Day 1: 09.01.2024

Sl. No	Poster No	Name	Institute	Title
1	2D-1	Utsa Sarkar	INST	Nanoconfined 1D-Monoelemental Tellurium in Nanocomposite Fibers: An Efficient Approach for Mechanical Energy Harvesting
2	2D-2	Ashis Kumar Panigrahi	IOP Bhubaneswar	Layer-Dependent Vibrational Properties of MoS2-WS2 Vertical Heterostructures and Insights into Exciton Dynamics
3	2D-3	Bidyadhar Das	NISER Bhubaneswar	Superconducting and Magnetic properties of NiBi3 thin films synthesized by coevaporation technique
4	2D-4	Kritika Ghosh	IIT Kharagpur	Implications of Epitaxial High-K Dielectric Gd2O3 thin films on Optical Properties of MoSe2 Monolayer
5	2D-5	Chumki Nayak	Bose Institute	Generation of Spin Coupled Valley Photocurrent in Alloy Transition Metal Dichalcogenide MoS 2x Se 2(1−x)
6	2D-6	Nabarun Mandal	IIT Kharagpur	Dual-Wavelength Amplified Spontaneous Emission from Interface Engineered Polymer Films using Atomically Thin Red Coral
7	2D-7	Ayushi Tripathi	HRI	Theoretical Investigation of Pressure Induced Oscillatory Band-gap in Onedimensional Lead-free Halide Perovskite: CsCu2I3
8	2D-8	Anyesha Chakraborty	IIT Kharagpur	Trace Detection of Ciprofloxacin in Milk by Label-free Raman Enhancement using Two-dimensional Magnesiochromite
9	2D-9	Dilip	IIT INDORE	External Stimuli Driven Electronic Properties Tuning in two-dimensional Ag2ReCl6: Towards Efficient HER Activity
10	2D-10	Swastik Sahoo	IIT BOMBAY	Demonstration of Spin Hall Angle in monolayer Xenes
11	2D-11	Abhijith	IIT Kharagpur	Aliovalent dopant engineering in 2D transition metal dichalcogenides
12	2D-12	Sourav Paul	IIT Kharagpur	Spectroscopic signatures of layer rotation and grain boundaries in WSe2
13	2D-13	Chinmayee Chowde Gowda	IIT Kharagpur	Two-dimensional Manganese di-telluride based Triboelectric Nanogenerator
14	2D-14	Vineet Pandey	IIT Kharagpur	Probing interlayer interactions and commensurate-incommensurate transition in twisted bilayer graphene through Raman spectroscopy
15	2D-15	Prajna Paromita Chanda	IIT Kharagpur	Stacking Dependent Transport Properties in CVD-Grown Tungsten Selenide (WSe2)
16	2D-16	Vibhu Arora	IISER Kolkata	Carriers induced Phase transition in WS2
17	2D-17	Suman Kumar Chakraborty	IIT Kharagpur	Phonon Dynamics in Engineered Moiré Superlattice
18	2D-18	Shreya Paul	IIT Kharagpur	Study of a few-layer ReS2 ferroelectric semiconductor field-effect transistor
19	DEV-1	Jagritee Talukdar	IIT Bombay	Performance enhancement of donor impurity integrated MoS2 based TFET photosensor through dielectric alteration
20	DEV-2	Nupur Saxena	IIT Jammu	CdS/ZnS core/shell nanostructures based broadband Photodetector
21	DEV-3	Subham Saha	IIT Kharagpur	Enhanced Resistive Switching in Halide Perovskite-based Memristor
22	DEV-4	Ajith Nix ESR	SRM	Unravelling Magnetism and Phase Transition in the Weakly Frustrated CantedAntiferromagnet Copper Pyrovanadate
23	DEV-5	Deepak Kumar Sahu	IIT Kharagpur	Gold nanoparticle-assisted ternary alloy Mo0.5W0.5S2-p Si verticalheterojunction photodetector via surface plasmon resonance

24	DEV-6	Suvadip Masanta	Bose Institute	Monolayer Graphene–MoSSe van der Waals Heterostructure: APromising Platform for Highly Responsive Near-Infrared-SensitiveBroadband Fast Photodetection
25	DEV-7	Nikita Chaudhary	INST	Silicon Distyryl-BODIPY Hybrid Photodiode: Moving a Step Ahead from Organic Interface Layer to Type II Band Alignment
26	DEV-8	Subhabrata Das	INST Mohali	Nanocluster decorated Graphene Based Self-Powered Respiratory Monitoring Device
27	DEV-9	Seema Rani	INST	Tailoring Dangling Defects of SnSe Based Metal-Semiconductor-MetalDevices: Harnessing Environmental Influence Towards Photodetector andHumidity Sensor
28	DEV-10	Sachin Kumar	IIT Kanpur	Dense oxygen plasma irradiation of platinum for improved charge to spin conversion efficiency
29	DEV-11	Purbasha Ray	IIT Kharagpur	2D MoSe2-WSe2 Lateral Heterostructure Based Emerging Electronics
30	DEV-12	Ayush Kumar Gupta	IIT Kanpur	Spin Hall oscillators for Neuromorphic computing
31	DEV-13	Ranjeev Kumar Parashar	IIT Kanpur	Probing the influence of counter ions in viologens on the electrochromic performance
32	DEV-14	Amrendra Kumar	IIT Kanpur	Unconventional spin polarization at Argon ion milled SrTiO3 Interfaces
33	DEV-15	Surbhi Ramawat	IIT JODHPUR	β-SrZrS3: A superior intermediate temperature thermoelectric through complex band geometry and ultralow lattice thermal conductivity
34	DEV-16	Arpita Roy	IIT PATNA	A Novel Supramolecular Ni(II)-Metallohydrogel based Resistive Random Access Memory Device with High Endurance
35	DEV-17	Kiruthiga Devi B	SRM	Exploring the nature of ferrimagnetic material of Ni4-xCoxNb2O9 ($0 \leq x \leq 2$)
36	DEV-18	Himadri Nandan Mohanty	IIT Hyderabad	EBL patterned Nafion electrolyte-based proton-gated synaptic transistors
37	TFT-1	Rajlakshmi	IIT Kharagpur	An innovative bioprocessing of ramie fibre
38	TFT-2	Souvik Das	IIT Kharagpur	Sisal Fiber Carboxylated Nitrile Butadiene Rubber (XNBR) Composites for Advanced Applications
39	TFT-3	Bidya Mondal	INST	On Demand Piezoelectric Smart Textiles for Point-of-care Diagnostics
40	FM-1	Sibani Mahapatra	IIT Kharagpur	4D Printing of Shape Memory Polymer Blends: Optimization, Characterization, and Performance Analysis
41	FM-2	Sangita	IIT Kharagpur	Designing a Mechanically Robust, Stimuli responsive Functional Hydrogel through Dynamic Metal-Ligand Bonding and Freeze-Thaw Technique
42	FM-3	Ashis Ghosh	IIT Kharagpur	Synthesis of a Multifunctional Hydrogel Using Dynamic Metal-Ligand Interaction and Hydrophobic Association
43	FM-4	Debajyoti Palai	IIT Kharagpur	Exploring the Mechanical, Tribological, and Biodegradation Behavior of the Zn- Based Alloys in Different Physiological Body Fluids
44	FM-5	Rohit Kumar	IIT BOMBAY	Unleashing the potential of two-dimensional semiconducting transition metal dichalcogenides for advanced energy device applications
45	FM-6	Aiswarya Priyambada	KIIT Odisha	First Principle study of structural and electronic properties at the Interface of (Ca2VMoO6)/(La2MnVO6) Double Perovskite Superlattices

46	FM-7	Swagatika Mohanty	KIIT Odisha	Structural, electronic and magnetic properties of La2Co1-xZnxMnO6 (**0 ≤ x ≤ 0.15**) double perovskites
47	FM-8	Prosun Mondal	IIT BHU	Multiferroic Composites: Unlocking the Potential of Dual Property Materials
48	FM-9	Nishtha Vats	IIT Jodhpur	Ca, Al, and Mn Substituted Strontium Hexaferrite (SrFe 12 O 19) for Rare Earth Free Permanent Magnet Applications
49	FM-10	Seshadev Barik	VSSUT	Structural evolution and Glass Forming Ability of Zr-Ag Alloys by using MD Simulations
50	FM-11	Konthoujam Priyananda Singh	NIT MANIPUR	Unveiling the magnetic properties of Imidazole capped Iron oxide nanoparticles at different Iron concentrations and its application in hyperthermia
51	FM-12	Ashish Omar	IISc Bangalore	Microstructural Evolution of DC Magnetron Sputtered Nb Thin Films: Interplay of Deposition Parameters and Structure Zone Transitions
52	FM-13	Sambit Kumar Biswal	IIT Patna	Reversible and Large Magnetocaloric effect in Si substituted MnNiSn-based Heusler alloy
53	FM-14	Amrendra Kumar	NIT ROURKELA	Synthesis and characterization of (Ba2Zn2Fe12O22) (0.5)(MgFe2O4)(0.5) ferrite composite for high frequency antenna application
54	FM-15	Srujan S Sapkal	DIAT Pune	Machine learning aided accelerated prediction and experimental validation of functional properties of K1-xNaxNbO3-based piezoelectric ceramics
55	FM-16	Indrajit Pal	Visva-Bharati University	Fabrication of semiconducting devices by implementing Nitroterephthalic acid directed mechanically flexible supramolecular Co(II)/Cu(II)-metallogel systems
56	FM-17	Debashis Das	MSCB University	rGO-[BiXFe(1-X)]2O3 - A potent photocatalyst for the degradation of crystal violet and evaluation of antibacterial efficiency
57	FM-18	Mukhesh	CeNS bengaluru	Fabrication of Large-Area, Affordable Dual-Function Electrochromic Smart Windows by Using a Hybrid Electrode Coated with an Oxygen-Deficient Tungsten Oxide Ultrathin Porous Film
58	FM-19	Athira Chandran M	CeNS bengaluru	Pt-Pd-Co-Mn-Ni High Entropy Alloy as an Efficient Saline Water Electrocatalyst for Hydrogen Evolution Reaction
59	FM-20	Pritha Dutta	CeNS bengaluru	Dual-Functional Electrochromic Smart Window using g WO3·H2O-rGO Nanocomposite Ink Spray Coated on Low-Cost Hybrid Electrode
60	FM-21	Kazi Parvez Islam	IIT Kharagpur	Antisite disorder-induced suppression of Exchange Bias in hole doped R 2 CoMnO 6 double perovskite system (R = rare-earth atom)
61	FM-22	Arghyadeep Das	IIT Kharagpur	Investigation of the origin of the pyroelectric current of spinel ferrite compounds
62	FM-23	Suryakanta Mishra	IIT Kharagpur	Structural origin of room temperature ferroelectricity in spark-plasma sintered GdCrO3, and related rare-earth chromates
63	FM-24	Priyanka Maji	IIT Kharagpur	Emergent field induced volatile resistive switching (RS) effect in Mott insulator titanate spinel
64	FM-25	Rupam Sahoo	IIT Kharagpur	Coordinated Water Molecules Induced Solid-State Superprotonic Conduction by Highly Scalable and pH-Stable Coordination Polymer (CP) and Metal-Organic Framework (MOF)
65	FM-26	Shuvendu Shuvankar Purohit	VSSUT	In vivo Wound Healing in Drosophila Melanogaster and Mouse models: Synergistic Effect of Bovine Serum Albumin and Graphene Quantum Dots

66	FM-27	Krishna Manjari Sahu	VSSUT	Sustained Release of Ciprofloxacin Mediated by **β**-cyclodextrin Modified CQD/Dextran based Hydrogels via Host-guest Mechanism
67	FM-28	Anuradha Biswal	VSSUT	Synergistic Effect of f-MWCNT and Nano Titania on Wound Healing Efficacy of Chitosan Films in Drosophila and Rat Models
68	FM-29	Pankaj Parmar	IIT Kharagpur	Pyrolytic conversion of waste biomass towards sustainable and alternate energy
69	FM-30	Soumyajyoti Mondal	IISc Bangalore	Giant electrostriction in bulk RE (III) substituted CeO2: effect of RE 3+ and its concentration
70	FM-31	Boris Wareppam	NIT Manipur	A Raman spectroscopy study for significant single magnon scattering in plasma- exposed ZnO and -Fe2O3 composite.
71	Cer-1	Arjun Mahato	IIT Kharagpur	Estimation of β-transus temperature of Ti-6Al-2V-1Fe-1Cr alloy
72	Cer-2	Saumya Gupta	IIT Kharagpur	Orientation based spheroidization response in thermo-mechanically processed Ti-6Al-4V alloys
73	Cer-3	Anant Shukla	IIT PATNA	Microstructural and Multiferroic Properties of (x)NiFe2O4 - (1-x) Ba0.9Sr0.1TiO3 Composites
74	Cer-4	Sushree Nibedita Rout	IIT Patna	Tuning of (BH)max and Magnetic Anisotropy in Microwave Sintered StrontiumHexaferrite by Al-Substitution
75	Cer-5	Divya Kumari	A N College Patna	Revealing the role of Ti in the magnetic behavior of double perovskite Sr2FeTiO6: A spectroscopic study
76	Cer-6	Subhra Kanti De	IIT MADRAS	Hydrogen adsorption by a porous bimetallic solid solution carbide MAX phases synthesized in an open atmosphere
77	Cer-7	Anupama	IISER KOLKATA	Investigation of many-body interaction governed ultrafast hole relaxation dynamics in CuS and photocatalytic efficiency-enhanced CuS/Ag2S nanocomposites
78	Cer-8	Srijan Mondal	IIT Madras	Formation Mechanism and Thermal Stability of Ternary Metal Boride: WAlB
79	Cer-9	Ankush Kumar	IIT Patna	The effect of biomass gasifier residue on the mechanical strength of cementitious composites
80	Cer-10	Waghchoure Nehal Ashok	BITS Pilani	Nanocrystalline Mn-doped Ba0.98Sr0.02SnO3 solid solution: Exploring challenges in the study of microstructure and optical properties
81	Cer-11	Priyankari Bhattacharya	Jadavpur UNIVERSITY	Development of CuO NP coated ceramic ultrafiltration membrane forremediating estrogens from water
82	Cer-12	Md Kashif Shamim	A N College Patna	Structural and Magnetic behavior of LaBiSrMnO3-NiFe2O4 Composite Ceramics
83	Cer-13	Ruchi Rashmi	A N College Patna	Role of cationic charge disordering in magnetic and electric response of ferroelectric perovskite BiFeO3-BaTiO3
84	S&N-1	Soumavo Sikder	NIT ROURKELA	Al2O3 - PMMA composite inspired by abalone nacre with improved mechanical properties
85	S&N-2	Suprakash Rabha	IASST GUWAHATI	Sustainable Removal of Lead Ions and Basic Fuchsin Dye from Water Using Lippia alba Leaves for Environmental Remediation
86	S&N-3	Aiswarya Sahu	IIT Jodhpur	Fabrication of Extreme Temperatures Stable Superhydrophobic Coating on HVOF Thermal Sprayed WC-12%Co/SS316 to Mitigate Chemical Fouling in Metallic Bodies
87	S&N-4	Indrajit Mohanta	NIT ROURKELA	Folic Acid Tetramers: Robust yet dynamic supramolecular polymers reinforced by salting out with external kosmotropic salts

88	S&N-5	Nihar Sahu	NIT ROURKELA	Ferrocene: an Exciting Building Block for Designing Supramolecular Assemblies
89	S&N-6	Angela Andoh	CSIR-Gujarat	PREPARATION OF TRIAZOLE BASED METALLOGEL AND IT DERIVED XEROGEL: STUDIES ON REMOVAL OF ANIONIC DYES FROM AQUEOUS SOLUTION AND SOLVENT-FREE CO2 CYCLOADDITION
90	S&N-7	Priyanka Priyadarshani Samal	IIT Patna	Self-Assembly of Alkylated Azo-benzene Molecules at Air-Water Interface
91	S&N-8	Himangshu Paul	IIT Patna	Controlling the nanoarchitecture of self-assembled oxadiazole integrated heterocoronene based discotic liquid crysta
92	S&N-9	Srikanta Debata	IIT Bhilai	pH-responsive multimode dynamics of light-powered rod-shaped microswimmers
93	TM-1	Saumen Chaudhuri	IIT Kharagpur	Mechanical Strain Driven Improvement in the Thermoelectric Performance of ML-MoS2
94	TM-2	Ganesh Sahadeo Meshram	IIT Kharagpur	Hydrophobicity Analysis of the Patterned Structures of the Materials Using Lattice Boltzmann Method
95	TM-3	Subhankar Sikder	IIT Kharagpur	Effect of three-member methyl groups on mechanophores dissociative energy by quantum mechanochemistry
96	TM-4	Vivek Dey	IISc	Physical modeling of avalanches in 2D Ag-hBN neuromorphic platform
97	TM-5	Prakash G	SRM Chennai	Clerite: A natural mineral with potential thermoelectric performance
98	TM-6	Sushree Ipsita	ITR Bhubaneswar	High Tunneling Electro-resistance Ratio of a typical Pt/STO/BTO/SRO Ferroelectric Tunnel Junction
99	TM-7	Vikas Singh Thakur	IIT ROORKEE	Strengthening Magnesium-Ion Batteries with Structurally Rigid Black Phosphorus for Superior Anodic performance
100	TM-8	Arpit Bhojraj Mendhe	DIAT Pune	Machine learning assisted prediction and experimental validation of the electrochemical performance of NiCo(OH)2-PANI composite
101	TM-9	Md Nur Hasan	S N Bose	Resolving Disputes in Rhenium Dichalcogenides: A First-principles Study
102	S&H-1	Biswajeet Nayak	IIT Kharagpur	Controlled Growth of large area 2D Transition Metal Dichalcogenides and Lateral Heterostructures, and their Electrical Characteristics
103	S&H-2	Deepika K N	IIT Kharagpur	Fe-assisted low temperature synthesis of SiC nanowires
104	S&H-3	Sudipta Khamrui	IIT Kharagpur	Study of Spin Localisation and Charge Transport in Hydrothermally Synthesised 2H-MoS2
105	S&H-4	Subhadip Ghosh	IIT Kharagpur	Vacancy Induced Photoluminescence of SnTe and V doped SnTe Topological Insulating Semiconductor
106	S&H-5	Shaona Bose	IIT Kharagpur	Atomically resolved decomposition pathway of electron-irradiated Cu-doped CsPbI3 nanocrystals
107	S&H-6	Girija Shankar Jena	IIT Kharagpur	A facile synthesis of ternary CuS@Ag/Bi2WO6 nanocomposite for photoreduction of Cr (VI) and degradation of tetracycline
108	S&H-7	Upali Aparajita Mohanty	Siksha O anusandhan University	Unveiling Peroxymonosulfate Activation by CoFe LDH p-n Heterostructure for Enhanced Photocatalytic Degradation of Sulfadiazine
109	S&H-8	Rajalaxmi Nath	NIT DURGAPUR	Synthesis of Nd-doped TiO2 photocatalyst for efficient removal of tetracycline antibiotic in wastewater under visible light irradiation
110	S&H-9	Aastha Singh	IIT Mandi	Solution-processed p-type CuGaO films towards thin film transistor application

111	S&H-10	Kritika Sharu	IISER Thiruvanathapuram	Leveraging Plasmonic Hot Electrons to Quench Defect Emission in Metal - Semiconductor Nanostructured Hybrids
112	S&H-11	Vinit	IIT ROPAR	High-performance broadband photodetector based on PtS/a-Ga2O3 heterostructures and impact of band-alignment
113	S&H-12	Anjan Kumar N M	IISER Kolkata	Carrier trapping dynamics in CoV2O6 using ultrafast non-degenerate pump probe spectroscopy
114	S&H-13	Badri Prasad Gatadi	IIT Ropar	Anomalous shift from negative photocurrent to positive photocurrent in FeSi2/Ga2O3 heterostructure based solar-blind photodetectors
115	S&H-14	Jyotirmayee Sahu	ITER SOA Bhubaneswar	Compositional Engineered Cd-Mo-Se Alloyed QDs for Photocatalytic H2O2 Production with Detailed Mechanism
116	S&H-15	Aradhana Panigrahi	IIT Patna	Understanding the Role of Charge Transfer in CsPbBr3 Perovskite Quantum Dots on Current Conduction
117	S&H-16	Subham Das	JNCSR BANGALORE	Tunable sp-d exchange interaction in Mn doped Dilute Magnetic Semiconductor (DMS) Nanocrystals (NCs)
118	S&H-17	Choudhury Abinash Bhuyan	University of Hyderabad	THz generation and charge-transfer in monolayer MoS 2 /GaAs heterostructure

Day 2: 10.01.2024

Sl. No.	Poster No	Name	Institute	Title
1	2D-19	Deep Jyoti Sapkota	IIT Jodhpur	Electronic and thermoelectric properties of Janus SbTeI monolayer
2	2D-20	Alok Kumar	IOP Bhubaneswar	Identification of H-type (AA') and R-type (AB) WS2 bilayers and twin boundaries using low and high-frequency Raman analysis
3	2D-21	Parbati Senapati	IIT PATNA	Enhancement of the spin thermoelectric properties in ring quantum dot junction by the magnetic field
4	2D-22	Bhagyashri Gaykwad	IIT Gandhinagar	High Energy Ball Milling Enables Scalable Exfoliation of Layered Titanium Diboride
5	2D-23	Sankalpa Bora	HRI	Theoretical investigation of Pressure-Driven Band gap narrowing in Onedimensional lead-free Halide Perovskite: Cs3Cu2I5
6	2D-24	Anshul Rasyotra	IIT Gandhinagar	Vacancies in TiB2 nanosheets facilitate Nitrogen chemisorption
7	2D-25	Minushree Rout	IIT Kharagpur	Role of Chemical Vapor Deposition Process Parameters for the Large Area Growth of Two-Dimensional MoSe2
8	2D-26	Sumit Kukreti	IIT JODHPUR	Strain-engineered thermophysical properties ranging from band-insulating to topological insulating phases in-antimonene
9	2D-27	Vidushi Chaudhary	IIT Kharagpur	In-situ defect passivation of 2D Lateral Heterostructures using one-pot synthesis strategy
10	2D-28	Ankit Bansal	IIT Madras	Electronic structure evaluation of BiXY type 2D Janus materials
11	2D-29	Bhabani Sankar Sahoo	IIT Kharagpur	The Growth of Two-Dimensional WSe2 on Different Oxide Dielectrics Deposited via Electron Beam Evaporator
12	2D-30	Ayan Mondal	IISER Kolkata	Pressure induced flatbands in large angle twisted bilayer graphene
13	2D-31	Puspita Parui	IISER Kolkata	Linear transverse electric field induced quantized conductance in GNR
14	2D-32	Umakanta Patra	IIT Bombay	Large area continuous bilayer MoS2 film grown by chemical vapour deposition technique
15	2D-33	Durgabatee Rout	IIT Jodhpur	Accordion like Multi-layered Ti 3 C 2 T x MXene Synthesis via Selective Etching of Metal Layer from parent MAX Phase
16	2D-34	Sovan Ghosh	IISER Kolkata	Orbital Hall Conductivity in Bilayer Graphene
17	2D-35	Soumya Mukherjee	IISER KOLKATA	Defect-bound exciton-exciton annihilation assisted ultrafast carrier dynamics in 2H–MoSe2 and Cr doped 1T/2H–MoSe2 nanosheets
18	2D-36	Papi Sarkar	JADAVPUR UNIVERSITY	Study on the effect of synthesis temperature on quality of two dimensional MXene
19	2D-37	Payal Bhattacharjee	IEM Salt Lake	Spectrum of gyrotropic modes and energy transmission between dipolarcoupled magnetic vortices in a square lattice via triggered vortex gyration: A promise for the spintronics technology
20	2D-38	Sarga P K	BITS Pilani	Electronic and interfacial properties of 2-dimensional MXene/blue phosphorene heterostructures and effect of external tuning parameters
21	2D-39	Karthik HJ	BITS Goa	Electric field tunability of band gap - Single and double polyyne chains

22	2D-40	Sayan Routh	SNBNCBS	Magnetic and magnetotransport properties of HoAl2Si single crystal
23	2D-41	Neelam Gupta	IIT Patna	Twistronics in two-dimensional transition metal dichalcogenide (TMD)-based van der Waals heterostructures
24	2D-42	Nihar Ranjan Sahoo	IIT Bombay	Far field excitation of Polaritons in Photonic Hypercrystals of van der Waals Materials
25	2D-43	Prahalad Kanti Barman	IIT MADRAS	High degree of spin-polarization in distorted PbI2: A Rashba-induced effect
26	2D-44	Priyanka Sinha	IISER KOLKATA	Magnetotransport properties of twisted bilayer graphene in the presence of electric and magnetic field
27	2D-45	Pritam	IIT Kharagpur	Unveiling the Optical Properties of Anisotropic 2D Materials
28	DEV-19	Kowsalya M	SRM	Coexistence of short- and long- range interaction in Mn1.5Cr1.5O4: A low-temperature magnetocaloric material
29	DEV-20	Gulshan Kumar Verma	IIT JODHPUR	Parametric Analysis of Semiconducting Nanowires Grown on Flexible Substrate for Low Temperature Gas Sensing
30	DEV-21	Indranil Maity	IIT PATNA	Multi-level Volatile Threshold Resistive Switching of LaCoO3 and Biomassderived Carbon Nanomaterial Residue Nanocomposite
31	DEV-22	Kajol Sahoo	IOP	Stable and luminescent cesium copper halide nanocrystals embedded in flexible polymer fibers for fabrication of downconverting WLEDs
32	DEV-23	Samiksha	IIT Bombay	Influence of Elevated Growth Temperature on seedless Hydrothermal Synthesis of ZnO Nanorods on Flexible substrate: Emergence of Nanoflower Structures
33	DEV-24	Priyanka Dubey	IIT Patna	Importance of Charge Transfer in CsPbBr3 Perovskite Nanocrystals for Optoelectronic Applications
34	DEV-25	Samayun Saikh	IIT Patna	Simultaneous Extraction of Charge Carrier Mobility and Total Contact Resistance in an Organic Field Effect Transistors
35	DEV-26	Anwesha Mahapatra	IIT Patna	Realization of artificial synapse using a gap-type atomic switch
36	DEV-27	Nikhitha Rajan	IIT Patna	Resistive switching in LaMnO3 based organic inorganic hybrid devices
37	DEV-28	Rahuldeb Roy	CeNS	Interlayer Water of Tungsten Oxide Unlocks the Jahn-Teller Distortion to Boost the Performance of Aqueous Electrochromic Battery
38	DEV-29	Santi Prasad Rath	IISc	Molecular Engineering of Memristors
39	DEV-30	Baisali Kundu	IIT Kharagpur	Optoelectronic Study of 2D-lateral Heterostructures
40	DEV-31	Md Saifuddin	NISER	Nanoparticle Organic Network Mediated Enhanced Optoelectronic Properties of Semiconducting Polymer Field Effect Transistors
41	DEV-32	Rajdeep Banerjee	IIT Kharagpur	Low-Voltage driven organic phototransistor based on high k Tb3+ doped LaPO4 nano-particle PMMA composite
42	DEV-33	Satayender K. Sangwan	IIT Kharagpur	Effect of mixed solvents on dielectric behaviour of Poly (methyl methacrylate) gate in Organic Field Effect Transistors

43	DEV-34	Rabeya Basori	IIT Kharagpur	Optoelectronic Performance enhancemnent in SiNWs/SnSe2 heterostructure photodetector by active interface modification
44	EM-1	Siddheswar Rudra	IIT Kharagpur	Facile Hydrothermal Synthesis of Highly-Efficient Electrocatalysts Toward Oxygen Evolution Reaction
45	EM-2	Animesh Mandal	IIT Kharagpur	Enhanced Gravimetric capacitance in Two-Dimensional Additive Free Titanium Carbide Mxene
46	EM-3	Pritam Sinha	BOSE INSTITUTE	Nano-sheet like MoS2 as a counter electrode for next generation Pt-free Dye-Sensitized Solar cells (DSSCs)
47	EM-4	Sachit Kumar Das	VSSUT ODISHA	Effect of clay on TiO2 embedded PMMA nanocomposite for energy storage application
48	EM-5	Praveen Kumar	IIT Kharagpur	Growth and Characterization of 2D TMDs for Supercapacitor Applications
49	EM-6	Kumar Sanket	NIT Rourkela	Synthesis and electrochemical characterisation of porous Si/C composite as an anode material of Li-Ion battery
50	EM-7	Shubham Sahoo	IIT patna	First principle exploration of twisted hBN-NbSe2 hetero-structure and application as an electrode for Li-ion battery
51	EM-8	Shivam Shukla	IIT Kharagpur	Cu1-xNix (x = 0, 0.5, 1) nanoparticles and their nanocomposites with elastin protein for energy storage device applications
52	EM-9	Vanshika Handuja	IIT Delhi	Functionalized Fibrous Material for High Performance Supercapacitor
53	EM-10	Pratyusha Das	IACS	Facile in-situ growth of spore-like silica on layered MXene sheets for potential application in Supercapacitor
54	EM-11	Pranay Chandra Mandal	University of North Bengal	CTF Stabilized Cu2O Nanocrystals and SnO2 Nanoparticles Assisted Photocatalytic CO2 Reduction in a Hybrid Cu2O/SnO2/CTF Nanostructures
55	EM-12	Gourab Hati	IIT Kharagpur	Facile synthesis of NiSe and Iron oxide decorated rGO-MWCNT nanocomposite as electrode materials for high performance all-solid-state asymmetric supercapacitor application
56	EM-13	Nil Lohit Sengupta	IIT Kharagpur	Fabrication of PVDF-BASED flexible piezoelectric nanogenerator utilizing waste material for mechanical energy harvesting
57	EM-14	Ajay Kumar	IIT Patna	Thermoelectric study of Graphenylene Nanoribbons: A First Principle Study
58	EM-15	Sudhir Kumar	IIT Kharagpur	Copper and Sulfur Doped NiCo-LDH for High-Performance Supercapacitor Electrode
59	EM-16	Aswini Bera	IIT Kharagpur	Assemble of an asymmetric supercapacitor device based on a spherical honeycomb like ZnMn2O4@Ni(OH)2 hybrid core-shell electrode material with superior electrochemical performances
60	EM-17	Jayshree Panda	ITER Bhubaneswar	MgIn2S4 decorated MOF-derived C/N-CeO2 nanorod heterojunction as efficient photocatalyst towards O2 reduction reaction.
61	EM-18	Ankita Mondal	IIT Kharagpur	Design and fabrication of high-performance asymmetric supercapacitor device utilizing MOF-derived Ni2CuO3/CuO nanocomposites as electrode material
62	EM-19	Shweta	IIT ROORKEE	Lithium and Sodium Superionic Conduction in Metal Borohydride Framework

63	EM-20	Amit Kumar Nayak	IIT Kharagpur	NiSe2 Nanooctahedron on Nickel Foam as an Efficient Bifunctional Electrocatalyst for Overall Water Splitting
64	EM-21	Arkapriya Das	IIT Kharagpur	Exploring synergistically enhanced dual performance of Cu2S/NiS/Ni3S4 aselectrode for hybrid supercapacitor device and catalyst for overall water splitting in alkaline and neutral media
65	EM-22	Unmesha Ray	IIT Kharagpur	Electrochemical performance of electrophoretically deposited cobalt/ zinc antimony oxide-carbon black negative electrodes for lithium-ion batteries
66	EM-23	Supriya Mondal	IIT Kharagpur	Porous and chemically robust MIL-100(V) MOF as an efficient cathode material for zinc ion batteries
67	EM-24	Subhashree Mohapatra	UTKAL UNIVERSITY	Influence of Selenide Variation on Performance of Mixed Metal Selenides for Supercapattery Applications
68	EM-25	Sthitapragyan Patnaik	IIT Kharagpur	Solvent Variated BMO Nanoflakes: An Efficient Electrocatalyst for Enhanced Nitrogen Reduction towards Ammonia Synthesis
69	EM-26	Sachidananda Mohapatra	IIT Delhi	Metal fluoride decorated carbon material for lithium sulfur batteries.
70	EM-27	Parna Maity	IIT Kharagpur	A flexible Self-powered Asymmetric Supercapacitor Power cell prepared byMOF derived Ni-Cu-Hydroxide with Onion scale as an effective piezoelectric separator
71	EM-28	Aashish Joshi	IIT Delhi	Mitigation of Shuttle Effect in Lithium-Sulfur Batteries Using Perovskite LeadZirconate Titanate (PbZr0.52Ti0.48O3) Nanofibers
72	EM-29	Anshu Kumari	NIT Warangal	MnCo-based MOF-Derived Materials as Anode Material for Methanol Oxidation and Oxygen Evolution Reaction
73	EM-30	Aparna Paul	CSIR-CMERI	Hydrothermal synthesis of MnS/rGO composite as high-performance anode material for supercapacitor application
74	EM-31	Ujjwal Phadikar	NIT Durgapur	Sulfur scrambling assisted in-situ growth of 3D - hierarchical FeNi2S4@Mo-doped Ni3S2/NF nanosheet arrays: A stellar performer towards alkaline water electrolysis
75	EM-32	Srijib Das	NIT Durgapur	Rationally Engineered Mn-O-Co High-Entropy-Interfacial Sites for Multifunctional Catalysis and High Performance Zn-Air Battery
76	EM-33	Sumana Bandyopadhyay	IIT Delhi	Electrospun fibre Reinforced Polymer Electrolyte with Dual Anion Synergy for All-Solid-State Lithium Metal Batteries
77	EM-34	Debasree Chowdhury	Bose Institute.	Engineering Porous Nanostructures on FTO as a Promising Host for Enhancing Light Harvesting Capacity in Dye-Sensitized Solar Cells
78	EM-35	Prem Pal Singh	IIT Kharagpur	Bio-Inspired Smart Composite Architecture for Thermally Tunable Green EMIShielding
79	EM-36	Partha Kumbhakar	Christ University Bangalore	2D ZnO decorated 3D printed device for Energy Harvesting
80	EM-37	Sk Imran Ali	University of Kalyani	Ni0.779SbF3(SO4): A New Electrode Material for Electrochemical Supercapacitors
81	EM-38	Dr Moumita Naskar	Central Power Research Institute	Performance evaluation of thermoplastic elastomeric encapsulation material for photovoltaic module

82	EM-39	Shobana M. K.	VIT	Electrochemical comparison of single-crystalline nickel-rich NMC-83 andNMC-88 cathode materials for lithium-ion batteries
83	Poly-1	Rohit S Nair	IIT Kharagpur	Segregated PDMS/LiNbO3/SWCNT Hybrid Composite for High-Performance Flexible Green EMI Shielding
84	Poly-2	Aparajita Pal	IIT Kharagpur	Dual crosslinked hydrogel based on interpenetrating polymer network for flexible supercapacitor application
85	Poly-3	Purbasha Maji	IIT Kharagpur	Investigation of shape memory behaviour and mechanical performance of surface modified nanofibrillar cellulose reinforced thermoplastic elastomer composite
86	Poly-4	Sayantika Kar	IIT Kharagpur	Synthesis of multifunctional eutectogel (PAM-ChCl-FA) utilizing fly ash inthermal frontal polymerization
87	Poly-5	Bholanath Ghanti	IIT Kharagpur	Synergistically Functionalized Pyridinyl and Phosphine Oxide-based Semifluorosulfonated Copolytriazole Membranes Preparation via “Click” Polymerization for Proton Exchange Membrane Applications
88	Poly-6	Sumit Bera	IIT Kharagpur	Enhancing polymer material properties through force induced chemical reaction
89	Poly-7	Suparna Ojha	IIT Kharagpur	High-Performance Flexible Piezo–Tribo Hybrid Nanogenerator Based on MoS_2@ZnO-Assisted β-Phase-Stabilized Poly(Vinylidene Fluoride) Nanocomposite
90	Poly-8	Adarsh Kumar Shah	IIT Kharagpur	Void morphology and fiber orientation characterization of FDM-printed short carbon fiber reinforced Polyamide (PA) thermoplastic
91	Poly-9	Sumanta Bera	IIT Kharagpur	High?Performance Flexible Piezo–Tribo Hybrid Nanogenerator Based on MoS2@ZnO Assisted Phase Stabilized Poly(Vinylidene Fluoride) Nanocomposite
92	Poly-10	Ankur Katheria	IIT Kharagpur	Fe3O4@g-C3N4 and MWCNT embedded highly flexible polymeric hybrid composite for simultaneous thermal control and suppressing microwave radiation
93	Poly-11	Pampa Chowdhury	IISER Kolkata	Upper Critical Solution Temperature-Driven Self-Coacervation of Nonionic Polymer
94	Poly-12	Arnab Banerjee	IISER Kolkata	Zwitterionic Polysulfobetaine: an Emerging Material to Inhibit Cancer Cell Migration through the Regulation of Actin Cytoskeleton Dynamics
95	Poly-13	Neelam Gupta	BHU	Vis-to-NIR electrochromism and bright-to-dark electrofluorochromism in a triazine and thiophene-based three-dimensional covalent polymer
96	Poly-14	Sudip Naskar	INST Mohali	Organic Ferroelectric Polymer for Non-volatile Memory and Solar cell
97	Poly-15	Anashwara Babu	SRM	Incorporation of Anthrapyrazolone-derived Dye into Thermoresponsive Polymer for Nitroaromatic Detection in Aqueous Medium
98	Poly-16	Palas Das	IIT Kharagpur	Super-Stretchable, Self-Healing 2D MXene-Based Composites for Thermal Management and Electromagnetic Shielding Applications
99	S&A-1	Mukti Mandal	IIT Kharagpur	Incorporation of Anthrapyrazolone-derived Dye into Thermoresponsive Polymer for Nitroaromatic Detection in Aqueous Medium

100	S&A-2	Ajay Haridas Cp	IIT Kharagpur	Recyclable Thermoplastic Polyurethane-Carbon Material Based Strain and Pressure Sensor for Monitoring Human Motions
101	S&A-3	Anisha Mandal	IIT Kharagpur	One-pot synthesis of palm wine-carbon dots for optical and smartphoneintegrated sensing platform for the detection of copper
102	S&A-4	Subhadip Mondal	IIT Kharagpur	Electrophoretically Fabricated Tubular Taguchi Type Gas Sensor
103	S&A-5	Nallamala Vandana	IIITDM KANCHEEPURAM	COMSOL SIMULATION OF ARRAY MICRO-CANTILEVER FOR BIOLOGICALINTERACTIONS
104	S&A-6	Susobhan Swain	VSSUT Odisha	Selective Detection of L-Cysteine via Fluorometric Assay using Rhodamine B modified Silver Nanoparticles in Aqueous Medium
105	S&A-7	Sohini Das	BITS	Next-Gen Epilepsy Care: Wearable and Personalized Intervention
106	S&A-8	Sunayana Bora	IIT Varanasi	WS2 quantum dots as an effective fluorescent sensor material for the detection of antibiotics in water
107	S&A-9	Akash Gayakwad	BITS PILANI	Glucose sensing by the Langmuir Blodgett film of ODACNT
108	S&A-10	Gomathi Sivakumar	SRM	Anthrapyrazolone Functionalized Oligo(ethylene glycol)methyl ether methacrylates Based Fluorescent Polymeric Hydrogel for Selective Detection of Tetracycline Drug
109	S&A-11	Tanmayee Mohanta	Maharaja Sriram Chandra Bhanja Deo University Baripada Odisha	Gandha Prasarini leaves derived N,S-doped carbon dots for detection of tartrazine and their antibacterial activity
110	S&A-12	Arko Biswas	IIT Kanpur	Modeling the Interaction between IPMC Actuators bonded to Soft and Compliant Host-Structures
111	S&A-13	Sanhita Swain	Maharaja Sriram Chandra Bhanja Deo University Takatpur Baripada Odisha	Development of the Triple-Mode Real-Time Detection of Doxorubicin by Nitrogen-Doped Carbon Dots
112	S&A-14	Rinku Paul	CSIR-CMERI	Peanut-Shaped BiVO4 for the Detection of Hazardous NH3 at Room Temperature
113	S&A-15	Lakkimsetti Lakshmi Praveen	NIT Surathkal	Room-temperature detection of ammonia by hydrothermally processed screenprinted WO3 gas-sensor toward breath marking applications
114	S&A-16	Sibashish Chakraborty	IIT Delhi	Chemically synthesized Silver decorated nano-flower (Aloe Vera) as rapid, sensitive and cost-effective SERS-active substrate
115	S&A-17	Manivannan P	VIT	An Experimental Investigation of SnO2 coated Fiber Optic LMR Sensor for Highly Sensitive Salinity Measurement
116	S&A-18	Swapnita Patra	VSSUT Odisha	Ex Vivo Glucose Detection in Human Blood Serums with Carbon Quantum Dots doped Oleic Acid treated Chitosan Nanocomposites

Thurst Area:	Code
2D and Quantum Materials	2D;
Devices (optical, electronic, and flexible)	DEV
Sensors and actuators	S&A
Polymer and flexible	Poly
Semiconductors and Heterostructures	S&H
Theoretical modeling and AI & ML for Materials Prediction	TM
Soft and Nature-inspired Materials	S&N
Ceramic, Composites, Metals and Alloys	Cer
Functional Materials	FM
Energy Materials-batteries, Supercapacitors, Solar cells	EM
Textile and Fiber technology	TFT