



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025, NIT Calicut



## Conference Schedule

<b>Day 1: 7th March 2025</b>			
<b>8:00 - 9:00</b>		<b>Registration</b>	
<b>9:00 - 10:00</b>		<b>Inauguration</b>	
		<b>Venue: Aryabhata Hall</b>	
<b>10:00 - 11:00</b>		<b>PLENARY SESSION 1A</b>	
		<b>Venue: Aryabhata Hall</b>	
<b>1</b>	<b>10:00 - 10:30</b>	<b>Plenary Lecture 1:</b>	Prof.Dr. PV Aravind, University of Groningen, Netherlands
		<b>Topic:</b>	Climate Smart Coffee Farming : The Wayanad Initiative
<b>2</b>	<b>10:30 - 11:00</b>	<b>Plenary Lecture 2:</b>	Dr. Ranjith Krishna Pai, Senior Director, Climate, Energy and Sustainable Technology (CEST), DST
		<b>Topic:</b>	India's Vision for Hydrogen Energy and various steps taken to promote hydrogen energy in the country
<b>11:00 - 11:30</b>		<b>Tea Break</b>	
<b>11:30 - 12:45</b>		<b>PARALLEL KEYNOTE SESSION 1A - Clean Energy</b>	
		<b>Venue: Aryabhata Hall</b>	
<b>1</b>	<b>11:30 - 11:55</b>	<b>Keynote Lecture 1:</b>	Dr. R Harikumar, Director, Energy Management Centre, Govt. of Kerala
		<b>Topic:</b>	Clean & sustainable energy projects in Kerala - Challenges & Opportunities
<b>2</b>	<b>11:55 - 12.20</b>	<b>Keynote Lecture 2:</b>	Mr.Arijit Ghosh, Managing Director, S.A.P. Automations (India) Pvt. Ltd.
		<b>Topic:</b>	Use of geothermal exchange in decarbonization of buildings
<b>3</b>	<b>12:20 - 12.45</b>	<b>Keynote Lecture 3:</b>	Dr. Kaustuv Mittra, Wiley
		<b>Topic:</b>	Enhancing Academic Impact with Special Issues
<b>11:30 - 12:45</b>		<b>PARALLEL KEYNOTE SESSION 2A - Clean Fuel</b>	
		<b>Venue: Bhaskara Hall</b>	
<b>1</b>	<b>11:30 - 11:55</b>	<b>Keynote Lecture 4:</b>	Dr. Jagabandhu Kole, Sr. Vice President R&D, JSW Cement
		<b>Topic:</b>	Importance of performance-based specifications or codes of practices in Cement and Concrete industries decarbonization space towards Net Zero target by 2070
<b>2</b>	<b>11:55 - 12.20</b>	<b>Keynote Lecture 5:</b>	Prof. Subith Vasu, CATER, University of Central Florida, USA
		<b>Topic:</b>	Hydrogen and ammonia combustion for green aviation and power generation



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025, NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

3	12:20 - 12:45	<b>Keynote Lecture 6:</b>	Prof. T Jayaraman/Mr. H. Shriram, NBGES
		<b>Topic:</b>	Mission IMPOSSIBLE-An engineering approach to sustainability
11:30 - 12:45		<b>PARALLEL KEYNOTE SESSION 3A - Decarbonisation</b>	
		<b>Venue: Chanakya Hall</b>	
1	11:30 - 11:55	<b>Keynote Lecture 7:</b>	Dr. Ullas Krishnan J N, Senior Manager, Dalmiya Cement (Bharat) Ltd.
		<b>Topic:</b>	Decarbonization strategies for a Climate-Resilient Future
2	11:55 - 12:20	<b>Keynote Lecture 8:</b>	Mr. Guruprakash Sastry, Associate Vice President & Climate Action Lead, Infosys, Bangalore
		<b>Topic:</b>	"Building sector decarbonization"
3	12:20 - 12:45	<b>Keynote Lecture 9:</b>	Mr. Avinash Kumar, President- ESG; Earthood Services Ltd.
		<b>Topic:</b>	Understanding the Pathways for Decarbonization
12:45 - 14:00		<b>Lunch Break</b>	
14:00 - 15:00		<b>PLENARY SESSION 2A</b>	
		<b>Venue: Aryabhata Hall</b>	
1	14:00 - 14:30	<b>Plenary Lecture 3:</b>	Dr. G. Subbaraman (Subbu), Institute Fellow and Project Development Director, GTI Energy, USA
		<b>Topic:</b>	Hydrogen Hubs in USA and Challenges
2	14:30 - 15:00	<b>Plenary Lecture 4:</b>	Mr. S Lakshminarayanan, Executive Director at Indian Oil Corporation Limited
		<b>Topic:</b>	Outlook of India's Energy Demand and Emission
15:00 - 15:15		<b>Tea Break</b>	
15:15 - 16:15		<b>Poster presentations (Session Chairs: Dr. Rakesh Sharma (MAHE), Dr. Arun Kumar (MAHE), Dr. Prem Kumar Chaurasiya (NIT Raipur), Dr. SL Sinha (NIT Raipur), Dr. Arun P, Dr. Abdul Akbar, Dr. Sajith V, Dr. Sudev Das)</b>	
16:15- 17:30		<b>Oral Presentations Day 1 - Parallel session 1A</b>	
		<b>Venue: Aryabhata Hall (Session Chair - Prof. S L Sinha, NIT Raipur)</b>	
<b>S.No.</b>	<b>Paper ID</b>	<b>Author</b>	<b>Title</b>
1	8	Christy Sunny	BIOFIL- An Air Purifier
2	32	Srinivas T	Carbon Dioxide to Polymers: A Comprehensive Review on Nanomaterial-Driven Conversions
3	44	Omvir Singh	Production of aromatics range hydrocarbon from Bio-Naphtha(paraffinic rich) oil Using experimental optimization for catalyst screening



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025 , NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

4	58	Padmanathan Panneerselvam	Sustainable Fuel for Diesel Engines: Chlorella Vulgaris Algal HTL Bio-Oil Blends - A Performance and Emissions Study
5	37	Krishna Raj V	Assessing the Performance of Nano-Composite Hydrated Salt PCM in Latent Heat Storage Systems Featuring Specialized Fin Configurations
6	60	Padmanathan Panneerselvam	Performance Analysis of Hydrogen Fueled Scramjet Combustor with Effect of Supplementary Oxygen
7	23	Shebaz Memon	Techno-Economic optimization and Societal impact of Integrated Renewable Energy Systems for Decarbonizing India and Achieving Net Zero
<b>16:15- 17:30</b>		<b>Oral Presentations Day 1 - Parallel session 2A</b>	
		<b>Venue: Bhaskara Hall (Session Chair - Dr. Rakesh Sharma, MAHE)</b>	
S.No.	Paper ID	Author	Title
1	66	AAKASH KUMAR NIMESH	Performance Study of an Ejector-Organic Rankine Cycle with Heat Recovery Vapor Generator
2	73	Nitin Padhiyar	Membrane Reactor Design considering Multiple Objectives
3	77	GREESHMA S	Potential of Steel Slag as an Sustainable Concreting material
4	140	PRADEEPAN PERIYAT	Systematic Approach Towards Net Zero Carbon – A Case Study at Udayagiri Gramapanchayath, Kannur District, Kerala
5	153	Anil M	A Review on Carbondioxide Capture Techniques and applications of CFD Modeling
6	126	Prof. Cherian Samuel	Framework for adopting decarbonization and industry 4.0 in steel industry
7	7	Chandana Sasidharan	Assessment of Electric Vehicle Adoption for Decarbonisation in Indian States
<b>16:15- 17:30</b>		<b>Oral Presentations Day 1 - Parallel session 3A</b>	
		<b>Venue: Chanakya Hall (Session Chair: Prof. Sarma V. Pisupati, Department of Energy and Mineral Engineering, Penn State, USA)</b>	
S.No.	Paper ID	Author	Title
1	155	Jai Santhosh Vankatesh	Solvent Screening for CO 2 Capture process
2	156	Sarumathi Kathirvel	HIGH FREQUENCY (470 kHz) ULTRASOUND-ASSISTED CO 2 STRIPPING: PROCESS INTENSIFICATION BY Al 2 O 3 NANOPARTICLES
3	173	Divya Rooby	CARBON CURING OF CEMENTITIOUS MATERIAL: INFLUENCE OF CO2 CONCENTRATION AND CURING DURATION ON CO2 UPTAKE AND COMPRESSIVE STRENGTH
4	175	Aathira Krishna	Carbon dioxide Sequestration in Recycled Concrete Aggregates: Its Impact on the Performance of Concrete



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025, NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

5	181	Avinesh Pyarilal	Decarbonizing Concrete 3D Printing: The Potential of Carbonation Mineralization and Carbonatable Binders
6	185	Mohan Cigurupadi Ganesan	Optimizing Diesel Engine Performance and Emissions with CuO Nanoparticles and Hydrothermal Liquefaction-Derived Biodiesel
7	104	Aishwarya Vipin	A paradigm shifts in circular economy: Prospects on bioplastics and its role in environmental restoration
16:15- 17:30		<b>Oral Presentations Day 1 - Parallel session 4A</b>	
		<b>Venue: MED Seminar Hall (Room No: DB 310) Session Chair: Prof. Jishnu Bhattacharya, IIT Kanpur)</b>	
S.No.	Paper ID	Author	Title
1	4	Shamal Chandra Karmaker	Digital Economy and Environmental Sustainability: Insights from Econometric and Machine Learning Analyses
2	87	Jinto Francis	Design of Heat Exchanger for Waste Energy Recovery From Rotary Cement Clinker Kiln For Regeneration of CO <sub>2</sub> Adsorbent
3	88	Tilling Taser	CO <sub>2</sub> injection-induced caprock deformation using higher order circular plate theory model and FEHM model: A Comparison
4	89	Smitha Rao	Digital Solution for efficient carbon capture utilization and storage
5	130	Shriappradha T. N	Economical Potter's clay adsorbents for the mitigation of organic dye contaminated wastewater
6	143 (online)	Sayali Gade	Design and multi-objective optimization of flow channels in PEM Hydrogen electrolyzer
7	165	Sowjen Meher Shankar	Room Temperature CO <sub>2</sub> Stripping from Aqueous 20 wt% Carbon Rich K <sub>2</sub> CO <sub>3</sub> Using 1MHz
16:15- 17:30		<b>Oral Presentations Day 1 - Parallel session 5A</b>	
		<b>Venue: CSED Seminar Hall (Room No: MB 201) (Session Chair: Dr. Arunkumar, MAHE)</b>	
S.No.	Paper ID	Author	Title
1	1	Selvakumar Ponnusamy	OPTIMISATION AND PREDICTION OF SAND BASED SENSIBLE ENERGY STORAGE SYSTEM USING AN ARTIFICIAL NEURAL NETWORK ALGORITHM
2	2	Ganesh Chembedu	Evaluating the Impact of Ternary blends with TiO <sub>2</sub> nanoparticles on CI engines for Environmental Safety and Sustainability
3	55	Illandula Venu	Enhancing Thermal Performance of Battery Packs Through Staggered Cell Configurations
4	49	Vijai Kaarathi Visvanathan	Energy Sharing Optimization & System Integration for Electric Three-Wheeler Powered by Fuel Cell Technology in India: A Simulation Based Approach



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025 , NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

5	62	Ajmi Midhlaj	Performance Prediction and Analysis of Solar Adsorption Refrigeration System Integrated With Phase Change Material Using Artificial Neural Network
6	97	Dr. Purnanand Bhale	Experimental Analysis of Humidification Dehumidification Desalination System Using Various Packing Materials
7	43	Aekta Shrivastava	Optimizing Multi-Robot Path Planning in Warehousing Services: An integrated Approach Using Petri Nets and ACO
16:15- 17:30		<b>Oral Presentations Day 1 - Parallel session 6A</b>	
		<b>Venue: EED Conference Room; DB205 (Session Chair: Prof. Amiya Kumar Jana IIT Kharagpur)</b>	
S.No.	Paper ID	Author	Title
1	39	Bhirendra Kumar	Energy, Exergy, Environmental and Economic (4E) Analysis of Solar Dryer: A Comprehensive Review
2	59	Jalaiah Nandanavanam	Facile synthesis of MIL-101(Cr) for enhanced gas sorption at room temperature
3	61	Ashna Maria Martin	Optimisation of pre-treatment unit integrated with Desalination system: A study on sustainable water treatment using banana peel
4	67	Magesh Kannan V	Flow Channel Modifications in Proton Exchange Membrane Fuel Cells: Integrating Nature-Inspired Geometries, AI-Driven Optimization, and Advanced Manufacturing
5	150	NARESH Maheshwari	Nuclear Power Plants and Associated Innovative Safety Features
6	207	V Saravanan	CFD Modeling of Indian Coal – Rice Husk Co-firing in 210 MWe Pulverized Coal Fired Boiler
7	54	Nidhi Baranwal	Performance and IR signature of Militray aircraft Engine for different nozzle area ratio
18:00 - 19:30		<b>Cultural Night</b>	
		<b>Venue: Aryabhata Hall</b>	
19:30 - 21:30		<b>Conference Dinner</b>	
<b>End of Day 1</b>			



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025, NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

## Day 2: 8th March 2025

Day 2: 8th March 2025			
09:30 - 10:30		<b>PLENARY SESSION 1B</b>	
		<b>Venue: Aryabhata Hall</b>	
1	09:30 - 10:00	<b>Plenary Lecture 5:</b>	Dr. Naomi Boness, Managing Director, Natural Gas Initiative, Stanford University
		<b>Topic:</b>	Practical considerations for decarbonizing a fossil-based energy system: Lessons learned in the US and around the world
2	10:00 - 10:30	<b>Plenary Lecture 6:</b>	Prof. Vikram Vishal, IIT Bombay
		<b>Topic:</b>	Decarbonization of the industry and the air
10:30 - 10:45		<b>Tea Break</b>	
10:45 - 12:50		<b>PARALLEL SESSION 1B - Clean Energy</b>	
		<b>Venue: Aryabhata Hall</b>	
1	10:45 - 11:10	<b>Keynote Lecture 10:</b>	Prof. Anil Kumar E, IIT Tirupati
		<b>Topic:</b>	Hydrogen storage for mobile and stationary applications
2	11:10 - 11:35	<b>Keynote Lecture 11:</b>	Prof. Muthukumar P, IIT Tirupati
		<b>Topic:</b>	Energy efficient environment friendly porous radiant burners: A sustainable solution for cooking and industrial applications
3	11:35 - 12:00	<b>Keynote Lecture 12:</b>	Prof. Sarma V. Pisupati, Department of Energy and Mineral Engineering, Penn State, USA
		<b>Topic:</b>	Decarbonization for achieving net-zero emissions goal: Mineral and material supply chain challenges
4	12:00 - 12:25	<b>Keynote Lecture 13:</b>	Dr. Shiju N. Raveendran, University of Amsterdam
		<b>Topic:</b>	Towards the development of sustainable processes: chemicals and materials from alternate feedstocks
5	12:25 - 12:50	<b>Keynote Lecture 14:</b>	Prof. Jishnu Bhattacharya, IIT Kanpur
		<b>Topic:</b>	Finding terrain-specific layout of a heliostat field
10:45 - 12:50		<b>PARALLEL SESSION 2B - Clean Fuel</b>	
		<b>Venue: Bhaskara Hall</b>	
1	10:45 - 11:10	<b>Keynote Lecture 15:</b>	Dr. Pradeepkumar Ashok, Senior Research Scientist, The University of Texas at Austin
		<b>Topic:</b>	Evaluation of Policy Options and Recommendation of a Phased Policy Strategy to Promote Adoption of Geothermal Ground Source Heat Pumps (GSHP) in India
2	11:10 - 11:35	<b>Keynote Lecture 16:</b>	Prof. Srinivasa Reddy, IIT Madras



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025, NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

		<b>Topic:</b>	Solar energy systems for agricultural process heat applications
3	11:35 - 12:00	<b>Keynote Lecture 17:</b>	Dr.Sanjay Chopra, Section Manager, GE Aerospace, USA
		<b>Topic:</b>	Gas turbine Advancements and Evolution
4	12:00 - 12:25	<b>Keynote Lecture 18:</b>	Balaji Kaliappan, Director-Engineering, Carrier
		<b>Topic:</b>	Blueprint for a Build Environment HVAC Net Zero Future
5	12:25 - 12:50	<b>Keynote Lecture 19:</b>	Shri Narendra Nath Veluri (IFS), ANERT Thiruvananthapuram
		<b>Topic:</b>	-
10:45 - 12:50		<b>PARALLEL SESSION 3B - Sustainability</b>	
		<b>Venue: Chanakya Hall</b>	
1	10:45 - 11:10	<b>Keynote Lecture 20:</b>	Prof. Amiya Kumar Jana, IIT Kharagpur
		<b>Topic:</b>	Toward decarbonising biodiesel production technology
2	11:10 - 11:35	<b>Keynote Lecture 21:</b>	Dr Subramaniam Ramanathan, Head Process Engg, Thermax Babcock & Wilcox Energy Solution
		<b>Topic:</b>	Decarbonization in power plant: Overview
3	11:35 - 12:00	<b>Keynote Lecture 22:</b>	Mr. Laiju I. P Nair, representative from Higher edn dept, ASAP green hydrogen Centre of excellence ((COE) skill sector
		<b>Topic:</b>	Fostering sustainability and adaptability through TVET, Building a future workforce
4	12:00 - 12:25	<b>Keynote Lecture 23:</b>	Mr. Subhrangshu Saha, Deputy Manager, HPCL-Mittal Energy Ltd.
		<b>Topic:</b>	Harmonizing Safety & Sustainability : A Strategic pathway for Refinery and Petroleum Operations
5	12:25 - 12:50	<b>Keynote Lecture 24:</b>	Dr. Subramani A., Senior Manager, GE Aviation, Bangalore
		<b>Topic:</b>	Role of Chemical Engineers in Decarbonisation
12:50 - 14:00		<b>Lunch Break</b>	
14:00 - 14:30		<b>PLENARY SESSION 2B</b>	
		<b>Venue: Aryabhata Hall</b>	
1	14:00 - 14:30	<b>Plenary Lecture 7:</b>	Prof. Jayanta Kapat, University of Central Florida, USA
		<b>Topic:</b>	Energy Transition - The need for Being Affordable, Equitable, Global and Holistic
14:30 - 15:30		<b>Poster presentations (Session Chairs: Dr. Sandeep Joshi, Senior Scientist, Rural Energy Division            Dr. Prashant Tayade, Senior Scientist, Rural Chemical Division, Dr. Sofia</b>	



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025, NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

Rani; Dr. Pradeep Ashok, Dr. Sujith Kumar CS, Dr. Subhasis Mandal, Dr. TJS Jothi, Dr. Nitin Banker)			
15:30- 15:45		Tea Break	
15:45- 17:00		Oral Presentations Day 2 - Parallel session 1B	
Venue: Aryabhata Hall (Session Chair: Prof. E. Anil Kumar, IIT Tirupati)			
S.No.	Paper ID	Author	Title
1	52	Sandeep Joshi	Performance Analysis of an Economical Portable Low-Temperature Biomass Pyrolyzer for Sustainable Charcoal Production and Decarbonization
2	95	Santhosh Balasubramanian	Soft Computational Optimization of Adsorption Processes: A Case Study on Sustainable Activated Carbon Synthesized from Prosopis juliflora Thornbush
3	99	Gayatri Nair	CO <sub>2</sub> capture with an Eco-Designed Cellulose and Calcium Framework
4	47	Arun Kumar Mahalingam	Thermal and Environmental Performance Assessment of Biogas Cookstove with Porous Radiant Burner
5	107	Nithya Pillai	Optimization Of Calcite Precipitation Using Carbonic anhydrase enzyme for Microbial Biocement Production
6	125	Pranav Choudhary	Carbon Capture, Utilization, and Storage: Advancing Technologies for Climate Change Mitigation
15:45- 17:00		Oral Presentations Day 2 - Parallel session 2B	
Venue: Bhaskara Hall (Session Chair - Dr. Nitin Padhiyar, IIT Gandhinagar)			
S.No.	Paper ID	Author	Title
1	3	Sreenivasan M	Intelligent IoT-Based Power Factor Correction System for Inductive Loads
2	10	Tamil S	Efficient Energy Storage System for Renewable Energy Source Integration to Grid
3	25	Harshita Patil	Optimizing Energy Efficiency in 6G Networks: A Comprehensive Review of AI Model Sensing Approaches
4	135		GCDI2025_Hydrogen_Paper
5	35	Anil Patil	Thermal characteristics of a hollow cylindrical concrete storage
6	69	Rakesh Sharma	Study on CaCl <sub>2</sub> +MWCNT Composite for Medium-Temperature Thermal Energy Storage
15:45- 17:00		Oral Presentations Day 2 - Parallel session 3B	
Venue: Chanakya Hall (Session Chair: Prof. P Muthukumar, IIT Tirupati)			
S.No.	Paper ID	Author	Title
1	38	Srinivas T	Applications of Nanomaterials in Phase Change Materials Energy Properties Enhancement

# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025 , NIT Calicut



तमसो मा ज्योतिर्गमय



[www.gcdi.in](http://www.gcdi.in)

2	40	Harshita Patil	AI Sensing Techniques for Energy Efficiency in 6G Networks
3	89		Digital Solution for efficient carbon capture utilization and storage
4	48	Amit Rai	DESIGN AND ANALYSIS OF ENERGY EFFICIENT PID CONTROLLED ACTIVE SUSPENSION SYSTEM FOR SUVs
5	166	Devendra Dandotiya	Design and development of very low temperature refrigeration system using cascade refrigeration
6	71	Milan John	Investigations on Solar Air Heater with Engine Oil as Thermal Energy Storage Material by Experiments and Numerical Simulations
<b>15:45- 17:00</b>		<b>Oral Presentations Day 2 - Parallel session 4B</b>	
		<b>Venue: MED Seminar Hall (Room No: DB 310) (Session Chair: Dr. Prem Kumar Chaurasiya, NIT Raipur)</b>	
S.No.	Paper ID	Author	Title
1	31 (Online)	PRIYANKA HAZARIKA	Heat Exchanger Sizing for Integrated Solar Cooling and Power Systems: A Systematic Approach
2	63 (Online)	Deeksha Paliwal	Thermo-Economic Analysis of Integrated PCM-TES System Retrofitted with HVAC System for Energy Flexibility
3	64 (Online)	Animesh Das	An Experimental Investigation on Nahar Oil-based Lubricant and It's Engine Performance- Emission Analysis with the Variation of Tribological Behavior
4	(online)	Simhachala Rao chikkala	Experimental investigations on mini-channel heat sink for spacecraft thermal energy management
5	184 (online)	Deepa A S	Sustainable E-Waste Management of Seized Electronic Devices in Law Enforcement Agencies
6	188 (online)	Dr. Habib	Coconut fibre based PVT cooling
<b>15:45- 17:00</b>		<b>Oral Presentations Day 2 - Parallel session 5B</b>	
		<b>Venue: CSED Seminar Hall (Room No: MB 201) (Session Chair - Dr. Shiju N. Raveendran, University of Amsterdam)</b>	
S.No.	Paper ID	Author	Title
1	30	Sofia Shaik	Life Cycle Assessment and Design of Strategic Human Resource Aspects to Manufacture Biogas-based Porous Radiant Burner Cookstoves
2	65	Malavika Vipin	Empirical assessment of Market Structure and Firm's Conduct on Energy Efficiency of Manufacturing Firms Using SCP
3	72	VALAI GANESH	Smart Waste Segregation System for Enhanced Municipal Waste Management- A Circular Economy Approach
4	80	Abhinaba Gupta	Quantification of Household Greenhouse Gas Emissions: A Scope 1, 2, and 3 Analysis
5	116	Dr. Prashant Tayade	Circular Economy in Essential Oil Sector



# 2<sup>nd</sup> Global Conference on Decarbonizing India (GCDI '25)

Towards Achieving Net Zero

National Institute of Technology Calicut

March 4 - 8, 2025 , NIT Calicut



[www.gcdi.in](http://www.gcdi.in)

6	68	Sutheesh P M	Numerical Investigations on Thermal Management of Lithium-ion Cell with Non-uniform Straight Finned PCM
15:45- 17:00		<b>Oral Presentations Day 2 - Parallel session 6B</b>	
		<b>Venue: EED Conference Room; DB205 (Session Chair: Dr. Pradeepkumar Ashok, Senior Research Scientist, The University of Texas at Austin)</b>	
S.No.	Paper ID	Author	Title
1			
2	132	Ram Thapa	Influence of Adsorber Geometry in Confined Space for Enhancing CO <sub>2</sub> Removal Using Adsorption-Desorption Cycle
3	190	Ganesh There	Design, Development and Experimental Assessment of an Active Indirect Solar Dryer for Bee Pollen from Coconut Trees
4	209	Aparna Krishnan	Synergy In Upcycled Plastic:Innovating Damping Materials
5	5	Rohit Yadav	Integration of Solar Thermal Energy in Industrial Processes through Pinch Analysis and Auxiliary Heating Optimization
6	128	Jishnu	Effects of Prolonged Hydrogen Exposure on the Microstructure and Embrittlement of 17-4 PH Stainless Steel
17:00 - 17:30		<b>Valedictory function</b>	
		<b>Venue: Aryabhata Hall</b>	
<b>End of Day 2</b>			