



## High-Performance Reinforced Concrete Structures and Composites

Guest Editors:

**Dr. Andrea Pranno**

Department of Civil Engineering,  
University of Calabria, 87036  
Rende, CS, Italy

**Dr. Umberto De Maio**

Department of Civil Engineering,  
University of Calabria, 87036  
Rende, Italy

Deadline for manuscript  
submissions:

**closed (29 February 2024)**

### Message from the Guest Editors

This Special Issue will provide recent progress and latest findings related to various aspects of reinforced-concrete-based and composite materials employed to design innovative high-performance structures. To this end, we welcome interesting research papers dealing with, but not limited to, the following topics:

- Innovative materials and mixture design;
- Advanced reinforcing microstructures;
- Nano and/or micro materials incorporation;
- Mechanical characterization of cement-based and composite materials;
- Fracture modeling in high-performance reinforced concrete structures;
- Numerical investigations on the effect of nano and/or micro reinforcements in cement-based and composite materials;
- Vulnerability analyses of high-performance concrete structural systems (bridges and buildings);
- Design guidelines and specifications for new and existing high-performance reinforced structures.

For further reading, please follow the link to the Special Issue Website at:

[https://www.mdpi.com/journal/buildings/special\\_issues/](https://www.mdpi.com/journal/buildings/special_issues/)

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## Editor-in-Chief

### Prof. Dr. David Arditi

Construction Engineering and Management Program,  
Department of Civil,  
Architectural, and Environmental  
Engineering, Illinois Institute of  
Technology, 3201 South  
Dearborn Street, Chicago, IL  
60616, USA

## 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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Buildings Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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