Special Issue

Engineering the Future of Sustainable Construction: Self-Healing and Bio-Based Material Technologies

Message from the Guest Editors

The construction industry is entering a transformative era driven by the urgent need for sustainability, climate resilience, and circularity. Traditional cementitious materials are responsible for significant carbon emissions and environmental degradation. To address this, scientists and engineers are exploring innovative materials and biologically inspired technologies that extend durability, reduce repair needs, and promote self-sufficiency in infrastructure. This Special Issue aims to spotlight the latest advances in self-healing cementbased materials and bio-based construction technologies, particularly those integrating microbial systems, biomineralization, and bio-cementation techniques. By bringing together researchers from civil engineering, microbiology, materials science, and sustainability disciplines, this Issue will promote interdisciplinary innovations that will shape the next generation of green infrastructure. In this Special Issue, original research articles and reviews are welcome.

Guest Editors

Dr. Olja Šovljanski

Dr. Tiana Milović

Dr. Vesna Bulatović

Deadline for manuscript submissions

30 June 2026



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/242779

Sustainability Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 sustainability@mdpi.com

mdpi.com/journal/ sustainability





Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



About the Journal

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. *Sustainability* publishes original research articles, review 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. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

