



### Tentative Program

## International Conference on Thin Films and Nanotechnology: Knowledge, Leadership & Commercialization (ICTN-KLC-2025)

11<sup>th</sup>-13<sup>th</sup> December 2025

#### Conference Patron

**Prof. Rangan Banerjee**  
**Director**

Indian Institute of Technology Delhi

#### **Prof. Trilok Singh** **Conference Chair**

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#### **Prof. Vipin Kumar** **Conference Co-Chair**

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**Day 1 (December 11<sup>th</sup>)****Registration: 9:00 AM - 9:30 AM****Inaugural Session and Welcome to the Guests (Venue: LHC 325)****9:30 AM – 10:30 AM****High Tea (10:35 AM - 11:00 AM)****Plenary Speaker 1: 11:00 AM - 11:45 AM (Venue: LHC 325)****Session Chairs: Prof. Rajendra Singh, Associate Dean, R&D and Prof. Pankaj Srivastava, IIT Delhi****Prof. Dr. Sanjay Mathur, Director, Institute of Inorganic Chemistry, University of Cologne, Germany****Title: Catalysts of Change: Advanced Nanomaterials Steering Health and Energy Transition**

Session / Time	Energy Generation (Venue: LHC 318)	Energy Storage/Interdisciplinary Science and Engineering (Venue: LHC 316)
<b>Invited Talks: Session 1</b>	<b>Session Chair:</b> <b>Prof. D.K. Pandya, Ex. HoD Physics and Adjunct Professor, IIT Jammu</b>	<b>Session Chair:</b> <b>Prof. Vipin Kumar, IIT Delhi</b>
<b>T01- 11:45 AM - 12:05 PM</b>	<b>Prof. Sanjay K. Srivastava, CSIR NPL</b> <b>Title: Efficient Organic Semiconductor-Silicon Hybrid Solar Cells Employing Effective Light Trapping Schemes</b>	<b>Prof. Hemant Kumar, IIT Bhubaneswar</b> <b>Title : Interplay of Solvation and ion transport in liquid electrolytes</b>
<b>T02- 12:05 PM - 12:25 PM</b>	<b>Prof. Jatin Kumar Rath, IIT Madras</b> <b>Title: Evolution of PDS and FTPS techniques to probe the functioning of solar cells</b>	<b>Prof. Prasanth Raghavan, Cochin University of Science and Technology (CUSAT)</b> <b>Title: Smart Textiles for Flexible and Stretchable Energy Harvesting and Storage Applications</b>
<b>T03- 12:25 PM - 12:45 PM</b>	<b>Prof. Vamsi K. Komarala, IIT Delhi</b> <b>Title: Fabrication and Characterization of Hetero-Junction Solar Cells for High Efficiency</b>	<b>Prof. Bhanu Nandan, IIT Delhi</b> <b>Title: Functionalized Textile Based Electrode Materials for Lithium Sulfur Batteries</b>
<b>T04- 12:45 PM - 01:05 PM</b>	<b>Prof. Oomman K. Varghese, University of Houston, USA</b>	<b>Prof. Eswaraiah Varlla, SRM Institute of Science and Technology, Kattankulathur Campus, Tamil Nadu</b>

	<b>Title: Revealing the Novel Properties of Low Dimensional Semiconductors via In Situ Studies and Numerical Simulations</b>	<b>Title: Liquid-Exfoliated Two-Dimensional Nanosheets: Energy Efficient Approaches and Self-assembly Processes</b>
<b>Lunch (1:05 PM – 2:00 PM)</b>		
<b>Invited Talks: Session 2</b>	<b>Session Chair: (Venue: LHC 318)</b> <b>Prof. Sandeep Chhoker, JIIT Noida</b>	<b>Session Chair: (Venue: LHC 316)</b> <b>Prof. Hemant Kumar, IIT Bhubaneswar</b>
<b>T05- 02:00 PM - 02:20 PM</b>	<b>Prof. Pabitra K. Nayak, TIFR Hyderabad</b> <b>Title: Doping of soft semiconductors for stable and efficient optoelectronics</b>	<b>Prof. Arihant Bhandari, IIT Delhi</b> <b>Title: Simulations of few-layer graphene-based electrodes for electrochemical energy storage.</b>
<b>T06- 02:20 PM - 02:40 PM</b>	<b>Dr. Suraj Soman, CSIR-NIIST Thiruvananthapuram</b> <b>Title : From Lightbulbs to Lifelines: Powering the Future with Indoor Light</b>	<b>Prof. Deepak Kumar, IIT Delhi</b> <b>Title: Co-utilization strategy-based nano-composite Gr-Si anode for Li-Ion battery</b>
<b>S01- 02:40 PM - 02:50 PM</b>	<b>Dr. Telugu Bhim Raju, Kyushu University Japan</b>	<b>Mr. Shubham Mural, NSUT</b>
<b>S02- 02:50 PM - 03:00 PM</b>	<b>Dr. Dinesh Kumar, IIT Madras</b>	<b>Ms. Gazal Gupta, IIT Delhi</b>
<b>S03- 03:00 PM - 03:10 PM</b>	<b>Mrs. Ankita Sharma, SNU Delhi</b>	<b>Mr. M Humam Zaim Faruqi, IIT Delhi</b>
<b>S04- 03:10 PM - 03:20 PM</b>	<b>Mr. Rajesh Maurya, IIT Madras</b>	<b>Mr. Jasil T K, NITK Surathkal</b>
<b>S05- 03:20 PM - 03:30 PM</b>	<b>Impulse Technology (Industry)</b>	<b>Ms. Piyali Biswas, IIT Patna</b>
<b>3:30 PM - 4:30 PM:</b>		<b>Poster Evaluation</b>
<b>Tea/Coffee (4:00 PM - 4:30 PM)</b>		
<b>Plenary Speaker 2: 4:30 PM - 5:30 PM (Venue: LHC 325)</b>		
<b>Session Chair: Prof. Sanjay Mathur, Director, Institute of Inorganic Chemistry, University of Cologne, Germany</b>		
<b>Prof. V. Ramgopal Rao, Fellow of IEEE, TWAS, INAE, IASc, INSA, NASI</b>		
<b>Group Vice-Chancellor for the Birla Institute of Technology &amp; Science (BITS) Pilani</b>		
<b>Title: From Atoms to Applications: Translating Nanoscience into Real-World Innovation</b>		

**Day 2 (December 12<sup>th</sup>)****Plenary Speaker 3: 09:30 AM - 10:15 AM (Venue: LHC 325)****Session Chair: Prof. Gyu-Min Kim, Hankyong National University, Anseong, Republic of Korea****Prof. Shyam Sudhir Pandey, Graduate School of Life Science and Systems Engineering Department of Biological Functions Engineering, Kyushu Institute of Technology, Japan****Title: Facile Fabrication of Large Area Oriented Thin films and their 2D-Positional Mapping for Organic Electronic Devices****Tea/Coffee (10:15 AM - 10:30 AM)**

Session / Time	Energy Generation (Venue: LHC 318)	Energy Storage/Interdisciplinary Science and Engineering (Venue: LHC 316)
Invited Talks: Session 3	Session Chair: <b>Prof. Gyu-Min Kim, Hankyong National University, Anseong, Republic of Korea</b>	Session Chair: <b>Prof. Deepak Kumar, IIT Delhi</b>
T07- 10:30 AM - 10:50 AM	Dr. Bhumika Choudhary, University of Turku, Finland <b>Title: Structurally Tunable Perovskite for Stable Thin film Optoelectronics</b>	Prof. Vanchiappan Aravindan, IISER, Tirupati <b>Title: Materials &amp; coating for batteries, super-capacitors and fuel cells</b>
T08- 10:50 AM - 11:10 AM	Dr. Rashi Kedia, Amity University, Noida, Uttar Pradesh <b>Title: Solvent-Free Deposition of Copper(I) Thiocyanate Thin Film: A Sustainable Approach for the Hole Transport Layer in Perovskite Solar Cells</b>	Prof. Abhishek Sarkar, IIT Delhi <b>Title: High Entropy Oxides: Opportunities and Challenges</b>
T09- 11:10 AM - 11:30 AM	Dr. Ashish Kulkarni, IIT Tirupati <b>Title: Insulating Metal Oxide and Self-Assembled Monolayer Interface for Efficient Perovskite Solar Cells</b>	Prof. Rajendra Singh Dhaka, IIT Delhi <b>Title: Sodium-ion Batteries for Sustainable Future and Viksит Bharat</b>
T10- 11:30 AM - 11:50 AM	Dr. Saurabh Kumar Pandey, IIT Patna <b>Title: Numerical Simulation of Bismuth-based</b>	

	highly efficient eco-friendly Perovskite solar cell	
<b>S6- 11:50 AM - 12:00 PM</b>	Dr. N. Sivakumar, IIT Madras	Mr. Ankit Kumar Deval, IIT Roorkee
<b>S7- 12:00 PM - 12:10 PM</b>	Mr. Snehangshu Mishra, IIT Kharagpur	Ms. Bhavani Sankaran, SRMIST Tamilnadu
<b>S8- 12:10 PM - 12:20 PM</b>	Mr. Milan Kumar Mandal, IIT Kharagpur	Ms. Toiba Manzoor, NSUT Delhi
<b>S9- 12:20 PM - 12:30 PM</b>	Mr. Nilesh, IIT Madras	Dr. Mahesh Chandra, IIT Delhi
<b>12:30 PM - 1:00 PM</b>		
<b>Networking</b>		
<b>Lunch (01:00 PM - 02:00 PM)</b>		
<b>Special Talk 1: 02:00 PM - 02:45 PM (Venue: LHC 325)</b>		
<b>Session Chair: Prof. Raju Kumar Gupta, IIT Kanpur</b>		
<b>Prof. Ramakrishna Ramanath Sonde, BITS Pilani Goa Campus</b>		
<b>Title: Energy transition and net zero pathway for India: Molecular Insights to Industrial Impact</b>		
<b>Invited Talks: Session 4</b>	<b>Session Chair: (Venue: LHC 318)</b> Dr. Bhumika Choudhary, University of Turku, Finland	<b>Session Chair: (Venue: LHC 316)</b> Prof. Manika Khanuja, Jamia Millia Islamia, New Delhi
<b>T11- 02:45 PM - 03:05 PM</b>	Mr. Arup Dhar, NISE, Gurugram <b>Title: Accurate translation of outdoor IV Measurements to STC for Photovoltaic Modules across Diverse Technologies</b>	Prof. Somnath Chandra Roy, IIT Madras <b>Title: An Exciting World of One-dimensional Metal Oxide Nano- and Hetero-structures</b>
<b>T12- 03:05 PM - 03:25 PM</b>	Mr. Awatans Tripathi, GIZ India, New Delhi <b>Title: Improving the pre-conditions of BIPV in India</b>	Prof. Shree Prakash Tiwari, IIT Jodhpur <b>Title: Flexible Electronic Devices for Smart Sustainable Systems</b>
<b>S10-03:25 PM - 03:35 PM</b>	<b>Networking</b>	<b>Networking</b>
<b>I1- 03:35 PM - 03:55 PM</b>	<b>RENEW (Venue: LHC 318)</b>	<b>RENEW (Venue: LHC 318)</b>
<b>I2- 03:55 PM - 04:15 PM</b>	<b>Bry Air (Venue: LHC 318)</b>	<b>Bry Air (Venue: LHC 318)</b>

<b>Tea/Coffee (4:15 PM - 4:30 PM)</b>	
<b>04:30 PM - 05:30 PM:</b>	<b>Panel Discussion (Venue: LHC 325)</b> <b>Title: Energy Transition in India: Challenges and Opportunities Towards Sustainable Energy Goals</b>
<b>05:30 PM - 06:45 PM:</b>	<b>Poster Evaluation</b>
<b>Gala Dinner 7:00 PM Onwards (Venue: ESSEX Banquet, <a href="https://maps.app.goo.gl/NJYpWnWb47CZmStm6">https://maps.app.goo.gl/NJYpWnWb47CZmStm6</a>)</b>	

Day 3 (December 13<sup>th</sup>)

Energy Generation(Venue: LHC 318)	Energy Storage/Interdisciplinary Science and Engineering (Venue: LHC 316)	Other Interdisciplinary Areas (Venue: LHC 325)
<b>Special Talk 2: 09:30 AM - 10:15 AM :</b> <b>Session Chair: Prof. Trilok Singh, IIT Delhi</b>		
<b>Prof. Gyu Min Kim, Hankyong National University, Anseong, Republic of Korea</b>  <b>Title: Ambient-Tolerant Mechanochemical Powder Strategy combined with Alkali-Metal-Integrated HTLs for Stable, Solvent-Minimal Perovskite Devices</b>	<b>T13- 09:30 - 09:50 AM</b>	<b>Session Chair Prof. Pawan K. Kulriya, JNU</b>  <b>Prof. Raju Kumar Gupta, IIT Kanpur</b> <b>Title: NASICON-Based Electrolytes for Solid-State Sodium-Ion Batteries</b>
	<b>S11- 09:50 - 10:00 AM</b>	<b>Mr. Vineeth S K, IIT Delhi</b>
	<b>S12- 10:00 - 10:10 AM</b>	<b>Mr. Bheem Kumar, JNU Delhi</b>
	<b>S13- 10:10 - 10:20 AM</b>	<b>Dr. Rajesh Kumar Jha, ICFAI Hyderabad</b>
<b>T13- 10:15- 10:35 AM</b>	<b>Prof. Upendra Pandey, Shiv Nadar Institution of Eminence</b>  <b>Title: Indenofluorene Dimer as an Efficient Interlayer for High-Performance Perovskite Solar Cells</b>	<b>S14- 10:20 - 10:30 AM</b>  <b>Mr. Shubhang Srivastava, IIT Madras</b>
		<b>S15- 10:30 - 10:40 AM</b> <b>Mr. Ashwin, IIT Delhi</b>
		<b>9:00-10:45 AM</b> <b>Networking session</b>

<b>Tea/Coffee (10:45 AM - 11:00 AM)</b>					
<b>Invited talks</b>	<b>Session Chair:</b> <b>Prof. Upendra Pandey, SNU Noida</b>		<b>Session Chair</b> <b>Prof. Sandeep Chhoker, JIIT Noida</b>		<b>Session Chair</b> <b>Prof. Suresh C. Sharma, DTU, Delhi</b>
<b>T14- 11:00- 11:20 AM</b>	<b>Prof. Pankaj Yadav, Pandit Deendayal University, Gujarat</b>  <b>Title : Automated EIS Analysis of Metal Halide Perovskite Single Crystals Using Machine Learning for Activation Energy Prediction</b>	<b>T14- 11:00 - 11:20 AM</b>	<b>Prof. Ankur Goswami, IIT Delhi</b>  <b>Title: Tungsten doped VO<sub>2</sub> thin film based resistive micro-oscillators for the application in neuromorphic systems</b>	<b>T1- 11:00 AM - 11:20 AM</b>	<b>Prof. Hemant Sagar, IIT Roorkee</b>  <b>Title: Advancing Toward 2070 Net-Zero: Hydropower Potential and Cavitation–Silt Problems Across Scales</b>
<b>T15- 11:20 AM - 11:40 AM</b>	<b>Mr. Dileep Tiwari, Executive Renewable Energy, Gujarat</b>  <b>Title: Unleashing Renewable Energy Opportunities: Policies, Strategies for Emerging Challenges, and the Path to Sustainable Investment in Gujarat</b>	<b>T15- 11:20 - 11:40 AM</b>	<b>Prof. Rishi Sharma, BIT Mesra</b>  <b>Title: Cold Plasma Processing for Surface Engineering</b>		
<b>S11- 11:40 AM - 11:50 AM</b>	<b>Mr. Nitin Kumar Bansal, IIT Delhi</b>	<b>S16- 11:40 AM 11:50 AM</b>	<b>Dr. Daljit Kaur, DAV University</b>	<b>S1- 11:20 AM - 11:30 AM</b>	<b>Dr. Sanjay Baghel, Dr. A.P.J. Abdul Kalam Technical University</b>

S12- 11:50 AM - 12:00 PM	Mr. Siddhant Singh, IISc Bangalore	S17- 11:50 AM - 12:00 PM	Dr. Charu Lata Dube, CUG	S2- 11:30 AM - 11:40 AM	Mr. Aloka Ranjan Sahoo, IGCAR
S13- 12:00 PM - 12:10 PM	Mr. Vipin C K, CSIR-NIIST Kerala	S18- 12:00 PM - 12:10 PM	Ms. Paulomi Singh, IIT Delhi	S3- 11:40 AM - 11:50 AM	Mr. Sujoy Paul, IIT Delhi
S14- 12:10 PM - 12:20 PM	Mr. Manoj Kumar, VIT AP University	S19- 12:10 PM - 12:20 PM	Ms. Fatima Zehra, JMI	S4- 11:50 AM - 12:00 PM	Mr. Vudit Pandey, AMU
S15- 12:20 PM - 12:30 PM	Ms. Neha Chakraborty, BIT Mesra, Ranchi	S20- 12:20 PM - 12:30 PM	Ms. Bhawna SU, Gurugram	S5- 12:00 PM - 12:10 PM	Mr. Dishant Sharma, IIT Delhi
S16- 12:30 PM - 12:40 PM	Networking	S21- 12:30 PM - 12:40 PM	Ms. Barsha Priyadarshini, CSIR IMM	S6- 12:10 PM - 12:20 PM	Mr. Pallav Sahu, IIT Delhi
S17- 12:40 PM - 1:00 PM	Networking	S22- 12:40 PM - 12:50 PM	Rishav Pandey, IIT Delhi	S7- 12:20 PM - 12:30 PM	Dr. Sonu, IIT Delhi

**Lunch (01:00 PM – 02:00 PM)**

**Plenary Speaker 4: 02:00 PM - 02:45 PM (Venue: LHC 325)**

**Session Chair: Prof. D.K. Pandya, Ex. HoD Physics and Adjunct Professor, I.I.T. Jammu**

**Prof. Bhim Singh, ANRF National Science Chair & Emeritus Professor, Department of Electrical Engineering, IIT Delhi**

**Title: Solar Photovoltaic Energy-A Sustainable Solution for Humanity**

Invited Talks:	Session Chair <b>Prof. Pankaj Yadav, PDU Gujrat</b> (Venue: LHC 318)		Session Chair <b>Prof. Vipin Kumar, IIT Delhi</b> (Venue: LHC 316)	Invited Talks:	Session Chair <b>Prof. Manika Khanuja, Jamia Millia Islamia, (Venue: LHC 325)</b>
T16- 02:45 PM - 03:05 PM	Prof. Dibyajyoti Ghosh, IIT Delhi  <b>Title: Designing Layered Halide Perovskites for Optoelectronics: Insights from ab initio and data-driven modeling</b>	T16- 02:45 - 03:05 PM	Prof. Manika Khanuja, Jamia Millia Islamia, New Delhi  <b>Title: Machine Learning-Enabled Acceleration of Catalytic Reaction Pathways and Sensing Performance in 2D Nanomaterials</b>	T2- 02:45 PM - 03:05 PM	Prof. Suresh C. Sharma, DTU, Delhi  <b>Title: Plasma-Assisted Vertically Aligned Semiconducting 2D Graphene Field Effect Transistor Based Biosensor for</b>

					<b>Detection of Various Cancerous Bio- molecules</b>
		T17- 03:05 - 03:25 PM	Prof. Jai Singh, Guru Ghasidas Vishwavidyalaya, Bilaspur  <b>Title: MoS<sub>2</sub> monolayer, bi-layer thin films fabricated by RF sputtering and pulsed laser deposited ZnO thin-films/nanostructures</b>		
		T18- 03:25 - 03:45 PM	Prof. Ulganathan Mani Amrita Vishwa Vidyapeetham  <b>Title: Strategies for Enhancing Zinc-Iron Hybrid Redox Flow Battery</b>	S8- 03:05 PM - 03:15 PM	Mr. Sivaramasudhan S, ISRO Bengaluru
S18- 03:05 PM - 03:15 PM	Ms. Shilshiya B. G, NIT Tiruchirappalli			S9- 03:15 PM - 03:25 PM	Prof. Abhinav Anand, VIT
S19- 03:15 PM - 03:25 PM	Mr. Ronaldo Roy, NIT Tiruchirappalli				
<b>Tea/Coffee (3:45 PM - 4:00 PM)</b>					
<b>04:00 PM – 05:30 PM: Valedictory Function (Venue: LHC 325)</b>					
<b>Closing Remarks</b>					

**\*LHC : Lecture Hall Complex, 325: Third floor room no 25**

# Oral Presentations

## Energy Generation

Oral Code	Name	Affiliation	Topic
S01	Dr. Telugu Bhim Raju	MCI-CNRC, Kyushu University, Japan	Design and development of organic hole transport materials for n-i-p structure perovskite solar cells
S02	Dr. Dinesh Kumar	Semiconductor Thin Film and Emerging Photovoltaic Laboratory, Indian Institute of Technology Delhi,	Fluorinated Two-Dimensional Interfacial Layers for Grain-Boundary Passivation and Enhanced Stability in Perovskite Photovoltaic Devices
S03	Mrs. Ankita Sharma	Shiv Nadar Institution of Eminence, G.B. Nagar, Uttar Pradesh	Mitigating Interfacial Defects with Discotic Liquid Crystal Interlayer: A Dual Function Strategy for Efficient and Durable Perovskite Solar Cells
S04	Mr. Rajesh Maurya	Department of Physics, Indian Institute of Technology Madras, Chennai, India	An adapted ALD method to fabricate low-resistivity and high-transparency aluminum-doped zinc oxide TCO for silicon heterojunction solar cells
<b>S05</b>		<b>For Impulse Technology</b>	<b>For Impulse Technology</b>
S06	Dr. N. Sivakumar	IIT Madras	New insight on the effect of 2D spacer (4FPEAI) treatment on 3D perovskites for the development of stable 2D/3D perovskite solar cells
S07	Mr. Snehangshu Mishra	IIT Kharagpur	Performance of mixed cation-mixed halide perovskite solar cell under Indoor Illumination
S08	Mr. Milan Kumar Mandal	IIT Kharagpur	Hybrid mesoporous structure for improvement in the performance of DSSC
S09	Mr. Nilesh	IIT Madras	Homoepitaxial Growth of Titanium Dioxide Using Plasma-Enhanced Atomic Layer Deposition
S10			<b>Networking</b>
I1			<b>RENEW</b>

I2			Bry Air
S11	Mr. Nitin Kumar Bansal	Indian Institute of Technology Delhi	Functional Layer Optimization and Tuning of Interfacial Dipole for Highly Stable Air-Ambient Fabricated Perovskite Solar Cells
S12	Mr. Siddhant Singh	Indian Institute of Science, Bengaluru	A Scalable Dopant-Free Spiro-OMeTAD: P3HT composite HTL Strategy for Stable, High-Efficiency Perovskite Optoelectronics
S13	Mr. Vipin C K	CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)	Hysteresis-Free Carbon-Based Perovskite Solar Cells with Enhanced Open-Circuit Voltage for Indoor Photovoltaics
S14	Mr. Manoj Kumar	VIT-AP University	FTM-Controlled Aligned Organic Semiconducting Thin Films: Advances, Challenges, and Device Applications
S15	Ms. Neha Chakraborty	Birla Institute of Technology Mesra	Long-term photovoltaic study of AZO, ITO, and FTO electrode-based Dye-Sensitised Solar Cells
S16			Networking
S17			Networking
S18	Ms. Shilshiya B. G	NIT Trichirappalli	Exploring the memristive behaviour in spray pyrolyzed cerium oxide thin film
S19	Mr. Ronaldo Roy	NIT Trichirappalli	Growth and Characterization of CuMnS Thin Films by SILAR for Heterojunction Applications

## Energy Storage/Interdisciplinary Science and Engineering

Oral Code	Name	Affiliation	Topic
S01	Mr. Shubham Mural	Netaji Subhas University of Technology (NSUT)	Mxene/Activated Carbon Composite based electrode for High Performance Supercapacitor
S02	Ms. Gazal Gupta	Indian Institute of Technology Delhi	Investigating The Extended Interlayer MoS <sub>2</sub> Cathode Performance In Magnesium-Lithium Hybrid Electrolyte Cells
S03	Mr. M Humam Zaim	Department of Chemical	Architecture-driven Performance Enhancement in Lithium-ion

	Faruqi	Engineering, IIT Delhi	Batteries
S04	Mr. Jasil T K	NITK SURATHKAL	A Density Functional Theory Study of NbX <sub>2</sub> (X=Se, Te) monolayers for Electrodes of Energy Storage Devices
S05	Ms. Piyali Biswas	Department of Physics, IIT Patna	Electrochemical properties modification by chemical pressure in Fe, Ni, and Co doped Lanthanum Silver Manganite-based electrode for Supercapacitor
S06	Mr. Ankit Kumar Deval	IIT Roorkee	C–C Linked Porphyrin-Based COFs for High-Performance Aqueous Zn-Ion Hybrid Supercapacitor
S07	Ms. Bhavani Sankaran	SRM Institute of Science and Technology, Tamilnadu,	CuCo MOF/Ni(OH) <sub>2</sub> Composite for High-Performance Supercapacitor electrode
S08	Ms. Toiba Manzoor	Netaji subhas university of technology	Bio-waste derived activated carbon for energy storage applications
S09	Dr. Mahesh Chandra	Indian Institute of Technology Delhi	Development of High Energy Density Room Temperature Na-S Batteries
S10			<b>Networking</b>
I1			<b>RENEW</b>
I2			<b>Bry Air</b>
S11	Mr. Vineeth S K	Indian Institute of Technology Delhi	Tailoring the solvation through molecular engineering in a blend quasi-solid polymer electrolyte for a high-performance sodium metal battery
S12	Mr. Bheem Kumar	JNU Delhi	Synergistic Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene Quantum Dots/Nanosheets Hybrid: Elevating Supercapacitor Performance
S13	Dr. Rajesh Kumar Jha	ICFAI Foundation for Higher Education, Hyderabad	Ferroelectric Behavior of Undoped PEALD HfO <sub>2</sub> Thin Films for Scalable Non-Volatile Memory Applications
S14	Mr. Shubhang Srivastava	IIT Madras	Optimal Selection of Surface Functionalized SnO <sub>2</sub> Dispersed Lubricants using Bootstrap based Statistical Methods for Tribology in Energy Applications

S15	Mr. Ashwin	Indian Institute of Technology Delhi	Characterization of HVOF-sprayed Co-NiCrAlY-Al <sub>2</sub> O <sub>3</sub> coatings with variable ceramic fraction for erosion behaviour evaluation of hydraulic turbine steel
S16	Dr. Daljit Kaur	Department of Physics, DAV University, Jalandhar-Pathankot National Highway NH-44, Jalandhar, India	Next-Generation Nanocomposites: Emerging Photocatalysts for Energy and Environmental Applications
S17	Dr. Charu Lata Dube	Central University of Gujarat	Investigation of optical property of titanium-tungsten oxide doped borosilicate glasses synthesised via microwave-assisted heating and conventional heating method: A comparative study
S18	Ms. Paulomi Singh	Indian Institute of Technology Delhi	Early Detection of Lung Cancer Using Vacancy-Ordered Perovskite
S19	Ms. Fatima Zehra	Jamia Millia Islamia	Machine Learning-Based Colorimetric Detection of Mercury via Nanozyme Activity of MOF Nanocomposite
S20	Ms. Bhawna	Department of Physics, School of Physical Sciences, Starex University, Gurugram Haryana 122413, India	Effect of Applied Electric Field During Spray Deposition on the Properties of ZnO Thin Films
S21	Ms. Barsha Priyadarshini	CSIR - Institute of Minerals and Materials Technology	Navigating Marine Corrosion: The Synergistic Effects of Nitrogen in TiMoN Coatings
S22	Mr. Rishav Pandey	Indian Institute of Technology Delhi	Design, Fabrication, and Characterization of Wide Bandgap RadHard Semiconductor Detectors for Applications in Particle Colliders and Particle Detectors in High Energy Physics

## Other Interdisciplinary Areas

Oral Code	Name	Affiliation	Topic
S1	Mr. Sanjay Baghel	Dr. A.P.J. Abdul Kalam Technical	Tailoring Structural, Morphological, Magnetic, and Optical

		University	Properties of Mn and Fe-Doped TiO <sub>2</sub> Nanoparticles for Next-Generation Functional Materials
S2	Mr. Aloka Ranjan Sahoo	Indira Gandhi Centre for Atomic Research, Kalpakkam	Tailoring Structural, Morphological, Magnetic, and Optical Properties of Mn and Fe-Doped TiO <sub>2</sub> Nanoparticles for Next-Generation Functional Materials
S3	Mr. Sujoy Paul	Indian Institute of Technology Delhi	Process Optimization of Sub-5 µm MEMS-Based SAW Resonators on LiNbO <sub>3</sub> for Biomedical Sensing Applications
S4	Mr. Vudit Pandey	Department of Physics, Aligarh Muslim University, India	Mn <sub>3</sub> O <sub>4</sub> -based Bipolar Resistive Switching Memory Devices
S5	Mr. Dishant Sharma	Indian Institute of Technology Delhi	Surface-Based Passive Mitigation Effects on Wake Structure and Aerodynamic Performance of an H-Rotor Vertical Axis Wind Turbine
S6	Mr. Pallav Sahu	Indian Institute of Technology Delhi	Improved Cavitation Characterization Using PANS on a Francis-Turbine Hydrofoil Section
S7	Dr. Sonu	Indian Institute of Technology Delhi	PANS Turbulence Model Based One-Way Fluid-Structure Interaction Analysis of a KP505 Propeller
S8	Mr. Sivaramasudhan S	Laboratory for Electro-Optics Systems (LEOS), ISRO	Challenges in Development of Silver Coating for Space Applications
S9	Prof. Abhinav Anand	Vellore Institute of Technology, Vellore	Optical and Scintillation Properties of Record-Efficiency CdTe Nanoplatelets toward Radiation Detection Applications

# Poster Presentations

## Energy Generation

Oral Code	Name	Affiliation	Topic	Date
P001	Mrs. Bhagyashri S.Bhalkar	Atigres, Kolhapur	Smart Wireless Throttle Body in Automobile System	11/12/25
P002	Aman Kumar	DTU, Delhi	High Output Piezo and Triboelectric generator based on MWCNT/Nd- doped ZnO/PVDF nanocomposite film for Energy Harvesting Application	12/12/25
P003	Sujata shekhawat	Jaypee Institute of Information Technology, NOIDA	Investigation of the deposition parameters for simulating the growth dynamics of vanadium carbide nanosheet in plasma enhanced chemical vapour deposition system	11/12/25
P004	Akshita Sharma	D.S. College, Aligarh	Growth of Reusable Zinc Ferrite Nanoparticles for White LED-based Photocatalytic Treatment	12/12/25
P005	Jigyasa Sharma	Starex University, Gurugram	Eco-Friendly Synthesis and characterization of ZnO Nanoparticles Using Neem Extract for Improved Structural and Optical Performance	11/12/25
P006	Partha Mishra	Indian Institute of Technology Delhi	Dual-Mode Quantum Dot-Based Optoelectronic Physical Unclonable Function for Secure Authentication and Anti-Counterfeiting Applications	12/12/25
P007	Saumya Srivastava	Indian Institute of Technology, Indore	Polymer–MXene–Viologen-Based Suprahybrid Electrochromic Device: Flexible Smart Window with Visible and Near-Infrared Switchability	11/12/25
P008	Bhawana Tripathi	BHU, Varanasi	Titanium Dioxide Based DSSCs.	12/12/25
P009	Mr. Animesh Anand	Indian Institute of Technology Delhi	EIS Study of PSCs	11/12/25
P010	Mr. Deepak Yadav	IIT Delhi and NISE	Simulation of 2T & 4T Textured Silicon–Perovskite Tandem Solar Cell using SETFOS	12/12/25

P011	Mr. Sidhanta Gupta	Indian Institute of Technology Delhi	Interface and Energy Band Engineering in Perovskite Solar Cells	11/12/25
P012	Ms. Parul Sharma	J.C. Bose University of Science and Technology, YMCA, Faridabad,	Understanding the Role of Pendant Chain and Cationic Head Groups in Perfluorinated Anion Exchange Membranes	12/12/25
P013	Mr. Sujit Kumar	National Institute of Technology Karnataka	Numerical analysis of CsGel3-based perovskite solar cell for indoor light harvesting	11/12/25
P014	Ms. Ankita Sao	Indian Institute of Technology, Delhi	Simulation-Based Optimization and Current Matching Strategy for High-Performance Perovskite/Silicon Tandem Solar Cells	12/12/25
P015	Mrs. Rinki	National physical laboratory, New Delhi	Enhanced Surface Passivation and Interface Quality of Ultrathin HfO <sub>x</sub> Films Deposited by PEALD on Silicon	11/12/25
P016	Mr. Navneet Singh	Indian Institute of Technology Delhi	Optimizing Vacancy Ordered Perovskite Solar Cells (Cs <sub>2</sub> SnI <sub>6</sub> ) Using SCAPS-1D Simulations	12/12/25
P018	Mr. Chaitanya Devashu S S Lodhi	Indian Institute of Technology, Delhi	Electrochemical Impedance Spectroscopy Analysis of Interfacial Layer Effects in FAPbI <sub>3</sub> Perovskite Solar Cells	11/12/25
P019	Mr. Andrew Simon George	CSIR-NIIST, Kerala	Novel Z-W and W2 solar module architecture – pathway towards utilization of the 3 orthogonal axes for electron flow	12/12/25
P020	Mr. Shahnawaz Alam	Indian Institute of Technology, Delhi	"Controlling Ion Flux via Substrate Biasing during ITO deposition: A Key to Preserving Passivation Quality in Silicon Heterojunction Solar Cells "	11/12/25
P021	Mr. Richik Datta	Indian Institute of Technology, Delhi	AI/ML driven studies of perovskite solar cells for Indoor Applications	12/12/25
P022	Mr. Sunil Kumar	D .S. College Aligarh Uttar	"Tailored Band Alignment and Enhanced Interface	11/12/25

		Pradesh	Engineering in SnS based Thin Film Solar Cell Heterostructure"	
P023	Ms. Bhawna	Indian Institute of Technology, Delhi	Computational Modelling & Simulations Tuning Hot Carrier Dynamics in Vacancy-Ordered Halide Perovskites through Lattice Compression: Insight from ab initio Quantum Dynamics and Machine Learning	12/12/25
P024	Mr. Arnab Jyoti Mandal	Indian Institute of Technology, Delhi	Impact of reduced wafer thickness on the performance of the Silicon Heterojunction Solar Cell	11/12/25
P025	Ms. Aditi Manna	Indian Institute of Technology, Delhi	Engineering charge transport in colloidal nanoparticles for optoelectronic device applications	12/12/25
P026	Ms. Farzana Rikta	Indian Institute of Technology Delhi	Design and Simulation of a Two-Terminal Perovskite–Chalcogenide Tandem Solar Cell	11/12/25
P027	Diksha	CSIR-National Physical Laboratory, New Delhi	Pivotal role of piranha cleaning in optimizing silicon surface morphology and enhancing solar cells performance	12/12/25
P028	Lakkoju Bharani	VIT-AP University, Amaravati, Andhra Pradesh India	A Comprehensive TCAD Investigation of Single-Fin and Dual-Fin 3D Bulk FinFETs Across Multiple High-K Dielectric materials	11/12/25
P029	Mohammad Aamir	BML Munjal University, Gurugram,	Computational investigations on oligomeric charge transport materials having (D <sub>1</sub> ) <sub>n</sub> –π–D <sub>2</sub> (n = 1, 2, ... 5) type of molecular architecture for perovskite solar cell applications	12/12/25
P030	Rakesh Kumar Pandey	BIT Mesra, Ranchi	Exploring the Role of Fe-Doping in Enhancing the Stability and Optoelectronic Properties of Lead-Free MASnI <sub>3</sub> Perovskite Thin Films	11/12/25
P031	Kishan Bajpai	Indian Institute of Technology, Delhi	Curing temperature optimization for screen printed Silicon Heterojunction Solar Cell	12/12/25
P033	Nirajkumar Motilal Yadav	Indian Institute of Technology, Delhi	Curing temperature optimization for screen printed Silicon Heterojunction Solar Cell	11/12/25

P034	Milan Kumar Mandal	IIT Kharagpur	Hybrid mesoporous structure for improving the performance of DSSC	12/12/25
P035	Mrittika Paul	IIT Kharagpur	Compositional Engineering of Double-cation Single-halide Perovskite for Efficient Solar Cell fabrication under Air Ambient Conditions	11/12/25
P036	Binita Boro	IIT Kharagpur	Self-Powered Visible Photodetector using Mixed Cation Mixed Halide Perovskite	12/12/25

## Energy Storage/Interdisciplinary Science and Engineering

P037	Ms. Anjali Yadav	Netaji Subhas University of Technology, Delhi	Biomass derived activated carbon from Apricot leaves as a potential electrode for supercapacitorBiomass derived activated carbon from Apricot leaves as a potential electrode for supercapacitor	11/12/25
P038	Mr. Mahaveer Singh	JAWAHARLAL NEHRU UNIVERSITY	SYNTHESIS AND CHARACTERIZATION OF TMDCS FOR SUPERCAPACITOR APPLICATION	12/12/25
P039	Mr. Rahul Singh	Indian Institute of Technology Delhi	Direct Growth of Na-ion Conducting Na <sub>3</sub> O <sub>15</sub> Si <sub>6</sub> Y Solid Glass Electrolyte with Reduced Interfacial Resistance for Room-temperature Sodium-Sulfur Pouch Cells	11/12/25
P040	Mr. Kundan Kumar Mishra	Indian Institute of Technology Delhi	A Sustainable Binder for High-Voltage Graphite Cathodes in Sodium Dual-Ion Batteries	<u>12/12/25</u>
P041	Mr. Shankar Kr. Choudhary	Dayanand Anglo-Vedic College Kanpur, U.P	Solid state electrolyte for Li ion Batteries	11/12/25
P042	Mr. Naveen	Delhi Technological University	Lithium sources dependent structural evolution and electrochemical performance in NMC811 cathode material for lithium ion batteries	12/12/25
P043	Ms. Vanshika Handuja	Indian Institute of Technology, Delhi	Engineered Interfaces Drive Superior Charge Dynamics in NiCoSe <sub>4</sub> @NiCoLDH Electrodes for High Performance Supercapacitors	11/12/25

P044	Ms. Deepika Bharti	Indian institute of technology Delhi	Understanding the Role of Densification on the Solid-State Electrolytes for Solid-State Batteries	12/12/25
P045	Mr. Niyaz Ali	INDIAN INSTITUTE OF TECHNOLOGY DELHI	In The Quest For a high-capacity, air-stable layered oxide cathode for sodium ion batteries.	11/12/25
P046	Mr. Md Osama Zubair	Indian Institute of Technology Delhi	Insights into the areal loading optimization to realize the development of high-energy Na-ion Bipolar Batteries	12/12/25
P047	Ms. Anushka Bordoloi	Indian Institute of Technology, Delhi	Study of Nickel-Doping in Mn-based Prussian Blue Analogues as High-Performance Cathodes for Sodium-Ion Batteries.	11/12/25
P048	Ms. Arti Rathor	Indian Institute of Technology Delhi	RT Sodium -Sulfur batteries :Cathode Design Strategy	12/12/25
P049	Mr. Sanjaykumar C	Indian Institute Technology Delhi	Unveiling Structure–Performance Relationships in Synthetic and KS6 Graphite Cathodes for Sodium Dual-Ion Batteries	11/12/25
P050	Mr. Suubi Mujuni Godwin	Indian Institute of Technology Delhi	Design and Development of Non-Aqueous Electrolytes for Safer Zinc-Ion Batteries	12/12/25
P051	Mr. Sanidhya Bhupesh	Indian Institute of Technology Delhi	Development of Anode materials for Sodium Dual-Ion Batteries	11/12/25
P052	Mr. Tushar	UQ-IITD Research Academy	“Regulating Zn <sup>2+</sup> Solvation Environment using hybrid Electrolyte Engineering for Durable and Reversible Zinc Metal Batteries”	12/12/25
P053	Oviya A	SRM Institute of Science and Technology Kattankulathur	Dual-Metallic NiNd-MOF with MoS <sub>2</sub> Composite: A Powerhouse for Supercapacitor Applications.	11/12/25
P054	Mr. Mohit Mehta	Indian Institute of Technology Delhi	Development of PVP:PEG-Based Solid Polymer Electrolyte for Safer Sodium Metal Batteries	12/12/25
P055	Mr. Kamlesh Kumar	Indian Institute of Technology Delhi	A Shuttle-Free Sodium–Sulfur Battery via Effective Polysulfide Confinement Strategy	<u>11/12/25</u>

P056	Ms. Akanksha Verma	Jaypee Institute of Information Technology	Synthesis, characterization and performance study of biomass derived activated carbon from mustard husk as a high-performance supercapacitor electrode	12/12/25
PO57	Mrs. Rajni	The NorthCap University	Design of novel dopant free thiophene based hole transport material for perovskite solar cells: A DFT and SCAPS-1D simulation	11/12/25
P058	Surya S	SRM Institute of Science and Technology Kattankulathur	High-Performance VOC Detection via Ru and Rh-Tailored $Ti_3C_2O_2$ MXene: A DFT and NEGF-Based Insight into Breast Cancer Sensing	12/12/25
P059	Dr. Gaurav Purohit	CSIR CEERI Pilani	Graphene Based Flexible Piezo-resistive Pressure Sensors on PDMS Substrates: A Simulation Study	11/12/25
P060	Sudhir Singh	Jamia Millia Islamia	Synergistic NiCo/MgAl Layered Double Hydroxide Composites for High-Performance Supercapacitors	12/12/25
P061	Ashwin Pandey	Indian Institute of Technology Delhi	Characterization of HVOF-sprayed Co-NiCrAlY-Al <sub>2</sub> O <sub>3</sub> coatings with variable ceramic fraction for erosion behaviour evaluation of hydraulic turbine steel	11/12/25
P062	Junaid Hasan Laskar	Jamia Millia Islamia	$V_2O_5$ nanorods embedded Polymer for Enhanced Electrochemical Performance	12/12/25
P063	Shivani Dangwal	Doon University Dehradun	Direct Z Scheme Based $WS_2/g-C_3N_4$ Heterostructure as Highly Efficient Electrocatalysts for Hydrogen Evolution Reaction: Device Fabrication and Future Prospects	11/12/25

### Thin Film and Interdisciplinary Areas

P064	Mr. Surya S	SRM institute of Science and technology, Kattankulathur	High-Performance VOC Detection via Ru and Rh-Tailored $Ti_3C_2O_2$ MXene: A DFT and NEGF-Based Insight into Breast Cancer Sensing	11/12/25
P065	Ms. Diksha Sharma	Jamia Millia Islamia, New Delhi	Hydrothermally assisted MXene based 2D nanocomposite for adsorption and photocatalytic	12/12/25

			immobilisation of Chromium (VI)	
P066	Ms. Saumya Srivastava	Indian Institute of Technology Indore	Polymer–MXene–Viologen-Based Suprahybrid Electrochromic Device: Flexible Smart Window with Visible and Near-Infrared Switchability	11/12/25
P067	Ms. Akshita Sharma	D S COLLEGE	Growth of Reusable Zinc Ferrite Nanoparticles for White LED-based Photocatalytic Treatment	12/12/25
P068	Ms. Naseha Khan	Jamia Millia Islamia	Colorimetric Detection of Mercury Ions Using MoSe <sub>2</sub> /ZIF-L Nanocomposite with Peroxidase-Like Nanozyme Activity	11/12/25
P069	Dr. Gurukrishna Kelayathodi	Indian Institute of Technology Kanpur	In-situ phase transitions and strain evolution in freestanding BaTiO <sub>3</sub> epitaxial membranes via sacrificial La 2/3 Sr 1/3 MnO <sub>3</sub> assisted lift-off	12/12/25
P070	Mr. Aditya Uday Kamat	Indian Institute of Technology Kanpur	Tunable Insulator-to-Metal transition in epitaxial VO <sub>2</sub> -based nanocomposite thin films via strain and defect engineering	11/12/25
P071	Mr. Monu Kataria	IUAC Delhi	Synthesis of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Nanowires through Au-assisted VLS Growth	12/12/25
P072	Mr. Balakrishna Reddy Annadi	Starex University, Gurugram	Study of Multifunctional characterization of Titanium Dioxide Nano particles Synthesized via Sole-gel Method	11/12/25
P073	Mr. Ayush Kumar Singh	Indian Institute of Technology Delhi	Performance Optimization of different ETLs and HTLs with perovskite Cs0.17FA0.83PbI <sub>3</sub>	12/12/25
P074	Allu Vinodhkumar	Indian Institute of Technology Delhi	Fabrication of Surface immobilized High-Entropy Alloy Nano Particles by Laser Dewetting and Characterization	11/12/25
P075	Ms. Laveena Pursharthi	Indian Institute of Technology Madras	Type II Based TiSe <sub>2</sub> /TiO <sub>2</sub> Heterostructures for Hydrogen Evolution Reactions (HER)	12/12/25
P076	Ms. Ankita Choure	Indian Institute of Technology	Solar-Energy-Driven Photocatalytic Performance of	11/12/25

		Delhi	Perovskite Nanomaterial Composites for Wastewater Treatment: Advancements in Photocatalyst Design	
P077	Abhinav M K	National institute of technology tiruchirappalli	Influence of Film Thickness on the Performance of CuS-Based Resistive Switching Devices	12/12/25
P078	Mr. Aman Kumar	Delhi Technological University	High Output Piezo and Triboelectric generator based on MwCNT/Nd-doped ZnO/PVDF nanocomposite film for Energy Harvesting Application	11/12/25
P079	Ms. Sanchari Pal	Indian Institute Of Space Science and Technology	Temperature-Induced Synaptic Fatigue in BiFeO <sub>3</sub> -Based Electronic Synapses	12/12/25
P080	Dr. Atul Shankar Mani Tripathi	VIT-AP University, Amaravati, Andhra Pradesh	A Comprehensive TCAD Investigation of Single-Fin and Dual-Fin 3D Bulk FinFETs Across Multiple High-K Dielectric materials	11/12/25
P081	Mrs. Jigyasa	Starex university, gurgaon	Green synthesis and characterization of Zinc oxide nanoparticles	12/12/25
P082	Ms. Sujata Shekhawat	Jaypee institute of information technology	Investigation of the deposition parameters for simulating the growth dynamics of vanadium carbide nanosheet in plasma enhanced chemical vapour deposition system	11/12/25
P083	Ms. Meenakshi	CSIR-NPL Delhi, India	Atomic Layer Deposition of Hf:ZnO with Tailored Work Function and Dual Conducting-Dielectric Behavior	12/12/25
P084	Ms. Kareena yadav	Starex University, Gurugram, Haryana	Investigation of optical and electrical properties of ZnO thin film for optoelectronics Application	11/12/25
P085	Mr. Abhijith Y Anand	Indian Institute of Space Science and Technology	Optically Enhanced Associative Learning and Pavlovian Conditioning in CuPc-based Synapses	12/12/25
P086	Arun Kumar	IIT Madras	Magnetic and Transport Properties of ordered LaSrMnRuO <sub>6</sub> double perovskite thin Films	11/12/25

P087	Ms. Humera S	National Institute of Technology, Tiruchirappalli	RF Sputtered Molybdenum Oxide Thin Films for ReRAM Applications	12/12/25
P088	Ms. Anju Kumari	JNU, NEW DELHI	Magnetic properties of CoCrFeNi and CoCrFeNiNb.10 high entropy alloys	11/12/25
P089	Mr. Anvek Chodankar	Indian Institute of Technology Delhi	Development and Characterization of ZnO Thin Films for Surface Acoustic Wave Magnetolectric Antennas	12/12/25
P090	Mr. Gaurav Rajput	School of Physical Sciences, JNU	Enhanced NO <sub>2</sub> Gas Detection Using Au and Ag Nanoparticle-Decorated MXene-Based Sensors	11/12/25
P091	Ms. Soha Maqbool Bhat	Indian Institute of Technology Delhi	Diode Laser-Assisted Optimisation of Double-Sided Laser-Induced Graphene	12/12/25
P092	Ms. Deeksha Naik	Vellore Institute of Technology, Vellore, India	Optimization of CsPbBr <sub>3</sub> perovskite nanocrystals featuring enhanced stability and optical efficiency	11/12/25
P093	Mr. Rohan Kumar	Indian Institute of Technology Delhi	Piezoelectric acoustic MEMS	12/12/25
P094	Ms. Faheema V	Indian Institute of Technology Delhi	Structural and Conformational Analysis of Ultra-Thin P(VDF-TrFE) Ferroelectric Films Using XRD and FTIR.	11/12/25
P095	Mr. Balakrishna Reddy Annadi	STAREX UNIVERSITY	Study of Multifunctional Characterization of Titanium Dioxide Nanoparticles Synthesized via Sol-Gel Method	12/12/25
P096	Mr. Umapathy Ganjigatte	Indian Institute of Technology Delhi	RF-Sputtered Al <sub>2</sub> O <sub>3</sub> /SiC Bilayer Thin Films on Si Substrates: Tailoring for Extreme Environments	11/12/25
P097	Mr. Jagat Singh	Indian Institute of Technology Delhi	Self-assembly of Conformationally Asymmetric ABC Linear Triblock Copolymer under Cylindrical Confinement	12/12/25
P098	Vishal Singh	Birla Institute of Technology, Mesra	A comparative study of the multifunctional role of a heterocyclic organic compound in organic-inorganic halide perovskite	11/12/25
P099	Darakshan Eqbal	BIT MESRA	Probing Interfacial Charge Transfer in	12/12/25

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P101	Mr. Srest Somay	Indian Institute of Technology, Delhi	Understanding Charge Transport across defects in TMDs	12/12/25
P102	Mr. Arun Sehrawat	Indian Institute of Technology, Delhi	Enhanced Infrared Detection Sensitivity in VO <sub>2</sub> -Based Bolometers Through Phase Transition Engineering	11/12/25
P103	Mr. Partha Mishra	Indian Institute of Technology Delhi	Dual-Mode Quantum Dot-Based Optoelectronic Physical Unclonable Function for Secure Authentication and Anti-Counterfeiting Applications	12/12/25
P104	Ms. Keerthitha Sudhir	Indian Institute of Space Science and Technology	Oxygen vacancy modulated neuromorphic behaviour in pulsed laser deposited yttrium iron garnet thin films	11/12/25
P105	Mr. Rishav Pandey	Indian Institute of Technology Delhi	Design, Fabrication, and Characterization of Wide Bandgap RadHard Semiconductor Detectors for Applications in Particle Colliders and Particle Detectors in High Energy Physics	12/12/25
P106	Praveen Kumar Yadav	University of Rajasthan, Jaipur, Rajasthan	Computational Designing of Resonant Modes in Defect-Engineered One-Dimensional TiO <sub>2</sub> /SiO <sub>2</sub> Photonic Crystals for Enhanced Optical Sensing	11/12/25
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P109	Mr. Abhinav M K	National Institute of Technology Tiruchirappalli	Influence of Film Thickness on the Performance of CuS-Based Resistive Switching Devices	12/12/25
P110	Mr. Sachin Singh	<i>Indian Institute of Technology, Delhi</i>	Influence of a Wind-Lens on the Aerodynamic Performance and Flow Behaviour of a Horizontal Axis	11/12/25

			Wind Turbine	
P111	Akash A. Ghaste	<i>Indian Institute of Technology, Delhi</i>	Comprehensive Investigation of Erosion–Corrosion Behaviour of CF8M Stainless Steel for Hydro Turbine Application	12/12/25
P112	Sandra Angelo	BML Munjal University. Gurugram,	Designing and analysis of D–π–A–π–D and A–D–A structured π-conjugated organic compounds for utilization as field effect transistors	11/12/25
P113	Gunjan	IIT Madras, Chennai	Structural, Optical, Electrical, and Morphological Characterization of Sol-Gel Spin Coated CZTS Thin Films	12/12/25
P114	Vaishnavi M Rajesh	Indian Institute of Space Science and Technology	Transition metal oxide based Neuromorphic devices	11/12/25
P115	Dr. Sanjay Kumar Kedia	Inter-University Accelerator Centre, New Delhi	Field-Assisted Growth and Characterization of Ferromagnet/Antiferromagnet Thin Films for Spintronic Applications	12/12/25
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P117	Shubhashish Pati	Indian Institute of Technology Delhi	Large anomalous Hall effect in sputtered Iron Silicon alloy thin films	12/12/25
P118	Harshita Rai	Kyushu Institute of Technology	Addressing the Charge Transport Bottlenecks in Flexible Organic Electrochemical Transistors Through Structural Ordering	11/12/25