Straightforward Strategies to Access N-containing Structure: Catalysis for the Benefit of Natural products

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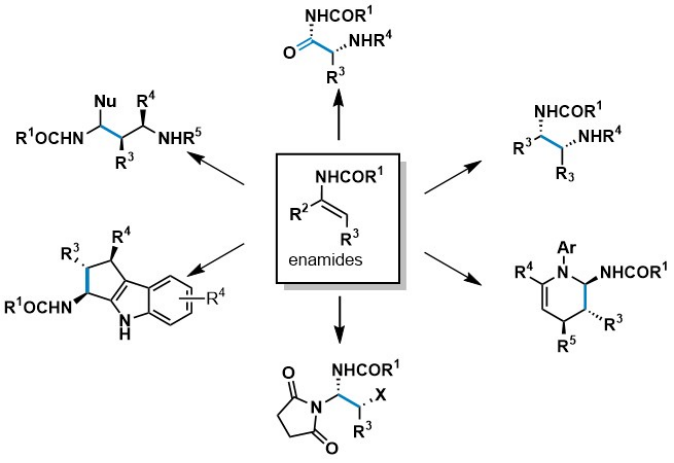
Nitrogen-activated carbon-carbon double bonds, as demonstrated by successful existing works on enamines, have a high potential for the construction of various nitrogen-containing products.[1] In order to expand the application of this class of substrates, we have focused on studying the reactivity of the promising enamide derivatives.[2] Starting from the well-known aza-Diels-Alder reaction, we have gradually been drawn to develop other cycloaddition reactions and more generally an extended range of α,β-difunctionalization methods.[3] Our most recent works involved radical processes, which contributed to significantly increase the diversity of scaffolds accessible from these nitrogenous substrates.[4] This lecture will detail our contribution towards the development of general approaches toward the synthesis of highly functionalized α,β-substituted amines in the context of an ongoing study towards the synthesis of various biologically active natural and non-natural products.[3,4]



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