



## Nitrilases and Nitrile Hydratases

Guest Editors:

**Prof. Dr. Ludmila Martinková**

Institute of Microbiology of the  
Czech Academy of Sciences,  
Prague, Czech Republic

**Dr. Margit Winkler**

Institute of Molecular  
Biotechnology, Graz University of  
Technology, Petersgasse 14, 8010  
Graz, Austria

Deadline for manuscript  
submissions:

**closed (30 June 2020)**

### Message from the Guest Editors

The biotechnological impact of nitrilases and nitrile hydratases has become widely acknowledged since their discovery a few decades ago. The past 10 years or so have witnessed a tremendous increase in the number of the biochemically characterized enzymes of these types, but also in the number of sequences coding for their putative homologs. The long-lasting trend in the investigation of these enzymes is their improvement towards higher activities, selectivities, and stabilities, as well as exploring new resources of enzymes. Additionally, new biocatalytic uses are being constantly identified. All these approaches are necessary for a more intensive exploitation of the enzymes in the production of fine chemicals for the chemical, pharmaceutical, and food industries. This Special Issue will collect contributions on enhancing the biocatalytic potential of nitrilases and nitrile hydratases through, e.g., protein engineering, genome mining, metagenomic libraries screening, and new substrate and/or product identification.





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](#)