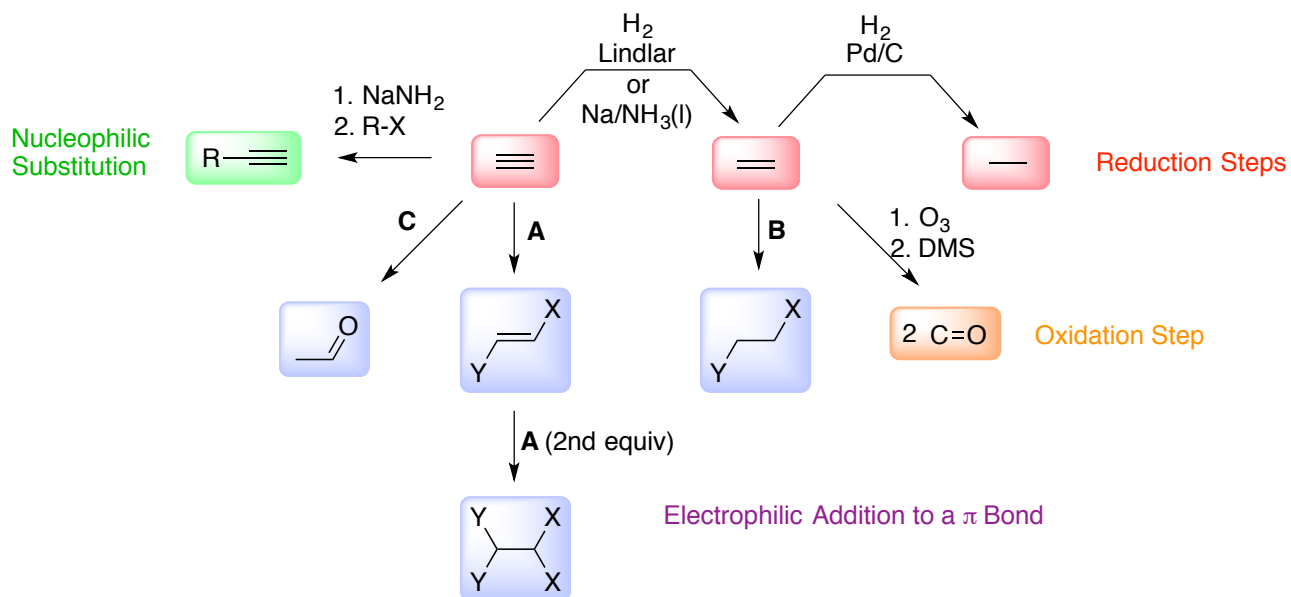


Chemistry 233 Synthetic Strategies I

Right now our synthetic toolbox is fairly limited. We will expand it as the semester progresses. You can pick a starting point (functional group) on the diagram below and trace a pathway to your desired target functional groups.



Conditions A

H-X (1 equiv)
 X_2 (1 equiv)

Conditions B

H-X
 X_2
 X_2 , H_2O or R-OH
 H_2SO_4 , H_2O
 1. $\text{BH}_3 \cdot \text{THF}$, 2. NaOH , H_2O_2

Conditions C

H_2SO_4 , H_2O
 HgSO_4 , H_2SO_4 , H_2O (terminal alkynes)
 1. $\text{BH}_3 \cdot \text{THF}$, 2. NaOH , H_2O_2