Special Issue

Eco-Performance of Alternative Binder Systems

Message from the Guest Editors

In the proposed Special Issue, we aim to collecting papers on potentially 'green' concrete types based on high volume replacement of ordinary Portland cement by alternative binders of any sort (well-known supplementary cementitious materials or non-traditional industrial byproducts/waste products). The research content of those papers should be focused on establishing a well-founded link between the observed microstructural, chemical, and transport properties (as assessed through (accelerated) experiments or modeling) and the expected durability and sustainability performance of the studied concrete type. The main goal is to disseminate the latest and most relevant advances in the sustainability performance of eco-friendly cementitious materials in order to contribute in the reduction of their environmental impact.

Keywords: cement replacement; supplementary cementitious materials; non-traditional binders; microstructure; transport properties; durability; service life; life cycle assessment

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closed (31 May 2021)

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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