



Sustainable Waste Management through Composting: Advances and Applications

Guest Editor:

Prof. Dr. Stefan Shilev

Department of Microbiology and
Environmental Biotechnologies,
Faculty of Plant Protection and
Agroecology, Agricultural
University – Plovdiv, 4000 Plovdiv,
Bulgaria

Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editor

Composting is the biotechnology that converts the wastes into a useful product and is recognized as an appropriate tool for sustainable waste management. It contributes to environmental safety and tremendously reduces organic wastes, greenhouse gas emissions, and pathogens.

Additionally, microbial communities play a crucial role in each composting stage, where the microbiome mediates the degradation of natural biopolymers and the formation of complex organic molecules. Further, the compost can also be an effective remediation agent in assisted bio- and phytoremediation strategies, thus improving soil sustainability.

This Special Issue will focus on composting as a part of waste management but also will highlight the utilization of compost as an amendment in improving soil system sustainability. As this topic is very relevant, the Special Issue will fill existing gaps in the literature, answering questions about the improvement of composting technology and its relation to sustainable waste management; use of byproducts of bioenergy processes in composting to bring environmental and agronomical benefits; understanding of enzyme functions and microbial community diversity, etc.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and
Natural Resources, Ohio State
University, Columbus, OH 43210,
USA

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.

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)

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[X@Sus_MDPI](#)