

Special Issue

Biomimetic Infrastructure Materials: Towards a Greener Future

Message from the Guest Editors

In the last decade we have made significant progress in improving the efficiency of the built environment. Scientists around the world have designed strategies for self-repairing building materials using cutting-edge technologies. Providing infrastructure with the unique ability to self-heal damage without external intervention has made the development of durable materials possible and reduced the further need for in-situ maintenance. Biomimetic materials represent the future of sustainable infrastructure, with enhanced longevity and substantial reduction in energy consumption and maintenance costs, relative to conventional cementitious materials. This Special Issue will provide a collection of noteworthy studies on:

- Methodologies and/or case studies on innovative self-healing infrastructure materials;
- Retrofitting and optimisation of existing structures with biomimetic characteristics;
- Numerical investigations on biomimetic composite structures;
- Carbon footprint analysis and life cycle assessment studies on biomimetic construction;
- Case studies on life cycle assessment and service life prediction of infrastructure designed with biomimetic materials

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2022)



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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

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