



Research on the Durability of Reinforced Concrete Structures

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Deadline for manuscript submissions:

20 November 2024



mdpi.com/si/202323

Message from the Guest Editors

The durability of reinforced concrete structures is a pivotal aspect of civil engineering, affecting the longevity, safety, and overall performance of our built environment. As structures age, they are subjected to various environmental factors and loads that can compromise their integrity. Hence, a comprehensive understanding of the durability of reinforced concrete structures becomes imperative.

We invite submissions that cover a wide range of topics, including, but not limited to, the following:

- Methodologies for durability assessment;
- Corrosion mechanisms in reinforced concrete;
- Impacts of environmental exposure on concrete durability;
- Innovations in materials and techniques to enhance durability;
- Case studies and field investigations elucidating durability challenges;
- Modeling and simulation approaches for evaluating durability performance;
- Sustainable and green solutions for enhancing concrete durability;
- Durability enhancement through advanced construction practices;
- The integration of digital technologies for monitoring and predicting concrete durability;
- Novel repair and maintenance strategies for enhancing concrete longevity.

Special Issue



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Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

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