



# 08<sup>th</sup> NATIONAL CONFERENCE ON BIOPOLYMERS AND GREEN COMPOSITES

Organized by  
CIPET: IPT - KOCHI

Supported by



Day 1 : 24<sup>th</sup> November , 2023

08.45 am - 10.00 am

INAUGURATION

10.00am -10.30 am

Tea Break

## PLENARY LECTURE

**Session: 1**

**Chair: Dr. R Sailaja, CUSAT**

**Hall: VC Hall -1st Floor**

S. No.	Time	Speaker	Topic
PL1	10.30 am - 11.15 am	<b>Prof Dr Kamal Nain Chopra</b> Laser Science and Technology Centre, (LASTEC) Defence Research and Development Organization (DRDO),Delhi	Recent Important Advances in Biopolymers and Green
PL2	11.15 am - 12.00 pm	<b>Dr. Parveen Saini</b> CSIR-NPL, New Delhi	Circular Economy Driven Sustainable Waste Management Practices
<b>Session: 2</b>			<b>Hall: VC Hall -1st Floor</b>
<b>Chair: Dr. T. O. Varghese Former Director, CIPET</b>			
PL 3	12.00 pm - 12.45 pm	<b>Dr. S.N. Jaisankar</b> CSIR-Central Leather Research Institute	Recent developments in polyurethanes for biomedical applications
PL 4	12.45 pm - 1.30 pm	<b>Dr. Susy Varughese</b> IIT Mardas	Rheological behaviour of pectin polysaccharides and its relevance in the biological world and in engineering applications



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1.30 pm - 2.30 pm		Lunch break	
PL 5	2.30 pm - 3.00 pm	Dr. Pugalendi Pandian Pandian advanced medical centre Madurai	In the making of synthetic bone graft
<b>Session: 3</b>		<b>Chair: Dr. Parveen Saini, CSIR-NPL</b>	<b>Hall: VC Hall -1st Floor</b>
PL 6	3.00 pm - 3.30 pm	Dr. Vasudevan Venugopal DFRL, Mysore	Sustainable Food Packaging Technologies
PL 7	3.30 pm - 4.00 pm	Dr. A. Seema C MET, Thrissur	Renewable Energy: Global Trends
4.00-4.15pm		Tea Break	
<b>INVITED LECTURE</b>			
<b>Session: 4</b>		<b>Chair: Dr. Leny Mathew</b>	<b>Hall: VC Hall -1st Floor</b>
IL 1	4.15 pm - 4.30 pm	Dr Saju Daniel St. Xavier's College Vaikom, Kothavara P O	Multifunctional Natural Rubber Based Polymer Nano Composites for a Sustainable Future
IL 2	4.30 pm - 4.45pm	Dr. Mujeeb Rahman P Govt. Arts & Science College, Calicut.	Experimental and Theoretical Investigation of chitosan nano ZnO Films prepared by one pot procedure.
IL 3	4.45 pm - 5.00pm	Dr Nisha St Alberts College	Multifaceted applications of various green composite films based on Chitosan



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Day 2: 25<sup>th</sup> November 2023

## PLENARY LECTURE

**Session: 5**

**Chair: Dr. K E George, Former Head, PSRT, CUSAT**

**Hall: VC Hall -1st Floor**

S. No.	Time	Speaker	Topic
PL 8	9.30 am - 10.15 am	<b>Dr. Ramendra Pati Pandey</b> School of Health Sciences and Technology (SOHST), UPES, Dehradun, Uttarakhand, India (Online )	The Translational Prospective of secretory proteins of <i>Mycobacterium tuberculosis</i> encapsulated in Bio-polymeric nanoparticles: An Interplay of Immune Response and Oxidative stress
PL 9	10.00 am - 10.45 am	<b>Dr. Mudrika Khandelwal</b> Department of Materials Science and Metallurgical Engineering, Indian Institute of Technology Hyderabad (Online)	Nanostructured Engineering of microbial cellulose for energy health and environment
10.45 am - 11.00am		Tea Break	



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<b>Session: 6</b>		<b>Chair: Dr. Manjulakshmi, CIFT, KOCHI</b>		<b>Hall: VC Hall -1st Floor</b>	
<b>INVITED LECTURE</b>					
<b>PL 10</b>	<b>11.00 am - 11.30am</b>	<b>Dr. Sunder Balakrishnan</b> Naturetec., Chennai (Online )	Value proportion and market drivers for bioplastics in India		
<b>PL 11</b>	<b>11.30 am - 12.00 pm</b>	<b>Prof. Dr. Nour Sh. El-Gendy</b> Environmental Sciences, Sustainable Development, Clean Energy, and Nano-Biotechnology ,Egypt (Online).	Recruitment of Lignocellulosic Waste Biomass to Achieve a Clean and Sustainable Environment.		
<b>PL 12</b>	<b>12.00 pm - 12.30 pm</b>	<b>Dr. Shivanada K N</b> ITC Limited, Bangalore (Online)	Trends in Biopolymer Coatings		
<b>IL 4</b>	<b>12.30 pm - 12.45 pm</b>	<b>Dr Rehan Khan</b> Institute of Nano Science and Technology (INST)	Inhibition of inflammatory arthritis using nanobiomaterials		
<b>IL 5</b>	<b>12.45 pm - 1.00pm</b>	<b>Dr. Riysudheen N</b> IG - WMO Arts and Science College Wayanad	Novel Copper doped reduced graphene oxide/ Polyurethane electrospun composite membranes and their electrochemical performance		
<b>IL 6</b>	<b>1.00 pm - 1.15 pm</b>	<b>Dr. Hasan Saygılı</b> Batman University, Batman, Turkey (Online)	High capacity removal of Congo red in biomass-based green composite: Characterization and isotherm studies		
<b>1.15 pm - 2.00 pm</b>		<b>Lunch break</b>			



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## ORAL PRESENTATION

**Session: 7**

**Chair: Dr Nisha, St Albert's College**

**Hall: VC Hall -1st Floor**

S. No.	Time	Presenter	Topic
OP 1	2.00 pm - 2.10pm	<b>Bhavya E P</b> Kerala University of Fisheries and Ocean Studies, Pananga	FORMULATION OF CARAGEENAN BASED BIONANOCOMPOSITE FILM FOR FOOD PACKAGING
OP 2	2.10 pm - 2.20 pm	<b>Nikhitha Augustin</b> Amrita School of Physical Science, Amrita Vishwa Vidyapeetham, Coimbatore	Analysis of electrical and electromagnetic interference shielding properties of polyvinylidene fluoride (PVDF)/ poly(lactic acid) (PLA)/ expanded graphite (ExGr) blend nanocomposites
OP 3	2.20 pm -2.30 pm	<b>S.U.Subhalakshmi</b> The Gandhigram Rural Institute (Deemed to be university)	Bioplastics and Biocomposites: Future of food packaging is Sustainability
OP 4	2.30 pm -2.40 pm	<b>Shagufta Bi</b> Lodhipur Rajpoot Delhi road, Moradabad U.P.	Green Synthesis of Nanoparticles and Its In-Vivo application
OP 5	2.40 pm - 2.50 pm	<b>Gurumoorthi Ramar</b> CIPET KOCHI	Zinc oxide incorporated composite electrospun scaffolds for bone tissue engineering
OP 6	2.50 pm - 3.00 pm	<b>C. Balaji Ayyanar</b> Coimbatore Institute of Technology, Coimbatore, Tamilnadu, India.	n-vitro and in-vivo Characterization of thin film
OP 7	3.00 pm - 3.10 pm	<b>Manish Yadav</b> Indian Institute of Technology Mandi, Mandi, Himachal Pradesh	Electrospun $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> /PAN nanofibers mat: A multifunctional and efficient platform in wastewater treatment



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<b>OP 8</b>	<b>3.10 pm - 3.20 pm</b>	<b>K. Amudhan</b> Mepco Schlenk Engineering College, Sivakasi, Tamilnadu, India	Fibre-reinforced polymer made Pylon tube for Lower Limb Prosthesis: Fabrication, Experimentation and Finite Element analysis
<b>OP 9</b>	<b>3.20 pm - 3.30 pm</b>	<b>Gopika Preethikumar</b> CSIR-National Institute for Interdisciplinary Science and Technology, Trivandrum	Dual-sized electrospun CA/PVP core-shell fiber membranes: Fabrication and characterisation
<b>OP10</b>	<b>3.30 pm - 3.40 pm</b>	<b>G. Manikanda Raja</b> AAA College of Engineering and Technology, Tamilnadu, India	Enhancing of mechanical Properties of Novel Ternary Epoxy Resin Composites:A strategic approach using Blended Graphene Oxide and Polypropylene Fillers
<b>OP 11</b>	<b>3.40 pm - 3.50 pm</b>	<b>Hsin-Cheng Chiu</b> National Tsing Hua University, Taiwan	New combination treatment from Ros-induced sensitized radiotherapy with nanophototherapeutics to fully Eradicate Orthotopic Breast cancer and Inhibit metastasis
<b>3.50 pm - 4.00 pm</b>		<b>Tea Break</b>	
<b>VALEDICTORY FUNCTION</b>			<b>Hall: VC Hall -1st Floor</b>



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## POSTER PRESENTATION

Poster No	Time	Name of participant	Title of poster
PP 1	2.00 pm - 3.00pm	<b>Abhijith S</b> Amaljothi College of Engineering, Kanjirappalli , Kottayam	Lotus Fiber reinforced epoxy composite for Automobile Interior applications
PP 2		<b>Adithya A V</b> CSIR- National Institute for Interdisciplinary Science and Technology (NIIST)	Surface Modified Cellulose Nanofiber Composites -Synthesis and Development for High-Performance Materials
PP 3		<b>Akshaya S</b> VIT Vellore	Bio-nanocomposites of alginate and cellulose nanofibers from agrowaste for food packaging applications
PP 4		<b>Anjali Prakash</b> CIPET-IPT, Chennai	Composition Optimization of Iron-Nickel-Nanographite Particles for Tuning the Electromagnetic Parameters of Silicone Rubber Composites
PP 5		<b>Arjun Somarajan</b> Amrita Centre for Nanoscience and molecular medicine, Kochi	Fabrication of Flexible, Hydrophobic and UV-Resistant Hybrid Nanocomposite of Polypropylene via Latex Technology for Green EMI Shielding
PP 6		<b>Bibin</b> Amaljothi College of Engineering, Kottayam	Flax Fibre Reinforced epoxy composite for Automotive Application
PP 7		<b>Deepika</b> Central University of Haryana, Mahendragarh, India	Biopolymers Application in Urinary Tract Infection
PP 8		<b>Reshma V S</b> CIPET KOCHI	Development of Biopolymer based on Chitosan grafted Polycaprolactone and Polyglycidylmethacrylate





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PP 9	<b>Roopa Rajan</b> Kerala University, Kerala	Biofunctional properties of Seaweed based composite films blended with natural polymers for seafood preservation
PP 10	<b>Saranya Kunjumon</b> Central University of Kerala, Kerala	Cotton Gauze impregnated by Plant Mediated Ag/CuO
PP 11	<b>Sourav C</b> Kufos, Madavana, Kochi	Extraction of eco-friendly packaging components from aquatic weed ( <i>Eichhornia Crassipes</i> ).
PP 12	<b>Stephan Jose</b> CIPET - Kochi	Synthesis & Characterization of Fluorescent Polymer Nanocomposites for Biosensing Applications
PP 13	<b>Suji Mary Zachariah</b> Mahatma Gandhi University, Kottayam, Kerala, India	Janus Structure Inspired PVA based Double Layered
PP 14	<b>Manish Kumar</b> Indian Institute of Technology Mandi, Himachal Pradesh	Piezo-photocatalytic activity of mechanochemically synthesized BiVO <sub>4</sub> for dye cleaning
PP 15	<b>Premkumar K</b> Central Institute of Petrochemicals Engineering and Technology, Chennai, Tamil Nadu, India	Synthesis and Fabrication of Activated Prosopis Juliflora -char reinforced with recycled Polypropylene based Biocomposites.
PP 16	<b>Selvi K</b> CIPET Kochi	Conjugated polymer based Direct Microscopic detection of microbial pathogens
PP 17	<b>Deepali Sachin Kamble</b> Shivaji University, Kolhapur	A review on synthesis and applications of polyaniline hydrogels