Special Issue

Pericyclic Reactions in Organic Synthesis

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.

Guest Editor

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Deadline for manuscript submissions

closed (31 July 2021)

Organics

an Open Access Journal by MDPI

Impact Factor 1.6
CiteScore 2.8

mdpi.com/si/60670

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Organics is a new open-access journal that offers rapid dissemination of innovative, informative, and impactful results in every aspect of organic chemistry, with a particular emphasis on new or significantly improved research results in the field of organic chemistry. The aim of this journal is to encourage scientists to publish their experimental and theoretical results in great detail to facilitate the advancement of organic chemistry. Sample research topics that span the journal's scope are organic synthesis, synthetic methodology, theoretical organic chemistry, physical organic chemistry, supramolecular and macromolecular chemistry, heterocyclic chemistry, organocatalysis, bioorganic chemistry, organometallic chemistry, functional organic materials, etc. We are flexible with the types of manuscripts accepted, including original research articles, short communications, highlights of new developments and insightful critical reviews.

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