



## ON-LINE REFRESHER COURSE ON

# SEISMIC REHABILITATION AND RETROFITTING OF BUILDINGS

*04 September, 2021 till 02 October, 2021  
Every Saturday from 15:00 Hours to 18:00 Hours (IST)*



### ABOUT THE COURSE

Seismic rehabilitation and retrofitting is the modification of existing structures to make them more resistant to seismic activity, ground motion or soil failure due to earthquakes. India has witnessed several moderate earthquakes in the last couple of decades causing huge number of fatalities and innumerable house collapses. The prevalent high earthquake hazard, large exposure and high vulnerability indicates that urgent proactive action is necessary. Thus, seismic retrofitting is not just an option, but a national urgency. The problem is compounded by the fact that over 95% of fatalities in past earthquakes in India have occurred in non-engineered houses and structures, which is a significant portion of the building habitat that exists. Significant gains can be made towards reducing (if not eliminating) loss of life by undertaking seismic strengthening of these non-engineered structures by retrofitting.

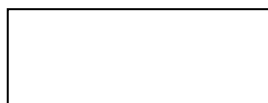
The main objective of this Refresher Course on “SEISMIC REHABILITATION AND RETROFITTING OF BUILDINGS” is to build capacity by throwing light on current scenario, giving background information about the works done so far, stimulating focus on the earthquake problems, extending knowledge concerning earthquakes, and giving ideas and reassurances to those faced with the task of building a safer future for the public. .

This course is aimed not only at all classes of engineers, novice and experts, but also targeted for the graduate / post graduate students, who are not so well conversant with the practical aspect of seismic rehabilitation and retrofitting of existing structures. The course is intended as a comprehensive educational training which can be considered for internship of the students.

Topics to be covered, include Issues and Challenges during Safety Audit of Buildings; Overview of National and International Codal Provisions on Seismic Evaluation, Repair and Strengthening of RCC and Masonry Buildings; various existing techniques for Seismic Strengthening and Retrofitting of Buildings; Energy dissipation retrofit techniques for seismic upgrading of buildings. Also Case Studies on Seismic Resilience and Characteristic Seismic Failure of RCC, Masonry Buildings will be covered in this course. The speakers for this course are all experts in the field and eminent members from the industry, academia and R&D who are involved in research and actual design & application of retrofitting measures in the real life cases.

#### DIAMOND SPONSORS

#### SUPPORTERS



## HOW TO REGISTER

**STEP 1:** Registration fee shall be paid through NEFT/RTGS/UPI as per bank details given below :

Beneficiary: Indian Association of Structural Engineers;  
C. Account No.: 10151200388, IFSC: SBIN0007196  
MICR: 110002034; Bank: State Bank of India(07196)  
Branch Address: Flyover Market, Defence Colony, ND 110024

**STEP 2:** The details of the participant (Name, Designation, Organization, Email id, Mobile) along with the proof of the payment shall be sent to [iastructe@gmail.com](mailto:iastructe@gmail.com) for registration. Students must send their valid student ID card (scanned) along with proof of payment. The registration link for webinar shall be sent prior to the every lecture to the confirmed participants.

Registration Link: <http://iastructe.co.in/online-refresher-course.php>

### REGISTRATION FEE

IAStructE Members : Rs 4,500/-\* + 18% GST

IAStructE Student members : Rs 1,000/- + 18% GST

Non Members : Rs 7,500/-\* + 18% GST

Students : Rs 2,000/- + 18% GST

Foreign Nationals : USD 100 or  
INR 7500/- + 18% GST

*(Foreign nationals - 20% discount for members of MoU Associations)*

*\* Additional 10% discount for Young engineer age upto 35 yrs*

*Every five registration from one organization will entail one free registration from the same organization*

*(E-certificate of participation will be provided to those who will have 80% attendance)*

*Proficiency certificate will be provided to those who will qualify the assessment test*

### SPONSORSHIP OPTION

ENTITLEMENTS	DIAMOND SPONSOR INR 3,00,000 + 18% GST*	SUPPORTER INR 1,00,000 + 18% GST*
Presentation Slot	15 mins.	N.A..
Advertisement in SED (Quarterly journal of IAStructE published as soft copy)	One Colour Page	One Colour Page
Logo in Poster & all related correspondence		
Company Profile to all delegates		

\* Indian Sponsor can either pay GST @ 18%  
or settle through Reverse Charge Mechanism

# Programme

## Refresher Course on Seismic Rehabilitation and Retrofitting of Buildings

(TIMINGS FOR THE COURSE : 15:00 HRS TO 18:00 HRS)

**Course Coordinator :** **Dr. Shilpa Pal**, GC member IAStructE &  
Associate Professor, Delhi Technological University

**Course Co-Coordinator:** **Mr Sandeep Donald Shah**, Fellow IAStructE &  
Country Head and MD – Taylor Devices India

S. No.	Title	Duration	Faculty
<b>DAY 1 (04<sup>th</sup> September 2021)</b>			
<b>Welcome &amp; Inaugural (15 mins)</b>			
1	Seismic Performance, Rehabilitation and Retrofitting of Buildings – Review of current scenario and Way forward [Keynote Lecture]	1 hour	Prof. C.V.R. Murthy Professor, IIT Madras
2	Introduction to various techniques for Seismic Strengthening and Retrofitting of Buildings	1 hour	Prof. Yogendra Singh Professor, IIT Roorkee
3	Sponsored presentation	15 mins	TBN**
4	Panel Discussion and Q&A	30 mins	Discussion by panellist
<b>DAY 2 (11<sup>th</sup> September 2021)</b>			
5	Rapid Visual Screening of Buildings	1 hour	Prof. R. Pradeep Ramcharala Professor, IIIT Hyderabad
6	Safety Audit of Buildings – Issues and Challenges	1 hour	Ms. Sangeeta Wij Managing Partner, SD Engineering Consultants LLP
7	Sponsor presentation	15 mins	TBN**
8	Panel Discussion and Q&A	30 mins	Discussion by panellist
<b>DAY 3 (18<sup>th</sup> September 2021)</b>			
9	Seismic Retrofit Strategies and their efficacy	1 hour	Ms. Alpa Sheth Managing Director, VMS Consultants Pvt Ltd.
10	Broad overview on Provisions of IS 15988 IS: 13935 - Seismic Evaluation and Strengthening of Existing Reinforced Concrete Buildings — Guidelines	1 hour	Prof. Durgesh Rai Professor, IIT Kanpur
11	Broad Overview of Codal Provisions of Seismic Evaluation, Repair and Strengthening of RCC Buildings	1 hour	Prof. P.R. Bose Retd. Prof. DTU, Delhi & Associate Director, DDF Consultants
12	Panel Discussion and Q&A	30 mins	Discussion by panellist
<b>DAY 4 (25<sup>th</sup> September 2021)</b>			
13	Seismic Resilience of Reinforced Concrete Buildings: Part 1. Characteristic Seismic failures Part 2. Strengthening using Novel Construction Materials	1 hour	Dr. Andreas Lampropoulos, Principal Lecturer, University of Brighton, UK
14	Seismic Resilience and Characteristic Seismic Failure of Buildings in Masonry – Few Case Studies and Analysis	1 hour	Dr Eftychiya Apostolidi*, University of Natural Resources and Life Science, Vienna, Austria
15	Seismic Strengthening of Foundation	1 hour	Prof G L Sivakumar Babu Professor, Geotechnical Engg Division Indian Institute of Science, Bangalore
16	Panel Discussion and Q&A	30 mins	Discussion by panellist
<b>DAY 5 (02<sup>nd</sup> October 2021)</b>			
17	Seismic Resilience Rating of Buildings	1 hour	Evan Reis* Executive Director, US Resiliency Council
18	Case Study - Retrofitting of Schools (Masonry structures)	1 hour	Dr. Hemant Kr. Vinayak, NITTTR, Chandigarh
19	Case Studies - Retrofit Seismic Upgrade of buildings using energy dissipation	1 hour	Mr. Sandeep Shah Country Head and MD – Taylor Devices India
20	Panel discussion and Q&A	30 mins	Discussion by panellist
21	Closing Remarks		

\* Subject to the confirmation

\*\* TBN: To be notified