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Effect of Environmental Conditions on Self-Healing Concrete for Durable and Sustainable Infrastructure

Guest Editor:

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Deadline for manuscript submissions:
closed (20 October 2023)

Message from the Guest Editor

Self-healing concrete is a new product. It can timely heal the cracks in itself through autogenous or autonomous approaches, which increases its durability and regains the lost strength. Cement replacement materials are important for a reduction in carbon footprint. In order to enhance the durability and sustainability of infrastructure concrete, self-healing concrete containing PVA fibres, bacteria, and/or a high content of cement-replacement materials, such as fly ash and Silica Fume, have been investigated in literature. However, further research is needed, particularly in areas such as self-healing low-carbon concrete containing new self-healing capsules/agents for sustainable and durable infrastructures.

Therefore, this Special Issue calls for papers in (but not limited to) the following areas:

- Currently used self-healing agents/bacteria;
- PVA as self-healing additive;
- Sustainability of self-healed concrete;
- Self-healing concrete for repair of existing infrastructure;
- Durability of self-healing concrete;
- New developed self-healing agents;
- Self-healing and health hazardous;
- Structural health of self-healing concrete structures.

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Message from the Editor-in-Chief

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