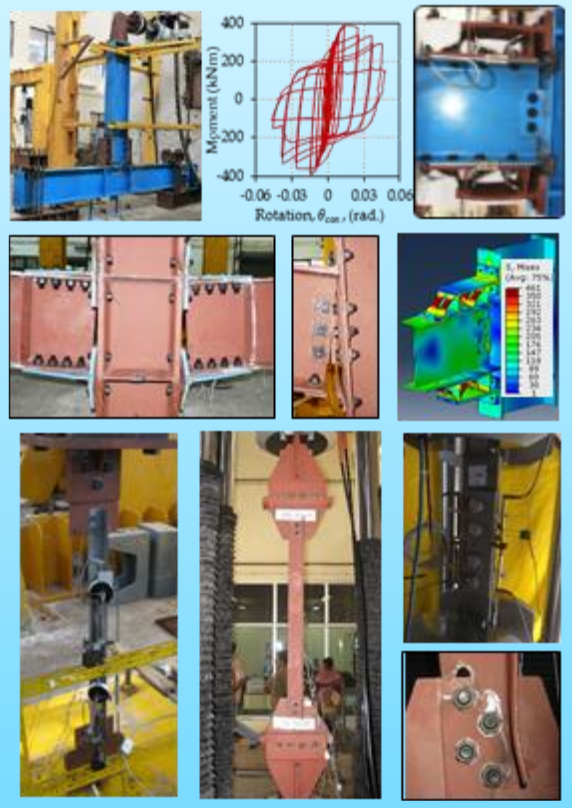
Online Advanced Course on

Behaviour and Design of Connections in Steel Structures (BDCSS-2021)

Duration: 20-22 January 2021
Timings: 10.00 AM to 4.00 PM IST



Organized by
CSIR-Structural Engineering Research Centre
(An ISO 9001:2015 Certified Organization)
CSIR Campus, Taramani
Chennai-600113, India

Overview:

CSIR-Structural Engineering Research Centre, Chennai, is one of the national laboratories under the Council of Scientific & Industrial Research (CSIR), India. CSIR-SERC has built-up excellent facilities and expertise on analysis, design and testing of structures and structural components. The Steel Structures Laboratory (SSL) of CSIR-SERC has been actively involved in R&D activities for about two decades related to performance assessment of various steel structural components and connections through experimental, numerical and analytical studies under monotonic and cyclic loadings. It has also largely contributed in the development of IS 800: 2007 and the related design handbook. As a part of CSIR Integrated Skill Initiative, an Advanced Course on "Behaviour and Design of Connections in Steel Structures (BDCSS '21)" is organized by SSL during 20-22 January 2021.

Background:

Steel structures are widely used in seismic zones due to their inherent ductility, faster construction and quality control. However, these advantages mainly depend upon the design/choice of connections between members, which play a major role in the aspects such as stiffness, strength and ductility of buildings. No specific guidelines are available to design or choose the type of connections and it is left to designer's discretion. Hence, thorough understanding of force flow, which is different for each type of connection within the joint is essential to design safer steel buildings. Further, major portion of construction time is spent in fabrication and installation of connections requiring highly skilled manpower for better quality. Hence, primary importance should be given to the design of connections for safety and faster construction with quality.

Objectives:

This course aims to introduce all the aspects needed for safe, economic design and analysis of shear and moment resistant connections in steel structures. The design is not dealt according to any specific standards, but through comparison will be made among the different norms and methodologies used in the engineering practice, for e.g. Indian Standard, Eurocode, American, etc. This course will be useful for practitioners, designers and fabricators for proper design and detailing of connections in steel structures.

Course contents:

The scope of the course brings together the needs of researchers as well as designers regarding design of connections in steel structures. Topics of particular importance include bolted and welded connections, Semi-rigid beam-column connections, Seismic resilient connections, column base connections, cold formed steel connections, etc. The lectures will also illustrate the experimental behaviour based on the investigations conducted at CSIR-SERC.

Fee:

Rs.1500/- per participant inclusive of GST for Indian delegates and US$40/- for foreign delegates. Presentation material (pdf format) and e-participation certificate shall be provided to all the registered participants. The brochure and details of the registration can be downloaded from the CSIR-SERC web site **https://serc.res.in/course**

Registration:

The course registration can be completed via online **(http://forms.serc.res.in/view.php?id=33087).**
Please choose/select the intended course title in the online registration form and fill all the particulars and pay the registration fee by clicking the **SBI collect** in the registration form.

Requirements for the online mode:

Desktop/Laptop/Smartphone with good internet speed and sufficient data pack. A web link will be sent to the registered participants for joining the course.

For further details, please contact

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