Special Issue

Reaction Mechanism and Properties of Cement-Based Materials (2nd Edition)

Message from the Guest Editor

This Special Issue focuses on but is not limited to, the mechanism of physicochemical effects on the cracking and toughening properties of cement-based materials on the macroscopic scale, such as gelling components, aggregates, admixtures, fibers, water-binder ratio, curing system and environmental effect; the effects of micrometer scale reinforcement materials such as microbeads, whiskers and osmotic crystals on the filling, bridging, bonding and osmotic crystallization in cement-based materials system.

It is my pleasure to invite you to contribute to the Special Issue "Reaction Mechanism and Properties of Cement-Based Materials." Full papers, communications, discussions, and reviews related to the current research, application and development of strengthening, toughening and durability enhancement components of different scales of cement-based materials, reaction mechanism and properties of various cementitious materials including Portland cement, aluminate cement, sulfate aluminum cement, ferroaluminate cement, phosphate cement are welcomed.

Guest Editor

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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