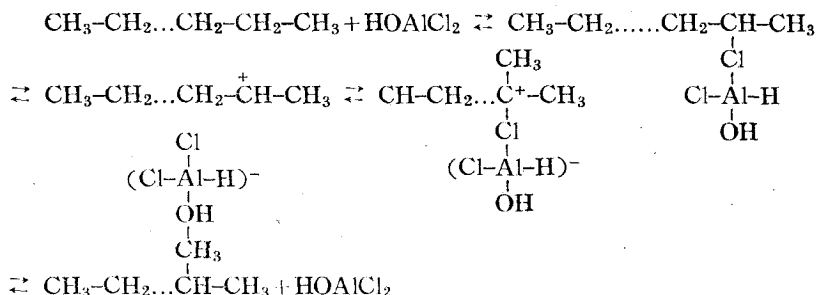


5. The apparent Arrhenius' activation energy of this reaction is 25 Kcal.

Kimio Tarama and Toshiaki Kubota.

From these results, the following mechanism is proposed, i.e. the reaction proceeds through the ionic intermediate complex between heptane and $\text{Al}_2\text{Cl}_{(6-n)}(\text{OH})_n$, produced from AlCl_3 and H_2O , in which n is smaller than 0.5 (simply represented by $\text{OHA}(\text{AlCl}_2)$).


$$\begin{array}{c} \text{CH}_3\text{-CH}_2\cdots\text{CH}_2\text{-}\overset{+}{\text{CH}}\text{-CH}_3 \\ | \\ \text{Cl} \\ | \\ (\text{Cl}\text{-Al}\text{-H})^- \\ | \\ \text{OH} \end{array}$$

form by the catalyst, mixture of CCl_4 and AlCl_3 , instead of H_2O .

(59)