

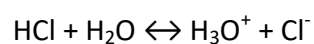
Answer on Question #78609, Chemistry / Inorganic Chemistry

Question:

Why does hydrogen chloride gas dissolved in water exhibit acidic properties while the gas dissolved in methyl benzene does not exhibit such properties?

Answer:

Hydrogen chloride dissolved in water (or other polar solvents) dissociates as follows:



Due to this it exhibits acidic properties.

On the other side, in non-polar solvents (like methyl benzene) dissociation is not observed. HCl does not exhibit acidic properties (but it still may form salts with strong bases such as amines, anilines etc.).

Answer provided by AssignmentExpert.com