Special Issue

Next-Gen Cementitious Composites for Sustainable Construction

Message from the Guest Editors

The construction industry is at a pivotal juncture, facing the dual challenges of ensuring sustainability and meeting the increasing demands for higher-performance materials. Cementitious composites, as the backbone of construction, are evolving to address these challenges. This ***Special Issue*** aims to showcase the latest advancements in sustainable, high-performance, and multifunctional cementitious composites, highlighting their potential to revolutionize construction practices and contribute to more resilient, energy-efficient, and environmentally friendly structures. We invite contributions that explore innovative approaches in the design, formulation, and application of cementitious composites. Topics of interest include but are not limited to the following:

- Sustainable materials and practices
- Advanced performance
- Multifunctionality
- Innovative design and fabrication techniques
- Case studies and applications

Our goal is to highlight emerging trends, identify research gaps, and suggest future directions for the development of cementitious composites that meet the demands of modern construction while adhering to the principles of sustainability.

Guest Editors

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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

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