Special Issue

Unraveling Mysteries of Heme Metabolism

Message from the Guest Editors

Heme, an iron-containing cofactor, is essential for most life forms. Heme-containing proteins are responsible for a myriad of different tasks in living organisms, being responsible for electron transfer, gas transport and sensing, diverse one-electron enzymatic reactions, and as gene regulators to list a few. The ability of the iron to change valance rapidly upon coordination with a ligand provides a diverse functionality to the array of biomolecules. While most currently characterized organisms that possess heme are capable of synthesizing their own heme, some do not, and have evolved elaborate mechanisms to obtain heme from their environment. Among mammals, defects in the heme synthesis pathway result in phenotypic disorders named porphyrias. Additionally, heme may be further metabolized to yield linear tetrapyrroles which serve diverse functions.

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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