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Advances in Ultra-High Performance Concrete and Engineered Cementitious Composites

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Message from the Guest Editors

Dear Colleagues,

Ultra-high Performance Concrete (UHPC) and Engineered Cementitious Composites (ECC) are two distinctive classes of high performance, fiber-reinforced cementitious composites. Due to their superior mechanical and durability properties, the applications of UHPC and ECC have been extensively studied, especially with respect to earthquake-resistant structures, durability, structural repairs and retrofitting, and bridge systems. Particularly, the production of UHPC and ECC members using 3D printing technology has been recently explored. The application of UHPC and ECC as a replacement for conventional concrete materials in RC elements necessitates a comprehensive understanding of the behavior of the materials under various types of loadings.

This Special Issue is intended to include the studies that make significant advances in UHPC and ECC, including materials development, mechanical and durability properties, structural applications, the production of materials and structures, analytical methods, computational models, experimental approaches, etc.



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Special Issue



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Message from the Editor-in-Chief

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