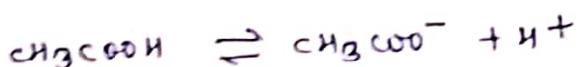


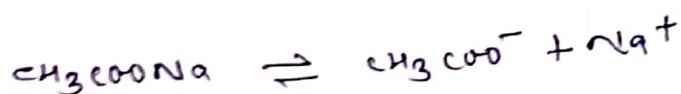
Common Ion Effect :-

If a salt of a weak acid is added to a soln of the acid itself, the dissociation of the acid is diminished further.

for example-

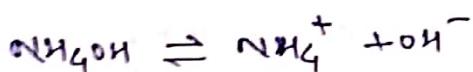


The addition of sodium acetate to a soln of acetic acid suppresses the dissociation of acetic acid.

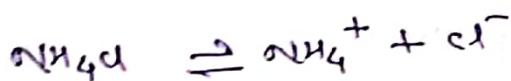


The addition of one of the products of dissociation (acetate ion) supplied by the largely dissociated salt (sod. acetate) pushes the equilibrium to the left. Thus the dissociation of acetic acid is suppressed.

Likewise, the dissociation of a weak base, such as  $\text{NH}_4\text{OH}$



is suppressed on the addition of a salt like  $\text{NH}_4\text{Cl}$  which supplies  $\text{NH}_4^+$  ion.



The addition of strong base such as  ~~$\text{NaOH}$~~   $\text{NaOH}$  also suppresses the dissociation of  $\text{NH}_4\text{OH}$ .

Thus, the suppression of the dissociation of a weak acid or weak base on the addition of its own ions is called common ion effect.