



19:00-22:00	GALA Dinner	19:00-22:00
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**DAY-3**  
**Sunday, 12 October 2025**

<b>Venue</b>	<b>DEV &amp; VARDHANA GOSWAMI LECTURE COMPLEX, IIT BHU VARANASI</b>				<b>Venue</b>
08:00-09:00	Registration and Breakfast				08:00-09:00
	<b>Venue: D&amp;V 1A</b> Session Chair: Prof. S N Upadhyay				
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: Neeraj Rai Mississippi State University, USA				09:45-10:30
10:30-11:15	Plenary Talk 7: Shri Abhay Bakre Mission Director, Ministry of New and Renewable Energy (MNRE), Government of India				10:30-11:15
<b>Venue</b>	<b>D&amp;V 2C</b>		<b>D&amp;V 2D</b>		<b>Venue</b>
11:15-13:35	Session 9: Hydrogen Production Session Chair: Prof. Kumud M Tripathi, IIT Jodhpur Dr. Bhavtosh Pandey, GAIL (India) Ltd.		Session 10: CO <sub>2</sub> Utilization Session Chair: Prof. Prateek Khatri, NIT Rourkela Prof. Sanjay Katheria, IIT BHU		11:15-13:30
	<b>Speaker</b>	<b>Title</b>	<b>Speaker</b>	<b>Title</b>	
11:15-11:40	Mr. David Cassidy CEO, Clean Hydrogen Technology, USA (Keynote)	How to Take Your Ideas from Concept to Success – CHT as a Case Study	Dr. Dev Kumar Thermax, Pune (Keynote)	Biofuel: Bio and E methanol the next low carbon fuel for Shipping and Aviation	11:15-11:40



11:40-12:05	<b>Dr. Sudhir Sarawat</b> CEO Horizon India Group (Keynote)	Transformation of Energy through Hydrogen and Fuel Cell	<b>Prof. Ejaz Ahmad</b> IIT (ISM) Dhanbad (Invited)	Cox Free Turquoise Hydrogen Production from Coal Bed Methane: A Futuristic Approach Towards Carbon Neutral Mining	11:40-12:00
12:05-12:25	<b>Dr. Snigdha Mishra</b> University of Leicester, UK (Invited)	Deep Eutectic Solvents for Sustainability	<b>Prof. Madhulika Gupta</b> IIT (ISM) Dhanbad (Invited)	Decoding the Role of Substitution Patterns and Surface Polarity in Biomass Recalcitrance	12:00-12:20
12:25-12:35	<b>Dr. Binod Kumar</b> (IIT Jammu)	Development of a 3D-Printed Integrated Heat Exchanger and Catalytic Reactor for 1 kW Ammonia-Fed Solid Oxide Fuel Cell Systems	<b>Prof. Sivasubramanian Velmurugan</b> (National Institute of Technology Calicut)	Valorization of Phormidium Valderianum for CO <sub>2</sub> Fixation and Phycocyanin as a Natural Food Colorant	12:20-12:30
12:35-12:45	<b>Dr. Nainsi Saxena</b> (IIT (ISM) Dhanbad)	Catalytic Decomposition of Coalbed Methane for Turquoise Hydrogen Production and Carbon Nanotube as byproduct Using Nickel-Supported Bentonite as catalyst	<b>Dr. Saumya Tiwari</b> (IIT Kanpur)	Methane-CO <sub>2</sub> Reforming in Molten Carbonate Salt Medium for Sustainable Syngas Production	12:30-12:40
12:45-12:55	<b>Dr. Aniruddha Santosh Bhide</b> (CHRIST, Bangalore)	Energy Efficient Green Hydrogen Generation via Formaldehyde Electrooxidation Using a Cu-Fe-Based Catalyst	<b>Kaushik Kundu</b> (IIT Delhi)	H <sub>2</sub> -rich syngas production through ML-driven catalyst optimization with experimental validation	12:40-12:50
12:55-13:05	<b>Anusha Yajurvedi</b> (University of Antwerp, Belgium)	Induction Heating of Commercial Catalysts for Ammonia Cracking:	<b>Dr. Priyanshu</b> (IIT Jammu)	A Novel Beam-Down Parabolic Dish Concentrator System Integrated with Trans	12:50-13:00



		Hydrogen Production and Asset Valorisation		critical CO <sub>2</sub> Rankine Power Cycle and PEM Electrolyser for Green Hydrogen Production: Design, Optical Analysis, and Techno-Economic Optimization	
13:05-13:15	<b>Sachin Kumar Vishwakarma</b> (IIT BHU)	Experimental Investigation of Joule Heated Membrane Separator for Ultra-Pure Hydrogen Production Using Methanol Steam Reforming	<b>Deepa Agrahari</b> (Madan Mohan Malviya University of technology)	Optimized Biohydrogen Production from Industrial Spent Wash via Integrated Dark Fermentation and Microbial Fuel Cell Using Clostridium biocatalyst	13:00-13:10
13:15-13:25	<b>Amarendra Nayak</b> (Ravenshaw University, Cuttack, Odisha)	An Interface Engineering Strategy of FeS <sub>2</sub> /CoS <sub>2</sub> at MoS <sub>2</sub> as an Electrocatalyst for Efficacious Water Splitting	<b>Deeksha Jaiswal</b> (IIT Kanpur)	Ti <sub>3</sub> C <sub>2</sub> TX-based Zr at MXene for CO <sub>2</sub> Capture and Conversion	13:10-13:20
13:25-13:35	<b>Dr. Akanksha Kumar Pathak</b> (IIT (ISM) Dhanbad)	Physics-Based 2D Simulation of the Coup de Fouet Effect in Lead-Acid Batteries for Renewable Integration	<b>Matam Sandeep Chandra</b> (IIT Madras)	Modelling of CO <sub>2</sub> desorption process from aqueous amine solution by coupling phase transfer with reaction kinetics	13:20-13:30
13:35-14:30	<b>Venue: D&amp;V 1A</b> <b>Closing Ceremony, Awards Distribution and Lunch Break</b>				13:30-14:30