

## Special Issue

# Natural Products Synthesis: From Carbohydrate Building Blocks to Bioactive Conjugates

### Message from the Guest Editors

Carbohydrates serve as fundamental building blocks for the synthesis of various bioactive compounds, including glycoderivatives, glycomimetics, glycosides, polysaccharides, and their conjugates, which exhibit therapeutic potential in areas such as anti-cancer, anti-inflammatory, and antimicrobial treatments. Recent advancements in synthetic chemistry have enabled the development of novel carbohydrate-based compounds with enhanced bioactivity and selectivity, addressing the growing need for sustainable and effective pharmaceuticals. We invite contributions that highlight innovative synthetic strategies, structural elucidation, and biological evaluation of these compounds. Topics of interest include the following: -- Synthesis and characterization of carbohydrate-based bioactive compounds; -- Development of novel synthetic methods for glycoside and polysaccharide derivatives; -- Exploration of the biological activities of carbohydrate conjugates, including their mechanisms of action; -- Application of carbohydrate-derived compounds in drug delivery systems and functional foods; -- Use of renewable carbohydrate resources for the sustainable production of bioactive materials.

### Guest Editors

Dr. Sarah Mazzotta

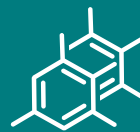
Department of Chemistry, University of Milan, Via Golgi 19, 20133 Milan, Italy

Dr. Giuseppe D'Orazio

Department of Chemistry, University of Milan, Via Golgi 19, 20133 Milan, Italy

### Deadline for manuscript submissions

28 February 2026



## Molecules

an Open Access Journal  
by MDPI

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



[mdpi.com/si/253921](https://mdpi.com/si/253921)

*Molecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[molecules@mdpi.com](mailto: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 molecular chemistry, now in its 29th 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 all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of 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).