

Special Issue

New Trends in Cement-Based Composites: From Materials Characterization to Structural Applications

Message from the Guest Editors

The primary goal of this Special Issue is to present new trends in the field of cement based composites and their application in structural elements. Although conventional fibre-reinforced concrete is still of interest, new technologies such as textile-reinforced concrete (TRC), strain-hardening cement-based composites (SHCC) and ultrahigh performance concrete (UHPC) have become a real perspective for the modernization of the construction sector. These new technologies can allow the design of more sustainable and resilient structures with enhanced mechanical properties and a longer service life. The use of natural fibers and more sustainable matrices is also of particularly importance for the future development of a modern construction industry. Another important topic is the development of fiber-reinforced cement-based composites with improved rheology towards a highly automated and digitalized industry. Therefore, works related to 3D printing and oil well cementing are appreciated. We also invite contributions closely related to applications, as well as the submission of research papers and review articles.

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Message from the Editorial Board

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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