CTE 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
3rd ANNOUNCEMENT

Collegio dei Tecnici della Industrializzazione Edilizia
Organizes

CACRCS DAYS 2020
Capacity Assessment of Corroded Reinforced Concrete Structures

1-4 December 2020
Venue: ONLINE

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 Pizzari, 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 18.08.2020
abstract acceptance notification 30.08.2020
full paper submission 12.10.2020
full paper acceptance 31.10.2020
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.
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*

**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*

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### Wednesday 2 December

**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*

**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*

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### 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*

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### 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
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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………………………………………………………….
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Registration fee €……………………………………...

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