



Biotechnology Advances to Address Plastic Pollution

Guest Editor:

Dr. Eva Garcia Ruiz

Department of Biocatalysis,
Institute of Catalysis and
Petrochemistry, Spanish National
Research Council (ICP-CSIC),
28049 Madrid, Spain

Deadline for manuscript
submissions:

closed (30 June 2023)

Message from the Guest Editor

Over the last century, plastics have become an essential commodity in our daily lives, offering solutions to the needs and challenges of humankind. Millions of tons of these plastics are produced and disposed of every year; most of them are derived from fossil hydrocarbons, and hardly any of them are biodegradable. As a result, the large fraction of plastic waste disposed of in landfills and the natural environment is released into the ecosystem, posing a threat to global ecology.

This Special Issue focuses on sustainable biotechnologies that promote a circular economy model for plastics, capitalizing enzymes and microorganisms. We invite authors to submit original research papers and comprehensive reviews covering all aspects of this topic, including, but not limited to, the biosynthesis and biodegradation of plastics and/or biovalorization of plastic waste.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical
Engineering, Texas A&M
University, College Station, TX
77843, USA

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPlus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Engineering, Biomedical*)

Contact Us

Bioengineering Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/bioengineering
bioengineering@mdpi.com
[X@Bioeng_MDPI](https://twitter.com/Bioeng_MDPI)