

Special Issue

Biotechnological Energy Conversion Technology: New Advances in Biosolids Management and Wastewater Treatment

Message from the Guest Editors

This Special Issue will present and consolidate recent advances in biotechnological conversion technologies, focusing on wastewater treatment and biosolid management, particularly for energy production, volume reduction, resource recovery (carbon, nutrients), contaminant destruction, and char/agri-ash generation. Topics of interest include, but are not limited to, the following:

- The removal, degradation, transformation, and destruction of contaminants of emerging concern that are typical of wastewater and biosolid streams
- Thermal treatments, such as hydrothermal carbonisation, supercritical water oxidation of biosolids for material and energy production;
- Sewage sludge stabilisation methods;
- In situ applications of biosolid-derived char in wastewater treatment, biomethane generation, biogas upgrading, and gaseous pollutant removal;
- Energy production from biogas, biochar, syngas, and bio-oil obtained from the biological–thermal treatment of wastewater sludges;

Guest Editors

Dr. Ibrahim Gbolahan Hakeem

Chemical and Environmental Engineering, School of Engineering, RMIT University, Melbourne, VIC 3000, Australia

Prof. Dr. Kalpit Shah

Chemical and Environmental Engineering, School of Engineering, RMIT University, Melbourne, VIC 3000, Australia

Deadline for manuscript submissions

5 March 2026



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/233483

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

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





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



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



About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, 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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)