

Special Issue

State-of-the-Art of Biomass and Municipal Waste into Useful Energy

Message from the Guest Editor

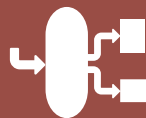
The finite nature of the fossil fuels, combined with an increasing worry about the concomitant greenhouse effect, has led research and industry into renewable energy sources (RES). In the immediate future, therefore, the most direct and cheapest way to tackle the problem is to use existing energy sources more efficiently. In any case, the biggest source of renewable energy, apart from solar energy, is biomass and municipal waste. Currently, four main methods of biomass and waste utilization are used: direct combustion, pyrolysis, biodegradation and gasification. Most biomass and waste can be converted into fuel by gasification because the process is generally more efficient and cleaner than direct combustion or pyrolysis and biodegradation. Pyrolysis and biodegradation of biomass from agricultural crops, forestry waste and sewage in order to obtain low-calorie fuel is expensive and sometimes dangerous due to methane explosions. However, the main objective of this issue is to promote new and advanced technology for the thermochemical conversion of biomass and waste for alternative energy production, syngas and even hydrogen H₂.

Guest Editor

Prof. Dr. Jan A Stašiek
Faculty of Mechanical Engineering, Gdansk University of Technology,
80-233 Gdańsk, Poland

Deadline for manuscript submissions

closed (11 March 2022)



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/85892

Processes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
processes@mdpi.com

[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)





Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)



About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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

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:

CiteScore - Q2 (Chemical Engineering (miscellaneous))