

# Special Issue

## New Fertilizer and Industrial Microbial Technology Based on Microbial Metabolites

### Message from the Guest Editor

During the last decade, metabolomics has developed from an emerging field to an essential one. Plant-growth-promoting rhizobacteria (PGPR) are naturally occurring soil bacteria that colonize plant roots, which is an important environment for plant-microbe interactions. During the PGPR's fermentation processes, small molecules (primary and secondary metabolites) change in both profile and types of bioactive compounds. Bioactive molecules result in modifications of PGPR-based biofertilizer properties. Metabolite profile patterns can thus provide a holistic signature of the biofertilizer state under study as well as deeper knowledge of specific biochemical processes. This Special Issue is devoted to "Microbiology and Ecological Metabolomics", and the topics that will be covered include (not exclusively) studies on the metabolomic analyses of PGPR responses to fermentation conditions, such as fermentation broth, temperature, and stresses; mechanisms of host adaptation to the metabolites, such as polyglutamic acid,  $\alpha$ -amino butyric acid, and spermidine; and mitigation effects of abiotic stresses, such as heat and salt and drought.

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### Guest Editor

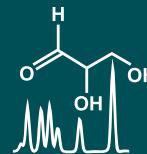
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### Deadline for manuscript submissions

closed (31 July 2023)



## Metabolites

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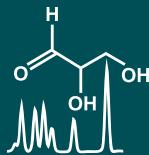
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## About the Journal

### Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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### Editor-in-Chief

Dr. Amedeo Lonardo

Internal Medicine, Ospedale Civile di Baggiovara, Azienda Ospedaliero-Universitaria, 41126 Modena, Italy

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JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q2 (Endocrinology, Diabetes and Metabolism)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.7 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the second half of 2025).

