Special Issue

Stimuli Responsive Compounds for Biological and Materials Sciences: Design, Characterization and Applications

Message from the Guest Editor

Stimuli-responsive materials have the ability to translate a stimulus into a change of physical/chemical properties. This activation leads to a modification at the nano/macromolecular scale such as a bond cleavage, color change or actuation. A wide range of stimuli from the internal/external environment can trigger a molecular response, namely, a variation of temperature, magnetic/electrical field, or combinations thereof. These functional materials can be endowed with multiresponsiveness and find some applications in drug delivery, gels, optical devices, shape-memory polymers, or nanocomposites. In this Special Issue, we will focus on the design and application of stimuli-responsive small molecules and polymeric materials. Particular attention will be paid to the development of new responsive functional groups, and the improvement of their sensitivity/selectivity toward specific stimuli. These studies will also concern the determination of new stimuli from an external/internal environment. These smart compounds will also be endowed with multiresponsiveness and find application in biological and materials sciences.

Guest Editor

Prof. Dr. Franck Meyer

Microbiology, Bioorganic and Macromolecular Chemistry, Faculty of Pharmacy, Université Libre de Bruxelles (ULB), 1050 Brussels, Belgium

Deadline for manuscript submissions

closed (31 July 2022)



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/98620

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



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).

