Conference & Exhibition on Carbon Neutrality in Cement and Concrete

19-20 November 2026

Centenary Convention Centre, Engineering Staff College of India, Gachibowli, Hyderabad – 500 032, Telangana, India

organised by

National Council for Cement and Building Materials

(under the administrative control of DPIIT, Ministry of Commerce & Industry, Govt. of India)

DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE
MINISTRY OF COMMERCE & INDUSTRY
GOVERNMENT OF INDIA

TENTATIVE PROGRAMME
(Inaugural Session, Plenary Sessions, Technical Sessions, Panel Discussions)

Thursday, 19 November 2026

REGISTRATION	**0800 h to 0930 h**
INAUGURAL SESSION **Auditorium** 0930 h Invocation and Lighting of Lamp 0935 h Welcome Address by **Dr L P Singh**, Director General-NCB 0950 h Indian Cement Industry - Challenges and Opportunities by **Shri Manoj Rustagi,** Executive Vice President and Chief Sustainability and Innovation Officer (CSIO), JSW Cement Ltd. 1005 h Address by Guest of Honour 1020 h Inaugural Address by Chief Guest Release of Publications by Chief Guest: ➢ Conference Souvenir ➢ Conference Proceedings (Digital Copy) 1045 h Vote of Thanks by Dr B Pandu Ranga Rao, Joint Director & Conference Organizing Secretary, NCB	**0930 h to 1100 h**
Inauguration of Technical Exhibition by Chief Guest **Exhibition Hall**	**1100 h to 1130 h**
Welcome Get Together & High Tea **Dining Hall**	
TECHNICAL SESSION – I: PLENARY TALK **Auditorium** **Session Chair: Shri C Shekar Reddy, Chairman, IGBC** **Transforming CO_2 into Building Materials** **Dr L P Singh, Director General-NCB**	**1130 h to 1200 h**
PANEL DISCUSSION: **Auditorium** **Carbon Neutrality in Built Environment** Moderator: **Dr B Pandu Ranga Rao, Joint Director, NCB** Distinguished Panellists: 1. **Shri V S Narang,** Director (Technical), MHIPL 2. **Shri Rahul Goel,** Joint President & Head Technical Services, UTCL 3. **Shri D Bhadra,** Senior Director & Head – CED, BIS 4. **Shri A K Dembla,** President & Managing Director, KHD 5. **Shri Manoj Rustagi,** Chief Sustainability & Innovation Officer, JSW 6. **Shri Kaustubh Phadke,** GM & India Head - GCCA	**1200 h to 1300 h**
Networking & Lunch **Dining Hall**	**1300 h to 1400 h**

TECHNICAL SESSION – II A	**Auditorium**	**1400 h to 1530 h**

Low-Carbon Cement Systems-I

Session Keynote: **Low Carbon Cements & Binders- Pathway to Net Zero**, **Dr S K Chaturvedi**, **Joint Director & Head-Centre for Cement Research & Testing, NCB**

1. Structural, Mechanical and Electrical Properties of PSC/PPC-EG composites, **Mohammad Irshad Ansari**, Ashutosh Kumar and Rajiv Prakash, IIT Bhilai [**P-101]**
2. Influence of Activation Parameters on the Rheology of High-Volume Copper Mine Tailings-Based Alkali-Activated Binders and their Application Potential, **Sahil Surehali**, Rijul Kanth Ramasamy Jeyaprakash, Narayanan Neithalath, Arizona State University, USA [**P-122]**
3. Synergistic Utilization of Fly Ash, GGBS and Limestone for Sustainable Multi-blended Cement Development, **Manish Kuchya**, Bhavik Patel, K Suresh, Awadhesh Singh, Satyabrata Sharma, UltraTech Cement **[P-141]**
4. Use of chrome sludge in production of clinker- case study, M V Ramana Murthy, MSV Prasad, Sagar Cements, Shiva Kumar, Sunder Rao, Vishnu Chemicals, Prasad Gonthi, M Balaraju, **Suresh Vanguri,** NCB **[P-148]**
5. Performance-based binder optimization for lower-clinker concrete: Strength comparison of OPC–GGBS and Portland slag cement systems, Purnanand P Savoikar**, Pawar Prashant S**, Goa College of Engineering **[P-129]**
6. Adaptation of Different Methodologies for Estimation of Kaolinite Phase during Quality Assessment of Different types of Clay for the Production of Low Carbon LC3 Cement, **Giasuddin Ahamed,** G Jayachandra Naidu, Sanjeev Kumar Chaturvedi, Lok Pratap Singh, NCB **[P-151]**

TECHNICAL SESSION – II B	**Seminar Hall - 1**	**1400 h to 1530 h**

Process Optimization and Plant Engineering – I

Session Keynote: Practical Pathways to a Low Carbon Cement Plant, Dr S B Hegde, Professor, Department of Civil Engineering & Director, Jain College of engineering & Technology, Hubli.

1. Advancing Large-Capacity Cement Production HWI Experience in Technology and Plant Performance, Ashok Kumar Dembla**, Deepti Varshney**, Humboldt Wedag India [**P-124]**
2. Energy-Efficient Cold-grinding in MVR Vertical Roller Mills, **Caroline Woywadt**, Gurserjan Singh, Gebr. Pfeiffer, India [**P-108]**
3. Sustainable cement manufacturing through energy efficient raw material grinding with polycom (high pressure grinding roll) - a case study- Stefan Diedenhofen, Vinod Wadile, **Prakash Wagh**, TKIL Industries **[P-139]**
4. Sustainable Explosion Protection Concepts for Coal Grinding Systems by Means of Explosion Venting, Berthold Bussieweke, **Manoj Thakur,** TECHCONS, India [**P-109]**
5. Advancement in Cement Manufacturing Process Automation including AI/ML and Industry 4.0 Application, **Amit Kumar Kanojia**, Adani Cement **[P-102]**
6. Process audit–driven optimization of vertical roller mills in cement manufacturing: Evidence from four raw and slag grinding case studies- **Anil Popuri**, Saurabh Bhatnagar, K P K Reddy, NCB. **[P-144]**

Networking & Tea	**Dining Hall**	**1530 h to 1600 h**

TECHNICAL SESSION – III A	**Auditorium**	**1600 h to 1730 h**

Decarbonizing Cement Manufacturing-I

Session Keynote: **Decarbonizing Cement Manufacturing, Dr. Keshav Bharadwaj, Assistant Professor, IISc Bengaluru**

1. Decarbonisation Of Cement Manufacturing at Scale: The Maha Cement (MHIPL) Integrated Model, **Sanjay K Singh**, My Home Cements Ltd., Hyderabad. **[P-140]**

2. Limestone Calcined Clay Cement (LC^3): Clay Activation Chemistry and Flash Calciner Process Technology A Value-Creating Route to Lower-Carbon Cement Production, Ashok Kumar Dembla, **Anurag Johari**, Jens Briedenbach, Marc Feiss, Humboldt Wedag India [**P-123]**
3. Transforming Cement Plant Emission Control: Smart Monitoring, Innovative Filtration and Intelligent Process Optimization, **Jaya Prakash Chilaka,** Thermax Ltd. **[P-155]**
4. Evaluation of Waste-Derived Fuel Utilisation in an Indian Cement Plant, **Kaustubh Phadke**, Luckman Muhmood, K J Somaiya School of Engineering [**P-134]**
5. Carbon mineralization of steel slag a pathway for CO_2 capture, utilization, and circular raw material generation, Mahima Srivastava, Priyapratim Patra, **Pratik Goyal,** J. Suresh, Amol Satpute, Dilip Makhija, Jagabandhu Kole, Manoj Kumar Rustagi, JSW Cement, Karnataka [**P-117]**
6. Carbon Dioxide Mitigation in Indian Cement Industry- assessment of Carbon Capture, Utilization and Techno Economic Viability, **Ankur Mittal**, Manoj Kumar Soni, NCB [**P-128]**

TECHNICAL SESSION – III B	**Seminar Hall - 1**	**1600 h to 1730 h**

Advanced Concrete Composites -I

Session Keynote: The Evolution of Cement: From Coarse to Ultrafine SCMs, **Shri Anil Banchhor, MD & CEO of RDC Concrete (India) Ltd.**

1. Comparison of Physics Informed Empirical Equation with Machine Learning Models for Concrete Compressive Strength Prediction under Distribution Shift, **Singh**, Dharmendra Kumar, NTPC, Hyderabad [**P-105]**
2. Methodological framework for cradle-to-gate life cycle assessment of precast metro bridge girder, **Sakthivel T**, Mr. Prasad Selvam S. R, L&T Construction, Heavy Civil Infrastructure (IC), Chennai **[P-135]**
3. Mechanical Properties of Recycled Aggregate Concrete Made using PSC as Binder, **Bhashya V,** Bhaskar S, CSIR, Chennai [**P-118]**
4. Mix Design of Ambient-Cured Geopolymer Concrete for Low-Carbon Construction, S Jagandas, **Prabha Mohandoss,** NIT Tirchirappalli **[P-130]**
5. Performance as the Criterion for Durability in Concrete Mix Proportioning, **B Kameswara Rao**, KL University, Vijayawada [**P-106]**
6. Experimental Investigation of the Mechanical and Durability Performance of Sustainable Ultra-High-Performance Concrete Incorporating Fly Ash, GGBS and Metakaolin, Dr. Mohd. Hamraj, **Noman Ashraf**, Venkata Narsireddy Sagili, MJCET, Hyderabad [**P-112]**

Networking & Tea	**Dining Hall**	**1730 h to 1800 h**
Cultural Program	**Auditorium**	**1800 to 1930 h**
Dinner	**Dining Hall**	**1930 h onwards**

Friday, 20 November 2026

TECHNICAL SESSION – IV A	**Auditorium**	**0930 h to 1100 h**

IS 456:2025 (Draft): Durability Design and Quality Assurance of Concrete

1. Service Life Approach – IS 456 (draft)**- Prof. KVL Subramaniam, Professor, Department of Civil Engineering, IIT Hyderabad**
2. Concrete and its constituents – specifications & applications – **Shri Amit Trivedi, Joint Director & Head-Centre for Construction Development & Research, NCB**
3. Mechanical Performance of High & Ultra High Strength and Light Weight Concrete - **Dr Brijesh Singh**, **General Manager & Head-Centre for Continuing Education, NCB**

TECHNICAL SESSION – IV B	**Seminar Hall - 1**	**0930 h to 1100 h**

Low-Carbon Cement Systems-II

Session Keynote: A Sustainable Pathway Towards Low Carbon Cement Production- Clay Calcination, Shri Sudheer Yeleti, Fuller Technologies.

1. A Sustainable Route for Producing Highly Reactive SCM from Basic Oxygen Furnace Slag with Concurrent Iron Recovery, **Priyapratim Patra**, Mahima Srivastava, Pratik Kumar Goyal, J. Suresh, Amol Satpute, Dilip Makhija, Manoj Kumar Rustagi, Jagabandhu Kole JSW Cement, Karnataka [**P-104]**
2. High Litre Weight Clinker Under Partial and Full Kiln Loading Conditions: Distinguishing Mineralogical Inefficiency from Burnability Limitation for Carbon-Neutral Cement Manufacturing, **Suresh Palla**, Vipul Mishra, Lalit Patodi, Mukesh Kakde, Suresh K, Sandeep Deshmukh, UltraTech Cement Limited, Awarpur. **[P-147]**
3. Waste Glass Powder as a Low-Carbon Supplementary Cementitious Material: A Comparative Study with Fly Ash-Based Blended Cements, **Manish Kuchya,** Ajay Mahadela, Jyoti Pansare, K Suresh, Awadhesh Singh, Satyabrata Sharma, UltraTech Cement Limited. **[P-142]**
4. Preparation of Low Carbon Calcium Silicate Cements Using Industrial ByProducts, **Varsha Liju,** Pinky Pandey, Diksha Rana, S K Chaturvedi and L P Singh, NCB. **[P-153]**
5. Calcium Sulfoaluminate Cement Systems: A Critical Review of Hydration, Performance, Sustainability and Future Perspectives, D. Praseeda, **Priyanka Burra,** Suresh Vanguri, VNR VJIET, Hyderabad **[P-119]**
6. Oxyfuel Technology For CO_2 Capture In Cement Industry, **Syed Rayees Ahmed**, Anand Bohra, Anil Kumar Popuri, NCB **[P-154]**

Networking & Tea	**Dining Hall**	**1100 h to 1130 h**

TECHNICAL SESSION – IV A (contd.)	**Auditorium**	**1130 h to 1300 h**

IS 456:2025 Draft: Advancing Performance, Durability & Emerging Concrete Technologies

1. Performance based design of RCC Structures – **Prof Suriya Prakash, Professor, Department of Civil Engineering, IIT Hyderabad**
2. Quality Assurance and Construction Provisions– **Dr B Pandu Ranga Rao, Joint Director & Unit Incharge-Hyderabad & Bhubaneswar, NCB**
3. Efficacy of Bi-polar Corrosion Inhibitor in Concrete, Puneet Kaura, Dheerendra Singh, **Brijesh Singh**, Amit Trivedi, NCB. **[P-145]**

TECHNICAL SESSION – IV C	**Seminar Hall - 1**	**1130 h to 1300 h**

Process Optimization and Plant Engineering – II

Session Keynote: NCB's R&D initiatives and technology development for high TSR, Dr Kapil Kukreja, General Manager & Head – Centre for Mining, Environment, Plant Engineering & Operation, NCB

1. Efficient & Greener Raw material grinding plants with Roller Press in finish mode: Case studies from Telangana, India, Venkatesh Vanam, **Atul Johri**, Alexander Knoch, Kai Weider, Humboldt Wedag India [**P-125]**
2. Data-Driven Clinker Cooler SerCos: Integrating A Comprehensive Framework for SerCo Support, Condition Monitoring, and Inventory Optimization Through the Customer Care SerCo Program (CCSP), Soundararaj N, Amit Varu, **Praveena K**, IKN Engineering India **[P-111]**
3. Prepol Step Combustor: A unique solution to combust most flexible alternate fuels, Samuel Zühlsdorf, Anup Das, Ali Asgar, **Abhinandan B. Jadhav**, TKIL Industries Pvt. Ltd., Pune **[P-131]**

4. Cost Reduction, Dust-Free Operation and Power Saving in Cement Mill Bag Houses through Floating Shoe Rotary Airlock Valves, **Sreedhar Sukumaran**, Anval International Pvt Ltd. **[P-138]**
5. Pioneering technology: Polysius – clinker cooler with remarkable efficiency polytrack® eco – clinker cooler with outstanding operating characteristics, Benski Bert, Ali Asgar, **Debajyoti Chatterjee**, TKIL Industries Pvt. Ltd. **[P-132]**
6. Sustainable and Innovative Refractory Solutions for Enhanced AFR Utilization in Cement Manufacturing, Sourav Duttagupta, Rajesh Kumar, Purushottam Bedare, Jitnesh Jain, **Phil Edwards,** Vesuvius India Ltd. and Vesuvius plc.**[P-150]**

Networking & Lunch	**Dining Hall**	**1300 h to 1400 h**

TECHNICAL SESSION – V A	**Auditorium**	**1400 h to 1530 h**

Advanced Concrete Composites – II

Session Keynote: Applications of 3D Printable Concrete: Emerging Trends and Future Prospects, Dr. Prabhat Ranjan Prem, Scientist-F, CSIR-SERC

1. Reducing Cement Consumption and Embodied Carbon Through RCC-To-Structural Steel System Optimization: A Case Study of An HVDC Valve Hall, **T. Surya Chandra Rao**, Paningipalli NVM Prakash, Power Grid Corp. of India [**P-116]**
2. Experimental Study on Combined Effect of Metakaolin (MK) and Ultrafine Slag (UGGBFS) on Mechanical and Durability Properties of Hybrid Fibre Reinforced Self Compacting Concrete (HyFRSCC), **Pavan Kumar Diddi,** NCB, Pushpendra K Sharma, Lovely Professional University, Amit Srivastava, Graphic Era University, Sri Rama Chand Madduru, Sree Chaitanya College of Engineering. [**P-149]**
3. Comparative Bond Behaviour of Steel and GFRP Reinforcement in Geopolymer and OPC Concrete, **G. Mallikarjuna Rao**, M. Kalyan, Jagandas Sabavath, N. Karthikeya, P. Varun Kumar, M. Pavan Kumar, CBIT, Hyderabad, **[P-133]**
4. Embodied Carbon Assessment of Expanded Polystyrene (EPS) Lightweight Concrete: Trade-Offs Between Density Reduction and Carbon Neutrality, **Nandika Srinivas Rao**, Uma Shankar Biswal, N. Sudharsan, UltraTech Cement Limited, Hyderabad [**P-127]**
5. Experimental Investigation on the Mechanical and Durability Performance of Graphene Oxide-Modified Concrete, V. Bhikshma, **Podeti Anil,** Osmania University, Hyderabad [**P-120]**
6. Carbonation Resistance of Concrete Incorporating Fly Ash and Ground Granulated Blast Furnace Slag under Accelerated Exposure. **B Kameswara Rao**, KL University, Vijayawada [**P-107]**

TECHNICAL SESSION – V B	**Seminar Hall - 1**	**1400 h to 1530 h**

Decarbonizing Cement Manufacturing-II

Session Keynote: AFR usage in Cement Industry, Shri Ujjwal Awasthi, Joint President & Plant Head-Kotputli Cement Works, UltraTech Cement Ltd.

1. Importance of Feasibility Study for an Alternate Fuel Feeding System, **Sakshi Kadam**, Amar Patil, Milind Chande, Biswajit Dhar, TECHCONS, India. **[P-114]**
2. Ceramic Vortex Finder: A Durable Alternative to Increase Lifetime of Dip Tubes at the Preheater Lower Stages when Utilizing Alternative Fuels, **Lars Andersen**, Pankaj Gupta, Simon Kofoed-Dam, HASLE Refractories, Denmark. **[P-113]**
3. Impact of usage of High ash coal (Indian Coal) in cement industry, **Anand Singh**, Shashikant M Vala, Shyamal Roy, Satyabrata Sharma, Ultratech Cement. **[P-143]**
4. Mineralogy–PSD Decoupling in OPC 53 Cement: Explaining the Weak Correlation Between Cement Alite Content and 28-Day Strength Through Industrial XRD and Particle Size Distribution Analysis, **Suresh Palla**, Vipul Mishra, Lalit Patodi, Mukesh Kakde, Suresh K, Sandeep Deshmukh, UltraTech Cement Limited, Awarpur. **[P-146]**
5. Utilization of Ni Process Residue as Setting Retarder in Cement Manufacturing, **Suresh Vanguri**, Aathira Suresh, V Rama, V Ramaswamy, P Janardhan and A Sushmitha, NCB **[P-152]**

6. Water Positivity Through Digital Intelligence and Catchment-Based Resilience, **Hrushikesh Sandhe**, Walter P Moore Engineering. **[P-156]**	
CONCLUDING SESSION **Auditorium** 1530 h Highlights of Conference by **Dr B Pandu Ranga Rao**, Joint Director & Conference Organizing Secretary, NCB 1540 h Best Paper Awards 1550 h Quiz 1610 h Industry Feedback 1625 h Vote of Thanks	**1530 h to 1630 h**
High Tea **Dining Hall**	**1630 h onwards**