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.

Guest Editors

Dr. Ana Lima

Institute of Agricultural and Environmental Research and Technology (IITAA), University of the Azores, 9700-042 Angra do Heroísmo, Terceira, Azores, Portugal

Prof. Dr. Elisabete Maria de Castro Lima

Department of Physics, Chemistry and Engineering (DPCE) and Institute of Agricultural and Environmental Research and Technology (IITAA), University of Azores, 9500-321 Ponta Delgada, São Miguel, Azores, Portugal

Deadline for manuscript submissions

31 December 2025



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/245046

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

mdpi.com/journal/molecules





Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th 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 all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

