

Special Issue

Biocatalysis—Enzymes in Industrial Applications

Message from the Guest Editor

This Special Issue focuses on enzyme engineering and industrial biocatalysis. Specifically, it explores cutting-edge research and developments in the industrial application of enzymes for producing high-value products, the rational design and functional enhancement of enzymes, and the structural and mechanistic analysis of industrial enzymes. Topics covered include: Development and optimization of industrial enzyme processes; Enzyme redesign and engineering for improved performance; Enzyme structural analysis of catalysis mechanisms. By integrating biocatalytic principles with enzyme engineering approaches (also with molecular simulations), this Special Issue aims to promote the development of enzymes and implementation in industrial processes. It serves as a valuable resource for researchers and practitioners working at the interface of enzymology and industrial applications, offering novel perspectives and methodologies to tackle challenges in industrial biocatalysis.

- enzyme engineering
- biocatalysis
- rational design
- protein structure
- process simulation
- molecular simulation

Guest Editor

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