



Environmental Engineering of Biopolymers from Renewable Resources

Guest Editor:

Dr. Francesco Valentino

Department of Environmental Sciences, Informatics and Statistics, "Cà Foscari" University of Venice, 30172 Mestre-Venice, Italy

Deadline for manuscript submissions:

closed (15 November 2022)

Message from the Guest Editor

Dear Colleagues,

Biodegradable and bio-based plastics production brings a considerable reduction in our dependency on fossil fuels. Hence, the utilization of renewable resources as feedstock for a particular class of biopolymers (e.g., polyhydroxyalkanoates; PHA) can increase the environmental sustainability of the bioprocesses. PHA are the ideal candidate to replace part of the market which is still dominated by fossil fuels plastics. The scope of this Special Issue is to give emphasis on renewable feedstock utilization by mixed or pure microbial cultures, as election substrates for PHA synthesis. Particular importance will be dedicated to those aspects related to process optimization, as well as possible integration of PHA production.

The aspect related to biorefinery development is extremely relevant because of the need to introduce concepts like the technical or economic feasibility of the process. Given these considerations, downstream processing for the development of innovative and environmentally sustainable protocols for PHA extraction/recovery from microbial cells will also be taken into account.

Dr Francesco Valentino

Guest Editor





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](#)