Online
Advanced Course on
"Forensic Analysis of Concrete Structures" (FACS'22)
24th & 25th March 2022

Organised by
CSIR-Structural Engineering Research Centre
CSIR Campus, Taramani,
Chennai – 600 113, India

CSIR-Structural Engineering Research Centre

CSIR-Structural Engineering Research Centre, Chennai, one of the national laboratories under the Council of Scientific Industrial Research, India has built up excellent facilities and expertise for the analysis, design and testing of structures and structural components. Services of CSIR-SERC are being extensively used by the Central and State governments, public undertakings and private sector. Scientists at CSIR-SERC serve on many national and international standards/committees. The Centre is recognized at the national and international levels as a leading research institution in the field of Structural Engineering. CSIR-SERC is conducting skill development programme with the motive of creating skilled workforce for the Industrial/societal requirements as a part of the skill initiative programme of CSIR.

Background

Structures undergo damage and distress even before their intended service life period, which need to be rectified for continuing their safe usage. Failure may be defined as an unacceptable difference between expected and observed performance. Forensic structural engineering refers to investigation and determination of the causes of structural failures of structures. In case of concrete structures, various methods such as advanced non-destructive techniques, testing of concrete and reinforcement for physical and chemical properties, analytical and numerical methods to evaluate the existing strength, load carrying capacity and suggesting repair retrofitting techniques.

Objectives

As forensic analysis is being recognized as an important tool to evaluate the causes and mechanism of structural failure, it has become essential for engineers to know in detail about various aspects of it. This course aims to meet the following objectives: To explain important structural failure mechanisms, to apply various advanced non-destructive techniques to assess the existing building strength, to evaluate strength parameters from concrete core samples, Petrography analysis, Codal Provisions, to determine whether to continue the usage of structure by retrofitting or to demolish.

Course Content

The course will cover the present state-of-the-art knowledge in the related theme and deal with practical aspects of forensic analysis. The scientists of the centre will present the R&D work of CSIR-SERC highlighting the research results in respect of analysis of distressed structures and the methodology formulated for condition assessment and service life prediction. The participants will be exposed to the recent developments on new materials and techniques used for rehabilitation of distressed concrete structures.

The course will be conducted online on 24th and 25th March, 2022 from 10.00 am to 5.00 pm IST

Fees and Registration

INR 1000/- per participant (inclusive of GST) for Indian nationals and US $ 25 for foreign nationals.
The course registration can be completed online by clicking here (http://forms.serc.res.in/view.php?id=33087).
Kindly select 'Forensic Analysis of Concrete Structures (24-25, March 2022)' in the course title and fill all the particulars online. The registration fee for the course can be paid by clicking the SBI collect link in the registration form.

"Certificate will be issued to all registered participants"

Requirements for 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, contact course co-ordinators
Dr. S. Sundar Kumar & Dr. P. Srinivasan
CSIR-Structural Engineering Research Centre,
Taramani, Chennai 600 113.
E-mail: ssk@serc.res.in, sriniv@serc.res.in
Off: +91 44 22549156, +91 44 22549170,
Mob: +91 96000 25950, +91 94440 76872
Website: www.serc.res.in