Special Issue

Spin-Crossover in Molecular Complexes and Coordination Polymers

Message from the Guest Editor

Modern concepts of using switchable molecular compounds in displays, sensing, and memory devices exploit an ability of some transition metal ions to reversibly switch their spin state in response to external stimuli, such as temperature, pressure, light irradiation, and electric or magnetic fields. Over the years, many molecular complexes and coordination polymers have been recognized for this spin-crossover phenomenon. Among possible spin-crossover behaviors found in their crystalline state (gradual, abrupt, stepwise or incomplete), abrupt spin transitions with a wide hysteresis occurring at temperatures close to the room temperature are preferred.

For this Special Issue, we invite researchers who are well versed in spin-crossover complexes or striving to expand their 'tool-kit' by searching among coordination polymers to share their efforts in gaining insight into the spin state behavior of these compounds and in applying such knowledge for rational design of new 'switchable' magnetic materials for future breakthrough applications.

Guest Editor

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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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