

Cyclobutane Derivatives: Photochemical Synthesis and Applications

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Cyclobutane derivatives are very versatile building blocks, thanks to the perfect balance between reactivity and stability. They can provide a source of chemical diversity due to their inherent ring strain as well as very interesting molecular scaffolds due to their specific behavior. Photochemical reactions can give an access to complex molecules that are difficult to obtain otherwise, such as our four-membered ring compounds.

This presentation will focus on our recent achievements on the development of light-initiated reactions to prepare functionalized cyclobutane β -amino acids, but also to create molecular diversity through the combination of photochemical steps in domino sequences. Finally, applications of four-membered ring β -amino acids in the field of foldamers will be presented.

