

Questions and problems to solve and learn

Exercise No. 9

Precipitation reactions and titrations

Argentometric titration.
Precipitation equilibria: the solubility product.
Common ion effect.
Diverse ion effect.
The precipitation process.
Ostwald ripening.
Homogeneous precipitation.
Effect of acidity on solubility.
Effect of complexation on solubility.
Detection of the end point: indicators.

Experiments:

9. Determination of chloride in water sample using Mohr's method. Determination of chloride in water sample using Volhard's method.

Recommended References:

1. Analytical Chemistry; G.D. Christian, P.K. (Sandy) Dasgupta, K. A. Schug; John Wiley & Sons, Inc.
2. Modern Analytical Chemistry; D. Harvey; The McGraw-Hill Companies.
3. Quantitative Chemical Analysis; D.C. Harris; W.H. Freeman and Company, NY.
4. Lectures on analytical chemistry:
 - section 3 Basic tools and operations part 1 Volumetric anal.
 - section 12 Precipitation Reactions and Titrations
 - section 13 Gravimetric Analysis