Special Issue

Plant Volatile Organic Compounds: Extraction, Characterization and Biological Activities

Message from the Guest Editors

Volatile organic compounds (VOCs) are among the most well-known plant specialized metabolites gaining increasing attention due to their ecological functions. chemical diversity, and wide-ranging biological properties. These molecules play key roles in plant defence, communication, and adaptation, and they also hold tremendous potential for applications across the pharmaceutical, agrochemical, food, and cosmetic industries. This Special Issue aims to gather high-quality original research and review articles that explore the extraction methods, chemical profiling, and functional properties of VOCs from a wide variety of plant species. Emphasis will be placed on sustainable and innovative extraction technologies, including green and circular approaches that valorise agricultural and forestry residues as raw materials.

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Deadline for manuscript submissions

31 December 2025



Molecules

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Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/245046

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As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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