Special Issue

Advanced Concrete Structures: Structural Behaviors and Design Methods—2nd Edition

Message from the Guest Editors

In recent years, numerous novel concrete materials and innovative concrete structures that enable accelerated construction, enhanced durability, cost-efficiency and a longer service life have been developed. The purpose of this Special Issue is to illustrate the latest achievements regarding the fundamental and practical investigation of novel concrete structures, with a particular focus on their structural behavior and design methods. The main topics of interest include, but are not limited to, the following:

- Novel structures made of new concrete material, e.g., ultra high-performance concrete (UHPC), fiber-reinforced concrete (FRC), and engineering cementitious composites (ECC), etc.;
- Precast/prestressed concrete structures for accelerated construction;
- Steel/FRP/UHPC–concrete composite structures;
- Connections or joins of prefabricated modular concrete elements;
- Rehabilitation/retrofitting of existing concrete structures;
- Shear behaviors of advanced concrete structures.

For more information, please follow the links below:
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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.

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