*CHEM 342 – Lecture 9 12/02/2015*

Overheads: - Today’s Outline

Recap Pericyclic Reactions:

Electrocyclic: all “allowed” – stereo: even, , con

Cycloaddition:

normally only suprafacial go: odd, , supra

Sigmatropic:



Last Pericyclic Reaction: Group Transfer Reactions

* Similar to cycloaddition, but one bond is  instead of 

Ene Reaction – most important example



Other Examples:

Diimide (source of “H2” – reducing agent) – 2 groups get transferred



Decarboxylation of -keto acids



Application: Malonic Ester Synthesis → to make R-CH2-CO2H



Similarly: Acetoacetic Ester Synthesis



