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# **X-ray Diffraction on Crystalline Materials**

Guest Editor:

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Deadline for manuscript submissions: closed (31 July 2023)

#### Message from the Guest Editor

Dear Colleagues,

It is a distinct pleasure for me to invite you to contribute to this *Crystals* Special Issue, entitled "X-Ray Diffraction on Crystalline Materials".

To paraphrase Sir William Bragg, the discovery of X-rays provided scientists with new eyes. Spoken ten years after the first X-ray crystal structures, many scientific ideas that had previously been dimly viewed (atomic theory, bonding in ionic solids, and the properties of materials such as diamond) were now incredibly clear.

The purpose of this Special Issue is to illustrate, over 100 years later, how X-ray diffraction continues to allow us to view the world of crystalline solids with new eyes. While X-ray diffraction has been key in establishing the nature of molecular structure, here, the emphasis is not on the molecule but on the crystal as a singular entity. Papers in this Special Issue will highlight unexpected structures, frameworks or networks, or unusual bonding arrangements, or elucidate the structural origin of the properties of crystalline materials, e.g., chromic, magnetic, thermal, or mechanical.









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### **Editor-in-Chief**

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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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