



International Conference on Energy and Environmental Materials (E2M -2024) July 11th- 13th July 2024 List of Oral Presentation

S. No.	Presentation ID	Name	Institute Name	Title of the Abstract
1.	OPA01	Ananta Paul	Indian Institute of Technology Bombay	Enhancing Bifacial Perovskite Solar Cell Efficiency from 18% to 26% and Beyond through Albedo Incorporation
2.	OPA02	Puli Akshita Govind	National Institute of Technology, Tiruchirappalli	Thermo-electric attributes of Ag doped BiSbTeSeSn high entropy alloy synthesised by high energy ball milling and spark plasma sintering.
3.	OPA03	Sajan Singh	Trinity College of Dublin, Ireland	From Solvent Annealing to Metal-Oxide Arrays: Mechanisms of Metal Infiltration in Block Copolymer Nanopatterns
4.	OPA04	Amar Dev	Birla Institute of Technology, Patna	Electromagnetic Shielding by a Polymer Based Tertiary Nanocomposite
5.	OPA05	Dr Samrat Sarkar	Parul University	Morphology and Size Dependent Cold Cathode Emission in Solvothermally Synthesized Cu ₂ ZnSnS ₄ Nanostructures
6.	OPA06	Ku. Albel Himmatrao Pundkar	IIIT, Nagpur	Navigating the Potential of Nanomaterial in Thermal Systems Evaluating Performance, Stability and Overcoming Limitations with Innovative Solutions: A Comprehensive Review
7.	OPB01	Kaifee Sayeed	Centre for Nano and Soft Matter Sciences, Bengaluru	Breaking Lithium Barriers: A Sustainable Sodium-Ion Battery Prototype
8.	OPB02	Udaya Kumar D	NITK Surathkal	Design and synthesis of TPA-based hole-transporting materials for inverted MAPbI ₃ perovskite solar cells
9.	OPB03	Badekai Ramachandra Bhat	National Institute of Technology Karnataka	Biomass-derived activated carbon as an electrode material for high-performance supercapacitor
10.	OPB04	Diksha	CSIR-National Physical Laboratory, New Delhi	Effective interfacial back surface passivation via i-a-Si:H thin layer of hybrid silicon solar cells
11.	OPB05	Jagadeesh Baskaran	PSG Institute of Technology and Applied Research	Design and development of novel metallic porous structures for efficient Thermal Energy Storage Systems
12.	OPB06	Kanupriya Sachdev	Malaviya National Institute of Technology, Jaipur	CuCo ₂ S ₄ Micro Cubes for High Energy Density Zn-ion Hybrid Supercapacitor
13.	OPB07	Asish Kumar Das	Indian Institute of Technology Indore	Enhancing room temperature performance of solid-state lithium cell via a facile solid electrolyte-cathode interface design
14.	OPB08	Sayan Halder	Birla Institute of Technology and Science Pilani, Hyderabad Campus	Development of Pt-Co Metallocycle Nanoarchitectures for Transparent-to-black Vis-to-NIR smart windows for Thermal Modulation
15.	OPB09	Abhas Anand	IIT Delhi	Electrodeposited Zeolitic Imidazolate Framework-8 Modified Zinc Anode Supported Over Porous Copper Framework for Aqueous Zinc-ion Battery Application
16.	OPB10	Abhijit Singha	Indian Institute of Technology Bombay	Development of CdTe/Perovskite Thin Film Tandem Solar Cells
17.	OPB11	Ajmal P	CSIR-National Chemical Laboratory, Pune	3D-Structured Carbon Induced Triple Phase Boundary Tuning and Enhanced Water Management for High Performance PEMFC
18.	OPB12	Anil Kumar	IIT Roorkee	Synthesis of Quasi-periodic Inverted Pyramid Microstructure Arrays to attain broad range Absorption for high efficiency Thin Silicon Solar cells
19.	OPB13	Bhumika Sharma	Indian Institute of Science	Post-treatment of NiOx-based Hole Transport Layer for high-efficiency Perovskite Solar Cells
20.	OPB14	Dr. Bablu Mordina	DMSRDE (DRDO), Kanpur	Effect of Second Metal Ion and Microstructures on the Electrochemical Performance of Bimetallic Oxide Based Supercapacitors



International Conference on Energy and Environmental Materials (E2M -2024) July 11th- 13th July 2024 List of Oral Presentation

21.	OPB15	KM Sakshi	Bennett University	Enhancing Stability of Perovskites through Spacer Cation Incorporation for application in Solar cells
22.	OPB16	Krithika M	Sastra Deemed to Be University	Manganese malate: A new, high-performance electroactive material for supercapacitors
23.	OPB17	Pankaj Pathak	SRM University Andhra Pradesh	Recycling of Energy Critical Metals from spent Lithium-ion Battery as a Secondary Resource
24.	OPB18	Sanjay Kanojia	DMSRDE (DRDO) GT Road Kanpur	A Study of Solid-State Electrolyte Based High-Performing Rechargeable Solid-State Lithium-Sulphur Batteries (LSBs)
25.	OPB19	SHWETA, Dr. P Murali Krishna	NIFTEM	Fruit peel polyphenol modified P2-type layered Na ₂ Zn ₂ -xM ₁ XPO ₆ (P, M= Bo,Si,EX) solid composite polymer electrolytes for ion conducting battery electrolyte applications
26.	OPB20	Vinay Kumar	CCS Haryana Agricultural University Hisar	Electrochemical Analysis of rGO/MoS ₂ nanocomposite-based electrode for Supercapacitor Application
27.	OPC01	Monika	Lovely Professional University	Development Of a Highly Efficient V@S Co-Doped Ta ₃ N ₅ Solar Catalyst Protected by Pani for H ₂ Production Via Water Electrolysis
28.	OPC02	Vigneshraaj A S	CeNS, BENGALURU	Effect of electronic structural engineering of Ni site by Fe doping for bifunctional oxygen electrocatalysis
29.	OPC03	AMARENDRA NAYAK	Ravenshaw University, Cuttack, Odisha	Tuning the Electronic Structure of Controlled 1T-MoS ₂ for Hydrogen Evolution
30.	OPC04	Lokanath Mohapatra	Indian Institute of Technology Indore	Charge transfer kinetics of Zn ₂ SnO ₄ Nanorods grown on ZnO seed layer for photoelectrochemical water splitting
31.	OPC05	Geeta Pandurang Kharabe	CSIR-NCL Pune	Aluminium, Nitrogen-Dual-Doped Reduced Graphene Oxide Co-Existing with Cobalt-Encapsulated Graphitic Carbon Nanotube as an Activity Modulated Electrocatalyst for Oxygen Electrocatalyst for Oxygen Electrochemistry Applications
32.	OPC06	KRISHNAVENI B S	Sastra Deemed University	Electrodeposited manganese carbonate as an electrocatalyst for hydrogen evolution reaction in acidic medium
33.	OPC07	Utkarsh	IIT Hyderabad	Enhancing the efficiency of water splitting through spin-filtering anodic current using chiral transition metal-based oxide thin film catalysts
34.	OPC08	Parveen Garg	UGC-DAE Consortium for Scientific Research, Indore	Single Crystalline α-Fe ₂ O ₃ Nanosheets with Improved PEC Performance for Water Splitting
35.	OPD01	Amitha Agnes Fernandes	Central University of Tamil Nadu	Investigation on the Effectiveness of Eggshell Biowaste for Multi-stage Water Purification
36.	OPD02	Sarveshachandra S, Dr. Jayadev Pattar	REVA University	Pivotal role of CuS nanoflowers on the performance of CuS/rGO/GCN heterojunction photocatalyst against Industrial Dyes
37.	OPD03	Dr. Thillai Sivakumar Natarajan	CSIR-Central Leather Research Institute	Integrated Batch-type Fenton-Electrocoagulation-Adsorption Processes for the Treatment of Tannery Wastewater and Chromium Recovery
38.	OPD04	Linkon Bharali	National Institute of Technology Silchar	Hydroxyapatite nanoparticles decorated with metal- organic framework, Co-Cu/ZIF@HAP, and evaluation of photocatalytic performance of the prepared nanocomposite towards the degradation of organic pollutants
39.	OPD05	Roshini N	CSIR-CLRI	Synthesis of Layered Double Hydroxide supported Metal-organic framework composites for the adsorptive removal of anionic dyes in wastewater treatment.



International Conference on Energy and Environmental Materials (E2M -2024)

July 11th- 13th July 2024

List of Oral Presentation

40.	OPD06	Deepshikha Goutam Awasthi	Shri Ram Institute of Science and Technology, Jabalpur	An Overview of AI/ML Techniques in Environment Conservation: Biodiversity and Forest Management
41.	OPD07	Akhila Manoharan Nair	Indian Institute of Technology Bombay	Metal-Doped Laser-Induced Graphene Electrodes and Filters for Electrochemical Disinfection of Enteric Viruses from Wastewater
42.	OPD08	Bhanu Prakash S	Bhabha Atomic Research Center	Stabilization of Candida rugosa lipase for optimized production of biodiesel
43.	OPD09	Dr. S. Prabakaran	IIT Bombay	Analyzing the Effect of Cottonseed Biodiesel Blend Produced from Heterogeneous Catalyst and n-Butanol on Reactivity Controlled Compression Ignition (RCCI) Engine
44.	OPD10	Nandini Dixit	IIT Bombay	Transition Metal-doping Optimization for Laser-Induced Graphene (LIG) Composite Electrodes and Filters for Enhanced Disinfection
45.	OPD11	Poonam Chaturvedi	Indian Institute of Technology Roorkee	Au nanoparticles modified KCa ₂ Nb ₃ O ₁₀ /g-C ₃ N ₄ Nanosheets Heterojunctions for Photocatalytic CO ₂ Reduction
46.	OPD12	Shreya Sharma	Indian Institute of Technology Bombay	Electrochemical Investigation of Polyoxometalate to Understand PCET
47.	OPD13	VIJAY JAIN	IIT Indore	Remote Sensing based Water Quality Monitoring of Indian Ramsar Wetlands
48.	OPE01	ANANYA MANDAL	IIT Kharagpur	Development of a Hydrogen Distribution System using Advanced Composite Integrated with Sensor Technology
49.	OPE02	Dr. Mohan Rawat	Chameli Devi Group of Institutions	Thermal investigation of cool roof structures in composite climate of India
50.	OPE03	PARTHA SARATHI PADHI	Raja Ramanna Centre for Advanced Technology	Tailoring interface confined carrier relaxation in Al ₂ O ₃ /TiO ₂ subnanometric laminates for energy storage applications
51.	OPE04	Shubhanjali kori	IIT Delhi	Assessment of performance to a field-scale constructed wetland: A case study of Tepla village, Ambala, Haryana
52.	OPE05	Aniket Arun Dhavale	Savitribai Phule Pune University	Numerical Investigation on Heat Transfer Characteristics of a Heat Exchanger Wrapped with Metal Foam
53.	OPE06	ManishKumar U Shaw	Hindustan Institute of Technology and Science, Chennai	ENHANCING BALLISTIC IMPACT PERFORMANCE OF NATURAL FIBER REINFORCED COMPOSITES WITH NATURAL FILLERS
54.	OPE07	Dr S Chand Rakesh Roshan	RGUKT Basar	Harnessing Bonding Heterogeneity: Tailoring Phonon Transport in Ternary Layered Compounds for Enhanced Thermal Management
55.	OPE08	Dr Sukanti Behera	Maulana Azad National Institute of Technology Bhopal	Recent Developments in Thermoelectric Properties of Bi ₂ Te ₃ -based Hybrid Nanocomposites
56.	OPE09	Dr. Amreen Ara Hussain	Institute For Plasma Research, Gandhinagar	Enhanced Optoelectronic Devices Engineered with Lead (Pb) or Lead-Free Halide Perovskites Tailored for Environmental Stability
57.	OPE10	Pooja Narwat	Devi Ahilya Vishwavidyalaya	Magnetic Field Dependent Magnetoresistive Variations in Trilayer (La _{2/3} Sr _{1/3} MnO ₃ /γ-Fe ₂ O ₃ /La _{2/3} Sr _{1/3} MnO ₃) Hetero-structure
58.	OPE11	Kumar Kaushlendra	IIT Roorkee	Enhanced synaptic characteristics under applied magnetic field in V ₂ O ₅ /NiMnIn based switching device for neuromorphic computing



International Conference on Energy and Environmental Materials (E2M -2024) July 11th- 13th July 2024 List of Poster Presentation

S. No.	Presentation ID	Name	Institute name	Title of the abstract
1.	PPA01	Dhruv Jain	Dayalbagh Educational Institute, Agra	Advancements in Structural and Electrical Properties of Fused Filament Fabricated Graphene-Reinforced Poly-lactic Acid
2.	PPA02	Anupam Chetia	Indian Institute of Technology Jodhpur	Synthesis and Characterization of Stable Lead-Free Double Halide Perovskite
3.	PPA03	Anupama Behera	Indian Institute of Technology Madras	Electrochromic behavior of nickel oxide thin films grown by reactive DC magnetron sputtering
4.	PPA04	Devan CM	IIT Madras	Electroabsorption study of thermally activated delayed fluorescent material
5.	PPA05	Kavya D M	Manipal Institute of Technology	Impact of Optimal Thickness on the Water Splitting Performance of Sulfurized Antimony Sulfide Thin Films
6.	PPA06	Manju kumari	IIT Indore	Chemical Substitution-Driven Electronic Properties Tuning and Catalytic Activity of TiO ₂ : An Interplay of Valance States
7.	PPA07	Mr. Sayan Atta	VIT Vellore	Influence of Topography on Nano-Mechanical Behaviour of Cylindrical Magnetron Sputtered TiN Thin Films
8.	PPA08	Peela Lasya	Indian Institute of Technology, Madras	Chemically stable ultrathin platinum films supported on oxide substrate
9.	PPA09	pratik kalivikatte	Indian Institute of technology Bombay	Chemically grown, nanospherical Cu ₂ -x Se thin films Photoelectrode by APT
10.	PPA10	RAHUL CHAUHAN	Indian Institute of Technology Indore	Innovating dye-sensitized solar cells through novel microalgal and cyanobacterial species extricated dyes: A sustainable tack for material scarce earth
11.	PPA11	Rajib Barik	Veer Surendra Sai University of Technology, Burla	Elevated microwave absorption efficiency in epoxy/carbon fiber fabric composites enhanced with graphene modification
12.	PPA12	Rohit Kumar	IIT Patna	Pulse Laser Deposited ZnO Thin Film: Annealing-Dependent Study of Structural, And Morphological Properties
13.	PPB01	Akash Kankane	Indian Institute of Technology Indore	Nanocomposite Separator-Electrolyte Systems for High-Performance Sodium-Ion Batteries
14.	PPB02	Amit Kumar Rajak	Indian Institute of Technology, Guwahati	Boosting of Concentration Gradient-Driven Energy Output by Employing Electrodes Possessing Contrasting Interfacial Activity
15.	PPB03	Athira S Babu	CSIR NCL	Binder-Free and Flexible VOPO ₄ /CNT Film Cathode for Aqueous Rechargeable Zn-Metal Battery
16.	PPB04	Ayushi Tripathi	Harish Chandra Research Institute, Allahabad	Theoretical Investigation of Pressure-Induced Oscillatory Band-gap in One- dimensional Lead-free Halide Perovskite: CsCu ₂ I ₃
17.	PPB05	Bommu Padmaja	Annamalai University	Hydrothermally grown nickel ions incorporated tin oxide nanostructures as an effective photocatalyst and an electrode in supercapacitor
18.	PPB06	Divya Chauhan	Banasthali Vidyapith	Zinc Oxide Integration for Enhanced Piezoelectricity in PVDF Nanofibers
19.	PPB07	Divya Rani	Indian Institute of Technology Roorkee, Roorkee	Unleashing the Potential of Silicon Micro/Nanowire Arrays: A Path to Higher Efficient Solar Cells
20.	PPB08	Gaurav Gupta	The LNM Institute of Information Technology, Jaipur	Ligands exchange free PbS-I Colloidal quantum dots solar cell based on the polymeric hole transport layer
21.	PPB09	Harshada L. Sawant	Institute of Chemical Technology (ICT)	Efficient polyethylene glycol substituted unsymmetrical zinc phthalocyanine sensitizer for dye-sensitized solar cells.
22.	PPB10	HIMANGSHU BAISHYA	IIT Guwahati	Multidentate Coordination-Induced Defect Passivation and Morphology Regulation for Efficient and Stable Inverted Perovskite Solar Cells
23.	PPB11	Kiran Kumar Garlapati	IIT Hyderabad	VO _x anchored Ti ₃ C ₂ T _x MXenes heterostructures for high-performance 2.2 V supercapacitors



International Conference on Energy and Environmental Materials (E2M -2024) July 11th- 13th July 2024 List of Poster Presentation

24.	PPB12	Laxman Singh	Indian Institute of Technology Madras	Close Space Sublimation of Organic Materials for Solar Cell Application
25.	PPB13	Mahima Ann Paul	TCG CREST	Microstructurally Engineered Interphase for Enhanced Anode Stability in Solid-State Lithium Metal Batteries
26.	PPB14	Manjeet	IIT Roorkee	Exploring Current Degradation in Hydroelectric Cells Through Time-Dependent Impedance Spectroscopy
27.	PPB15	MAYANK UDAYPRATAP SINGH	CSIR- NCL	Unveiling the effect of twin and grain boundary in sub 2 nm platinum cobalt alloy in high-temperature proton exchange membrane fuel cell through novel hot injection method.
28.	PPB16	Mayur Patel	IIT Guwahati	Harmonizing Additive and Dimensional Engineering for Efficient Triple Cation Perovskite Solar Cell
29.	PPB17	Mohammad Zaid	IIT Hyderabad	Low-temperature solid-state synthesis of advanced fluorophosphate cathodes for Sodium-ion batteries
30.	PPB18	Monira Parvin	IIT Hyderabad	High surface area carbon-coated lithium iron manganese phosphate (LiMn _{0.8} Fe _{0.2} PO ₄) a superb electrode material for Lithium-ion batteries
31.	PPB19	MUHAMMED ANEES P K	National Institute of Technology Karnataka, Surathkal	Phosphomolybdic acid coupled polypyrrole via organic cation linkers for electrochemical supercapacitors
32.	PPB20	Neha	Indian Institute of Technology Indore	Synthesis and Characterization of P3 and P2 Phases of Mn/Ni-based Na-ion Battery Cathodes
33.	PPB21	Nissar Hussain	IIT Indore	A Facile Synthesis of Conductive Metal-Organic Frameworks on Electrospun Core-Shell Graphene Nanofiber as Free-Standing Electrodes for Flexible Hybrid Supercapacitors
34.	PPB22	Omar Shahid	IIT Hyderabad	Low thermal conductivity in a new mixed metal telluride Mn _{1.8} (1)In _{0.8} (1)Si ₂ Te ₆
35.	PPB23	Pratiksha Gami	Indian Institute of Technology Indore	NASICON-type Medium Entropy Li _{1.5} Sn _{1.0} Al _{0.5} Zr _{0.5} (PO ₄) ₃ Electrolyte for Solid State Li Metal Batteries
36.	PPB24	Praveen Kumar	Indian Institute of Technology Indore	Perovskite Cubic Strontium-Zirconate's Behavior Towards Electrolyte-based Supercapacitor Application
37.	PPB25	Rajanigandha Barik	Sambalpur University	Modified dielectric properties of MAPbI ₃ through synergistic integration with graphene oxide nanosheets to achieve optimal energy storage solutions
38.	PPB26	Rajesh Kumar	IIT Roorkee	Pseudocapacitive Performance of Reactively Co-Sputtered Titanium Chromium Nitride Nanopyramids towards Flexible Supercapacitor with Li-ion Storage
39.	PPB27	Rajwinder Kaur	Indian Institute of Technology, Kanpur	Understanding the Emergence of Capacitance in Nanoscale Molecular Junctions
40.	PPB28	Rakhi Saha	Indian Institute of Technology Indore	SrFeO _{3-δ} as cathode material for the application in solid oxide fuel cell
41.	PPB29	Raktim Gogoi	IIT, Guwahati	Ionic Thermoelectricity through Reconstructed Layered Material based Nanofluidic System
42.	PPB30	Sadhana Barman	Assam University, Silchar	Bandgap prediction of non-metallic crystals through machine learning approach
43.	PPB31	Samridhi Saxena	Indian Institute of Technology Indore	Electrochemical Behaviour of a P3-type High Na Content Cathode for Na-ion Batteries
44.	PPB32	Sankalpa Bora	Harish-Chandra Research Institute	Theoretical investigation of Pressure-Driven Electronic, Optical and Excitonic properties in lead-free Halide Perovskite: Cs ₃ Cu ₂ I ₅
45.	PPB33	Sheetal Gupta	Indian Institute of Technology Indore	Iron-based PBA @ rGO composite as high capacity & high energy density cathode for hybrid supercapacitor
46.	PPB34	Shiva Mishra	Dayalbagh Educational Institute	AGC of Deregulated Power System using Polar FLC
47.	PPB35	Shyam Shankar S	The LNM Institute of Information Technology, Jaipur	P3HT: PC71BM-based flexible Organic Solar Cells for Indoor IoT Applications
48.	PPB36	Sidharth Barik	CSIR-National Chemical Laboratory, Pune	Uncovering the Potential of Pseudo-Boehmite AlOOH/NGr Composite-Based PtIr Electrocatalyst for Efficient Electrochemical Ammonia Oxidation for Direct Ammonia Fuel Cell
49.	PPB37	Soumyashree Das Adhikari	Indian Institute of Bhubaneswar, Odisha	Fluorinated Ether-based Electrolytes for Sodium-Ion Battery



International Conference on Energy and Environmental Materials (E2M -2024) July 11th- 13th July 2024 List of Poster Presentation

50.	PPB38	SUBIN K C	Indian Institute of Technology Indore	In-situ Synthesis of Ag-doped Hollandite Manganese Oxides on Polypyrrole Support Towards Supercapacitor Application
51.	PPB39	Taranga Borgohain	Harish Chandra Research Institute	Electronic and Optical Properties analysis in Silver Bismuth-Based Perovskite (AgBiL ₄): A theoretical study
52.	PPB40	Vipul Mangesh Ghare	Goa University	Investigating the Effect of Cu ²⁺ Substitution on the Supercapacitor Performance of Cobalt Ferrites
53.	PPB41	Vivekanand	Indian Institute of Technology Bombay (IITB)	Dendritic Growth Suppression in Hybrid Redox Flow Batteries
54.	PPB42	Farheen Anjum	IIT Kanpur	Band-Structure Modification Leads to Enhanced Thermoelectric Performance of Bi ₂ S ₃ by CaCl ₂ Doping
55.	PPB43	Jyotirekha Dutta	Indian Institute of Technology Hyderabad	Transforming Residual Lithium Compounds on LiNi _{0.8} Mn _{0.1} CO _{0.1} O ₂ Surface into A Li-Mn-P-O-Based Composite Coating for Multifaceted Improvements
56.	PPB44	Mamta Bulla	Ccs Hau, Hisar	Development Of Binder-Free Electrodes Using Synthesized V ₂ O ₅ For Supercapacitor Application
57.	PPB45	Maria Kurian	CSIR-National Chemical Laboratory	Separator-Modified Anion Conducting Polymer Electrolyte Membrane with In-Situ Engineered Cathode for Quasi-Solid-State Zinc-Air Battery Applications
58.	PPB46	Priyanka P P	CSIR-National Chemical Laboratory, Pune	Hydrogel Polymer Electrolyte Integrated 3D Porous Cathode Material for Quasi-Solid-State Zinc Metal Battery by In Situ Polymerization
59.	PPB47	Rekha Sharma	Prestige Institute of Engineering, Management and Research Indore	Triboelectric Energy Harvesting by Redox Active Molecules
60.	PPC01	Akanksha Negi	IIT Gandhinagar	Exploring Electrocatalytic Decamethylferrocene-mediated Hydrazine Oxidation in Organic medium
61.	PPC02	Amisha Mukherjee	Indian Institute of Technology, Jodhpur	Simulation of Proton Exchange Membrane Electrolyzer for Hydrogen Production: A Broader View on Electrochemical Aspects
62.	PPC03	Akshay Kumar Sonwane	Indian Institute of Technology Indore	Effect of Deposition Potential on Ni-Co-Fe Alloy Electrodeposition for Improved Alkaline Hydrogen Evolution
63.	PPC04	Arati Samal	Indian Institute of Technology Indore	A Nickel-Doped Two-Dimensional Covalent Organic Polymer (2D-COP) for Electrocatalytic Hydrogen Evolution Reaction
64.	PPC05	Arvind	Rajiv Gandhi Institute of Petroleum Technology Jais, Amethi	Biogenic Fe-Cu-Mo Salts for Electrochemical Total Water Splitting and CO ₂ RR: Excellent Durability & Low Overpotential
65.	PPC06	Banani Talapatra	Central University of Punjab	MXenes as a component of electrocatalysts for Oxygen Evolution Reaction
66.	PPC07	Bhavana R	Indian Institute of Technology Gandhinagar	Metal-free Electrocatalytic Valorization of PET Plastic Waste with Co-generation of Hydrogen
67.	PPC08	Chetansinh Kesarisinh Chauhan	IIT Gandhinagar	"Towards Enhanced Efficiency in Electrocatalytic Hybrid Water Splitting: A Comparative Study of Manganese, Iron, and Nickel-Based Metal-Organic Framework Catalysts"
68.	PPC09	Himanshu Saini	Indian Institute of Technology, Jodhpur	Modeling and Synthesis of High-Pressure Proton Exchange Membrane Electrolyzer: A Special Focus on Safety and Modulating the Efficiency of Hydrogen Production and Storage
69.	PPC10	JETHAWA UNNATI PRADIP	The Institute of Science, Mumbai	Ti-doped B ₁₂ C ₆ N ₆ nanocages for hydrogen storage: DFT study
70.	PPC11	Kaustubh Bhaskar Nerkar	The Institute of Science, Mumbai	C ₂₀ nanocage and Its Derivatives for hydrogen storage: A DFT investigation
71.	PPC12	Lalita Wagh	IIT Indore	Metal-functionalized supramolecular hydrogels as efficient electrocatalysts for HER and OER
72.	PPC13	PALASH JYOTI GOGOI	Centre for Nano and Soft Matter Sciences	Insight into the active key species of Mo ₂ C and Mo/Mo ₂ C systems in unstable alkaline hydrogen evolution reaction



International Conference on Energy and Environmental Materials (E2M -2024)

July 11th- 13th July 2024

List of Poster Presentation

73.	PPC14	Phulladweepa Patra	Indian Institute of petroleum and energy, Visakhapatnam	Exfoliated Cobalt-Doped Manganese Oxide Nanosheets: An Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction in an Alkaline Medium
74.	PPC15	POONAM SANDIP PARKAR	The Institute of Science, Mumbai	Hydrogen storage properties of Ti doped [1,1,1,1] paracyclophane and its derivatives: A DFT study
75.	PPC16	Priyanshu Chaubey	Indian Institute of Technology (Indian School of Mines), Dhanbad	MoSe ₂ nanosheets anchored phosphorous doped rGO as an efficient electrocatalyst for overall water splitting
76.	PPC17	Sonali Samal	Indian Institute of Technology Indore	Controlled growth of Cu ₂ ZnSnS ₄ (CZTS) quantum dots for photoelectrochemical water splitting
77.	PPC18	Soumaya Deep Chatterjee	Noida International University	Solar Alchemy: Rejigging Green Hydrogen Production Through Photoelectrochemical Water Splitting (PEC).
78.	PPC19	Subhajit Sarkar	IIT ISM Dhanbad	Fe-NiCo ₂ O ₄ @S, N-rGO nanocomposite for improved water electrocatalysis
79.	PPD01	Ajantha S	CSIR-NIIST, Trivandrum	Enhancing faecal sludge treatment: study on effects of mixing and inoculation on organic matter degradation
80.	PPD02	Chandana M S	CSIR-NIIST, Trivandrum	Investigating microbial diversity and antimicrobial resistance properties of faecal sludge before and after various treatment processes
81.	PPD03	Girija Shankar Jena	Indian Institute of Technology, Kharagpur	A facile synthesis of plasmonic Bi ₂ WO ₆ /Ag/CuS ternary nanocomposite to boost photocatalytic degradation of persistent antibiotics
82.	PPD04	Manoj Bora	Assam University Silchar	Synthesis of CTAB passivated Cs ₂ AgBiCl ₆ perovskite for photocatalytic applications
83.	PPD05	Manya Madhu	CSIR- NIIST	Nutrient removal and Aeration: A bench scale study on fresh fecal matter
84.	PPD06	Reshma Anil S	CSIR-NIIST, Trivandrum	Harnessing natural media for efficient faecal sludge treatment: A bench scale study.
85.	PPD07	Ripan Mondal	Indian Institute of Technology Kharagpur	Ag ₀ modified Ag ₃ AsO ₄ /g-C ₃ N ₄ hybrid for effective photocatalytic removal of 4-chlorophenol under visible light
86.	PPD08	Shruti Sharma	DMSRDE, DRDO, Kanpur	Preparation of Boron Nitride from Pyrolysis of Single Source Precursor and Study of Its Photocatalytic Activity
87.	PPD09	Utsav Mishra	Rajiv Gandhi institute of petroleum technology, Amethi	Self-Assembly of Nanocellulose and Lignin: Applications in Radiative Cooling, Bio-adhesives and Sustainable Photocatalysis
88.	PPD10	Yogesh Kumar	CSIR-National Chemical Laboratory	Self-Supported Electronically Modulated Super-Hydrophilic Interconnected Nanospikes and Particle of MoS ₂ -Ni ₃ S ₂ /NF for Alkaline Water Electrolyzer
89.	PPD11	NAZIA AFREEN	IIT Delhi	Chromium Uptake by Vetiver grass thriving in and around Rania-Khan Chandpur Cr-Contaminated Site, India
90.	PPD12	Bhagyalakshmi Chinnam	National Institute of Technology, Warangal	Visible Light-Driven Photocatalyst: Ag ⁺ Doped TiO ₂ Heterojunction with Carbon Nanotubes for Remediation of Aqueous Phase Microplastics
91.	PPD13	Prasath V L	CSIR-Central Leather Research Institute	Influence Of Acoustic Cavitation in The Extraction of Keratin from Tannery Animal Hair Waste Using Greener Solvent
92.	PPD14	Aayushi Gour	Devi Ahilya Vishwavidyalaya Indore, India	Water Consumption Forecasting Model Aizawl
93.	PPD15	Annu Sheokand	CCS HAU Hisar Haryana	Synthesis of MIL-100 (Fe) Derived Iron (III) Oxide for Gas Sensing Applications
94.	PPE01	Aminakutty N	IIT Madras	A Dual emitting carbon dot-based ratiometric fluorescent probe for polarity sensor



International Conference on Energy and Environmental Materials (E2M -2024)

July 11th- 13th July 2024

List of Poster Presentation

95.	PPE02	Arya K	Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru	Unveiling the Non-enzymatic Electrochemical Glucose Sensing Properties of NiO Polyhedra synthesized through a Simple Thermal Decomposition Approach
96.	PPE03	Bipasha Saikia	Indian Institute of Technology Guwahati	Heterojunction of Natural Clay Minerals and Carbon Nanotubes as Robust Moisture Electric Generator
97.	PPE04	Chayan Das	IIT Jodhpur	High sensitivity and speed from heterostructure of few-layer MoS ₂ and reduced graphene oxide-based photodetector
98.	PPE05	Guna Nandhini G	Central University of Tamil Nadu	Design, Synthesis, and Characterization of Tetrabenzofluorene Derivatives with Tailored Properties for Fluorescent Sensing Application
99.	PPE06	Jyoti Agarwal	Indian Institute of Technology, Madras	Graphene-based transparent conducting electrode for OLED applications
100.	PPE07	KIRAN MAYAWAD	Indian Institute of Technology Guwahati	Stimuli-Responsive Nanofluidic Device for Controlled Delivery of Ions
101.	PPE08	Komal Srivastava	Indian Institute of Technology, Hyderabad	Thermoelectric and photovoltaic properties of 12-BaBi ₂ S ₄
102.	PPE09	Meenu Sharma	Indian Institute of Technology Indore	Enhancement in SO ₂ Sensing Performance by Functionalizing Thiazole Polymer with Benzoselenadiazole Ring
103.	PPE10	MIZANUR ALAM	IIT GUWAHATI	Non-volatile resistive switching based on halide perovskite materials for memory applications
104.	PPE11	Priyanka Arya	AcSIR, CSIR-CSIO Chandigarh	Flexible 2D MXene Based High-Performance Piezoelectric Nanogenerators.
105.	PPE12	RUCHI KUMARI SHARMA	CSIR-National Physical Laboratory	Reduced Graphene Oxide/Silicon Heterojunction Solar Cells: Technical Strategies for Future High Efficiency Devices
106.	PPE13	Arwa Ghasletwala	Chameli Devi Group of Institution, Indore	Artificial Intelligence Techniques in Buildings for Energy-Savings
107.	PPE14	Sarita	CCS Haryana Agricultural University, Hisar	Optimizatization Of Temperature by Hydrothermal Synthesis of Nickel Sulfide for Application as Energy Storage Device
108.	PPE15	Deepansh Dhall	DEI AGRA	Development of Electrochemical Energy Storage Device Thorough Fused Filament Fabrication

