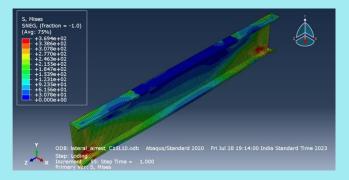


# One Day Workshop On Cold-Formed Steel Structures



Date: 29<sup>th</sup> September, 2023
Organized by

Department of Structural and Geotechnical Engineering

# School of Civil Engineering VIT, Vellore

In association with

# Indian Society of Earthquake Technology (ISET)

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 2023, in Engineering and Technology, VIT stands 240th best in the World, the 9th best in India, and by Subject 2023: Computer Science and Information Systems, VIT stands under the band of 201- 250, securing 8th rank in India. Also based on the same survey, eight subjects of VIT are within the top 500 in the world. It is ranked the 8th best University, 11th best Research institution, and the 11th best Engineering institution in India (NIRF ranking, Govt. of India 2023) 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 of Technology (QUT), West Virginia 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 Workshop:**

Cold-Formed Steel (CFS) members are made from structural quality sheet steel that is formed into variety of sections and shapes by roll forming the steel through a series of dies. CFS is light weight, extremely strong, non-combustible and relatively easy to install. CFS structures have a wide range of applications in our daily lives. In civil engineering, they are commonly used as primary or secondary load carrying structural elements such as roof and wall members, purlins, steel framing, trusses, lattice beams or mezzanine floor beams.

The main aim of this workshop is to provide basic insights of cold-formed steel member design using various codes of standards. Also, the event covers the effective width and direct strength methods of design procedures. Moreover, it focuses on the behaviour of CFS structural elements under bending, buckling and compression, etc. The workshop will provide a platform for under graduate and post-graduate students, research scholars, faculties, and design engineers to understand the in-depth knowledge in the field of cold-formed steel structural design.

## **Topics to be covered:**

- Limit State Design of Cold-Formed Steel Members: The Effective Width and Direct Strength Methods.
- Stability Aspects in Cold-Formed Steel Compression Member Design.
- Buckling Characteristics and Strength of Cold-Formed Steel Members under Bending.

#### **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

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#### **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**, Assistant Professor Sr. and HOD, EWRE, SCE, VIT Vellore

#### **Resource Persons:**

- Dr. J. Vijaya Vengadesh Kumar Assistant Professor, NIT Surathkal, Karnataka
- Dr. Raghavan Ramalingam
   Assistant Professor,
   NIT Tiruchirappalli, Tamil Nadu
- Dr. Hareesh M
  Assistant Professor Sr.,
  Vellore Institute of Technology, Vellore

### **Targeted Participants:**

- Under Graduate and Post Graduate Civil Engineering Students and Research Scholars.
- Faculties, Consultants and Designers.

### **Registration:**

- Last Date of Registration: 22/09/2023
- Register online at: <a href="https://events.vit.ac.in/">https://events.vit.ac.in/</a>
- Registration Fees (excluding GST):

Category	Fees
Students	Rs. 500 /-
Faculty/Industry	Rs. 1000 /-

## **Coordinators:**

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#### **ISET- Coordinators:**

**Dr. G. Mohan Ganesh**, Professor (HAG), School of Civil Engineering, VIT Vellore.

**Dr. P. Rama Mohan Rao**, Professor, CDMM, School of Civil Engineering, VIT Vellore.