Special Issue

Strategies for Optimal Fermentation by Using Modern Tools and Methods

Message from the Guest Editor

The optimization of fermentation processes to produce biomass, fuels, and chemicals has always faced challenges. The current state of the art highlights the complexity of achieving success in all areas of fermentation, emphasizing that success cannot be achieved without first applying methods that isolate and identify microorganisms from habitats or communities, or methods for improving the function of existing microorganisms. Notably, special attention will be given to the following: 1. manuscripts on the identification of microorganisms by target amplification methods and nucleic acid sequence analysis; 2. nanoparticles as a tool to enhance mass transfer processes and metabolic control during fermentation; 3. innovative culturing techniques to facilitate fermentation processes; 4. the development of subsystems techniques involving microbial kinetics, liquid flow distribution in the bioreactors, and heat and mass transfers. Keywords: fermentation process; metabolic control; process modeling; design; optimization

Guest Editor

Prof. Dr. Alexander Dimitrov Kroumov Institute of Microbiology Bulgarian Academy of Sciences, Sofia, Bulgaria

Deadline for manuscript submissions

closed (15 December 2024)



Fermentation

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 5.7



mdpi.com/si/207969

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).

