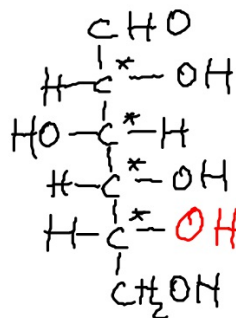


Isomerie :

- 1) Verzweigungen in der C-Kette
- 2) Funktionelle Gruppe an verschiedenen Stellen im Molekül
primäre, sekundäre, tertiäre Alkohol
- 3) Verschiedene funktionelle Gruppen
Ether - Alkohol

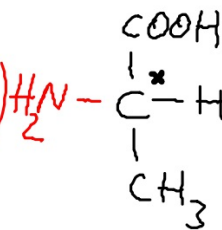
4) D-, L-Form von Kohlenhydraten
von Aminosäuren

~~(R/S)~~



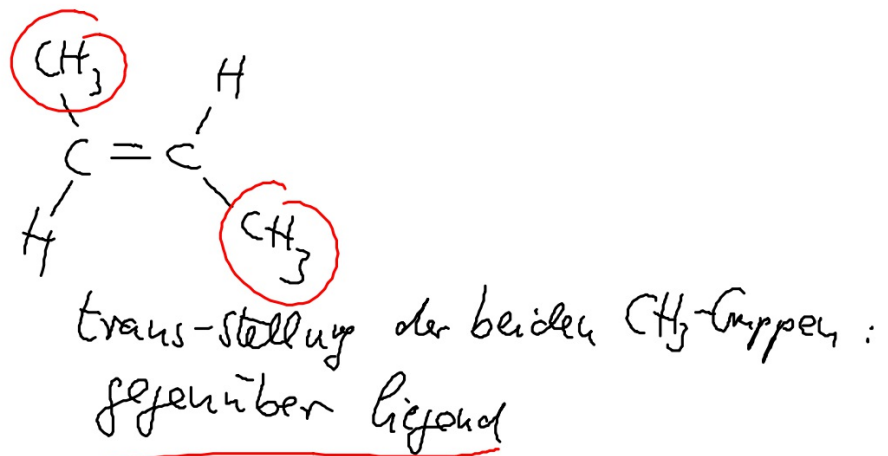
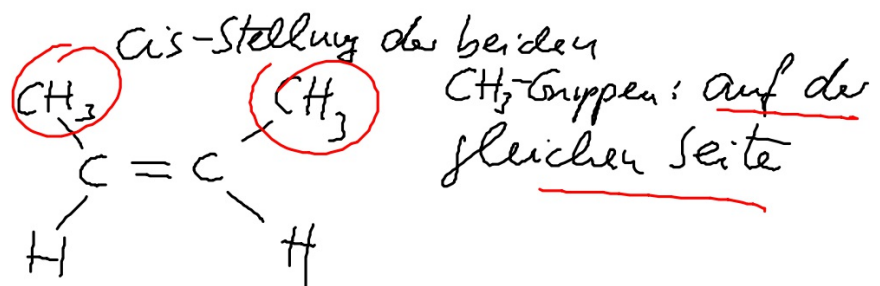
(D: rechts)

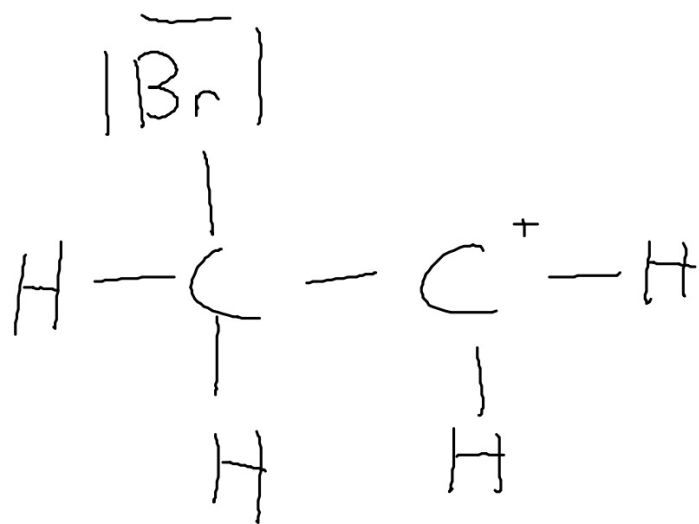
(L: links)



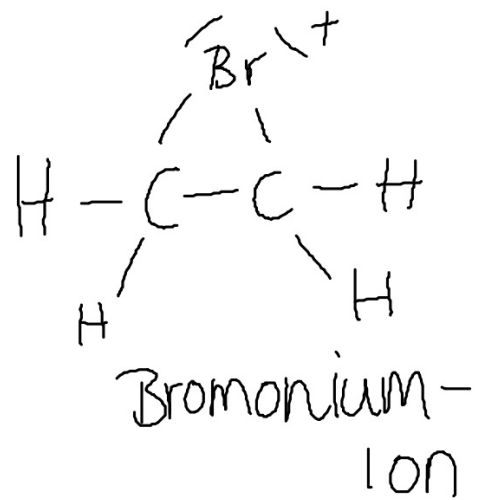
* chirales C-Atom

5.) Cis-
trans- Isomerie



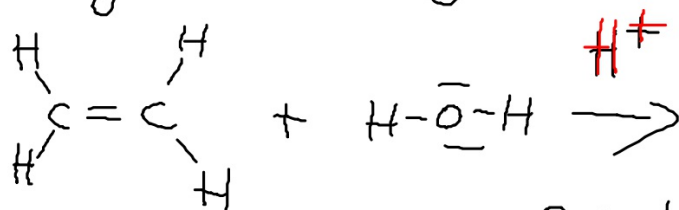


Carbenium-ion

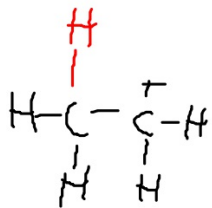


Weitere Möglichkeiten der elektrophilen Addition

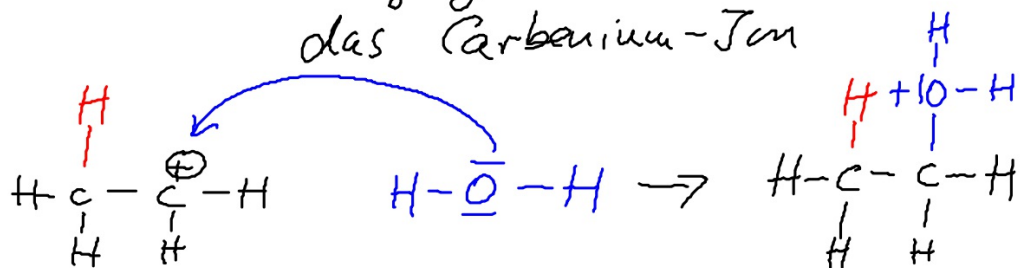
1. Hydratisierung (Reaktion mit Wasser)



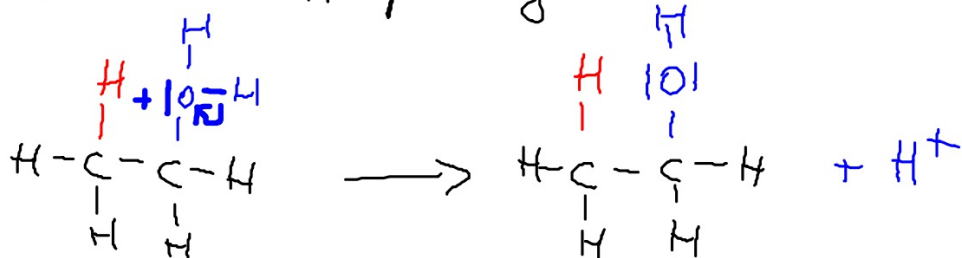
1. Schritt: elektrophile Addition von H^+ an die Doppelbindung



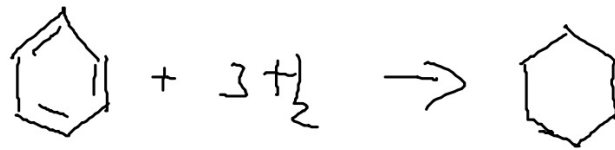
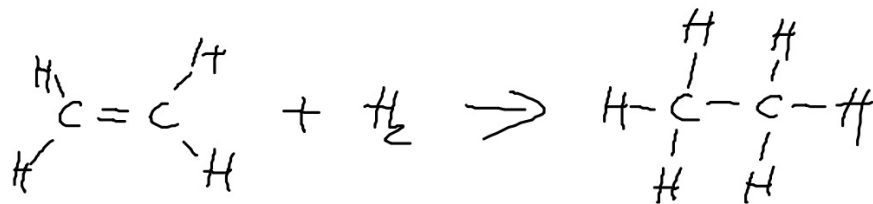
2. Schritt: Anlagerung des Wasser-Moleküls an das Carbenium-Ion



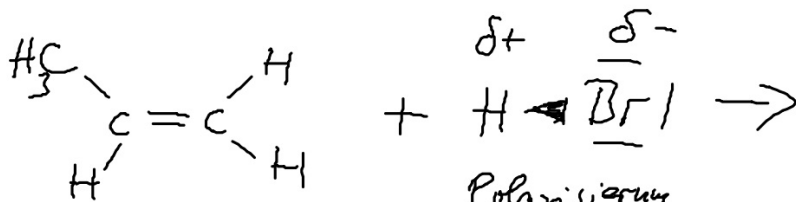
3. Schritt: Abspaltung eines H^+ -Ions



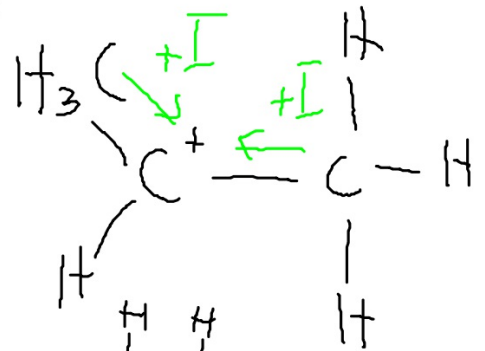
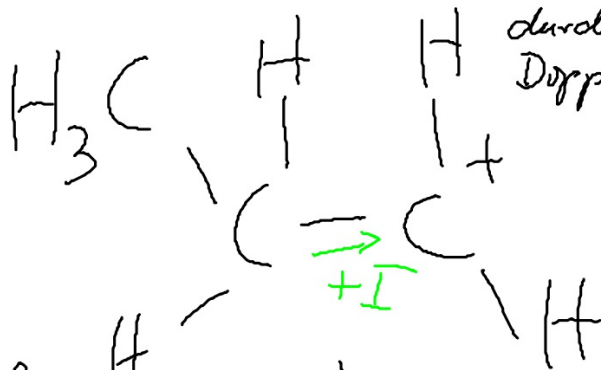
2. Hydrierung (Reaktion mit Wasserstoff)



3. Addition von HBr



Polarisierung
durch die C=C-
Doppelbindung



Markownikow-
Regel

