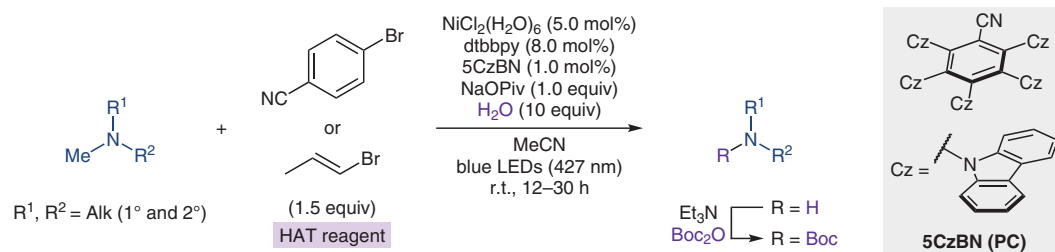
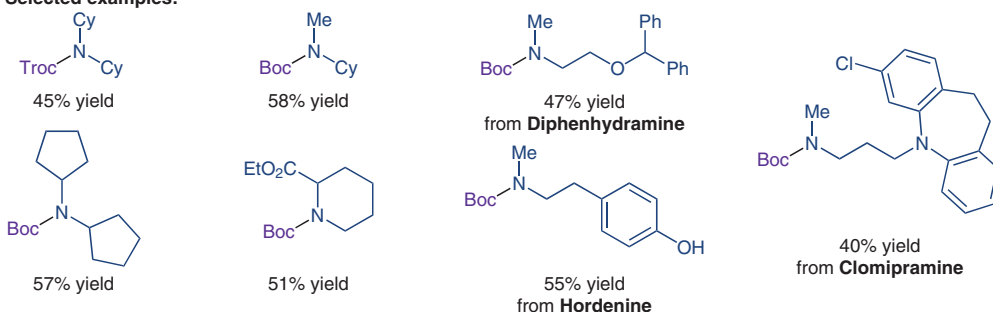


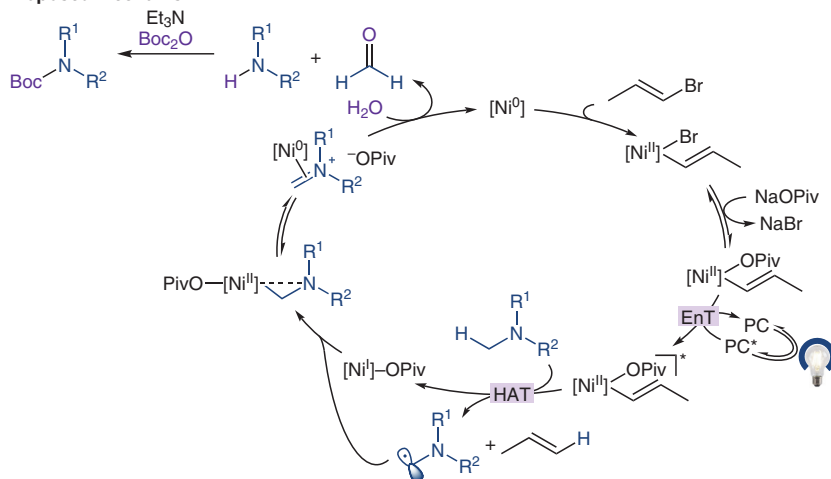
Cutting Me Off: Selective *N*-Demethylation of Trialkylamines Using C(sp²)-Bromides as HAT Reagents



Selected examples:



Proposed mechanism:



Significance: Rovis and co-workers report a photoinduced nickel-catalyzed protocol for the *N*-demethylation of trialkylamines. In contrast to classical approaches, the use of C(sp²)-bromides as hydrogen atom transfer (HAT) reagents allows for selective demethylation over debenzoylation.

Comment: Mechanistic studies support the shown mechanism, where photoinduced Ni-C(sp²) bond homolysis leads to the formation of a vinyl (or aryl) radical that is involved in the α -amino radical generation by hydrogen atom abstraction from the trialkylamine.