

Special Issue

Exopolysaccharides of Microbial Origin: Production, Analysis and Modification

Message from the Guest Editors

We invite submissions of original research articles and reviews focusing on the latest developments in the field of microbial exopolysaccharides.

Microbial exopolysaccharides (EPSs) are high-molecular-weight polymers secreted by microorganisms, playing crucial roles in biofilm formation, stress tolerance, and ecological interactions. Their unique physicochemical properties make them valuable in medicine and industry, including food, pharmaceuticals, cosmetics, and environmental biotechnology.

Topics of interest include the following:

- **Biosynthesis pathways** and regulatory mechanisms of EPS production;
- **Genetic engineering of microorganisms** for enhanced production and modification of EPS;
- **Molecular design** of EPS-based materials;
- **Analytical techniques** for characterization and structural elucidation of EPS;
- **In situ and ex situ modifications** of EPS;
- **Innovative applications** in industrial and medical sectors.

This Special Issue aims to cover both fundamental biological and biochemical aspects as well as cutting-edge technological and applied perspectives. Contributions that explore novel functionalities, bioprocess optimization, and interdisciplinary approaches are highly encouraged.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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