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Organocatalysis: Advances, Opportunity, and Challenges

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Message from the Guest Editors

Dear Colleagues,

Organocatalyzed reactions provide an alternative to metalcatalyzed reactions in creating of a wide range of organic compounds in a convenient manner. The advantages of organocatalysis include the use of inexpensive and readily available organic compounds as catalysts, as well as increased synthetic efficiency. These benefits could lead to the application of such processes in the industry. A relatively new concept is the use of chiral organic catalysts. In this area, new opportunities are opening up for the development of extremely active catalysts that rival the efficiency of enzymes and that of the few superactive chiral transition metal complexes, such as hydrogenation catalysts or certain cross-coupling reaction catalysts.

Submissions to this Special Issue are welcome in the form of original research papers or short reviews that reflect the state of research in the field of organocatalysis on the following topics: selective organocatalytic reactions, asymmetric organocatalysts, element–organic compounds in organocatalytic reactions, noncovalent interactions in organocatalysis, and the study of the mechanisms of organocatalytic reactions.



