



Green and Sustainable Chemistry of Waste Conversion in Circular Economy: Challenges and Perspectives

Guest Editors:

Prof. Dr. Maria Rios

Department of Mechanical Engineering, Federal University of Ceará, Fortaleza 60440-554, Brazil

Prof. Dr. José Cleiton Sousa dos Santos

Institute of Engineering and Sustainable Development, University of International Integration of the Afro-Brazilian Lusophony, Redenção 62790-970, Brazil

Message from the Guest Editors

This Special Issue will focus on the green and sustainable chemistry of waste conversion processes, including biomass conversion, the development and application of green chemical products, waste-to-energy processes, thermochemical conversion processes, biomaterials, the life cycle assessment of chemical products and processes, and biomass in the circular economy. Waste biorefinery, as well as circular bioeconomy, will also be covered, which includes bioprocesses; waste for biopolymers; bio-lipids production; bioprocesses for wastewater treatment; and the integrated use of biowaste, biofuels, and renewable feedstocks.

Topics of interest, but not limited, include:

- Green and sustainable chemistry of waste conversion;
- Bioconversion of wastes into value-added products;
- Waste-to-energy conversion;
- Waste biorefinery: challenges and perspectives;
- Biomass in a circular economy;
- Life cycle of chemicals and products;
- Integrated use of biowaste;
- Treatment technologies for biowaste;
- Bioconversion of biowaste into renewable energy and biomaterials.

Deadline for manuscript submissions:

closed (30 May 2024)



mdpi.com/si/163382

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and
Technology, University of Turin,
Via P. Giuria 9, 10125 Turin, Italy

Message from the Editor-in-Chief

Processes (ISSN 2227-9717) provides an advanced forum for process/system-related research in chemistry, biology, material, energy, environment, food, pharmaceutical, manufacturing and allied engineering fields. The journal publishes regular research papers, communications, letters, short notes and reviews. Our aim is to encourage researchers to publish their experimental, theoretical and computational results in as much detail as necessary. There is no restriction on paper length or number of figures and tables.

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), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Chemical*) / CiteScore - Q2 (*Chemical Engineering (miscellaneous)*)

Contact Us

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

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

mdpi.com/journal/processes
processes@mdpi.com
[X@Processes_MDPI](https://twitter.com/Processes_MDPI)