



Advances in Green Catalysis for Sustainable Organic Synthesis

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Message from the Guest Editors

Catalysis is currently one of the most powerful tools in organic synthesis. In the context of the principles of Green Chemistry, catalysis has opened new routes for organic synthesis, improving the sustainability of chemical transformations.

The optimization of synthetic sequences and the reduction of side-products by increasing the selectivity have been a major contribution from catalyzed organic reactions. The introduction of catalysts has profoundly changed synthetic protocols for the construction of molecules, whose application ranges from pharmaceuticals and agrochemicals to advanced materials on both laboratory and industrial scales. Despite all the progress in the field, catalysts are not always green and sustainable: some rely on toxic metals, are not stable, not recyclable or are difficult to reuse, which compromises its implementation in the chemical processes.

Now the challenges are the design and use of green catalysts and catalyzed reactions to foster sustainable synthesis. The Special Issue intends to highlight updated contributions in the design and application of green catalysts and green catalytic methods that pave the way for a sustainable organic synthesis.

