Five-Days Online STC

on

Repair & Retrofitting of Structures: Challenges and Solutions

27th to 31th January 2022



Coordinators

Dr. Joy Pal Dr. Vimal Kumar

Organized by



Department of Civil Engineering National Institute of Technology Hamirpur Hamirpur-177005 (H.P.)

About the Institute

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, which came into existence on 7th August 1986 as Regional Engineering College, a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. On 26th June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology. The Institute offers Bachelor, Master and Doctoral programs in Engineering, Sciences, Architecture, Management and Humanities. Various programs serve the purpose of building a comprehensive foundation of knowledge and of enhancing confidence, creativity and innovation in its students.

About the Department

National Institute of Technology, Hamirpur was established in the year 1986 and the Civil Engineering Department is part of the institute since its inception. Civil Engineering is the branch with a lot of diversity right from structural to transportation engineering, environmental to hydrology to hydraulics engineering, geology to geo-technology to earthquake engineering. Being one of the primary Engineering Departments of the Institute, the Department of Civil Engineering offers B. Tech., M. Tech. and Ph.D. degree programs. The Department has been imparting quality education at undergraduate and postgraduate levels. The faculty members have been active in teaching, research as well as academic activities.

Committee

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Director, NIT Hamirpur (H.P.)

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Dr. Surjit Singh Katoch

Head, DoCE, NIT Hamirpur (H.P.)

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Assistant Professor, DoCE, NIT Hamirpur (H.P.)

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About the e-STC

The key objective of structural design is to ensure overall safety while performing its intended use. However, the structures show degradation over passes of time. Moreover, damaging seismic activities further reduce the strength and stability of the structures. Hence, the old and degrading structures have started to show a serious need for additional repairs and retrofitting. Repairing and Retrofitting are perhaps the most ideal alternative to make an existing lacking structure protected against future dangers and other natural powers.

The primary aims of this e-STC are to enhance technical and professional competency as well as organizing skills of the faculty members for repairing and retrofitting the existing structures. The STC will promote interaction with professionals working in specific areas of research in Academic Institutions, Research Labs, and Industries. Also, exposure will be provided to the audience from renowned speakers on the latest developments in Academia, Research and Industry. This program will bring a positive transformation among the faculty members, research scholar and participants from industries towards research work, and enable the participants to develop competence in understanding—recent advances in proposed topic of the STC.

Topics to be covered

- Repairing and retrofitting of RCC/steel structure
- Retrofitting of fire/corrosion affected structures
- Water proofing of basement and terraces
- Repairing and retrofitting of non-engineered and masonry buildings
- Latest techniques in repair and retrofitting
- Structural health monitoring

• Chemicals for repair & Case studies etc.

Resource Persons

- Prof. A. R. Santhakumar, Former Emeritus Professor, IIT Madras
- > Prof. Umesh Kumar Sharma, IIT Roorkee
- > Prof. Pankaj Agrawal, IIT Roorkee
- ➤ Prof. Sauvik Banerjee, IIT Bombay
- Prof. Anjan Dutta, IIT Guwahati
- > Dr. Achal Kumar Mittal, CBRI Roorkee
- > Prof. Hemant B. Kaushik, IIT Guwahati
- ➤ Prof. Samit Ray Chaudhuri, IIT Kanpur
- > Prof. S. K. Deb. IIT Guwahati
- Prof. Hemant Kumar Vinayak, NITTTR Chandigarh
- > Prof. Naveen Kwatra, TIET Patiala
- > Prof. Aditya Singh Rajput, IIT Ropar
- Er. Vaibhav Gupta, Technical Head, UltraTech Cement
- > Dr. Mangesh Joshi, Sanrachana Structural Strengthening Pvt. Ltd.
- > Dr. Abhay Gupta, Skeleton Consultants Pvt. Ltd.

Important Dates

Last date (Online Registration): 24-01-2022 Confirmation by E-mail: 25-01-2022 e-STC Duration: 27-01-2022 to 31-01-2022

Eligibility

This program is open to faculty members, scientists, Ph.D. and research scholars, P.G. & U.G. students and industrial personnel.

Registration Fee

The fee will be collected through SBI Collect.

- (a) Rs. 200 for Students
- (b) Rs. 500 for participants from Academia/R&D Labs

(c) Rs. 1000 for participants from Industry

How to Apply

The interested candidates must deposit the non-refundable registration fee only through SBI collect with the following procedure:

- a. Go to SBI collect and choose Himachal Pradesh as state of Institution and type of Institution as educational institute.
 - https://www.onlinesbi.com/sbicollect/icollecthome.htm
- b. Choose NIT Hamirpur from Name of the Institutions and Select payment category as WORKSHOP FDP STC CONFERENCE.
- c. Generate the payment slip.
- d. Fill the registration form (mandatory) using the following link and also upload the payment slip.

https://forms.gle/grqCZU8FaEJCCHs6A

<u>Notes:</u> *The applications will be accepted on first-cum-first serve basis.

*Venue: Online mode, link for the same will be shared later to registered participants.

e-Certification

E-certificates will be provided to the participants, with at least 80% attendance, upon successful completion of the program.

Contact Details

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