Please mail to:

Dr. P. Srinivasan / Mr. Vimal Mohan
Course Coordinators (CRC'19)
Advanced Concrete Testing and Evaluation Laboratory
CSIR-Structural Engineering Research Centre
CSIR Campus, Taramani, Chennai - 600113,
e-mail: sriniv@serc.res.in; vm@serc.res.in
Phone: 044-22549170 /4721 Fax: 044-22541508

Registration

The registration fee for the course is Rs. 7,000/- (inclusive of GST at 18%) per participant. For foreigners, the registration fee is US $250/per participant. The brochure and details can be downloaded from CSIR-SERC website https://www.serc.res.in.

The registration fee covers registration kit which includes the course material, lunch and refreshments during the course period.

Application for participation in the course should be sent in the attached form along with registration fee to reach the course coordinators by 16th November 2019. The fee should be remitted by a crossed demand draft drawn in favor of "CSIR-SERC", payable at State Bank of India, Taramani, Chennai. For e-payment, please transfer the amount to "CSIR-SERC", Savings Account No. 30225927924 with SBI, Taramani (IFSC Code: SBIN0010673; MICR code: 600002130) towards CRC '19.

The number of participants will be limited to 40 on first come, first served basis. Intimation of acceptance of registration for the course will be communicated to the participants by 20th November 2019

Travel, Boarding and Lodging Arrangements

Travel, boarding and lodging expenses of the participants will have to be done by the participants or their sponsoring organizations. Boarding and lodging arrangements are to be made by the participants themselves. However, limited accommodation in the guest house at CSIR-SERC campus can be arranged on first come, first served basis at nominal cost. Participants, who wish to avail this facility, are advised to write to the coordinators well in advance.

Course Coordinators (CRC'19)

Dr. P. Srinivasan / Mr. Vimal Mohan

For further details, please contact
Dr. P. Srinivasan / Mr. Vimal Mohan
Course Coordinators (CRC'19)
Advanced Concrete Testing and Evaluation Laboratory
CSIR-Structural Engineering Research Centre
CSIR Campus, Taramani, Chennai-600113,
e-mail : sriniv@serc.res.in; vm@serc.res.in
Phone : 044-22549170 /4721 Fax:044-22541508
Mobile : 9444076872 /9940229373

Advanced Course on

Corrosion of Reinforcement and its Control (CRC'19)

28 – 29 November 2019

CSIR-SERC
ENGINEERING SUSTAINABLE STRUCTURES

An Activity Under CSIR Integrated Skill Initiative

CSIR SKILL INITIATIVE

Organised by

CSIR- Structural Engineering Research Centre
(An ISO Certified Organistaion)
CSIR Campus, Taramani, Chennai - 600113, India
https://www.serc.res.in

Advanced Course on
Corrosion of Reinforcement and its Control (CRC'19)

As part of CSIR Integrated Skill Initiative, an advanced course on Corrosion of Reinforcement and its Control (CRC'19) will be conducted by CSIR - Structural Engineering Research Centre (CSIR-SERC), during 28 - 29 November 2019.

Background

Corrosion of plain carbon steel reinforcement in concrete structures is a techno-economic problem for several reasons. Technically (i) it poses challenges in research and development to discover methods and materials either to control or prevent corrosion (ii) inspite of considerable research work world-wide, it is now well recognised that corrosion in plain carbon steel can only be controlled and a total prevention is nearly an impossible task (iii) corrosion of reinforcing steel in concrete is peculiar in the sense that the corrosion product, because of its volume growth, causes cracking to the concrete. This physical effect together with sectional loss of reinforcing bars affect the load carrying capacity, serviceability, and the service life of a structure (iv) rehabilitation of corrosion damaged structures is often cumbersome requiring high technical expertise and competence.

In the economic front (i) corrosion results in the loss of metal which is produced in a high energy - intensive process (ii) rehabilitation requires highly expensive materials resulting in huge expenditure (iii) sometimes it throws a structure out of function resulting in indirect loss of income (iv) in the case of infrastructure, it may jeopardize normal activities.

Durability with regard to corrosion has become the key issue and it is recognised that the life cycle cost of buildings and other structures which are corrosion-prone has increasingly become unmanageable. This is more true in the case of bridge structures world-wide. Therefore, efforts are to be more focussed towards this durability issue taking into account both technical and economical aspects. There are number of corrosion protection methods which have been developed recently and each one takes care of one or more parameters which influence corrosion. But none of them seems to give a guaranteed performance in resisting corrosion and a well-defined service life to structures. Further, such protection measures need to be applied in a periodical manner to control the corrosion process.

Objective

Since corrosion is recognised as one of the major durability problems in concrete structures, construction and maintenance engineers need to know more about the corrosion process, mechanism, and influencing factors, methods for identifying corrosion, corrosion control aspects etc. Realising this need, CSIR-SERC, Chennai is organising this course with the following objectives:

- To familiarise the participants on the basic aspects of corrosion process and mechanism.
- To create awareness on the latest developments in techniques and instrumentation used for condition assessment of reinforced concrete structures.
- To motivate the use of new materials and other corrosion control measures for construction of durable structures and rehabilitation of structures damaged due to corrosion.

Course contents:

The course will cover the present state-of-the-art knowledge in the related theme and deal with practical aspects of corrosion problem. The scientists of the centre will present the R&D work of CSIR-SERC highlighting the research results in respect of corrosion of rebar 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 corrosion protection and methods for construction of durable structure. The experience of CSIR-SERC in rehabilitation of corrosion-affected structures will also be discussed. The participants will be given opportunity to share their experience and discuss specific problems they have faced.

Topics

- Corrosion process, mechanism, and influencing factors
- Electrochemical aspects of corrosion of rebar and test methods
- Condition assessment of concrete structures - with particular emphasis on corrosion aspects
- Corrosion protection materials and techniques
- Materials and techniques for rehabilitation
- Methodology for risk assessment and service life prediction
- Performance specification and evaluation of materials used for corrosion control

Participation:

The course is designed to benefit design and construction engineers from government, public and private sector organisations, research scholars and scientists from academic and research institutions.

Faculty:

The faculty for the course consists of scientists from CSIR-SERC, Chennai, besides few experts from industries/academic institutions.

Venue:

CSIR - Structural Engineering Research Centre (CSIR-SERC), CSIR Campus, Taramani, Chennai

Duration:

2 days, 28 & 29 November 2019

Registration Form

Advanced Course on

Corrosion of Reinforcement and its Control (CRC'19)

28 & 29 November 2019

1. Name .....
2. Designation .....
3. Official Address .....

.....

.....

4. Address for correspondence .....

.....

.....

Phone: ..... Fax: .....

E-mail: .....

5. Qualifications .....
6. Area of interest and specialization .....

.....

7. Details of demand draft/e-payment

   (Bank/Number/Date/Amount) .....

.....

8. Requirement of accommodation at CSIR-SERC Trainees Hostel
   Yes ☐ No ☐

Date: Signature of the participant

Endorsement

We agree to sponsor (Name & Designation) .....

.....

of this organization for the above course. The course fee is attached in the form of Demand Draft / Proof of online fee payment has been enclosed.

Date: Signature and seal of the sponsoring Authority