



Transition Metal Ions in Biology

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Deadline for manuscript submissions:

closed (31 December 2023)

Message from the Guest Editor

Transition metal ions are fundamental for life as we know it. They are present in all essential biological processes and pathways, such as nitrogen fixation, photosynthesis, cellular respiration, cell proliferation, stress response, biomineralization, among others. While iron is the most abundant of these elements, manganese, zinc, copper, molybdenum, cobalt, chromium, vanadium, nickel and tungsten also play a substantial role in biological systems. The successful use of transition metal ions is certainly due to the fundamental ability to exist in different oxidation states and in a multitude of coordination structures with three of the five most abundant elements in life (oxygen, nitrogen and sulfur). With the application of up-to-date methodologies to study biological and biochemical systems, new and sophisticated roles of metal ions in living systems can be revealed in articles in this Special Issue that aims to highlight some of the recent advances. We would like to invite experts in the field to contribute both original research papers, as well as review articles, covering basic aspects and future directions in the field





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Message from the Editor-in-Chief

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