DAY-3
Sunday, 12 October 2025

Venue	DEV & VARDHANA GOSWAMI LECTURE COMPLEX, IIT BHU VARANASI				Venue
08:00-09:00	Registration and Breakfast				08:00-09:00
	Venue: Conference Hall 1				
09:00-09:45	Plenary Talk 5: Prof. Shantanu Roy Executive Director IIT Delhi-Abu Dhabi				09:00-09:45
09:45-10:30	Plenary Talk 6: Prof. Sukumar Mishra Director IIT (ISM) Dhanbad				09:45-10:30
Venue	Conference Hall 2		Conference Hall 3		Venue
	Session 9: Hydrogen Production		Session 10: CO_2 Utilization		
	Speaker	**Title**	**Speaker**	**Title**	
10:40-11:05	**Prof. Amit Kumar** IIT Guwahati **(Keynote)**	Hydrogen Generation through Membrane Reformer	**Dr. Dev Kumar** Thermax, Pune **(Keynote)**	Biofuel: Bio and E methanol the next low carbon fuel for Shipping and Aviation	10:40-11:05
11:05-11:30	**Mr. David Cassidy** CEO, Clean Hydrogen Technology, USA **(Keynote)**	How to take your ideas from concept to success – CHT as a case study	**Dr. Rakesh Saini** Principal Scientist, CSIR - IMMT Bhubaneswar **(Invited)**	Sustainable utilization of industrial solid waste substrate via thermochemical route	11:05-11:25
11:30 -11:55	**Dr. Sudhir Sarawat** CEO Horizon India Group **(Keynote)**	Fuel Cell	**Dr. Ejaz Ahmad** IIT (ISM) Dhanbad **(Invited)**	Cox Free Turquoise Hydrogen Production from Coal Bed Methane: A Futuristic	11:25-11:45

				Approach Towards Carbon Neutral Mining	
11:55-12:15	**Dr. Snigdha Mishra** University of Leicester, UK **(Invited)**	Deep Eutectic Solvents for Sustainability	**Dr. Madhulika Gupta** IIT (ISM) Dhanbad **(Invited)**	Decoding the Role of Substitution Patterns and Surface Polarity in Biomass Recalcitrance	**11:45-12:05**
12:15-12:25	**Dr. Binod Kumar** IIT Jammu	Development of a 3D-Printed Integrated Heat Exchanger and Catalytic Reactor for 1 kW Ammonia-Fed Solid Oxide Fuel Cell Systems	**Prof. Sivasubramanian Velmurugan** National Institute of Technology Calicut	Valorization of Phormidium Valderianum for CO_2 Fixation and Phycocyanin as a Natural Food Colorant	**12:05-12:15**
12:25-12:35	**Dr. Nainsi Saxena** IIT (ISM) Dhanbad	Catalytic Decomposition of Coalbed Methane for Turquoise Hydrogen Production and Carbon Nanotube as byproduct Using Nickel-Supported Bentonite as catalyst	**Dr. Saumya Tiwari** IIT Kanpur	Methane-CO_2 Reforming in Molten Carbonate Salt Medium for Sustainable Syngas Production	**12:15-12:25**
12:35-12:45	**Dr. Aniruddha Santosh Bhide** CHRIST, Bangalore	Energy Efficient Green Hydrogen Generation via Formaldehyde Electrooxidation Using a CuFe-Based Catalyst	**Kaushik Kundu** IIT Delhi	H_2-rich syngas production through ML-driven catalyst optimization with experimental validation	**12:25-12:35**
12:45-12:55	**Anusha Yajurvedi** University of Antwerp, Belgium	Induction Heating of Commercial Catalysts for Ammonia Cracking: Hydrogen Production and Asset Valorisation	**Dr. Priyanshu** IIT Jammu	A Novel Beam-Down Parabolic Dish Concentrator System Integrated with Transcritical CO2 Rankine Power Cycle and PEM Electrolyzer for Green	**12:35 -12:45**

				Hydrogen Production: Design, Optical Analysis, and Techno-Economic Optimization	
12:55-13:05	**Sachin Kumar Vishwakarma** IIT BHU	Experimental Investigation of Joule Heated Membrane Separator for Ultra-Pure Hydrogen Production Using Methanol Steam Reforming	**Deepa Agrahari** Madan Mohan Malviya University of technology	Optimized Biohydrogen Production from Industrial Spent Wash via Integrated Dark Fermentation and Microbial Fuel Cell Using Clostridium biocatalyst	**12:45-12:55**
13:05-13:15	**Amarendra Nayak** Ravenshaw University, Cuttack, Odisha	An Interface Engineering Strategy of FeS2/CoS2@MoS2 as an Electrocatalyst for Efficacious Water Splitting	**Deeksha Jaiswal** IIT Kanpur	Ti_3C_2TX-based Zr@MXene for CO_2 Capture and Conversion	**12:55-13:05**
			Matam Sandeep Chandra IIT Madras	Modelling of CO_2 desorption process from aqueous amine solution by coupling phase transfer with reaction kinetics	**13:05-13:15**
13:15-14:30	**Closing Ceremony, Awards Distribution and Lunch Break**				**13:15-14:30**