

Special Issue

Design, Modifications and Antibacterial Application of Intelligent Polymer Materials

Message from the Guest Editor

During the last several decades, the use of antibiotics has taken a significant step toward preventing the propagation of bacterial pathogens. The development of intelligent materials—also known as smart materials—with multiple antibacterial components are of great importance for both fundamental research and practical applications. However, this has proven to be extremely challenging. Based on both the molecular and formulation design, polymeric intelligent materials could be specifically adapted for the demands of antimicrobial applications. Polymers are chemically stable and can be chemically and physically modified to give them some different characteristics to display antimicrobial activity. Therefore, this Special Issue of *Molecules* will serve as a platform for analyzing the recent advances in the Design, Modifications and Antibacterial Application of Intelligent Polymer Materials. I kindly invite you to submit contributions in the form of short communications, original research articles, and review papers.

Guest Editor

Prof. Dr. Fusun Ozer

School of Dental Medicine, University of Pennsylvania, Philadelphia, PA 19104, USA

Deadline for manuscript submissions

closed (30 November 2024)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/187786

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 molecular chemistry, now in its 30th 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 15.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).