# Special Issue

# Yeast Biotechnology: Current Challenges and Future Directions

# Message from the Guest Editors

The use of yeast in biotechnology has a long and fascinating history, dating back thousands of years. It is one of the major microorganisms that has been discovered by humans and utilized for benefiting our daily lives. With advances in modern biotechnology, microbiology, synthetic biology and metabolic engineering, yeast has been used to manufacture biofuels, commodity and specialty chemicals, industrial enzymes, food ingredients and pharmaceuticals. Yeast is a single-celled microorganism ideal for biomanufacturing due to its genetic manipulation. fermentation process, fast growth rate, ease of cultivation, high secretion capacity, and safety. This Special Issue of *Bioengineering* will focus on current challenges and future directions of yeast biotechnology, which includes: fundamental and applied research on yeast biology; metabolic engineering; molecular biology and genetic engineering; new products from yeast; new cell cultivation and fermentation methods: downstream process development and product recovery; bioprocess scale-up; techno-economic analysis of yeast biotechnology and products.

# **Guest Editors**

Dr. Dongming Xie

Dr. Quinn Zhu

Dr. Edward S. Miller, Jr.

## Deadline for manuscript submissions

closed (30 June 2024)



# Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 5.3 Indexed in PubMed



mdpi.com/si/166272

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.

