2025 年 2/1-2/2 に DST-JSPS ワークショップをインド IIT マドラスで開催しました！

DST-JSPS joint workshop on "Atomically Precise Materials for Sustainability"

Venue: Holiday Inn, OMR IT Expressway, Thiruvanmiyur, Chennai

Time	Day 1: Feb. 1, 2025	Day 2: Feb. 2, 2025
8:30 – 8:50	Registration	
8:50 – 9:00	Welcome addresses	
	Session I (Chair: Prof. Thalappil Pradeep)	**Session V** (Chair: Prof. Yuichi Negishi)
9:00 – 9:30	**Prof. Yuichi Negishi,** Tohoku University Creation of High-Performance Energy and Environmental Catalysts by Controlling the Aggregation of Metal Atoms	**Prof. Thalappil Pradeep**, IIT Madras Open Questions on Cluster Research
9:30 – 10:00	**Prof. Sukhendu Mandal,** IISER Thiruvananthapuram Atomically Precise Nanocluster Assemblies: Properties beyond their Cluster Unit	**Prof. Rajendra Singh Dhayal,** Central University of Punjab Functionality and Properties of Dichalcogenide Controlled Precise Metal Nanoclusters
10:00 – 10:30	**Prof. Katsuaki Konishi,** Hokkaido University Cluster of Clusters: Evolution of Gold Nanoclusters via Supramolecular Assembling	**Prof. Tatsuya Tsukuda,** The University of Tokyo Electronic Structures and Optical Properties of Atomically-Precise Gold Nanostructures
10:30 – 11:00	**Prof. Nirmal Goswami**, CSIR - IM&MT Depletion-Driven Assembly of Gold Nanoclusters: Insights into Luminescence and Catalysis	**Prof. Ananya Baksi,** Jadavpur University NIR II Emission Enhancement by Tuning Au Positions in $Au_{12}Ag_{32}$ Clusters
11:00 – 11:20	Discussion & Tea Break	
	Session II (Chair: Prof. Umesh V. Waghmare)	**Session VI** (Chair: Prof. Kuruvilla Joseph)
11:20 – 11:50	**Prof. Jayasree R S,** **SCTIMST** Amino Acid, Peptide and Protein Stabilized Gold Clusters as Excellent Platforms for Biomedical Applications	**Prof. Seiji Yamazoe,** Tokyo Metropolitan University Structural Isomerization and Molecular Adsorption Properties of Ligand-Protected Metal Clusters Studied by XAFS
11:50 – 12:20	**Prof. Katsuhiro Isozaki**, Kyoto University Exploration of Catalytic Applications of Gold Nanoclusters Bearing Supramolecular Reaction Field	**Prof. Indranath Chakraborty,** IIT Kharagpur Atomic-Level Engineering on Nanoclusters: Improving Structural and Functional Properties

12:20 – 12:50	**Prof. Adarsh K V,** IISER, Bhopal Photoexcitation on low dimensional semiconductors: A playground for optical properties	**Prof. Tetsuya Kambe,** Osaka University Precise Synthesis of Atomicity-Controlled Clusters and Single-Layered Materials
12:50 – 13:05	***Short talk 1***: **Dr. Rival Jose**, IIT Madras Bimetallic Nanocluster-Based Light-Emitting Diodes with Saturated Red Emission	***Short talk 4:*** **Ms. R Bhuvaneswari,** JNCASR Competing role of strain and stacking in electronic and topological properties of γ-Phosphorene
13:05 – 14:30	Discussion & Lunch	
	Session III (Chair: Prof. Tatsuya Tsukuda)	**Session VII** (Chair: Prof. Hidehiro Sakurai)
14:30 – 15:00	**Prof. Umesh V. Waghmare,** JNCASR Magnetic Transitions and domain walls in 2D $FePS_3$	**Prof. Takeshi Iwasa**, Hokkaido University Excited State Engineering of Vertex Sharing Noble Metal Clusters by Photo-Shaping using Near-Field
15:00 – 15:30	**Prof. Hidehiro Sakurai,** Osaka University Gold Nanoparticle Synthesis Using Microchip Laser System through Pulsed Laser Ablation	**Prof. Venkatesh V,** IIT Roorkee Thiolate Protected Copper Nanoclusters: Design, Synthesis and Multifaceted Applications
15:30 – 16:00	**Prof. Chaitanya Sharma Yamijala,** IIT Madras Hot Carrier-Driven Degradation of PFAS Using Plasmonic Nanoparticles	**Prof. Kuruvilla Joseph**, Indian Institute of Space Science & Technology Surface Engineered Nanosystems for Bio-Medical and Space Applications
16:30 – 16:50	Tea Break	
	Discussion & Break	Discussion & Break
	Session IV (Chair: Prof. Katsuaki Konishi)	**Session VIII** (Chair: Prof. Sukhendu Mandal)
16:50 – 17:20	**Prof. Tapasi Sen**, INST Mohali Probing the fluorescence Intermittency of single metal nanoclusters	**Prof. Kenji Iida,** Hokkaido University Electronic and Optical Properties of Heterogeneous Nanomaterials Revealed by Theoretical and Computational Study
17:20 – 17:50	**Prof. Takane Imaoka**, Institute of Science Tokyo	**Prof. Shibu Siddarth,** University of Calicut

	Dynamic Coordination Structure of Supported Metal Clusters	Light-Induced Self-Assembly in Precision Noble Metal Nanoclusters: New Directions and Applications
17:50 –18:20	***Short talk 2***: **Ms. Glory James** Ligand-Free Au_9 Nanocluster Templated Growth of Zirconium-Based Metal-Organic Framework for Peroxidase Mimicking Catalysis ***Short talk 3***: **Ms. Harshita Nagar** Rapid Determination of the Structures of Atomically Precise Copper Nanoclusters using MicroED	**Discussion & Closing remarks** -
18:20-19:30	**Discussion**	
19:30 – 21:00	Dinner	
	Day 3: Feb. 3, 2025	
9:00 – 12:00	Lab tour/ Research Park visit/Sightseeing	
15:00	Departure	