Special Issue

Sustainable and Low-Carbon Building Materials in Special Areas

Message from the Guest Editors

Generally, more attention is paid to the durability of structures in special areas. The bearing capacity and deformation of the foundation in such areas are also influenced by the properties of the surrounding medium. To better solve problems in special areas, it is of great importance to study the effects of sustainable and low-carbon building materials on the performance of both structures and foundations. This Special Issue on "Sustainable and Low-Carbon Building Materials in Special Areas" seeks high-quality works on the laboratory testing, field testing, and numerical modeling of sustainable and low-carbon building materials. Topics include but are not limited to the following:

- Concrete durability in special environments;
- Treatment of soil or foundation in special areas;
- Utilization of solid waste in building materials;
- Low-carbon construction methods:
- Life evaluation or prediction model of structures.

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

https://www.mdpi.com/journal/buildings/special_issues / 1K5K512D64

Guest Editors

Dr. Gaowen Zhao

Dr. Shifeng Lu

Dr. Gang Liu

Dr. Le Wang

Deadline for manuscript submissions

closed (30 November 2025)



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Buildings Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 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.

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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