5th International Symposium on Photofunctional Chemistry of Complex Systems (ISPCCS2025)

joint with

IIS UTokyo Symposium No.127

and

1st International Symposium on Concerto Photocatalysis

December 12-14, 2025

Royal Kona Resort, Hawaii, USA

Timetable

Day 1 (Dec. 12, 2025)

15:30	Registration
16:00	**Opening Remarks**
【Session I】 Chair: Kazuyuki Ishii and Kiyoshi Miyata	
16:10	Low-energy sensitization of lanthanide luminescence **Ana de Bettencourt** (University of Nevada)
16:30	Photofunction of helical lanthanide complexes **Miki Hasegawa** (Aoyama Gakuin University)
16:50	Environmental sensing system using lanthanide(III) aggregates in water media **Yasuchika Hasegawa** (Hokkaido University)
【Session II】 Chair: Yasuchika Hasegawa and Kosei Yamauchi	
17:10	Organic vapor-induced microscopic behaviors in molecular crystals **Kazuyuki Ishii** (The University of Tokyo)
17:30	Photoactivation of Human Green Cone Opsin Studied by Femtosecond Stimulated Raman Spectroscopy: Initial Steps Toward Understanding the Early Events in Human Vision **Miroslav Kloz** (The Extreme Light Infrastructure ERIC)
17:50	Luminescence Properties of Mixed-Ligand Silver(I) Coordination Polymers Composed of Emissive and Non-Emissive Units **Kiyoshi Tsuge** (University of Toyama)
18:10	Photoinduced charge separation in chromophore-protein system **Antonin Vlcek** (J. Heyrovský Institute)
19:00	**Welcome reception**

Day 2 (Dec. 13, 2025) AM

	【Session III】 Chair: Mihaela Cibian and Hiroyuki Takeda
9:00	Photoredox Cascade Catalysis for Efficient Charge Separation and Dual Productivity **Atsushi Kobayashi** (Hokkaido University)
9:20	Anti-Kasha Reactivity in Organic and Coordination Compounds **Oliver Wenger** (University of Basel)
9:40	Electric bias-free solar-to-hydrogen peroxide conversion in a photoelectrochemical cell using an inorganic/organic hybrid photocathode **Masayuki Yagi** (Niigata University)
10:00	Photocatalytic Water Splitting and CO_2 Reduction as Artificial Photosynthesis **Akihiko Kudo** (Tokyo University of Science)
10:20	Coffee Break
	【Session IV】 Chair: Oliver Wenger and Atsushi Kobayashi
10:40	Amidine-*N*-oxide as a ligand in transition metal complexes with emissive high-energy excited states **Garry Hanan** (Université de Montréal)
11:00	Harnessing Empty-Orbital Orientation with Bridging Ligands: Unlocking Visible-Light Functions in Group 12 Multinuclear Complexes **Yoshimasa Wada** (The University of Tokyo)
11:15	Formation of Empty C–Zn π Orbitals: Toward Visible Light Response in Mononuclear Zn(II) Complexes **Hidemitsu Iwamoto** (The University of Tokyo)
	【Poster preview】 Chair: Akinobu Nakada
11:40	**Poster preview**
12:00	**Lunch**

Day 2 (Dec. 13, 2025) PM

【Session V】 Chair: Miki Hasegawa and Hitoshi Ishida	
14:00	Stimuli-responsive Flexible Lewis Pair Functionalized Coordination Complexes **Michael Wolf** (University of British Columbia)
14:20	Visible-Light Absorption of Heteroleptic Cu(I) Complexes Bearing 5-Membered Heteroaryls for Redox Photosensitizer **Hiroyuki Takeda** (Gunma University)
14:40	Photoassisted Chemical Vapor Deposition of Ru from (η^4-diene)$Ru(CO)_3$ and (η^2-olefin)$Ru(CO)_4$ Complexes **Lisa McElwee-White** (University of Florida)
15:00	Enhanced Phosphorescence of a Cyclometalated Ir(III) Complex with a Planar Triarylborane Moiety Triggered by Fluoride Binding **Eri Sakuda** (Nagasaki University)
15:20	Coffee Break
【Session VI】 Chair: Eri Sakuda and Kiyoshi Tsuge	
15:40	Metallochlorophyll-a derivatives asymmetrically coordinated with axial ligands **Hitoshi Tamiaki** (Ritsumeikan University)
16:00	Photofunctional Transition Metal–Peptide and Protein Conjugates for Targeted Cancer Phototheranostics **Kenneth Kam-Wing Lo** (City University of Hong Kong)
16:20	Supramolecular luminescent assemblies: imaging and beyond… **Luisa De Cola** (Università degli Studi di Milano)
16:40	Beyond Expectations: Curious Photochemical and Biological Functions of Ruthenium Polypyridyl Complexes **Hitoshi Ishida** (Kansai University)
17:00	**Poster Session** (~17:45 Sunset)
18:30	**Free Discussion**
19:30	**Banquet**

Day 3 (Dec. 14, 2025) AM

【Concerto Photocatalysis Session I】 Chair: Kei Murata and Takeshi Iwasa	
9:00	Concerto of Interdisciplinary Photocatalysts for Molecular Conversions **Akinobu Nakada** (Kyoto University)
9:20	**Sven Rau** (Universität Ulm)
9:40	Multielectron Reduction of CO_2 by Cobalt-NHC Catalysts **Kosei Yamauchi** (Kyushu University)
10:00	Photocatalysis with chemically engineered protein **Koji Oohora** (The University of Osaka)
10:20	Computational Modelling of Photo-induced Electron Transfer within the Marcus Picture and Beyond **Stephan Kupfer** (Friedrich Schiller University Jena)
10:40	Coffee Break
【Concerto Photocatalysis Session II】 Chair: Koji Oohora, Akinobu Nakada	
11:00	Selection rule engineering by photo-shaping using near-field **Takeshi Iwasa** (Hokkaido University)
11:20	Spatiotemporal Analysis of Complex Mixing Processes using Chemiluminescence **Kiyoshi Miyata** (Kyushu University)
11:40	Photocathode with Backside Illumination: a New Paradigm for Solar Fuel Production **Marc Robert** (Sorbonne University)
12:00	Main factors which determine efficiency of photocatalytic reactions **Osamu Ishitani** (Hiroshima University)
12:20	Closing Remarks **Peter Ford** (University of California, Santa Barbara)
	Departure

Poster Presentation

P1	Lamellar Cleavage-Induced Triboluminescence in Chiral Crystals of Lanthanide Complexes with Amino Acid Derivatives **Reo Ohno** (Aoyama Gakuin University)
P2	Novel ruthenium (II) complex with planar arylborane compound for CO_2 photoreduction **Takuya Yokoo** (Nagasaki University)
P3	Dual emission systems of four Eu cluster-MOFs with isonicotinic acids **Shun Fujii** (Aoyama Gakuin University)
P4	Ligand Triplet Energy Escape in Tb(III) Complex for Developing Highly Sensitive Luminescent Thermometer **Yusaku Yamaguchi** (Hokkaido University)
P5	Photochemical Halogen-Atom Abstraction Enables a Catalytic Cycle for C–H Halogenation **Kei Murata** (Riken)
P6	Formation of Empty C–Zn π Orbitals: Toward Visible Light Response in Mononuclear Zn(II) Complexes **Hidemitsu Iwamoto** (The University of Tokyo)

Organizers

Kazuyuki Ishii (The University of Tokyo, Japan)
Yasuchika Hasegawa (Hokkaido University, Japan)
Miki Hasegawa (Aoyama Gakuin University, Japan)
Hitoshi Ishida (Kansai University, Japan)
Garry S. Hanan (Univ. Montreal, Canada)
Kenneth Kam-Wing Lo (City University of Hong Kong, China)
Peter C. Ford (University of California, Santa Barbara, USA)
Ana de Bettencourt-Dias (University of Nevada, USA)
Hiroyuki Takeda (Gunma University, Japan)
Atsushi Kobayashi (Hokkaido University, Japan)
Eri Sakuda (Nagasaki University, Japan)
Kazuki Nakamura (Chiba University, Japan)
Akinobu Nakada (Kyoto University, Japan)
Kei Murata (Riken, Japan)
Kiyoshi Miyata (Kyushu University, Japan)

Co-organized by

The Photofunctional Complexes Research Association Japan
Institute of Industrial Science, The University of Tokyo
Grant-in-Aid for Transformative Research Areas "Concerto Photocatalysis"

Sponsored by

Tokyo Ohka Foundation for the Promotion of Science and Technology
CSJ Journals, The Chemical Society of Japan

東京大学
生産技術研究所
Institute of Industrial Science,
The University of Tokyo

光触媒協奏学
Concerto Photocatalysis

公益財団法人
東京応化科学技術振興財団
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BCSJ 100th Anniversary

Chemistry Letters

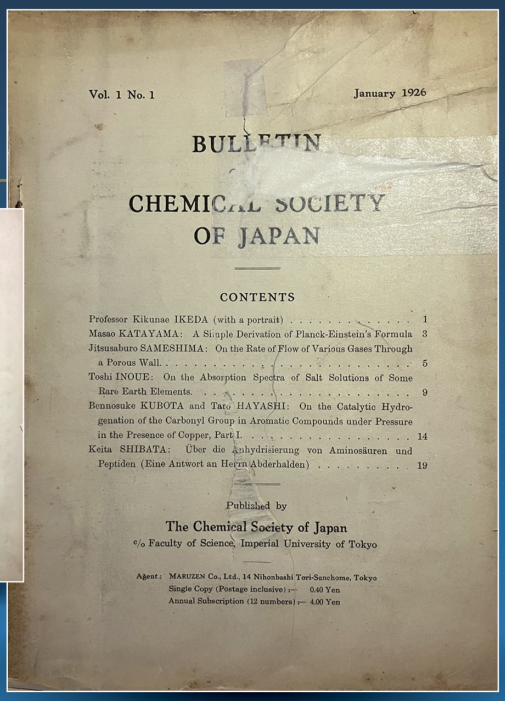
BCSJ 100th Anniversary

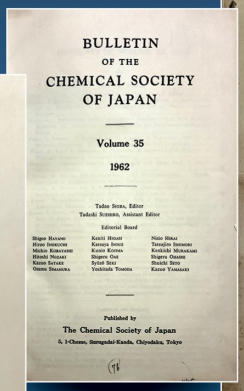
A photo of Dr. Kikunae Ikeda in the first issue of BCSJ.

Photo：KOJI OKUMURA
(Forward Stroke)

The Bulletin of the Chemical Society of Japan (BCSJ) was founded in 1926 as a pioneering chemistry journal publishing in both English and German. Since then, BCSJ has been publishing significant work spanning various fields of chemistry, except for the years 1945 and 1946. The 100th volume will appear in 2027.

First Issue 1926





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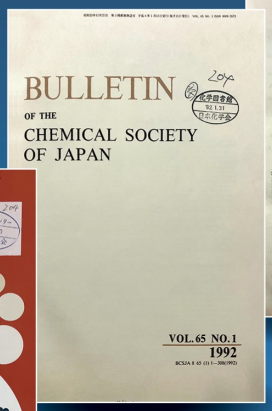

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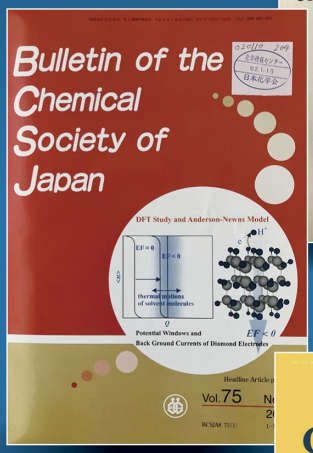

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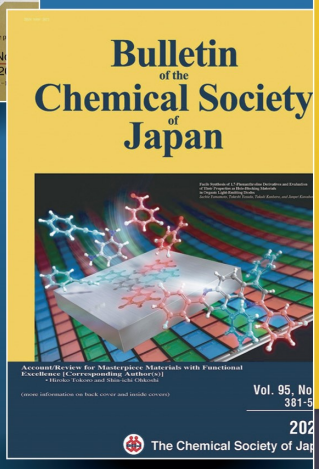

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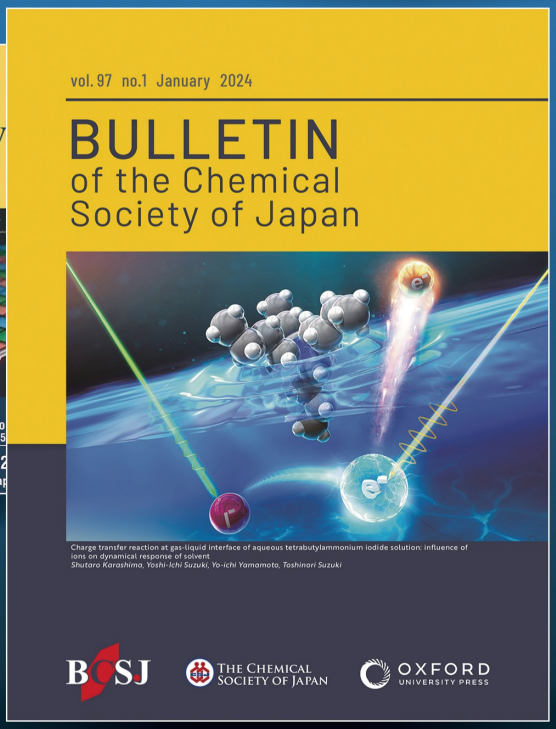

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100th anniversary in 2025!