

Special Issue

Assessment of Corrosion Resistance and Mechanical Properties of Reinforced Concrete

Message from the Guest Editor

Corrosion phenomenon consists a major degradation problem of reinforced concrete (RC) structures, affecting both concrete and steel, which are expected to deteriorate over time due to the aggressive environmental factors. Recently, the influence of corrosion on durability of RC structures has attracted the attention of several research projects. Hence, it becomes crucial to correlate the mechanical behavior of structures and the mechanical performance of evolving materials with their corrosion damage, in order to assess the service lifetime of structures.

Topics related to the wide spectrum of corrosion and inhibition are invited as contributions to this Special Issue : Design of new materials and manufacturing methods;

Correlation between chemical composition, processing parameters, metallurgical aspects and surface characteristics with corrosion resistance;

Protective coatings so as to prolong the service life of existing and new structures;

Assessment of corroded RC structures;

Modelling the corrosive factor in RC elements.

Guest Editor

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Message from the Editor-in-Chief

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editor-in-Chief

Prof. Dr. Yong Zhang

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