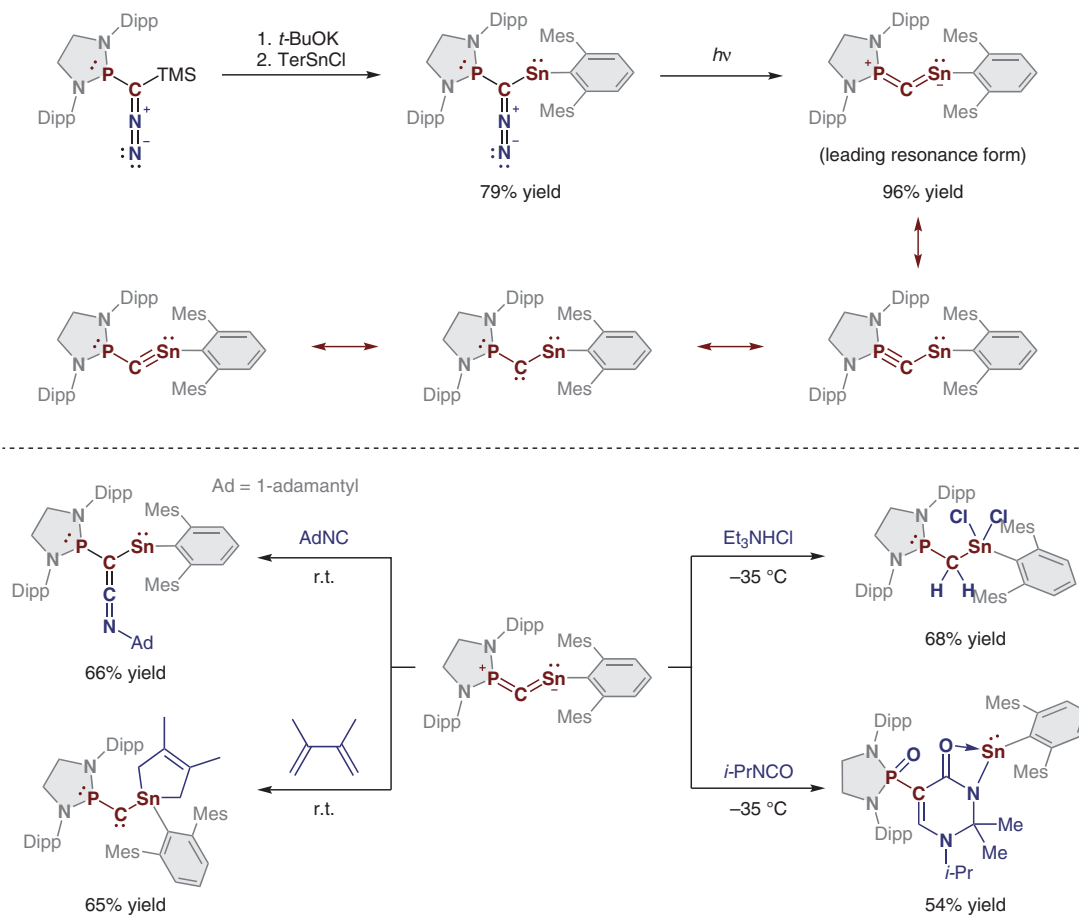


A Stable Stannyne



Significance: Alkyne analogues containing heavier group 14 elements are typically unstable and not isolable. In this work, a crystalline base-free stannyne that is persistent at room temperature is synthesized and isolated.

Comment: By virtue of a bulky cyclic phosphino ligand, the stannyne is stabilized and isolable at room temperature in nitrogen atmosphere, with a single-crystal structure unveiled. Having four resonance forms, the stannyne shows the reactivity of both a carbene and stannylene.