**Disscution and solution for the second exp 2**

**1- Why the experiments are done in a dark place?**

**A\ It is known that Silver chloride is sensitive to light where hydrolyzed to silver and chloride according to the following reaction**

**Light**

**AgCl Ag + ½ Cl2**

**The rate hydrolyzed is increased to direct sunlight, so it is very important that precipitation in placed in a dark place.**

**2- The diluted nitric acid is used as a washing precipitate (AgCl) and does not use pure water?**

**A\ Because of pure water will be lead to convert the precipitate into colloidal precipitate, that some of its** **implement through the filter so that the use of the diluted nitric acid (0.015N) is wash the precipitate and so reduce solubility AgCl, the dilute nitric acid replaces the silver nitrate adsorption It is on the surface of the precipitate , and when drying the precipitate Volatility is acid nitric is purified silver chloride**

**AgCl:Ag+ :NO3- + HNO3 AgCl :HNO3**

**AgCl: HNO3 AgCl + HNO3 AgCl :HNO3**

**3- What are the specifications of the formed silver chloride precipitate?**

**A\ White precipitate, very sensitive to light and its solubility is low in water and this solubility increase when the temperature increase.**

**4- The precipitate filtration is done at room temperature or less?**

**A\ This is because the solubility of the precipitate is increased by increasing the temperature.**