Special Issue

Sustainable Approaches to Corrosion Protection in Concrete Structures

Message from the Guest Editors

Corrosion remains a major challenge affecting the durability and sustainability of concrete structures worldwide. This Special Issue highlights innovative and eco-friendly approaches to corrosion protection, with a focus on extending service life and reducing environmental impact. Topics of interest include corrosion inhibitors, surface treatments, self-healing systems, nanomaterials, and smart coatings. The use of supplementary cementitious materials, durability-based design, and life cycle assessment frameworks are also encouraged, alongside predictive modeling and multiscale evaluation of corrosion mechanisms. By fostering interdisciplinary research, this Special Issue aims to advance sustainable strategies that ensure resilient and long-lasting concrete infrastructure.

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