UKIERI Concrete Congress

Sustainable Concrete Infrastructure

14 – 17 March 2023

(Virtual Mode)

Congress Secretariat:

Dr B R Ambedkar National Institute of Technology
Jalandhar – 144 027 (Punjab) India

www.ukiericoncretecongress.com

Third Announcement

Peer reviewed papers will be published in the:

1. Journals of the Institution of Civil Engineers, UK
2. Materials Today Proceedings of Elsevier

Host Organisations:

Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab) India
Guru Nanak Dev Engineering College, Ludhiana (Punjab) India

CONCRETE is a global construction material, serving the social, engineering and commercial needs of the mankind through means of building the essential infrastructure to sustain our progress. The basic materials that comprise concrete are also global and this makes it second to water only in volume consumption. Notwithstanding these benefits, concrete and its providers and users also have responsibilities and obligations in ensuring its correct, durable and sustainable applications. This UKIERI Concrete Congress is being organised to discuss all aspects relating to concrete's current and future contribution as to how we build the established and develop living world. In achieving this aim, the Congress will be working with the stakeholders worldwide, involving researchers, practitioners, professional institutions, trade organisations and the relating Government departments.

The six Conferences comprising the Congress are designed to cover a wide range of issues reflecting concrete's versatility relevance and potential for further exploitation. The proceedings of the Congress will be managed differently, maximizing the delivery of current knowledge as well as the creation of new knowledge, focusing on the advantages and benefits as well as cutting across barriers that can limit applications. The need for future provision whilst responding to environmental concerns will be discussed. There will be opportunity to learn, network, debate and find solutions and opportunities relating to these issues.

The Congress will appeal to providers of services, manufacturers, practicing engineers, designer's consultants and researchers as well as planners and property developers. In fact, to all that relate to concrete's unique contribution to how we live both now and in the future.

Chief Patrons

Subhash C Ralhan, Chairman, Board of Governors
Dr B R Ambedkar National Institute of Technology, Jalandhar, India

Harjinder Singh Dhami, President Managing Committee
Guru Nanak Dev Engineering College, Ludhiana, India

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Dr B R Ambedkar National Institute of Technology, Jalandhar, India

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Guru Nanak Dev Engineering College, Ludhiana, India

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Dr B R Ambedkar National Institute of Technology, Jalandhar, India

H S Rai, Head of Civil Engineering Department
Guru Nanak Dev Engineering College, Ludhiana, India

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Ravindra K Dhir OBE
University of Birmingham, UK / Trinity College Dublin, Ireland / University of Dundee, UK

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S P Singh, Raman Bedi, Kanish Kapoor, Navdeep Singh
Dr B R Ambedkar National Institute of Technology, Jalandhar, India

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Rohit Mehra, Dr B R Ambedkar National Institute of Technology, Jalandhar, India
Moray D Newlands, University of Dundee, UK
Kevin A Paine, University of Bath, UK
Jagbir Singh, Guru Nanak Dev Engineering College, Ludhiana, India
H P Singh, Dr B R Ambedkar National Institute of Technology, Jalandhar, India
S B Singh, Birla Institute of Technology and Science, Pilani, India
Roger P West, Trinity College Dublin, Ireland

Opening Session
Tuesday
14 March 2023
13.30 hrs

UKIERI Concrete Congress

Sustainable Concrete Infrastructure

The Congress will host the following Conferences:

Conference 1:
Waste Materials for Building Concrete Infrastructure

Conference 2:
Smart and Eco-Cement Materials for Concrete Construction

Conference 3:
Reinforced Concrete and Precast Concrete for Sustainable Infrastructure

Conference 4:
Self-Compacting Concrete in Morden Construction Era

Conference 5:
Advances in Geopolymer Concrete and Applications

Conference 6:
3D Printing as the Future of Sustainable Concrete Infrastructure

Wednesday
15 March 2023

Conference 1

Waste Materials for Building Concrete Infrastructure

Themes

- Recycled and Secondary Materials and Use
- Use of Quarry Fines
- Fresh Concrete, Engineering and Durability Performance
- Performance- Based Specifications
- Environment Impact and Sustainable Development
- CO_2 Life Cycles Assessment/Analysis
- Case Studies, Future Development and Trends
- Others

Wednesday
15 March 2023

Conference 2

Smart and Eco-Cement Materials for Concrete Construction

Themes

- Super/Smart Absorbent Polymers
- Self-healing, Self-cleaning and Self-curing Phenomena
- Nano Materials, Novel Fibres and Smart Sensors
- Nano Superplasticisers/Particles/Tubes
- Next Generation of Nano Based Concretes
- Porous Concrete and Applications
- Non-Intervention Techniques
- Others

Thursday
16 March 2023

Conference 3

Reinforced Concrete and Precast Concrete for Sustainable Infrastructure

Themes

- Precast/Masonry for Housing and Infrastructure Development
- Bridge/Tunnel Segmental Construction
- Sustainable Design and Structural Frames
- Codal Provisions and Design Aspects
- Seismic Performance of Structural Elements
- Structural Optimization and Life Cycle Analysis
- Service Life and Sustainable Design Methods
- Others

Thursday
16 March 2023

Conference 4

Self-Compacting Concrete in Morden Construction Era

Themes

- Rheology, Early Age Strength and Durability
- Form Work Issues
- Measuring Performance and Test Methods
- Use of Secondary Materials
- Structural and Mechanical Behaviour
- Future Developments and Trends
- Applications and Case Studies.
- Others

Friday
17 March 2023

Conference 5

Advances in Geopolymer Concrete and Applications

Themes

- Materials and Methods
- Fresh Concrete, Engineering and Durability Properties
- Developing Value Added-Use of Materials
- Environment Impact and Sustainable Development
- Portland Cement Combinations, Benefits and Risks
- Innovative and Future Developments
- Potential Applications and Market Acceptance
- Others

Friday
17 March 2023

Conference 6

3D Printing as the Future of Sustainable Concrete Infrastructure

Themes

- Materials Information and 3 D Printing Technology
- Building Information Modelling
- Development of Engineering Properties
- In-Situ performance
- Environmental Benefits of 3D-Priting in Construction
- Life Cycle Assessment and case Studies
- Research Goals and Methods
- Others

Who Should Participate

- Academicians, Researchers and Students
- Design Engineers and Architects
- Contracting Engineers
- Research Funding and Professional Bodies
- Local and Regional Authorities
- Ready Mixed Concrete Suppliers
- Precast Concrete and Materials Suppliers
- Formwork Designers
- Highway Authorities and Designers
- Trade Associations

Congress Proceedings

Peer reviewed papers willl be published in the following journals :

1. **Institution of Civil Engineers, UK**
   - Magazine of Concrete Research (Themed Issue)
   - Engineering Sustainability
   - Infrastructure Asset Management
   - Environment Engineering and Science
   - Smart Infrastructure and Construction
   - Waste and Resource Management
2. **Materials Today Proceedings, Elsevier**

Language

The language of the Congress is English and will be held in Virtual Mode. The Congress Secretariat will be at Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab), India.

Congress Fees

The Congress fee includes soft copy of the Abstract Book/Proceedings. The fee structure is shown below.

Fee per Delegate (₹)	
Author registration	2500
Student registration (Non author)	2000
Standard registration (Non author)	3000

Registration / Payment Details

- For registration, please use the following Link. Please copy and paste into the browser if it does not work.
  https://forms.gle/MbBH5FvQNePm3qeZA
- Separate registration is required for each paper if you have submitted more than one paper. In such case(s), separate registration fee for each paper is required to be paid.
- Selected papers shall be considered for peer review for possible publication in the Journals of ICE/Materials Today Proceedings after the Congress. Publication of papers in the Journals of ICE/Materials Today Proceedings is subject to peer review.

Bank Account Details	
Account Name	UKIERI Concrete Congress
Account Number	65155472509
Account Type	Current
Bank	State Bank of India, REC Jalandhar-144027, India
IFS Code	SBIN0050841
SWIFT Code	SBININBB440

For Further Details, Please Contact

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