# **Special Issue**

# Essential Oil: Variability, Environmental Conditions, Composition and Bioactivity

## Message from the Guest Editor

Essential oils (EOs) are a complex matrix composed of numerous volatile compounds generally extracted from different parts of the plant by steam distillation. They are known to have various biological activities often attributed to their phenolic constituents. They have always been used in folk medicine and for food preservation. Today, many applications concern the use of EOs as new natural sources of biological interest. Their chemical composition depends on cultivars. environmental factors, and extraction processes. Ensuring the reproducibility of EO's quality requires controlling all these parameters. This Special Issue will focus on the variability of EO's composition, the identification of factors that influence variability as well as authenticity indicators. The aim of this Special Issue is also to provide an overview of the demonstration of the synergistic effect between EO's molecules or in association with existing drugs to strengthen biological activities. Finally, research on the impact of the domestication of plants on the chemical composition and biological activity of their EOs will be appreciated for the sustainable management of biodiversity.

### **Guest Editor**

Dr. Isabelle Bombarda

Institut Méditerranéen de Biodiversité et d'Ecologie marine et continentale, Marseille, France

### Deadline for manuscript submissions

closed (31 October 2021)



## **Molecules**

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/81595

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 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.

#### 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).

