

National Seminar on Ceramic and Glass Technology For a Sustainable Future: Challenges, Opportunities, and Innovation (CGTSF-2026)

7-8 AUGUST, 2026

VENUE: CSIR-CGCRI, KOLKATA

Organized by



Indian Institute of
Ceramics Kolkata

Jointly With



CGCRI

CSIR-Central Glass &
Ceramic Research Institute,
Kolkata

In Association with



All India Pottery
Manufacturers' Association





National Seminar on
Ceramic and Glass Technology for a Sustainable Future: Challenges, Opportunities, and Innovations
(CGTSF-2026)

PROGRAMME SCHEDULE

Day 1: 7th August, 2026

Time	Venue: Meghnad Saha Auditorium, CSIR-CGCRI, Kolkata
09:00 to 10:00 hrs	Registration
10:00 to 11:00hrs	Inauguration Programme
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 on the dais
10:10 to 10:15 hrs	Welcome Address by Dr H S Tripathi, Former Scientist G & Co-Chairman, CGTSF-2026
10:15 to 10:20 hrs	Address by Prof Bikramjit Basu, Director, CSIR-CGCRI & Patron, CGTSF-2026
10:20 to 10:25 hrs	Address by Dr. Debashish Bhattacharjee, Member, Technology Development Board, GOI & Chief Guest
10:25 to 10:30 hrs	Address by Dr G Ramaguru, Director, DIACoE, IIT Hyderabad & Guest of Honour
10:30 to 10:35 hrs	Address by Shri Sabyasachi Roy, President, AIMPA



10:35 to 10:45 hrs	IIC and AIPMA award distribution
10:45 to 10:50 hrs	Release of Abstract Book by the dignitaries on the dais
10:50 to 10:55 hrs	Felicitation of the dignitaries on the dais
10:55 – 11:00 hrs	Vote of Thanks by Dr Shirshendu Chakraborty, Scientist F, CSIR-CGCRI and Organizing Secretary, CGTSF-2026
11:00 to 11:30 hrs	High Tea: Venue- K. D. Sharma Multipurpose Hall, CSIR-CGCRI
11:30 to 13:00 hrs	Technical Session-I Chair: Dr BD Mukherjee
11:00 to 11:30 hrs	Keynote Lecture "Ceramic Materials and Human Civilisation: From the First Fire to the Future of Sustainable Technologies" by Debashish Bhattacharjee, Member, Technology Development Board, GOI
11:30 to 12:00 hrs	Keynote Lecture: "Ceramic Tiles & Composites for Aerospace Applications" Dr G Ramaguru, DIACoE, IIT Hyderabad
12:00 to 12:30 hrs	Keynote Lecture by Prof Bikramjit Basu, Director, CSIR-CGCRI
12:30- 13:00 hrs	Plenary Lecture: "Firing the Future: Cross-Pollinating Missile Technology Ceramics for Sustainable Traditional Ceramic Manufacturing" Dr Anil Kumar, ASL-DRDO
13:00 to 14:15 hrs	LUNCH: Venue: K. D. Sharma Multipurpose Hall, CSIR-CGCRI



14:15 to 16:30 hrs	Technical Session- II	
	TS:II(A) Venue: Meghnad Saha Auditorium Chair: Dr A Ghosh	TS:II(B) Venue: APC Roy Seminar Hall Chair: Dr S Ghatak
14:15 to 14:45 hrs	Novel Diborides for Ultra-High Temperature Applications Prof. Peter Tatarko, SAS, Bratislava (Online)	Prediction of Flow-Accelerated Refractory Corrosion Regions in Electric Glass Furnaces Using CFD Modelling Dr. Jitendra Sehgal, Borosil
14:45 to 15:15hrs	CUMI Advance Ceramics: From Material Innovation to Engineered Solutions Dr Santanu Mandal, CUMI	Strategic Material Capabilities at Industrial Scale are key for Atmanirbhar Bharat Mr. Niraj Bhukhanwala, Bhukhanwala Industries PVT. Ltd.
15:15 to 15:35hrs	Energy Efficient Ceramic Tile Bodies Using Calcined Colemanite Dr. Parvesh Agrawal, CGCRI Naroda	Mr. Kushal Agarwal, Sarvesh Refractory
15:35 to 15:55hrs	Ceramics in automobiles : Emerging opportunities for Advanced Alumina Materials in Conventional and Electric Mobility Dr. Shekhar Nath, Hindalco	Development of Hydroxyapatite Coated with Silk Reinforced Polycaprolactone Bio-Composites for Bone Applications Prof. S. Manisha Vidyavathy, Anna Univ.
15:55 to 16:15hrs	Development of Glass Foam Bricks from Waste Glass: Various stages of TRL Dr Ashish Mondal, CSIR-CGCRI	Advanced Calcium Phosphate Bioceramics: Fundamental Material Design, Synthesis, Processing, and Additive Manufacturing of Hydroxyapatite, β-TCP, and Bioactive Glass Mr. Sabyasachi Roy, Ceramat



16:15 to 16:30hrs	Atomic Pair Distribution Function (APDF): Screening tool to have the insight into the local structure of complex perovskites Dr J Ghosh, CSIR-CGCRI	Rational Construction of Direct Z-Scheme $\text{Zn}_{0.5}\text{Cd}_{0.5}\text{SrTiO}_3$ Heterojunction for Superior Charge Separation and Hydrogen Evolution Dr Srabanti Ghosh, CSIR-CGCRI
16:30 to 17:00 hrs	TEA BREAK	
17:00 to 18:30hrs	Technical Session-III	
	Technical Session-III(A) Venue: Meghnad Saha Auditorium Chair: Dr S Mandal	Technical Session-III(B) Venue: APC Roy Seminar Hall Chair: Dr R C Das
17:00-17:25hrs	Porous alumina-based membrane development at CSIR-CGCRI Shri. Swachchha Mazumdar, CSIR-CGCRI	Carbon fibre reinforced ceramic matrix composite and advances in ceramic machining Shri S.Gangadharan, CSIR-CGCRI
17:25-17:50hrs	Role of Ceramic Materials and Process Engineering in High Temperature Electrolyser towards Deep Decarbonization Dr Jayanta Mukhopadhyay, CSIR-CGCRI	Mr. Vamshi Kiran, TA Instrument
17:50-18:10hrs	Silicon carbide: Processing, properties, and critical applications Dr Prasenjit Barick, ARCI	Tailoring Multifunctional Nanocomposites for Smart and Sustainable Technology Dr Shrabanee Sen, CSIR-CGCRI
18:10-18:30hrs	BREAK	Alumina in Healthcare: Enabling Advanced Medical Technologies Mrs Somya Vashistha, Hindalco
18:30 to 19:00hrs	TEA BREAK	



19:00 to 20:00 hrs	Cultural Programme (Meghnad Saha Auditorium)
20:00 - 21:30 hrs	DINNER (K. D. Sharma Multipurpose Hall)

Day 2: 8th August, 2026

Time	Venue: Meghnad Saha Auditorium and APC Roy Seminar Hall	
10:00 to 11:30hrs	Technical Session- IV (Student Technical Presentation; Parallel) Coordinator: Dr S Chakraborty & Dr S Sinhamahapatra	
11:30 to 11:50hrs	TEA BREAK	
11:50 to 13:30hrs	Technical Session -V(A) Venue: Meghnad Saha Auditorium Chair: Dr H. S. Tripathi	Technical Session -V(B) Venue: APC Roy Seminar Hall Chair: Dr. Parvesh Agrawal
11:50 to 12:10hrs	High-Resolution Analytical Transmission Electron Microscopy of Advanced Ceramics and Thin Films Dr. Sandip Bysakh, CSIR-CGCRI	Refractory Research at CSIR-CGCRI: A 75-Year Legacy Dr Kausik Dana, CSIR-CGCRI
12:10 to 12:30hrs	Role of Carbide-Induced Solid Solution Strengthening on Mechanical Reliability and Oxidation Resistance of Ultra-High Temperature Ceramics Dr. Pradyut Sengupta, CSIR-IMMT	Materials and Manufacturing Advances in Scaffold for Bone Tissue Engineering Dr Mitun Das, CSIR-CGCRI
12:30 to 12:50hrs	Multifunctional Magnesium Phosphate Bioceramics Prof Mangal Roy, IIT KGP	Solution combustion processed high entropy oxide dielectric ceramics: A solution for optoelectronic applications Dr Saumen Mandal, NIT Suratkal



12:50 to 13:10hrs	From Laboratory to Market: Lessons in Technology Commercialization and Entrepreneurship Smt Reshmi Dharmadhikari Roy, Metwiz	Oxidation behaviour of ZrB_2-SiC-AlN ultra-high temperature ceramics Prof Pratik K. Ray, IIT Ropar
13:10 to 13:30hrs	Shifting Paradigms in Doped-Zirconia Ceramics: Microstructural Engineering Driven Novel Properties & Perspectives Prof Anirban Choudhary, IIT Patna	High-Purity Aluminas: Enabling Advanced Technologies Through Tailored Properties Sourojit Pal, Almatix Alumina Pvt Ltd
13:30 to 14:20hrs	LUNCH (K. D. Sharma Multipurpose Hall)	
14:20 to 15:25hrs	Technical Session-VI Venue: Meghnad Saha Auditorium Chair: Prof. Rituparna Sen	
14:20 to 14:40hrs	Challenges and Prospects of Granite Waste Utilization in Vitrified Tile Body Batch Composition Dr. Asha Anil, CSIR-CGCRI	
14:40 to 14:55hrs	Effect of Nickel Doping on LSM Cathodes for Intermediate-Temperature SOFC Applications Dr. Barnasree Chanda, CSIR-CGCRI	
14:55 to 15:10hrs	Challenges in the Fabrication of Cordierite-based Ceramic Monolith Catalytic Converters for Flue Gas Treatments Dr. Rajan Biswas, CSIR-CGCRI	
15:10 to 15:25hrs	Transforming Low-Cost Kaolin into a High-Flux Zeolite Interlayer: A Hierarchical Composite Membrane Strategy for Sustainable Ethanol Dehydration Dr. Somjyoti Basak, CSIR-CGCRI	
15:25-16:00hrs	Session VII: Valedictory Session Venue: Meghnad Saha Auditorium Concluding session and Presentation of students' awards	



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