
**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 (NSTC), 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)
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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	INAUGURAL SESSION Welcome address and about the event: Prof. Rajendra S. Dhaka, IIT Delhi Address by Prof. Rangan Banerjee, Director IIT Delhi Address by Ambassador Baushuan Ger, Taipei Economic & Cultural Center, India Address by Prof. C. T. Wang, Taipei Economic & Cultural Center, India Address by Prof. James Gomes, Dean International, IIT Delhi 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 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)
Invited-1 12:20 - 12:40		Anil Verma, IIT Delhi
NETWORKING and LUNCH BREAK (12:40-13:50)		
TECHNICAL SESSION-2: 13:50-15:30 Session Theme: Carbon Neutral & Environmental, Energy Storage Session Chair:		
Time	Topic of Presentation	Name & Affiliation of Speaker
Keynote-3 13:50-14:20	Fuel cells and electrolytic cells development in NCU	Chung-Jen TSENG National Central University, Taiwan (online)
Invited-2 14:20-14:40	Sustainable electrode materials for high performance Lithium-Sulfur batteries	Bhanu Nandan, IIT Delhi
Invited-3 14:40-15:00	Bio-coal and carbon reduction potential in electricity sector	Priyanka Kaushal, IIT Delhi
Keynote-4 15:00-15:30	BAT-CAP Hybrid Energy Storage Materials	Subhasish Basu Majumder, IIT Kharagpur
TEA BREAK and POSTER SESSION (15:30-16:30)		
TECHNICAL SESSION-3: 16:30-18:40 Session Theme: Hydrogen production & utilization, Energy Storage, Carbon Neutral Session Chair: Amit Gupta, IIT Delhi		
Time	Topic of Presentation	Name & Affiliation of Speaker
Keynote-5 16:30-17:00	Hydrogen Production in 3D-Printed Micro Electrolyzer	Suddhasatwa Basu, IIT Delhi
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 & Transition to a Sustainable, Carbon Neutral Economy	Priyanka Bajaj, NIPER Hyderabad
Invited-6 17:10-17:30	Design and Development of Solid State Batteries	Yogesh Sharma, IIT Roorkee4
Invited-7 17:30-17:50	In-silico study of potential electrode materials for rechargeable batteries	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 and Storage Technology Chair:		
Time	Topic of Presentation	Name & Affiliation of Speaker
Keynote-7 09:30-10:00	Aqueous Rechargeable Batteries	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	Dual-Duty Innovation: Two-Dimensional Aluminum Anodes for Metal Ion Batteries and Promising Prospects for Hydrogen Storage	Nirat Ray, IIT Delhi
TEA BREAK and POSTER SESSION (11:00-11:30)		
TECHNICAL SESSION-5: 11:30-13:00 Session Theme: Green Energy and New Generation of Energy Storage Technology Session Chair:		
Time	Topic of Presentation	Name & Affiliation of Speaker

Keynote-8 11:30-12:00	Porous Carbon Electrodes for High Energy Density Quasi-solid-state Flexible Supercapacitors	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, Carbon Neutral and Environmental Sustainability 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 14:50-15:00	Smart Factory and Carbon Neutrality	Jason HO, Taisys Technologies Co. Ltd., Taiwan
Invited-17 15:00-15:10	Taiwan Green Energy Industry and Energy Taiwan Exhibition Introduction	Steven Chien Chun LIU Taipei World Trade Center, Liaison Office in New Delhi
Invited-18 15:10-15:20	The applications of polymer technology in renewable energy industry	Hengchia KUO, Plastics Industry Development Center, Taiwan (Online)
Invited-19 15:20-15:30	Limitations and Possibilities of Hydrogen Gas as a Prolific Source of Energy	R. N. Malik, Haryana State
Invited-20 15:30-15:40	Case Studies of Fuel Cells in Various Application Scenarios	Ray Lin, Eco-Energy Technology, Taiwan (Online)
Invited-21 15:40-15:50		
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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