

## Special Issue

# Corrosion Mechanism and Protection of Reinforced Concrete

### Message from the Guest Editors

Corrosion of the steel reinforcement is one of the most important challenges for the reinforced concrete, especially for the structures and infrastructure exposed to an aggressive environment. A series of programs has been conducted to improve the durability of the reinforced concrete. Thanks to the continuous research in this field, satisfactory improvements have been achieved, including innovations in both the materials, technologies, and theories. This Special Issue aims to highlight and collect the most recent developments and trends in advances in corrosion mechanisms and protection of reinforced concrete. The corrosion issue will be encouraged, including but not limited to the following topics:

- Corrosion mechanism of the steel reinforcement;
- Propagation of the non-uniform corrosion;
- Spatial distribution of the corrosion products in the concrete;
- Corrosion-induced cracking of the concrete cover;
- Degradation of the corroded concrete;
- Improvement of the durability of the corroded RC constructions;
- Protection of the reinforced concrete;
- Strengthening of the predamaged structures.

### Guest Editors

Dr. Wenjun Zhu

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### Deadline for manuscript submissions

30 September 2025



## Materials

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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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