

**International Conference on Energy & Advanced Materials
02-04 November, 2023**

TECHNICAL PROGRAM

Day 1 : 02 Nov.2023 (Thursday)

Registration

09:00-09:30 AM Registration (Venue: Reception, ABB II)

09:30-10:00 AM Inaugural Function (Venue: LT4, ABB II)

10:00-10:30 High Tea

Session 1 (Venue: LT4):

Session Chair: Prof. M. A Shaz, BHU, Varanasi

Time	Talk	Speaker	Title
10:30 to 11:20 AM	Plenary 1	Prof. S. Basu, IIT Delhi	Low-cost microporous organic-inorganic hybrid metal phosphonates for electrochemical water splitting and development of micro-electrolyser.
11:20 AM-12:10 PM	Plenary 2	Prof. A.S.K Sinha, Director, RGIPT	Energy Transition and Hydrogen Energy
12:10-12:40 PM	Special Invited-1	Prof. R. Nagarajan, University of Delhi	Exploring 2D Bismuth containing oxides and oxychlorides for energy and ferroelectric applications

12:40-1:25 PM LUNCH

Session 2 (Venue: LT4):

Session Chair: Prof. Saket Asthana, IIT Hyderabad

01:25-01:55 PM	Special Invited-2	Prof. Neeraj Khare, IIT Delhi	Nanostructures And Nanocomposites For Clean Energy Harvesting
1:55-2:25 PM	Special Invited-3	Prof. M. A Shaz, BHU	Hydrogen Energy in India: The Varanasi Chapter
2:25-2:45 PM	Invited 1	Dr. Rohit R. Shahi, CUSB Bihar	High Entropy Materials for Energy Storage Applications
2:45-3:05 PM	Invited 2	Dr. H. Pandey, SVNIT, Suratkal	Machine learning approach for the search of new Heusler compounds

Tea Break & Poster 3:05-4:05 PM (ENST-16-SK-RC, IJMR-06-RS-CE, IJMR-32-VP-GM, IJHE-02-SB-PE, IJHE-03-SB-AN, OPWP-13-SS-AK, IJMR-24-HP-IS, IJMR-34-SO-GM, IJMR-38-PB-GM, OPWA-23-OA, IJMR-36-SO-SS, IJHE-23-NF-AD, IJMR-58-CS-SC, IJMR-55-AN-NG)

Session 3 (Venue: LT4):

Session Chair: Prof. R. K. Dwivedi, IIIT Noida

4:05-4:30 PM	Invited 3	Dr. Manoj Kumar, IIIT Noida	Tailoring Multiferroic BiFeO ₃ to Derive New Functionalities
4:30-5:30 PM	Oral Talks	6 oral talks of 10 (8+2) mins. each	IJMR-02-SR-SU, OPWP-26-AI-SA, IJHE-22-NH-AP, IJMR-14-RR-EM, ENST-11-HS-IS, OPWP-25-BP-SA

Session 3 (Venue: G11):

Session Chair: Dr. B.C. Joshi, IIIT Noida

4:05-4:30 PM	Invited 4	Dr. Sandeep Chhokar, IIIT Noida	Catalysis and Energy Materials/ Advanced 2D Materials
4:30-5:30 PM	Oral Talks	6 oral talks of 10 (8+2) mins. each	IJHE-15-ES-AJ, OPWP-29-EC-DS, ENST-21-RK-NE, ENST-20-RK-NB, IJHE-25-OP-SC, IJHE-17-EH-NK

Parallel Sessions

Day 2 : 03 Nov. 2023			
Session 4 (Venue: LT4):			
Session Chair: Dr.R. R. Shahi, CUSB, Bihar			
09:30-10:00 AM	Plenary 3	Prof. M Majumdar Monash University Australia	A holistic full-cell approach towards designing practical Lithium Sulfur batteries
10:00-10:30 AM	Plenary 4	Prof. M. Felderhoff, MPI, Germany	Metal Hydride based Hydrogen Storage Systems
10:30-11:00 AM	Special Invited-4	Prof. S.A. Hashmi, University of Delhi	Redox-active Non-aqueous Polymer-based Electrolytes for Supercapacitor Application
Tea Break & Poster Presentation 11:00-11:30 AM (ENST-01-HP-IH ,ENST-06-HP-FP, OPWP-05-SE-VY,IJHE-07-UK-HE, IJMR-10-PR-RN,ENST-12-AO-NT,ENST-13-AO-ZN,IJMR-07-AS-SD)			
Session 5 (Venue: LT4):			
Session Chair: Prof. S.A. Hashmi, University of Delhi			
11:30 AM- 12:00 PM	Special Invited-5	Prof. Amita Chandra, University of Delhi	Crucial role of surface modified filler in polymer electrolyte for energy devices.
12:00- 12:30 PM	Special Invited-6	Prof. S.N. Pandey, MNNIT Allahabad	Advanced Materials for Energy Storage
12:30- 01:00 PM	Special Invited-7	Dr. B Chakraborty, BARC	2D Nanomaterials for Hydrogen Storage and Electro-chemical Energy Storage: Insights from DFT Simulations
01:00- 1:30 PM	Special Invited 8	Dr. R. J. Choudhary, UGC-DAE- Indore	Tuning the electronic and magnetic properties of functional magnetic oxide System via Strain
01:30-2:15 PM LUNCH			
Session 6 (Venue: LT4):			
Session Chair: Prof. Amita Chandra, University of Delhi			
2:15-2:45 PM	Keynote 1	Prof. Sanjeev Sonkaria SNU, Korea	Photovoltaics: Convergence at the Synthetic and Biosynthetic Boundary
2:45-3:25 PM	Special Invited-9	Prof. Saket Asthana, Physics, IIT Hyderabad	Emerging Trends in advanced smart ferro electric energy materials
03:25 PM - 03:45 PM	Special Oral talk	Dr. Abhishek Ghosh, IIT Delhi	Breaking the thermoelectric performance limit via Substrate engineering
Tea Break & Poster Presentation 3:45-4:15 (OPWP-28-MF-MS,OPWP-06-MR-CR,ENST-26-ND-AO,IJHE-04-RR-HS,IJMR-49-IS-AV,IJMR-13-PS-IG,ENST-33-TS-AK, IJMR-39-EC-GM)			
Session 7 (Venue: LT4):			
Session Chair: Dr. Anuj Kumar, IIIT Noida			
4:15-4:35 PM	Invited-5	Dr. Vikas Singh, SSPL-DRDO	High Electron Mobility Transistors based on InGaN Quantum Well channel: Epitaxial Design & the 2DEG
4:35-6:50 PM	Oral Talks	13 oral talks of 10 (8+2) mins. each	IJHE-19-WB-SK,ENST-31-EI-BR ,ENST-24-MC-SA,IJHE-20-DZ-HS,IJMR-02-MR-MP,OPWP-33-TS-RK,IJMR-21-LP-HG, ENST-05-MG-CI,OPWP-01-AS-TS,IJHE-13-AS-VG,IJMR-22-PJ-CS,IJHE-17-EH-NK, IJMR-57-IH-AM,IJMR-45-SC-SS
Session 7 (Venue: G11):			
Session Chair: Dr. Shalu, Sharda Univeristy, Noida			
4:15-4:35 PM	Invited 6	Dr. T.P. Yadav, University of Allahabad	Intermetallics for Hydrogen Production and Storage Application
04:35-04:50 PM	Invited 7	Dr. Shweta Singh, MGCU, Bihar	Graphene aerogel as a promising material for energy storage application
4:50-6:50 PM	Oral Talks	12 oral talks of 10 (8+2) mins. each	OPWP-30-EH-MA,IJHE-14-EP-AD,ENST-29-EE-VS,IJHE-18-PF-CD,IJHE-20-DZ-HS,ENST-27-EA-DK,IJMR_56_IN_TP,IJMR-35PE-RK,OPWP-27-FS-AB,ENST-38-CT-BC,IJHE_24_HE_TP,ENST-18-UK-SE
6:50- 08:00 PM	Cultural Event		
08:00 PM Onwards	Conference Dinner		

Parallel Sessions

Day 3 : 04 Nov. 2023			
Session 8 (Venue: LT4):			
Session Chair: Prof. M. Felderhoff, MPI, Germany			
09:15-09:45 AM	Special Invited 10	Prof.R. Gupta, Pittsburgh State University, USA	Nanostructured semiconductors for energy production and storage
09:45-10:35 AM	Plenary 5	Prof. T N Rao, Director, ARCI, Hyderabad	Emerging Technologies For Energy Storage Materials: Towards Self-Reliant India
10:35 to 10:55 AM	Invited 8	Dr. Arvind Kumar, JNU, Delhi	Investigations On Heusler Alloy For Spintronic Applications
Tea Break & Poster 10:55:11:20 AM(OPWP-20-SS-AK,OPWP-31-FF-AK, IJHE-21-EL-AK,OPWP-19-IN-MS, IJMR-17-SG-RS, IJHE-06-UK-EO, IJMR-05-AV-HC,IJMR-12-PR-EY)			
Session 9 (Venue: LT4):			
Session Chair: Prof. N. Goswami, IIIT Noida			
11:20- 11:50 AM	Special Invited-11	Prof. Sanjay Puri JNU New Delhi	Cooperative Kinetics of Living Liquid Crystals
11:50 AM- 12:20 PM	Keynote 2	Prof. Versha Khare SNU Korea	Artificial Intelligent Driven Energy Materials Discovery
12:20- 12:50 PM	Special Invited-12	Prof. Suresh C. Sharma DTU	Analytical Modelling and Numerical Simulation of Cylindrical Double Gate Junction less Carbon Nanotube Field Effect Transistor (JL-CNTFET) for Sensing Applications
12:50- 01:40 PM	10 oral talks of 10 (8+2) mins. Each		ENST-10-JS-RE,ENST-02-HV-CE,OPWP-02-HE-BN,IJHE-01-BS-AR,ENST-02-HV-ES,ENST-07-LS-SE,ENST-14-RR-EC,IJHE-08-VS-SI,IJHE-17-EH-NK,ENST-37-RM-MS
01:40-2:30 PM LUNCH			
2:30-3:30 PM	Poster	IJHE-16-TM-AJ,IJMR-26-RR-ED,IJMR-15-RB-IP,IJMR-20-AB-SN,IJHE-05-AK-UI,IJMR-19-AB-EE,OPWP-35-LB-AK,OPWP-36-SE-AK,OPWP - 12- CO - AK,OPWP-21-SI-SR,OPWP-37-IS-YK,OPWP-32-PE-SL,OPWP-15-RB-SC,ENST-19-AK-EN,OPWP-09-SQ-AS,OPWP-07-GI-CG,OPWP-34-IM-SL,IJMR-09-VM-EN,OPWP-38-SC-MS	
Tea Break 03:30-03:50			
3:50-4:20 PM	Validatory		