

## Special Issue

# Structural Assessment of Reinforced Concrete Elements Damaged by Corrosion: Experimental, Numerical and Analytical Studies

### Message from the Guest Editors

Reinforced concrete (RC) structures/infrastructures are often exposed to different types of damages and deterioration due to exposure conditions during their service life. Practical cases of premature deterioration in RC structures highlight that corrosion is one of the dominant degradation mechanisms in 70% of the evaluated cases. The principal effects of corrosion, such as cracking and spalling of the concrete cover, are associated with reductions of the reinforcement cross-section. The latter, accompanied by a mechanical properties decay, is still investigated in terms of the hysteretic energy degradation during cyclic or fatigue loading as well as buckling behavior. Consequently, steel reinforcement corrosion plays a key role on the entire structural performance of reinforced concrete structures. It is our pleasure to invite you to submit a manuscript for this Special Issue, gathering original research contributions and critical reviews that go beyond the current knowledge in the structural assessment of corroded reinforced concrete members by means of experimental, numerical, and analytical investigations.

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### Guest Editors

Dr. Mahdi Kioumars  
Prof. Dr. Enrique Hernández Montes  
Dr. Stefania Imperatore

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### Deadline for manuscript submissions

closed (31 December 2022)



## Materials

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