

Special Issue

Advances in Biocatalysis and Enzyme Engineering

Message from the Guest Editors

Biocatalysis using enzymes or whole cells has become an essential tool in the synthesis of chemicals. As an alternative to traditional chemical processes, biocatalysis is particularly attractive in synthesizing chiral compounds and performing chemically challenging reactions. The discovery and characterization of novel enzymes is important to broaden the applicability of biocatalysis, and engineering of existing enzymes using genetic or chemical modifications not only can deepen our understanding of enzyme structure-function relationship but can also improve biocatalysis with better catalytic performance. In recent years, multienzymatic/cell-free biosynthetic and chemoenzymatic cascade reactions have attracted more attention because they can significantly expand the product scope and synthesize more complex target molecules. This Special Issue aims to collect original research articles and reviews focused on biocatalysis and enzyme engineering. Submissions from biocatalytic reactions coupled with other types of catalysis such as chemocatalysis or photocatalysis are also welcome.

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