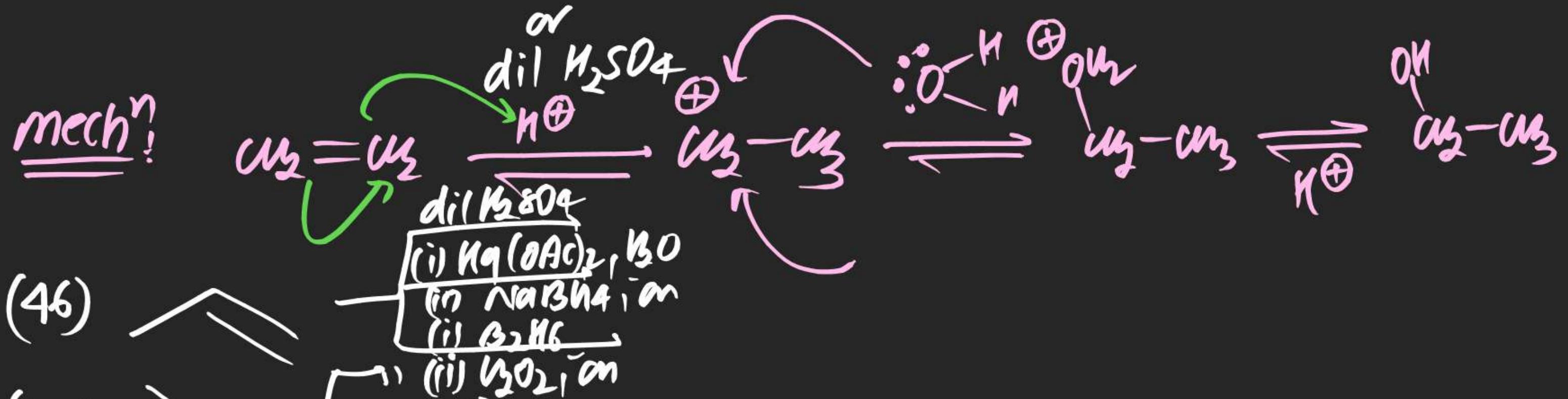
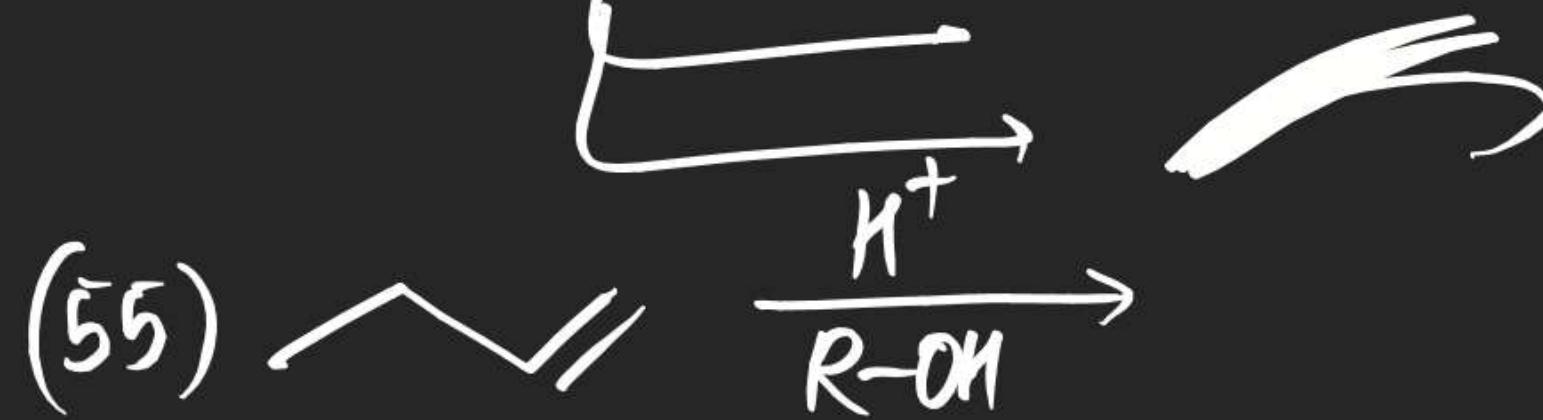
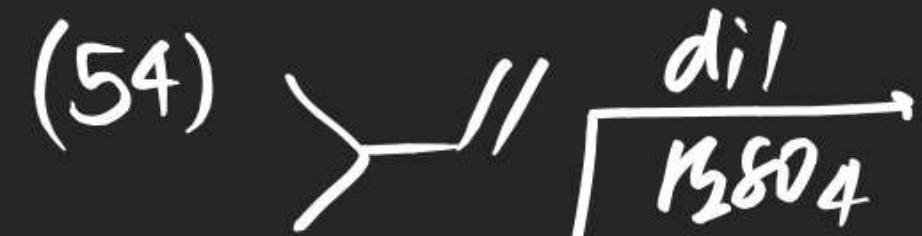
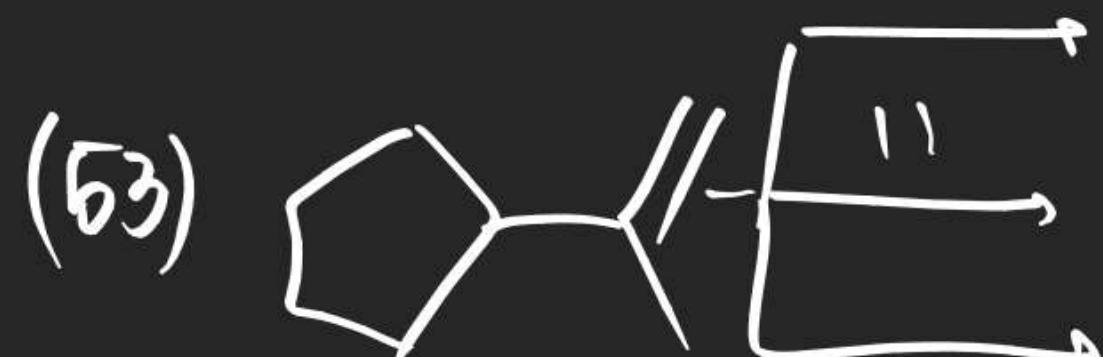
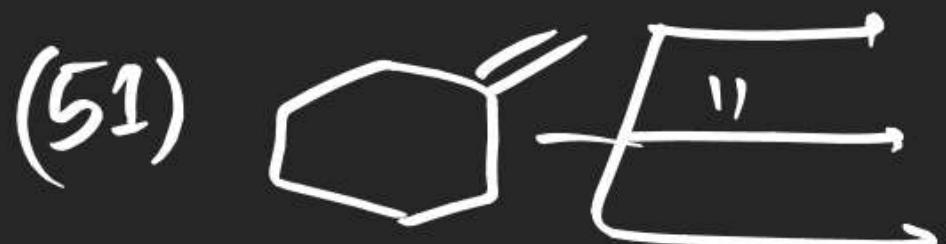


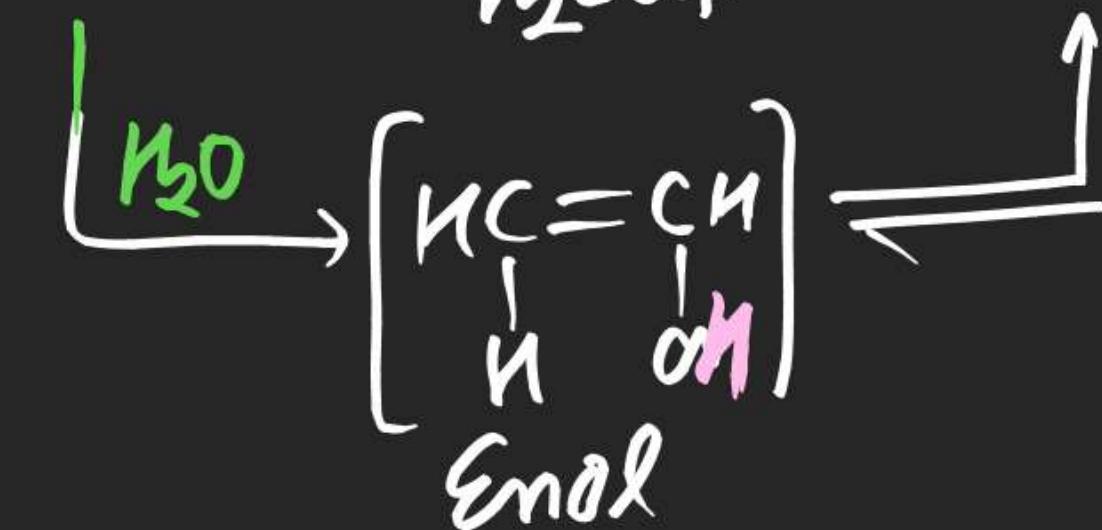
(#) Addition of  $\text{H}_2\text{O}$  / hydration of alkene  
Reaction of alkene with dil  $\text{H}_2\text{SO}_4$

$\Rightarrow$  On Reaction of alkene with dil  $\text{H}_2\text{SO}_4$   
 Alcohol is obtained as a product.

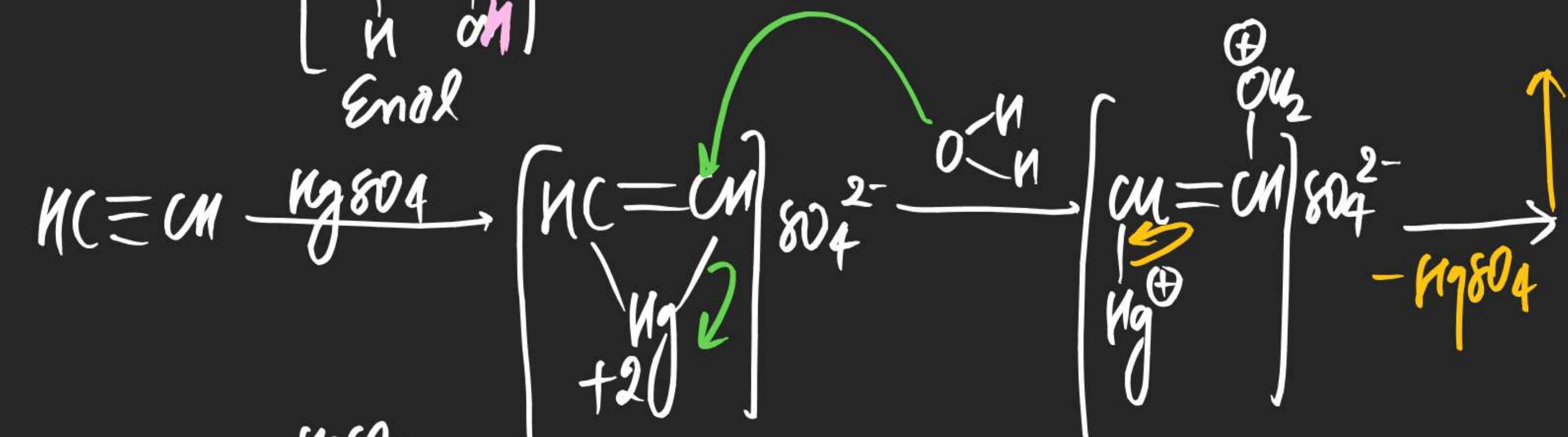


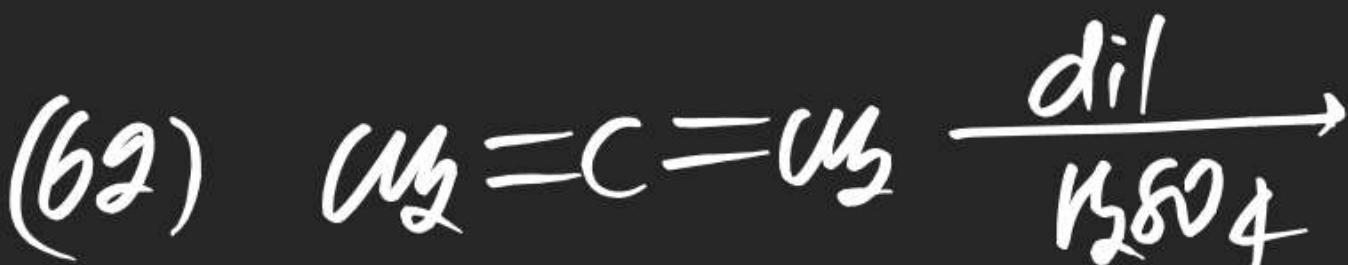


# Kuchroo's Reaction:

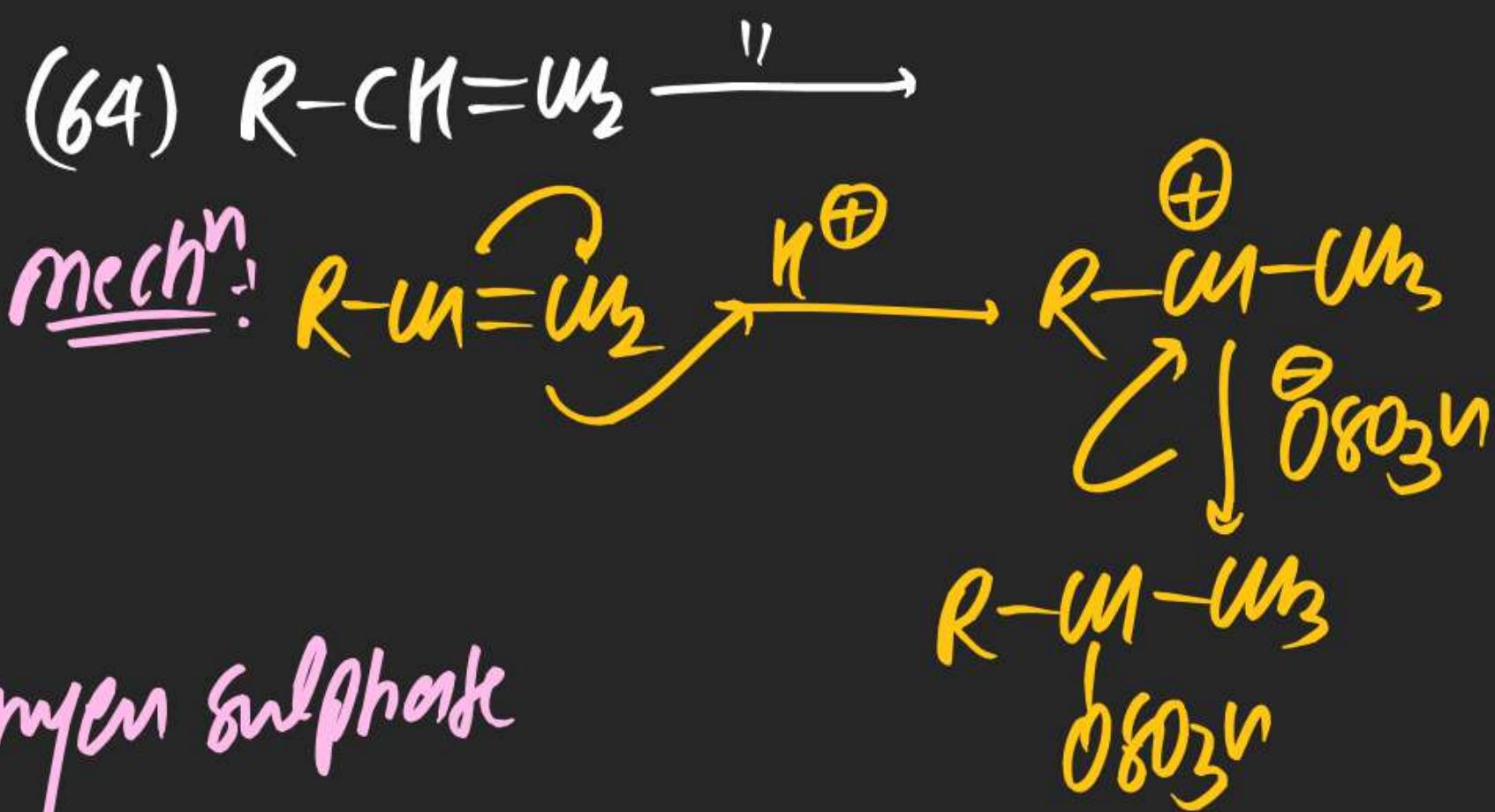


mech!



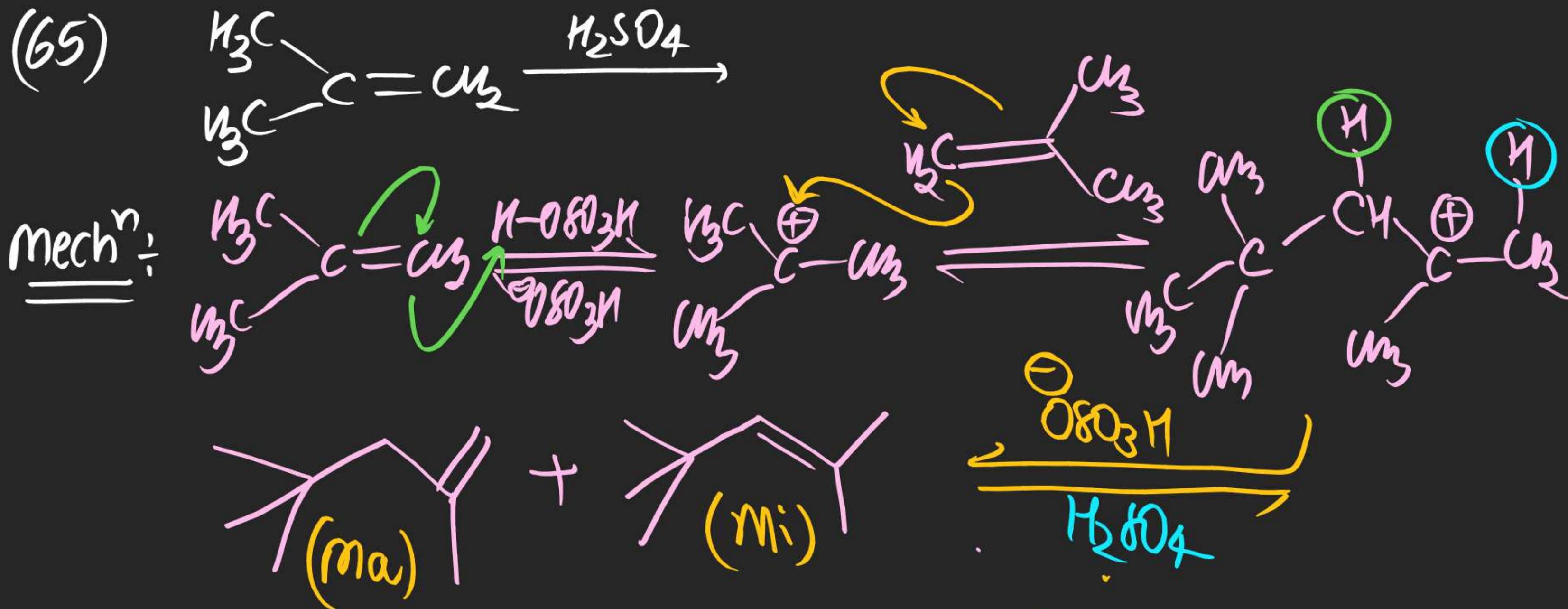


$\Rightarrow$  On addn of  $\text{K}_2\text{S}_2\text{O}_8$ , alkene myogen sulphate is obtained, if alkene type is  $\text{R}_2=\text{CH}_2$ , R-

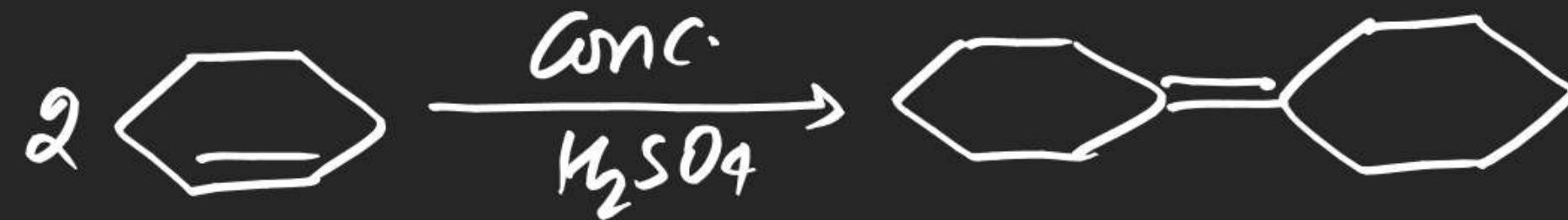


$\Rightarrow$  Alkene gets dimonized with conc.  $H_2SO_4$

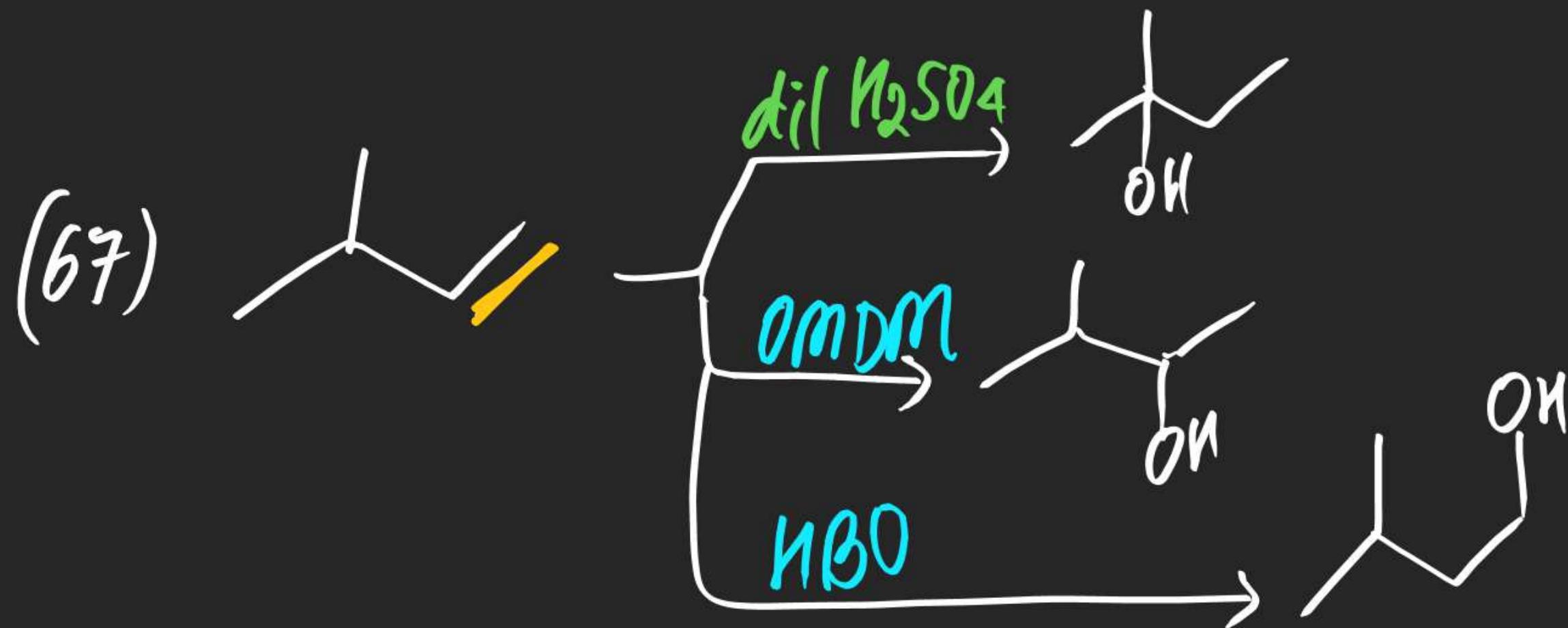
if alkene type is  $[R-C=CH, R-C=C-R \dots]$



## (66) Baeyer mechanism

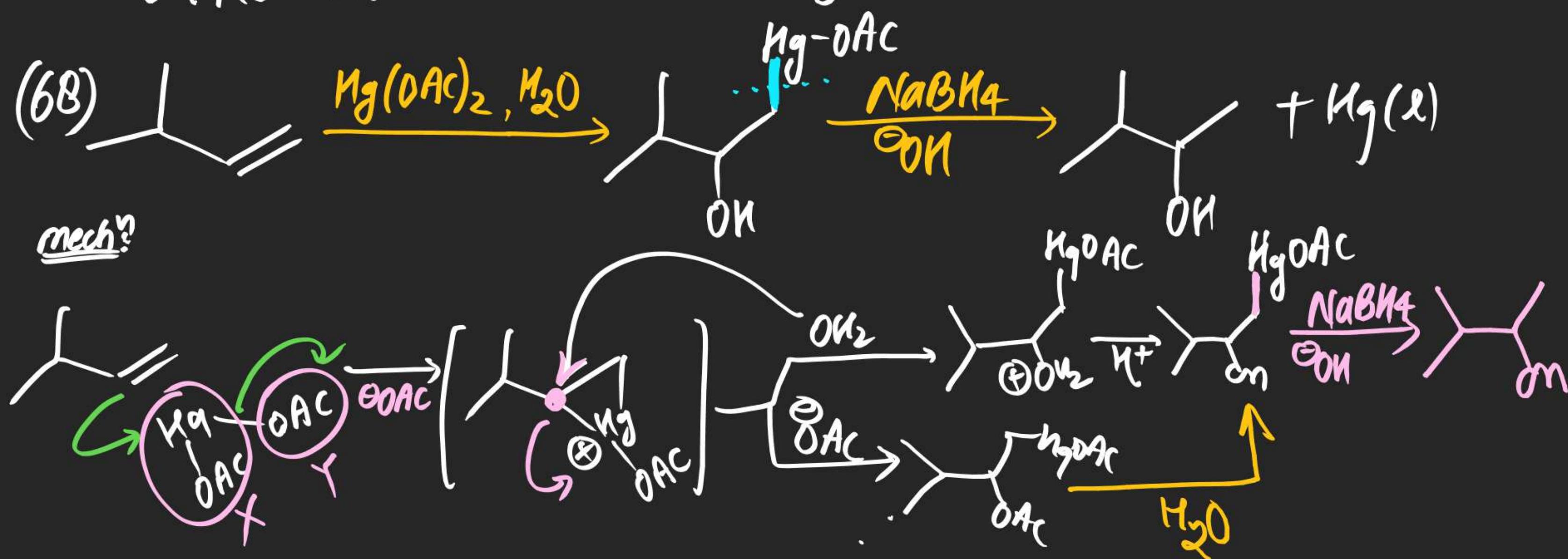


mechanism:-



# (#) Oxe-Mercuration De-Mercuration (OMDM)

⇒ In this Reaction alkene is treated with  $Hg(OAc)_2, H_2O$ , which on Reaction with  $NaBH_4, OH^-$  gives a Alcohol as a Product.



Note (i) NCC intermediate

(ii) No Reversible Possible

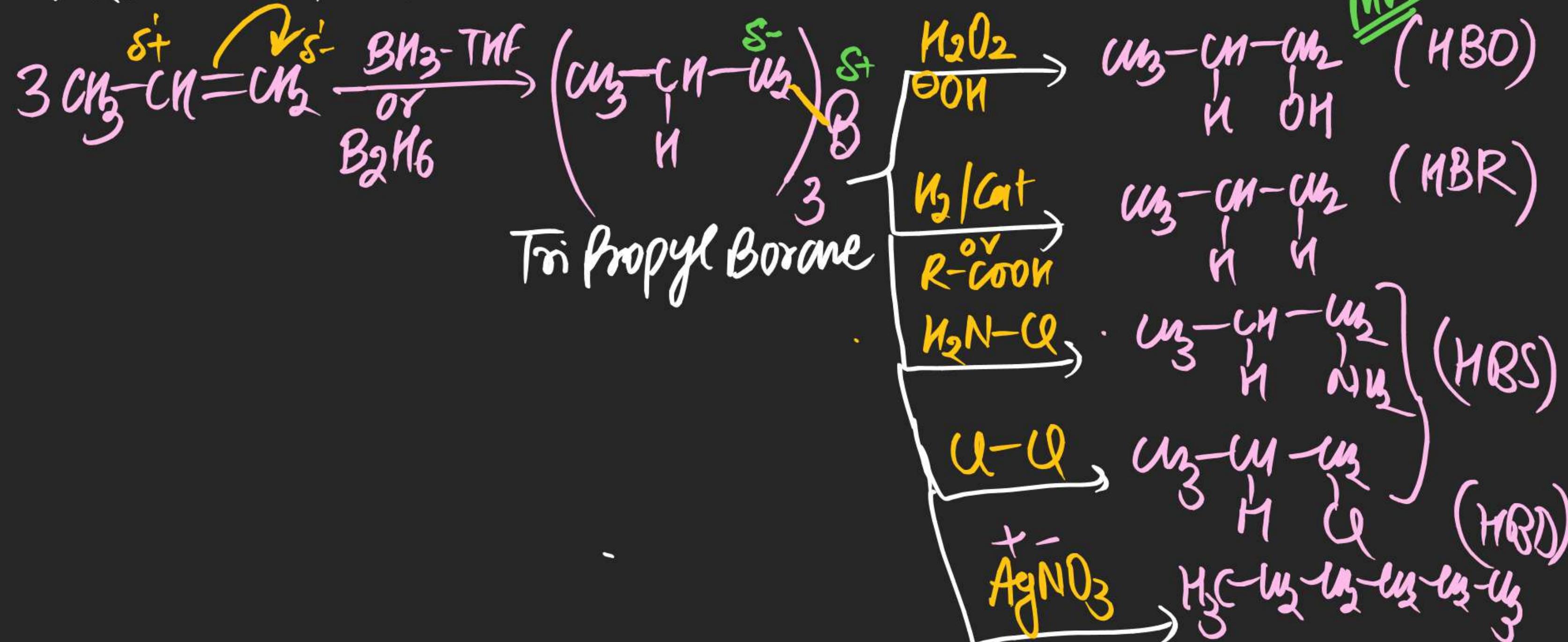
(iii) Om its Anti phenomena.

(iv) Product of OMDM can also be obtained by assuming  
H<sub>2</sub>O addn on given alkene in marconicoff's addn.

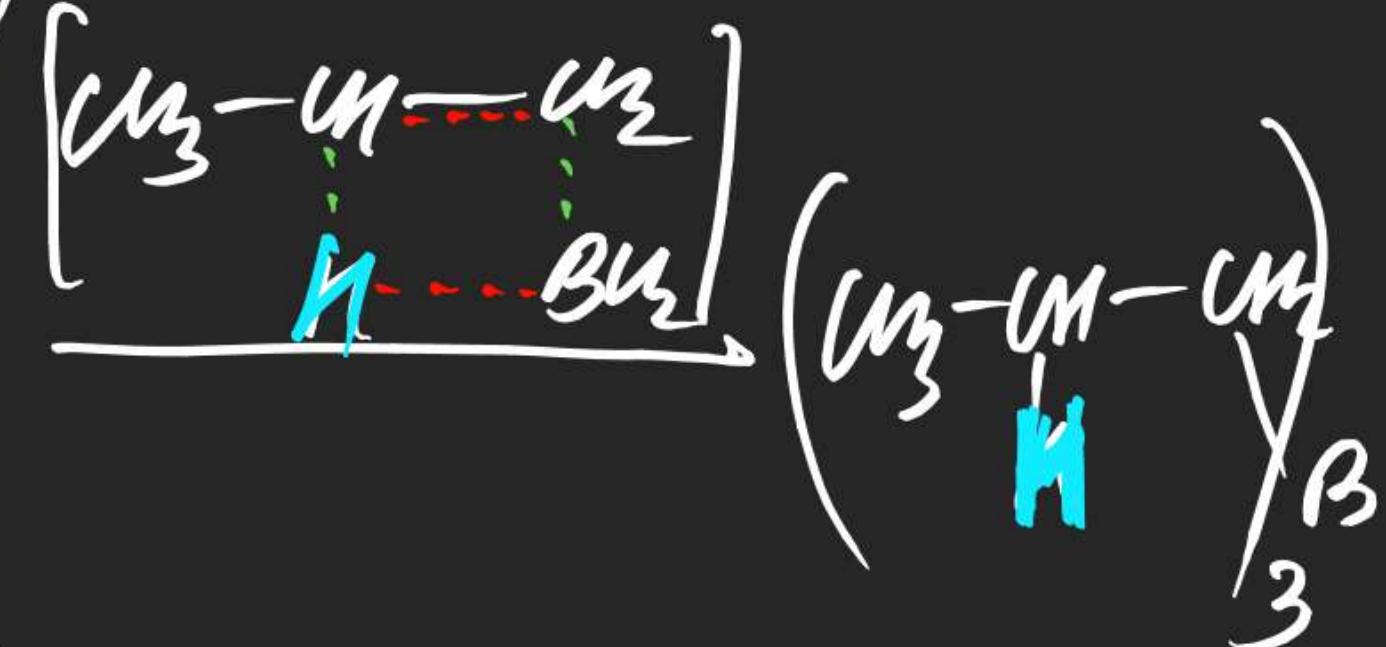
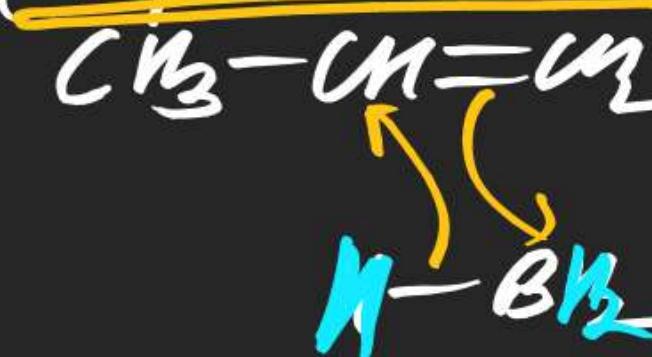
(v) Ether is obtained as a product if R-on is taken in place of H<sub>2</sub>O.

# (#) Hydro-Boration (HB)

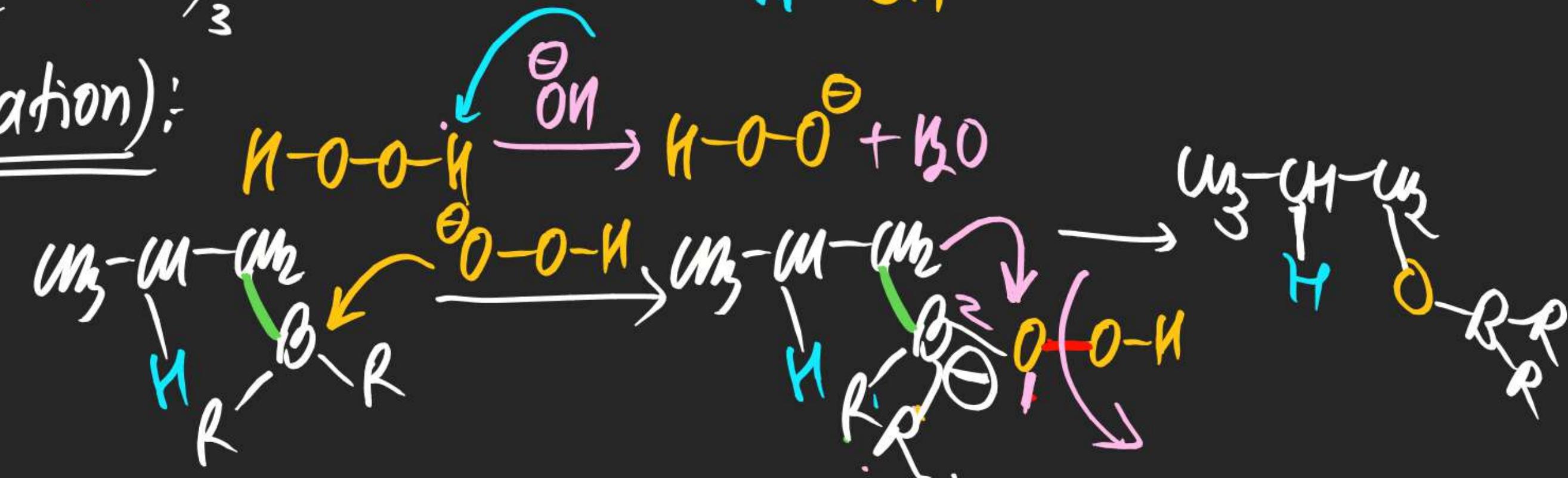
⇒ Reaction of alkene with Borane/DiBorane is known as HydroBoration

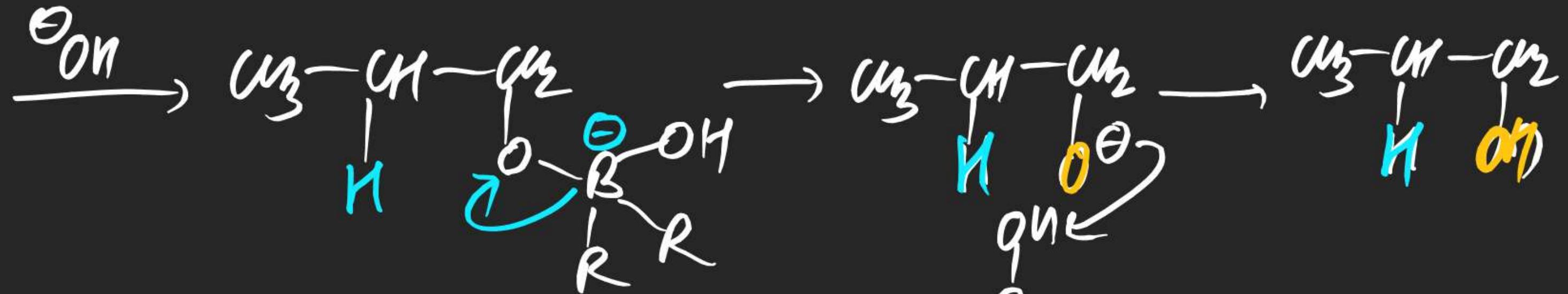


## mech<sup>n</sup> (HydroBoration)



## mech<sup>n</sup> (Oxidation):





Note (i) NBO overall is syn addn phenomenon

(ii) No Carbocation Intermediate

(iii) No Regenent possible

(iv) Product of NBO can be obtained by assuming H<sub>2</sub>O addn

or given alkene in Anti markenicoff's method.

