Frontiers of Materials, Life & Earth Sciences and Beyond

13th Annual ISAJ Symposium

November 18, 2022 (Friday) Main Auditorium, Embassy of India, Tokyo, Japan

Time	PROGRAM	
9:00 -9:25	PARTICIPANTS REGISTRATION	
9:30 - 10:05	INAUGURAL SESSION	
9:30	Welcome Address	Dr. Sunil Kaul, Chairman, ISAJ
9:40	Conveners' Address	Dr. Elango Chandiran, Dr. Digvijay Singh
9:45	Keynote Address	H.E. Mr. Sibi George, The Ambassador of India to Japan
9:55	Awards Presentation	ISAJ Lifetime achievement award
10:00	Vote of Thanks	Dr. Alok Singh, Vice-Chairman, ISAJ
10:05 - 10:30	PHOTO SESSION & TEA/COFFEE BREAK	
10:30-12:10	CHAIR: Dr. Renu V	SESSION I Vadhwa (AIST), Prof. Sakthi Kumar (Toyo Univ.)
10:30	Tadaaki Nagao, National Institute for Materials Science (NIMS) Carbon Dots as Sustainable Materials for UV Screener, Direct White Light Emitter, and Laser	
10:50	Michio Kawamiya, The Japan Agency for Marine-Earth Science and Technology (JAMSTEC) <i>Earth system modeling for projecting the changing planet</i>	
11:10	Kazutoshi Iijima, Yokohama National University Aggregation Bahavior of Polysaccharide Composite Particles and Application for Tissue Engineering	

11:30	Manish Biyani, Japan Advanced Institute of Science and Technology (JAIST) Can we predict the next pandemic?	
11:45	Ruma Mandal, Tohoku University Magnetization Dynamics Study of High PMA Ultrathin Magnetic Heterostructures: A TRMOKE Study	
11:55	Vamsi K. Komarala, Indian Institute of Technology (IIT) Delhi Fabrication and characterization of carrier-selective contact based silicon solar cells	
12:10 - 14:00	LUNCH & POSTER SESSION Chairs: Dr. Digvijay Singh (NIMS), Dr Vickey Nandal (NIMS)	
14:00 – 15:30	SESSION II CHAIR: Prof. Atsushi Suzuki (YNU), Dr. Aaditya Manjanath (NIMS)	
14:00	Jonathan Hill, National Institute for Materials Science (NIMS) Novel Functional Organic Chromophores	
14:20	Toru Hara, National Institute for Materials Science (NIMS) Electron microscopy techniques developed in NIMS for materials research	
14:30	Sachiko Hayashida, Research Institute for Humanity and Nature (RIHN) Aakash project: toward clear air over the world	
14:45	Hena Das, Tokyo Institute of Technology Mechanisms at the level of atoms and electrons that drive electric field control over magnetism	
15:05	Sae Matsunaga, The University of Tokyo High temperature materials: Ni-based superalloys and beyond	
15:20	Bhaskar Dasgupta, Tokyo University Hybrid of experiment and computation for the interpretation of biomolecular sequence and structural data	
15:30 - 15:50	TEA/COFFEE BREAK	

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15:50-17:30	SESSION III	
	CHAIR: Dr. Swadhin Behera (JAMSTEC), Dr. Kedarnath Mahapatra (Tokai U.)	
15:50	Masayoshi Higuchi, National Institute for Materials Science (NIMS)	
	Electrochromic Metallo-Supramolecular Polymers	
	Atsushi Suzuki. Yokohama National University	
16:10	Smart Hydrogels with Excellent Swelling and Mechanical Properties for Realistic Medical	
	Simulators	
16:20	Subbiah Alwarappan, CSIR-CERI, India, & University of Tsukuba	
	Electrochemical Biosensors	
16:35	Mahesh K. Kaushik, University of Tsukuba	
	Orexin, sleep, and narcolepsy; The discovery received the 2023 "Breakthrough Prize"	
16:50 17:00	V Srivani. Jichi Medical University	
	Multi-Therapeutic Applications of Engineered Phage Capsids	
	Akniesn babu Ganganboina, National Institute for Materials Science (NIMS)	
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17:10	Md Emrul Kayesh, National Institute for Materials Science (NIMS)	
	Coadditive Engineering for Stable Sn-based provskite solar cells	
17:20	Aaditya Manjanath, National Institute for Materials Science (NIMS)	
	Probing chemical reaction dynamics through excited-state time-dependent GW simulations	
10 00 10 50	SESSION IV: SELECTED POSTERS Oral Presentations	
17:30-17:50	CHAIR: Dr. Asima Sultana (AIST), Dr. Elango Chandiran (NIMS)	
	PS-1 Hisay Lama, The University of Tokyo	
	Glassy Phase in Dense Bacteria Population	
	PS-2 Deeksha Arya, The University of Tokyo	
	Multinational advancements for AI-driven road inspection	
	PS-3 Pooja Gusain, Keio University	
4 mins. each	Violet light modulates mood behavior via non-visual retinal opsin OPN5	
	PS-4 Rahul Bhardwaj , Japan Advanced Institute of Science and Technology (JAIST)	
	Nafion's Proton Transport in Cathode Catalyst Layer of Hydrogen Fuel Cell	
	PS-5 Huang Tianwei , The University of Tokyo	
	Modification of extracellular vesicles with oligopeptide for selective interaction with	
	activated endothelium	
17:50~	CLOSING SESSION & POSTER AWARDS	