Special Issue

Biocatalytic Process Optimization

Message from the Guest Editors

Biocatalysis is very appealing to industry because it allows, in principle, the synthesis of products not accessible by chemical synthesis. Enzymes are very effective and precise biocatalysts as they are enantioselective, with mild reaction conditions and green chemistry. Biocatalysis is currently widely used in the pharmaceutical industry, food industry, cosmetic industry, and textile industry. This includes enzyme production, biocatalytic process development, biotransformation, enzyme engineering, immobilization, and recycling of biocatalysts. One of the most challenging problems in biocatalysis applications is process optimization. Experimental design combined with response surface methodology or artificial neural network are powerful tools for process optimization. This Special Issue aims to cover recent progress and advances in the field of biocatalysis optimization using any methods, such as experimental design, response surface methodology or artificial neural networks. Other methodologies, even as one-factor-at-a-time experiments for optimization related to biocatalysis, are also welcome.

Guest Editors

Prof. Dr. Chia-Hung Kuo

Department of Seafood Sci-ence, National Kaohsiung University of Science and Technology, Kaohsiung 81157, Taiwan

Prof. Dr. Chwen-Jen Shieh

Biotechnology Center, National Chung-Hsing University, Taichung, Taiwan

Deadline for manuscript submissions

closed (30 June 2020)

Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 7.6

mdpi.com/si/31733

Catalysts
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

mdpi.com/journal/catalysts

Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 7.6

mdpi.com/journal/catalysts

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Keith Hohn
Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, CAB Abstracts, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

MDPI