Special Issue

Advances in Preparation and Characterization of High-Performance Cement-Based Structural Materials

Message from the Guest Editor

As various buildings and infrastructures put forward higher requirements for the mechanics and durability of concrete, high-performance cement-based structural materials with various added functions and process have been developed, such as ultra-high-performance concrete/ultra-high-performance fiber-reinforced concrete (UHPC/UHPFRC), strain-hardening cement composite (SHCC), high-performance fiber-reinforced concrete (HPFRC) and so on. These cement-based structural materials have a good prospect of application and extension because of their special mechanical behavior and excellent durability. In recent research of the preparation of these materials, different additives and fibers have been added to the cement-based material matrix to generate new excellent properties. Therefore, it is urgent to re-characterize existing material properties accurately due to the emergence of new material properties. This Special Issue may stand as a useful reference for further research and development in preparation and characterization of high-performance cement-based structural materials.

Guest Editor

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