2023 International Conference on Carbon Neutral Technology for Sustainable Development &

2023 Taiwan-India Exchange Workshop on Sustainable Renewable Energy and Smart Energy Storage Technology

organized by

Indian Institute of Technology Delhi

in association with

National Science and Technology Council, Taiwan

and

Energy Storage Platform on Batteries (ESPOB), DST-IIT Delhi

Venue: Seminar Hall, IIT Delhi Dates: September 4-6, 2023

Schedule of the Program

Day 0: Monday, September 4th, 2023

Social Interaction cum Networking Session and welcome dinner (18:30-20:30)

Day 1: Tuesday, September 5th, 2023

Arrival (08:30-09:00)			
TIME	SESSION	RESOURCE PERSONS	
9:00-9:45	Registration	Volunteers	
10:00-10:30	10:00-10:30 INAUGURAL SESSION		
Welcome address and about the event: Prof. Rajendra S. Dhaka, IIT Delhi			
Address by Prof. Rangan Banerjee, Director IIT Delhi			
Address by Prof. C. T. Wang, Taipei Economic and Cultural Center India			

Address by Prof. James Gomes, Dean International, IIT Delhi
Address by

Address by

Vote of thanks Prof. Chyi How Lay, Taiwan

10:30-10:40	Progress of Indo-Taiwan Joint project	(Taiwan side)		
10:40-10:50	Progress of Indo-Taiwan Joint project	(Indian side)		
GROUP PHOTO and TEA BREAK and POSTER SESSION (10:50-11:20)				
TECHNICAL SESSION - 1: 11:20-12:40 Session Theme: Energy Harvesting and Storage Materials Session Chair:				
Time	Topic of Presentation	Name & Affiliation of Speaker		
Keynote-1 11:20 - 11:50		Rangan Banerjee, IIT Delhi		
Keynote-2 11:50 - 12:20	Big Success: Biomass gasification with Super-critical cycle for energy supply system	Shu-San HSIAU National Central University, Taiwan (online)		
Invietd-1 12:20 - 12:40		Anil Verma, IIT Delhi		
NETWORKING and LUNCH BREAK (12:40-13:50)				
	TECHNICAL SESSION-2: 13:50-15: Session Theme: Hydrogen production and u Session Chair:			
Time	Session Theme: Hydrogen production and u			
Time Keynote-3 13:50-14:20	Session Theme: Hydrogen production and u Session Chair:	ntilization		
Keynote-3	Session Theme: Hydrogen production and use Session Chair: Topic of Presentation Fuel cells and electrolytic cells development	Name & Affiliation of Speaker Chung-Jen TSENG National Central University,		
Keynote-3 13:50-14:20 Invited-2	Session Theme: Hydrogen production and use Session Chair: Topic of Presentation Fuel cells and electrolytic cells development in NCU Sustainable electrode materials for high	Name & Affiliation of Speaker Chung-Jen TSENG National Central University, Taiwan (online) Bhanu Nandan,		
Keynote-3 13:50-14:20 Invited-2 14:20-14:40 Invited-3	Session Theme: Hydrogen production and use Session Chair: Topic of Presentation Fuel cells and electrolytic cells development in NCU Sustainable electrode materials for high	Name & Affiliation of Speaker Chung-Jen TSENG National Central University, Taiwan (online) Bhanu Nandan, IIT Delhi Priyanka Kaushal,		
Keynote-3 13:50-14:20 Invited-2 14:20-14:40 Invited-3 14:40-15:00 Keynote-4	Session Theme: Hydrogen production and to Session Chair: Topic of Presentation Fuel cells and electrolytic cells development in NCU Sustainable electrode materials for high performance Lithium-Sulfur batteries	Name & Affiliation of Speaker Chung-Jen TSENG National Central University, Taiwan (online) Bhanu Nandan, IIT Delhi Priyanka Kaushal, IIT Delhi Subhasish Basu Majumder, IIT Kharagpur		
Keynote-3 13:50-14:20 Invited-2 14:20-14:40 Invited-3 14:40-15:00 Keynote-4	Session Theme: Hydrogen production and to Session Chair: Topic of Presentation Fuel cells and electrolytic cells development in NCU Sustainable electrode materials for high performance Lithium-Sulfur batteries BAT-CAP Hybrid Energy Storage Materials	Name & Affiliation of Speaker Chung-Jen TSENG National Central University, Taiwan (online) Bhanu Nandan, IIT Delhi Priyanka Kaushal, IIT Delhi Subhasish Basu Majumder, IIT Kharagpur 30-16:30)		
Keynote-3 13:50-14:20 Invited-2 14:20-14:40 Invited-3 14:40-15:00 Keynote-4	Session Theme: Hydrogen production and to Session Chair: Topic of Presentation Fuel cells and electrolytic cells development in NCU Sustainable electrode materials for high performance Lithium-Sulfur batteries BAT-CAP Hybrid Energy Storage Materials TEA BREAK and POSTER SESSION (15:30-18:	Name & Affiliation of Speaker Chung-Jen TSENG National Central University, Taiwan (online) Bhanu Nandan, IIT Delhi Priyanka Kaushal, IIT Delhi Subhasish Basu Majumder, IIT Kharagpur 30-16:30)		

Invited-4 16:30-16:50	Circular Economy Site Location for Reusable Cup Machine	Siu-Hang Godwin CHAN Feng Chia University, Taiwan	
Invited-5 16:50-17:10	Greening of chemicals manufacture and Transition to a Sustainable, carbon neutral economy	Priyanka Bajaj, NIPER Hyderabad	
Invited-6 17:10-17:30	Design and Development of Solid Sate Batteries	Yogesh Sharma, IIT Roorkee4	
Invited-7 17:30-17:50		Priya Johari, Shiv Nadar University	
Invited-8 17:50-18:10	Smart Observer for Protecting Labour Rights: AI-based Distant Water Fishermen Work Hour Estimation	Pao-Ann HSIUNG National Chung Cheng University, Taiwan (Online)	
Invited-9 18:10-18:30	Engineering the Interfaces for Integrated CO2 Capture and Utilization using Electrochemical Conversion	Pravin P Ingole, IIT Delhi	
Keynote-6 18:30-19:00	Emerging Energy Generation and Storage Technologies: The Path to Net-Zero Emissions	Tapas Kuila CSIR-CMERI Durgapur	
CONFERENCE DINNER (19:00-20:30)			

Day 2: Wednesday, September 6th, 2023

TECHNICAL SESSION-4: 09:30-11:00 Session Theme: Renewable Energy Chair:			
Time	Topic of Presentation	Name & Affiliation of Speaker	
Keynote-7 09:30-10:00		A. J. Bhattacharyya, IISc, Bangalore	
Invited-10 10:00-10:20		Alvin B. CULABA, De La Salle University Manila, Philippines (Online)	
Invited-11 10:20-10:40	Strategies to Stabilize the Sodium metal anode for High-energy Room-temperature Sodium-Sulfur Batteries	Vipin Kumar, IIT Delhi	
Invited-12 10:40-11:00		Nirat Ray, IIT Delhi	
TEA BREAK and POSTER SESSION (11:00-11:30)			

TECHNICAL SESSION-5: 11:30-13:00 Session Theme: Session Chair:				
Time	Topic of Presentation	Name & Affiliation of Speaker		
Keynote-8 11:30-12:00		S. A. Hasmi, Delhi University		
Invited-13 12:00-12:20	Designing greener energy conversion system for a sustainable future	C. N. Tharamani, IIT Ropar		
Invited-14 12:20-12:40	Environmental and Electrochemical Stability of 'Layered' Na- Transition Metal Oxide based Cathode Materials for Na-ion Batteries	Amartya Mukhopadhyay, IIT Bombay		
Invited-15 12:40-13:00	Development of Metal-CO ₂ Battery: A New Strategy for a Sustainable Future	C. S. Sharma, IIT Hyderabad		
	NETWORKING and LUNCH BREAK (13:	00-14:20)		
TECHNICAL SESSION-6: 14:20-16:20 Session Theme: New Venture Experiment Sharing Session Session Chair:				
Time	Topic of Presentation	Name & Affiliation of Speaker		
Keynote-9 14:20-14:50	Lignocellulosic Biomass derived carbons for sustainable and carbon neutral applications	Thallada BHASKAR CSIR-Indian Institute of Petroleum Dehradun, India		
Invited-16 14:50-15:05	Smart Factory and Carbon Neutrality	Jason HO, Taisys Technologies Co. Ltd., Taiwan		
Invited-17 15:05-15:20	Taiwan Green Energy Industry and Energy Taiwan Exhibition Introduction	Steven Chien Chun LIU Taipei World Trade Center, Liaison Office in New Delhi		
Invited-18 15:20-15:35	The applications of polymer technology in renewable energy industry	Hengchia KUO Plastics Industry Development Center, Taiwan (Online)		
Invited-19 15:35-15:50	Limitations and Possibilities of Hydrogen Gas as a Prolific Source of Energy	R. N. Malik, Delhi		
Keynote-10 15:50-16:20	Non-conventional Plastic Research cum Management for Environmental sustainability	Vimal Katiyar, IIT Guwahati		
TEA BREAK and POSTER SESSION (16:20-17:30)				
CONCLUDING SESSION (17:30-18:00)				
	DEPARTURE (18:00)			

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