

Special Issue

Mix-Design and Behavior of Special Concrete

Message from the Guest Editor

Reinforced concrete is the most widely structural solution all over the world, due to the huge versatility and reduced cost both for precast and in situ construction. This Special Issue aims to cover the latest developments in mix-design and behavior of new special concretes. It covers not only special concretes, such as lightweight, high and ultra-high performance, self-compacting and fiber-reinforced, alkali-activated, and geopolymer-based concretes with recycled aggregates, but primarily those combined with eco-efficient binder matrices. Those matrixes are mainly obtained by replacing the Portland cement proportions via sustainable and supplementary cementitious materials, or by developing new binder solutions with special and eco-friendly cements and clinkers, or even by alkali-activated binders. Therefore, original papers dealing with new advances and challenges in new special concretes are highly welcome, namely concerning mix-design and production, rheology, hydration, and microstructure, as well as physical, mechanical, time-dependent, and durability properties. Service life assessment, sustainability, and modeling are also invited to this Special Issue.

Guest Editor

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Message from the Editor-in-Chief

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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