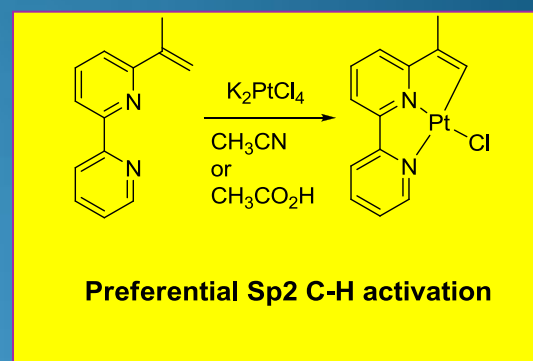
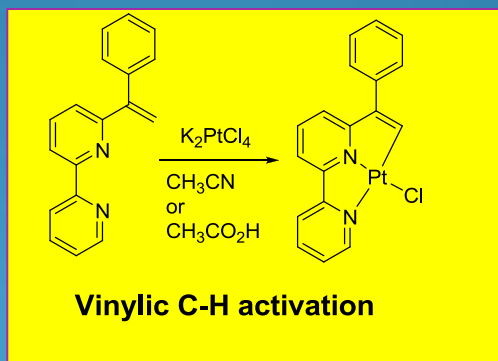
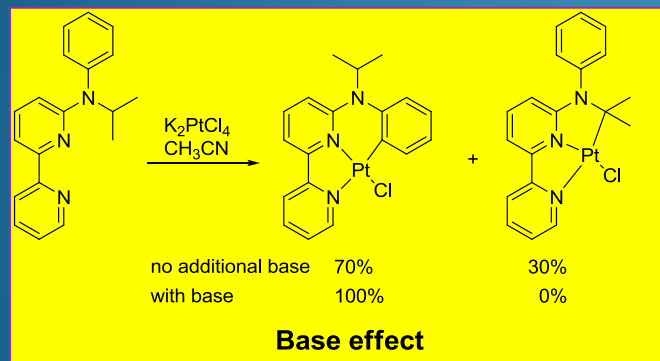
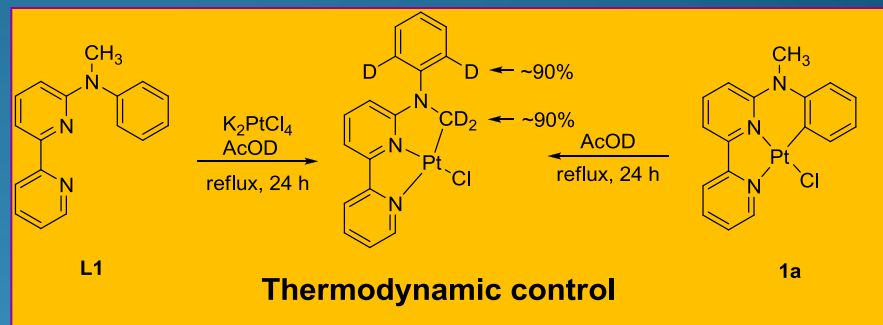
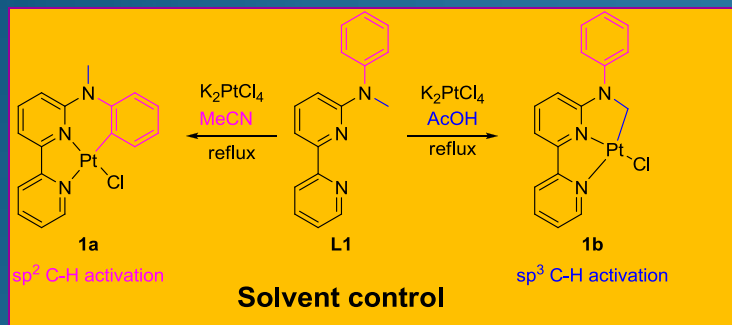


# Control of Selectivity in Intramolecular Carbon-Hydrogen Bond Activations by Transition metal Complexes

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**$sp^3$  vs  $sp^2$  C-H bond activation:** There are many factors that can affect the selectivity in the activation of different types of carbon-hydrogen bonds.



The effects on the selectivity of carbon-hydrogen bond activation can be rationalized by analyzing the reaction mechanisms including fundamental thermodynamics and kinetics. Future work will incorporate the theoretical calculation to further elucidate the reaction mechanisms.