



Prospects and Challenges in the Sustainable Development of Building Materials

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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.





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Message from the Editor-in-Chief

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