

# On the occasion of Engineers Day Design-a-Thon On Building the Future: Sustainable Solutions in Modern Infrastructure Development



Date: 12<sup>th</sup> September, 2024 Organized by

School of Civil Engineering VIT, Vellore In association with

Indian Society of Earthquake Technology (ISET) VIT, Vellore Chapter







#### **About Vellore Institute of Technology:**

VIT has made a mark in the field of higher education in India imparting quality education in a multicultural ambiance, intertwined with extensive application oriented research. VIT was established in 1984 by the well-known educationist. and former`` parliamentarian, honourable Dr. G. Viswanathan, the Founder and Chancellor, a visionary who transformed VIT into a Centre of Excellence in higher technical education. It persistently seeks and adopts innovative methods to improve the quality of higher education in all fields of science and technology. As per QS World University Ranking 2024, in Engineering and Technology, VIT stands 212th best in the World, the 9th best in India, and by Subject. It is ranked the 10<sup>th</sup> best University, 13<sup>th</sup> best Research institution, and the 11<sup>th</sup> best Engineering institution in India (NIRF ranking, Govt. of India 2024) and has got A++ in the 4th cycle of NAAC accreditation.

#### **About School of Civil Engineering:**

The School of Civil Engineering (SCE) is a part of the institute since its inception. The school has grown tremendously over the past thirty years and is now recognized as one of the major engineering schools in VIT. The school has 47 faculty members from elite institutions across the globe. Besides high quality teaching and research at both UG and PG levels, faculty members of the school are actively involved in executing a number of R&D and Consultancy projects from government agencies including DST, ISRO, UGC, AICTE, and also from many reputed industries.

The School of Civil Engineering, with its multifaceted faculty members, continues to maintain and cultivate

its strong link with the infrastructural industry such as L&T, HCC, DLF, RAMCO, CCL, Godrej, TATA Consultancy, etc. The Strength of Materials laboratory is one of the best with accreditation by NABL (National Accreditation Board for Testing and Calibration Laboratories) from OCT -2018 onwards. The school has also regularly benefited from international linkages facilitated by the university level MoUs with a number of leading foreign universities such as Deakin University, Queensland University, North Dakota State University, etc.

#### **About ISET Vellore Chapter:**

By the initiatives of VIT Vellore, ISET Vellore Chapter was established in December 2016 for the public welfare and seismic resilient India, as a forum for scientists and engineers of various specializations to join together and exchange ideas and to promote research, development and awareness work in the field of Earthquake Technology.

#### **About IGS Vellore Chapter:**

Founded in 1948, the Indian Geotechnical Society (IGS) is a leading organization advancing Geotechnical Engineering in India. Originally named the "Indian National Society of Soil Mechanics and Foundation Engineering," IGS now includes Local and Student Chapters across the country. It partners with national and international bodies to foster innovation, with student chapters playing a crucial role in developing future Geotechnical Engineers.

### About Workshop:

In an era marked by rapid urbanization and environmental challenges, the event "Building the Sustainable Solutions in Modern Future: Infrastructure Development" underscores the critical need for innovative and eco-conscious approaches in constructing and designing infrastructure. It explores how integrating sustainability into infrastructure projects can address pressing issues such as climate change, resource depletion, and urban sprawl. It also highlights the importance of adopting renewable materials, energy-efficient technologies, and cutting-edge design strategies to create resilient and environmentally responsible structures. By focusing on sustainable practices, this event aims to inspire new ideas and solutions that not only meet current needs but also ensure long-term benefits for future generations. The event will bring together students from different field of engineering disciplines to share insights and showcase innovative projects, paving the way for a sustainable future in infrastructure development.

The objectives of the event are

- To engage participants in the design and creation of models that reflect sustainable infrastructure principles.
- To explore innovative materials, energyefficient technologies, and eco-friendly construction methods.
- To foster collaboration and exchange of ideas on practical applications of sustainable solutions.

### **Organizing Committee**

### **Chief Patron:**

Dr. G. Viswanathan, Chancellor

### Patrons:

Mr. Sankar Viswanathan, Vice President Dr. Sekar Viswanathan, Vice President Dr. G. V. Selvam, Vice President Dr. V.S. Kanchana Bhaaskaran, Vice Chancellor Dr. Partha Sharathi Mallick, Pro Vice Chancellor Dr. T. Jayabarathi, Registrar

### **Convener:**

**Dr. A. S. Santhi**, Professor (HAG) and Dean School of Civil Engineering, VIT Vellore.

### Co- Convener:

**Dr. A. Punitha Kumar**, Associate Professor and HOD, SGE, SCE, VIT Vellore **Dr. S. Mahenthiran**, Associate Professor and HOD, EWRE, SCE, VIT Vellore

# IGS, Vellore Chapter

**Dr. Porchelvan P,** Professor (HAG) and Chairman **Dr. Arunava Rai,** Asst Professor and Secretary

# **ISET, Vellore Chapter**

**Dr. G. Mohan Ganesh,** Professor (HAG) and Chairman **Dr. P. Rama Mohan Rao,** Professor and Secretary

### **Coordinators:**

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# **Model Making Session:**

- Participants should bring materials to create models demonstrating sustainable infrastructure concepts, such as green buildings, renewable energy systems, and water conservation features.
- Each group may consists of maximum of 3 students.

# Materials to be used:

• Model-making materials (e.g., cardboard, eco-friendly paints, recycled items)

# Who should attend?

- Students and professionals in architecture, engineering, and environmental science.
- Anyone interested in sustainable design and infrastructure development.

# **Presentation and Discussion:**

• Each team or individual will present their model, explaining the sustainable features and design considerations. Feedback will be provided by industry experts.

# **Registration:**

- Last Date of Registration: 11/09/2024
- Register online at: <u>https://events.vit.ac.in/</u>
- Registration Fees (excluding GST):

Category	Fees
Students	Rs. 100 /-