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4th R. N. Raikar Memorial International Conference & Ghosh-Mukherjee International Symposium on ADVANCES IN SCIENCE & TECHNOLOGY OF CONCRETE



INDIA CHAPTER OF AMERICAN CONCRETE INSTITUTE

2-3, Nagree Terraces, Soonawala Agiary Road, Mahim (W), Mumbai 400 016, India.

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Late Mr. R. N. Raikar

India Chapter of American Concrete Institute (IC-ACI), since its inception in 1979, has catapulted into a national body for concrete excellence due to untiring efforts of late Mr. R.N. Raikar. IC-ACI has been honoured with 'Excellent Chapter Award' from our parent body ACI consecutively for the last 21 years – a feat it continues to achieve to date.

ACI, in its centennial year, conferred on him the highest individual honour of being an 'Honorary Member' of the Institute in recognition of his service to the concrete industry. As a tribute to his legacy, the R. N. Raikar conference series aims to salute global concrete icons of Indian origin.

INVITATION

India Chapter of American Concrete Institute cordially invites you to 4th R. N. Raikar Memorial International Conference & Ghosh-Mukherjee International Symposium on ADVANCES IN SCIENCE & TECHNOLOGY OF CONCRETE on 12th, 13th, and 14th December 2024 in Mumbai.

It would be a technical extravaganza with something for everyone - architects, consultants, contractors, material scientists, manufacturers and suppliers, researchers, technocrats, and academia from all across the globe. See you at the conference...

'Incredible India' is a unique tourist destination, and the weather in December is going to be just perfect throughout India.

Conference Honorees: Ghosh-Mukherjee International Symposium



Dr. S. K. Ghosh

Dr. S. K. Ghosh heads the consulting practice, S. K. Ghosh Associates LLC, Palatine, Illinois, now a subsidiary of the International Code Council. Dr. Ghosh is active on many national technical committees, is an Honorary Member of ACI, and is a Fellow of ASCE, SEI, and PCI. He is a member of ACI Committee 318, Standard Building Code, and the ASCE 7 Standard Committee (Minimum Design Loads for Buildings and Other Structures). He is a former member of the Boards of Direction of ACI, the Earthquake Engineering Research Institute, and the Building Seismic Safety Council. He is a member of the Board of Governors of ASCE's Structural Engineering Institute. Dr. Ghosh has influenced seismic design provisions in the United States for many years. In addition to authoring many publications in the area of structural design, Dr. Ghosh has investigated and reported on structural performance in the most recent earthquakes. He is currently leading a World Bank project on building code enforcement in Dhaka, Bangladesh.



Prof. Abhijit Mukherjee

Prof. Abhijit Mukherjee is a Civil Engineer, researcher and educator. Prof. Mukherjee is Dean at Curtin University, Australia. He has taught structural mechanics, structural design, structural stability, and finite element analysis courses. His industrial consultations are on structural assessment, structural rehabilitation, and new structural materials. He loves to work on the rehabilitation of heritage structures. His research is on sustainable engineering practices. He approaches sustainable practices from three directions - the development of new sustainable materials, monitoring the health of existing infrastructure and extending the life of infrastructure through rehabilitation and retrofitting.

MESSAGE: ACI INCOMING PRESIDENT: Michael J. Paul (2024-2025)



Mr. Michael J. Paul

The Institute is pleased to join the India Chapter - ACI for the 4th R. N. Raikar Memorial International Conference - Advances in Science and Technology of Concrete. As the next president of ACI, I welcome the opportunity to inaugurate the conference proceedings and address leaders in all facets of concrete construction.

As one of the preeminent knowledge-sharing events in the South Asia region, the International conference will feature a wide array of technical presentations of timely topics in the concrete industry, plus student competitions and a variety of networking opportunities.

As a leading global authority dedicated to the best use of concrete, ACI has been delivering concrete knowledge for more than a century, and the R. N. Raikar Memorial International Conference is another example of how ACI members keep the Institute Always Advancing.



Dr. Surendra Manjrekar
CHAIR - CONFERENCE

Dr. Surendra Manjrekar is Chairman and Managing Director of Sunanda Specialty Coatings Pvt. Ltd. and is an 'Honorary Member' of the American Concrete Institute (2018) and 'Honorary Fellow' of the Institute of Concrete Technology (ICT), UK (2022).

Construction Industry Development Council (CIDC) India honoured him with the "Industry Doyen Award" (2017). He was three times "President of the India Chapter of ACI" and is "Principal Convener of ACI Certification in India" (2008 – present).

Dr. Manjrekar is a Vice Chancellor appointee on the "Internal Quality Assurance Cell" of Dr. Homi Bhabha State University, Mumbai, as an Industry representative. He is a Special Signatory to the MOU for technical co-operation between India, Singapore, Vietnam, and Malaysia organized by ACI in Singapore (2019). He is active in concurrent R&D work in the fields of Corrosion Prevention in RCC/PSC structures with special emphasis on infrastructure, 3rd Generation Corrosion Inhibiting Admixtures, Internal Curing, Repairs of Dams, Bridges, Irrigation Canals, water-related structures, Polymers, Underwater Concreting, CO2 sequestration in polymers, Nano molecule Soil Stabilization, Waterproofing, Anti-freezing Admixtures in Concrete.



Mr. Chetan R. Raikar
CONVENER - CONFERENCE

Mr. Chetan Raikar is Chairman & Managing Director of Structwel Designers & Consultants Pvt. Ltd, an engineering consultancy of 50 years of glorious standing; apart from being on panels of many international and national forums and institutions, is a professional Structural Engineer with a B. E. in Civil Engineering from Sardar Patel University, Gujarat, and a Master's degree of Science in Conservation of Heritage structure from Herriot – Watt University, Edinburgh, United Kingdom. Chetan has to his credit many awards from several prestigious organizations and Govt. of Maharashtra. Some of them are the Young member award for professional achievement in 1999 by ACI, the Excellence vocational award by Rotary International District in 2009, and the 'Maharashtra cha Kohinoor' award in March 2013 from Govt. of Maharashtra, ACI Chapter Activities Awards in 2018 and 'Industry Captain Award' in 2018 instituted by CIDC (Construction Industry Development Council), Govt. of India.

Chetan is the Lead Auditor and Technical Auditor for the National Accreditation Board of Laboratories, Quality Council of India, in accordance with ISO/IEC 17025. He is also an ISO 9001-2008 Lead Assessor and an Accredited Mediator certified by the Indian Institute of Arbitrators & Mediators

Topics for Conference

Novel Cements and Advanced Materials

- Advances in science and technology of cement, admixtures, and concrete
- Advances in materials concept and tailored material properties
- Energy efficient process and materials
- Fibre reinforced concrete
- Green concrete
- Heavy density concrete
- Hot weather / cold weather concreting
- Nano technology
- New cements such as LC3
- Other related developments
- Permeable concrete
- Phase change materials (PCM)
- Recycled Concrete Aggregates & Concrete
- Self consolidating/ compacting concrete
- Ultra high performance concrete
- Underwater concrete

Performance in Service, Prediction of Service

- Durability of concrete
- Improved performance of shrinkage cracking
- Innovative solutions for corrosion prevention of rebars
- Service life and life cycle analysis
- Smart materials
- Structural health monitoring
- Sustainability of concrete
- Transport properties of concrete

Fire

- Characterisation of fire, blast and impact loading on structures Behaviour of structural materials at high temperatures
- Design of structures for improved resilience
- Design of Bridges for Fire & Blast Resistance
- Effects of Fire & Blast on Facades & Glass Assemblies
- Effects of Fire and Blast on Steel connections
- Strengthening, retrofit and repair

Earth-based Materials

- Advances in structural and civil engineering applications
- Concrete construction & maintenance of structures in different fields of infrastructure, such as: -Aviation, Structures - Railways / Metros, Ports, Harbours and Nuclear Plants
- Dismantling of structures
- Innovative and cost effective fire resistant solutions
- Innovative therapies & Practices in structural designs
- Quality control related to concrete structures
- Research and current developments
- Seismic retrofitting
- Structural Steel Quality control related to concrete structures

Characterization, Testing and Monitoring Materials and their Properties and Associated Modeling

- Advanced models from nano to macro scale
- Advances in software
- Advances in testing of material properties
- Advances in material modeling, fresh state to early age to fracture and damage mechanics
- Experimental analysis of concrete structures
- Monitoring concrete properties during construction
- Multi-scale modeling
- Non-destructive testing
- Sensors

Precast & Pre-Stressed Concrete:

- Connections in Precast Jointed Systems
- Fast Track Precast Construction
- Precast Concrete Technology
- Precast Concrete Tunnel Segments
- Precast Pavements
- Prestressed Concrete

Other Topics

- 3D printing
- Aggregates
- Alternative cement
- Asphalt and bituminous materials
- ASR
- Bacterial processes
- Bio-based materials
- Carbonation
- Carbon-based nanomaterials
- Cement chemistry
- Coating materials
- Composite and hybrid structures
- Concrete in fire
- Creep and Shrinkage
- Curing of concrete
- Deterioration mechanisms
- Design
- Deleterious ions
- Durability
- Sustainable materials
- Early age properties of concrete
- Explosion
- Fibers
- Fracture
- Hydration and micro structure development
- Admixtures
- Impact
- Masonry
- Materials processing
- Natural stone
- NORMs
- Nuclear concretes
- Numerical Modeling
- Polymers
- Prestressed concrete
- Protection and renovation of heritage structures Freeze-Thaw
- Recycle aggregate
- Rheology of concrete
- SAPs / Internal curing
- Self-healing asphalt
- Self-healing concrete
- Soil Materials
- Special Construction Materials and Components Bitumen/Asphalt
- Structural aspects
- Sustainable materials
- Textile reinforced concrete
- Timber
- Transport properties
- Waste materials

IMPORTANT DATES AND DEADLINES

Last date for abstract submission: **15th October 2024**
 Review of the abstract by Scientific Committee: **22nd October 2024**
 Review of abstract and paper by Scientific Committee: **5th November 2024**

Last date for final paper
 submission
30th October 2024

Delegate Fees

Indian Delegates

Before 15th October 2024: INR 12,000 + 18% GST
 After 15th October 2024: INR 13,500 + 18% GST

International Delegates

Before 15th October 2024: USD 500 (Including Taxes)
 After 15th October 2024: USD 625 (Including Taxes)

Discount on

delegates fees

- 25% discount - Main Authors
- 10% discount - Members of ICACI / Supporting Orgs
- 50% discount - Students
- 60% discount - ICACI Student Members

Note: kindly note that any one of the above mentioned discounts can be availed while registering as a delegate.

- **Authors/presenters need to pre-register**
- **Conference fee includes a delegate kit, conference document, lunch and tea/coffee on all days**

PARTNERSHIP OPPORTUNITIES (TAXES ADDITIONAL AS APPLICABLE)

FEATURES / CATEGORIES	SOLITAIRE	PLATINUM	DIAMOND	GOLD	SILVER	KIT	LUNCH / DINNER
Amount (INR)	25 Lacs	10 Lacs	7.5 Lacs	5 Lacs	2.5 Lacs	1 Lac	5 Lacs
Complimentary Delegates	15	10	7	5	3	1	5
Presentation Slots	15 Mins	10 Mins	5 Mins	5 Mins	5 Mins	-	5 Mins

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Entitlements

Features/Categories	INR (Total)	USD (Total)	
Back Cover - BOOKED	1.5 Lacs	3000	One Full Page Advertisement in the Volume of conference proceedings with brand exposure by way of complimentary advertisement in IC-ACI Quarterly and logo presence on conference website with link to your Website
Front Inside Cover - BOOKED	1 Lac	2500	
Back Inside Cover	1 Lac	2500	
First 4 & Last 4 Pages	70000	1750	
Inside Pages	60000	1500	One Full Page Advertisement in the Volume of conference proceedings

EXHIBITION STALL (Taxes addition as applicable): Charges per stall

Size of Stalls	INDIAN (INR)	FOREIGN (USD)
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Mr. Aniruddha Nakhawa

List of Confirmed Speakers



Prof. Nilüfer Zihnioglu
Turkey

Topic: The Fresh State Properties of Seawater Mixed Calcium Aluminate Cement



Prof. Nishant Garg
USA

Topic: Raman Imaging of Static and Dynamic Systems



Prof. P.A.M. Basheer
UK

Topic: Title to be communicated



Dr. Didar Singh Cheema
Australia

Topic: Delithiated β -Spodumene Of Lithium Mineral Extracting Process, A Potential Supplementary Cementitious Material For Geopolymer & Conventional Concrete Applications With Reduced Co2 Footprint



Dr. Ahmad Abdelrazaq
USA

Topic: Design and Construction of Merdeka 118 Tower using High Performance Concrete: Pushing the Boundaries of Concrete Technology for Megatall Building



Prof. Prannoy Suraneni,
USA

Topic: Emerging Approaches for Reducing Concrete CO2 Emissions

List of Confirmed Speakers



Prof. Deepak K. Kamde
France

Topic: Corrosion characteristics of steel-concrete interface with low-carbon binders.



Prof. Kazunori Fujikake
Japan

Topic: Fundamental study on crumb rubber mortars as shock-absorbing materials.



Prof. Giorgio Ferrari
Italy

Topic: Low Carbon Concrete Admixtures. A New Class Of Products For Concrete Net Zero 2050 Scenario



Prof. Thaung Htut Aung
Thailand

Topic: Application of Resilience-based Design Approach in the Structural Design of Tall Buildings



Prof. Harald Justnes
Norway

Topic: Aluminium reinforced concrete in a resource utilization and recycling perspective



Prof. Dr. Johann Plank
Germany

Topic: Decarbonization Strategies for the Global Cement and Concrete Industry



Prof. Raquib Ahsan
Bangladesh

Topic: Wavelet-Based Identification of Effective Prestress of a Damaged Prestressed Concrete Girder.



Prof. Anol Mukhopadhyay
Australia

Topic: Comprehensive Durability Evaluation of Bridge Deck High-Performance Concrete under Severe Environmental Exposure Conditions



Prof. Liberato Ferrara
Italy

Topic: A holistic approach to sustainability of concrete: upgrading the perspective from material to structural design and life cycle assessment



Prof. Gaurav Sant
USA

Topic: Title to be communicated



Prof. Narayanan Neithalath
USA

Topic: Title to be communicated



Dr. Rishi Gupta
Canada

Topic: Investigating the suitability of textile fibers in developing cementitious composites



Prof. Ashok Kakade
USA

Topic: Title to be communicated



Prof. Pericles C. Stivaros
New York

Topic: Service Life Evaluation in Concrete Rehabilitation – A Sustainability Benefit



Prof. Navindra Ganganath Liyanarachchi
Thailand

Topic: Rapid Identification of Seismic Damage in Tall Buildings by Using Acceleration Response Time Histories: A Modal Decomposition Based Approach



Prof. Pedro Borges
Mexico

Topic: Title to be communicated



Dr. Steven M. Baldrige
USA

Topic: Carbon Reduction Strategies Providing Seismic Benefits



Prof. Alejandro Durán Herrera
Mexico

Topic: Development of lightweight UHPC for architectural applications



Dr. Edith Gallandorm
USA

Topic: Introduction to ACI-PCI 319: Building Code Requirements for Structural Precast Concrete



Prof. Prasad Rangaraju
USA

Topic: Use of Ground-Glass Pozzolans as Low-Carbon Supplementary Cementitious Material in Portland Cement Concrete



Dr. Ing. Andrés Antonio Torres Acosta
Mexico

Topic: Sustainability in the concrete industry: what is being done and what remains to be done



Prof. Nancy Soliman
Mexico

Topic: Title to be communicated



Prof. Mohammad Alameri
Australia

Topic: Mechanical and Durability Performance of Optimized GGBS-Based Geopolymer Concrete Structures



Prof. Ochini Chandrasena
Thailand

Topic: Evaluation of Equivalent Static Forces for Wind-resistant Design of Long-span Roof Structures from Dynamic Pressure Data

List of Confirmed Speakers



Prof. Salmabanu Luhar
UK

Topic: Evaluation of the Durability Performance of Ultra-High- Performance Geopolymer Concrete Under Dry-Wet Cycling Conditions



Prof. Varenayam Acha,
China

Topic: Enhancing Cement Mortar Durability with Expanded Perlite and Microbial Induced Calcite Precipitation



Prof. Nur Yazdani,
USA

Topic: Structural Safety of Concrete Bridge Decks with Variable Rebar Covers



Prof. Mehadi Ahmed Ansary,
Bangladesh

Topic: Building Vulnerability Assessment Process in Bangladesh



Dr. Ahmed Khalfan Said Al
Washahi, Oman

Topic: Total Replacement of Cement with Fly Ash and GGBS in Mortar Mix



Prof. Subhra Majhi
Australia

Topic: Monitoring concrete corrosion using enhanced ultrasonic imaging

REGISTRATION FORM

(Photocopy if necessary)

4TH R. N. RAIKAR MEMORIAL INTERNATIONAL CONFERENCE

&

**Ghosh – Mukherjee International Symposium on
Advances in Science & Technology of Concrete**

Dates: 12th, 13th, & 14th December 2024,

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