*CHEM 342 – Lecture 11 10/03/15*

Overheads: - Today’s Outline

Recap Thursday: Rearrangements

1. Pinacol



1. OH leaves to give most stable C+
2. H > aryl > alkyl (3° > 2° > 1°) neighboring group participation

semi-pinacol: R-N2+ = LG → can be used for ring expansion

2) Favorskii

3) Baeyer-Villiger Oxidation

Also involves rearrangement

Migratory Aptitude (for Baeyer-Villiger)

3° > 2° phenyl > 1° > methyl

Most substituted moves more easily

Good way to oxidize ketone → ester

MCPBA was most common reagent, but it is shock-sensitive and raises health concerns, so price 🡩, availability 🡫

Can also use Oxone™ = KHSO5

e.g 

an example from Nola’s past: ☺



Carbonyl Reactions

Chem 242:



More about Enolates



→ to deprotonate completely need stronger base



Alkylation of Enolates





What if ketone is unsymmetrical?



