Special Issue Stem Cell Bioprocessing

Message from the Guest Editors

Over the last couple of years, with the development of innovative technologies and an increased drive for sustainability, stem cells-based applications have widened to now include alternative foods and leather products alongside biotherapeutics. However, and regardless of the application, there is a need to ensure that reliable and cost-effective bioprocesses are in place for manufacturing the stem cells and their products. This interdisciplinary research is complex as it sits at the intersection between engineering and life sciences, and as such, it requires knowledge and expertise from both disciplines. This Special Issue aims to showcase the latest research in the form of original papers and comprehensive reviews on new approaches to manufacturing stem cells to tackle the existing challenges of scale-up, reproducibility and costeffectiveness, as well as innovations in bioprocessing tools for stem cell production. It is intended to be a collection of content that covers stem cell manufacturing from laboratory to industrial scale, including scale up or scale out systems, as well as representative scale down models for process development.

Guest Editors

Dr. Mariana Petronela Hanga Biochemical Engineering Department, University College London, London WC1E 6BT, UK

Dr. Eirini Theodosiou College of Engineering and Physical Sciences, Aston University, Birmingham B4 7ET, UK

Deadline for manuscript submissions 25 August 2025



Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 5.3 Indexed in PubMed



mdpi.com/si/201631

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

mdpi.com/journal/ bioengineering





Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 5.3 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Biomedical) Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.2 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.