Special Issue

Coordination Compounds: Polydentate Pyridine/Pyrazine Alcohol Ligands, Eco-Friendly Synthesis, Crystal Structures and Stability

Message from the Guest Editor

Ligands based on pyridine alcohol and pyrazine alcohol have a high tendency to coordinate to transition metal ions and they demonstrate potential to create a variety of molecular/polymeric coordination compounds. Owing to their polar groups (N and OH), pyridine/pyrazine alcohol ligands are well soluble in water, which is important for their roles in biochemistry, and they provide the possibility of synthesis in aqueous environments. Furthermore, they have the potential to form strong hydrogen bonds with solvents or host molecules via noncovalent interactions, such as hydrogen bonding.

The scope of this Special Issue covers research on the synthesis of coordination compounds by pyridine/pyrazine alcohol ligands, the growth of suitable single crystals and the determination of the crystal structures by X-ray diffraction methods, as well as their potential properties, such as gas or small molecule adsorption, including N2, CO2 and water.

Please note that submissions on both experimental and simulation studies covering these topics are welcome.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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