Special Issue

Research and Applications of *f*-Element Complexes

Message from the Guest Editors

f-element compounds and studies of their fundamental properties have gained significant attention in the last 20 years because of their wide range of importance and applications. Actinides are the foundation of current nuclear fuel production processes with significant research efforts exploring 4f/5f covalency, redox chemistry, and immobilization. Even though they are chemically and physically similar, lanthanides host a number of other applications outside of the nuclear fuel cycle—including, but not limited to, magnetic materials, laser materials, phosphors, organic synthesis catalysis, and dyes. Crystallization of such compounds can offer. In this Special Issue, we invite contributions dedicated to studies of both lanthanide- and actinide-based complexes, targeted synthesis strategies, and/or rational design. We also welcome papers concerning *f*-metal minerals, natural and derived materials, and their potential applications in a wide variety of fields. Of interest are also contributions dedicated to the comparison of various properties of 4*f* and 5*f*-analogs, which may be relevant to the *f*-element community at large.

Guest Editors

Dr. Katherine R. Johnson

Dr. Jeffrey Einkauf

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Deadline for manuscript submissions

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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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