

Special Issue

Recent Advances in Bio-Based Nanomaterials for Environmental Remediation, Waste Valorization and Circular Economy

Message from the Guest Editors

This Special Issue is focused on the most recent advances in the development of bio-based nanomaterials applicable for the elimination of contaminants from the environment (water, soil and air) and resource recovery from wastes towards a circular economy. The following topics are welcome in this Special Issue:

- Rational design and synthesis of biopolymer-based nanomaterials, including nanocomposites, hybrid materials and surface-modified nanomaterials, for applications in the adsorption and/or degradation of pollutants;
- Assessment of the environmental impact and ecotoxicity of the bio-based nanomaterials;
- Resource recovery from wastes using bio-based nanomaterials;
- Mechanistic and computational studies regarding adsorption and reactions at the interfaces with bio-based nanomaterials.

Guest Editors

Dr. Ana Luísa Daniel da Silva

CICECO-Aveiro Institute of Materials, Chemistry Department, University of Aveiro, 3810-193 Aveiro, Portugal

Dr. Sofia F. Soares

CICECO-Aveiro Institute of Materials, Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal

Deadline for manuscript submissions

closed (1 March 2023)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed



mdpi.com/si/109264

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).