**Kinetic Control and thermodynamic control Reaction:** The product that forms faster is called the Kinetic product. The product that is more stable is the thermodynamic control product. Typically ,kinetic control involves lower temperature and shorter reaction times. Thermodynamic control involves higher temperature and long reaction times to ensure that even the slower reactions have the chance to occur, and all the material is converted to the most stable compound.

Eg. Addition of HCl to 1,3 butadiene at low temperature gives a mixture containing of 80% of the less substituted alkene (kinetic control). However at higher temperature 75% more substituted alkene(thermodynamic control) is formed.



