

SPARC Conclave 2026
Collaborative Research with Global Impact
Internationalization of Indian Academia for Viksit Bharat 2047
8-9 March 2026
IIT Kharagpur Research Park, New Town, Kolkata

DAY 1, 8 MARCH 2026

Theme: Celebration & Research Showcase

09:00 – 10:00	Registration
10:00 – 10:40	Inaugural Session
	10:00 - 10:06 : Opening & Invocation
	10:06 - 10:08 : SPARC Overview : National Coordinator
	10:08 - 10:10 : Address : Joint Secretary
	10:20 - 10:45 : Chief Guest Address : Prof. David Quéré, ESPCI Paris & École polytechnique
10:40 – 11:00	Tea Break
11:00 – 12:00	Invited Talks
	Prof. Bikramjit Basu, Director, CSIR-CGCRI
	Prof. Sandeep Verma, IIT Kanpur
	Prof. Gautam Biswas, Professor Emeritus, BITS Pilani
	Prof. Aravindakumar CT, VC, MGU
	<i>Session Chair: Prof. Vibha Tandon</i>
12:00 – 12:35	Platinum Jubilee Session
	12:00 - 12:02 : Introduction by National Coordinator, SPARC
	12:02 - 12:07 : Address by Director, IIT Kharagpur
	12:07 - 12:15 : Address by Hon'ble Secretary, DHE
	12:15 - 12:39 : Felicitations of Distinguished Academic Visionaries
	Prof. Amitabha Ghosh
	Prof. A K Mallik
	Prof. Damodar Acharya
	Prof. Gautam Biswas
	Prof. Vibha Tandon
	Prof. Tanusri Saha-Dasgupta
	Prof. Bikramjit Basu
	Prof. Dipendra Mitra
12:45 – 13:30	Technical Session T1 T1_1 to T1_4
13:30 – 14:15	Lunch
14:15 – 15:00	Technical Session T2 T2_1 to T2_4
15:00 – 16:15	Technical Session T3 T3_1 to T3_5
16:15 – 16:45	Keynote Address 2 — Prof. Partha Sarathi Mukherjee, IISc Bangalore
	<i>Session Chair: Prof. Santanu Bhattacharya, Director, IISER Tirupati</i>
16:45 – 17:30	Panel 1 : Internationalizing Indian Higher Education: From Vision to Strategy
	Prof. Prof. Santanu Bhattacharya, Director, IISER Tirupati
	Prof. M M Ghangrekar, Director, NIT Puducherry
	Prof. Manoj Tiwari, Director, IIM Mumbai
	Prof. Maneesha Vinodini Ramesh, Vice Chancellor, Amrita University
	Prof. Ashutosh Biswas, Executive Director AIIMS Bhubaneswar
	Prof. Amitava Datta, Pro-VC Jadavpur University
	<i>Moderator: Prof. Partha Pratim Chakrabarti, IIT Kharagpur</i>
17:30 – 18:00	SPARC Engagement Session for Indian PIs only
	Policy, Processes & Road Ahead
	Address by Joint Secretary (ICC), DHE, Ministry of Education
	Open Q&A with National Coordinator SPARC
	<i>Session Chair: Joint National Coordinator SPARC</i>
17:30 – 18:30	Poster Session P1 & Tea
19:00 – 20:30	Cultural Programme
20:30 – 21:30	Dinner

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DAY 2, 9 MARCH 2026

Theme: Future Pathways & Global Engagement

09:15 – 10:05	Panel 2 : Sustaining Global Research Partnerships Ms. Rittika Chanda Parruck, Director of Education, British Council India Dr. Rajendra Tripathi, Head of Higher Education Programme and Partnerships, British Council India Mr. Arthur Rapp, Director DAAD India Ms. Shikha Sinha, Senior Advisor, Intl Cooperation, DAAD India Dr. Prachi Kaul, Director Shastri Indo-Canadian Institute Prof. S. R. Mahadeva Prasanna, Director, IIIT Dharwad Prof. Abhay Kumar, Director, IIIT Agartala Prof Anadaroop Bhattacharya, Dean, International Relations, IIT Kharagpur <i>Moderator: Prof. Rabibrata Mukherjee, National Coordinator, SPARC, IIT Kharagpur</i>
10:05 – 10:15	Announcements Wiley Special Issue : Dr Rohini Kitture, Deputy Editor, Wiley SPARC Alumni Launch : National Coordinator SPARC
10:15 – 11:15	Poster Session P2 & Tea
11:15 – 12:15	Technical Session T4 T4.1 to T4.5
12:20 – 13:10	Panel 3 : From Lab to Market & Deep-Tech Startups Mr. Ehtesam Farooqui, Cropcoin Dr. Arpan Pal, TCS Research Mr. Saurabh Ray, Monosha Dr. Piyush Chawhan, AI Ally Mr. Adarsh Das, Axon Energy Pvt. Ltd. Mr. Pankaj Kumar, Quant Solar <i>Moderator: Prof. Damodar Acharya, IIT Kharagpur (Former Director)</i> <i>Co-Moderator: Prof Chirodeep Bakli, Head, School of Energy Science & Engineering, IIT Kharagpur</i>
13:10 – 14:10	Lunch
14:15 – 15:00	Selected Student Flash Talks <i>Session Chairs: Dr. Titash Mondal, Dr. Archana Arbind</i>
15:00 – 15:30	Conclave Synthesis & Awards 15:00 - 15:08 : Conclave Summary: National Coordinator 15:08 - 15:15 : Poster Awards: National Coordinator & Joint Secretary 15:15 - 15:25 : Vision for SPARC 2.0: Joint Secretary 15:25 - 15:39 : Vote of Thanks
15:30 – 16:00	Tea

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Technical Program Schedule

DAY 1, 8 MARCH 2026

Technical Session T1

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Room	702	703	802	803
T1	T1.1	T1.2	T1.3	T1.4
	Chairs <i>Prof. Anant Kumar Rai</i> <i>Prof. D. R. Mailapalli</i> Presentations P3267: Dr. Surajbhan Sevda P1613: Sathesh Mariappan P4014: Dr. Sourojee Dutta P4090: Prof. Tangellapalli Srinivas P2247: Ramsagar Vooradi	Chairs <i>Prof. Avinash Sonaswane</i> <i>Prof. B. C. Revanasiddappa</i> Presentations P1789: Prof. Gowthamarajan Kuppasamy P2241: Prof Sampa Saha P3821: Anirban Chakraborty P2470: Prof. RamaRao Malla P2645: Saptarshi Basu	Chairs <i>Prof. Kailash C. Jena</i> <i>Prof. Leena Nebhani</i> Presentations P2420: Prof. Shirish H. Sonawane P3837: Prof. Rintu Banerjee P3140: Indranath Chakraborty P2434: Sai Rama Krishna Malladi P2369: Indrani Sen	Chairs <i>Prof. Mruganka Kumar Panigrahi</i> <i>Prof. Nikhil Singha</i> Presentations P1727: Dr. Anirban Sur P1750: Hari Ponnamma Rani P3755: Dr. G. Hariharan P2932: Raghu Raja Pandiyan Kuppasamy P3295: Prof. P. Sreekumar

Technical Session T2

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Room	702	703	802	803
T2	T2.1	T2.2	T2.3	T2.4
	Chairs <i>Prof. Soumyadeep Seth</i> <i>Prof. Pravesh Chandra Shukla</i> Presentations P3344: Chandra Sekhar Pant P3625: Chirodeep Bakli P1844: Kinsuk Naskar P4093: Amit Ojha P3235: Shakthi Prasad D	Chairs <i>Prof. Bipin Nair</i> <i>Prof. Chandra Prabha M N</i> Presentations P2595: Prof. Dr. Shashikala Gurpur P3357: Sunita Mehta P4055: Prof. M B Mukesh Krishnan P3847: Usha K Aravind P2137: Dr S.K. Sudarsanam	Chairs <i>Prof. Geetha Kumar</i> <i>Prof. Soumya Gangopadhyay</i> Presentations P3110: Dr. Titash Mondal P2531: Ashish Bhatnagar P2533: Prof. Yahya A. Ismail P2434: Sai Rama Krishna Malladi P3518: Somjeet Biswas P40: Prof. Apurbba Kumar Sharma	Chairs <i>Prof. Manoj BS</i> <i>Prof. Prashanth Reddy Hanmaiahgari</i> Presentations P3228: Siva Rama Krishnan S P3418: Vivek Ashok Bohara P3183: Syed Mohammad Zafaruddin P3673: Dr. Nithyanandan Kanagaraj P3764: Prof. Niloy Ganguly

Technical Session T3

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Room	702	703	802	803	Auditorium
T3	T3.1 Chairs <i>Prof. Sakthivadivel D</i> <i>Prof. Susanta Banerjee</i> Presentations PG250059: Ankit Gupta P1585: Adway Mitra P2846: Surendra K Martha P3239 : Sourav Monda P2323: Dr. Aryadevi R D P2502: Nagesh D. Patil P3789: Dr. Nithya Venkatesan P3808 : Santosh Kumar Tiwari P3884: Swarup Kumar Mahapatra	T3.2 Chairs <i>Prof. G. L. Samuel</i> <i>Prof. M S Muthu</i> Presentations P4052: Dr. Anup Nandy P1801: Azizuddin Khan P2269: Nasimul Hoda P3878: T.S. Murali P2963: Murali Prasad Pantala P2205: Jayaraj P B PG250095 : Subhamoy Mandal P4125: Dr. Senthilkumar Sellappan P4114: Dr. Sarthak Mandal	T3.3 Chairs <i>Prof. G. L. Samuel</i> <i>Prof. M S Muthu</i> Presentations P1863: Kanchan K. Malik P2388: Nalini Bikkina P2075: Alamelu Geetha Krishnamurthy P2661: Sayantan Dasgupta P1903: Prof. Basavadatta Mitra P2503: Ujjwal Jana P4131: Narayan Chandra Das P1858: Dr Nandita Banerjee Dhawan	T3.4 Chairs <i>Prof. Krupal Gangawans</i> <i>Prof. P Srinivasa Rao</i> Presentations P2781: Dr. Preetam Sarkar P2621: Dr. S. Radha P2257: Prof Sunil Bhand P2332: Jayeeta Mitra P3213: Ranjan Ganguly P3737: Prof. Sanjib Kumar Panda P3591: Rajesh Mehrotra P3753: Jayanti Tokas P4016: Riffat John	T3.5 Chairs <i>Prof. Avadh Kishor</i> <i>Prof. S. Lenin Prakash</i> Presentations P4035: Dr. Soumya Ranjan Mahapatro P3620: Soumi Muhuri P4058: Sourav Kanti Addya P1848: Bharatiraja C P3079: Prof. John Bosco Balaguru P3787: Dr. Akhilesh Kumar P3118: Dr Gaurav Sapra P3831: Dr. M. Srinivasan P3541: Sahil Garg

DAY 2, 9 MARCH 2026

Technical Session T4

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Room	702	703	802	803	Auditorium
T4	T4.1 Chairs <i>Prof. P. V. Suresh</i> <i>Prof. Virendra Kumar Vijay</i> Presentations P1701: Raghu Raman P265: Amit Ghosh P2253: Prof. Lalit Chandra Saikia P1885: Dr. Sujith Kumar C. S P2323: Dr. Aryadevi R D P2873: Arghya Mitra P1080: Meenu Ramadas P3953: Prof. R. Mahendiran P835: Sanjay Kumar Mehta P1207: Sarat Kumar Das	T4.2 Chairs <i>Prof. Bernaurdshaw Neppolian</i> <i>Prof. P K Datta</i> Presentations P3314: Suvanjan Bhattacharyya P2552: Dr. Yash Kumar Mittal P1839: Divya C Senan P1599: Prabodh Bajpai P122: B. Mohammed Jaffar Ali P3864: Dr. Archana R. Sathyan P4075: Manoj B P4070: Dr. Swapna P. Antony	T4.3 Chairs <i>Dr. Mayuresh Kumar</i> <i>Prof. Naved Anjum I Malek</i> <i>Prof. Santhosh Chidangil</i> Presentations P2007: Debasis Mitra P2510: Prof. S. Swaminathan P3122: Goutam Saha P1716: Venkatesh Chelvam P2927: Dr Renold Elsen S P2630: Shamik Chowdhury P4131: Narayan Chandra Das P3179: Gopi Ram P3084: Arnab Atta	T4.4 Chairs <i>Prof. D. Ravi Shanker</i> <i>Prof. Mahesh Patel</i> Presentations P2569: Dr. K. Muthukumar P2311: Prof. Tripti Singh P3606: Ranjan Kumar Srivastava P4083: William Kumar Mohanty P2869: Indrajit Ghosh P3840: Shailendra K Varshney P2758: Sathya Peri P2528: Dr. Nivethitha S	T4.5 Chairs <i>Prof. Gopal Nail M</i> <i>Prof. John Zothanzama</i> Presentations P2244: Dr. Dibyendu Adak P2294: Prof Dilipkumar A Patel P2465: Prof S V S S N V G Krishna Murthy P3328: Sarang Chandrashekhar Dhongdi P4028: Dr S.K. Pramada P2824: Prof. Henry Zodinliana Pachuau P2523: Samaresh Bardhan P510: Arkopal Kishore Goswami P3282: Jyotsna Dutta Majumdar

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Poster Presentation Schedule

DAY 1 – 8 MAR 2026

Poster Session P1

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Theme: Advanced Materials, Rare-earth & Critical Minerals

Poster	Presenter	Title
P01	Greeshma Thankachan	Synthesis and Physicochemical Characterization of HKUST-1/Polyetherimide Mixed Matrix Membranes for Pervaporation Separation
P02	Jyotirekha Dutta	Adverse to beneficial: upcycling residual lithium compounds on LiNi _{0.8} Mn _{0.1} Co _{0.1} O ₂ into a stabilizing Li _{1+x} Mn _{2-x} O ₄ interface
P03	Borra Venkata Lakshmi	Rare earth elements, Recycling, permanent magnets, leaching, reduction
P04	Harsha Arya	Developing circular organophosphate polymers for selective removal of lead ions from water
P05	Ajisha A	Tuning the Structural and Thermoelectric Transport Properties of Mg ₂ Si via Fe Substitution
P06	Barkat Aziz	Next-Generation Sustainable Thermoplastic Vulcanizate (TPV): Bio-EPDM/Recycled-PP Empowered by Vitrimer Chemistry
P07	Abhimanyu Kumar Prajapati	Activating sulfur redox chemistry with 1T-MoS ₂ for high-performance Li-S batteries
P08	Swarnendu Bhuyan	Quartz microfracture Sealing in Orogenic Gold Systems: Coupling Experimental Observations with Reactive Transport Modelling
P09	Akhil Nazim M. K.	Polyether-block-amide Mixed Matrix Membrane Enhanced with Cu-Based Metal-Organic Framework for Pervaporation and Gas Separation
P10	Awanish Gupta	Effect of shell thickness on electrochemical properties of core-shell CuO@TiO ₂ nanoparticles for application in lithium/sodium-ion batteries
P11	BADRI RAHUL	Synthesis, Fabrication and Characterisation of DOPO-based Electrospun Polyimide Separator for Lithium Metal Battery
P12	Bholanath Ghanti	High proton-conducting fluorine-free pyridinyl proton exchange membranes with enhanced dimensional stability

Theme: Energy, Sustainability and Climate Change

Poster	Presenter	Title
Poster No	Name	Title
P13	Shalini R	Energy-Crop Performance Assessment of a 10.56 kW Agrophotovoltaic System for Tomato Cultivation in Semi-Arid India
P14	Surabhi Chakraborty	Is ESG Controversy Associated with Non-Performing Loans (NPL) of the Banking Sector: Evidence from the Indian Banking System
P15	Jijitha Gilton	DEVELOPING AND VALIDATING A SUSTAINABILITY LITERACY SCALE

P16	Swagata Goswami	Novel iron free nano-Fenton-like catalyst for sustainable treatment of antibiotics and cyanobacteria
P17	Barsha Mondal	Ritual, food and meaning. Indigenous Hindu Coping Systems as Lived Pathways to SDG 2 (Zero Hunger) & SDG 3 (Health and Well-being)
P18	Mahima Bhatnagar	Enzymatic Hydrolysis and Fermentation of Textile (Waste) for Ethanol Production via Glucose Formation
P19	Annie Feba Varghese	Energy Saving Behaviour Assessment Scale (ESBAS) : A validated instrument to assess determinants of energy saving behaviour
P20	Nimisha Tiwari	Ritual, food and meaning. Indigenous Hindu Coping Systems as Lived Pathways to SDG 2 (Zero Hunger) & SDG 3 (Health and Well-being) Beyond Policy Language: Cultural Practice as Sustainable Development
P21	Shraddha Rai	Developing a framework and designing assessment metrics for cyclic social innovation for a circular economy in India
P22	Anushree Bhat S	ATMOSPHERIC CO2 DIRECT CONVERSION DEVICE
P23	PRIYANKA KU-MAWAT	Computational Framework and Energy Benchmarking Strategy for Net Zero Energy Buildings in India
P24	Swarnali Dhar	Quantifying Irreversible Mixing in Stratified Turbulence
P25	Lagudu Hemanth Rajesh	A Stable Nickel-based Nano structured Oxygen Carriers for Chemical Looping Dry Reforming of Methane

Theme: Agri & Food Technologies

Poster	Presenter	Title
P26	Asha Kumari & Patel Mayur Kirtibhai	Phenotypic, physiological and biochemical characterization of mung bean [<i>Vigna radiata</i> (L.) R. Wilczek] germplasm under excess iron stress
P27	Manju Rani	Assessing the Influence of provenances on proximate composition, Antioxidant Activity and fatty acid in seeds and leaves of <i>Moringa oleifera</i>
P28	Narne Kavya	Real-time Automated Pest Monitoring of Horticultural Crops of Sub-Himalayan Region of Uttarakhand, India
P29	Mary Theresa	Integrative endophytic microbiome engineering and genomic strategies for enhanced camptothecin biosynthesis in <i>Ophiorrhiza mungos</i> L.
P30	Puja Nelluri	Effect of Milling Moisture on Chickpea Protein Enrichment during Multi- Cycle Air Classification
P31	Dr Sivaprakash Gu-rusamy	A study on the mechanisms of edible nanomaterials to enhance the shelf- life and preventing the apples against blue mold decay and table grapes against black mold decay
P32	Bibek Bahadur Shrestha	Upcycling Beetroot Waste into Carbon Dot–Betalain Nanofibers as a Sustainable Strategy for Smart Packaging

Theme: Space and Defense

Poster	Presenter	Title
P33	Khushboo	Adaptive Laser Beam Engineering with Coherent Beam Combining for Efficient Power Delivery
P34	Krishnendu Nayak	Toroidal Magnetic Field Evolution Under Imposed Differential Rotation and Magnetic Dipole in Spherical Shell

Theme: Next-Gen Communications

Poster	Presenter	Title
P35	Neethu Sajeev	Predictive Handover Management Using Real-Time Measurements from a UK Urban Network
P36	Treesa Reena John & Vamsi Krishna Pothuru	Indigenous/Local knowledges and Community Radio in India: Some Learnings from the Field

P37	Sandhana Mahalingam M	Advanced Balanced Antipodal Vivaldi Antennas with Metamaterial-Inspired Loading for UltraWideband and mmWave Systems
P38	Amala Jose	Gain-Guided Broadband Few-Mode Fiber Amplifier for High-Capacity Optical Systems Amala Jose 1, Nithyanandan Kanagaraj 1 and Massimiliano Guasoni 2

Theme: Smart Cities & Mobility

Poster	Presenter	Title
P39	Alinda Merrie Jan	The Effects of Digital Mediation of Urban Labour Markets: Insights from the New Gig Economies in India
P40	AHANA BOSE	Labour Market Uncertainty and Pension Contributions
P41	Dasari Navya	Smart and Sustainable Water Infrastructure-management of Water Distribution Network using GIS and Hydraulic Modelling and the Journey to Smart Systems
P42	Guduru Shravani	Exploring the Sequential Impact of Autonomy on Performance: The Roles of Work-Life Balance and Job Engagement in Location-based Gig Work
P43	Sadiya Shaikh	Development of a PCA-Based Traffic Speed Deflectometer Index for Network- Level Structural Evaluation
P44	Ishaan Thakur & Parikshit Sharma	Enhancing Cultural Resilience of the Third-Generation Diaspora through Digital Technologies and Storytelling of Indian Tangible and Intangible Heritage

Theme: Manufacturing & Industry 4.0

Poster	Presenter	Title
P45	Jeshurun A	A Cost-Effective and Rapid Approach in Manufacturing Microchannel Masters Having Width Perturbations
P46	Vinayaka E Bodur	Laser Directed Energy Deposition of Permendur as a Core for Transcranial Magnetic Stimulation Coil
P47	Sivaprakash S	A process intensified approach for continuous production of polymeric nanospheres for potential in drug delivery application

Theme: Advanced Computing (Supercomputing, AI, Quantum Computing)

Poster	Presenter	Title
P48	Kiran Sivadas	Effects of arbitrary axis rotation using a hybrid simplified lattice Boltzmann method
P49	Jaspreet Kaur	Advanced AI and Neuromorphic based Technologies in Agriculture; An Exposure under SPARC
P50	Maneela Sirisety	Safe Behavior on the Internet: Research, Training of Teachers, Parents, and Adolescents
P51	Akanksha Srivastava & Vikas	Analysing the Behavioural Intention of Instructors to Adopt Blockchain in Grading and Certification
P52	Meghana Bhat	The Waring rank of quasi-monomial complete intersections
P53	Krishna Chaitan Marthi	Hydrodynamic instability in side-by-side triangular bluff body arrays

Theme: Healthcare & MedTech

Poster	Presenter	Title
P54	Sakshi Anand & TAJA-MUL SHAFI	CRISPR/Cas9-based targeting of the Host Sphingolipid Switch to Overcome Artemisinin Resistance in Malaria.
P55	Arundhathy J	Association of air pollutants, to protein aggregation disorders

P56	Apurba Das	How bacteria sense environment: case study on Myxococcus xanthus chemosensory pathway
P57	Azhar Tariq Khan	Strategic Synthesis of Fused Indole Alkaloids: A Divergent Route to Novel 10-Membered Macrocycles as Potential Anti-Malarial Leads
P58	Sapna Sudan	Enzyme-Based Biochip Sensor for Impedimetric Detection of Antibiotics in Water.
P59	Sabiha Khan	Synthesis of New Antimalarial Chemotypes
P60	Dr. Akshpreet Kaur	Wearable Triboelectric Nanogenerators for Autonomous Healthcare Monitoring
P61	Sahiti Vojjala	The AI Regulatory Sandbox: Balancing Innovation and Patient Safety through Graded Liability System
P62	PARVATHY M R	Combating Antimicrobial Resistance Using AuNR–MOF Nanohybrids on a Microfluidic Platform
P63	Priyamvada Bhamidipati	Investigation on Sanguinarine induced ER stress and its related gene expression in MDA-MB-231 triple negative breast cancer cells
P64	Arnab Maity & Souvik Sinha	Multistage Fusion Framework for Coronary Artery Disease Detection from Multichannel PCG
P65	Adarsh Singh	Microwave Antenna-Based Approaches for Non-Invasive and Continuous Glucose Monitoring
P66	Shivam Jadaun	Development of a Compact CBD Nanopore System for Real-Time Detection of Inflammatory Biomarker CRP
P67	LEKHNATH SHARMA	Design and synthesis of small molecules for the treatment of prostate and skin cancer
P68	Niroj Kumar Meher	Dynamic role of CPT1A during Epithelial to Mesenchymal Transition(EMT) in A549 cell lines
P69	ADITYA KUMAR SAHU	Unequal Health Outcomes: Analysing the Burden of Lifestyle-Related Non- Communicable Diseases among Women in North India
P70	Alok Kumar Thakur	The Lure of 'Healthier Smoke': Comparative Physical, Chemical, and Oxidative Potential Characterization of Emissions from Herbal and Tobacco Cigarettes
P71	Florence Laldinpuii	Songs of Bereavement: Poetry and Narratives of Death
P72	Athmika Tarun	No Sense of an Ending: Feeling Implicated in Graphic Narratives of Madness
P73	Harish G. S.	A Programmable, Field-Strength Adjustable 3D-Printed Magnetic Actuation System for Advanced Biomedical Studies
P74	Dr. Renuka Pramod Potbhare	Skin microbial fingerprints as a marker among genetically related Indian individuals

Poster Session P2

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Theme: Advanced Materials, Rare-earth & Critical Minerals

Poster	Presenter	Title
P75	Navneesh Kumar Sonkar	High temperature tribological studies of multilayer TiCr/TiCrN coatings incorporated with Ag for dry sliding applications
P76	Subhendu Pramanik	Design of a Self-Healable Hybrid Nanofilled Chloroprene Elastomer Composite
P77	Pankaj Kumar Ojha	Critical Role of Intrinsically Deformable Laves Phase on the Structure-Property Correlation in High Entropy Alloys
P78	Koustav Sahoo	Water-Driven Dynamic Crystallization of an Atomically Precise Nanoparticle in Solution
P79	Soumyadip Roy	Amyloid-Confined Silver Nanoclusters for Electrocatalytic Nitrate Reduction
P80	Mohammad Zaid	Synergistic Mn-Cr Co-doping in Na ₃ V ₂ (PO ₄) ₂ O ₂ F Promising Cathode: Unlocking Superior Performance for Next-Generation Sodium-Ion Batteries
P81	Jesiya Susan George	Insights into the Synergistic Effect of Graphene Oxide/Silica Hybrid Nanofiller for Advancing the Properties of Epoxy Resin
P82	Gaurav Pandey	Characterization of triple junction distributions in nanocrystalline metals for determination of mechanical properties
P83	Yugal Kishor Sharma	Thermodynamic Design, Fabrication and Wear Performance Evaluation of (Cr ₂₀ Mo ₁₀ Nb ₂₀ Ti ₂₀ Ta ₁₀ Zr ₂₀)–Ni _x High Entropy Alloys
P84	Ajay Haridas CP	Recyclable, and Crosstalk-free Thermoplastic Polyurethane-Carbon Materials Based Flexible Electronics
P85	Saikat Banerjee	Fluoroelastomer-graphene nanoplatelet nanocomposites : Next generation sealing solution for aerospace and automotive industry
P86	Priyanshi Goel	Poly (Benzoxazine-co-Sulfur): two in one active material for cathode for Lithium – Sulfur batteries
P87	Deepayan Chakraborty	Causally Aware Feature Selection and Explanation for the Prediction of Indian Summer Monsoon Rainfall from Global Climatic Indices.
P88	Madhusudhana M	Layered Nanocomposite Composed of Graphene Carbon Quantum Dots and MXene Coated with Calcium Oxide Nanoparticles for Large Scale Carbon Dioxide Capture and Translation into Nano-Fertilize
P89	Payyavula Raju	A Bimetallic Nanofibrous Fe–Cu–Al ₂ O ₃ Oxygen Carrier for the Chemical Looping Combustion of Methane

Theme: Energy, Sustainability and Climate Change

Poster	Presenter	Title
P90	Deepak Mishra	Optimizing Pumping Thresholds to Reduce Phosphorus Loading Using Machine Learning
P91	NASRIN BANU G	Egg Shell Mediated Ni ₅ P ₄ /Polypyrrole electrocatalyst for Sustainable Water Splitting
P92	Bimal Kumar Dora	Global Grid: The Future of Earth
P93	Sumit Khatri	Analysis of Melting Characteristics of Spherical Phase Change Materials for Improved Solar Still Productivity
P94	Soumen Midya	Geometric–Electronic Structure Optimization of Ni/Cu-Based Trimetallic Catalysts for Efficient Alkaline Hydrogen Evolution
P95	Akhila Deepak Kumar & Bhargav N	Distributed wind energy for urban and rural requirements, integration and energy conversion
P96	Gouranga Maharana (Presenter)	Prototype glass tube reactor with flexible ZnO tetrapods sheet for photodegradation of dye pollutants

P97	Lalruatkima Ralte	Novel heterojunction catalyst for the sustainable degradation of amoxicillin and propyl-2-thiourea: Ecotoxicity evaluation and mechanistic insights
P98	Saurabh Singh Chauhan	Production of Methanol from Catalytic Hydrogenation of CO ₂ and Its Utilization in a Spark-Ignition Engine
P99	Amir Mehtab	Development of Graphitic Carbon Nitride (g-C ₃ N ₄) and its doped Nanostructured Analogous for Clean and Green Energy Applications Emphasizing on Hydrogen Generation.
P100	Musaid P P	Physical and dynamical factors affecting the boundary layer tracer pathway to the Asian Summer Monsoon Anticyclone
P101	Anirban Roy	Inertia-Adhesion Mediated Dust Removal on Solar Glass Surfaces Across PV Generations
P102	T Puneeth	Advanced High temperature High Pressure Oxygen Storage and Release Materials (OSRM) for Chemical Looping (CL): A promising CCS and clean energy generation Technology
P103	Abhishek Mishra	Solar PV Based Hybrid Microgrid System for Efficient Energy Management
P104	Rajeev Ranjan	Developing Next-Generation Membrane-Based Electrolysers

Theme: Semiconductors

Poster	Presenter	Title
P105	Bharathy J	Polarization-dependent cylindrical vector vortex beams and optical skyrmion generation using all-dielectric chiral metasurfaces
P106	Rima Dolai	Building Resilience in Semiconductor Supply Chain Using Reverse Logistics
P107	Kranthi Panuganti	Assessing High-Voltage PWM-Induced Degradation of FR4 PCBs in Aircraft Applications
P108	Patwari Aditya Shivaji	Minimalist Nanofluidic Architectures for Energy-Efficient Neuromorphic Memristors

Theme: Disaster Management & Resilient Infrastructure

Poster	Presenter	Title
P109	Mehran Farooq Shah	Hybrid SEIR-Bayesian Ensemble Model for Semiconductor Supply Chain Risk Prediction Using Graph Neural Networks
P110	Ratna Bhagat	Shallow slow slip and low-frequency earthquakes in the Palghar intraplate seismic swarm, western India
P111	SHIVAM SAINI	Uncertainty Quantification of GEP-based Turbulence Closure Models for Intake Subjected to Extreme Crosswinds
P112	Donkumar Francis Marbaniang & Richard Badonbok Lyngkhoi	Low cost precast concrete panels for Assam Type Housing in North-East India
P113	Souvik Daripa	What Controls Earthquake Size and Slip complexity on Planar Rate and State Faults ?
P114	Dr. N. Nageswara Reddy	Real-time Forecasting of Floods Using SWAT model

Theme: Agri & Food Technologies

Poster	Presenter	Title
P115	ASHUTOSH JENA	Climate Risk Assessment of Coastal Rice Farming: A Case Analysis from Eastern India Ashutosh Jena ¹ , Archana Raghavan Sathyan ² , Allan Thomas ² , Suzanne Jacobs ^{3, 4} , Lutz Breuer
P116	RAHUL THAKUR	Tamarind Kernel Xyloglucan Films Reinforced with TEMPO-Modified Cellulose Nanospheres for Sustainable Food Packaging

P117	Prashant Kumar	Milling as a Pre-Treatment Strategy for Improving Protein Enrichment Efficiency during Dry Fractionation of Chickpea
P118	Arijit Saha	Deciphering complex-liquid retention on flexible surfaces for greener pesticide spray management
P119	Vicky Nandgaye	From Farms to Factories: Land-Use Shifts Driving Rural-Urban Food Transitions
P120	Menokhono	Continuity in Change: The Cultural and Economic Life of Wild Foods among Indigenous communities of Nagas in India
P121	Arti Karamchandani	Recent advances in designing synthetic plant regulatory modules. Authors: Arti Karamchandani, Rajesh Mehrotra, Diana Santelia

Theme: Smart Cities & Mobility

Poster	Presenter	Title
P122	Anibesh Singh	The Effects of Digital Mediation of Urban Labour Markets: Insights from the New Gig Economies in India
P123	RAJADURAI R	A Decentralized Architecture for Digital Twinning of Underground Utilities in Smart Cities
P124	R.NAKKEERAN	Wireless Power Transfer for Electric Vehicle Application
P125	M R AJITH KUMAR	Smart and Sustainable Water Infrastructure - Management of Water Distribution Network using GIS and Hydraulic Modelling and the Journey to Smart Systems
P126	Manoranjan Gandhudi	HR Practices and Gig Workers Performance: The Mediating Role of Psychological Contract
P127	Srijay Sutar	“Assembling the city: Utility and Gendered Infrastructures in Northern India”

Theme: Advanced Computing (Supercomputing, AI, Quantum Computing)

Poster	Presenter	Title
P128	Ashwani	New Higher-Order Super-Compact Finite Difference Scheme to Study Three-Dimensional Fluid Flow and Heat Transfer in Non-Newtonian Power-Law Fluids
P129	Mainak Chaudhury	IREM: Informative and Robust Explanation Generation of Deep Multi-modal Model
P130	Harsh Chaudhary & Javed Khan	The Ethical Implications of Using AI to Simulate Emotional Support (Praise) in a Learning Environment
P131	JOHNY MARJIT	Building Digital Counter-Narratives in Higher Education: Visit Experience and Task-Based Learning at Queen’s University Belfast
P132	Rajkhush Kumar	A system-wide model of startup facilitation using encrypted networking in an entrepreneurial ecosystem.
P133	Rohit Rajput	A Semi-Supervised Approach for Classifying Pedestrians from Point Cloud Clusters
P134	Arvind Kumar	Multiagent AI for Controlled Sensing and Communications

Theme: Healthcare & MedTech

Poster	Presenter	Title
P135	Anushka Sahu	Standard Essential Patents and Digital Health: Critical Analysis from a Patient-Safety Perspective
P136	AKSHAYA THULASI SATHYANARAYANA	We C.A.R.E: Development, Implementation, and Validation of a Structured Module for Enhancing Communication, Attentiveness, Respect, and Empathy in Medical Education
P137	Ankita Dey & Swadhin Chakraborty & Suvendu Nandi	Highly Branched Poly (NIPAM-co-vinyl anthracene) Copolymers as Dual-Responsive Carriers for Cervical Cancer Drug Delivery

P138	MONALISA SAHU	Deciphering Mycobacterial Respiratory Niches to Target Organelle Dynamics during Infection: A Translational Approach to Develop Novel Therapeutic Intervention
P139	Anuska Sarkar	Enhancing Surgical Vision through Depth-Aware Tracking and Occlusion Handling
P140	Debashree Tripathy	Women's Experience of Managing Lifestyle Diseases in Selected Regions of North India: An Integrative Review
P141	Harith Priya Kannan	Bisphenol A Promotes Hippocampal Degeneration through Nrf2 Methylation and Unfolded Protein Response Activation
P142	Sharine Priscilla A	Multigenerational neurotoxic effects of bisphenol A in the Drosophila model
P143	Mr Jey Kumar Pachiyappan	Plastics and People: Human health implications of microplastics in the environment
P144	Naveen S. Lal	Mercury in Built Environments: Distribution, Determinants, and Health Implications
P145	Dr. Lijin Rajan	Simultaneous biomimetic sensing and actuation of conducting polymer coated textile yarns
