



Porphyrin-Based Compounds: Synthesis and Application

Guest Editors:

Dr. Carlos Monteiro

LAQV-REQUIMTE, Department of
Chemistry, University of Aveiro,
3810-193 Aveiro, Portugal

Dr. M. Amparo F. Faustino

LAQV-REQUIMTE, Department of
Chemistry, University of Aveiro,
3810-193 Aveiro, Portugal

Dr. Carlos Serpa

Coimbra Chemistry Centre,
Chemistry Department,
University of Coimbra, Coimbra,
Portugal

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Message from the Guest Editors

Porphyrins, metalloporphyrins and their analogues, are a family of macrocycles that are ubiquitous in nature, playing key roles in numerous biological functions, such as in plant light-harvesting (e.g., chlorophyll, a magnesium–chlorin complex), oxygen binding and transport (e.g., heme group, an iron–porphyrin complex, responsible for animal cellular respiration), and bacteria photosynthesis.

The pivotal functions played by these naturally occurring porphyrinoids have motivated and inspired organic chemists to produce synthetic porphyrins and analogues in the laboratory. In the last few years, the multitude of porphyrin applications has transformed the interest in these compounds from purely academic to industrial processes. It is very relevant to implement new, more selective and efficient synthetic methods with a low environmental impact.

In this Special Issue, we invite original research papers and comprehensive reviews with a focus on the synthesis and functionalization of tetrapyrrolic macrocycles and their potential applications in different fields covering any aspect related to the abovementioned topics.





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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

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Molecules Editorial Office
MDPI, St. Alban-Anlage 66
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