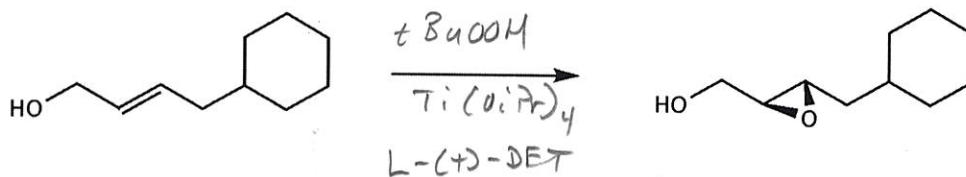


Quiz 2 (35 points)

Name Key

1. Show the reagents required to prepare each of the epoxides. Note that you must use the Sharpless asymmetric epoxidation to do this. Be clear about which version of the reagent is required in each case. (20 points)

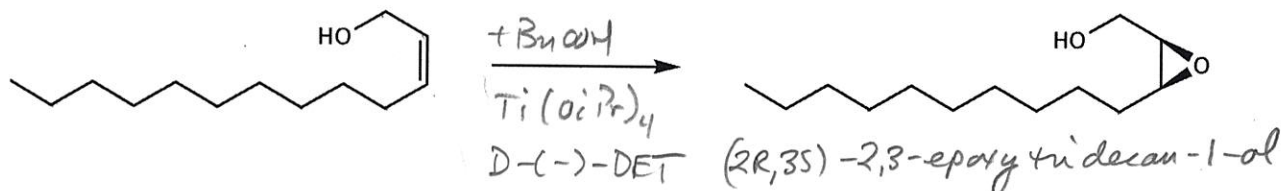
a.



(E)-4-cyclohexylbut-2-en-1-ol

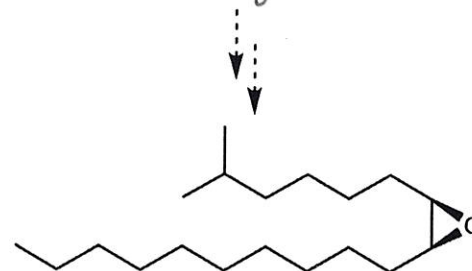
(2S,3S)-4-cyclohexyl-2,3-epoxybutan-1-ol

b.



(Z)-tridec-2-en-1-ol

(2R,3S)-2,3-epoxytridecan-1-ol



disparlure
(sex pheromone of the gypsy moth)

(7R,8S)-7,8-epoxy-2-methyloctadecane

2. Provide IUPAC names for all 5 compounds above. (C_{13} is tridec- and C_{18} is octadec-) (25 points)