
1PO-29	Taiga Toguchi	Photoresponsive Crosslinking of Bis-styrylpyrene Bridged by Binaphthyl Skeleton and its Photoregulation of Liquid Crystal Alignment
1PO-30	Ashkan Mokhtar	FRET based PL Photoswitching of Perovskite Quantum Dots
1PO-31	Masakazu Morimoto	Multicolor Photochromism of Two-component Mixed Crystals Composed of Oxidized Diarylethene Derivatives
1PO-32	Ryuta Imai	Synthesis and Photochromism of a Diarylethene Derivative Having Corannulenes as the Side Aryl Units
1PO-33	Yugo Tsuji	Substituent Effects on TADF Active Naphthalimide-Carbazole Dimer by Davydov Splitting
1PO-34	Natsuki Suda	Size-dependent Kinetic Stability of Self-assembled Fluorescent Nanorings
1PO-35	Tatsuya Seki	Observation of Interactions between Molecular Assembly Surfaces and Monomers through FRET
1PO-36	Yushi Fujimoto	Solid-states Luminescence Dynamics of Dibenzoylmethanato Boron Difluoride Complex with Aggregation-Induced Emission
1PO-37	Wataru Ishii	Photo-induced Luminescence Chromism of Silver Nanocluster for Bright Near-infrared Emission
1PO-38	Keito Kotaka	Solvent Dependence of the Thermal Back Reaction Rate of Binaphthyl-Bridged Imidazole Dimer
1PO-39	Christopher J. Clemett	Concerning the Proclivity of Photochromic Pyrans to Undergo Ring Contraction

November 8th, 2023 (Wednesday)

18:00 ~ 19:40 (odd: 18:00 ~ 18:50, even: 18:50~19:40)

2PO-01	Misato Suganuma	Change in Photocyclization Reactivity of an Inverse Type Diarylethene Derivative by Inclusion into Cyclodextrins
2PO-02	Kei Maruyama	Synthesis and Photoreactivity of an Asymmetric Terarylene with an Isopropoxy Group on a Photo-Active Carbon
2PO-03	Keitaro Nakatani	Switching Photochromic Molecules from P- to T-type by Protonation – towards On-demand Back Reaction Trigger
2PO-04	Yoshiyuki Watanabe	Photochromism and Fluorescence Photoswitching of Diarylethenes Having a Dye at the Reactive Carbon Atom
2PO-05	Arisa Hamada	Efficient Fluorescence Photoswitching of Photochromic Nanoparticles that Work in Organic Solvents
2PO-06	Beta Achromi Nurohmah	Studies of Electronic Effect of Substituents in Photoresponsive Moieties on Photorelease Reaction of Alcohols from 1,4-Naphthoquinone-based Photolabile Molecules
2PO-07	Akiko Sekine	<i>In situ</i> Control of Photochromism in Spiropyran Derivatives with Dual Photoreactive Complexes
2PO-08	Yoshinori Okayasu	Photochromic Dinuclear Iridium(III) Complexes Having Phenoxy-Imidazolyl Radical Complex Derivatives
2PO-09	Yu Matsunaka	Excitation Wavelength Dependent Photochromism of Asymmetric Spiropyran, SBP- β -NP
2PO-10	Kaho Irie	Photoreaction of N-(1H-Indol-2-ylmethylidene)aniline and Its Derivatives
2PO-11	Katsuya Mutoh	Multi-state Photoswitch of a Biphotochromic Molecule Consisting of Hexaarylbiimidazole and Terarylene Units
2PO-12	Takayuki Murai	Photochromism of N,N'-Diacylindigo Studied by Time-Resolved Transient Absorption Spectroscopy
2PO-13	Taeko Inada	Fluorescence Quenching and Molecular Simulation Studies on the Interaction of Lysozyme with Photochromic-Ligands
2PO-14	Katarzyna Matczyszyn	Gold Nanorods-Assisted Isomerization of Azobenzene Derivatives
2PO-15	Yohei Hattori	Development of Photoluminochromic Unsymmetric Diarylethenes and Their Metal Complexes
2PO-16	Ryo Nishimura	Dynamic Mechanofluorochromism of Diarylethene Crystal
2PO-17	Kenji Higashiguchi	Kinetic Analysis of the Photochemical Paths in Asymmetric Diarylethene Dimer
2PO-18	Tomohiro Shiraki	Near-infrared Emission Wavelength Switching of Single-walled Carbon Nanotubes based on Functionalized Diarylethene Photochromism
2PO-19	Taketomo Tanaka	Spectral Inhomogeneity of Phenol Blue in Protic Solvents Revealed by Ultrafast Ground State Dynamics
2PO-20	Hikaru Sotome	A Dominant Factor of Photocyclization Reaction of Diarylethene Derivatives That Is Completed on the Excited State Potentials
2PO-21	Roman Tiurin	Synthesis a New Family of Reversible Photochromic Dyes Based on Benzo[de]cinnoline and Perimidine Core

2PO-22	Daichi Kitagawa	Relationship between Photocyclization Reactivity and Dihedral Angle of Aryl Group in Inverse Type Diarylethenes
2PO-23	Shiori Yagi	Binaphthyl-bridged Imidazole Dimers Exhibiting both T-type Negative Photochromism and P-type Photochromism
2PO-24	Yusuke Funasako	Pyridinium-fused Spiropyran Salts Exhibiting Positive and Negative Photochromism in the Solution and Solid State
2PO-25	Syoji Ito	Modification of Optical Force Acting on Microparticles Using Photochromic Reaction: Controlling the Speed of Microscopic Orbital Motions
2PO-26	Yo Shimizu	Effect of Trans-cis Photoisomerization of Azobenzene units on Photo-induced Calamitic-discotic bimesomorphic Phase Transition for a Triphenylene Mesogen with Tetradecyloxyazobenzene Units Connected at the Periphery
2PO-27	Zhiwei Zhang	Isomerization of Bioactive Acylhydrazones Triggered by Light or Thiols
2PO-28	Hideyuki Nakano	Novel Photomechanical Behaviors Observed for Azobenzene-based Molecular Glasses
2PO-29	Jun-Wei Shen	Light-regulated Polarity Change of Photochromic Diarylethenes
2PO-30	Kazuhiro Yamaoki	Construction of Photoswitchable Quantum Dot Aggregate Structures Using an Azobenzene Derivative
2PO-31	Yukina Niine	Energy Transfer from Higher Excited States of a Quantum Dot to an Azobenzene Derivative
2PO-32	Fathy Hassan	Light-Driven Cellulose Nanocrystals Enabled by Photochromic Molecular Switch
2PO-33	Motonori Washisaka	Photorelease Reaction of Alcohols from Novel Photolabile Molecules based on 1,4-Naphthoquinone Core
2PO-34	Marine Louis	Wavelength Selective Cascade Effect in Microcapsules for X-ray Detection via Fluorescence Modulation
2PO-35	Takashi Hirose	Photochemical Synthesis and Emission Properties of Pyrene Dimers Covalently Linked to a Helical π -Conjugated System
2PO-36	Mitsuaki Yamauchi	Control of Anthracene Supramolecular Structures by Photo and Thermal Stimulation
2PO-37	Eriko Machida	Aggregation-induced Emission Properties of a Polar Azobenzene Derivative
2PO-38	Pablo Reine	Room Temperature Phosphorescence from Corannulene Derivative
2PO-39	Masakazu Morimoto	A Turn-on Mode Fluorescent Diarylethene with an Azacrown Ether Macrocycle: Metal-ion-gated Enhancement of the Photoreactivity and Fluorescence