Special Issue

Biological Treatment for Sustainable Waste Management and Green Environment

Message from the Guest Editor

With increasing global waste generation, sustainable waste management has become a critical challenge. Biological treatment methods, such as composting. anaerobic digestion, and microbial bioremediation, offer eco-friendly solutions by converting waste into valuable resources (e.g., biogas, fertilizers) while reducing pollution. These approaches align with circular economy principles and support climate change mitigation by minimizing landfill use and greenhouse gas emissions. This Special Issue aims to explore innovative biological treatment technologies that enhance waste valorization and environmental sustainability. It will highlight advancements in microbial processes and integrated waste-to-energy systems. By focusing on scalable and low-carbon solutions, this Issue contributes to Sustainability's scope of promoting ecological balance, resource efficiency, and sustainable development.

Guest Editor

Prof. Dr. Xiaowei Li

Department of Environmental Science and Engineering, School of Environmental and Chemical Engineering, Shanghai University, Shanghai 200444, China

Deadline for manuscript submissions

14 February 2026



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/240153

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)

