



Modeling Methods for Fermentation Processes

Guest Editor:

Prof. Dr. Peter Götz

Department of Bioprocess
Engineering, Berliner Hochschule
für Technik, Berlin, Germany

Deadline for manuscript
submissions:

closed (28 February 2024)

Message from the Guest Editor

Dear Colleagues,

Since the advent of modern biotechnology initiated scientific research towards quantitative analysis of fermentation processes, various modeling tools have been applied and newly devised. This started around 50 years ago with the transfer of knowledge from chemical engineering to describe bioreactors, using mainly empirical equations, accompanied by unstructured models for the biological reactions. Beyond empirical and mechanistic models, a third approach to fermentation modeling is evolving, which is data-driven (e.g., machine learning).

This Special Issue aims to collect state-of-the-art publications on all modeling methods and their hybrid variants, from basic research to applications in industry, to provide an overview and initiate the creation of new approaches. Strengthening modeling will improve the efficiency, sustainability, and profitability of fermentation-based industries by understanding the underlying mechanisms of the system, optimizing the process parameters, and minimizing waste generation and resource consumption.

Prof. Dr. Peter Götz

Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Badal C. Saha

Retired, National Center for
Agricultural Utilization Research,
USDA-ARS, Peoria, IL, USA

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.

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), PubAg, FSTA, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Biotechnology and Applied Microbiology*) / CiteScore - Q2 (*Plant Science*)

Contact Us

Fermentation Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/fermentation
fermentation@mdpi.com
X@Ferment_MDPI