



Pericyclic Reactions in Organic Synthesis

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Message from the Guest Editor

Within the realm of natural product synthesis, pericyclic reactions have played a pivotal role in discovering a new path to constructing and rearranging medium-sized carbocyclic scaffolds. Over time, a variety of pericyclic reactions (e.g. cycloadditions, sigmatropic reactions, electrocyclic and ene reactions) have been evaluated, to optimize the efficiency of synthetic routes in assembling complex small molecules and natural products. The significant chemo-, regio-, and stereo-control achievable by these reactions, as well as their efficiency in forming a number of hindered C-C bonds in a single step, the atom economy, and the minimal waste produced are of paramount importance for the synthetic chemists of the 21st century, in terms of synthesizing novel molecules and ever larger chemical libraries for drug-led screening.

This issue intends to highlight some of the most important discoveries and recent mechanistic considerations in pericyclic reactions that have fuelled, and will continue to fuel, our understanding, and translate into chemical efficiency.





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Message from the Editor-in-Chief

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