# Special Issue

# Nuclear Magnetic Resonance-Powered Metabolomics: Progress and Future Prospects

## Message from the Guest Editor

Metabolomics has undergone a transformation in recent years, and much of its success can be attributed to rapid developments made in analytical techniques like nuclear magnetic resonance (NMR) spectroscopy. Metabolomics has found applications in diverse areas, from establishing a fundamental understanding of altered metabolism in diseases like cancer to disease diagnosis using biomarkers and drug discovery. The metabolomics study workflow can be divided into stages, including sample preparation, data collection, data analysis and metabolite and/or metabolic pathway identification. In this Special Issue, we focus on the advances made in these stages of the metabolomics workflow. Representative examples include, but are not limited to, (a) novel sample preparation approaches with enriched or selective isotope labelling for in-cell NMR studies; (b) advances in rapid data collection using one- or two-dimensional NMR experiments; (c) software and statistical techniques for analyzing data and identifying metabolites and mapping them to metabolic pathways; and (d) applications of NMR metabolomics in understanding diseases, biomarker discovery, and metabolic engineering

## Guest Editor

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## Deadline for manuscript submissions

30 September 2025

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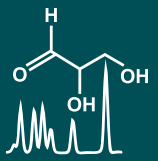


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# About the Journal

## 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.

## Editor-in-Chief

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