



Matrix Infrared Spectra and Molecular Structures of Reactive Intermediates

Guest Editor:

Prof. Dr. Xuefeng Wang

School of Chemical Science and
Engineering, Tongji University,
Shanghai 200092, China

Deadline for manuscript
submissions:

closed (30 November 2018)

Message from the Guest Editor

Dear Colleagues,

The reactive intermediates generated in chemical reactions, such as free radicals, unstable ions, and activated complexes, are short-lived and highly reactive. Identification of such chemical species is important to help understand chemical reaction mechanism. The reactive intermediates can be isolated in low temperature matrix, which can be identified by infrared spectroscopy. Such MI-IR (matrix isolation–infrared spectroscopy) technique goes back for many years, which is continuously used to identify the reactive species. The state-of-the-art theoretical calculations are performed to confirm the assignments of matrix infrared spectra and explore reaction mechanism and nature of bonding. This Special Issue will focus on recent progress of matrix isolated reactive intermediates, both experimentally and theoretically.

Prof. Xuefeng Wang
Guest Editor





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, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/molecules
molecules@mdpi.com
[X@Molecules_MDPI](#)