

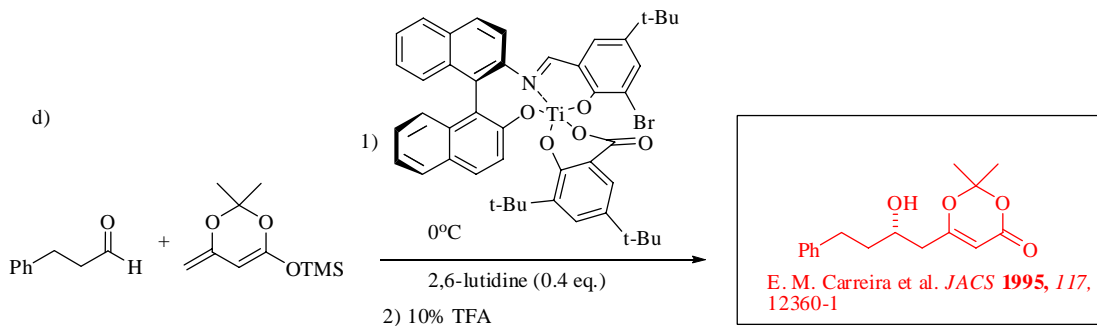
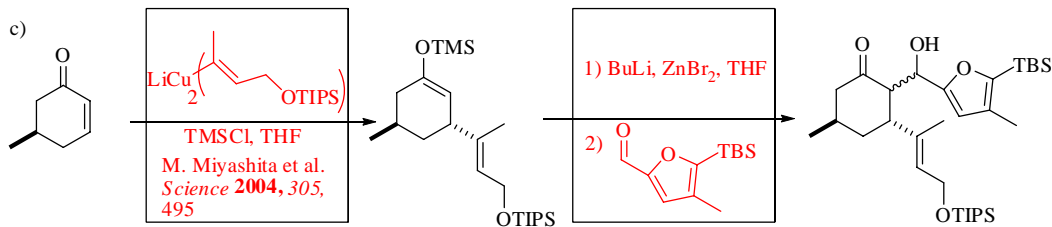
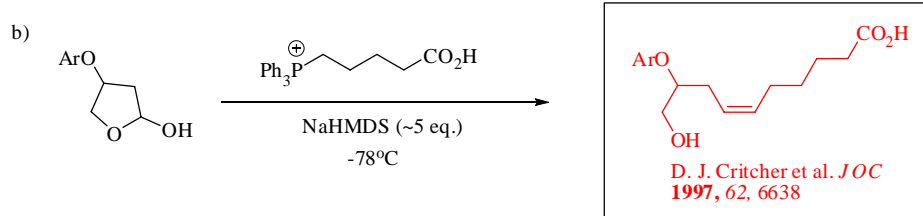
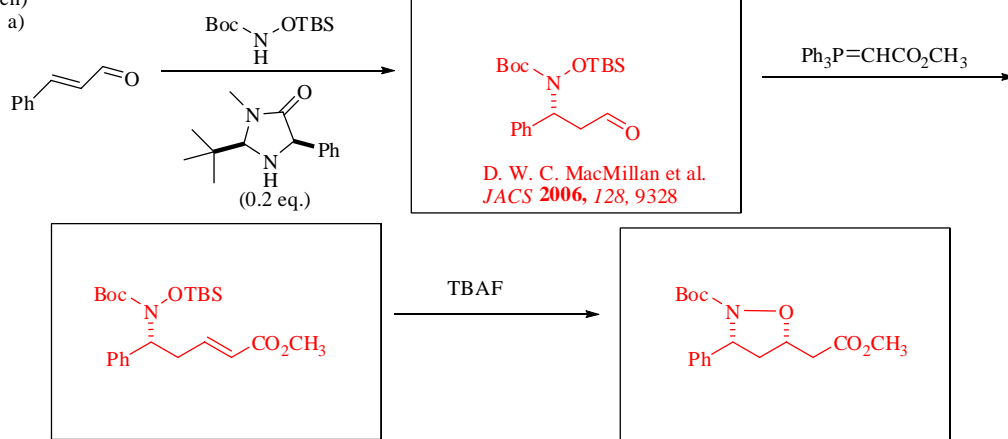
Advanced Organic Chemistry

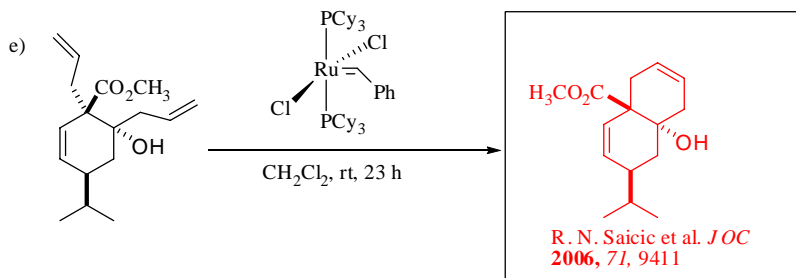
Problem Set #3

Due: Oct. 4, 2007

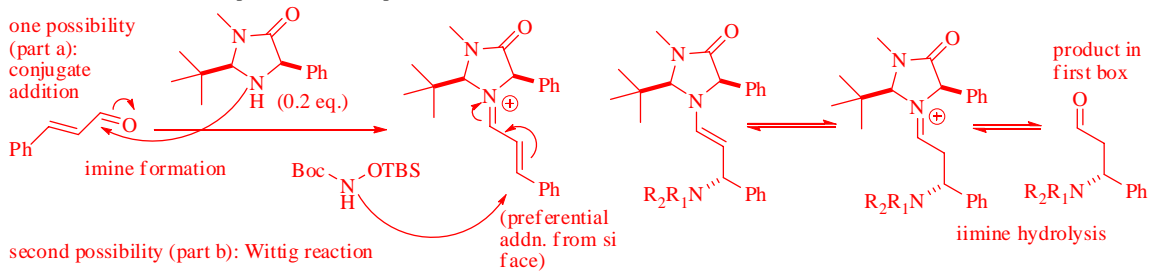
Name: Leslie Feist

1. Complete the following reactions by providing reagents or products in the box. Include stereochemistry where appropriate. (2 pts. each)

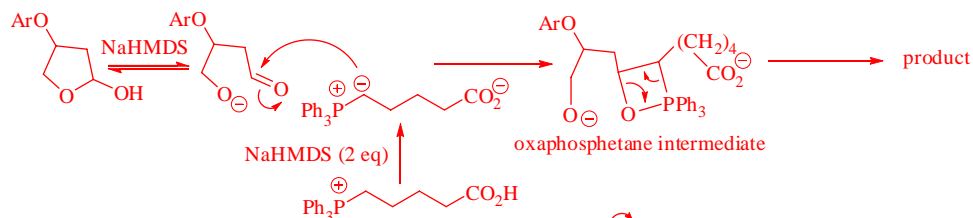




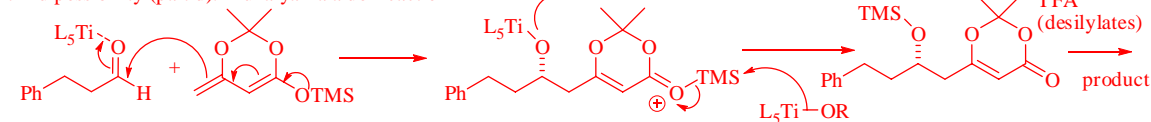
2. Choose one reaction from question 1 and show the mechanism of the C-C bond forming step. You do not need to worry about explaining stereoselective processes and you may use abbreviations where appropriate. (3 pts. UG; 5 pts. grad students) BONUS: Do a second mechanism for up to 4 additional points.



second possibility (part b): Wittig reaction



third possibility (part d): Mukaiyama aldol reaction



3. Suggest steps to transform the molecule on the left to the molecule on the right. (3 pts. UG; 5 pts. grad students)

