Special Issue

Advances in Novel Precast Concrete Structures

Message from the Guest Editors

Precast concrete structures, with increasing global construction demand, are commonly deemed to be advantageous in terms of their building quality, time and labor savings, cost efficiency, environmental friendliness, etc. Various precast concrete structures have been developed and constructed, including an emulative system, pretensioning system, rocking system, and modular system. New technologies in the civil engineering field, e.g., novel energy-dissipators and advanced materials like FRP, UHPC, and ECC, are increasingly combined with precast concrete structures. Furthermore, many recent construction ideas or concepts, such as building industrialization, smart construction, and intelligent construction, are actually mainly related to precast concrete structures. Therefore, precast concrete structures remain one of the most active and prosperous research areas in civil engineering.

This Special Issue aims to promote the high-quality works in developing and studying novel precast concrete structures for high performance and satisfactory construction efficiency, with a focus on state-of-the-art progress, development, and new trends.

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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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