Special Issue

Performance and Properties of Reinforced-Cement-Based Materials in Aggressive Environments

Message from the Guest Editors

The degradation mechanisms of cement-based materials under various aggressive environments and the development of strategies to reinforce those materials and increase their durability have increasingly attracted the attention of scientists, engineers, and technologists. The maintenance of structures suffering these kinds of environments is costly and may disturb human activities inside or near the structures for a time. The frequency and cost of repair and maintenance can be minimized by means of composite design strategies based on selecting the reinforcement material and the composition of the matrix or coating strategies that avoid direct exposure of the material to the aggressive environment. In this Special Issue, degradation mechanisms, kinetics, and analyses, as well as different approaches aiming to increase the durability of cementbased materials in aggressive environments are highlighted and discussed. It is our pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

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Deadline for manuscript submissions

closed (20 November 2022)



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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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