Special Issue

3D Printing and Digital Technologies in Concrete

Message from the Guest Editors

Digital technologies in concrete, such as additive extrusion, shotcrete and particle-bed-based 3D printing, as well as subtractive manufacturing including milling, are rapidly penetrating the built environment industry, both in practice and academia, promising significant time, cost and environmental benefits through the digital transformation of construction processes. In light of this, this Special Issue is dedicated to presenting the state-of-the-art in 3D printing and digital technologies in concrete, publishing high-quality original research papers within the following subfields:

- Sustainable materials;
- Microstructure characterisation;
- Fresh state behaviour;
- Reinforcement strategies;
- Technological developments;
- Durability investigations;
- Structural engineering;
- Hardened state behaviour;
- Mechanical performance;
- Numerical modelling strategies;
- Quality control processes;
- Software advancements.

We welcome all contributions and especially encourage fresh perspectives from our industry community to facilitate industry-academia collaboration, communication and synchronisation.

Guest Editors

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Deadline for manuscript submissions

closed (20 April 2023)



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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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