



Design, Synthesis, and Catalytic Applications of Metal Complexes

Guest Editor:

Dr. Mei Wang

School of Materials Science and
Engineering, Tianjin University of
Technology, Tianjin 300384,
China

Deadline for manuscript
submissions:

31 December 2025

Message from the Guest Editor

Dear Colleagues,

Metal complexes with sterically demanding ligands have long shown great potential for application in a wide range of fields, especially in catalysis. The synthesis and characterization of these challenging molecules with unique features have helped to elucidate catalytic processes for optimizing the catalysts. Metal complexes as molecular catalysts have the advantage of synthetic control over steric and electronic properties in the vicinity of the active sites. In recent years, researchers have moved towards exploiting these highly reactive complexes to achieve a range of catalysis in OER, HER, CO₂RR, NRR, water splitting, etc.

This Special Issue presents research on the chemistry of metal complexes, as well as other metal-based materials relevant to catalysis in various fields.

Dr. Mei 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 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

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](https://twitter.com/Molecules_MDPI)