

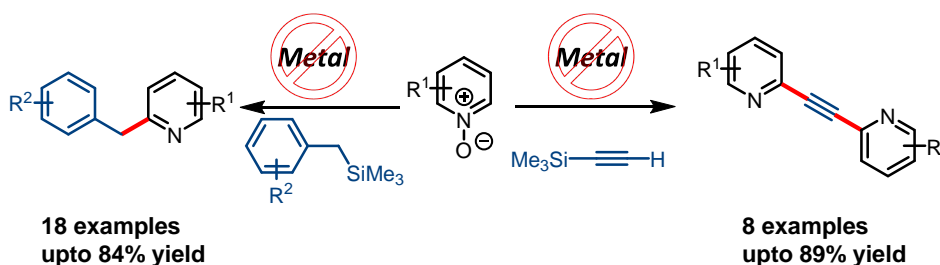
CATALYTIC METAL-FREE CROSS-COUPLING OF HETEROAROMATIC *N*-OXIDES WITH ORGANOSILANES

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A metal-free, regioselective C-H functionalization of heteroaromatic *N*-oxides has been developed. The method enables the synthesis of various benzylated and alkynylated *N*-heterocycles in a transition metal-free manner employing organosilanes as coupling partners. The unanticipated reactivity has been exploited for the synthesis of a number of symmetrical disubstituted acetylenes from ethynyltrimethylsilane *via* carbon-silicon bond metathesis (Scheme 1) [1].



Scheme 1. Metal-free cross-coupling of *N*-oxides with organosilanes

[1] Puthanveedu, M.; Polychronidou, V; Antonchick, A.P., *Org. Lett.* **2019**, *21*, 3407-3411.