– Program –

The 14th RAP Symposium

December 9–10, 2026 | Suzuki Umetaro Hall, RIKEN

Wednesday, December 9

09:30–10:00		Welcome Coffee
		Chair: Satoshi Wada
10:00–10:25		Opening: Koichiro Tanaka [Director, RAP] Greetings: Yoshinori Tokura [Executive Director of Science, Physical Science Domain] Greetings: Shinya Tatematsu [Director, MEXT] Group Photo
Session 1		**ULTIMATE PHOTONICS: Extreme Light and AI for Science**
		Chair: Satoshi Wada
10:25–11:05	I-01	High Power Diode-pumped Solid-state Laser for Fusion Energy Toshiyuki Kawashima Hamamatsu Photonics K.K., Central Research Laboratory (affiliation to confirm)
11:05–11:45	I-02	Development and Operation of High-repetition PW-class and Multi-PW Kilojoule Laser Systems at ELI Beamlines Bedřich Rus ELI Beamlines, Czech Republic
11:45–12:15	O-01	Digital Twin for Advanced-Photonics-Enabled Manufacturing Shuntaro Tani Digital Twin for Light-Matter Interaction RIKEN ECL Research Team, RIKEN RAP
12:15–13:30		– Lunch Discussion (75 min) –
Session 2		**Precision Technologies and Advanced Photonics**
		Chair: Yutaka Yamagata
13:30–14:10	I-03	Advances in Fabrication Technologies for X-Ray Focusing Optics and Their Applications Hidekazu Mimura Research Center for Advanced Science and Technology, The University of Tokyo
14:10–14:40	O-02	RANS: A Compact but Versatile Neutron Source T. Kobayashi[1,2], T. Takanashi[1], M. Mizuta[1,2], S. Imajo[1,2], H. Kusano[1,2], A. Muneem[1,2], Y. Okuno[1,2], T. Fukuchi[2], Y. Ikeda[2], and T. R. Saito[2] [1]Neutron Operation Unit, RIKEN RAP [2]Neutron Frontier Research Team, RIKEN RAP
14:40–15:00		– Coffee Break (20 min) –
Session 3		**Frontiers in Quantum Metrology**
		Chair: Masao Takamoto
15:00–15:40	I-04	Quantum Sensing with a Levitated Nanoparticle Kiyotaka Aikawa Department of Physics, Graduate School of Science, The University of Tokyo
15:40–16:10	O-03	Laser Spectroscopy of Sympathetically Cooled Thorium-229 Ions Atsushi Yamaguchi Nuclear Laser Spectroscopy Research Unit, RIKEN RAP
Session 4		**Poster Session**
16:10–17:40		– Poster Session – | Bioscience Building, 2F & 3F Lounge
18:00–20:00		– Social Gathering – | Administrative Headquarters, 2F Communication Lounge

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09:30–10:00		Welcome Coffee
Session 5		**AI Photonics and Interdisciplinary Science**
		Chair: Takuo Tanaka
10:00–10:40	I-05	Computational Imaging with Randomness Ryoichi Horisaki Graduate School of Information Science and Technology, The University of Tokyo
10:40–11:10	O-04	Photoresponsive Molecule-functionalized Plasmonic Nanowires for Single Live-cell Manipulation Tomoko Inose[1,2] [1]Nanophotochemistry Research Unit, RIKEN RAP [2]Institute for Integrated Cell-Material Science (WPI-iCeMS), KUIAS, Kyoto University
11:10–11:40	O-05	From High-speed Infrared Spectroscopy to Dynamic Chemical Imaging Takuro Ideguchi[1,2] [1]Biophotonics Research Team, RIKEN RAP [2]Department of Advanced Materials Science, The University of Tokyo
11:40–13:00		– Lunch Discussion (80 min) –
Session 6		**Advanced Research in Photonics**
		Chair: Koji Sugioka
13:00–13:30	O-06	A New Picture of Reacting Molecules Tahei Tahara[1,2] [1]Molecular Spectroscopy Laboratory, RIKEN PRI [2]Ultrafast Spectroscopy Research Team, RIKEN RAP
13:30–14:00	O-07	From Material Purification to Photovoltaic Energy Conversion in Halide Perovskites Tomoya Nakamura[1,2] and Atsushi Wakamiya[1] [1]Institute for Chemical Research, Kyoto University [2]Kyoto University Institute for Advanced Study (KUIAS), Kyoto University / HIKARI-COOL Kyoto
14:00–14:30	O-08	Designing Temporal Precision in Ultrafast Imaging: Capturing Light–Matter Interactions with STAMP Keiichi Nakagawa Graduate School of Engineering, The University of Tokyo / HIKARI-COOL Tokyo
14:30–14:50		– Coffee Break (20 min) –
Session 7		**Frontiers in Terahertz Photonics**
		Chair: Hiroaki Minamide
14:50–15:30	I-06	Terahertz Silicon Photonics for Advanced Applications Masayuki Fujita Research Institute of Electrical Communication, Tohoku University (affiliation to confirm)
15:30–16:00	O-09	High-peak-power coherent terahertz-wave parametric sources: toward compact electron accelerators and edge-enhanced self-interference imaging Yuma Takida and Hiroaki Minamide Tera-Photonics Research Team, RIKEN RAP
16:00–16:20		Poster Awards Ceremony / Closing: Eiji J. Takahashi