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## Exploring the Frontier of MOFs through Crystallographic Studies

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### Message from the Guest Editors

Metal-Organic Frameworks (MOFs) have gained special interest over the last few years due to their structure-activity relationship properties, nevertheless, it can only be explored in case that crystallographic studies and topological approaches are feasible. Crystallographic studies are a powerful tool used to determine and describe several material properties, such as hydrogen bonds interactions, guest molecule adsorption and desorption, phase transitions as well as the coordination environment and oxidation state of the metal. In this forefront issue, we propose to give a thorough discussion of the structure-activity relationship properties of MOFs based on crystallographic studies, demonstrating the relevance of this topic and the problems that must be faced. Among the topics of interest are theoretical and/or empirical research exploring applied crystallographic studies of MOFs, as well as innovative synthesis to improve MOFs crystallization, new methods to data collection, and MOFs characterization.



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# Special Issue



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## 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.

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