

Special Issue

Recycled Aggregate Concrete and Alternative Binders for Sustainable Building Engineering

Message from the Guest Editors

The construction industry is considered one of the most important sectors of socio-economic development. However, its dynamism gives rise to two major environmental issues: (i) a significant increase of construction and demolition waste (CDW), which represents more than 30% of the solid waste generated by all economic sectors, and (ii) an increase in the production of Portland cement concrete, which is the most widely used construction material in the world and, through the production of cement alone, constitutes about 7% of all greenhouse gas emissions. Hence, it is essential to find, on the one hand, solutions for discarded CDW, in addition to their use as recycled aggregates, and, on the other hand, alternative sustainable binders that can replace Portland cement. This Special Issue focuses on the development of sustainable cementitious composites, either by the replacement of natural aggregates with recycled aggregates or by the use of sustainable binding technologies that constitute a viable alternative to Portland cement.

Guest Editors

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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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