

Special Issue

Metalloenzyme Modulators and Enzyme Mimics: Synthesis and Applications

Message from the Guest Editors

This Special Issue addresses our understanding of different modulations of metalloenzymes and enzyme mimics in order to better understand the mechanism behind them. About one-third of all enzymes known so far are metalloenzymes, and all major six enzyme classes established by the International Union of Biochemistry, i.e., oxidoreductases, transferases, hydrolases, lyases, isomerases, and ligases, are important members among metalloenzymes, with many different functions in cells. For this reason, they are considered as important drug targets for the treatment of major human diseases. Additionally, over the last few years, we have seen important achievements regarding molecules and their ability to act as mimetics of enzymes, that is, their ability to imitate the function of natural enzymes, thus understanding their active site structure and function. This Special Issue of *Molecules* welcomes contributions dealing with all aspects of metalloenzymes and enzyme mimics research, including drug design, inhibitors, activators, structure–function relationship, etc.

Guest Editors

Dr. Fabrizio Carta

U.R.I.To.N. Research Unit, UNIFI · Dipartimento NEUROFARBA,
University of Florence, Florence, Italy

Dr. Andrea Angeli

Neurofarba Department, University of Florence, Sesto Fiorentino, FI,
Italy

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

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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

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