Special Issue

Structure and Properties of Macrocycle-Based Molecular (Co-)Crystals

Message from the Guest Editors

In recent years, the design and synthesis of new macrocycles with distinctive topological structures has grown rapidly as a field. In addition, macrocycles can bind one or more targets via endocavity inclusion or exo-wall complexation when in a solid state to form co-crystals with diverse structures, tunable stoichiometric ratios, and interesting properties.

This Special Issue focusing on the research topic "Structure and Properties of Macrocycle-Based Molecular (Co-)Crystals". We seek original research reports focused on specific aspects of macrocycle crystals or co-crystals and their applications, including but not limited to the following topics:

The synthesis of new macrocycles and their crystalline properties;
The design of macrocycle co-crystals;
Charge–transfer co-crystals;
The applications of macrocycle (co-)crystals, including luminescence, stimuli-responsiveness, adsorption/separation, sensors, semiconductor, ferroelectric, photothermal conversion, and optoelectronics;
The relationship between crystal structure and their properties.

Guest Editors

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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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