

**Partial List of Accepted Participants for Poster Presentation #MatChem**

| Poster No. | Name                      | Poster Title                                                                                                                                                                   | Email id                                   |
|------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| MC1        | Ranjit Mishra             | Synthesis of sulfur-doped porous carbon for supercapacitor and gas adsorption applications                                                                                     | ranjit.mishra@niser.ac.in                  |
| MC2        | Sahanaz Parvin            | In Situ Cation Intercalation in the Interlayer of Tungsten Sulfide with Overlaying Layered Double Hydroxide in a 2D Heterostructure for Facile Electrochemical Redox Activity. | sehnaz17@gmail.com                         |
| MC3        | NABANITA HAZRA            | Capillary Driven Self-Assembly of Ellipsoidal Composite Microgels at the Air/Water Interface                                                                                   | hazra@pc.rwth-aachen.de                    |
| MC4        | Somnath Das               | Scaling the Perovskite Red Wall: Phase-Stable and Highly Luminescent Red/NIR-Emitting All-Inorganic and Hybrid Perovskite Nanocrystals                                         | dassom08@gmail.com                         |
| MC5        | ARIJIT JANA               | A Hexagonal Propeller-Shaped Silver Nanomolecule                                                                                                                               | arijit1995jana@gmail.com                   |
| MC6        | SUSHMITA CHANDRA          | Modulation of Electronic Structure and Thermoelectric Properties of Orthorhombic and Cubic SnSe by AgBiSe <sub>2</sub> Alloying                                                | sushmita@jncasr.ac.in                      |
| MC7        | Indra Narayan Chakraborty | InP/ZnS Quantum Dots as Efficient Visible-Light Photocatalysts for Redox and Carbon-Carbon Coupling Reactions                                                                  | indra.chakraborty@students.iiserpune.ac.in |
| MC8        | Hridoy Jyoti Bora         | FILM-BASED ELECTRONIC VOLATILE ACID VAPOR SENSOR WITH ULTRAHIGH SENSITIVITY FOR REAL-TIME ANALYSIS                                                                             | hridoyjyotibora.2397@gmail.com             |
| MC9        | Arunavo Chatterjee        | Detailed Photophysical Dynamics of Yellow Emitting Carbon Dots                                                                                                                 | chatterjeearunavo1@gmail.com               |

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|      |                            | Inside Niosomes and Spectroscopic Exploration of a NIR Emitting FRET Pair: A FLIM-FRET Study.                                                                                      |                                        |
| MC10 | Pillalamarri Srikishnark a | Improving the Capture Efficiency of Particulate Matter by Molecularly Charged Electrospun Nanofibers                                                                               | krishnarkasri@gmail.com                |
| MC11 | Vinita Ahuja               | Two-dimensional Mixed Lead/Bismuth Oxychloride Based Materials as Anodes for Sodium-ion Batteries                                                                                  | v.a.ahuja12@gmail.com                  |
| MC12 | Ayan Mondal                | Influence of Vanadate Structure on Electrochemical Surface Reconstruction and OER Performance of CoV <sub>2</sub> O <sub>6</sub> and Co <sub>3</sub> V <sub>2</sub> O <sub>8</sub> | ayanmondal23@gmail.com                 |
| MC13 | Kavita Rani                | Multi-stimuli programmable FRET based RGB absorbing antennae towards ratiometric temperature, pH and multiple metal ion sensing                                                    | ranakavita37@gmail.com                 |
| MC14 | Rishi Verma                | Cold Activation of Bonds by “Hot Electrons” using Solar Light                                                                                                                      | rishi.verma@tifr.res.in                |
| MC15 | SUBHAJIT CHAKRABORTY       | Tyrosine-Templated Dual-Component Silver Nanomaterials Exhibit Photoluminescence and Versatile Antimicrobial Properties through ROS Generation                                     | subhajit16@iiserb.ac.in                |
| MC16 | Rinku Kushwaha             | Exceptional Capacitance Enhancement of a Non-Conducting COF through Potential-Driven Chemical Modulation via Redox Electrolyte                                                     | rinku.rinku@students.iiserpune.ac.in   |
| MC17 | SUPRIYA SAHOO              | Ferroelectricity and Piezoelectric Energy Harvesting of Hybrid A <sub>2</sub> BX <sub>4</sub> type Halogenocuprates                                                                | sahoo.supriya@students.iiserpune.ac.in |

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|      |                | Stabilized by Phosphonium Cations                                                                                                                            |                                         |
| MC18 | Ananya Pal     | Heteroatoms doped spherical porous carbon particles that retain high specific capacitance at high current density                                            | palananyachem@gmail.com                 |
| MC19 | Ankit Samanta  | Sustained generation of peroxide from air by carbon nano onion under visible light to combat RNA virus and hospital pathogens                                | ankitsamanta2011@gmail.com              |
| MC20 | Vishal Kumar   | Room Temperature Synthesis of Nanoparticle and Nanocluster Using Triboelectric Generator                                                                     | vishal040393@gmail.com                  |
| MC21 | Pratik Dhumal  | Graphene-bentonite supported free-standing, flexible membrane with switchable wettability for selective oil–water separation                                 | pratik.dhumal.pd@gmail.com              |
| MC22 | Joy Chatterjee | Intrinsic-to-Extrinsic Emission Tuning in Luminescent Cu Nanoclusters by in-situ Ligand Engineering                                                          | chatterjee.joy@students.iiserpune.ac.in |
| MC23 | Ankit Nagar    | Scalable Drop-to-Film Condensation on a Nanostructured Hierarchical Surface for Enhanced Humidity Harvesting                                                 | ankitnr19@gmail.com                     |
| MC24 | Tanvi Gupte    | Highly-sensitive As <sup>3+</sup> detection using electrodeposited nanostructured MnO <sub>x</sub> and phase evolution of the active material during sensing | tanvi.gupte@yahoo.com                   |
| MC25 | Parul Verma    | Charge-transfer regulated visible light driven photocatalytic H <sub>2</sub> production and CO <sub>2</sub> reduction in                                     | parulisactsg@gmail.com                  |

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|      |                   | tetrathiafulvalene based coordination polymer gel                                                                                     |                             |
| MC26 | Nisha Yadav       | Design of Purely Organic Solid-State Room Temperature Phosphorescence(RTP) Emitters.                                                  | ny97633@gmail.com           |
| MC27 | Ankita Mohanty    | 3D Hierarchical NiCo-MOF: A Potential Electroactive Material for Energy Storage Device                                                | ankitamohanty27@gmail.com   |
| MC28 | Tapas Kumar Dutta | Post-synthetic modification of covalent organic frameworks through in situ polymerization for enhanced capacitive energy storage      | tapas17@iiserb.ac.in        |
| MC29 | Arkaprabha Giri   | When Macrocycle Meets Porous Organic Polymer (POPs): Resorcin[4]arene-based POPs for Selective Molecular Separation                   | arkaprabha16@iiserb.ac.in   |
| MC30 | Sourav Sen        | Designing cellulose based functional materials for green energy related biotechnological applications                                 | sourav.ph18211@inst.ac.in   |
| MC31 | Chetna Tewari     | Conversion of Waste to Wonder Nanomaterials for Bio Imaging, Water Treatment and Iron Sensing Applications                            | chetna.tewari370@gmail.com  |
| MC32 | Shouvik Bhui      | Solid state emitting fluorophore blended portable and reusable polymer matrix for quick detection of ammonia gas and aqueous melamine | bhuinshouvik1992@gmail.com  |
| MC33 | Ashutosh Mohanty  | 'FA and MA Cation Dynamics in APbBr <sub>3</sub> Perovskite'                                                                          | ashutoshmohanty46@gmail.com |
| MC34 | Praveen Kumar     | Design and Fabrication Lead Free Perovskites for Photovoltaic Application                                                             | phd1901131026@iiti.ac.in    |
| MC35 | Jahnabi Gogoi     | Photo-responsive Azobenzene-clay- carbon                                                                                              | gjahnabi@gmail.com          |

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|      |                             | dot doped nanocomposites with tunable electrical properties                                                                                                            |                                 |
| MC36 | Sazzadur Rahman             | Guar Gum and Chitosan cross-linked bio-polymer composite film, potentially used for packaging applications.                                                            | srahman.ngn1994@gmail.com       |
| MC37 | Munshi Sahid Hossain        | Mechanically flexible organic crystals capable of proton conduction act as an electrode                                                                                | munshisahidhossain432@gmail.com |
| MC38 | Ankita Deb                  | Fabrication of Nano-Bio-Conjugate Film using Aloe vera to detect hazardous chemicals found in cosmetics                                                                | anksdb26@gmail.com              |
| MC39 | Gyana Prakash Nanda         | Non-conventional Single Component Thermally Activated Delayed Fluorescence Organo-Gel                                                                                  | gyanananda@IISc.ac.in           |
| MC40 | Upasana Deori               | Hyperfluorescence organic light emitting diodes with high efficiency and color purity                                                                                  | upasanadeori@iisc.ac.in         |
| MC41 | T R Poorani                 | Molecular Docking Study on Europium Nanoparticles and Mussel Adhesive Protein for Effective Detection of Latent Fingerprints                                           | pooranitr08@gmail.com           |
| MC42 | DESISSA YADETA MULETA       | Waterproof pure organic long persistent luminescent that emits green OLPL for more than 8s in water and air                                                            | d_muleta@yahoo.com              |
| MC43 | MD SHAHJAHAN KABIR CHOWDURY | Proton conductivity enhancement of graphene oxide membrane by treating (3 mercaptopropyl)trimethoxysilane and its application as an electrolyte in hydrogen fuel cells | kabir.eu@gmail.com              |
| MC44 | Khaled Alkanad              | CO2 Reduction Selectivity by Constricting a                                                                                                                            | khaledalkanad2018@gmail.com     |

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|      |                    | Switchable Charge Transfer Bi <sub>2</sub> S <sub>3</sub> /TiO <sub>2</sub> /MoS <sub>2</sub> Photocatalyst                                                                                              |                                      |
| MC45 | Sujay Shekar G. C. | Synergetic effect of photo-Fenton and photocatalytic activity by sunlight-driven synthesis of $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> -Fe <sub>3</sub> O <sub>4</sub> /CeO <sub>2</sub> heterostructure | sujayshkr@gmail.com                  |
| MC46 | Nidhi Gupta        | Supramolecular Nanostructures mediated Bioglass Composite as Bone Matrix Mimick                                                                                                                          | nidhigupta87@gmail.com               |
| MC47 | Debashrita Sarkar  | A combined effect of heteroatom incorporation and anion etching in cobalt silicate precatalyst for improved OER                                                                                          | debashrita1chemistry@gmail.com       |
| MC48 | SITHARA GOPINATH   | Shape-Memory Polymer Nanocomposites of Poly( $\epsilon$ -caprolactone) with the Polystyrene-block-polybutadiene-block-polystyrene-triblock Copolymer Encapsulated with Metal Oxides.                     | gopinathsithara@gmail.com            |
| MC49 | Surishi Vashishth  | Single step strategy for crafting tin/carbon soot composite as highly stable Li-ion battery anode                                                                                                        | surishi@jncasr.ac.in                 |
| MC50 | Suchi Smita Biswas | Facts or artifacts: Pitfalls in quantifying sub-ppm levels of ammonia produced from electrochemical nitrogen reduction                                                                                   | suchi@jncasr.ac.in                   |
| MC51 | Pradyut Roy        | Electrostatically Driven Förster Resonance Energy Transfer in an All-Quantum Dot Based Donor-Acceptor System                                                                                             | roy.pradyut@students.iiserpune.ac.in |
| MC52 | Rabindranath Garai | Conjugated Polyelectrolyte-Passivated Stable Perovskite Solar Cells for Efficiency Beyond 20%                                                                                                            | rgarai02@gmail.com                   |
| MC53 | Shazia Nabi        | Template assisted directional growth of Cu                                                                                                                                                               | shaziabhatku85@gmail.com             |

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|      |                       | MOF over heteroatom doped graphene as highly efficient and promising strategy in designing MOF based Electrodes                                          |                                          |
| MC54 | Nilanjana Nandi       | N-Doped Carbon Dots for Visual Recognition of 4-Nitroaniline and Use in Fluorescent Inks                                                                 | nandi176122012@iitg.ac.in                |
| MC55 | Komal N. Patil        | Chemoselective Hydrogenation of Cinnamaldehyde to Hydrocinnamaldehyde over Active and Stable Ni-Cu phyllosilicate@SNTs                                   | patil.komal@jainuniversity.ac.in         |
| MC56 | SURYA M               | GREEN NANOPARTICLES THROUGH BIOSYNTHETIC APPROACH                                                                                                        | suryamaran1199@gmail.com                 |
| MC57 | Saurabh Joshi         | Bioinspired Adenine-Catechol Immobilized Polymer Hydrogel Adhesive for Cell proliferation in 2D and 3D Cell Culture Models.                              | saurabhj@iitk.ac.in                      |
| MC58 | Juri Kalita           | Designing of magnetic nanohydroxyapatite for the degradation of pharmaceutical contaminant                                                               | jurikalita1512@gmail.com                 |
| MC59 | Kangkan Jyoti Goswami | Reduced graphene quantum dot based versatile platform for L-dopa sensing: Fluorescence turn-on, filter paper, and air-stable flexible electronic devices | kangkangswm@gmail.com                    |
| MC60 | Debashree Roy         | Controlling the Aspect Ratios of Au Nanocrystals in Seed-Mediated Synthesis: Why Addition Time of AgNO <sub>3</sub> Matters?                             | debashree.roy@students.iiserpune.ac.in   |
| MC61 | Shabnum Maqbool       | Selective Enhancement of Third-Harmonic Up-Conversion in 1D Hybrid Pyridinium Lead Iodide with Broad Self-Trapped Excitonic Emission                     | shabnum.maqbool@students.iiserpune.ac.in |

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| MC62 | Tariq Sheikh         | Stabilizing Lower Dimensional Lead Halide Perovskites by Intermolecular Cation- $\pi$ Interactions                                                                                                                     | tariq.sheikh@students.iiserpune.ac.in |
| MC63 | priyanka sarkar      | Protein-Activated Transformation of Non-Fluorescent Silver Nanoparticles to Blue and Red-Fluorescent Nanoclusters.                                                                                                     | sarkar18@iitg.ac.in                   |
| MC64 | Ranjit Mishra        | Synthesis of sulfur-doped porous carbon for supercapacitor and gas adsorption applications                                                                                                                             | ranjit.mishra@niser.ac.in             |
| MC65 | Jayoti Roy           | Gas Phase Ion Chemistry of Titanium-Oxofullerene With Ligated Solvents                                                                                                                                                 | jayoti10@gmail.com                    |
| MC66 | Aalok Basu           | Nano-gold tethering boosts amyloid inhibitory activity of natural polyphenols                                                                                                                                          | aalok.albus@gmail.com                 |
| MC67 | Spoorthi B K         | Ambient microdroplet annealing of nanoparticles                                                                                                                                                                        | spoorthibhat1994@gmail.com            |
| MC68 | Subhadeep Das        | Red thermally activated delayed fluorescence in dibenzopyridoquinoxaline-based nanoaggregates                                                                                                                          | subhadeep19@iiserb.ac.in              |
| MC69 | Swadhin Garain       | Ambient Triplet Harvesting of Purely Organic Chromophores based on Arylene mono and diimides                                                                                                                           | swadhingarain94@gmail.com             |
| MC70 | Manzoor Ahmad Pandit | Template free-synthesis of cobalt-iron chalcogenides [Co <sub>0.8</sub> Fe <sub>0.2</sub> L <sub>2</sub> , L = S, Se] and their Robust Bifunctional Electrocatalysis for Water Splitting Reaction and Cr(VI) Reduction | panditmanzoor14@gmail.com             |
| MC71 | Athma E P            | Prudent electrochemical pretreatment to promote OER by catalytically inert "Iron incorporated metallic Ni nanowires                                                                                                    | athmaep@gmail.com                     |



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| MC72 | SUSOBHAN<br>DAS   | Harnessing molecular rotations in plastic crystals: a holistic view for crystal engineering of adaptive soft materials | dassusobhan.chem@gmail.com |
| MC73 | Rahul<br>Mahashya | Unconventional TADF based poly(aryl ether ) dendron.                                                                   | rahul17305@iisc.ac.in      |
| MC74 | Angana<br>Borbora | Fabrication of orthogonally reactive micron/ sub-micron capsules                                                       | borboraangana@gmail.com    |