

Special Issue

Advancing Microbial Biotechnology

Message from the Guest Editors

Understanding and implementation of microorganisms has a vital role in the bioeconomy era and the rapid expansion of biotechnology. Microorganisms underpin sustainable production in pharmaceutical, fuel, polymer, food, and many other sectors. Research increasingly targets the rational design of both strains and processes to enhance productivity, robustness, and viability. “Advancing Microbial Biotechnology” will showcase holistic and innovative strategies for microbial synthesis of high-value and platform products, including but not limited to proteins, mRNA, plasmid DNA, lipids, polysaccharides, and bulk or specialty chemicals. Contributions may span fundamental strain engineering, systems and synthetic biology, bioprocess development and scale-up, metabolic modeling, and integrated biorefinery concepts. Researchers are warmly invited to submit original research articles, critical review articles, and short communications that advance microbial biotechnology. Cross-disciplinary approaches linking microbiology with engineering, data science, or materials science are particularly encouraged.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich

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Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).