Special Issue

Long-Term Performance of Ultra High Performance Concrete: From Material Degradation to Structural Behavior

Message from the Guest Editors

Ultra-high-performance concrete (UHPC) is renowned for its exceptional mechanical strength, superior durability, and dense microstructure. While decades of research have refined mix design, fiber reinforcement design, and early-age properties, less attention has been devoted to the long-term interaction between durability degradation and structural performance. This Special Issue aims to bridge that gap by showcasing research linking material deterioration mechanisms with their structural consequences in UHPC systems.By emphasizing how degradation processes translate into structural impacts, this Special Issue seeks to advance predictive assessment, enable durability-informed design, and optimize UHPC applications for reliable, sustainable infrastructure.

Guest Editors

Prof. Dr. Sang-Hyo Kim

Department of Civil and Environmental Engineering, Konkuk University, Seoul 05029, Republic of Korea

Prof. Dr. Chungwook Sim

Department of Civil and Environmental Engineering, Konkuk University, Seoul 05029, Republic of Korea

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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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

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

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