Special Issue

Biocatalysis Technologies: Fundamentals and Applications

Message from the Guest Editors

With revolutionary advances in engineering technologies for both enzymes (i.e., protein engineering) and microbial cells (i.e., genome editing), commercial-scale applications of biocatalysts are expected to substitute established chemical processes in the near future. The impact of these techniques was recognized when awarding Frances Arnold (2018) and Jennifer Doudna (2020) the Nobel Prize in Chemistry for the directed evolution of proteins and the clustered regularly interspaced short palindromic repeats (CRISPR)-gene editing, respectively.

This Special Issue "Biocatalysis Technologies: Fundamentals and Applications" will focus on recent advances and new perspectives in the biotechnological applications of enzymes and microbial whole-cell systems. The scope of this Special Issue will range from the basic characteristics of emerging biocatalysts to their practical applications with focus on current engineering technologies. We look forward to receiving your contributions to these fascinating fields.

- biocatalysis
- enzyme
- whole-cell biotransformation
- microbial biotechnology
- biosynthesis
- protein engineering
- metabolic engineering

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Deadline for manuscript submissions

closed (20 March 2024)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/139728

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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