



PROGRAMME SCHEDULE

DAY 1: 08th March, 2025 (Saturday)

REGISTRATION	08:00 Hours
INAUGURATION	10:00 – 11:30 Hours
HI-TEA	11:30 – 11:45 Hours

Hotel Holiday Inn	PLENARY SESSION	11:45 – 13:15 Hours
Session Chairpersons: Prof. Manoj Choudhary		
Title		Time (hrs.)
MoU Signing Ceremony between CIPET and Gati Shakti Vishwavidyalaya University, Vadodara, Gujarat		
Ecological Economy Padma Bhushan Padma Shri Dr. Anil Prakash Joshi <i>Himalayan Environmental Studies and Conservation Organization</i>		11:45 – 12:15
PLA – The biopolymer Plastic of the future Prof. Ramani Narayan <i>Michigan State University, USA</i>		12:15 – 12:45
Bioengineering of Biopolymers for Human Healthcare Prof. Bhuvanesh Gupta <i>IIT Delhi</i>		12:45 – 13:15
Future Trends in Packaging.. Shri. Jeevaraj Gopal Pillai <i>Uflex Ltd.</i>		13:15– 13:45
LUNCH BREAK		13:45 – 14:30 Hours
14:30 – 15:30	INDUSTRY INTERACTION MEET	Hotel Holiday Inn
Co-ordinators	Mr. Anil Kumar Khare, CIPET:IPT-Lucknow Mr. Jasram Singh, CIPET:IPT-Lucknow	
Objective	<ul style="list-style-type: none"> Understanding industry needs Research collaboration Improving Students Employability 	
Schemes of MSME	SIDBI	

Session Chairpersons: Prof. Senthilarasu Sundaram & Prof. E. Bhoje Gowd

Hall – I AUDITORIUM	KEYNOTE SESSION	14:30 – 16:10 Hours
Impact of Chemicals in the Climate Change <i>Prof. D S Arya</i> <i>IIT Roorkee</i>		14:30 – 14:55
Geopolymer and its Sustainable Application in Construction Sector: Issues & Challenges <i>Prof. S K Singh</i> <i>Chief Scientist, CSIR-CBRI, New Delhi</i>		14:55 – 15:20
Leveraging Biocatalyst-H₂O₂ Driven Microplastic Degradation: Waterborne Microplastic Breakdown and Soil Microbial Community Shifts <i>Prof. Naveen K Navani</i> <i>IIT Roorkee</i>		15:20 – 15:45
Added Value Products from Biochar <i>Prof. Alcides Lopes Leão</i> <i>São Paulo State University, Brazil</i>		15:45 – 16:10
TEA BREAK		16:10 – 16:30 Hours

16:30 – 17:00	SPECIAL LECTURES	Hall – I AUDITORIUM
Shri. Manoj R Shah <i>President</i> <i>All India Plastics Manufacturer's Association (AIPMA)</i>		16:30 – 16:40
<i>IPI - Cipet Student Chapter Announcement</i> Shri. Abhay Upadhye <i>Chairman Indian Plastics Institute</i>		16:40 – 16:50
<i>Expert Lecture Program under the Project 3P: Productivity, Processing & Technology</i> Shri. Nitin Pandya <i>HR Head Prasad Group</i>		16:50 – 17:00

POST LUNCH SESSIONS: 16:00 – 18:30 Hours

Hall – II	Hall – III	Hall – IV	Hall - V
<ul style="list-style-type: none"> Green and Sustainable Materials 3D Printing & Additive Manufacturing 	Zero waste Materials & CO ₂ Emission Reduction Strategies	Recycling Technology and Circular Economy	CONTRIBUTORY ORAL PRESENTATION

Hall – II	<ul style="list-style-type: none"> Green and Sustainable Materials 3D Printing & Additive Manufacturing
Session Chairpersons: Prof. Naveen K Navani & Prof. Shriram Sonawane	
Title	Time (hrs.)
INVITED TALK	
Green composites reinforced by natural Fibers: Novel materials for sustainable world with low environment impact <i>Dr G L Devnani</i> <i>HBTU Kanpur</i>	16:00 – 16:20

Surface-Bound Polymers: Cutting-Edge Techniques and Applications in Sustainable Materials <i>Dr. Debasis Samanta</i> <i>CSIR-Central Leather Research Institute</i>	16:20 – 16:40
3D Printing With Crystalline Polymers: Challenges and Opportunities <i>Prof. (Dr.) Abhijit Bandyopadhyay</i> <i>University of Calcutta</i>	16:40 – 17:00
Plastics & Polymeric Products: Upcoming Challenges, Toxicity and Sustainability Approaches <i>Dr V P Sharma</i> <i>CSIR-Indian Institute of Toxicology Research, Lucknow</i>	17:00 – 17:20
Polysaccharide-based biopolymers: Synthesis, characterization and their applications <i>Dr. Jyoti Pandey</i> <i>B. B. Ambedkar University, Lucknow</i>	17:20 – 17:40
Polymer Nanocomposite and Mixed Matrix Green materials Toward the Next Generation of Sustainable Membranes <i>Dr. G. Arthanareeswaran</i> <i>NIT, Trichy</i>	17:40 – 18:00
Mechanical properties of novel PLA composite infused with betel nut waste biocarbon for sustainable 3D printing <i>Dr. T. Senthil Kumar</i> <i>CSIR-Indian Institute of Petroleum, Dehradun</i>	18:00 – 18:20
Value Proposition and Market Drivers for Bioplastics in India <i>Dr. Sunder Balakarishnan</i> <i>Nature-Tec., Chennai</i>	18:20 – 18:40
End of Day 1	

Hall – III	Zero waste Materials & CO ₂ Emission Reduction Strategies
Session Chairpersons: Prof. D S Arya & Prof. O P Pandey	
Title	Time (hrs.)
INVITED TALK	
Biopolymer and Natural Fibre Based Green Composites to Redress Food Packaging Materials for Sustainable Development <i>Prof. Sushil Kumar</i> <i>MNIT, Allahabad</i>	16:00 – 16:20
Novel Route for CO₂ Reduction for the Manufacturing of Petrochemical: Cyclohexyl Acetate <i>Dr. Vikas K. Sangal</i> <i>Malaviya National Institute of Technology, Jaipur</i>	16:20 – 16:40
Development of Benchmark adsorbent for Carbon Capture From Industrial Flue Gas <i>Dr. Ravibabu</i> <i>CSIR - Central Electrochemical Research Institute (CECRI), Karaikudi</i>	16:40 – 17:00
CONTRIBUTORY PAPERS	
Sustainable Management of Recycled Resources to Prepare Cost-Effective Wood-Plastic Composites <i>Dr. Vuba Kiran Kumar</i> <i>CIPET:CSTS: Hyderabad</i>	17:00 – 17:10
Study on Effect of Reaction Temperature on Number Average Molecular Weight of Synthesized PTFE in Batch Polymerization <i>Vibha Goswami</i> <i>CIPET:IPT-Jaipur</i>	17:10 – 17:20
A Green Approach to Prepare Biodegradable Film From Pineapple leaves for Food Packaging Applications. <i>Junaid Raza</i> <i>M J P Rohilkhand University, Bareilly</i>	17:20 – 17:30

Deep Eutectic Solvents in Reactive Extraction as a Green Approach for Carboxylic Acid Recovery in Biopolymer Production <i>Saurabh Babu</i> <i>MNNIT, Allahabad</i>	17:30 – 17:40
Current Status & Review on Biodegradable Polymers for Food Packaging <i>Nandini Vishwakarma</i> <i>MNNIT, Allahabad</i>	17:40 – 17:50
Nano-cellulose Reinforced PLA films for Carry Bags <i>Vimal Tripathi</i> <i>MNNIT Allahabad</i>	17:50 – 18:00
Applications of Hyaluronic Acid based Smart Polymers in Pollution Control <i>Riya Srivastava</i> <i>HBTU, Kanpur</i>	18:00 – 18:10
Nano-Engineered Polyether ether ketone (PEEK) Coatings for Dental Implants: Digital Light Processing Technology Meets Biomaterials <i>Gaurav Kumar Singh</i> <i>Pondicherry University</i>	18:10 – 18: 20
End of Day 1	

Hall – IV	Recycling Technology and Circular Economy	
Session Chairpersons: Prof. Anand Kishore Kola & Prof. Dr. Girish M. Joshi		
Title		Time (hrs.)
INVITED TALK		
Sustainability and Circular Economy Concepts in Plastics Packaging <i>Dr. Lakshmi Raghupathy</i> <i>Former Director M/o Environment and Forests and Climate Change</i>		16:00 – 16:20
Cost-effective process for energy production and saving materials from MSW waste plastic and leaf-litter <i>Prof. Suresh Sundaramurthy</i> <i>Maulana Azad National Institute of Technology Bhopal</i>		16:20 – 16:40
Synergizing Cellulose Circular Economy and Sustainable Environmental Remediation Techniques through the Radiation Processing approach <i>Dr. Nilanjali Mishra</i> <i>BARC</i>		16:40 – 17:00
Hydroprocessing Of Waste Plastics To Petroleum Products Utilizing Ionic Liquid Catalyst At Reduced Process Temperatures <i>Dr V L Mangesh</i> <i>KL University</i>		17:00 – 17:20
Microstructure and properties of chopped basalt fiber and Molybdenum disulfide reinforced epoxy matrix composites <i>Dr. M Ravichandran</i> <i>K. Ramakrishnan College of Engineering, Tiruchirappalli</i>		17:20 – 17:40
Recycling of medical and municipal plastic waste using UV assisted pyrolysis for liquid hydrocarbon fuels <i>Dr. D. K. Avasthi</i> <i>UPES Dehradun</i>		17:40 – 18:00
End of Day 1		

Session Chairpersons: Prof. D.C. Tiwari & Prof. Sanjay Kumar Srivastava		
Hall V	CONTRIBUTORY PAPERS	
Innovative Biocomposite Films: The Role of Nanofiller in Performance and Application <i>Dr Alok Sahu</i> <i>CIPET:IPT-Raipur</i>		16:00 – 16:10
Development of Nylon 3D Printing Filaments for Fused Deposition Modelling from Recycled plastics for environmental sustainability		16:10 – 16:20

<i>Avneet Kumar Joshi</i> <i>CIPET:CSTS-Chandrapur</i>	
Himalayan Nettle Fibre: An Excellent Biomaterial In Polymer Composite Application <i>Manash Protim Mudoi</i> <i>IIT Roorkee</i>	16:20 – 16:30
Comparative study on the mechanical performance of 3D Printed PETg and ABS <i>Pooja Gupta</i> <i>Sagar Institute of Technology and Management, Barabanki</i>	16:30 – 16:40
Polymer Material Selection and 3D-Printing Technology implementation for manufacturing VLTD AIS-140 Intelligent Transportation System Device <i>Mr. Praveen Deshmukh</i> <i>CIPET:CSTS-Balasore</i>	16:40 – 16:50
Parametric Analysis of Critical 3D printing Component development for customised application <i>Dr. Diwesh B Meshram</i> <i>CIPET:CSTS-Korba</i>	16:50 – 17:00
Green Energy and Green Petrochemicals: Transforming India's Sustainability Landscape with Green Technology-A review using ADO modelling based on PLS analysis <i>Prachi Srivastava</i> <i>CIPET:IPT-Lucknow</i>	17:00 – 17:10
Polymeric Foam 3D Printing of Microcellular Composites <i>G Radhakrishna</i> <i>CIPET:SARP-APDDRL</i>	17:10 – 17:20
Kinetic Analysis of non isothermal pyrolysis of multilayered PE/Nylon waste plastics using model fitting approach <i>Achyut Kumar Panda</i> <i>Veer Surendra Sai University of Technology, Odisha</i>	17:20 – 17:30
Computational Modelling and Experimental Study for Batch Emulsion Polymerization of PMMA: Effect of Process Parameters on Fractional Conversion and Average Kinetic Chain Length <i>Ashish Kumar</i> <i>CIPET:IPT-Jaipur</i>	17:30 – 17:40
Optimizing Machining Parameters for Ti-6Al-4V Using Wire Electrical Discharge Machining: A Taguchi-Based Approach <i>Shaik Mohammed Khaja</i> <i>CIPET:IPT-Murthal</i>	17:40 – 17:50
Biomass derived (A-WML/TiO₂) nano-adsorbent for remediation of Cr (VI) from wastewater <i>Archana Kushwaha</i> <i>HBTU, Kanpur</i>	17:50 – 18:00
Studies of Mechanical, Thermal, and Morphological properties of MWCNT dispersed with HDPE-PP for Automobile Applications <i>V Ganesh Ram</i> <i>Amrita School of Engineering, Coimbatore</i>	18:00 – 18:10
Synthesis of Bio-based Plasticizer from Rice bran Acid oil & it's Plasticizing Properties in Poly (Vinyl Chloride) Film <i>Prince Hareshbhai Patel</i> <i>Charutar Vidya Mandal University</i>	18:10 – 18:20
Removal of heavy metal from industrial wastewater using nanocomposite film via synergistic approach (adsorption and photocatalysis) <i>Satyanand Jaiswal</i> <i>HBTU, Kanpur</i>	18:20 – 18:30
End of Day 1	

POSTER SESSION - I

OLC ACADEMIC BLOCK – Ground Floor

15:00 – 17:00 Hours

DAY 2: 09th March, 2025 (SUNDAY)

**HALL - I
AUDITORIUM**

PLENARY SESSION

09:00 – 12:45 Hours

Session Chairpersons: Prof. Bhuvanesh Gupta & Prof. Ramani Narayan

Title

Time (hrs.)

Carbon Management in Petrochemical Sector: An approach towards net Zero

*Prof. K K Pant
IIT Roorkee*

09:00 – 09:30

*Prof. Ashutosh Tiwari
University of Uttah*

09:30 – 10:00

Pathways for a Green, Clean, and Sustainable Chemical Industry in Viksit Bharat@2047

*Padmashri Prof. G D Yadav
ICT, Mumbai*

10:00 – 10:30

*Prof. Rajiv Prakash
IIT Bhilai*

10:30 – 11:00

TEA BREAK

11:00 – 11:15 Hours

Waste to Sustainable Products

*Prof. Kumar Patchigolla
Teesside University, UK*

11:15 – 11:45

Role of Tribology in Building a Sustainable Future

*Prof. Rajnesh Tyagi
IIT BHU*

11:45 – 12:15

Materials innovation for Perovskite solar cells efficiency and lifetime increase

*Prof. Senthilarasu Sundaram
Teesside University, UK*

12:15 – 12:45

**HALL - I
AUDITORIUM**

KEYNOTE SESSION

12:45 – 13:35 Hours

Advancements of 3D Printing in Dentistry

*Dr. Disha Srivastava
IIT Roorkee*

12:45 – 13:10

Hierarchically Architected Semicrystalline Polymer Aerogels for Multifunctional Applications

*Prof. E. Bhoje Gowd
CSIR-National Institute for Interdisciplinary Science and Technology (IIST), Trivandrum*

13:10 – 13:35

LUNCH BREAK

13:35 – 14:00 Hours

Session Chairpersons: Prof. Santhanu Chattopadhyay and Prof. Rajneesh Tyagi

**HALL - I
AUDITORIUM**

KEYNOTE SESSION

14:00 – 15:40 Hours

Sustainable Products based on Biopolymers and Lignocellulosic Fibers : An Eco-friendly Solution

*Prof. Inderdeep Singh
IIT Roorkee*

14:00 – 14:25

Semiconducting Polymers for Optoelectronic Devices: Challenges and Opportunities <i>Dr. Sudhir Kumar</i> <i>ETH Zurich, Switzerland</i>	14:25 – 14:50
Recent Advances in MXenes for Advancements in the Sustainable Development. <i>Prof. O.P. Pandey</i> <i>Thapar University, Punjab</i>	14:50 – 15:15
Future Proofing Polymers using Application Development <i>Dr. Sumanda Bandyopadhyay</i> <i>SABIC Research and Technology Pvt. Ltd. Bengaluru</i>	15:15 – 15:40
TEA BREAK	15:40 – 16:00 Hours

EVENING SESSIONS: 16:00 – 18:30 Hours				
Hall – I AUDITORIUM	Hall – II	Hall – III	Hall - IV	Hall V
Blends, Alloys & Composites	Biomedical Materials & Catalyst Technology	Membrane & Water Treatment Technology, Thin Films & Coatings	Nanomaterials and Nanocomposites	CONTRIBUTORY ORAL PRESENTATION

Hall – I AUDITORIUM	Blends, Alloys & Composites
Session Chairpersons: Prof. Arvind Kumar Mungray & Prof. G L Devnani	
Title	Time (hrs.)
INVITED TALK	
Effect of Cure Parameters on the Performance of Carbon, High Silica and E - glass Phenolic Composites <i>Prof. Anand Kishore Kola</i> <i>NIT- Warangal</i>	16:00 – 16:20
Recent Scenario of polymers composites and blends: Emerging Applications <i>Prof. Dr. Girish M. Joshi</i> <i>Institute of chemical technology (ICT) Mumbai</i>	16:20 – 16:40
Application of Polymer nano composite for electronic application <i>Prof. D.C. Tiwari</i> <i>Ex VC jiwaji University, Gwalior</i>	16:40 – 17:00
An Overview of Elastomers: Reinforce SBR-Nanocomposites with Tin Oxide Filler <i>Prof. W. B. Gurnule</i> <i>Kamla Nehru Mahavidyalaya, Nagpur</i>	17:00 – 17:20
Demonstrating Economic Viability of Circular Plastics via Advanced Recycling <i>Mr. Suhas Dixit</i> <i>M/s. APChem Pvt Ltd</i>	17:20 – 17:40
CONTRIBUTORY PAPERS	
Bio-Polymer Composites for Suitable Alternatives of Single Use Plastic Packaging Applications <i>Vivek Kumar</i> <i>CIPET:IPT-Lucknow</i>	17:40 – 17:50
High-Performance Wood Polymer Composites for Industrial Machinery <i>Sourav Patel</i> <i>Veer Surender Sai University of technology, Odisha</i>	17:50 – 18:00

Analysis of Fracture Properties of Butterfly Composite Joints Using Finite Element Method <i>Sandeep Verma</i> <i>MNIT, Allahabad</i>	18:00 – 18:10
Effect of Graphene Reinforcement on The Tensile Behavior of Bio-Based Epoxy Nanocomposites <i>Vivekanand Singh</i> <i>MMM University of Technology Gorakhpur</i>	18:10 – 18: 20
Fabrication of epoxy /polyester based hybrid composites reinforced with chemically treated sisal fibers with improved thermo-mechanical properties <i>Pradeep Kumar</i> <i>Institute of Engineering and Technology Lucknow</i>	18:20 – 18:30
End of Day 2	

Hall – II	Biomedical Materials & Catalyst Technology	
Session Chairpersons: Prof. Suresh Sundaramurthy & Prof. Sushil Kumar		
	Title	Time (hrs.)
INVITED TALK		
	Waste to Resources: Sustainable development for realizing a circular economy <i>Prof. Arvind Kumar Mungray</i> <i>NIT- Surat</i>	16:00 – 16:20
	Polymeric Nanocomposite Hydrogel for Controlled Drug Delivery <i>Dr. Sarat Kumar Swain</i> <i>Veer Surendra Sai University of Technology, Burla, Sambalpur</i>	16:20 – 16:40
	Conductive Polymers for Space Mission <i>Prof. Hitesh D. Patel</i> <i>Gujarat University, Ahmedabad</i>	16:40 – 17:00
	Porphyrin coupled chitosan biomaterials for an efficient transfection in cancer cells <i>Dr. Santosh Kumar</i> <i>Harcourt Butler Technical University, Kanpur</i>	17:00 – 17:20
	Role of CCU and Hydrogen Integration in Energy Transition: Recent advancements & opportunities <i>Dr Komal Tripathi</i> <i>IIT Roorkee</i>	17:20 – 17:40
	PVA (Polyvinyl Alcohol) and fluorescent nanomaterials based luminescent platform for non-enzymatic detection of biomolecules <i>Prof. Sanjay Kumar Srivastava</i> <i>Institute of Science, BHU, Varanasi</i>	17:40 – 18:00
End of Day 2		

Hall – III	Membrane & Water Treatment Technology, Thin Films & Coatings	
Session Chairpersons: Prof. Raju Kumar Gupta & Dr. Ravibabu		
	Title	Time (hrs.)
INVITED TALK		
	Heavy metal removal using polymeric membranes: recent perspective <i>Prof. Shailendra Bajpai</i> <i>NIT Jalandhar</i>	16:00 – 16:20
	Fully Bio-based Membrane with Calcined Eggshell for Enhanced Industrial Effluent Treatment <i>Dr. S. Anandakumar</i> <i>Anna University Chennai</i>	16:20 – 16:40
	Fabrication of inorganic semiconductors@g-C3N4 heterojunction nanocomposites via sustainable routes for photocatalytic mineralization of	17:20 – 17:40

waste water and photoelectrochemical (PEC) water splitting <i>Prof Gajanan Pandey</i> <i>Babasaheb Bhimrao ambedkar University, Lucknow</i>	
Filtration as the fourth dimension of sustainability – An Overview <i>M/s. H&V Advanced Materials (India) Pvt. Ltd</i> <i>Dr.Shetty Ravindra Rama</i>	16:40 – 17:00
Epoxy Nanocomposites: A Study on Mechanical, Thermal and Morphological Characteristics <i>Dr. Manish Kumar</i> <i>Harcourt Butler Technical University</i>	17:00 – 17:20
Smart Thin-film Nanocomposite Membranes: Solvent-Free Engineering for Advanced Liquid and Gas Separation <i>Dr. Pravin G. Ingole</i> <i>CSIR-North East Institute of Science and Technology, Jorhat</i>	17:20 – 17:40

CONTRIBUTORY PAPERS

Recyclable and repulpable water-based coating formulation to replace the polyethylene coating on paper cups <i>Dr Anurag Kulshreshtha</i> <i>IIT Roorkee</i>	17:40 – 17:50
Preparation of Hydrophobic Membrane from Discarded PVDF Plastic Material <i>Meenakshi Yadav</i> <i>MNIT, Jaipur</i>	17:50 – 18:00
Removal of heavy metal from industrial wastewater using nanocomposite film via synergistic approach (adsorption and photocatalysis) <i>Satyanand Jaiswal</i> <i>HBTU Kanpur</i>	18:00 – 18:10
Development of an Optimization Model for Strategic Planning in India's Petrochemical industry <i>Bhawna Chauhan</i> <i>Indian Institute of Technology Ropar</i>	18:10 – 18: 20
Microstructure Analysis of Nickel-Based Superalloy Using Selective Laser Melting (SLM) Additive Manufacturing <i>S Vijayakanth</i> <i>CIPET:IPT-Kochi</i>	18:20 – 18:30

End of Day 2

Hall – IV	Nanomaterials and Nanocomposites
Session Chairpersons: Dr. Santosh Kumar Vishvakarma & Dr. G Santhana Krishnan	
Title	Time (hrs.)
INVITED TALK	
Integration of nanotechnology in engineering applications <i>Prof. Shriram Sonawane</i> <i>VNIT-Nagpur</i>	16:00 – 16:20
Nanomaterials based Polymeric Products for Naval Applications <i>Dr. Debdutta Ratna</i> <i>National Materials Research Laboratory, Thane</i>	16:20 – 16:40
Hydrothermal Synthesis of Two-dimensional Nanoparticles for Nano lubricant Applications : A Pathway for Enhanced Efficiency <i>Dr. S.V.A.R. Sastry</i> <i>HBTU, Kanpur</i>	16:40 – 17:00
Formulation and Development of Amphotericin-B Nanocream to Treat Neglected Diseases <i>Dr. Vinod Mokale</i> <i>MGM University, Aurangabad</i>	17:00 – 17:20
Development of piezoelectric nanomaterials for environmental pollution remediation <i>Chandra Shekhar Pati Tripathi</i>	17:20 – 17:40

<i>Banaras Hindu University Varanasi</i>	
Enhanced Convective Heat Transfer using Nanofluids: A Promising Approach <i>Bharat A. Bhanvase</i> <i>Laxminarayan Innovation Technological University</i>	17:40 – 18:00
CONTRIBUTORY PAPERS	
Application of nanofluids for the PVT solar panels <i>Dr. Parag Thakur</i> <i>Sardar Vallabhbhai National Institute of technology, Surat</i>	18:00 – 18:10
Infusion of nanoclay materials for the performance enhancement of fiber reinforced composites <i>Pankaj Kumar Lodhi</i> <i>HBTU, Kanpur</i>	18:10 – 18:20
Preparation of Nylon-clay Nanocomposites Using Unmingled Clay for Engineering Applications <i>Ritu Kumari</i> <i>CIPET: IPT Bihta</i>	18:20 – 18:30
End of Day 2	

Hall – V	CONTRIBUTORY PRESENTATIONS
Session Chairpersons: Dr. Gobhardhan Lal & Dr. K N Pandey	
Title	Time (hrs.)
Extraction of starch from agro-residues of cassava: Development of thermoplastic starch and characterization thereof <i>Dr. K A Rajesh</i> <i>CIPET: IPT-Kochi</i>	16:00 – 16:10
Designing Bioreceptive surfaces for use in Biomedical Applications <i>Chetna Verma</i> <i>IIT-Delhi</i>	16:10 – 16:20
Preparation of Antimicrobial LLDPE Film with Copper Powder for Food Packaging Applications <i>Polynomous Industries Pvt. Ltd.</i> <i>Rajkamal Tiwari</i>	16:20 – 16:30
Sulfonated polystyrene@polypropylene for VRFB application <i>Devendra Y. Nikumbe</i> <i>CSIR-Central salt and marine chemical research institute, Bhavnagar, Gujarat</i>	16:30 – 16:40
Electro Spun PVDF/MWCNT (Poly Vinylidene Fluoride / Multi Walled Carbon Nanotubes) Nanofiber Composites from Recycled Cigarette Butts for Advanced Tactile Sensing Applications <i>Dr. Alka Gupta</i> <i>CSJMU Kanpur</i>	16:40 – 16:50
Polypropylene Alloys and Blends: Advancements, Applications, and Future Trends <i>Sanju Vijayan</i> <i>Dharamsinh Desai University, Gujarat</i>	16:50 – 17:00
Thermal Stability of Natural Fibers Reinforced Chemically Functionalized Polyethylene Hybrid Composites <i>Hariome Sharan Gupta</i> <i>IIT Roorkee</i>	17:00 – 17:10
Impact of Surface Modification on the Reinforcement Efficiency of Halloysite Nanotubes in PEEK Composites <i>Naved Siraj</i> <i>CIPET: IPT, Murthal</i>	17:10 – 17:20
A hybrid process intensified approach for continuous production of polymeric nanospheres for potential in drug delivery applications <i>Sivaprakash S</i> <i>National Institute of Technology Warangal</i>	17:20 – 17:30
Polymeric Graphitic Carbon Nitride-Based Photocatalysts for Sustainable Ammonia Synthesis: Advancing Green Chemistry	17:30 – 17:40

<i>Rahul Gupta</i> <i>Indian Institute of Technology Kanpur</i>	
Effect of Metal Oxide Nanoparticles on Linear Low-Density Polyethylene (LLDPE) based Nanocomposites for High Voltage Cable Application <i>Bibhudatta Paikaray</i> <i>Gita Autonomous College, Bhubaneswar</i>	17:40 – 17:50
SLM Based Additive Manufacturing of IN-718: Mechanical and Microstructural Analysis <i>Jyotirmaya Kar</i> <i>MNIT, Jaipur</i>	17:50-18:00
End of Day 2	

18:00 – 19:00 Hrs	PANEL DISCUSSION	Hall -1 Auditorium
MODERATOR	<p>Shri DEEPAK MISHRA <i>Joint Secretary (Petrochemical)</i> <i>Department of Chemicals and Petrochemicals</i> <i>Ministry of Chemicals & Fertilizers</i> <i>Govt. of India</i></p> <p>Prof. (Dr.) SHISHIR SINHA <i>DG-CIPET</i></p>	
PANEL EXPERTS	<ul style="list-style-type: none"> • Padma Bhushan Padma Shri Dr. ANIL PRAKASH JOSHI <i>Himalayan Environmental Studies and Conservation Organization</i> • Padma Shri Prof. ASHUTOSH SHARMA <i>IIT Kanpur</i> • Padma Shri Prof. G D YADAV <i>Emeritus Professor of Eminence</i> <i>ICT Mumbai</i> • Prof. MANOJ CHOUDHARY <i>Vice Chancellor</i> <i>GATI SHAKTI VISHWAVIDYALAYA (GSV)</i> • Prof. VINAY PATHAK <i>Vice Chancellor</i> <i>Chhatrapati Shahu Ji Maharaj University, Kanpur</i> • Prof. K K PANT <i>Director</i> <i>IIT Roorkee</i> • Shri RAJESH PATHAK <i>Secretary, TDB</i> 	

TOPIC

**SUSTAINABILITY CHALLENGES FOR
VIKSIT BHARAT 2047**

POSTER SESSION - II

OLC ACADEMIC BLOCK – Ground Floor

15:00 – 17:00 Hours

DAY 3: 10th March, 2025 (Monday)

HALL - I AUDITORIUM	PLENARY SESSION	08:30 – 11:00 Hours
Session Chairpersons: Prof. Inderdeep Singh & Prof. Kumar Patchigolla		
Title		Time (hrs.)
Sustainable Hydrogen Production from Waste Plastics <i>Dr. Ajay Dalai</i> <i>University of Saskatchewan, Canada</i>		08:30 – 09:00
Material Considerations For Energy Harvesters in Tactile Sensing and IoTs <i>Prof. Ashok Vaseashta</i> <i>International Clean Water Institute, USA</i>		09:30 – 10:00
Circular Economy: New Opportunities for Sustainable Green Bio-nanocomposites <i>Prof. Sabu Thomas</i> <i>M G University, Kottayam</i>		10:00 – 10:30
<i>Prof. Santhanu Chattopadhyay</i> <i>IIT Kharagpur</i>		10:30 – 11:00
TEA BREAK		11:00 – 11:15 Hours
HALL - I AUDITORIUM	KEYNOTE SESSION	11:15 – 13:00 Hours
Upcycling waste plastics for the preparation of added-value materials <i>Dr. Rabah Boukherroub</i> <i>Univ. Lille, CNRS, Centrale Lille, France</i>		11:45 – 12:10
Phosphorus Moieties-based Sulfonated Polytriazoles: Synthesis, Characterization, and Evaluation of Proton Exchange Membrane Properties <i>Dr. Sushanta Banerjee</i> <i>IIT Kharagpur</i>		12:10 – 12:35
Financial Strategies For Sustainable Growth in The Petrochemical Sector: Advancing Viksit Bharat <i>Nishant Joshi</i> <i>IIM, Ahmedabad</i>		12:35 – 13:00
LUNCH BREAK		13:00 – 13:30 Hours

POST LUNCH SESSIONS: 13:30 – 15:30 Hours

Hall – I AUDITORIUM	Hall – II	Hall – III	Hall - IV
Artificial Intelligence & Machine Learning	Smart and High-Performance Polymers	Energy Harvesting & Storage	Functional Materials

Hall – I AUDITORIUM	Artificial Intelligence & Machine Learning		
Session Chairpersons: Dr. Debdutta Ratna & Dr. S V A R Sastry			
Title			Time (hrs.)
INVITED TALK			
Thermal Decomposition Behaviour of Ammonium Perchlorate/LaMn_{0.4}Fe_{0.6}O₃ Composition: An Artificial Neural Networking Investigation <i>Prof (Dr) Pragshkumar Niranjnabhai Dave</i> <i>Sardar Patel University</i>			13:30 – 13:50
AI & ML Assisted Catalyst Design for Olefin Polymerization <i>Dr. Nikhil Prakash</i> <i>Sant Longowal Institute of Engineering & Technology, Longowal, Sangrur</i>			13:50 – 14:10
Migration of Material and Sub-Surface Damage Post Electro-Discharge Machining <i>Dr. Syed Asghar Husain Rizvi</i> <i>Khwaja Moinuddin Chishti Language University, Lucknow</i>			14:10 – 14:30
Solvent Fractionation and Purification of Carbosilane Mixtures Obtained in an Extended Pyrolysis Polycondensation Process <i>Dr. G Santhana Krishnan</i> <i>CSIR-National Aerospace Laboratories Bangalore, India</i>			14:30 – 14:50
Atomistic Simulation for the Water Induced Iron Corrosion and Prevention Mechanism <i>Dr. Sunil Kumar</i> <i>CSIR-National Metallurgical Laboratory, Jamshedpur</i>			14:50 – 15:10
CONTRIBUTORY PRESENTATION			
AI-Assisted Polymer Synthesis & Design For A Sustainable Future <i>Anshita Singh</i> <i>CIPET:IPT-Lucknow</i>			15:10 – 15:20
Generative AI-Driven Polymer Innovation: Trends, Challenges, and Future Perspectives <i>Dr. Pranava Chaudhar</i> <i>HBTU, Kanpur</i>			15:20 – 15:30
TEA BREAK		15:30-15:45	

Hall – II	Smart and High-Performance Polymers		
Session Chairpersons: Dr V L Mangesh & Prof Gajanan Pandey			
Title			Time (hrs.)
INVITED TALK			
Smart and High-Performance Polymers: Bridging Innovation and Applications <i>Dr. Dibyendu Sekhar Bag</i> <i>DMSRDE (DRDO), Kanpur</i>			13:30 – 13:50
Phase behavior of polymers under macromolecular crowding <i>Dr. Gaurav Chauhan</i> <i>IIT Indore</i>			13:50 – 14:10

Highly sensitive and fast room temperature LPG sensor based on TiO₂ reduced graphene oxide (r-GO) composite and their sensing applications <i>Prof. (Dr.) Pramod Kumar Yadawa</i> <i>Veer Bahadur Singh Purvanchal University, Uttar Pradesh</i>	14:10 – 14:30
Natural Biomaterials and their biological derivatives as a Green and sustainable option for advanced therapeutic applications <i>Prof. Sailaja G.S.</i> <i>Cochin University of Science and Technology, Kochi</i>	14:30 – 14:50
Enhanced Performance of Lead Halide Perovskite Materials Synthesized Via Mechanochemical Method <i>Dr. Sachindra Nath das</i> <i>Jadavpur University, Kolkata</i>	14:50 – 15:10
TEA BREAK	
15:10-15:25	

Hall – III	Energy Harvesting & Storage
Session Chairpersons: <i>Chandra Shekhar Pati Tripathi & Dr. G. Arthanareeswaran</i>	
Title	Time (hrs.)
INVITED TALK	
Enhanced bactericidal activity of amoxicillin-conjugated magnetic nanoparticles <i>Dr. Moupiya Ghosh</i> <i>IEM-UEM, Kolkata</i>	13:30 – 13:50
Investigation as a photo catalyst and super-capacitive application of PAN/Ag-gC₃N₄ NF and Cu: Ni: CNFs composites <i>Dr. Navinchandra G. Shimpi</i> <i>University of Mumbai, Mumbai</i>	13:50 – 14:10
Technological advancements and innovations in green hydrogen applications <i>Dr. Ashok G. Matani</i> <i>Government College of Engineering, Jalgaon</i>	14:10 – 14:30
New Generation Energy Materials from Polymers <i>Dr. Satyaprasad senanayak</i> <i>NISER Odisha</i>	14:30 – 14:50
Replication of Surface Defects Using Advanced Polymer Resins for Machine Health Monitoring <i>Dr. Neeraj Kumar</i> <i>National Test House (HQ)</i>	14:50 – 15:10
CONTRIBUTORY PRESENTATION	
Recycling and reuse of HDPE waste from Cable stay Sheathing: Characterization and Study of Morphological and Mechanical properties <i>Pravin B Bachhav</i> <i>CIPET:CSTS- Ranchi</i>	15:10 – 15:20
Activation Energy and Energy Potential Estimation of Biomass Using TGA <i>Dr. Manish Choudhary</i> <i>CIPET:IPT-Lucknow</i>	15:20 – 15:30
End of Day 3	

Hall – IV	Functional Materials
Session Chairpersons: <i>Dr. Santosh Kumar & Dr. H S Patel</i>	
Title	Time (hrs.)
INVITED TALK	
Polyacrylamide (PAM) with graphene oxide (GO) and single-walled carbon nanotubes (SWCNTs): A notable electrical and mechanical properties	13:30 – 13:50

<i>Dr. T.P. Yadav</i> <i>University of Allahabad, Prayagraj</i>	
Graphene in polymers - the way forward <i>Dr. M S Gaur</i> <i>Hindustan College of Science and Technology, Farah</i>	13:50 – 14:10
CO₂ based polymers and their synthesis <i>Mr Umesh kumar</i> <i>Indian Institute of Petroleum, Dehradun</i>	14:10 – 14:30
Sustainability in Chemical Industry <i>Ms Pallavi MB</i> <i>M/s. SABIC Research and Technology Pvt. Ltd. Bengaluru</i>	14:50 – 15:10
Bio-based and biodegradable polymer: a sustainable approach towards green environment <i>Dr. Naveen Dwivedi</i> <i>Chandigarh University</i>	15:10 – 15:30
End of Day 3	

Hall – V	CONTRIBUTORY PRESENTATIONS
Session Chairpersons: Prof. W. B. Gurnule & Dr. M Ravichandran	
Title	Time (hrs.)
Reverse engineering in polymer and petrochemicals using spectroscopy <i>Labindia Analytical instruments Pvt Ltd</i> <i>Sandip Jagtap</i>	13:30 – 13:40
Influence of Coagulant Temperature and Non-Solvent Concentration on the Fabricated Composite PDMS/PVDF Membranes for MD Application <i>Manish Singh Rajput</i> <i>MNIT, Jaipur</i>	13:40 – 13:50
Compatibility study of Elastomeric Blends of NBR/SBR with different compatibilizers <i>Ambika Joshi</i> <i>CIPET:CSTS- Ranchi</i>	13:50 – 14:00
Exploring The Potential of Nano Filler For The Development of Polyolefin Composite Film For Sustainable Packaging Applications <i>Dr. Pijush Kanti Mandal</i> <i>CIPET:IPT-BBSR</i>	14:00 – 14:10
High-Performance Fire-Resistant Epoxy Nanocomposites Reinforced with Halloysite Nanotubes and Graphene <i>Devanand Bambole</i> <i>CIPET:CSTS-Baddi</i>	14:10 – 14:20
Biocarbon reinforced PBT composites: Effect of source material and use in automobile applications <i>Avinash Kumar</i> <i>CIPET, Chennai</i>	14:20 – 14:30
Regeneration of Waste Engine Oil: An Innovative Approach for a Sustainable Environment <i>Dr T Senthil</i> <i>CIPET:IPT-Jaipur</i>	14:30 – 14:40
Functionlization of Halloysite Nanotubes Using Plasma Treatment for the Preparation of Nanocomposites <i>Kamal Kant Singh</i> <i>CIPET IPT-Murthal</i>	14:40 – 14:50
Effect of Natural Fiber Hybridization on the Mechanical and Water Absorption Behaviour of Polymer Composites <i>Dr. Nitish Kumar</i> <i>CIPET:IPT Bihta</i>	14:50 – 15:00
Carbohydrate-Based Reprocessable and Healable Covalent Adaptable	15:00 – 15:10

Biofoams: A Sustainable Approach for Advanced Applications Chandan Upadhyay Rajiv Gandhi Institute of Petroleum Technology, UP	
End of Day 3	

DAY 1: 08th March, 2025

POSTERS

Venue: OLC ACADEMIC BLOCK (Ground Floor)

Poster ID	Name of the Presenter	Paper Title
POLYMERS IN MEDICAL AND HEALTHCARE		
P 1	Tusharkanta Nayak <i>CIPET:SARP-LARPM</i>	A Novel Bioactive Polyurethane-based Nanofibrous Membrane for Controlled Release of Drug in Biomedical Applications
P 2	Anuradha Biswal <i>Veer Surendra Sai University of Technology, Odisha</i>	Nano CaCO₃ Mediated Wound Healing Characteristics of Chitosan Films in Invertebrates and Vertebrates Without Added Drugs
P 3	Athulya M <i>CIPET:IPT-Kochi</i>	Evaluation of Carboxyl Functionalized Zinc Oxide Nanoparticles as a Swelling Matrix for Drug Delivery Application
P 4	Swapnita Patra <i>Veer Surendra Sai University of Technology, Odisha</i>	Carbon Quantum Dots in N,N'-Dicyclohexylcarbodiimide-Modified Cellulose for Ex Vivo Fluorescence Glucose Sensing in Human Blood Serum
P 5	Annesha Gupta <i>CIPET:IPT-Bhubaneswar</i>	Synthesis and Characterization of Polyimide based Covalent Organic Framework for Drug Delivery applications
P 6	Shuvendu Shuvankar Purohit <i>Veer Surendra Sai University of Technology, Odisha</i>	In Vivo Wound Healing of Excision Wounds in Drosophila and Rats Using Protein/N-GQD Nanocomposite Hydrogel
P 7	Selvi Krishnan <i>CIPET:IPT-Kochi</i>	Investigating the Optical Properties of Conjugated Polymer Nanoparticles for the Targeted Detection of viable E. coli: Implications for Clinical Diagnostics
P 8	Susobhan Swain <i>Veer Surendra Sai University of Technology, Odisha</i>	Polyethylene Glycol capped Silver/Rhodamine B nanocomposites for Tryptophan detection in Human Blood

P 9	Gurumoorthi Ramar <i>CIPET:IPT-Kochi</i>	Biopolymer composite Nanoparticles with Ag, GO and ZnO scaffolds for Bone Tumor Therapy and Regeneration
P10	Soumajyoti Ghosh <i>IIT Kharagpur</i>	A Novel Electrically Conductive Hydrogel for on-site Disease Diagnosis
BLENDS, ALLOYS AND COMPOSITES		
P11	Pratuse Ranjan Tiwari <i>CIPET:IPT-Lucknow</i>	Compounding of Poly Lactic Acid with Natural Fibre(Sugarcane Bagasse) By Single Screw and Twin-Screw Extruder.
P12	Krishna Manjari Sahu <i>Veer Surendra Sai University of Technology, Odisha</i>	Multifunctional Polyacrylic Acid/Poly(N-Isopropylacrylamide)/Strach/CQD Nanocomposite Hydrogel
P13	Ramya Devi K <i>IIT Kharagpur</i>	Development, Characterization and Modelling of Polyurethane based Nanocomposite Laminates for Lighter Than Air Vehicles Application
P14	Chetan Kumar Garg <i>HBTU, Kanpur</i>	Recent Trends in Development of Nano-cellulose based Composites for Diverse Applications: A Review
P15	Anushree Sinha <i>Babu Banarasi Das University, Lucknow</i>	Flax Fiber: Novel material as a reinforcing agent in various polymer composites
P16	Bindu Sagar Rout <i>CIPET:IPT-Bhubaneswar</i>	Development of PLA/Jute Fiber/PHB Composites for Sustainable Industrial Applications
P17	Piyush Gupta <i>IIT Kharagpur</i>	Impact of Eco-friendly Basalt fillers on Silicone Rubber: A New Generation Halogen-free Intumescent Flame-retardant Composite System
P18	Rajat Singh <i>CIPET:IPT-Lucknow</i>	Effect of Bast kenaf fiber-reinforced thermoplastic Cassava starch/ poly(lactic acid) green composite: Thermal and water resistance properties
P19	Sonali Pundir <i>CIPET:IPT-Lucknow</i>	Enhancement of Mechanical and Thermal Properties of Biodegradable PBAT Composites Reinforced with Corn Husk Fibers
P20	Abhishek Trivedi <i>CIPET:IPT-Raipur</i>	Extraction and Application of waste "Fish Scales in Biodegradable Composite Sheets

P21	Sidharth Shankar Singh <i>CIPET:IPT-Ahmedabad</i>	Development of High-Performance FRP Cladding Sheets for Enhanced Durability in Cooling Towers
P22	Shailesh Tomer <i>CIPET:IPT-Lucknow</i>	Improving the Thermal Stability of PVC by using Montmorillonite Clay and Chitosan
P23	Gaurav Kumar Pandey <i>CIPET:IPT-Lucknow</i>	Development of Fiber Reinforced Polymer (FRP) Composites Using Sugar Cane Bagasse
P24	Aditi <i>CIPET:IPT-Ahmedabad</i>	Mechanical, Thermal and Microstructural Studies of Jute Fiber Reinforced Polypropylene Composite
P25	Mukesh Kumar <i>CIPET:IPT-Lucknow</i>	Interfacial Behavior and Mechanical Properties of Short Glass Fiber-Reinforced Recycled Polypropylene Composites"
P26	Monal Goel <i>CIPET:IPT-Ahmedabad</i>	Effects Of Glass Fibres Reinforced Plastics And Epoxy Resin
P27	Harsh Gambhir <i>CIPET:IPT-Murthal</i>	Enhancing Mechanical Performance Of rHDPE Solid Wall Pipes Through LLDPE Blending: A Circular Economy Approach
P28	Suprit Samantaray <i>CIPET:IPT-BBSR</i>	Mechanical, Thermal and Morphological Behavior of PLA/PBAT Reinforced with Nano - Calcium Carbonate Composite
P29	Harshvardhan Rajpurohit <i>CIPET:IPT-Ahmedabad</i>	Review on Advances in Polyurethane Applications
P30	Ashutosh Sabat <i>CIPET:IPT-Bhubaneswar</i>	Fabrication and Characterization of PLA/PBAT/MWCNT nanocomposites
P31	Selvakumar Thangaraj <i>CIPET:IPT-Chennai</i>	Optimizing Tensile Strength of Nano-Clay Reinforced Aluminium-Glass Fiber Epoxy Hybrid Laminates
P32	Sabyasachi Gartia <i>CIPET:IPT-Bhubaneswar</i>	Utilisation of banana fibre reinforced polypropylene composite for textile application
P33	Aditya Mahankuda <i>CIPET:IPT-Bhubaneswar</i>	Development And Characterization of Banana Fiber Reinforced Epoxy Resin Composite for Printed Circuit Board Applications

P34	Anupal De Sarkar <i>CIPET:IPT-Ahmedabad</i>	Heat Insulating mat from Thermoplastic Polyurethane Reinforced with keratin fibers obtained from chicken feathers”
P35	Durgamadhab Mishra <i>CIPET:IPT-Bhubaneswar</i>	Optimization of polycarbonate/ Acrylonitrile Butadiene Rubber Blends: Mechanical-Thermal Property Trade-offs with Graphite Flake Reinforcement for High-Performance Applications
P36	Priyanka Bhargava <i>CIPET:CSTS-Bhopal</i>	Synthesis and Characterization of Glass Fibre-Reinforced Novolac Vinyl Ester Resin Composite: An Experimental Study
P37	Gopika P S <i>CIPET:IPT-Kochi</i>	Synthesis and characterization of polymethyl methacrylate nanocomposite using CTAB-Maleic acid Adduct modified clay
P38	Namrata Solanki <i>CIPET:IPT-Ahmedabad</i>	Advanced PBAT/PLA Blends for Packaging: Influence of Epoxidized Soybean Oil and Nano Silicate

3D PRINTING AND ADDITIVE MANUFACTURING

P39	Ashish Kumar <i>CIPET:IPT-Murthal</i>	Characterization of Thermoplastics-Based filament from Recycled Plastic for 3D Printing
P40	Kundan Singh bohra <i>CIPET:IPT-Murthal</i>	4D Printing A Review On Advances And Challenges
P41	Gaurav Mishra <i>CIPET - IPT Ahmedabad</i>	Development of High-Performance 3D Printing Filament from Recycled PET with Improved Crystallization and Rheological Properties
P42	Gunndeeep Singh Grover <i>CIPET:IPT-Lucknow</i>	Study And Analysis Of 3d Printing Of Particular Component In The Field Of Additive Manufacturing
P43	Vaibhav Agarwal <i>CIPET:IPT-Jaipur</i>	Optimization of 3D Printing Parameters for PA-CF Composites (Polyamide-Carbon Fiber): A Tensile Strength Evaluation

MEMBRANE TECHNOLOGY AND THIN FILMS & COATINGS

P44	Monali Chhatbar <i>Sardar Vallabhbhai National Institute of Technology, Surat</i>	Polydopamine/copper nanoparticles modified forward osmosis membrane to use in osmotic microbial fuel cell for human urine treatment
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P45	Priti Parmanand Sakhare <i>Sardar Vallabhbhai National Institute of Technology, Surat</i>	Forward Osmosis: A potential techniques for isolation of trace organic constituents from human urine
P46	Bhargav Shukla R <i>Sardar Vallabhbhai National Institute of Technology, Surat</i>	Forward Osmosis and Vacuum Membrane Distillation Integrated System for Wastewater Treatment
P47	Biswaranjan swain <i>CIPET:IPT-Bhubaneswar</i>	Making of Carbon Filter Using Water Haycinth
P48	Payel Maity <i>IIT Kharagpur</i>	Polymer containing MOF (PcMOF) in Specially Coating Application
P49	Samreen Ahmad <i>HBTU, Kanpur</i>	Application of Bio enzymes in paper and pulp industry
P50	Pratibha Yadav <i>Maulana aazad National Institute of technology, Bhopal</i>	Investigation of lifetime of microbubbles coated with nanoparticles
P51	Chandrika Sengar <i>HBTU, Kanpur</i>	Impact of Dispersibility on the Effectiveness of Nanocellulosic Biodegradable Polymers for Wastewater Treatment
P52	Dhananjay Dnyaneshwar Khairnar <i>Central Salt and Marine Chemicals Research Institute, Bhavnagar, Gujarat</i>	Vanadium Redox Flow Batteries with an Amphoteric Poly(styrene-co-2-vinyl benzimidazole) Membrane
RECYCLING AND WASTE MANAGEMENT		
P53	Pabitra Mohan Mahapatra <i>Veer Surendra Sai University of Technology, Odhisha</i>	Screening of Clay Catalysts in the Pyrolysis of Multilayer Plastic Waste: Process Optimization and Characterization of Oil Products
P54	Gajera Zavin Rameshbhai <i>Sardar Vallabhbhai National Institute of Technology, Surat</i>	Hydrothermal Carbonization of Tobacco Waste: Experimental Study and Struvite generation
P55	Arth Gandhi <i>Sardar Vallabhbhai National Institute of Technology, Surat</i>	Effect of hydraulic retention time and solid loading on decentralized treatment of fecal sludge

P56	Nitesh Suresh Chawade <i>Motilal Nehru National Institute of Technology, Allahabad</i>	Intensified Interesterification of Waste Cooking Oil with Methyl Acetate for FAME and Triacetin Production
P57	Yugal Kishor Pandit <i>Indian Institute of Technology Dhanbad, Jharkhand</i>	Experimental Investigation of a Novel Preformed Particle Gel for Water Shutoff Treatment in Heterogeneous Oilfields
P58	Amardeep Singh <i>CIPET:IPT-Lucknow</i>	Impact of Hybridization of Basalt Fiber and Hemp Fiber on the Mechanical Properties of Recycled Polypropylene
P59	Reshma Sarangi <i>CIPET:IPT-BBSR</i>	Kinetic study analysis of the conversion of PET polymer to monomer.
P60	Nikhil Kumar Alkara <i>CIPET:IPT-Raipur</i>	Optimization of Compatibilizer for Recycled Thermoplastic & Elastomer Blend
P61	Dr. Monalisa Satapathy <i>CIPET:IPT-Jaipur</i>	Experimental analysis of light diesel oil produced from different plastic waste and performance evaluation
P62	Nived V Nambiar <i>CIPET:IPT-Kochi</i>	Sustainable Container Flooring Using Recycled Plastic
P63	Dharavath Vijay <i>CIPET:IPT-Jaipur</i>	Production of Biofuel Through Pyrolysis of Banana Plant Waste
P64	Shrikant Chaubey <i>CIPET:IPT-Lucknow</i>	Advancements and Sustainability Challenges in Polyvinyl Chloride (PVC) Applications

R&D IN REFINING AND PETROCHEMICALS

P65	Mansi <i>CSIR-IIP, Dehradun</i>	Synthesis, characterization and evaluation of a novel surfactant as an emulsifier for pipeline transportation of Indian heavy crude oil
P66	Taanisha Mukhopadhyay <i>Haldia Institute of Technology, West Bengal</i>	Production of Biofuels from Algal Biomass by Aqueous phase reforming process
P67	Chanchal Panthi <i>MANIT, Bhopal</i>	Petroleum Industry: Production, Refining, Evolution and Challenges
P68	Abhishek Sameerkumar Mehta <i>Sardar Vallabhbhai</i>	Vacuum Distillation of Spent sulfuric acid: Investigation of quality variations in distillate and residue derived from feed

DAY 2: 09th March, 2025

POSTERS

Venue: OLC ACADEMIC BLOCK (Ground Floor)

Poster ID	Name of the Presenter	Paper Title
CATALYST TECHNOLOGIES		
P69	Avishek Mandal <i>Jadavpur University, Kolkata</i>	Synthesis and Characterisation Of Cost Effective Non-Noble Elctro-catalyst (Co₂P/Ni₂P) For Hydrogen Evolution Reaction (HER)
P70	Oluwatumininu Abosede Mutiu <i>CSIR-IIP, Dehradun</i>	EDTA as a complexing agent for double metal cyanide catalyzed synthesis of polyether carbonate polyol
P71	Abhishek Chandel <i>Thapar institute of Engineering and Technology, Patiala</i>	Waste Plastic and Natural Zircon derived carbon coated zirconium carbide (ZrC) nanocomposites for Electrocatalytic and Photocatalytic Application
P72	Annu Tyagi <i>Indian Institute of Technology Roorkee</i>	Green Ammonia Production: Metal-Based Electrocatalysts for Efficient Electrochemical Nitrogen Reduction
P73	Khushbu H Bhavsar <i>Sardar Vallabhbhai National Institute of Technology, Surat</i>	Xylitol synthesis over mixed oxide supported ruthenium catalyst
P74	Gopikadas K <i>CIPET:IPT-Kochi</i>	Enhanced photocatalytic degradation of methylene blue using TiO₂/ZnO/Cr₂O₃ Ternary nanosystem
P75	Biswaranjit Swain <i>CIPET:IPT-BBSR</i>	Electrocatalytic activity study of CuO@C Nanocomposite
ENERGY HARVESTING AND STORAGE DEVICES		
P76	Sk Mizanur Islam <i>Jadavpur University, Kolkata</i>	Enhanced Electrochemical Performance of NiMn₂O₄/Carbon Nanofiber for Supercapacitor Applications

P77	Priyant Kumar <i>HBTU, Kanpur</i>	“Development the suitable recycling methods for metals extraction present in the spent lithium-ion batteries (LIB): A Review”
P78	Pinki Yadav <i>HBTU, Kanpur</i>	Sustainable Lithium Extraction from Lithium-Ion Batteries: Advancements and Environmental Impact Reduction
P79	Aparajita Pal <i>IIT Kharagpur</i>	Metal-Organic Framework (MOF) Reinforced Functional Hydrogel Nanocomposite for Supercapacitor Applications
P80	Monika <i>Thapar Institute of Engineering and Technology , Patiala</i>	Low Temperature Synthesis of MoAIB MAB Phase for Enhanced Supercapacitance Application
P81	Mohd Arif <i>HBTU, Kanpur</i>	Recent developments in lithium extraction from lithium ion batteries
P82	Shubham Kumar <i>HBTU, Kanpur</i>	Fibrous Bivo4 photoanode for wastewater treatment and water oxidation along with H2 production.
P83	Divanshu <i>CIPET:IPT-Lucknow</i>	Converting walking motion into electrical energy
P84	Aman Singh Panwar <i>CIPET:IPT-Jaipur</i>	Preliminary Characterization of membrane composed of polyvinylidene fluoride/ZrO2 for application in fuel cell.
P85	Sashwata Sahoo <i>CIPET:SARP-LARPM</i>	Energy harvest, storage, and utilization by IoT-enabled self-powered health monitoring device based on triboelectric nanogenerator
FUNCTIONAL MATERIALS & ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING		
P86	Satyendra Singh <i>HBTU, Kanpur</i>	Synthesis and characterization of chitosan-cellulose derivative for CO ₂ capture
P87	Chandra Prakash Gupta <i>IIT Roorkee</i>	Predicting Thermophysical Properties of Refrigerants via Machine Learning Based on Molecular Structure
P88	Debasish Mohanty <i>CIPET:SARP-LARPM</i>	Study on Neural Network Alignment of Polymer Representation Addressing Potential Biomedical Polymer Generation

P89	Mithun Halder <i>Jadavpur University, Kolkata</i>	Study On Structural, Optical And Conductive Properties Of Mechanochemically Synthesized Cs _x MA1-XPbI ₃ Perovskite
P90	Souvik Mal <i>Jadavpur University, Kolkata</i>	Temperature-dependent structural study on mechano-chemically synthesized Methylammonium lead bromide (CH ₃ NH ₃ PbBr ₃)
P91	Supriya Tripathy <i>University of Mumbai, Mumbai</i>	Highly Selective and Sensitive Xylene Gas Sensor Based on NiFe ₂ O ₄ Nanospheres Synthesized Via Hydrothermal-Ultrasonication Approach
P92	Aneeta Varghese <i>University of Calicut, Kerala</i>	Synthesis and characterization of MEH-PPV incorporated Alginate-based Fluorescent Hydrogel
P93	Kamalveer <i>Thapar Institute of Engineering and Technology, Patiala</i>	Synthesis routes and various applications of 2D Borophene
P94	Sharad Raghuvanshi <i>IIT Roorkee</i>	Hygrothermal Assisted Ionic Liquid/DMSO Modification Of Wood Ultrastructure Using Multifunctional Magnetic Nanoparticles: A Machine Learning Approach For Sustainable Polymeric Applications
P95	Argha Ojha <i>IIT Dhanbad, Jharkhand</i>	Synthesis, Characterization and Application of Graphene Oxide Grafted Poly dimethylacrylamide (GO-g-PDAm) as a Novel Gas Hydrate Inhibitor as well as Corrosion Inhibitor
P96	Priyadarshini Rout <i>CIPET:IPT-Bhubaneswar</i>	Hydrothermal Synthesis of Cobalt-based Metal-Organic Frameworks: A Novel Approach for Biomedical and Water Treatment Applications
P97	Aparna A B <i>CIPET:IPT-Kochi</i>	Preparation of Pectin-Based Organogels
P98	Althaf A Salih <i>CIPET:IPT-Kochi</i>	Synthesis of ZnO Nano Particles and Evaluation of Its Antibacterial Activity
P99	Akash Banerjee <i>CIPET:IPT-Bhubaneswar</i>	A Novel Conductive Aerogel from Sisal-Derived Cellulose and PEDOT: PSS via Sol-Gel and Freeze-Drying

GREEN AND SUSTAINABLE MATERIALS

P100	Mukul Sengar <i>Institute of Engineering and Technology Lucknow</i>	Solar drying of carrot using polycarbonate with UV protection: A sustainable approach
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P101	Dhore Nikhil Rambharosh <i>IIT, Kharaghpur</i>	Prospects of Bio-based Waterborne Polyurethane for Multifaceted Applications
P102	M.H. Halashankar Swamy <i>IIT, Bhu</i>	“Biodegradable Eichhornia crassipes (Water Hyacinth)-PVA Composites: A Sustainable Approach to Waste Utilization”
P103	Ishwar Sharan <i>IIT, Roorkee</i>	Synthesis of non-isocyanate polyurethane using aminolysis of propylene carbonate and short diols via polyaddition/polycondensation: a green approach
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