Special Issue

Prospects and Challenges in the Sustainable Development of Building Materials

Message from the Guest Editors

Various levels can lead to innovation in construction materials, including composition selection, production technology, and developing new materials. In addition to meeting performance criteria, construction materials can also shape the entire life cycle of civil infrastructure. The simulation of performance requires the modification of specifications and guidelines for material selection, design and rehabilitation concepts for both new and old infrastructure, and accurate prediction models. This Special Issue aims to explore challenges, recent advancements, and future prospects in the field of smart, functional, and sustainable construction materials. Potential areas of interest include, but are not limited to, the following:

- Materials circular economy;
- Nanotechnology and advanced composite materials for industrial and construction applications;
- Self-healing materials and green construction;
- Novel sustainable cementitious materials:
- Life cycle assessment and environmental impact analysis of building materials;
- Durability enhancement techniques for construction materials:
- Advanced functional materials:
- Case studies in construction materials.

Guest Editors

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Prof. Dr. Montserrat Zamorano

Prof. Dr. Maria Martín-Morales

Deadline for manuscript submissions

closed (31 October 2025)



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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

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