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Corrosion Effects on Durability of RC Structures

Guest Editor:

Prof. Dr. Charis Apostolopoulos

Laboratory of Technology and Strength of Materials, Department of Mechanical Engineering and Aeronautics, University of Patras, Patras, Greece

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Message from the Guest Editor

Dear Colleagues,

Corrosion phenomena affect reinforced concrete in terms of materials, as non-uniform mass loss of steel reinforcement bars, degradation of their mechanical properties, cracking and spalling of surrounding concrete, and in terms of elements' bearing capacity, due to bond loss between steel and concrete and due to reduced flexural capacity.

This Special Issue of *Metals* provides a forum for original research and critical reviews on advances in assessing the corrosion damage of reinforced structures. Areas of interest include the monitoring and measurement of corrosion level, in terms of critical chloride concentration or surface concrete cracking, in the laboratory and on site. Furthermore, the control of corrosion by chemical and electrochemical means is a weighty topic. To conclude, the estimation of corroded reinforced concrete elements' bearing capacity is the main design criterion of the structures' durability from the point of view of structural engineers.











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Message from the Editorial Board

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 metallurgical field the ranging from processing. and mechanical behavior. phase transitions microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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Metals Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals_MDPI