



an Open Access Journal by MDPI

# Trends in Energy Harvesting Biotechnology

Guest Editors:

submissions:

### Message from the Guest Editors

Prof. Dr. Jaakko Puhakka Sustainable use of natural resources has directed conventional waste and wastewater management towards. Prof. Jukka Rintala resource recovery, including nutrients and energy. Biotechnology provides solutions for harvesting energy Prof. Bestamin Özkaya carriers from waste materials together with meeting the Prof. Erkan Sahinkaya environmental protection needs. Various bioprocesses have been developed for waste-to-energy harvesting, including biomethane, bioalcohols biohydrogen and bioelectricity. Anaerobic digestion for methane and Deadline for manuscript bioethanol production have found many applications closed (28 February 2019) whereas processes targeting biobutanol, biohydrogen, as bioelectrochemical remain well as systems in developmental stage. These technologies have various potentials and challenges prior to providing wide-scale resource recovery solutions. The primary focus of this introduce up-to-date Special Issue is bioprocess approaches for producing energy carriers from waste materials with a special focus on identifying key factors limiting their large-scale beneficiation.









an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

### 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.

# **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 (Engineering (miscellaneous))

### **Contact Us**

*Energies* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies\_mdpi