

About

A three day symposium on Geotechnical Aspects of Heritage Structures (SGHS 2024) is organized to celebrate the 75th year of the Indian Geotechnical Society (IGS) by the IGS Trichy chapter in collaboration with National Institute of Technology, Tiruchirappalli and National Institute of Technology, Puducherry under the aegis of Technical Committee (TC301) of International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE).

India is a place resplendent with heritage structures back from 9,500 years ago. The heritage buildings in India reflect the most advanced architectural designs and engineering significance, evident in the lifetime of the structures were withstanding. These structures have withstood many unforeseen natural and manmade disasters. It is a wonder that these structures were recovered from such a calamity. These structures are withstanding because of better knowledge in designing the sub-structures and super-structures of the engineers in those days.

Among the heritage places in India, Tiruchirappalli is celebrated as one of the oldest cities of Tamil Nadu, in which many dynasties set their supremacy and built monuments to record their existence. Some prominent structures with outstanding monuments and architectural designs were Kallani Dam, Thanjavur Brihadisvara temple, etc. It was built thousands of years ago, and they are capable of withstanding despite facing many wars and natural calamities. Among them, Thanjavur Brihadisvara temple is recognized as a UNESCO World Heritage Site.

In this regard, the symposium focuses on the geological and geotechnical challenges on heritage structures, geohazard assessment on heritage structures, and Geotechnical Investigations towards repair and rehabilitation of heritage structure is proposed.

Organizing committee

Chairman:

Prof. K. Muthukkumaran, NIT Trichy

Organizing Secretary:

Dr. V. Senthilkumar, NIT Puducherry Dr. Jitesh T. Chavda, S.V. NIT Surat

Joint-Organizing Secretary:

Dr. P. V. Premalatha, M.I.E.T Engineering College, Trichy

Dr. T. Ashok Kumar, NIT Puducherry

Mr. T. Jegadeesh Kumar, Joint-Secretary - IGS Trichy Chapter

Orgnaizing Committee Members:

Dr. G. Venkatesan, Anna University BIT Campus, Trichy

Dr. S. Senthamil Kumar, Periyar Maniammai University, Thanjavur

Dr. Deendayal Rathod, NIT Trichy

Dr. A. R. Prakash, Managing Partner, Kesee Associates, Salem

Ms. P. Devahi, TN-PCB, Trichy

Advisory Committee:

Dr. Marc Ballouz, President, ISSMGE

Prof. Keh-Jian Shou, Vice President Asia, ISSMGE

Prof. Alessandro Flora, Chair, TC301, ISSMGE

Dr. Anil Joseph, President, IGS Delhi

Dr. A. P. Singh, Hon. Secretary, IGS Delhi

Mrs. Aarti Bhargava, Aimil Ltd., New Delhi

Dr. Anitha G. Pillai, SCMS, Kerela

Dr. Arun Menon, IIT Madras

Dr. Ashish Juneja, IIT Bombay

REGISTRATION FEE:

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Indian delegates	upto 1st Jan 2024	after 1st Jan 2024
IGS Members	6000 INR	7000 INR
Non-IGS members	7000 INR	8000 INR
Students from India		
(PG and above)	3000 INR	3500 INR
Accompanying Spouse	3000 INR	3500 INR
International delegates		
IGS/ISSMGE members	150 USD	175 USD
Students	75 USD	85 USD
Accompanying Spouse	75 USD	75 USD
Other International delegates	175 USD	200 USD

Dr. Ayothiraman R, IIT Delhi

Dr. Balan K, Rajdhani IET Nagaroor, Trivandrum

Dr. Dasaka S. Murty, IIT Bombay

Dr. Gali Madhavi Latha, IISc Banglore

Dr. Jaykumar Shukla, Geo Dynamics, Vadodara

Dr. Maheshwari B. K, IIT Roorkee

Dr. Murali Krishna A, IIT Tirupati

Dr. Naga Sreenivasa Rao K, CIT, Guntur

Dr. Neelima Satyam D, IIT Indore

Dr. Prasad S.K, VCE Mysuru

Dr. Ramesh H.N, UVCE Bangalore

Dr. Ravi Sankar Jakka, IIT Roorkee

Er. Ravikiran Vaidya, Geo Dynamics, Vadodara

Dr. Samadhiya N.K, IIT Roorkee

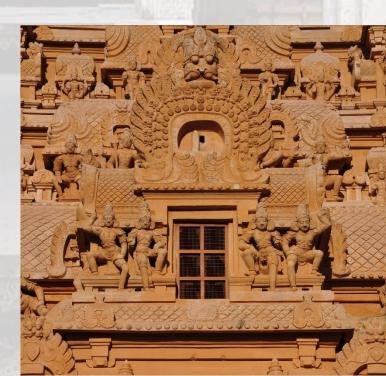
Dr. Sanjay Kumar Verma, TIET, Jabalpur

Dr. Sridevi G., BVRIT Narsapur

Dr. T. Thyagaraj, IIT Madras

Dr. Unnikrishnan N, CET.

Dr. Vishwas A. Sawant, IIT Roorkee





THEMES OF SYMPOSIUM

Geological and geotechnical challenges in historical sites

The geological and geotechnical characteristics of different historical sites, including underground and rock-cut sites, in India and overseas will be the main focus.

Diagnostics of distress

A significant difficulty is determining the type and severity of distress in historic buildings without sacrificing their his toric significance. Although non-destructive testing techniques (such as GPR, Tomography, MASW, etc.) are typically used, intrusive tests are occasionally performed as part of diagnostic investigations. The most recent innovations and cutting-edge practice will be discussed during the conference.

Heritage geotechnics

Under this theme, several types of foundations will be identified, along with the materials utilized and any related issues.

Geohazards and heritage

Geohazards including earthquakes, cloudbursts, and slope collapses have lately destroyed a number of historic structures, making their preservation extremely difficult. One of the main issues of this conference will be risk assessment, tactics, and preventative actions against such natural disasters.

Geotechnical Safety assessment

This theme will cover the identification of failure processes in foundations, retaining structures, and underground structures as well as innovative approaches for deterministic and probabilistic safety evaluation.

Numerical modelling strategies

Within this theme, recent developments in numerical modeling of the substructure, foundation soil, and soil-structure interaction will be discussed as they relate to safety assessments of historical sites and structures.

Geotechnical interventions towards rehabilitation

Under this theme, recent cutting-edge rehabilitation methods will be explored, together with their design principles, to solve geotechnical distress in old foundations, earth-retaining structures, or underground structures.

Case studies on Historical sites

The symposium will serve as a forum for the discussion of key case studies that are very instructional either because of the difficult geotechnical distresses they experienced or because of the innovative solutions created or implemented to secure the safety and preservation of the historical sites.

Geotechnical Investigation, monitoring and performance assessment

This theme will cover the geotechnical-based investigations for effective monitoring of heritage structures and the development of warning systems

Soil structure interaction aspects of heritage structures

Under this theme, the state-of-the-art technology and methods for the investigation of soil-structure interaction and mitigation measures for controlling these effects on heritage structures will be considered.

Other topics related to Heritage Structures

Any contributions related to the heritage structures will be considered under this theme.

OFFICIAL LANGUAGE:

The official language of the Symposium is English. Papers shall be written and presented in English.

VENUE:

National Institute of Technology, Tiruchirappalli – 620015.

National Institute of Technology Tiruchirappalli is a centrally funded technical institute. One of the largest academic campuses in India, the campus has an area of 800 acres, Located in Tiruchirappalli, which is located at the center of the Tamil Nadu, rich in artifacts, sculptures, Temples, monuments, etc., all around it. Therefore it is a virtuous place to study the geotechnical aspects of heritage structures

Tiruchirappalli is a well-connected city with the rest of the world by a road, rail and air transport.

Nearest Railway Station: Tiruchirappalli Railway Station (22 kms from the event location)

Nearest Air Port: Tiruchirappalli International Airport (15 kms from the event location)

SPONSORSHIP OPPORTUNITIES

Sponsorship Category	Amount (INR)	Privilege	
Platinum	3,00,000/- 6 Conference delegates, 2 Exhibition stall 3m x 3m (Space, Furniture, Electricity), 3 Banners in key areas 10 minutes corporate presentation, Logo on official conference banners, One promotional item an one printed brochure supplied by sponsor in the conference bag		
Diamond	5 Conference delegates, 1 Exhibition stall 2m x 2m (Space, Furniture, Electricity), 2 Banners in key area 5 minutes corporate presentation, Logo on official conference banners, One promotional item and or printed brochure supplied by sponsor in the conference bag.		
Gold	1,00,000/- 4 Conference delegates, 1 Exhibition stall 2m x 2m (Space, Furniture, Electricity), 1 Banners in key areas 5 minutes corporate presentation, one printed brochure supplied by sponsor in the conference bag.		
Silver	50,000/-	3 Conference delegates, 1 Banners in key area, one printed brochure supplied by sponsor in the conference bag	
Bronze	25,000/-	2 Conference delegates, one printed brochure supplied by sponsor in the conference bag.	
Well wisher	10,000/-	1 Conference delegate.	

Publication

The accepted papers will be published as "scopus" indexed proceedings after completing a separate review process.

ORGANIZERS

Indian Geotechnical Society Trichy Chapter

In 1948, the Indian Geotechnical Society (IGS) was founded, with its headquarters in Delhi. The society is affiliated to the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). It has more than 40 chapters spread around the nation. One of these chapters is the IGS Trichy Chapter. In order to contribute to the achievement of excellence in geotechnical engineering for the benefit of society, the IGS Trichy Chapter was founded in 2014 and is committed to advancing knowledge and creating opportunities for the sharing of information by academicians and practitioners in a broad range of geotechnical disciplines. Regular technical meetings, workshops, conferences, seminars, and site visits will help the IGS Trichy Chapter achieve its goal of educating practicing engineers and students about the relevance and value of geotechnical engineering.

SUPPORTING ORGANIZATION

ISSMGE (TC301)

Technical Committee on the Preservation of Historic sites of the International society of Soil Mechanics and Geotechnical Engineering, ISSMGE, is a form, which shares and provide information related to the preservation of historic sites and monuments. Its aim is to promote and establish the culture conservation in terms of geotechnical aspects and it highlight the role of geotechnical engineers to understand and resolve the problems.

NIT, Trichy

The National Institute of Technology, Trichy (NIT-T), formerly known as Regional Engineering College, is located in the center of Tamil Nadu on the banks of the Cauvery River. It was founded in 1964 as a joint venture between the governments of India and Tamil Nadu with the aim of meeting the nation's demand for technical manpower. With the agreement of the UGC/AICTE and the Government of India, this institution received Deemed University Status in 2003 and changed its name to National Institute of Technology as a result of its extensive experience. The university provides Undergraduate Courses in eleven areas and Postgraduate Courses in 31 disciplines of Science, Engineering, and Technology and M.S. (by Research) and Ph.D. in all departments. The institute has about 6000 students enrolled, and more than 250 faculty members NIT-T is now at eight place in the NIRF ranking of engineering institutes and is ranked first among the 31 NITs in India.

NIT, Puducherry

The National Institute of Technology Puducherry (NIT Puducherry or NITPY) is an independent public technical and Research University situated in Karajkal, a coastal enclave in the Nagapattinam District of Tamil Nadu, in the Union Territory of Puducherry. It was established in 2010 and declared as the Institute of National Importance by Government of India under National Institute of Technology, Science Education and Research Act, 2007. This institute offers 5 B. Tech courses, 4 M. Tech courses, and Ph. D. in 9 Disciplines. It ranked 136 among engineering colleges in the NIRF ranking in 2022.

IMPORTANT DATES

Submission of abstract: Intimation of abstract acceptance: Submission of full-length papers: Intimation of full-length paper acceptance: Submission of camera ready papers: Registration of accepted papers: Symposium:

30th September 2023 15th October 2023 01st December 2023 15th December 2023 1st January 2024 15th January 2024 14th - 16th February 2024

HERITAGE TOUR

On February 16, 2024, third day of the symposium, a guided heritage tour will be organized for the participants to explore the UNESCO World Heritage sites. The tour specifics will be regularly updated on the conference website.

Submit your Abstract

Abstracts of original papers (limited to 300 words) on any theme subject are invited for the inclusion in the symposium proceedings and presentation during the symposium. The abstracts shall be prepared in English language using the template provided on the website. The abstract will be reviewed by the technical committee and the authors will be informed about the acceptance for making the full paper submission. Abstract submission link: https://forms.gle/pRiKo3BVj1DdBFPj6

To Contact

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