# Special Issue

# Innovative Biotechnological Production of Microbial Polysaccharides

## Message from the Guest Editors

This Special Issue is dedicated to exploring advances and cutting-edge challenges in the production of microbial polysaccharides and sharing the latest discoveries, methodologies, and research results. It welcomes all kinds of contributions (original research articles, reviews) that explore various aspects of microbial polysaccharide production, including but not limited to the following:

- Novel microbial strains and their growth optimization for improving polysaccharide synthesis
- Characterization, purification, and functionalization of microbial polysaccharides for industrial applications
- Advances in fermentation techniques and bioprocess engineering to improve the production and yield of polysaccharides
- Exploration of metabolic pathways and genetic engineering strategies to tailor polysaccharide characteristics
- Bioreactor design and scale-up strategies for industrial-scale production
- Implementation of AI for optimizations and production control
- Innovative sustainable approaches to produce polysaccharides, including raw material selection, waste use, and eco-friendly production practices

and

#### **Guest Editors**

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## Deadline for manuscript submissions

30 December 2025



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## **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**

Dr. Badal C. Saha

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

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## **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).

