

## Special Issue

# The Role of VOCs in Communication Between Plants and Microorganisms on Metabolomics

### Message from the Guest Editor

This Special Issue exploring the role of VOCs in communication between plants and microorganisms highlights the rapidly expanding field of volatilomics at the interface of chemical ecology, plant biology, and microbiology. VOCs are increasingly recognized as critical mediators of communication in complex ecosystems, shaping interactions that influence plant health, microbial communities, and environmental resilience. The contributions gathered here explore the diverse chemical roles of VOCs and their ecological functions, ranging from plant-emitted signalling molecules that modulate defence responses to microbial volatiles that enhance growth, nutrient uptake, stress tolerance, and direct defence against harmful organisms, as well as pathogen-derived volatiles that alter host metabolism and suppress plant immune responses. Emerging metabolomic technologies have enabled unprecedented insights into VOC diversity, biosynthetic pathways, and the dynamic nature of these interactions under changing environmental conditions.

### Guest Editor

Dr. Valentina Lazazzara

National Research Council (CNR), Institute for Sustainable Plant Protection (IPSP), 50019 Florence, Italy

### Deadline for manuscript submissions

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## Metabolites

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*Metabolites*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[metabolites@mdpi.com](mailto:metabolites@mdpi.com)

[mdpi.com/journal/  
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## About the Journal

### Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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### Editor-in-Chief

Dr. Amedeo Lonardo  
Internal Medicine, Ospedale Civile di Baggiovara, Azienda Ospedaliero-  
Universitaria, 41126 Modena, Italy

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