INR Rs. 3000/- per participant inclusive of GST for working professionals, Rs. 1500/- for student participants and US \$ 450/- for foreign delegates. Presentation material (in pdf format) and participation certificate will be provided to all the registered participants.

# Procedure

The course registration can be completed via online form which can be obtained using the URL below:

https://serc.res.in/course

# **Boarding and Lodging**

Limited accommodation in the Guest House/Trainee Hostel at CSIR-SERC campus can be arranged on first-come first-serve basis at extra cost. Participants, who wish to avail this facility, are advised to write to the coordinators well in advance.

# **Prerequisites**

The course registrants can ensure adequate knowledge on the background to course contents through academic qualifications/ working experience to fully exploit the benefits of attending advanced courses.

# Scan QR Code:



https://youtu.be/joc2sFDksi4? feature=shared



# Mr. J C Sunil

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# **Course Details**

#### Overview

CSIR-Structural Engineering Research Centre, Chennai is one of the constituent laboratories of Council of Scientific & Industrial Research (CSIR), India. CSIR-SERC has been certified as ISO 9001:2015 quality institution. It has excellent facilities and expertise for the analysis, design and testing of structures and structural components. As part of the CSIR Integrated Skill Initiative, CSIR-SERC is organizing the Advanced Course on Seismic Engineering and Testing.



# Background

The current principal challenge in Structural Engineering lies in developing Innovative Concepts to protect buildings and structures during all sorts of natural and man-made hazards. As per latest draft Indian Standard IS:1893 (Part 1) 2023, in the revised Seismic Zonation map, 59% of the land area (with over 78% of its population living in it) is prone to moderate to severe earthquake shaking intensities. Advanced Seismic Testing and Research (ASTaR) Laboratory, with its state-of-the-art testing facilities, has contributed to fundamental and applied research in the field of Earthquake Engineering.

# **Objectives**

The course is intended with the objective of disseminating the knowledge and expertise accrued over the years to a larger engineering fraternity. The course would allow the participants to familiarize themselves with the recent advancements. It is sincerely expected that the course would be useful for students, researchers, scientists, academicians, design and practicing engineers, managers and other engineering professionals working or intended to work in the area of earthquake engineering and also, would provide direction for future developments in this area.

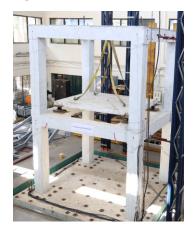


#### **Course Contents**

The course is envisaged to familiarize the participants with the latest, yet to be implemented, draft provisions in Indian design standards, comparison with International standards, experimental techniques for evaluation of RC and structural masonry buildings, seismic safety of specific typology of structures such as buildings with geometrical irregularities, Open Ground storey buildings and Moment Resisting Frames,

Seismic vulnerability assessment of RC bridge piers, application of Artificial Neural Networks (ANNs), Magneto-Rheological (MR) smart systems as semi-active vibration control technique and hybrid testing methodologies in the field of seismic engineering.

A visit to different laboratories of CSIR-SERC is arranged for the benefit of participants.



# Duration

Date: 07-09 October 2025 Time: 09.30 a.m. to 05.00 p.m.

# **Faculty**

Faculty for the course mainly comprises of Scientists from CSIR-SERC.

### Venue

Training and Development Complex, CSIR-SERC, Chennai

