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Concrete 3D Printing and Digitally-Aided Fabrication

Guest Editor:

Message from the Guest Editor

Dr. Arnaud Perrot IRDL, Université Bretagne Sud, Lorient, France

Deadline for manuscript submissions: closed (31 December 2020) Dear Colleagues,

The concrete construction industry has improved its productivity for last 50 years. Nowadays, the development of computer-aided design tools along with the introduction of additive manufacturing in the construction industry have the ability to revolutionize the way we build construction.

This Special Issue focuses on new additive manufacturing methods used for concrete: the extrusion-based method, particles-based methods, and others new techniques using shotcrete or digitally fabricated permeable formworks or fabrics. Paper topics can deal with many aspects related to the digital fabrication of concrete and cement-based materials: processing, case study, fresh state properties and rheological requirements, the mechanical behaviour of printed cement-based material, the structural design of printed parts and structures, and environmental and economic impacts.

This Special Issue is expected to provide a collection of articles showing an overview of recent advances in the field of concrete 3D printing and drawing future perspectives for these new revolutionizing methods.









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Message from the Editor-in-Chief

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