



Alkynes: From Reaction Design to Applications in Organic Synthesis

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Message from the Guest Editor

Dear Colleagues,

Alkyne functionality represents one of the most valuable building blocks of organic chemistry. Despite its seeming simplicity, it combines many unusual and attractive features. Furthermore, alkynes have the same oxidation state as carbonyl compounds and, hence, via simple addition of nucleophiles, offer a “hidden door” entry into carbonyl chemistry. Due to the presence of two independently addressable π -systems, alkynes can readily form four (and, under certain conditions, up to six) new bonds, lending themselves perfectly to the design of cascade transformations. The recent examples of unusual alkyne transformations include ionic chemistry of neutral hydrocarbons, preparation of radicals without radical initiators, generation of excited states without light, “1,2-dicarbene reactivity” of alkynes in “boomerang” radical processes, selective conversion of alkynes into carbonyl compounds, and full disassembly of the alkyne moiety.

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Guest Editor





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Message from the Editor-in-Chief

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