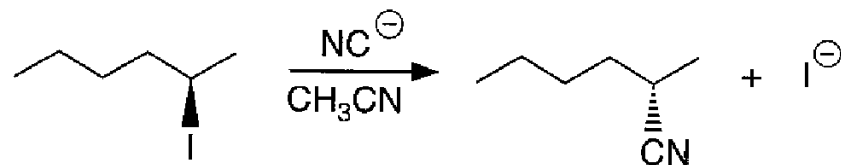
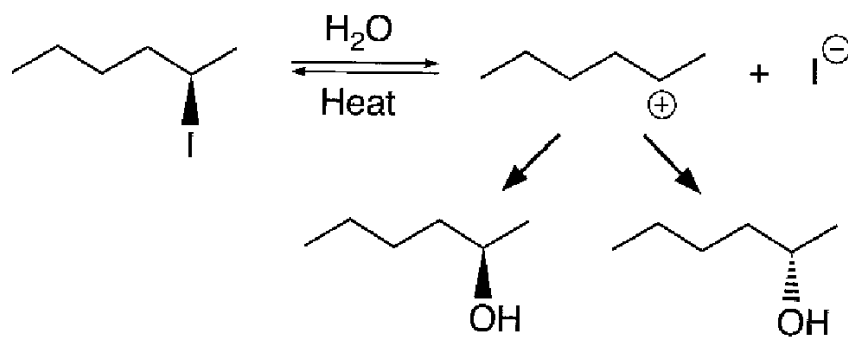
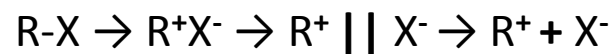


# 4. Stereochemical Studies

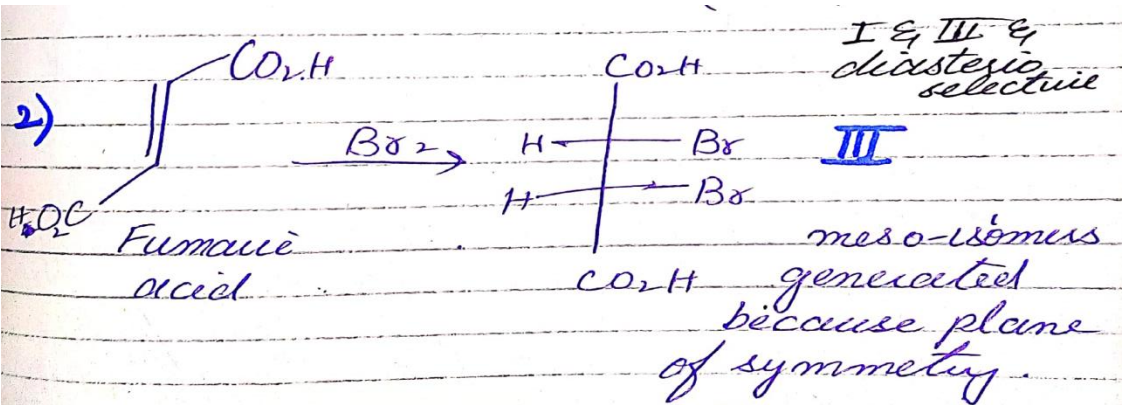
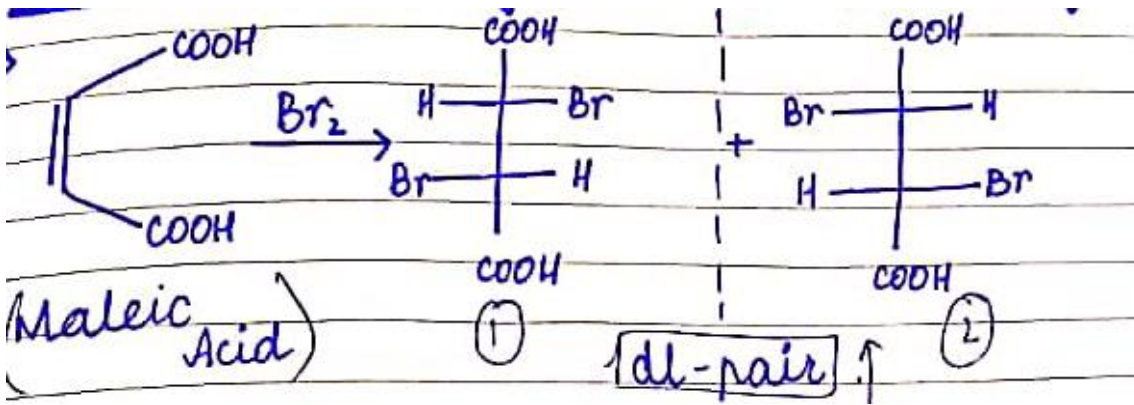
$S_N2$  = Inversion of configuration



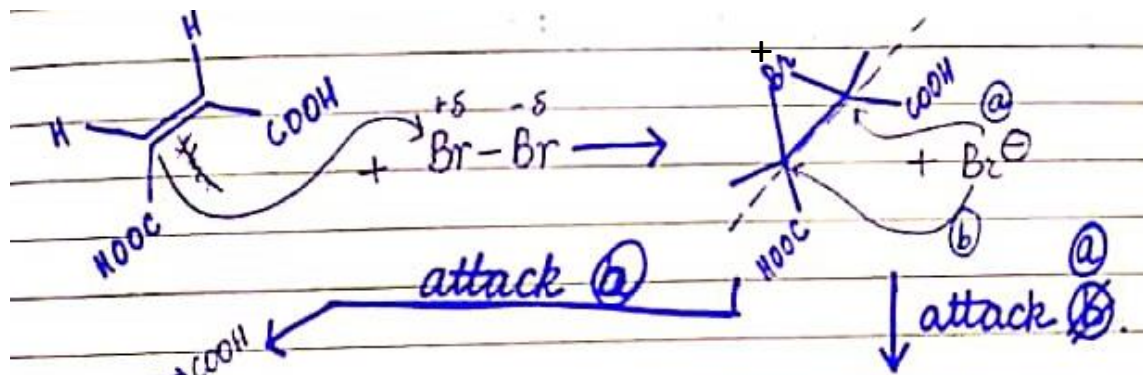
$S_N1$  = Partial racemization to complete racemization



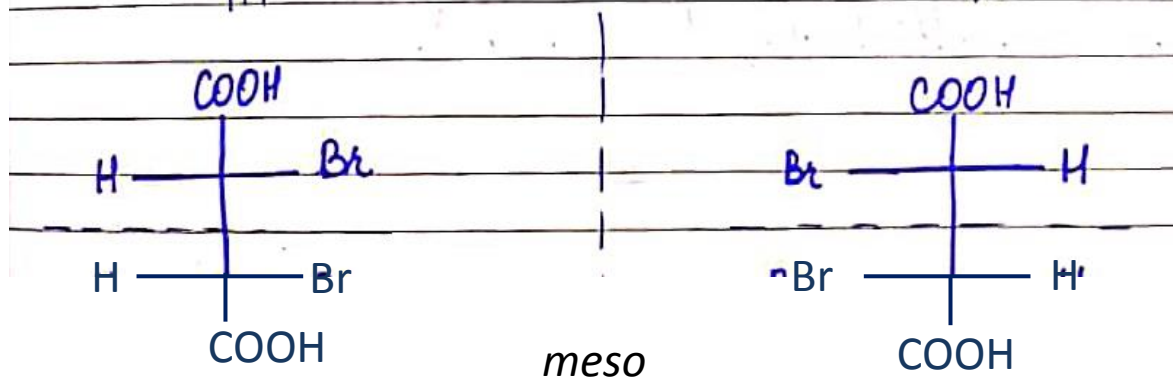
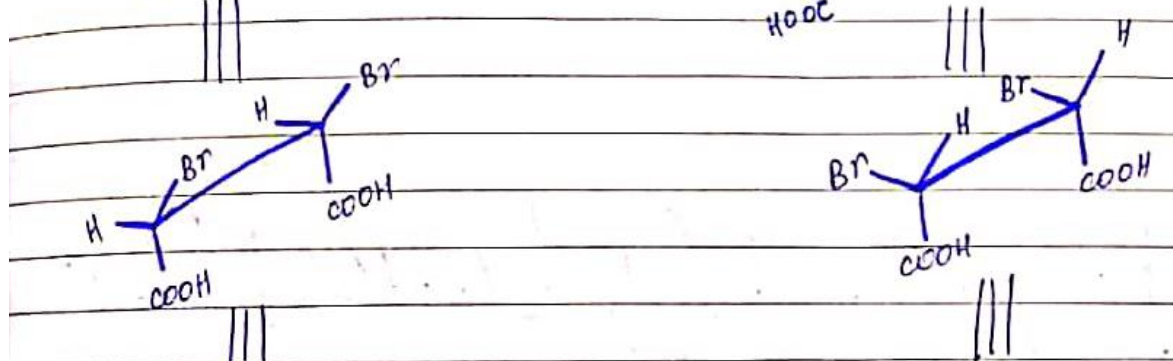
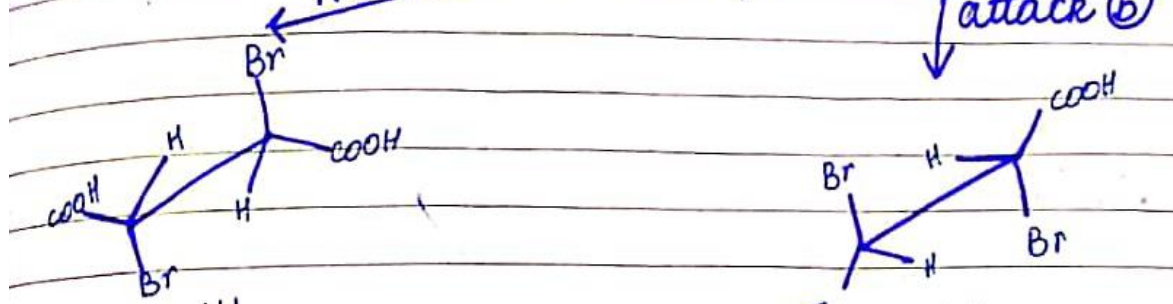
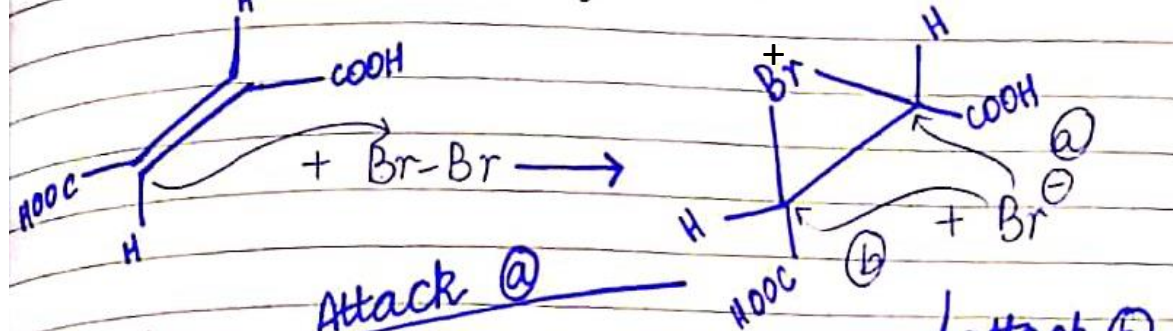
# Addition of Br<sub>2</sub> to Olefinic Double Bond



- Stereoselective
- Stereospecific



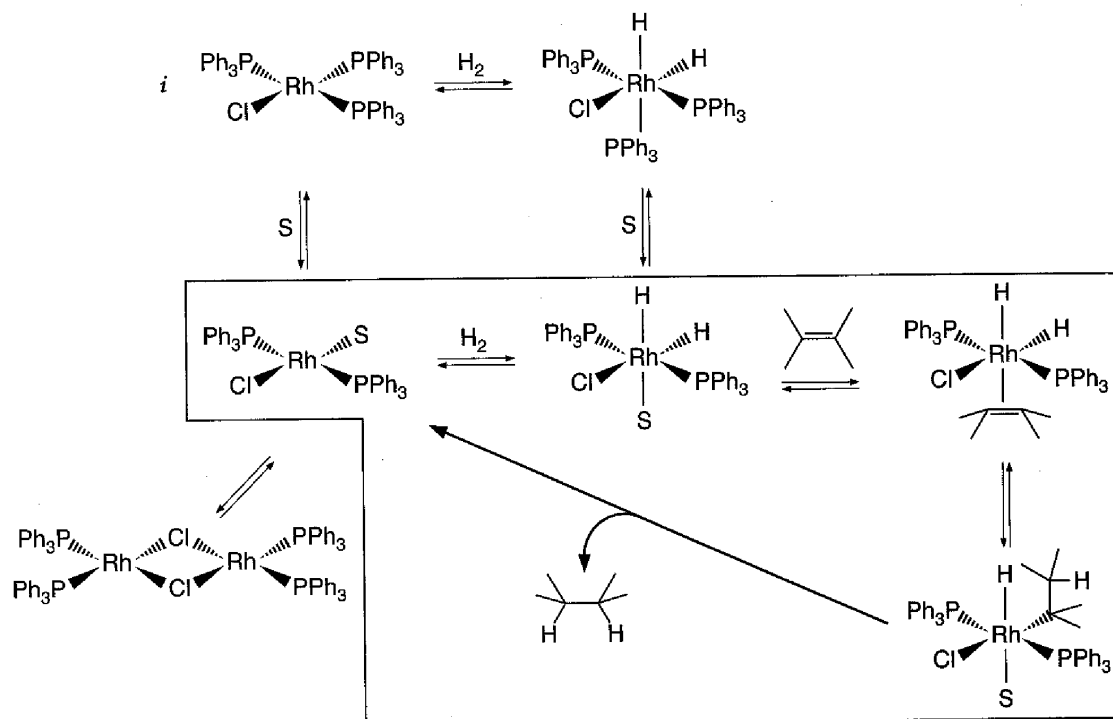
dl-pair



# Transient Spectroscopy

For short lived reactive intermediates, simple isolation and characterization is not an option, so we must resort to other techniques.

## Hydrogenation of Alkenes Using Wilkinson's Catalyst



Hydrogenation mechanism

Note: See Also Trapping of Intermediates