Special Issue

Corrosion of Reinforcing Steel in Reinforced Concrete

Message from the Guest Editor

The long-established challenges to reinforced concrete have been exposure to aggressive chloride ions from the sea, ground, admixtures or de-icing salts, and the neutralisation of the protective alkalinity by reaction with atmospheric carbon dioxide. The repair of reinforced concrete as a result of reinforcement corrosion is a major industry and, in addition to conventional breakout and repair, employs a wide range of specialist methods and materials such as cathodic protection and corrosion inhibitors. This Special Issue of *Materials* provides a forum for original research and critical reviews on advances in characterising and controlling the corrosion of steel reinforcement—whether conventional, pre-stressed or fibre—in reinforced concrete structural applications. Areas of interest include critical chloride levels, the monitoring and measurement of reinforcement corrosion in the laboratory and on site, and the control of corrosion by chemical and electrochemical means.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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