Small Sciences Symposium (SSS-2026)

IACS, Kolkata

November 19-21, 2026

POSTER SESSION

November 20, 2026 (4:15 PM – 6:00 PM)

Centenary Building (1st floor)

Poster No.	Name	Title of Abstract
P1	Katsuyuki Murai	Photoreversible Phase Transition of Diarylethene Supramolecular Assemblies between Microparticles and Oil-in-Oil Droplets
P2	Dhruba Jyoti Deka	Tyrosinase Enzyme-Inspired Cu(I)-Porous Organic Polymer for Selective Oxidation of Biomass-Derived 5-HMF
P3	Saikat Pal	Solution-Processed Thin Films of Two-Dimensional WSe_2 for Photodetection Applications
P4	Sumanta Mondal	D-A-D Types Highly Conjugated Porous Organic Polymer for Photocatalytic Benzylamine Coupling Reaction
P5	Saumik Sarkar	Supramolecular-Assembly of Foldable Donor-Acceptor Dyad Leads to Highly Stable Charge-Transfer Phase and Ferroelectricity
P6	Haritha R	Rationally Designed High-Entropy MOF featuring Multi Active Sites for Electrocatalytic HER
P7	Sujauddin Gazi	Manganese Zinc Ferrite Microspheres for Electrochemical Sensing of Hydrogen Peroxide in Milk: Synergistic Role of Cation Distribution and Oxygen Vacancies
P8	Kumar S. Siddharth	Bio-inspired Chain Capping Selectively Inhibits Elongation to Direct Secondary Pathways in Supramolecular Polymers
P9	Sarani Biswas	Structure-Activity-Based Electrode-Fibril Interaction and Selective Electrochemical Disassembly of Fibrils via ROS-Mediated Structural Collapse
P10	Mamoni Maji	Ruthenium Induced Strain and Phase Polarization in Nickel toward High Yield Nitrate-to-Ammonia Conversion

P11	Sowbhick Patra	Controlling Chirality-Induced Spin Selectivity (CISS) through Linker- and Temperature-Dependent Pathway Complexity in NDI-Cholesterol Assemblies
P12	Souvik Mondal	Nano-Heterostructures of opological Insulators and Soft Metallo-Supramolecular Polymer for Solar Fuel Production
P13	Swadhin Chakraborty	Designing a New Class of Mechanophoric Polymer Based on Epoxy-Functionalized Rhodamine Derivative for Visual Damage or Crack Detection
P14	Mampi Maji	Design and Development of Triazine-Based Aminal-Linked Porous Organic Polymers for CO_2 Capture and Conversion
P15	Puja Pal	Heme-Insulin Interaction and their Peroxidase activity associated with Type 2 Diabetes Mellitus (T2DM)
P16	Sk Mustak Ahamed	Electrochemical Capacitive Performance of Dihydroxyterephthalic Acid-Doped Polyaniline Nanotubes in Symmetric and Asymmetric Configurations
P17	Soumya Koner	Highly Efficient Surface Functional Group Display in Chain-Folding Regulated Assembly of Amphiphilic Polyurethane
P18	Md. Tuhin Shaikh	Dynamic control of chiroptical responses in intrinsically chiral mixed halide perovskite nanocrystals
P19	Chandreyee Banerjee	Tailoring Surface Properties of Two-Dimensional Polymeric Platelets via Crystallization-Driven Self-Assembly
P20	Riddhi Mitra	An Amine-mediated Synthesis Strategy for Shape-controlled Cesium Lead Halide Perovskite Nanoplatelets
P21	Chandan Biswas	Ambient Electrocatalytic Urea Synthesis from CO_2 and N_2 Compartmentalized by Cyclic Cu-Trinuclear (Cu3)-Ferrocene (Fc) Networking Porous-Organic-Polymer
P22	Sourav Moyra	Supramolecular Catalysis for Metal-Free Photoelectrochemical Water Splitting
P23	Priyanka Saha	Electrochemical evaluation and profiling of 3D self-assembled mesoporous mixed ternary nickel-cobalt based ferrite microspheres for advanced electrochemical energy storage/ conversion applications
P24	Bikash Mishra	Side-Chain Modulation in Diketopyrrolopyrrole-Based Covalent Organic Frameworks for Fast and Durable Lithium-Ion Batteries
P25	Sourav Singha	Stereoselective Cationic Polymerization of Vinyl Ethers Using a BINAM-Based Chiral Additive

P26	Soumyadip Show	Solvent Mixing-Demixing Mediated Polymorphism and Secondary Nucleation in a Chiral BODIPY System
P27	Sanchita Paramanik	The Electronic Relaxation Dynamics and Electron-Vibration Coupling of Assembled Metal Nanoclusters
P28	Tiyasha Biswas	Thiol–Ene Enabled Surface Immobilization of Hyperbranched Polyglycidol-Grafted Polynorbornene for Functional Antifouling Interfaces
P29	Koushik Banik	Thermo-Electronic Characteristics of Nanocrystalline Metals resolve
P30	Souvik Bag	Designing A New Polymer Containing Metal-Organic Framework (PcMOF) based on H_2BDC-Functionalized Poly(2-methacryloyloxyethyl acetoacetate) and its Application in Dye Adsorption
P31	Praduman Kumar Gupta	Polyaniline Nanocomposites as the Substrate for Electrocatalysis
P32	Supriyo Saha	Effect of Alkyl Chains towards the Formation and Stability of Dithiourethane-Based Single-Chain Nanoparticles
P33	Seetharaman V	Ce-MOF derived nanoceria as peroxidase mimetic towards highly selective electrochemical detection of H_2O_2
P34	Tarun Jana	$PdCl_2$-Triggered Self-Assembly of a Metal-Organic [3]rotaxane from [2]rotaxane Precursor: An Efficient Supramolecular Catalyst towards C-C Cross-Coupling Reactions
P35	Soumyadip Malik	Programming Supramolecular Pathway Complexity through Enantiomeric Excess
P36	Sunetra Karmakar	Amino Acid-Derived Fluorescent Polymers with Solvent- and Structure-Dependent UCST/LCST Behavior and Their Applications
P37	Avanti Chakroborty	Structural Modulation in Covalent Organic Frameworks for Photocatalytic Hydrogen Peroxide Generation
P38	Iti Ghosh	Guest Induced Exfoliation of a Non-Porous Chalcogen Bonded Network
P39	Jishu Pramanik	Engineering Ag-Doped Bi_2MoO_6/CdS Heterostructures for Enhanced Photocatalytic Nitrogen Fixation and Ammonia Production
P40	Yaiswarya Das Karmakar	Engineering Hierarchical Assemblies in Circularly-Polarized Luminescence (CPL)-Emitting Supramolecular Polymers through Surface-Catalyzed Secondary Nucleation

P41	Tamizhvanan R	Engineering the Surface and Interfaces on a Self-supported Electrocatalyst towards Methanol-assisted Hybrid Water Electrolysis
P42	Neha Poddar	G-Quadruplex-Guided Dynamic Covalent Selection and Intracellular Assembly for c-MYC Regulation in Human Colorectal Cancer Cells
P43	Swomi Basu	Small-Molecule Targeting of the KRAS Promoter G-Quadruplex: Mechanisms of Transcriptional Repression and Anticancer Activity
P44	Akashdeep Saha	Gradient Poly(BzMA-grad-DEGMEMA) Copolymers via RAFT Polymerization for Vibration Damping Applications
P45	Soumyadip Mukherjee	Fighting Ferroptosis via Nose to Brain Delivery: QbD-Optimized Deferasirox PLGA Nanoparticles for Mitigating Secondary Injury After Intracerebral Hemorrhage
P46	Deep Kumar Barman	Bioinspired CS–HAP Nanobiocomposites with Thiol and Amine Functionalities for Bone Tissue Regeneration
P47	Mohanraj @ Ayyappan S	Evaluation of Jussiaea repens-Derived Carbon Nanosphere and Its Polyaniline Composites for Biomedical Applications
P48	Priyanka Panigrahi	HA-Functionalized Zn, Se-Co-Doped Hydroxyapatite Nanobiocomposite: Molecular Understanding of Protein Binding and Cellular Behavior
P49	Sagnik Banerjee	Self-assembled cationic amphiphilic peptide-based nanofibrous hydrogel network with dual antifungal–antibacterial activities combating drug resistance and supporting 3D cell culture of mammalian cells.
P50	Ajal K Prakash	Biotin-Functionalized Multi-Stimuli-Responsive Polymeric Prodrug for Receptor-Mediated and Mitochondria-Targeted Codelivery of Camptothecin and Protocatechualdehyde
P51	Rimi Ghosh	Unprecedented LPMO Activity Exhibited by Cu bound Amyloidogenic Peptides
P52	Sudipta Paul	Multifunctional 4D-Printable Boronic Acid-Functionalized Hydrogels for Soft Actuation and Environmental Remediation
P53	Saumili Chakraborty	Pyridyl-Disulfide Decorated Nano-Capsules for Rapid Thiol-Mediated Cellular Uptake and Drug Delivery
P54	Bachchu Mondal	Multi-Responsive Triazole-Based Poly(ionic liquid)s and Poly(zwitterionic Ionic Liquid)s: From Gene Delivery to Antifouling Materials

P55	Pratap Paul	i-Motif DNA Nanoplatform Enables Dynamic Covalent Evolution of Telomerase Inhibiting Ligands
P56	Kushal Bhattacharya	Fine-Tuning RNA Secondary Structure for Therapeutic Intervention: Targeting TERRA G-Quadruplexes to Modulate Telomere Homeostasis
P57	Chandan Kumar	Guanidine-Functionalized Dehydroabietic Acid–BODIPY Polymers for Cancer Theranostics
P58	Dipendu Sarkar	Defect-Engineered Electron-Phonon Coupling in CdS/Zn-BiOCl Z-Scheme Heterostructures for Enhanced Solar Fuel Generation
P59	Kousik Das	Multifunctional Neuromorphic Memristors Based on Epitaxial Antiferroelectric $PbHfO_3$ Thin films
P60	Ariya K Vijayan	Engineering Hollow ZnCo Glycerate Structures through Composition Optimization for Supercapacitor Applications
P61	Hasina Khatun	Memory Effect in Ionic Liquid Gated Two-Dimensional MoS_2 Field Effect Transistors
P62	Ajay Haridas CP	Achieving High-Instantaneous Pulse Power in Contact-Separation TENG via Series Capacitive Voltage Control Architecture
P63	Muhammed Fasil P P	Magnetic Engineering in Two-Dimensional hematene and ilmenene for Efficient Electrochemical Dinitrogen Oxidation
P64	Silve Dasgupta	Deciphering Ultrafast Electron Injection Dynamics in Porphyrin -Based Sensitizers
P65	Prosenjit Roy	Revealing Defect-Mediated Stable Resistive Switching Mechanism in $BaTiO_3/SrRuO_3/Si$ Heterostructures
P66	Prakriti Mishra	Fabrication of Memristive Devices via Electrophoretic Deposition of Solution-Processed 2D Materials
P67	Papri Dasgupta	Evolution of Geometric Frustration in Nanoscale $Gd_2Ti_2O_7$ and $Er_2Ti_2O_7$ Pyrochlores
P68	Akash N Bhuvanendran	Surface modification via Pre-Adsorption Strategy for Enhanced Dye-Sensitized Solar Cell Performance
P69	Nayanika Misra	Guiding Silica Self-Organizations: A Biomimetic Route to Adaptive Nanotubes for Energy Applications