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SCHMIDT REARRANGEMENT REACTION

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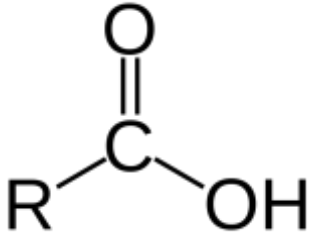
- Reaction between carboxylic acid and hydrazoic acid in presence of concentrated sulphuric acid to produce amine



$$+ N_3H \xrightarrow{\text{Conc. } H_2SO_4} R-NH_2 + CO_2 + N_2$$

- CO_2 from R-COOH is released and N_2 from N_3H resulting in formation of R-NH_2

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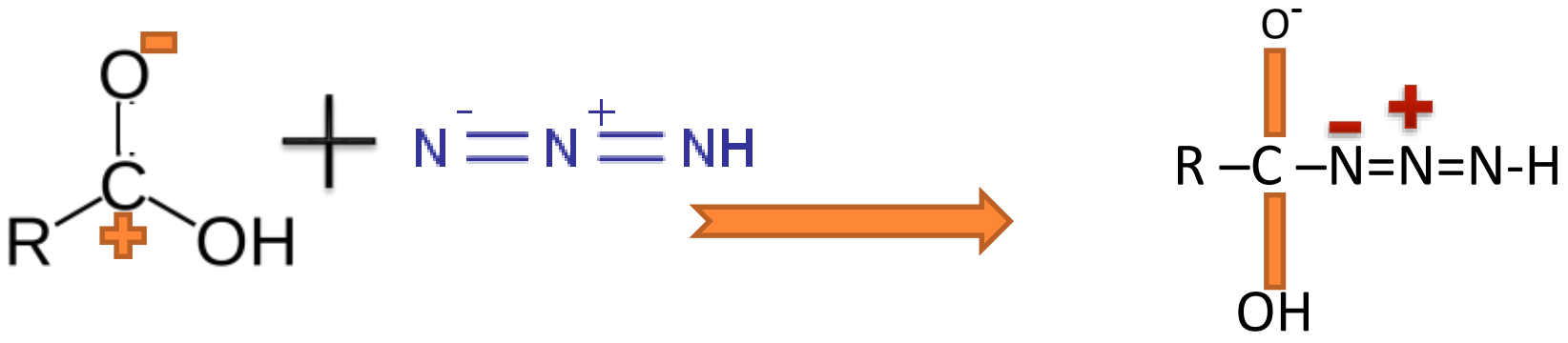

- Oxygen is electronegative element so it breaks the double bond and a negative charge is created on oxygen while a positive charge is created on carbon
- N_3H is attracted to carbon with + charge

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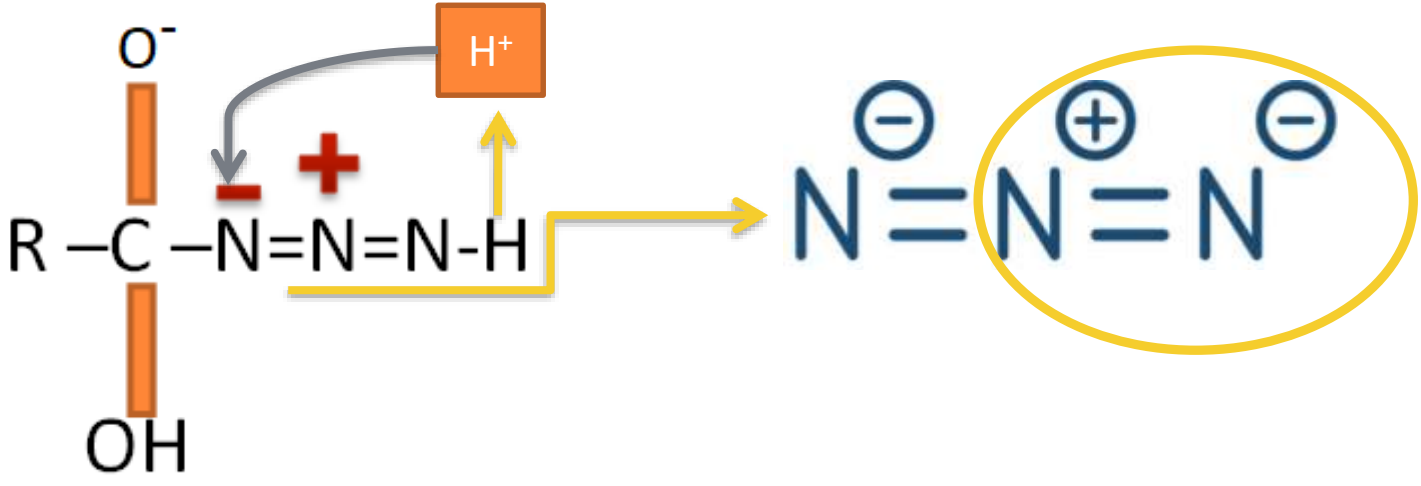
- Again there is a negative & positive charge on oxygen & carbon respectively.
- So H^+ is removed which is later attracted by N-
- N=N bond breaks, as a result N_2 gas is evolved



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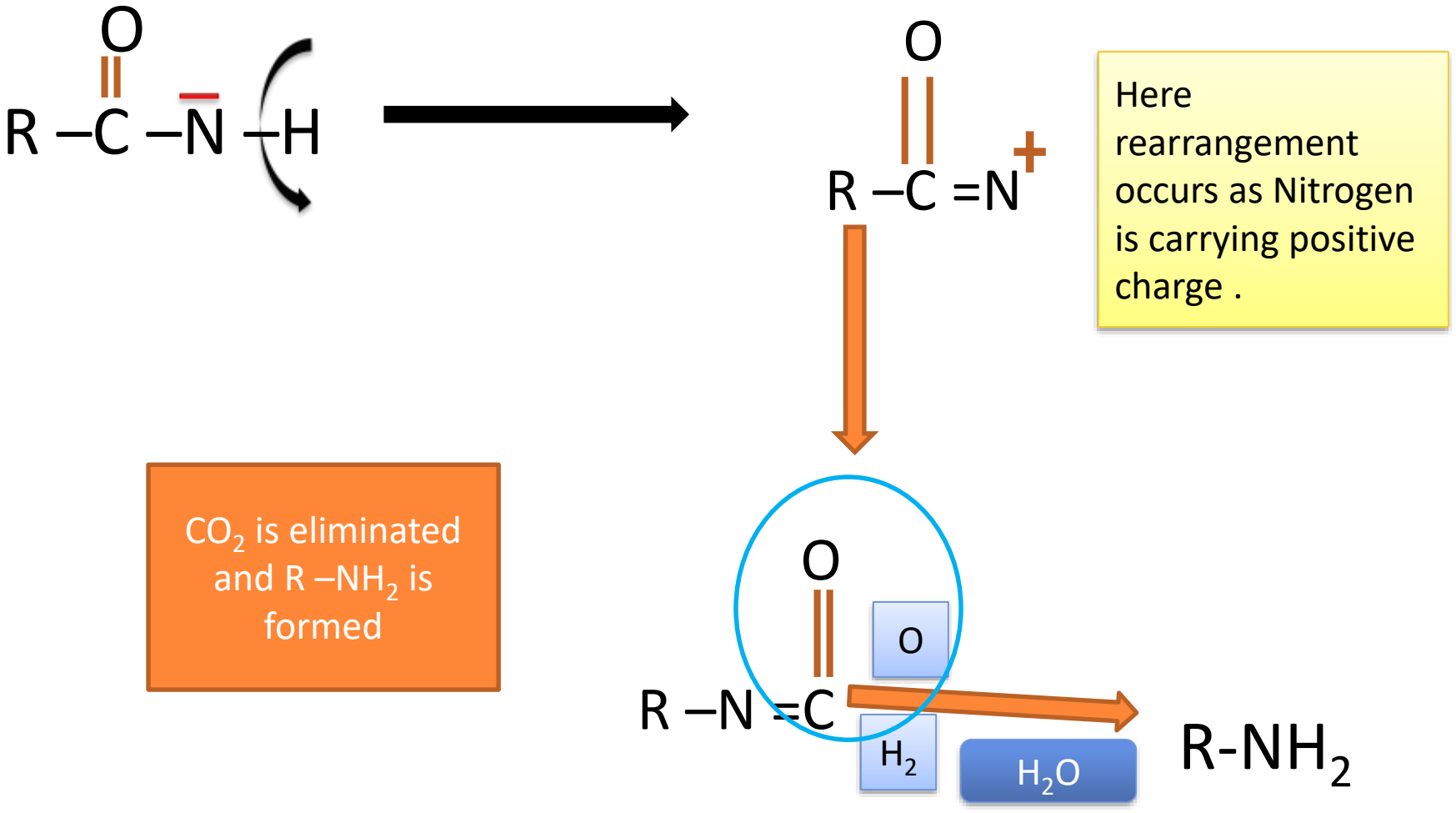

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