

Special Issue

Research on Polyphenolic Compounds from Fruits and Vegetables: Extraction, Chromatographic Analysis, and Biological Properties

Message from the Guest Editor

Phenolic compounds are ubiquitous in plants which collectively synthesize several thousand different chemical structures characterized by hydroxylated aromatic ring(s). These compounds play several important functions in plants. They represent a striking example of metabolic plasticity, enabling plants to adapt to changing biotic and abiotic environments and provide to plant products color, taste, technological properties, and putative health-promoting benefits. Phenolic compounds represent the most studied phytochemicals and have been widely exploited as model systems in different areas of plant research. These components are known as secondary plant metabolites and also possess antimicrobial, antiviral, and anti-inflammatory properties, along with their high antioxidant capacity. The aim of this Special Issue is to provide information on the most recent developments in the chemical investigation of polyphenols, emphasizing the extraction, separation, and analysis of these compounds via chromatographic and spectral techniques.

Guest Editor

Dr. Ireneusz Kapusta

Department of Food Technology and Human Nutrition, Faculty of Biology and Agriculture, Rzeszow University, Zelwerowicza 4, 35-601 Rzeszow, Poland

Deadline for manuscript submissions

closed (31 August 2022)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/93510

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

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



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).