



## Program Schedule

**International Conference on Sustainable  
Technologies for Energy and Environment**

# **ICSTEE-2025**

*Jointly Organized by*

**PSG Institute of Advanced Studies, Coimbatore  
&  
ECS IIT Madras Student Chapter, IIT Madras, India**





## International Conference on Sustainable Technologies for Energy and Environment (ICSTEE – 2025)

Jointly Organized by

PSG Institute of Advanced Studies, Coimbatore & ECS-IIT Madras Students Chapter, IIT Madras, India

(27-29 November, 2025)

**Pre-Conference Workshop**

**PROGRAM SCHEDULE**

**27 November 2025**

**Venue: PSG Institute of Advanced Studies, Peelamedu, Coimbatore**

**Inaugural Venue: 'D' Block Conference Hall, Ground Floor, PSG College of Technology**

8:00 AM	:	<b>Registration</b>
9:00 AM	:	<b>Invocation</b> <i>Ms. Santhoshini Murugan, Research Scholar, IIT Madras</i>
9:05 AM	:	<b>Welcome Address</b> <i>Dr. J. Kanchana, Director, PSG Institute of Advanced Studies</i>
9:10 AM	:	<b>Pre-Conference Workshop - Brief</b> <i>Dr. R. Kothandaraman, IIT Madras</i> <i>Dr. Anuradha M Ashok, PSG Institute of Advanced Studies</i> <i>Dr. Vasanth Dakshinamoorthy, PSG Institute of Advanced Studies</i>
9:25 AM	:	<b>Chief Guest Address</b> <i>Dr. K. Prakasan, Principal, PSG College of Technology</i>
9:35 AM	:	<b>Vote of Thanks</b> <i>Dr. M. Veena, PSG Institute of Advanced Studies</i>
9:40 AM	:	<b>Tea Break</b>



### Workshop 01: ECS - Charge Craft: Advanced Electrochemistry with Hands-on Electro-Organic Synthesis, Battery Testing and EIS

Venue: 'D' Block Conference Hall, Ground Floor, PSG College of Technology

10:00 AM	:	<b>Prof. R. Kothandaraman, IIT Madras</b> <i>Probing Interfaces in Time &amp; Frequency: Cyclic Voltammetry, Chronomethods and Impedance</i>
11:30 AM	:	<b>Dr. Vanchiappan Aravindan, IISER Tirupati</b> <i>The Importance of Recycling Li-ion Batteries: Unlocking Their Second Life</i>
12:30 PM	:	Lunch

Venue: 'G' Block, G-202 and G-203, PSG College of Technology

01:30 PM	:	<i>Hands-on-Session: Electro-organic synthesis</i>
02:05 PM	:	<i>Hands-on-Session: Understanding mass transfer effects using EIS</i>
02:40 PM	:	<i>Hands-on-Session: Grain boundary resistance measurement in a solid electrolyte using EIS</i>
03:15 PM	:	Tea Break
03:30 PM	:	<i>Hands-on-Session: Electrochemical characterizations of Zinc-Bromine static battery/super capacitor</i>
04:30 PM	:	Session Feedback – Q&A

### Workshop 02: Electron Microscopy

Venue: 'D' Block, PSG IAS - International Office - Seminar Hall

10:00 AM	:	<b>Dr. Anuradha M Ashok, PSG Institute of Advanced Studies</b> <i>Electron Microscopy: Fundamentals, types and Techniques</i>
11:30 AM	:	<b>Dr. Anuradha M Ashok, PSG Institute of Advanced Studies</b> <i>Electron Diffraction and TEM specimen preparation</i>
12:30 PM	:	Lunch

Venue: 'I' Block, PSG IAS

01:30 PM	:	<i>Electron Microscopy Demonstration (Venue: I-107)</i>
03:15 PM	:	Tea Break



03:30 PM	:	<i>Electron Microscopy Data Analysis Training (Venue: I-314)</i>
04:30 PM	:	Session Feedback – Q&A
<p style="text-align: center;"><b>Workshop 03: Zebrafish Model for Environmental Risk Assessment</b> (Venue: I Block, PSG Polytechnic Seminar Hall, I-305)</p>		
10:00 AM	:	<b>Dr. P. Ekambaram, Prof and Head, Dept. of Biotechnology, Bharathiar University.</b> <i>Zebrafish – An Alternate Model for Neurotoxicity Research</i>
10:50 AM	:	<b>Dr. Ashish Pandey, Sr. Application Specialist, Carl Zeiss Pvt. Ltd. and SAARC RMS, India.</b> <i>Zebrafish Imaging: From Widefield to Nanoscale Approach</i>
11:40 AM	:	<b>Dr. Vasanth Dhakshinamoorthy, PSG Institute of Advanced Studies</b> <i>Zebrafish Model for Environmental Risk Assessment: A Special Emphasis on Fish Embryo Acute Toxicity (FET) Test</i>
12:30 PM	:	Lunch
<p style="text-align: center;"><b>Venue: I Block, Toxicology Lab, PSG IAS, I- 201F</b></p>		
01:30 PM	:	<i>Hands-on- Training, Fish Embryo Acute Toxicity (FET) Test (OECD /OCDE 236)</i>
03:15 PM	:	Tea Break
03:30 PM	:	<i>Hands-on- Training, Fish Embryo Acute Toxicity (FET) Test (OECD /OCDE 236)</i>
05:00 PM	:	Session Feedback – Q&A





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### Conference

#### PROGRAM SCHEDULE (28.11.2025)

Venue: PSG Convention Centre, Neelambur, Coimbatore

8:00 AM	:	<b>Registration</b>
9:00 AM	:	<b>Invocation</b> <i>Ms. Santhoshini Murugan, Research Scholar, IIT Madras</i>
9:05 AM	:	Welcome Address <i>Dr. J. Kanchana, Director, PSG Institute of Advanced Studies</i>
9:10 AM	:	<b>About the Conference</b> <i>Dr. P. Biji, PSG Institute of Advanced Studies</i> <i>Dr. R. Kothandaraman, IIT Madras</i>
9:15 AM	:	<b>Presidential Address</b> <i>Dr. P. V. Mohanram, Secretary, PSG Institute of Technology and Applied Research</i>
9:20 AM	:	<b>Inaugural Address – Chief Guest</b> <i>Dr. U. Kamachi Mudali, Vice-Chancellor, Homi Bhabha National Institute, Mumbai</i>
9:35 AM	:	<b>Special Address – Guest of Honor</b> <i>Mr. Sunil Kumar, Director General, ONGC Energy Centre, Delhi</i>
9:45 AM	:	<b>Special Address – Guest of Honor</b> <i>Dr. Ranjith Krishna Pai, Scientist 'F'/Senior Director, Department of Science and Technology, Government of India</i>
9:55 AM	:	<b>Vote of Thanks</b> Dr. R. Selvakumar, PSG Institute of Advanced Studies
10:00 AM	:	Tea Break



## Session 1 - Plenary Lectures

*Session Chair: Dr. D. Parvathalu, ONGC Energy Centre*

10:30 AM	:	<b>Prof. R. R. Sonde, Birla Institute of Technology and Science (BITS), Pilani – Goa</b> <i>Science - Speed-Scale in Sustainability and from Pilot to Policy for Industrial Impact</i>
11:15 AM	:	<b>Dr. Ranjith Krishna Pai, Department of Science and Technology, Government of India</b> <i>Research to Reality: Building India's Green Hydrogen Ecosystem through Innovation and Collaboration</i>
12:05 PM	:	<b>Dr. R. Vijay, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad</b> <i>Development of Materials and Processes for Energy @ ARCI</i>
12:45 PM	:	Lunch Break

## Parallel Sessions Venue @ PSG Institute of Technology and Applied Research, Neelambur, Coimbatore

Hall 01	:	Thejas - Department of Mechanical Engineering
Hall 02	:	Shakthi - Department of Civil Engineering
Hall 03	:	Prithvi - Department of Electronics and Communication Engineering

## Session 2 - Keynote lectures

Hall	Thejas- Hall 1	Shakthi - Hall 2	Prithvi - Hall 3
<b>Session Chair</b>	<b>Prof. Yves Lansac, Uty Tours, France</b>	<b>Prof. Shobha Shukla, IIT Bombay</b>	<b>Prof. Venkatakrishnan, IIT Mandi</b>
2.00 PM (30+5 min)	<b>Prof. Pratibha Sharma, IIT Bombay</b> <i>Metal Hydride Materials and Systems for various Applications</i>	<b>Prof. Yun Hee Jang, DGIST, South Korea</b> <i>Hard-Cation-Soft-Anion Ionic Liquids Enhancing PEDOT: PSS Conductivity and Stretchability. Multiscale Molecular Modeling</i>	<b>Prof. Ligy Philip, IIT Madras</b> <i>Sustainable Water Management through Circularity Principles: Case Studies</i>
2.35 PM (30+5 min)	<b>Dr. D. Parvathalu, ONGC Energy Center</b> <i>Green Hydrogen Development Initiatives at ONGC Energy Centre</i>	<b>Prof. Sangaraju Shanmugam, DGIST, South Korea</b> <i>Electrosynthesis of green and sustainable fuels</i>	<b>Prof. Shankara Gayathri Radhakrishnan, Univ. of Pretoria, South Africa</b> <i>Electrochemical Activation of Carbon dioxide</i>



3.05 PM (30+5 min)	<b>Prof. R. Kothandaraman, IIT Madras</b> <i>Reinforcing a Lithium-ion Battery Cathode (NCA) with Mn Doping</i>	<b>Dr. K. Kadirvelu, DRDO-BU</b> <i>Advanced Nanoarchitectures: Transforming Defence Capabilities with Multifunctional Nanomaterials</i>	<b>Dr. Nancharaiah, BARC, Kalpakkam</b> <i>Aerobic Granular Sludge Technology: Advantages, Challenges and Perspectives</i>
3.40-4.00 pm	Tea Break		
Session 3- Invited lectures			
Hall	Thejas- Hall 1	Shakthi - Hall 2	Prithvi - Hall 3
Session Chair	Prof. R. Kothandaraman, IIT Madras	Prof. Sumit Saxena, IIT Bombay	Dr. K. Kadirvelu, DRDO- BU
4.00 PM (30+5 min)	<b>Prof. P. Venkatakrishnan, IIT Madras</b> <i>Next-Generation Carbazole-Based <math>\pi</math>-Conjugated Materials for High Performance Energy Solutions</i>	<b>Dr. Raman Vedarajan, ARCI Chennai</b> <i>Circular PEMFC Technology: High-Performance Functionalized Pt/C Electrocatalysts Coupled with Platinum and Nafion® Recycling Pathways</i>	<b>Dr. Alseno Mosai, University of Pretoria, South Africa</b> <i>Treatment of mining waste using a combination of technologies and the recovery of precious elements from the mining waste</i>
4.35 PM (20+5 min)	<b>Dr. M. Sathish, CECRI, Karaikudi</b> <i>High-Energy Supercapacitors: Integrating Nanocarbons and Advanced Electrolytes</i>	<b>Dr. Manjusha Battabyal, IITDM Kancheepuram</b> <i>Waste Heat Recovery: Nanostructured Thermoelectric for Sustainable Energy</i>	<b>Dr. Bhuvaneswari Sridhar, IIT Madras</b> <i>Energy Saving and Sustainability In Scaling Chemical Process – An Overview</i>
Session 4 - Oral Presentations			
Hall	Thejas- Hall 1	Shakthi - Hall 2	Prithvi - Hall 3
5.00 PM (8+2 min)	OP (1-6)	OP (7-11)	OP (12-17)
6.00 PM	Session 5 – Poster Presentation		
7.00 PM	Cultural Program & Gala Dinner		



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**Conference**

### PROGRAM SCHEDULE (29.11.2025)

Venue: PSG Institute of Technology and Applied Research, Neelambur, Coimbatore

Session 6 – Keynote Lectures			
Session Chair	Prof. Prathiba Sharma, IIT Bombay	Prof. Yun Hee Jang, DGIST, South Korea	Dr. Nancharaiah, BARC, Kalpakkam
Hall	Thejas- Hall 1	Shakthi - Hall 2	Prithvi - Hall 3
9.30 AM (30+5 min)	<b>Prof. Yves Lansac, Uty Tours, France</b> <i>DNA condensation and aggregation induced by condensing agents</i>	<b>Prof. Shobha Shukla, IIT Bombay</b> <i>Functional Biopolymeric Micro/Nanostructures using Femtosecond Laser Lithography and their Applications</i>	<b>Prof. Girish Gopinath, KUFOS, Kochi</b> <i>Application of Geospatial Technology in Water Resources Management</i>
10.05 AM (30+5 min)	<b>Prof. Venkatakrishnan, IIT Mandi</b> <i>Development of Sustainable Heterogeneous Catalysts for Energy and Environmental Applications</i>	<b>Dr. B. Subramanian, CECRI Karaikudi</b> <i>Thin film Electrodes by Physical and Chemical methods for Energy Storage</i>	<b>Dr. Arockia Lenin, Ministry of Environment, Forest and Climate Change</b> <i>Ministry of Environment, Forest and Climate Change: India’s Governance and Recent Policies Addressing impacts of Climate Change</i>
10.40 AM	Tea Break		
Session 7 – Keynote Lectures			
Session Chair	Prof. Shanmugam Sangaraju, DGIST, South Korea	Prof. Shankara Gayathri Radhakrishnan, Univeristy of Pretoria, South Africa	Dr. Arockia Lenin, Ministry of Environment, Forest and Climate Change



11.00 AM (30+5 min)	<b>Prof. K. Chandraraj, IIT Madras</b> <i>2G Ethanol: A Promising Alternative Renewable and Sustainable Energy Carrier in India</i>	<b>Prof. N. Ponpandian, Bharathiar University</b> <i>Transition Metal Co-Doped WO<sub>3</sub> Nanorods as Efficient Electrocatalysts for the Oxygen Evolution Reaction</i>	<b>Dr. Joseph Kingston, DFRL</b> <i>Climate Change and Harsh Environments: Postbiotics as Resilient Protectors of the Gut Microbiome</i>
Invited Lectures			
11.35 AM (20+5 min)	<b>Prof. Sumit Saxena, IIT Bombay</b> <i>Recent Advances in Electrode Materials for Supercapacitors</i>	<b>Dr. B. Bhuvaneshwari, IIT BHU</b> <i>Green Carbon: An in-depth Understanding of its Fibrillar Nature and Doping Promoted Electrochemical Activity</i>	<b>Prof. Sankar Ganesh Palani, BITS Pilani, Hyderabad</b> <i>Process Reconfiguration of High-Solids Anaerobic Co-Digestion of Food Waste and Sewage Sludge Using Novel HOLAnD* System</i>
12.00 PM (20+5 min)	<b>Dr. Rohini Kitture, Deputy Editor, Wiley (online mode )</b> <i>Mastering Research Publishing: Insights from the Editor's Desk</i>		
12.30 PM	Lunch Break		
Session 8 – Oral Presentation			
Hall	Thejas- Hall 1	Shakthi - Hall 2	Prithvi - Hall 3
1.30 PM (10 min each)	OP (18-23)	OP (24-29)	OP (30-36)
Session 9 – Invited Lectures			
Session Chair	<b>Prof. N. Ponpandian, Bharathiar University</b>	<b>Dr. B. Subramanian, CECRI Karaikudi</b>	<b>Prof. K. Chandraraj, IIT Madras</b>



2.30 PM (20+5 min)	<b>Dr. B. Rakhi, NIIST Trivandrum</b> <i>Ti-Based MXenes and Their Hybrids as Efficient electrode Materials for Sustainable Energy Storage Devices</i>	<b>Prof. Sudip Kumar Batabyal, Amrita Vishwa Vidyapeetham</b> <i>Surface Charge Engineering for Hydrovoltaic Power Generation</i>	<b>Dr. Dinesh Jagadeeshan, IIT Palakkad</b> <i>In pursuit of low temperature ethylene oxidation.</i>
2.55 PM (20+5 min)	<b>Dr. Vanchiappan Aravindan, IISER, Tirupati</b> <i>High Performance Na-ion Batteries via Solvent-co-Intercalation</i>	<b>Dr. Rajini Antony, BARC, Kalpakkam</b> <i>Investigation of Electrochemical Interfaces by Scanning Probe and Spectroelectrochemical tools for industrially relevant electrochemical devices</i>	<b>Dr. Rohit Srivastava, PDEU Gandhinagar</b> <i>The Strategic Role of Green Hydrogen in Achieving Sustainable and Low-Carbon Energy Futures</i>
3.20 PM (20+5 min)	<b>Dr. Ulaganathan Mani, Amrita Vishwa Vidyapeetham</b> <i>Boosting the cycle life of the Zn-I<sub>2</sub> Hybrid Redox Flow Battery</i>	<b>Dr. T. Maiyalagan, SRM Institute of Technology, Kattankulathur</b> <i>Innovative Materials for Low-Cost Green Hydrogen Generation</i>	<b>Dr. R. Ariharasuthan, DJ Academy of Design</b> <i>Traditional and Sustainable Packaging: A Paradigm for the Future</i>
3.45 PM (20+5 min)	<b>Dr. P. Bala Srinivasan, High Energy Batteries Ltd.</b> <i>Green hydrogen pathways – An Indian Perspective</i>	<b>Sponsor Lecture - 01</b> <b>Dr. Manimaran paramasivam</b> <b>Carl Zeiss</b> <i>ZEISS Versa 3D X-ray Microscopy: Unlocking Material Innovations for Energy Storage</i>	<b>Sponsor Lecture - 02</b>
4.10 PM	Tea Break		
Valedictory Function (Venue: THEJAS - Hall 1)			
04:30 PM	:	<b>Welcome Address</b> <i>Dr. J. Kanchana, Director, PSG Institute of Advanced Studies</i>	
04:35 PM	:	<b>Chief Guest Address</b> <i>Dr. N. Saravanakumar, Principal, PSG Institute of Technology and Applied Research</i>	



04:40 pm	:	<b>Oral/Poster Presentation Prize Distribution</b> <i>Wiley Awards: Dr. P. Biji, PSG Institute of Advanced Studies</i> <i>ACS Awards: Mr. Sujan Sekhar, ACS Publication</i> <i>RSC Awards: Dr. R. Selvakumar, PSG Institute of Advanced Studies</i>
04:50 PM	:	<b>Concluding Remarks</b> <i>Dr. Anuradha M Ashok, PSG Institute of Advanced Studies</i>
04:55 PM	:	<b>Feedback Session</b>
05:00 pm	:	<b>Vote of Thanks</b> <i>Dr. B. Geetha Priyadarshini, PSG Institute of Advanced Studies</i>



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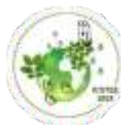
### LIST OF ORAL PRESENTATION PARTICIPANTS

S. No.	OP ID	Sal.	Name of the Participant	Institute	Title of the Talk
<b>28.11.2025</b>					
<b>ENERGY</b>					
1	OP-01	Ms.	Suruthi V	CSIR Central Electrochemical Research Institute	<b>ABS-014:</b> Mn <sub>3</sub> O <sub>4</sub> /RuO <sub>2</sub> Composite as Bifunctional Electrocatalyst for Efficient Oxygen Reactions in Rechargeable Zinc-Air Batteries
2	OP-02	Ms.	B Rajeshwaree	Indian Institute of Technology, Bombay	<b>ABS-021:</b> CO <sub>2</sub> Capture and Mineralization by a Zinc-based Molecular Complex Under Industrially Relevant Conditions
3	OP-03	Ms.	Chandni A P	Calicut University	<b>ABS-042:</b> Defect-Engineered Sulfur-Doped Graphene/Polyaniline Nanocomposites as High-Energy Electrodes for Asymmetric Supercapacitors
4	OP-04	Ms.	Sreyesha A	SRM Institute of Science and Technology	<b>ABS-050:</b> NIRVANA-2618: A Sustainable Hydrogen-Based Engine for Zero-Emission Mobility.
5	OP-05	Mr.	Mohanraj Madeshwaran	Amrita Vishwa Vidyapeetham	<b>ABS-129:</b> Modified Nickel Oxide for Enhanced Supercapacitor and OER Electrocatalyst Applications.
6	OP-06	Ms.	Nandhini S	Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology	<b>ABS-093:</b> Influence of Fe <sup>3+</sup> ions on Structural, Morphology, Elemental and Optical Properties of Lanthanum Aluminate Nanoparticles.





7	OP-07	Mr.	Vivek V G	PSG Institute of Technology and Applied Research	<b>ABS-122:</b> Performance Evaluation of PEM Fuel Cells under Varying Active Area: An Experimental and Numerical Approach
8	OP-08	Mr.	Anoop Naikkath	Indian Institute of Technology, Madras	<b>ABS-145:</b> Quantitative Determination of Diffusivity in Ferro/Ferricyanide System Using Warburg Impedance under DC Bias
9	OP-09	Ms.	Sreelakshmi Paruvayakode	Indian Institute of Technology, Madras	<b>ABS-146:</b> Mechanistic Analysis of Anodic Dissolution of Mg in Simulated Seawater
10	OP-10	Mr.	Irshad M.K	PSG Institute of Advanced Studies	<b>ABS-163:</b> Nickel–Cobalt Phosphide Nanoneedle Arrays Supported on BiomassDerived 3D Activated Carbon as a High-Efficiency Electrode for Advanced Asymmetric Supercapacitors
11	OP-11	Mr.	Vansh Bhutani	Indian Institute of Technology, Madras	<b>ABS-167:</b> Viologen-Based Zn–Electrochromic Energy Storage Device with Polymer Electrolyte for Smart and Scalable Applications
<b>ENVIRONMENT</b>					
12	OP-12	Prof.	Ramesh C. Bansal	University of Sharjah	<b>ABS-018:</b> Reducing Tree Contact Faults via Partial Patterned Insulation
13	OP-13	Mr.	Saranraj G	Centre for Pollution Control and Environmental Engineering, Pondicherry University	<b>ABS-069:</b> Treatment and Energy Recovery from Fish Market Wastewater Using a Constructed Wetland–Microbial Fuel Cell (CWMFC) with Phragmites australis
14	OP-14	Ms.	Harsha Dhanwani	Institute of Chemical Technology, Mumbai	<b>ABS-075:</b> A Sustainable Pathway for Carbon Recycling through Dry Reforming of Methane
15	OP-15	Ms.	Priyanka Babubhai Shivde	Institute of Chemical Technology, Mumbai	<b>ABS-076:</b> Sustainable Conversion of CO <sub>2</sub> to Methane Using Biochar-Based Supported Catalysts
16	OP-16	Mr.	Purushothaman P	Vellore Institute of Technology	<b>ABS-105:</b> Iodine adsorption by thiophene-based covalent organic polymer: a study of structural influence on performance



17	OP-17	Ms.	Blessy S	PSG Institute of Advanced Studies	<b>ABS-108:</b> Valorized Cassava Waste as a Sustainable Adsorbent for Vancomycin: Performance and Interaction Mechanisms
<b>29.11.2025</b>					

<b>ENERGY</b>					
18	OP-18	Ms.	Karthiga Manivannan	Bharathiar University	<b>ABS-170:</b> Catalytic Activity of Copper decorated Scandium Carbonitride MXene (Cu@Sc <sub>3</sub> CN) towards Electrochemical Carbon dioxide reduction to CH <sub>3</sub> OH- A DFT Study
19	OP-19	Ms.	Thilagavathi T	Anna University	<b>ABS-171:</b> Green Combusted YFeO <sub>3</sub> nanomaterial as a promising electrocatalyst for green hydrogen production
20	OP-20	Ms.	Bhagyashree Ponmudi	PSG Institute of Advanced Studies	<b>ABS-173:</b> Sputter deposition of Bi <sub>2</sub> Se <sub>3</sub> and SnSe thin films for thermoelectric applications
21	OP-21	Ms.	Sugatha P S	Amrita Vishwa Vidyapeetham	<b>ABS-185:</b> Design and Development of Naphthalic-Based Organic Single Crystals for Enhanced Self-Powered Photodetection
22	OP-22	Mr.	Vijai Kaarthi V	PSG Institute of Technology and Applied Research	<b>ABS-196:</b> Open Source AI Framework for Simplified PEM Fuel Cell Modelling
23	OP-23	Ms.	Navya John	PSG Institute of Advanced Studies	<b>ABS-120:</b> Influence of lower valent element substitution on tailoring carrier transport modulation in n- type ZnFe <sub>2</sub> O <sub>4</sub> for enhanced high temperature thermoelectric performance
24	OP-24	Ms.	Darsana Sudarsan	Amrita Vishwa Vidyapeetham	<b>ABS-203:</b> Moisture-Activated Energy Generation in Interface-Tailored Lead-Free Halide Perovskites
25	OP-25	Ms.	Edita Joseph	Amrita Vishwa Vidyapeetham	<b>ABS-204:</b> Metal Cation intercalated layered sulphoselenides for Next-Generation optoelectronic applications
26	OP-26	Ms.	Neethu M	Amrita Vishwa Vidyapeetham	<b>ABS-225:</b> Fluorine-incorporated graphene oxide for hydrovoltaic power generation:



					Improving proton migration and storage capacity
27	OP-27	Ms.	Catherine Jesinthamary D	PSG Institute of Advanced Studies	<b>ABS-227:</b> Structural, morphological, and optical properties of sputtered amorphous indium–tin–zinc–calcium oxide thin films for display applications.
28	OP-28	Mr.	Nishanth Kumar M	CSIR-Central Electrochemical Research Institute	<b>ABS-228:</b> Efficient Smog and CO <sub>2</sub> Removal using Adsorption-Based DAC System: Field Deployment in Urban Environments
29	OP-29	Mr.	Sankaran V	PSG College of Technology	<b>ABS-192:</b> Investigation of Structural and Optical Properties of CeO <sub>2</sub> Nanoparticles for UV Photodetector Applications.

#### ENVIRONMENT

30	OP-30	Dr.	Kasthuri Thilagam V	ICAR - Sugarcane Breeding Institute	<b>ABS-131:</b> Assessing the carbon sequestration potential of soil and water conservation interventions at the watershed level.
31	OP-31	Mr.	Nikhil G Mohan	IIT Madras	<b>ABS-164:</b> Sonochemical reduction of Nitrates to Ammonia for facile removal of nitrates from water.
32	OP-32	Ms.	Nithya K	Bharathiar University	<b>ABS-179:</b> Fluorescent Carbon Quantum Dots as Dual-Function Probes for UltraSensitive Chromium (VI) Detection and In Vivo/In Vitro Bioimaging.
33	OP-33	Mr.	Rajesh U P	PSG Institute of Advanced Studies	<b>ABS-197:</b> Sustainable SERS platform for Pesticide Detection Using Silver Nanoparticles on Black Silicon Recycled from Solar Cells.
34	OP-34	Dr.	Rajkumari Kumaraswamy	Khalifa University	<b>ABS-199:</b> Comparative assessment of pure culture vs mixed culture fermentation in synthesis of commercially viable products.
35	OP-35	Ms.	Nikita Jayant Vyawahare	Savitribai Phule Pune University	<b>ABS-213:</b> Carbon Dot-Based Ratiometric Fluorescent Probe for Sensitive Detection of Mercury and Lead Ions.
36	OP-36	Ms.	Unnamalai.S	PSG Institute of Advanced Studies	<b>ABS-246:</b> A seaweed-based 3D bioprinted scaffolds for multiple critical metal recovery from spiked aqueous solution.

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