



3rd Seminar on 'Corrosion Control in Concrete Structures (C³S)'

Saturday, June 15, 2019 ; Auditorium, IC & SR building, IIT Madras, Chennai

About the Seminar

India is witnessing a significant boom in the construction of many infrastructure systems (highway/railway bridges, ports/harbours, high-rise buildings, etc.). These concrete structures are designed for the service life more than 100 years. Unfortunately, many concrete structures are experiencing premature corrosion and not able to meet the design life requirements. Almost 50% of the concrete structures today experience a repair within about 10 years. About 40% of the cement produced in the country is used for repair practices. We spend about ~1 to 2 % of GDP in addressing the corrosion issues in concrete infrastructure. Therefore, we must educate our engineers on how to ensure the concrete structures are well-protected against corrosion. If we do not take adequate measures in this regard, then the future India will have to face an expensive challenge of repairing the large number of infrastructure systems that are being built now. This course is designed to help students and faculty members in civil engineering and practicing civil engineers to learn the basics of corrosion mechanisms in concrete structures and ways to protect the embedded steel from corrosion (in both existing and new structures). In particular, sufficient reading materials will be provided to enable further learning and be able to teach elective courses and practice good concrete engineering/corrosion control/construction practices. The lectures and laboratory sessions will cover the following topics with a blend of scientific principles behind, and the research- and practice-oriented viewpoints.

Tentative Schedule

Time	Topic	Speaker
08:00 – 08:45 am	Registrations & Tea/Coffee/Snacks	
09:00 – 10:00 am	Basics of electrochemistry & corrosion testing	Dr. Rangarajan S., BARCF, Kalpakkam
10:00 – 10:45 am	Corrosion in reinforced & prestressed concrete systems	Dr. Radhakrishna G. Pillai, IIT Madras
10:45 – 11:15 am	Tea/Coffee	
11:15 – 11:45 pm	Corrosion testing in laboratory & service life estimation	Ms. Sripriya Rengaraju, IIT Madras
11:45 – 12:30 pm	Corrosion testing in field – Case studies	Dr. Bhaskar Sangoju, CSIR-SERC
12:30 – 01:30 pm	Lunch	
01:30 – 02:15 pm	Performance based specifications	Prof. Manu Santhanam, IIT Madras
02:15 – 03:00 pm	Cathodic protection – Principles & case studies	Mr. Dhruvesh Shah, Vector Corr. Tech.
03:00 – 03:20 pm	Performance of epoxy-coated rebars	Dr. Radhakrishna G. Pillai, IIT Madras
03:20 – 03:40 pm	Tea/Coffee	
03:40 – 04:00 pm	Performance of CPC coated rebars	Mr. Deepak Kamde, IIT Madras
04:00 – 04:45 pm	Performance of galvanized rebars and protective coatings for steel	Dr. Haji Sheikh Mohammed, BSA Crescent Inst. of Sc. & Tech.
04:45 – 05:30 pm	Concrete surface coatings and inhibitors	Dr. P. Srinivasan, CSIR-SERC
05:30 – 05:45 pm	Concluding remarks & Certificate distribution	

Registration Fee

Industry personnel – Rs. 5,000/-; Faculty – Rs. 1,500/-; Researchers/scientists – Rs. 3,000/-
ME/MTech/PhD students with stipend – Rs. 1,500/-; All Students without stipend – Rs. 1,000/-

At the end of the program, all participants will receive a 'Certificate of Participation'.

Registration starts on **May 20th 2019**. Fill in the Online Registration Form at

https://docs.google.com/forms/d/e/1FAIpQLSemQCJmXluKITCzf7Sb_qLydXNnhCe6vZhS-Nlm-dXcxGjpw/viewform

Co-ordinators

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Check/DD in favour of "CORCON INSTITUTE OF CORROSION" payable at **MUMBAI** and sent to the following address:

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