



## Biocatalysis in Organic Synthesis

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### Message from the Guest Editors

Dear Colleagues,

The preparation of valuable chiral compounds requires the development of more efficient methodologies, in which selectivity and atom economy of the processes become the 'evolutionary pressure'. Biocatalysis, i.e., the use of purified enzymes, cell free extracts or whole cells, as catalyst in organic processes, offers several advantages for the synthesis of high-added value materials. Thus, biocatalysts generally display exquisite selectivities while using mild and eco-friendly reaction conditions. Enzymatic reactions are economically feasible. Biocatalysis often face some drawbacks that hampered their complete application in organic methodologies, including low substrates concentrations or the need of expensive cofactor molecules for different types of reactions. In the last few years, several efforts have been devoted to overcoming these bottlenecks, including the preparation of immobilized biocatalysts, medium engineering with the use of different non-conventional media for biocatalyzed reactions, the development of efficient cofactor recycling systems, and even designing cascade reactions.





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