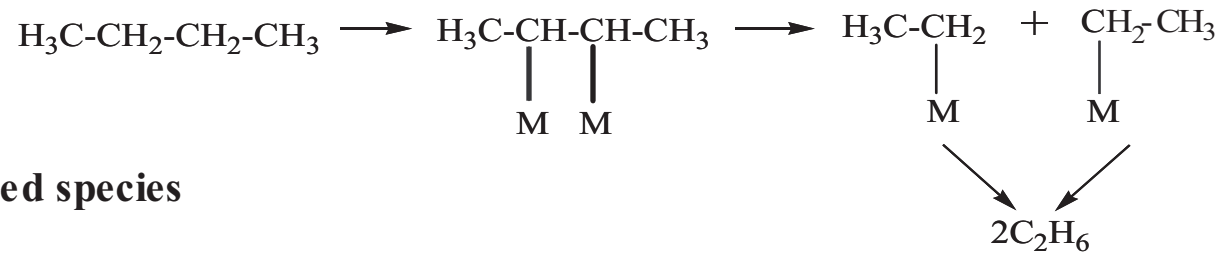


Scheme 1s. 1,2-adsorbed mechanism for hydrogenolysis of butane



1,2-adsorbed species

