Special Issue

Recent Advances in Volatile Organic Compound Analysis as Diagnostic Biomarkers

Message from the Guest Editors

Volatile organic compounds (VOCs) are a diverse group of carbon-based molecules which are volatile at ambient temperatures and are emitted by an organism as a result of metabolic processes of cells and associated microbiome. The qualitative and quantitative profile of VOCs in biological fluids can vary depending on the physiological changes. Therefore, the pattern of volatile metabolites may reflect the presence of several diseases. This has been intensively investigated in the last few decades, resulting in an increasing number of studies focused on new volatile biomarker discovery.

This Special Issue aims to summarize the recent findings related to VOCs detected in various biological fluids such as breath, blood, urine, feces, as well as bacterial and cell cultures for biomedical applications. The Special Issue will be covering various topics, including but not limited to biomedical/medical application of VOC analysis, biomarker discovery, and novel approaches for sampling and analyzing VOCs.

Guest Editors

Dr. Natalia Drabińska

1. Department of Chemistry and Biodynamics of Food, Institute of Animal Reproduction and Food Research of Polish Academy of Sciences, 10-748 Olsztyn, Poland
2. Institute of Food Technology of Plant Origin, Poznań University of Life Sciences, 31 Wojska Polskiego Street, 60-624 Poznań, Poland

Dr. Ben de Lacy Costello

Institute of Biosensor Technology, University of the West of England, Coldharbour Lane, Frenchay, Bristol BS16 1QY, UK

Deadline for manuscript submissions

closed (31 March 2021)

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/si/42025

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

mdpi.com/journal/molecules

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).

MDPI