Special Issue

Nano-Enabled Approaches for Sustainable Development of the Construction Industry

Message from the Guest Editors

The recent involvement of manufactured nano-objects (MNOs) in self-healing concrete has greatly improved the strength of cement-based materials. However, self-healing potential on deep surface and methods to evaluate calcium carbonate precipitation in self-healing specimen remains poorly understood. Aiming to explore this window further and enhance the safe application of MNOs in the construction industry, we invite submissions of novel and original papers and reviews to this SI covering (but not limited to) the following topics:

- Nanobiotechnology approaches for the production of nano-bio concrete.
- Impact of MNOs on strength and workability of concrete structures.
- Mechanistic insights into MNOs interactions with self-healing agents such as bacteria etc.
- Methods related to the estimation of self-healing potential of concrete.
- Elucidate the strength and weaknesses related to the field applicability of nano-bio concrete.
- Potential toxicological impacts and public health issues from emerging nano-bio concretes.
- Insights into the regulation and governance of nano-bio concrete.
- Other related topics

Guest Editors

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Deadline for manuscript submissions

closed (20 August 2023)

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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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