Special Issue

Recent Advances in Anaerobic-Digestion-Based Biorefinery

Message from the Guest Editor

Anaerobic digestion is a negative-carbon method that could contribute to achieving global sustainable development goals, as it can reduce pollution while recycling energy and high-value-added products (e.g., lactic acid, volatile fatty acids, and biostimulants). However, the physicochemical properties of different substrates significantly affect their anaerobic digestion performance. For example, anaerobic digestion of wastewater has undergone obvious progress and is more efficient than that of organic solid wastes, which makes the universal application of anaerobic digestion challenging. In particular, its long reaction period, low methane yield, low organic degradation rate, poor stability and undesirable byproducts greatly limit the applicability of anaerobic digestion to organic solid wastes. The general understanding of anaerobic digestion in solid-state (e.g., organic solid wastes) and liquid-state (e.g., wastewater) substrates needs to be further improved.

Guest Editor

Dr. Ying Xu

State Key Laboratory of Pollution Control and Resource Reuse, School of Environmental Science and Engineering, Tongji University, Shanghai 200092, China

Deadline for manuscript submissions

30 April 2026



Fermentation

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 5.7



mdpi.com/si/251794

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

mdpi.com/journal/ fermentation





Fermentation

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 5.7



About the Journal

Message from the Editor-in-Chief

Welcome to a new open access journal, Fermentation, which meets the growing need for a high quality peerreviewed international journal with easy access to all researchers globally. We hope that you will share our enthusiasm for this new journal and look forward to working with you to make Fermentation a leader in its field. Your contributions are vital for the success of this new journal. Proposals for editing a special issue for a particular topical area are always welcome.

Editor-in-Chief

Prof. Dr. Christian Kennes

Department of Chemical Engineering, Faculty of Sciences, University of La Coruña, La Coruña, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, FSTA, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Biotechnology and Applied Microbiology) / CiteScore - Q1 (Plant Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 3.9 days (median values for papers published in this journal in the first half of 2025).

