

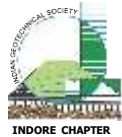


4th Indo-Japan Pre-Conference Workshop on HIGH SPEED RAIL & GEOTECHNICAL CHALLENGES



Wednesday, 18th December 2024

ORGANISED BY



MIT
A group of Academic & Research Institutions

WORKSHOP SPONSOR



(In Blended Mode)

Indian Geotechnical Society Indore Chapter &
Indian Geotechnical Society Aurangabad Chapter
in Association with

Civil Engineering Department

MIT, Chhatrapati Sambhajnagar (Aurangabad)- 431010



About the Pre-Conference Workshop

The Indian Geotechnical Society (IGS) and the Japanese Geotechnical Society (JGS) have established a collaborative agreement to foster the exchange of technical, scientific, and professional knowledge in the field of geotechnical engineering. This partnership has led to a series of successful workshops aimed at promoting advancements in geotechnical engineering and facilitating meaningful interactions between researchers from both countries. Notable past workshops include:

- First Indo-Japan Workshop on "Advances in Earthquake Engineering" held on December 14, 2011, at Kochi, India, organized by the IGS Kochi chapter.
- Second Indo-Japan Workshop on "Geotechnics for Resilient Infrastructure" conducted on November 14, 2015, in Fukuoka, Japan.
- Third Indo-Japan Workshop on "Geotechnics for Natural Disaster Mitigation and Management" hosted at IIT Guwahati, India on December 13, 2017.

Building on this foundation, the upcoming Pre-Conference Workshop on "High Speed Rail and Geotechnical Challenges Associated" is scheduled for Wednesday, December 18, 2024. This workshop will focus on the geotechnical aspects of the latest advancements in the design and operation of high-speed rail while addressing the complex challenges involved. (In Blended Mode)

Geotechnical Challenges in High-Speed Rail

The implementation of high-speed rail in India faces several significant challenges, with geotechnical issues being among the most critical. Key challenges include:

- Legal and community resistance often complicates land acquisition. Ensuring the acquired land is geotechnically suitable adds complexity, requiring thorough assessments to avoid hazards like landslides or soil instability.
- India's diverse terrain, including regions with soft soils, presents unique challenges. Constructing stable foundations in areas with soft, compressible soils is particularly difficult and requires advanced soil stabilization techniques. Additionally, ensuring the stability of tunnels and bridges, managing groundwater levels, and addressing seismic risks are essential for safe construction.
- The geotechnical complexities, especially in areas with soft soil, can significantly drive-up costs. Advanced technologies and techniques are necessary to overcome these challenges, but they also add to the financial burden.

The proposed workshop will focus on these critical geotechnical issues, particularly the challenges of building on soft soils, ensuring slope stability, and designing robust foundations. Addressing these challenges is key to developing a safe and reliable high-speed rail system in India. Successfully overcoming these geotechnical hurdles will be crucial for realizing a world-class high-speed rail network. The workshop offers an opportunity for researchers and practitioners to collaborate on innovative solutions to these pressing challenges.

KEY NOTE SPEAKERS



Dr. Susumu Yasuda

Professor Emeritus
Tokyo Denki University, Japan
Topic : Assessment of the environmental impact of constructing a maglev ultrahigh-speed railway in mountainous areas



Dr. Reiko Abe

Project Management Specialist, Japan
Topic : Upgradation & Development Of Railway Infrastructure In India



Prof. Ikuo Towhata

Visiting Professor,
Kanto Gakuin University, Japan
Topic : Problems illustrated by high-speed railway projects in two countries



Dr. Susumu Nakajima

Head- Foundation & Geotechnical Engineering Laboratory, Railway Technical Research Institute, Japan
Topic : Development & recent trend of design & construction of earth structures supporting Japanese high-speed railway



Prof. Fumio Tatsuoka

Tokyo University of Science Japan
Topic : Developments of GRS structures & their applications to High-Speed Railway in Japan and India

Prof. G. V. Rao

Guest Professor,
IIT Gandhinagar, India
Topic : Geotechnical Challenges in implementation of Japanese HSR system in India



Dr. R. P. Singh

DGM, NHRCL, Mumbai, India
Topic : Geotechnical Investigation for Mumbai Ahmedabad High Speed Trains: A Paradigm Shift



Prof. J. T. Shahu

Professer IIT Delhi, India
Topic : Developments in Track Geotechnics



Er. M. Kumaran

General Manager & Head Marine & Intake Structures, L&T Geo Structure Pvt Ltd, Chennai, India.
Topic : Indian perspective on Geotechnical aspects for High-Speed Trains



Prof. Amit Prashant

Indian Institute of Technology Gandhinagar, India.
Topic : Rigid Fascia GRS Walls for HSR in India



REGISTRATION

For registration to Pre-Conference Workshop, kindly pay the fee at the bank as detailed below and upload the payment receipt to registration link.

REGISTRATION LINK

<https://forms.gle/SzdJXwLLFrjVxDi37>

NAME OF ACCOUNT HOLDER : IGS Aurangabad Chapter

BANK ACCOUNT NUMBER 5434101001278

IFSC : CNRB0005434

NAME OF BANK : Canara Bank, Beed Bypass, Aurangabad.

WHO SHOULD ATTEND ?

The workshop will be beneficial for academicians, industry practitioners, research scholars and students.

Delegate Category	Early bird up to 31 st Oct 2024	After 31 st Oct 2024
Students	<700	<800
Professionals	<1000	<1200
Students Online	<500	<600
Professionals Online	<800	<1000



SCAN FOR PAYMENT

ORGANISING TEAM

Prof. Neelima Satyam

Convener

Prof. S. K. Prasad

Co - Convener

Dr. Manish S. Dixit

Organising Secretary

Civil Engineering Department MIT, Chhatrapati Sambhajnagar (Aurangabad), Maharashtra, India - 431 010.

Venue : Anand Hall

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