

TWO DAY INTERNATIONAL CONFERENCE ON SUSTAINABLE INFRASTRUCTURE: INNOVATION, OPPORTUNITIES AND CHALLENGES – 2023 (SIIOC – 2023) ON THURSDAY, 20<sup>th</sup> APRIL 2023 & FRIDAY, 21<sup>st</sup> APRIL 2023.

Organized by



NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

Publishing partner



Website: http://siioc.nitk.ac.in/

# **Organizing Secretary**

Dr. Raviraj H M and Dr. Pavan G S, Department of Civil Engineering, NITK Surathkal.

## **VENUE**

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA (NITK), SURATHKAL, MANGALORE -575 025, INDIA.

## **NITK, SURATHKAL**

National Institute of Technology Karnataka (NITK), Surathkal is an Institute of National importance that was established as Karnataka Regional Engineering College (KREC) in the year 1960. Nine undergraduate programmes in different disciplines leading to B.Tech. and M.Tech., M.Tech.(Research) and doctoral degree programmes in a wide range of specializations are being offered by the departments, school and centres.

NITK is located at Surathkal, about 20 kms north of Mangaluru city on NH66, on way to Udupi and Goa. NITK is well connected by air, rail and road. Mangalore International Airport, Mangalore Junction railway station, Mangalore Central Railway and Mangalore central bus stand are within 20 kms from the Institute. The world-famous temple town Udupi is about 30 kms away. The sprawling 300 acres of the campus is divided to the east and west side by NH66 with lots of greenery and interesting interiors and exteriors lined by the great Arabian sea on the west.

#### **DEPARTMENT OF CIVIL ENGINEERING**

The department was established in the year 1960 with a UG programme in Civil Engineering. Now in addition to B.Tech. (Civil) the Department also offers master's degree programme in Construction Technology and Management, Environmental Engineering, Geotechnical Engineering, Structural Engineering and Transportation Engineering and Ph.D. programme. The Department is engaged in various Research & Development Projects funded by MHRD, MoEF, DST, BARC, BRNS. Testing, consultancy services, industry interaction, continuing education programmes, R&D activities at the department have benefited and promoted inclusive all-round development of the industry and stake holders in the region.

#### **CONFERENCE OBJECTIVE**

The conference provides a platform for deliberations on developing solutions that mitigate the impact of infrastructure on ecology and environment. Research and case studies on challenges, underlying opportunities and innovative ideas for the development of sustainable infrastructure will be presented and discussed.

### **CONFERENCE THEMES**

The Conference is focused on the following themes in general, but not limited to:

- 1. Low carbon building technologies and affordable housing
- 2. Novel structural analysis and design methodologies
- 3. Innovations in composite structures
- 4. Seismic resilient infrastructure
- 5. Utilization of industrial wastes for construction
- 6. Design & construction approaches for green highways
- 7. Road user safety & traffic mitigation for sustainable highways
- 8. Urban transport systems and traffic management
- 9. Financing infrastructure projects
- 10. Challenges for Soil improvement & Ground stabilization
- 11. Solid waste management
- 12. Mitigative measures for air & noise pollution
- 13. Water and waste water treatment
- 14. Hazardous waste management
- 15. Clean Water and Sanitation
- 16. Sustainable Cities
- 17. Smart Growth
- 18. Waste to Wealth
- 19. Climate Action
- 20. Disaster Risk Reduction
- 21. Innovations in Foundation Design
- 22. Dam Engineering
- 23. Computational, Analytical and Numerical Modelling
- 24. Retrofitting & Rehabilitation
- 25. Earthquakes & Landslides
- 26. Transportation Geotechnics
- 27. Disaster Risk Reduction

### WHO SHOULD ATTEND

Students, Faculty members, Professionals from industry, Administrators and Policy makers.

### CALL FOR PAPERS

Research papers are invited from all prospective authors. Authors are requested to submit an abstract of not more than 300 words within the deadline. Abstract can be submitted using the Google form link in the conference website (https://siioc.nitk.ac.in/). Upon acceptance of abstract, link for uploading the full-length paper shall be shared with the authors. Full length papers submitted will be peer reviewed by the technical committee. Selected papers from the conference will be published by Springer as Scopus indexed book chapter in the conference proceedings book volume. Springer will conduct quality checks on the accepted papers and only papers that pass checks will these published.

## **IMPORTANT DATES**

: 10<sup>th</sup> March, 2023 Submission of Abstract : 15<sup>th</sup> March, 2023 Acceptance of Abstract : 15th March, 2023 Registration

Submission of Full-Length

: 30<sup>th</sup> March, 2023 Paper

## **REGISTRATION FEES**

Particulars	Fees including GST
Faculty	INR 4720
Faculty of NITK	INR 4000
Industry/Research participants	INR 5900
International participants	USD\$ 75 (Online mode), USD\$ 150 (Offline mode)
Students	INR 2360
Students of NITK	INR 2000

<sup>\*</sup>For registration use the form attached.

Travel and accommodation need to be arranged by the participants. Registration fees includes registration kit, working lunch and tea during break.

For oral presentation, presenting author must register for the conference. At least one author must register for the conference for the full-length paper to be included in the conference proceedings.

#### CONTACT

Department of Civil Engineering

NITK Surathkal, Srinivasnagar, Mangalore.

Mob: +91 9448861733: Mob: +91 9844380262; Email: siioc@nitk.edu.in

## **ORGANIZING COUNCIL**

Chief Patron: Prof. Prasad Krishna

(Director (Additional Charge), NITK)

Patrons: Prof. B. R. Jayalekshmi

(Head, Department of Civil Engineering, NITK)

Organizing Secretary: Dr. Raviraj H M. and Dr. Pavan G S

(Assistant Professor, Department of Civil Engineering, NITK)

#### **ADVISORY COUNCIL**

Dr. A.U. Ravi Shankar, Dept. of Civil Engg., NITK Dr. G.L.Sivakumar Babu, Dept. of Civil Engg., IISc

Dr. Indrajit Pal, AIT, Thailand

Dr. Katta Venkataramana, Dept. of Civil Engg., NITK

Dr. Kazuyuki Izuno, Ritsumeikan University, Japan

Dr. Kevin Paine, University of Bath, UK

Dr. Krishna R. Reddy, University of Illinois Chicago, USA

Dr. K. Swaminathan, Dept. of Civil Engg. NITK

Dr. K.S. Babu Narayan, Dept. of Civil Engg., NITK

Dr. K.S. Nanjunda Rao, Dept. of Civil Engg., IISc, Bangalore

Dr. M. C. Narasimhan, Dept. of Civil Engg., NITK

Dr. Muhammed Basheer, University of Leeds, UK

Dr. Moray Newlands, University of Dundee, UK

Dr. Paloma Pineda, University of Seville, Spain

Dr. Saniay Kumar Shukla, Edith Cowan University, Australia

Dr. Shuichi Torii, Kumamoto University Japan

Dr. Siau Chen Chian Darren, NUS Singapore

Dr. S. Shrihari, Dept. of Civil Engg., NITK

Prof. Shuqing Yang, Universit of Wollongong, Australia

Dr. Sitaram Nayak, Dept. of Civil Engg., NITK

Dr. Subhash C. Yaragal, Dept. of Civil Engg., NITK

Dr. Varghese George, Dept. of Civil Engg., NITK

## **TECHNICAL COMMITTEE**

Dr. A.S. Balu, Dept. of Civil Engg., NITK

Dr. Adani Azhoni, Dept. of Civil Engg., NITK

Dr. Anupama Surenjan, Dept. of Civil Engg., NITK

Dr. Arun Kumar Thalla, Dept. of Civil Engg., NITK

Dr. B.B. Das, Dept. of Civil Engg., NITK

Dr. Babloo Chaudhary, Dept. of Civil Engg., NITK

Dr. Basavaraju Manu, Dept. of Civil Engg., NITK

Dr. Devatha C.P, Dept. of Civil Engg., NITK

Dr. Gangadhar Mahesh, Dept. of Civil Engg., NITK

Dr. J Vijaya Vengadesh Kumar, Dept. of Civil Engg., NITK

Dr. Mithun Mohan, Dept. of Civil Engg., NITK

Dr. Palanisamy. T, Dept. of Civil Engg., NITK

Dr. Prashanth. M.H. Dept. of Civil Engg., NITK

Dr. Rajasekaran, C, Dept. of Civil Engg., NITK

Dr. Sreekumar.M, Dept. of Civil Engg., NITK

Dr. Sreevalsa Kolathayar, Dept. of Civil Engg., NITK

Dr. Sridhar, G, Dept. of Civil Engg., NITK

Dr. Sunil.B.M, Dept. of Civil Engg., NITK

Dr. Suresha.S.N, Dept. of Civil Engg., NITK

Dr. Vinoth Srinivasan, Dept. of Civil Engg., NITK

## ABSTRACT/PAPER SUBMISSION

Abstract/Paper submission shall be made through google form submission. Link is available in conference website http://siioc.nitk.ac.in/

### **REGISTRATION FORM**

TWO DAY INTERNATIONAL CONFERENCE ON SUSTAINABLE INFRASTRUCTURE: INNOVATION, **OPPORTUNITIES AND CHALLENGES-2023 (SIIOC - 2023)** Thursday, 20<sup>th</sup> April 2023 & Friday, 21<sup>st</sup> April 2023.

Designation & Addre	ess:		
			T.
	C		
The second		M.	2

Payment mode: Online

Beneficiary Name: NITK SURTHKAL

Account Number: 37772503911

State Bank of India, NITK Campus Srinivasnagar

IFSC: SBIN0002273

**UTR number:** 

## Signature of Participant

This to certify that, the above-mentioned participant is employee/ student of our institute /organization.

Date:

Signature and Seal of Head of **Department/Section**