

## Special Issue

# Novel Research on Plant Extraction and Its Biological Activity

### Message from the Guest Editors

For millennia, plants have served as sources of therapeutic agents due to the presence of specialized metabolites with several biological activities. Herbal remedies and extracts continue to play a crucial role in primary health care for approximately 75–90% of the rural population globally. Despite the rise of synthetic chemistry within drug discovery and development during the late 20th century, there are emerging indications of renewed interest in natural products. In this context, particular interest is developing around the optimal extraction condition for recovering health-promoting compounds from plant species and their byproducts by choosing environmentally friendly extraction solvents and methods.

This special issue aims to optimize plant matrix extraction by applying classical and/or advanced methods (e.g. statistical mathematical methods, artificial intelligence, neural networks, etc.); analyzing phytochemical characterization, and isolating and purifying natural plant products for bioactivity evaluation. The ultimate goal is to obtain extracts with the highest amount of specialized metabolites and explore their pharmacological applications.

---

### Guest Editors

Dr. Maria Ponticelli  
Dr. Nikolay Tzvetkov  
Dr. Daniela Russo  
Dr. Luigi Milella

---

### Deadline for manuscript submissions

closed (20 June 2025)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/223223](https://mdpi.com/si/223223)

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

[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### 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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )