

# Chem 345 – Organic Reactions

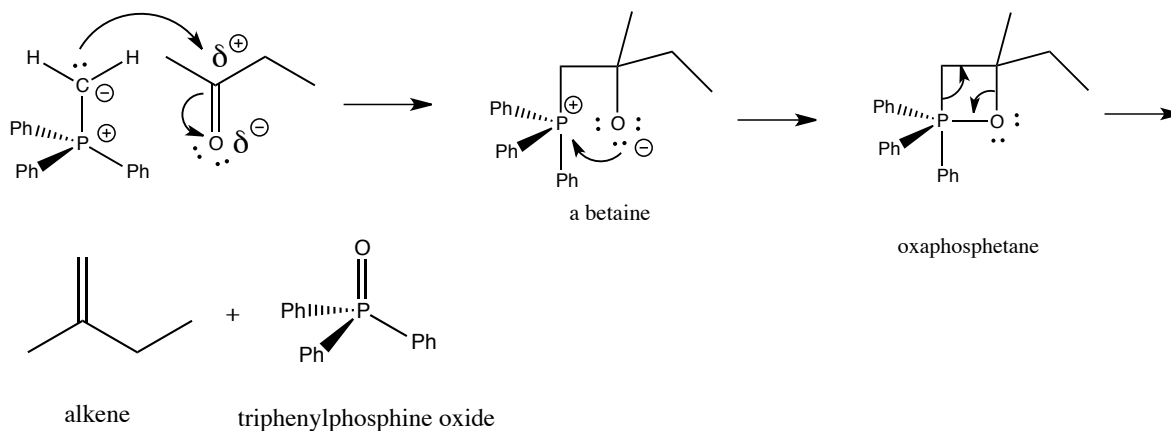
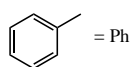
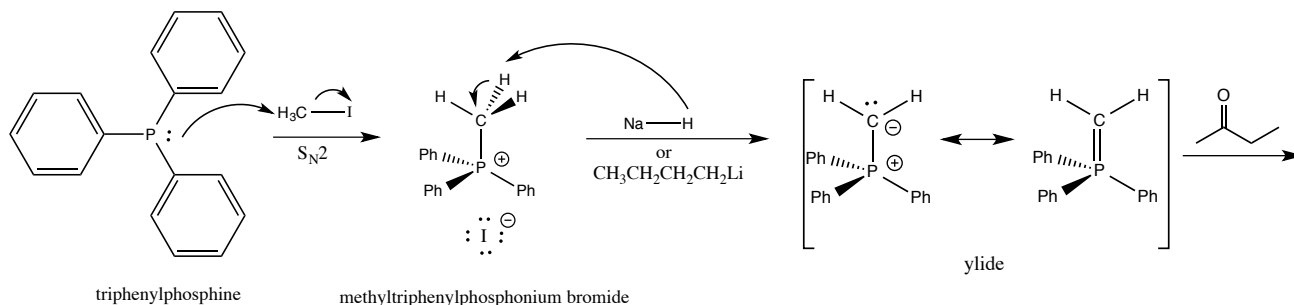
## Chapter 19

Prepared by José Laboy, MS

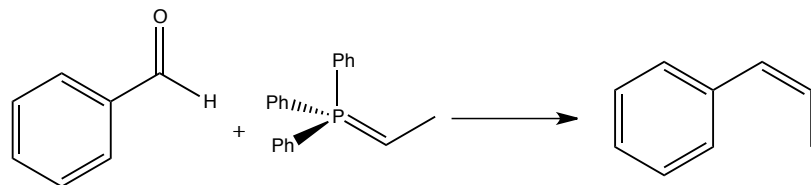
<http://www.chem.wisc.edu/areas/clc> (Resource page)

### The Wittig Reaction

Reaction:



The Wittig reaction is an excellent method to synthesize alkenes. It has the advantage that *a single positional isomer is the product*. When the ylide is derived from an alkyl halide the main product is the *Z*-isomer alkene.



87% *Z*-isomer : 11% *E*-isomer

In cases where more stable ylides are used there is a greater *E* : *Z* alkene ratio.

