



an Open Access Journal by MDPI

## Metal Based Drugs: Opportunities and Challenges

Guest Editors:

**Prof. Dr. Patrick Gamez**

ICREA, Pg. Lluís Companys 23,  
08010 Barcelona, Spain

**Dr. Ana B. Caballero**

nanoBIC, Departament de  
Química Inorgànica i Orgànica,  
Facultat de Química, Universitat  
de Barcelona, Martí i Franquès  
1–11, 08028 Barcelona, Spain

Deadline for manuscript  
submissions:

**closed (10 July 2017)**

### Message from the Guest Editors

Dear Colleagues,

Metal-based drugs are used for a wide range of human diseases, beyond their well-known applications in cancer (cisplatin) or rheumatoid arthritis (auranofin).

The development of drugs based on coordination compounds, *i.e.*, metal complexes, offers the possibility of great structural versatility, compared to purely organic molecules, as they are generated from the combination of different metal ion(s) with distinct ligand(s). The binding of the ligand to the metal ion gives rise to drastic changes in the biological properties of both the organic (ligand) and the inorganic (metal) part. Metal complexes may exert their therapeutic effect through the interaction with cellular organelles, inhibition of enzymes, alteration of the cell membrane, enhanced lipophilicity, cell–cycle arrest, *etc.*

This Special Issue is aimed at providing a forum for the dissemination of information on the most recent and relevant research in this topical and exciting area of current investigation.

Prof. Dr. Patrick Gamez

Dr. Ana Belén Caballero

*Guest Editors*



[mdpi.com/si/7060](http://mdpi.com/si/7060)



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](http://www.mdpi.com)

[mdpi.com/journal/molecules](http://mdpi.com/journal/molecules)  
[molecules@mdpi.com](mailto:molecules@mdpi.com)  
[X@Molecules\\_MDPI](#)