## Answer on Question#63368 – Chemistry – General chemistry

## Question:

For each of the following reactions, write a balanced net ionic equation. Define whether the reaction goes nearly to completion or proceeds to only a small extent.

 $Na_2SO_4(aq) + CH_3CO_2H(aq) \rightleftharpoons$ 

Write a balanced net ionic equation:

This reaction.

 $K_2HPO_4(aq) + NH_3(aq) \rightleftharpoons$ 

Write a balanced net ionic equation:

This reaction.

## Answer:

The first reaction is impossible because ions that exist in the solution don't react each other. So, we cannot write a balanced net ionic equation.

There is the aqua solution of ammonia in the second reaction. Ammonia exist in hydrate form in this conditions:  $NH_3 + H_2O \rightleftharpoons NH_3 \cdot H_2O \rightleftharpoons NH_4^+ + OH^-$ 

 $K_2HPO_4(aq) + NH_3(aq) \rightleftharpoons$ 

Write a balanced net ionic equation:

 $H^+ + OH^- \rightleftharpoons H_2O$ 

This reaction goes nearly to completion.