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Optical and Molecular Aspects of Liquid Crystals

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Message from the Guest Editors

Molecular structure and optical properties are of the most interesting aspects of liquid crystalline materials. Recently, they have been the topic of intensive studies due to their essential application potential in material science technology. Since new types and properties of liquid crystal phases have been observed and investigated, such materials are bound to gain increasing importance in many industrial and scientific fields.

The optical properties of liquid crystalline materials are mainly dependent on their molecular geometry, where minor changes in their molecular structures can be accompanied by great changes in their mechanical and optical characteristics. In recent years, several synthesized compounds have been made in order to produce wide varieties of molecular geometries.

Research dealing with the problems relating to electro-optical properties, physical and thermal characterizations, structure, dynamics, interactions, reaction mechanisms, reaction rates and involving new synthesized materials, nanostructures, soft matter, self-assembly, and composites is invited in this Special Issue.



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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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