catalysts

an Open Access Journal by MDPI

IMPACT FACTOR 4.0

CITESCORE 7.6

Advances in Biocatalysis and Enzyme Engineering

Guest Editors:

Dr. Jing Zhao
State Key Laboratory of Biocatalysis and Enzyme Engineering, Hubei Key Laboratory of Industrial Biotechnology, School of Life Science, Hubei University, #368 Youyi Road, Wuhan 430062, China

Dr. Guochao Xu
School of Biotechnology, Jiangnan University, Wuxi, Jiangsu Province, China

Deadline for manuscript submissions:
closed (30 November 2022)

Message from the Guest Editors

Dear Colleagues,

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.