Special Issue

Nitrilases and Nitrile Hydratases

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.

Guest Editors

Prof. Dr. Ludmila Martínková

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)

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/si/22489

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

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

MDPI

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).