Special Issue

High-Performance Concrete and Durability of Concrete Structures

Message from the Guest Editors

Concrete is the most representative building material and is the most used worldwide. Its performance and durability have an important impact on the technological advancements and sustainability approaches of buildings. High-performance concrete (HPC) is a result of the constant improvement of this material. The combination of high-quality materials and optimization of the mix design has allowed HPC to achieve specific performance goals, including long-term performance, which highlights its durability. Some important challenges of HPC are related to achieving high strength and durability while maintaining workability, minimizing environmental impact, and ensuring cost-effectiveness in construction practices. This Special Issue intends to explore the latest developments, research, and innovations in HPC. Topics covered may include, but are not limited to:

- Advances in mix design methods:
- Influence of raw materials on the HPC:
- The potential role of the residues in this context;
- New curing systems;
- Main degradation agents and their combined action.

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Message from the Editor-in-Chief

The journal is devoted to academic researchers, working in the main fields of civil engineering, who want to spread their findings in the scientific community. Topics include: solid mechanics, structural and earthquake engineering, environmental and geotechnical engineering, survey and geo-spatial engineering, coastal and harbor engineering, building physics and sustainable materials, municipal or urban engineering, engineering and economy, and construction engineering. Contributions which are a good mixture of rigorous theoretical principles and experience-based technical solutions are especially welcome. Purely numerical or experimental approaches are also accepted, provided they are accompanied by a strong speculative investigation, finalized to extract a physical interpretation, and useful for enlarging the general knowledge of the problem.

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