



Ultrasound and Microwave-Assisted Organic Synthesis

Guest Editor:

Dr. Katia Martina

Dipartimento di Scienza e
Tecnologia del Farmaco,
Università di Torino, Via P. Giuria
9, 10125 Torino, Italy

Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editor

High-value product synthesis can be reached by means of alternative energy sources, such as ultrasound irradiation. Synthesis of organic molecules and nanoparticles for use in organic synthesis, catalyst preparation are important domains in the fine chemical and pharmaceutical industries, and ultrasound irradiation provides a source of mechanical energy which can be used to improve reaction rate, yield, and selectivity in a wide range of chemical processes. This Special Issue of the journal is devoted to chemical reactions induced or promoted by ultrasonic waves, namely, sonochemistry to provide an alternative to other enabling technologies with the aim to access new synthetic pathways, new mechanisms, and catalyst and nanoparticle preparation. Sonochemistry covers a multidisciplinary approach integrating chemistry, physics, and process technology, and therefore, the Special Issue is also addressed to the reactor design and to the development of a hybrid reactor in which synergistic effects of ultrasound combined with other technologies are studied for intensified chemical syntheses in terms of energy and resource efficiency.





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, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/molecules
molecules@mdpi.com
[X@Molecules_MDPI](https://twitter.com/Molecules_MDPI)