Special Issue

Advanced Design & Behavior of Concrete Structures

Message from the Guest Editor

Concrete structures are regarded as the backbone of building a sustainable society, especially when facing natural- and human-caused disasters such as earthquakes, tsunamis, tornadoes, fire, or blast incidents. This is considered a trending topic in the natural hazard and risk field, and it is critical for protecting human lives and minimizing economic losses. Due to these facts, researchers are working on improving new building components and construction techniques that are being established through innovative computational models, experimental approaches, and disaster prevention and mitigation techniques for various engineering concrete structures such as bridges, buildings, retaining walls, tunnels, dams, and other types. Research areas may include (but are not limited to) the following:

- Design strategies;
- Alternative and new technologies;
- Design, implement, and practice innovation;
- Code requirements, development, and evaluation;
- Advanced experimental techniques for concrete;
- Static and dynamic;
- Concrete structures under loading and extreme environmental conditions.

Guest Editor

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Deadline for manuscript submissions

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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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