



Biomimetic Infrastructure Materials: Towards a Greener Future

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Message from the Guest Editors

Dear Colleagues,

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





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Message from the Editor-in-Chief

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