Special Issue

Sustainable Development in Building: High-Performance Materials with Solid Waste

Message from the Guest Editors

Presently, it has become imperative to create sustainable natural ecosystems to protect the environment. Recycling solid waste into sustainable building materials has received increasing attention in the construction industry. Properties are important indicators to be considered when preparing sustainable solid waste materials. This Special Issue invites original research papers (primary research articles and reviews) focusing on solid waste to produce high-performance building materials. The topics for this Special Issue include, but are not limited to: - Solid waste (such as construction waste, industrial waste, by-products, etc.); - Low-carbon binders (such as alkali-activated materials, geopolymers, etc.); - Solid waste concrete (such as recycled aggregate concrete, geopolymer concrete, rubberized concrete, etc.); - The application of life cycle assessments (LCAs) in solid waste building materials; - Performance enhancement technology for solid waste building materials; - Eco-friendly ultra-high performance concrete; - Case studies of solid waste building materials use in the construction industry.

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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