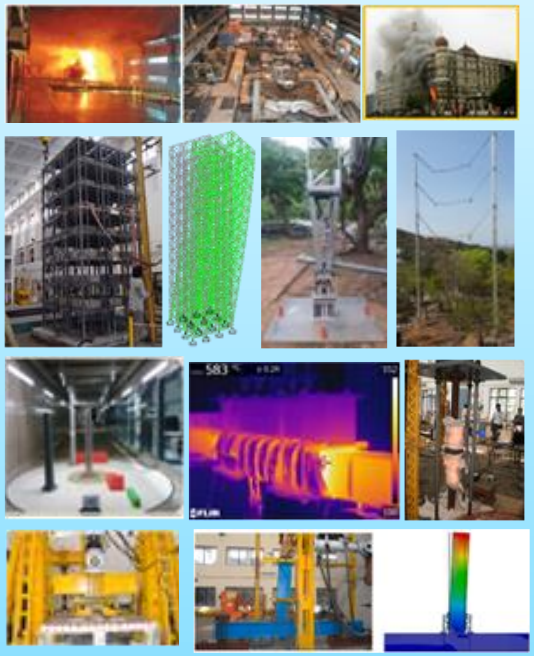
Advanced Course on

Analysis and Design of Steel Structures for Extreme Loads (ADSSE-2024)

22nd -24th , January 2024



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. The Steel Structures Laboratory (SSL) of CSIR-SERC has been actively involved in R&D activities for about three decades related to the analysis, design, and testing of structures and structural components. Condition assessment studies, as well as retrofitting and rehabilitation of various industrial structures, towers, and bridges, are among the other activities carried out by scientists at SSL. The scientists of SSL team have also contributed significantly in the development of IS800:2007 and the related design handbook.

Background:

Resilient building design is of paramount importance for ensuring structures' safety, functionality and sustainability in the face of natural and manmade disasters and climate change. According to a report by the United Nations Office for Disaster Risk Reduction (UNDRR), disasters caused approximately $2.9 trillion in economic losses globally between 2000 and 2019, affecting over four billion people. This highlights the need for resilient building design to ensure that buildings can withstand the impact of such disasters and provide shelter for their occupants. This comprehensive short course will provide guidance for analyzing and designing steel structures to safely withstand extreme loading, including wind, earthquakes, impact, blast, and fire, in compliance with codal provisions.

Objectives:

The primary objective of the course is to provide an opportunity for researchers, practicing engineers, academicians, and consultants from both the public and private sector organizations/institutions, as well as other engineering professionals, to familiarize themselves with the analysis and design of structures against extreme conditions such as seismic events, cyclones, fire, and blasts.

Course contents:

Basics of design of steel structures for extreme loads seismic resistant design of components, connections and structures, construction considerations in the design of high-rise buildings with steel, fire and blast resistant design of steel structures, vibration control of steel structures, design, analysis, testing, repair and retrofitting of transmission line towers, etc. The lectures will also illustrate the experimental investigations conducted at CSIR-SERC.

Faculty:

Faculty for the course would comprise mainly scientists from CSIR-SERC and experts from reputed research/academic institutions/industry.

Venue and Duration:

Training and Development Complex (TDC), CSIR-SERC, Chennai.
Timings: 09:00AM to 05:30 PM

Registration and Fee:

Registration fee is Rs.9000/- per participant inclusive of GST for Indian delegates and US$400/- for foreign delegates Course material (pdf format) and participation certificate shall be provided to all the registered participants. The above registration fee includes a kit, lunch and refreshments for three days. Participants can register online for this course by using the provided weblink: **(https://serc.res.in/course).**

Please select the intended course, fill all the particulars and pay the registration fee using SBI collect link in the form.

Travel, Boarding and Lodging Arrangement

The participants or their sponsoring organizations must bear travel, boarding and lodging expenses. Limited accommodation in the Guest House/Trainee's Hostel at CSIR-SERC Campus may be arranged on a first-come-first-served basis at extra cost. Participants wishing to avail of this facility are advised to write to the course coordinator well in advance, and in any case, not later than Jan 15, 2024.

For further details, please contact

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