





Special Issue Reprint

# Cycloaddition Reactions at the Beginning of the Third Millennium

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The aim of this Special Issue is to provide an overview of cycloaddition reactions at the start of the twenty-first century. Almost a century after the discovery of the Diels–Alder cycloaddition, this kind of pericyclic process continues to be a very efficient tool in synthetic organic chemistry and shows significant and widespread applications in different chemistry areas, from traditional organic synthesis to medicinal chemistry, materials chemistry, and so on. These reactions are beneficial to chemists because they provide valuable cyclic compounds often in a simple manner and with high and predictable regio- and stereochemistry in addition to high atom economy. These appealing features make cycloadditions privileged processes in organic synthesis.

This Special Issue in *Reactions* aims to collect recent results concerning the applications of [4+2] cycloadditions, namely Diels-Alder, Hetero Diels-Alder, and 1,3-Dipolar cycloadditions, as well as [2+2] processes. The use of more efficient, green and sustainable experimental conditions is strongly pursued to improve both the environmental aspects and the synthesis of carbo- and heterocycles with noteworthy applications in natural, pharmacological, biological, and materials domains.





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