

# Special Issue

## New Concrete Materials: Performance Analysis and Research

### Message from the Guest Editor

With the development of civil engineering, the requirements for concrete performance are also increasing. In order to meet the usage requirements, researchers have continuously developed new concrete materials with higher strength and better durability. New concrete materials play a very important role in reducing costs, increasing service life, and promoting environmental protection. Through microscopic analysis (e.g., scanning electron microscopy, X-ray diffraction, and so on), it is possible to gain a deeper understanding of the mechanical properties and failure mechanisms of new concrete materials. This Special Issue aims to encourage scientists and researchers to publish their experimental and theoretical findings or solutions on new concrete materials. Research areas may include (but not limited to) the following:

- Recycled concrete;
- Modified concrete;
- Ultra-high performance concrete;
- Mechanical properties;
- Durability;
- Low carbon;
- Microstructure.

For more information about the special issue, please click on the link below:

[https://www.mdpi.com/journal/buildings/special\\_issues/3I866IYAH7](https://www.mdpi.com/journal/buildings/special_issues/3I866IYAH7)

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### Guest Editor

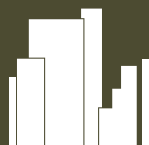
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### Deadline for manuscript submissions

closed (30 April 2024)



## Buildings

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. David Arditi

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indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Construction and Building Technology) /  
CiteScore - Q1 (Architecture)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).