

## Special Issue

# Bioreactor Design and Optimization Process

### Message from the Guest Editors

The role of biotechnology in process engineering has attracted significant interest within the scientific community due to its numerous applications.

Bioreactors represent the heart of bioprocessing, being the place in which the main reactions occur. This makes bioreactor design and optimization of increasing interest for enhancing process efficiencies. In many bioprocesses, bioreactor characteristics influence a process' economic feasibility. Consequently, developing innovative solutions for reactor design is a pressing need in bioprocess engineering. This Special Issue requests high-quality studies focusing on topics such as the following:

- Innovative bioreactor design;
- CFD modeling of bioreactors;
- Process intensification in bioreactors;
- Mass-transfer optimization in bioreactors;
- Solid-state bioreactors: development and challenges.

---

### Guest Editors

Dr. Serena Lima

Department of Engineering, Università degli Studi di Palermo, 90128 Palermo, Italy

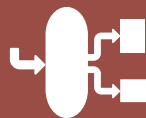
Prof. Dr. Francesca Scargiali

Department of Engineering, University of Palermo, 90128 Palermo, Italy

---

### Deadline for manuscript submissions

closed (15 December 2025)



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5

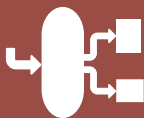


[mdpi.com/si/210235](https://mdpi.com/si/210235)

*Processes*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[processes@mdpi.com](mailto:processes@mdpi.com)

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





# Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



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



## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Giancarlo Cravotto  
Department of Drug Science and Technology, University of Turin, Via P.  
Giuria 9, 10125 Turin, 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, Inspec, AGRIS, and other databases.

#### Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))