



## Lectins: From Biochemical and Structural Studies to Biotechnological and Biomedical Applications

Guest Editor:

**Dr. Annabelle Varrot**

Univ. Grenoble Alpes, CNRS,  
CERMAV, 38000 Grenoble, France

Deadline for manuscript  
submissions:

**closed (31 October 2019)**

### Message from the Guest Editor

Dear Colleagues,

In the recent years, the number of isolated lectins has greatly increased, and several lectins with novel folds, specificity, and multivalency have been described. New families have been identified, but the panel of characterised lectins still needs to be enlarged. The identification and characterisation of lectins directly purified from natural extracts or lacking genetic data remain a challenge; therefore, it is important to develop techniques to facilitate these processes. A better understanding of the biological activities of lectins and of the mechanisms by which they recognize and bind to carbohydrates is also essential, as are methods to improve their production and availability, notably in recombinant forms. The engineering of existing scaffolds can be useful to expand or modify the specificity or activities of lectins. Many applications are under development, and new ones can still be identified and explored.

The purpose of this Special Issue is to highlight the most recent contributions on lectins, from identification to applications.

Dr. Annabelle Varrot

*Guest Editor*





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical  
Biology and Phytochemistry,  
University of Münster,  
Corrensstrasse 48, D-48149  
Münster, Germany

## 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.

## 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](#), [MEDLINE](#), [PMC](#), [Reaxys](#), [CaPlus / SciFinder](#), [MarinLit](#), [AGRIS](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Chemistry, Multidisciplinary) / CiteScore - Q1 (Chemistry (miscellaneous))

## Contact Us

---

*Molecules* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/molecules](http://mdpi.com/journal/molecules)  
[molecules@mdpi.com](mailto:molecules@mdpi.com)  
[X@Molecules\\_MDPI](#)