Special Issue

High-Performance Concrete: Constituents, Properties and Applications

Message from the Guest Editors

We are pleased to invite you to contribute to this Special Issue entitled “High-Performance Concrete: Constituents, Properties and Applications”. As a significant breakthrough in concrete technology, high-performance concrete (HPC), with high strength and notable durability, has been extensively applied in the construction of infrastructures, such as bridges, to achieve a better structural performance against natural hazards. Thus, government agencies promote the application of this new material in new fields such as building construction. In this Special Issue, we are soliciting articles concerning the recent developments and applications in HPC material. Papers which include, but are not limited to, the following topics are welcome:

- Optimal constituents of HPC;
- Application of HPC in structural strengthening and retrofitting;
- Sustainability and resilience of HPC structures;
- Durability of HPC structures in harsh environments;
- 3D printing concrete;
- Carbon storage.

Guest Editors

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Deadline for manuscript submissions

closed (30 November 2023)

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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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