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Ultra-High Performance Concrete (UHPC): Preparation, Properties and Applications

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Message from the Guest Editors

Compared with normal concrete, ultra-high performance concrete (UHPC) is considered to be a new development of concrete technology with excellent workability, high compressive strength, toughness, and long durability, etc. The UHPC has been widely used in bridge engineering, super high building and long-span structures, and so on. Recently, the UHPC made of superplasticizers, silica fume, and steel fibers has been widely used to construct the super-high building structure, long span bridge, subsea tunnel. Plenty of researches have been carried out to discuss the preparation and performances of UHPC. Therefore, the UHPC has both important academic meaning and engineering value. The research scope of this special issue can be the mix proportion of concrete, material compositions, mechanical properties, preparation technology and methods, long term performance, water to cement ratio, type and content of fibers, dosage of cementitious materials, mechanical and rheological properties of UHPC, and so on.



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Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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.

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