



Novel Cementitious Materials for Resilient and Sustainable Buildings and Infrastructure

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Message from the Guest Editors

Dear Colleagues,

Recently, many big cities have been subject to the challenges of increasing population, limited land and resources, aging buildings and infrastructure, environmental pollution, as well as urban resilience issues due to climate change and hazards. Developing “smart, green and resilient” cities to ensure that the cities of the future are livable, competitive, and sustainable is an emerging important research and development direction. Concrete is arguably one of the most important engineering materials in support of modern civilization. Many novel cementitious materials as well as innovative construction technologies have received tremendous interest in recent years.

This Special Issue aims to present the recent progress and latest findings on novel cementitious materials for resilient and sustainable buildings and infrastructure. We welcome high-quality original research papers and state-of-the-art reviews.

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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.

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