



Molecules

---

an Open Access Journal by MDPI

---

CiteScore: 8.6

Indexed in PubMed

Impact Factor: 4.6

Special Issue Reprint

## Current Development of Asymmetric Catalysis and Synthesis

**Edited by: Jiayi Xu**

Enantiopure organic compounds are of fundamental importance across biological, medicinal, and materials chemistry. Reflecting this importance, the vast majority of pharmaceutical agents are optically active. Asymmetric catalysis and synthesis represent powerful and well-established methodologies for accessing such chiral molecules, with the field undergoing significant advancement over the past thirty years. Consequently, a diverse array of chiral catalysts and asymmetric transformations has been successfully developed and deployed.

The Current Reprint Edition of the Special Issue is dedicated to highlighting methodological progress across the field, with key focus areas including the following: novel developments in asymmetric synthesis and catalytic strategies—such as transition-metal catalysis, organocatalysis, and biocatalysis—combined with studies on kinetic resolution, theoretical and mechanistic investigations, chemical modification of chiral organic molecules, and assessment of their associated biological functions.

<https://www.mdpi.com/books/reprint/12407>

