S U M M A R Y

The theory of the effect of high pressure on the equilibria and rates of chemical reactions is briefly given. This theory is then applied to the results of certain experimental investigations of chemical reactions at high pressure, and is found to throw some light on their mechanisms. Reactions dealt with include thermal and catalytic cracking of paraffins, destructive hydrogenation of aromatic hydrocarbons, addition of alkyl halides to tertiary amines or pyridine in acetone, thermal polymerisation of styrene, and isotopic ion-exhange reactions. (Author)