Special Issue

Meeting the Challenge of Metabolomics Analysis by Using Multidimensional Gas Chromatography with Mass Spectrometry

Message from the Guest Editors

Over the preceding two decades, multidimensional gas chromatography (MDGC) and its incarnation, comprehensive two-dimensional gas chromatography (GC×GC), have emerged as powerful bioanalytical tools for the study of metabolomics in many branches of life sciences. The hyphenation of GC×GC to mass spectrometry (MS) has further developed into a "super-resolution" technique that provides improved separation, detection, and identification of complex metabolomes. Notably, the utilization of multiple separation dimensions and the informing power of MS, especially high-resolution MS, have significantly expanded the coverage of detectable metabolites in biological matrices of living systems compared with GC–MS methods. In this Special Issue, we invite authors to disseminate their findings on the recent developments and applicability of MDGC and GC×GC–MS in advancing metabolomics studies. Submissions are welcome in the form of original research and review articles. We look forward to your valuable contributions.

Guest Editors

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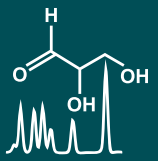

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About the Journal

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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