

 organizes



**1-4 DECEMBER
2020**
WORKSHOP ONLINE

CACRCS DAYS 2020

*Capacity Assessment of Corroded
Reinforced Concrete Structures*

with the support of



For any information about the event, please visit the website: www.cte-it.org

3° ANNOUNCEMENT



Collegio dei Tecnici della Industrializzazione Edilizia

Organizes

CACRCS DAYS 2020 Capacity Assessment of Corroded Reinforced Concrete Structures

1-4 December 2020

Venue: ON LINE

PRELIMINARY PROGRAM

with the support of



Fédération International du Béton



fib Italy Young Member



Associazione Italiana Calcestruzzo
Armato Precompresso

TOPIC

The capacity assessment of corroding reinforced concrete, fibre reinforced concrete and prestressed structures has become a most relevant engineering task with significant social and economic impact. The need to develop codes for use in the practice spurs the research community to establish and share methods to determine material deterioration and mechanical properties, member resistance and structural capacity.

ORGANIZING COMMITTEE

Coordinator: **Beatrice Belletti, Dario Coronelli**
Anna Magri, *CTE*
David Fernández-Ordóñez, *Secretary General*
Luc Taerwe, *Editor-in-Chief Structural Concrete Journal*
Marta del Zoppo, Francesca Vecchi, Isabella Giorgia Colombo, *fib Italia Young Member*

SCIENTIFIC COMMITTEE

Carmen Andrade, Fabio Biondini, Fabio Bolzoni, Robby Caspeele, Airong Chen, Hugo Corres, Edoardo Cosenza, Marco di Prisco, Pawan Gupta, Mehdi Kashani, Federica Lollini, Karin Lundgren, Stuart Matthews, Camillo Nuti, Giovanni Plizzari, Zila Rinaldi, Jesús Rodríguez, Francesco Tondolo, Joost Walraven

CALL FOR ABSTRACT

The CACRCS DAY welcome all the contributions related to the behaviour of reinforced concrete, fibre reinforced concrete and prestressed structures damaged by corrosion both with numerical and experimental approaches.

PAPER SUBMISSION

Authors willing to present their work at the CACRCS DAYS 2020 are kindly invited to submit an abstract in accordance with the sessions of the workshop. The abstract should not exceed 750 characters. Accepted papers will be included in the Proceedings of the Workshop that will be send to Scopus-Database. The template for abstract and paper is available on the CTE website (www.cte-it.org).

AWARDS

Awards will be made to the most outstanding paper presented by a fib young member and to the most excellent paper presented in the workshop. will be awarded.

IMPORTANT DATES

abstract submission EXTENDED	12.09.2020
abstract acceptance notification	19.09.2020
full paper submission	19.10.2020
full paper acceptance	03.11.2020
final paper submission	15.11.2020
author's registration	15.11.2020
presentation submission	22.11.2020

VIDEO

As a speaker, You will present **in streaming** on Zoom from anywhere in the world. Anyway you will be invited to record your presentation and send it to the Organising Committee within 22.11.2020. We will use the registration only in the case, for any reason, you are unable to connect to zoom at the time scheduled for your presentation. The author will have to sign an authorization document in order to grant the use of the videos by the organizing committee for the purpose of the event.

The authorization document will soon be available on the website www.cte-it.org.

Recording/downloading of your video by other participants is strictly forbidden.

PRELIMINARY PROGRAM

Special sessions are organised during the workshop. Authors are kindly invited to select the session at which they will present their papers. At the beginning of each session, chairpersons prepare two education presentations: the first one illustrates the fundamental, while the second one the research challenges of the topic treated in the session. Therefore, the virtual workshop offers a didactic material for engineers, practitioners and a forum for scientists, concrete technologists, researchers, academics to improve knowledge about corrosion of reinforced concrete structures.

Tuesday 1 December

Airong Chen

Disease inspection and performance evaluation of concrete components in bridges: engineering practices in China

Stuart Matthews

fib Model Code 2020 and the life-cycle management of existing concrete structures

A1) Corrosion Induced Damage in Materials

Key-note Speakers:

Carmen Andrade

Advances in the description of corrosion induced cracking

Fabio Bolzoni

Experimental evaluation of rebars corrosion rate in concrete

A3) Mechanical Properties of Concrete and Steel, Bond - Slip Relation in the Case of Corrosion

Key-note Speakers:

Karin Lundgren

What do we know about concrete, steel, and bond-slip relation for corroded bars?

Francesco Tondolo

Research developments on bond between corroded steel and concrete

Wednesday 2 December

A2) In Situ Inspections in the Case of Corrosion

Key-note Speakers:

Pawan Gupta

Evaluation and Restoration of Severely Damaged Unbonded Post-Tensioned Structures"

Giovanni Plizzari

Design Aspects and Chloride-Induced Corrosion Behaviour of Fibre Reinforced Concrete Structures

B1) Experimental Tests on Corroded RC and PC Structures

Key-note Speakers:

Zila Rinaldi

Failure mechanisms in corroded RC and PC elements

Jesús Rodríguez

Some thoughts on structural performance of corroded concrete structures coming from past experimental results

Thursday 3 December

B2) Implementation of the Effect of Reinforcement Corrosion in Models for the Determination the Bearing Capacity

Key-note Speakers

Marco di Prisco,

Design approaches concerning SLS and ULS in corroded structural elements

Joost Walraven

Significance of reinforcement corrosion for modelling the behaviour of existing structures

C1) Case Study of Existing Structures and Infrastructures

Key-note Speakers:

Hugo Corres Peiretti

What do we need to understand in order to inspect, assess and design interventions in concrete structures affected by corrosion?

Edoardo Cosenza

Safety and Durability of RC and PC Italian Bridges: A New Guideline

Friday 4 December

C2) Performance of Corroded Reinforcement Concrete Structures in Seismic Situations

Key-note Speakers:

Mehdi Kashani

Seismic Performance of Corrosion-Damaged RC Bridges: Current Trends and Future Demands

Camillo Nuti

Bridge Pier Corrosion in Seismic Areas: Forecasting and Future Behaviour and Assessment

C3) Robustness and Resilience Issues of Corroded RC and PC Structures. Predictive Estimation of the Residual Life and Effects of Repairing Actions

Key-note Speakers:

Fabio Biondini

Life-Cycle Risk, Reliability, Robustness, and Resilience of Corroding RC/PC Bridges and Bridge Networks

Robby Caspeele

Time-Dependent Structural Resistance, Reliability and Robustness Assessment of Degrading Reinforced Concrete Structures Under Uncertainty: Recent Developments and Future Challenges

REGISTRATION FEES

are VAT exempted include participation to the virtual workshop, proceedings in electronic format. The membership to CTE or fib or aicap is required to participate.

Cte fib aicap Member

Registration fee **€50,00**

If you are not a member 2020 CTE or fib or aicap,

New CTE Member

Registration fee **€150,00**

Included the CTE Membership valid only for year 2021

Ordinary Member CTE fib aicap Member

Registration fee **€350,00***

Included the CTE fib aicap Membership valid only for year 2021

*The registration fee included the CTE fib aicap Membership valid **only** for year 2021 as Ordinary Member fib and individual member of aicap and CTE 2021

Payment

by bank transfer to CTE indicating
Name Surname – CACRCS 2020

CTE – Bank Intesa San Paolo

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CONTACTS

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For more information about the event, please visit the internet website www.cte-it.org

REGISTRATION FORM

Before the end of July it will be possible to **register** directly from the **CTE website** (www.cte-it.org) and make the payment by credit card or bank transfer.

Otherwise you can fill in the registration form and send it to info@cte-it.org with the copy of bank transfer

LAST NAME.....

NAME.....

Email.....

Company/University.....

INVOICING DATA:

Company name.....

Address.....

Zip Code.....

City.....

VAT/Fiscal Code.....

I authorize the processing of my personal information under D.Lgs. 51/2018. I agree with the processing of my data for receiving information about upcoming courses and for statistical purpose. At any time, pursuant to D. Lgs. 51/2018, I will be able to access my data, request their modification or cancellation.

Registration fee €.....

Did you have submit an abstract or a paper? If yes, please specify the ID Number.....

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Signature.....