Special Issue

Advances and Applications of Recycled Concrete in Green Building

Message from the Guest Editors

The construction field requires careful attention to the use of natural resources and CO2 production worldwide. Gravel and sand consumption need to be kept under control and, when possible, partially limited by urban mining and demolished concrete material. A sustainable approach is the main target for planning new structures and using low carbon-based new cementitious materials. The scope is to gather the actual and most recent developments and knowledge related to the recycling, as well as the mechanical and durability, properties of recycled concrete for buildings in order to further investigate and promote the reasonable use, dosage, and quality of recycled concrete aggregates within recycled concrete. Research areas may include (but are not limited to) the following:

Recycled concrete aggregates' characterization and quality control.

Local materials and recycled concrete.

Recycled concrete for buildings.

Mechanical and durability performance of new recycled materials.

Sustainable cements and recycled concrete.

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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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