

Answer on Question #66940 - Chemistry - Physical Chemistry

Question 1: Consider the equilibrium of AgCl(s) in water. What is the effect of adding KCl ?

The reaction goes to the left

Silver chloride solubility increases

The KCl has no effect

The reaction goes to the right

Answer: answer is "The reaction goes to the left" for reaction $\text{AgCl(s)} = \text{Ag}^+_{(\text{aq})} + \text{Cl}^-_{(\text{aq})}$ and answer is "The reaction goes to the right" for reaction $\text{Ag}^+_{(\text{aq})} + \text{Cl}^-_{(\text{aq})} = \text{AgCl(s)}$

Question 2: A Brønsted-Lowry acid is defined as a substance that _____ .

acts as a proton acceptor

decreases $[\text{H}_3\text{O}^+]$ when dissolved in water

increases $[\text{OH}^-]$ when dissolved in water

acts as a proton donor

Answer: acts as a proton donor

Question 3: The pH of a solution is 4.6; what is its pOH?

9.4

4.6

11.6

2.4

Answer: 9.4

Question 4: What is the conjugate base of HCO_3^- ?

CO_3^{2-}

H_2CO_3

OH^-

HCO_3^+

Answer: CO_3^{2-}