Special Issue

New Trends in Innovative Building Materials and Structures

Message from the Guest Editor

"New Trends in Innovative Building Materials and Structures" discusses recent advancements in materials and construction techniques that are reshaping the building industry. The issue highlights the development of sustainable materials like carbon fiber, metamaterials, cellular structures and self-healing concrete, which offer improved durability and environmental benefits. Additionally, it explores the integration of smart technologies in building design. such as sensors for real-time monitoring and adaptive systems for energy efficiency. The focus on modular construction and prefabrication methods is also emphasized as a means to enhance efficiency and reduce construction time. Overall, the issue underscores the importance of embracing innovative materials and technologies to meet the evolving demands of modern construction projects.

Guest Editor

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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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