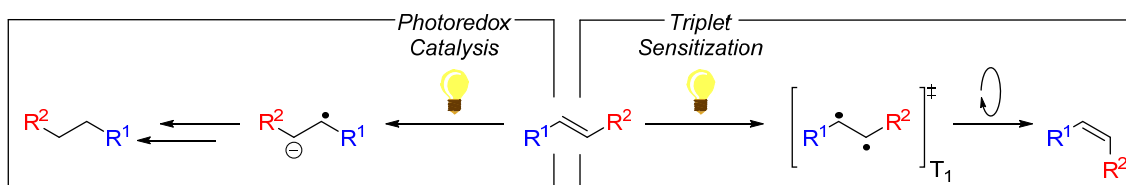


PHOTOCATALYTIC TRANSFORMATIONS OF ALKENES: STUDIES ON PHOTOREDUCTION AND $E \rightarrow Z$ ISOMERIZATION

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Olefins are important compounds for both the synthetic and biological communities, which can undergo various transformations to achieve building blocks for industrial applications. While many methods exist for alkene functionalizations, the recent advances in photocatalytic strategies have proven to be potential alternatives. This is particularly relevant to alkene hydrogenation and isomerization, which are both widely used processes at an industrial level [1-5]. The photocatalytic approach avoids the use of high energy content reagents such as H_2 or hydride sources and the need for a multi-step process. However, the substrate scope of these systems is generally very limited, which compromises their utility. Therefore, we aim to develop truly versatile methodologies for performing these transformations. We will present our recent results in photoreduction of electron-deficient alkenes and energy transfer-based E to Z isomerization.



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