



Porphyrin-Based Compounds: Synthesis and Application

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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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Message from the Editor-in-Chief

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