

# Online Advanced Course on Fatigue and Fracture Behaviour of Steel and Concrete Structures and Components (FFBSCSC '22) 19 & 20 May 2022



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

## About CSIR-SERC

CSIR-Structural Engineering Research Centre (CSIR-SERC), 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 for analysis, design and testing of structures and structural components. Services of CSIR-SERC are being extensively sought by the Central and State Governments and public and private sector undertakings. Scientists of CSIR-SERC serve on many national and international committees and the Centre is recognized at the national and international levels as a leading research institution in the field of structural engineering.

## About the Course

The course provides necessary background to basic concepts of fatigue and fracture including design of components and structures against fatigue. The course gives an opportunity for engineering professionals to familiarize themselves with the recent developments in the area of fatigue and fracture mechanics, and design of components/structures against fatigue and fracture. The course will be focused on materials, components and structures, numerical techniques for fatigue and fracture of components and structures. The topics to be covered during the Course include:

- ◆ Introduction to fatigue and fracture
- ◆ Introduction to concrete fracture and evaluation of fracture parameters
- ◆ Fracture mechanics-based life assessment of components/structures
- ◆ FEM and analytical modelling for fatigue and fracture
- ◆ Fatigue strength and life studies on offshore and automobile components
- ◆ Experimental studies on fatigue and fracture behaviour of structural components
- ◆ Fatigue behaviour of RC structures including strengthened RC beams
- ◆ Metallurgical aspects of fatigue and fracture & failure analysis

Scan the QR Code for  
Course Promo Video



## Participation

The course is open to practicing engineers, researchers, academicians, consultants, research scholars, stake holders and decision makers in public and private sector organizations. The number of participants is limited and on first-come first-serve basis.

## Duration

19 & 20 May 2022; Time: 09.30 a.m. to 5.30 p.m.

## Fee

The registration fee for the course is Rs. 1,000/- (inclusive of GST) per participant for Indian delegates and US\$ 25/- for foreign delegates. Presentation material (pdf format) and 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 through online at <http://forms.serc.res.in/view.php?id=77571>. 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.

**Coordinators Dr. S. Vishnuvardhan  
and Dr. A. Ramachandra Murthy**

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