Special Issue

Crystallography of Enzymes

Message from the Guest Editors

Enzymes are proteins or RNA molecules that act as biological catalysts for accelerating biochemical reactions by lowering their activation energies. Enzymes catalyze more than 5,000 known types of biochemical reactions; however, how enzymes carry out such diverse functions is still not fully understood. Since enzymes' unique three-dimensional (3D) structural architectures allow them to act on substrates and convert them to products, determining enzymes' structure is critical in elucidating their diverse functions. Currently, X-ray crystallography remains the favored technique for determining enzyme structures. X-ray crystallography has been widely utilized to elucidate the atomic details of catalytic mechanisms and conformational changes in enzymes, such as active site binding to substrates or inhibitors. Such structural insights inform biology and biomedicine. Although many enzyme structures have been determined in the past several decades, more remain to be elucidated. Thus, we welcome structural biologists and biochemists to provide their views and perspectives on the crystallography of interesting and novel enzymes.

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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.

Editor-in-Chief

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