

# Special Issue

## Advanced Numerical and Computer Methods in Civil Engineering

### Message from the Guest Editors

Advanced numerical and computer methods in civil engineering have become increasingly important for modern engineers and researchers in recent decades. They can be used alone or in combination with experimental /theoretical studies, from the material level to the structural level, for solving nearly all engineering problems. This Special Issue will present novel developments or new applications of advanced numerical and computer methods for addressing problems in civil engineering. Our interests include but are not limited to the following:

- Advanced finite element/meshless/boundary element/peridynamic/discrete element/data-driven based/machine-learning based/CFD technologies;
- Advanced atom-level/molecular-level/cross-scale/multi-physics modeling;
- Advanced strength/stability/failure/fatigue/fracture/dynamic/thermal/acoustic analysis and optimization with numerical and computer methods;
- Other contents in the scope of advanced numerical and computer methods in civil engineering.

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/)

[R8XH61D33E](https://www.mdpi.com/journal/buildings/special_issues/R8XH61D33E)

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### Guest Editors

Dr. Dongming Li

School of Civil Engineering and Architecture, Wuhan University of Technology, Wuhan, China

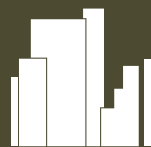
Dr. Zechuan Yu

School of Civil Engineering and Architecture, Wuhan University of Technology, Wuhan 430070, China

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### Deadline for manuscript submissions

closed (20 December 2023)



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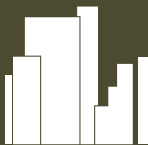


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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[buildings@mdpi.com](mailto:buildings@mdpi.com)

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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

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

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### Author Benefits

#### High Visibility:

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 15.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).