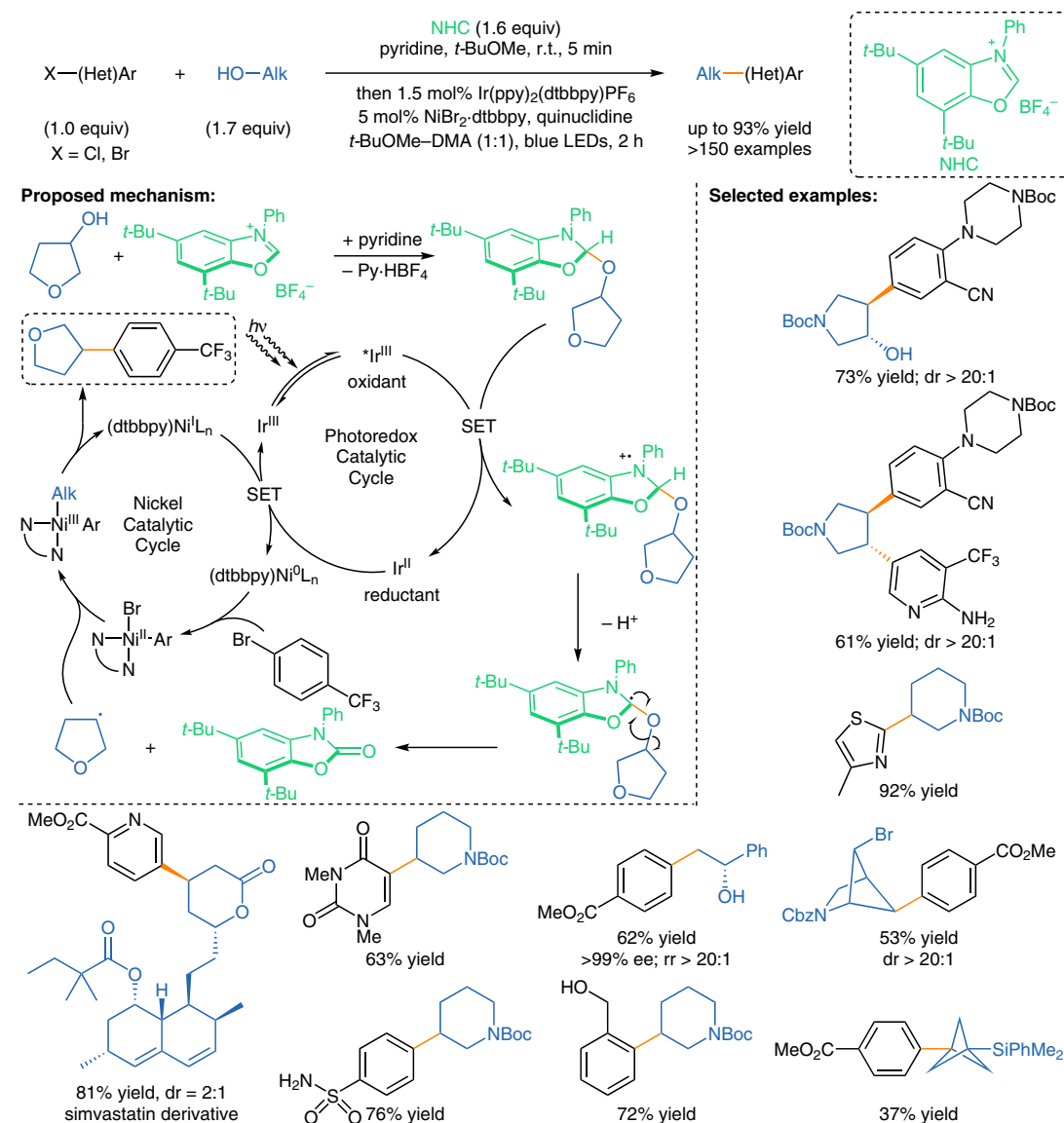


Photoredox-Enabled Deoxygenative Cross-Coupling of Alcohols Activated by NHCs



Significance: The authors report a nickel-catalyzed photo-enabled deoxygenative cross-coupling between $\text{C}(\text{sp}^3)$ -hybridized alcohols activated through an N-heterocyclic carbene salt with aryl halides. The procedure enables coupling of highly functionalized primary, secondary and tertiary alcohols.

Comment: Late-stage functionalizations of complex molecules such as a taxol variants and multiply protected saccharides are shown. A reaction mechanism is proposed in which the NHC salt plays a key role in providing the thermodynamic driving force for the reaction.