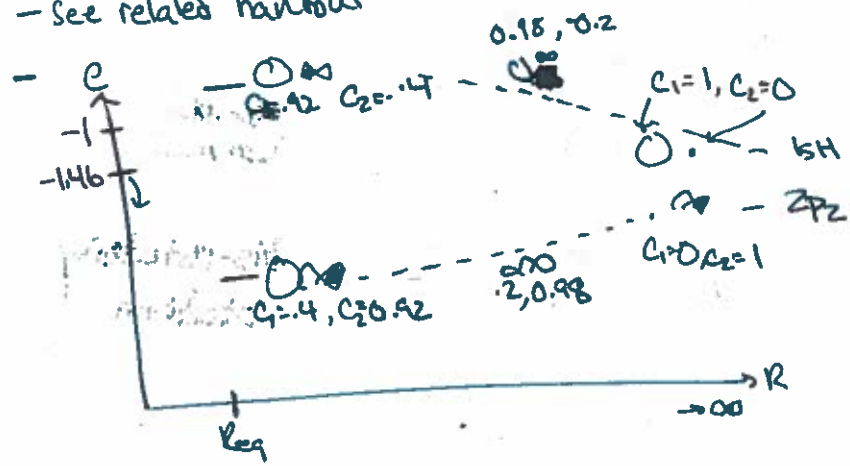


Orbital continuity during reaction: Woodward-Hoffman "The highest ϵ orbital controls the rx. barrier"

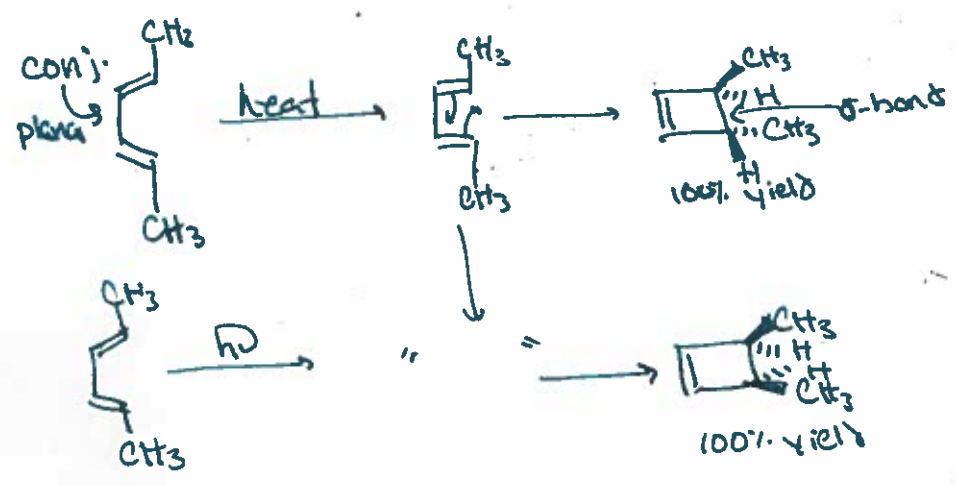
"The coefficients c_i (R_i) are continuous functions of R ;"

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- See related handout



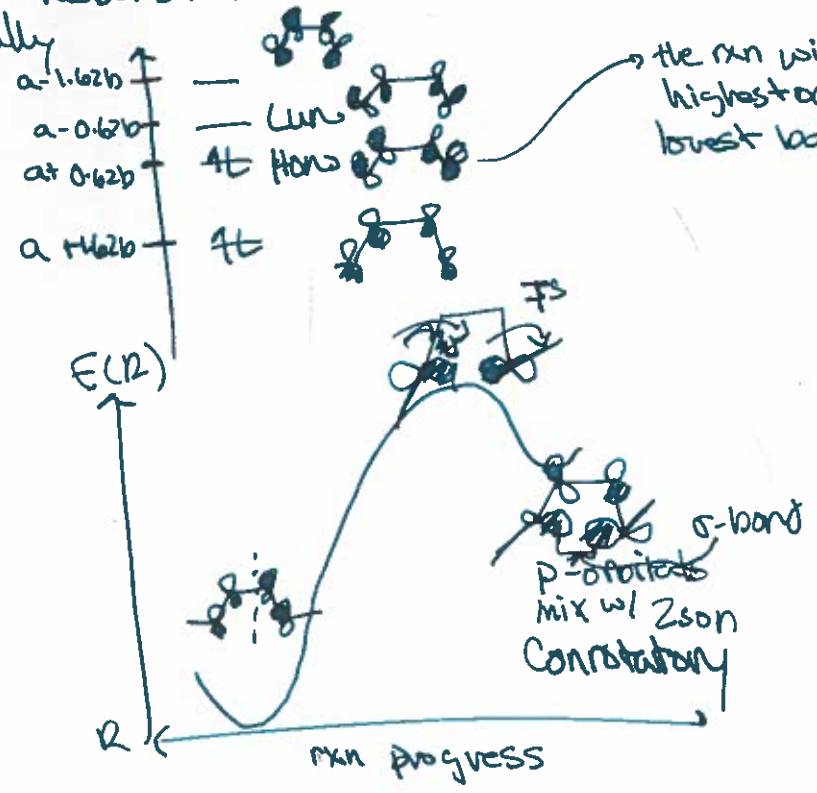
"MOs transform continuously during a chemical rxn"



Why is these reactions so stereoselective?

Reasons: MOs deform continuously during rxn:

Thermally

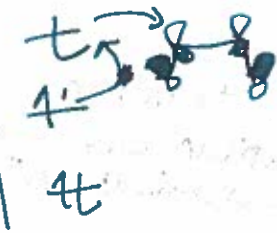


the rxn will be controlled by the e^- in the highest occupied MO: the orientation with lowest barrier wins

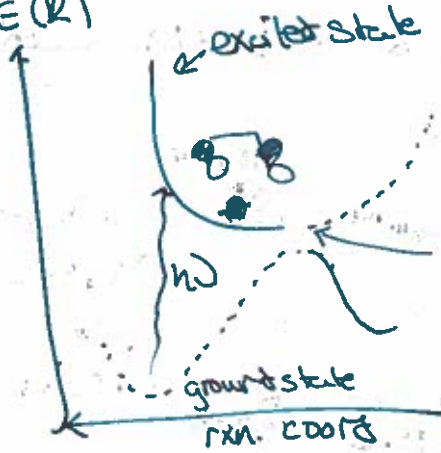
σ -bond
p-orbitals
mix w/ Z_{orb}
Conrotatory

w/ Light

e_i



$E(R)$



dis-rotatory rotation