



National Seminar on Sustainable Glass and Ceramic Manufacturing: Pathways to a Greener Future

Date: 19–20 February 2026

Venue: Meghnad Saha Auditorium, CSIR-CGRI, Kolkata

DAY 1 (19th February 2026)

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| 9:30 to 10:00 hrs | Registration |
| 10:00 to 10:45 hrs | Inauguration |
| 10:00 to 10:05 hrs | Lighting of the ceremonial lamp with Invocation |
| 10:05 to 10:10 hrs | Presentation of flower bouquets to the dignitaries |
| 10:10 to 10:15 hrs | Welcome Address by Dr. Sitendu Mandal, Chairman, Kolkata Chapter |
| 10:15 to 10:20 hrs | Address by Dr. Jeetendra Sehgal, President (R&D), Borosil Renewables, Guest of Honor |
| 10:20 to 10:30 hrs | Address by Mr. Saurabh Khedekar, CEO-Hindalco, Chief Guest |
| 10:30 to 10:35 hrs | Felicitation of the dignitaries |
| 10:35 to 10:40 hrs | Vote of Thanks by Mr. Diptendu Banerjee, Secretary, Kolkata Chapter |
| 10:40 to 10:45 hrs | National Anthem |
| 10:45 – 11:00 hrs : HIGH TEA | |
| 11:00 to 13:10 hrs | Technical Session - 1: Accelerated Innovations in Ceramics and Glass Research and Manufacturing through AI/ML (Chairperson: Dr. S. K. Bhadra) |
| 11:00 to 11:30 hrs | PLENARY TALK-1: “Alumina for Self-Reliant India: Contributions to Strategic Sectors” by Mr. Ajit Bhagoji , Specialty Alumina Business, Hindalco Industries Ltd, Mumbai |
| 11:30 to 11:50 hrs | KEYNOTE ADDRESS-1: “Computational Fluid Dynamics Simulation of a Continuous Glass Tank Furnace for Understanding Defect Formation in Glass” by Dr. Jeetendra Sehgal , B. L. Kheruka Research and Development Center, Borosil Renewables Ltd, Pune |
| 11:50 to 12:10 hrs | INVITED TALK-1: “Influence of Glass Wastes on the Microstructural Evolution and Crystallization Kinetics of Glass-ceramic Glaze” by Prof. S. Manisha Vidyavathy , Department of Ceramic Technology, AC Tech, Anna University, Chennai |
| 12:10 to 12:30 hrs | INVITED TALK-2: “Powering Performance: High Purity Specialty Silicon for Advanced Non-Oxide Ceramic Applications” by Mr. Arindam Mukherjee , Elkem South Asia Pvt Ltd, Kolkata |
| 12:30 to 12:50 hrs | INVITED TALK-3: “A Data-Driven Approach Toward Tailored Design of Glasses” by Dr. Indrajit Tah , Specialty Glass Division, CSIR-CGRI, Kolkata |
| 12:50 to 13:10 hrs | INVITED TALK-4: “Phosphate Based Glass and Their Potential Use as Fertilizers” by Prof. Sumit Kumar Pal , Department of Ceramic Engineering, NIT Rourkela, Odisha |
| 13:10 – 14:30 hrs : LUNCH | |

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| 14:30 to 15:30 hrs | Technical Session - 2: Glass for Self-Reliant India: Contributions to Strategic Sectors (Chairperson: Dr. K. Annapurna) |
| 14:30 to 14:50 hrs | INVITED TALK-5: “ <i>Electronic Ceramics for Space Applications</i> ” by Dr. K. Ashok , Electronic Ceramic Section, VSSC, ISRO, Thriuvananthapuram, Kerala |
| 14:50 to 15:10 hrs | INVITED TALK-6: “ <i>Strategic Specialty Glasses for National Self-Reliance</i> ” by Dr. Kaushik Biswas , Specialty Glass Division, CSIR-CGCRI, Kolkata |
| 15:10 to 15:30 hrs | INVITED TALK-7: “ <i>Glassy Perspectives on Waste Utilization and Recycling</i> ” by Dr. Ashis Kumar Mandal , Specialty Glass Division, CSIR-CGCRI, Kolkata |
| 15:30 – 15:45 hrs : TEA BREAK | |
| 15:45 to 17:45 hrs | Technical Session - 3: Refractory, Traditional Ceramics, Beneficiation of Ceramic Raw Materials and Allied Materials: Problems and Opportunities (Chairperson: Dr. Musharaf Ali) |
| 15:45 to 16:05 hrs | KEYNOTE ADDRESS-2: “ <i>Ceramic Membranes and Application Potential in India</i> ” by Mr. Swachchha Majumdar , Membrane and Separation Technology Division, CSIR-CGCRI, Kolkata |
| 16:05 to 16:25 hrs | INVITED TALK-8: “ <i>The Evolution of Refractory Research at CSIR-CGCRI: From Indigenous Resources to Advanced High-Temperature Materials</i> ” by Dr. Kausik Dana , Refractory & Traditional Ceramics Division, CSIR-CGCRI, Kolkata |
| 16:25 to 16:45 hrs | INVITED TALK-9: “ <i>Glass-ceramics: Versatile Coating Material for Engineering and Biomedical Applications</i> ” by Dr. Sumana Ghosh , Biomaterials and Medical Devices Division, CSIR-CGCRI, Kolkata |
| 16:45 to 17:45 | Contributory Lectures |
| 16:45 to 16:55 hrs | CONTRIBUTORY TALK-1: “ <i>Low-Field Electrocaloric and Pyroelectric Performance of BNZ-Modified KNLNT Lead-Free Ceramics Prepared by Two-Step Sintering</i> ” by Mr. Chiranjit Chaliha , NIT Manipur, Imphal, Manipur |
| 16:55 to 17:05 hrs | CONTRIBUTORY TALK-2: “ <i>Composition-Informed and Explainable Machine Learning for Glass Type Classification Using Small Experimental Datasets</i> ” by Mr. Swapnil Mohanty , NIT Rourkela, Rourkela, Odisha |
| 17:05 to 17:15 hrs | CONTRIBUTORY TALK-3: “ <i>Transient Liquid Phase Flash Sintering of 3 mol% Ytria-Stabilized Zirconia with ZnO–Cu, O Eutectic at 900p C and in 180 Seconds</i> ” by Dr. Tamoghna Chakrabarti , Department of Metallurgical & Materials Engineering, IIT Patna, Patna, Bihar |
| 17:15 to 17:25 hrs | CONTRIBUTORY TALK-4: “ <i>Engineering Functionality in High-Entropy Perovskite Oxides: From Bulk to Thin Films</i> ” by Dr. Vipin Kumar Singh , CSIR-CGCRI, Kolkata |
| 17:25 to 17:35 hrs | CONTRIBUTORY TALK-5: “ <i>Flash Sintering: A Novel Method for Ultrafast Materials Processing</i> ” by Mr. Devinder Yadav , Dept. of Metallurgical and Materials Engineering, IIT Patna, Patna, Bihar |
| 17:35 to 17:45 hrs | CONTRIBUTORY TALK-6: “ <i>Vanadium Dioxide (VO₂) Enabled Advanced Thermochromic Glass for a Sustainable Built Environment</i> ” by Dr. Pawan Kumar Ojha , Saha Institute of Nuclear Physics, Kolkata |
| 18.00 to 19.30 hrs | Cultural Event: Ms. Mohul Mukherjee & Team: “Ardhanareeswar” |
| 19:30 – 22:00 hrs : DINNER | |

DAY 2 (20th February, 2026)

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| 10:00 to 13:00 hrs | Technical Session - 4: Advanced Ceramics: Problems and Opportunities (Chairperson: Dr. H. S. Maiti) |
| 10:00 to 10:20 hrs | KETNOTE ADDRESS-3: Prof. Subhasish Basumajumder , IIT KGP |
| 10:20 to 10:40 hrs | KETNOTE ADDRESS-4: “Reframing Healthcare Sustainability through Materials Design: Biogenic Bioceramics as a Circular Pathway from Waste to Tissue Engineering” by Dr. Vamsi Krishna Balla , Biomaterials and Medical Devices Division, CSIR-CGCRI, Kolkata |
| 10:40 to 11:00 hrs | INVITED TALK-10: “Role of High Temperature High Temperature Electrolyser towards Deep Decarbonization” by Dr. Jayanta Mukhopadhyay , Energy Materials & Devices Division, CSIR-CGCRI, Kolkata |
| 11:00 to 11:20 hrs | INVITED TALK-11: “Synthesis and Characterization of Forsterite and Forsterite Composite Based Medical Implant and Future Applications” by Dr. Swagatadeb Sahoo , Department of Electronics & Communication Engineering; NIT Jamshedpur, Jharkhand |
| 11:20 – 11:40 hrs : TEA BREAK | |
| 11:40 to 12:00 hrs | INVITED TALK-12: “Piezoelectric Nanocomposites Derived Sensors: Flexible Candidate a Smart Sensor” by Dr. Shrabanee Sen , Functional Materials and Devices Division, CSIR-CGCRI, Kolkata |
| 12:00 to 12:20 hrs | INVITED TALK-13: “Paper-Power: Sustainable Separator & Flexi-Cell Design for Energy Storage Applications” by Dr. Mir Wasim Raja , Energy Materials & Devices Division, CSIR-CGCRI, Kolkata |
| 12:20 to 12:40 hrs | INVITED TALK-14: “Scalable Screen-printed Ceramic Gas Sensors for the Room Temperature Detection of Toxic Gases” by Dr. Saumen Mandal , Department of Metallurgical and Materials Engineering, NIT Karnataka, Karnataka |
| 12:40 to 13:00 hrs | INVITED TALK-15: “Two-dimensional Materials Can Inhibit A β Fibrillation in Alzheimer’s Disease” by Dr. Titas Kumar Mukhopadhyay , Department of Chemistry, NIT Jamshedpur, Jharkhand |
| 13:00 – 14:30 hrs : LUNCH | |
| 14:30 to 15:30 hrs | Panel Discussion / Industry Brainstorming Session (Moderator: Dr. Atiar R. Molla) Panelists: Dr. Suman Kumari Mishra, Former Director, CSIR-CGCRI Prof. Goutam Sutradhar, Director, NIT Jamshedpur Dr. Musharaf Ali, BARC Mr. T. K. Chakraborty, Glass Specialist Mr. Diptendu Banerjee, RHI Magnesita Mr. Shirshendu Chatterjee, Refsol |
| 14:30 to 15:30 hrs | Poster Session for Students (Moderator: Dr. K. Biswas, Dr. Anirban Dhar and Dr. Kausik Dana) |
| 15:30 to 16:30 hrs | Technical Session - 5: Advanced Glass for a Sustainable Earth (Chairperson: Dr. Ranjan Sen) |
| 15:30 to 15:50 hrs | KETNOTE ADDRESS-5: “Atomic Arrangement in Multi-component Glasses” by Dr. Sk. Musharaf Ali , Chemical Engineering Division, BARC, Mumbai |
| 15:50 to 16:10 hrs | KETNOTE ADDRESS-6: “Refractories for Glass Industries and Challenges” by Mr. T. K. Chakraborty , Former Plant Head – Saint-Gobain Glass India, Bhiwadi, Rajasthan |
| 16:10 to 16:30 hrs | INVITED TALK-16: “Waste-to-Wealth: Recycling Solid Wastes into Value-Added Engineering Products” by Dr. Subrata Panda , Department of Ceramic Engineering, IIT (BHU), Varanasi, UP |
| 16:30 to 17:00 hrs | Valedictory Session and Award Ceremony |
| 17:00 – 17:30 hrs : TEA | |