



an Open Access Journal by MDPI

# Essential Oil of the Plants: Chemical Composition, Antimicrobial Activity, and Biological Applications

Dear Colleagues,

Guest Editors:

### **Message from the Guest Editors**

#### Dr. Luis Alberto Ortega-Ramirez

Departamento de Ciencias de la Salud, Universidad Estatal de Sonora, San Luis Rio Colorado, Sonora, Mexico

#### Dr. Jesus Fernando Ayala-Zavala

Emerging Technologies Laboratory, Food and Development Research Center (CIAD), Hermosillo, Mexico

Deadline for manuscript submissions: **31 October 2024** 

Antibiotics are about to launch a Special Issue dedicated to research related to the potential use of essential oils or their major components obtained from plants, highlighting their chemical composition, antimicrobial activity, and biological applications. Essential oils are oily aromatic liquids obtained from different parts of plants (flowers, seeds, leaves, bark, shoots, herbs, fruits, and roots), a large part of them are made up of a variable mixture of terpenoids, derived from their secondary metabolism. In traditional medicine, they have been used as stomachic, antispasmodic, carminative, antiparasitic, antimicrobial, and antihypertensive agents, even as insecticides, among other traditional applications. In this Special Issue, we are interested in research that highlights the variety of compounds present in essential oils and demonstrates their biological activities through in vivo and in vitro studies using innovative methods and technologies.



mdpi.com/si/166681







an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Nicholas Dixon

School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW 2522, Australia

## Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supragovernmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. Antibiotics is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (*Pharmacology & Pharmacy*) / CiteScore - Q1 (*General Pharmacology, Toxicology and Pharmaceutics*)

# Contact Us

Antibiotics Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/antibiotics antibiotics@mdpi.com X@antibioticsmdpi