MANGALORE UNIVERSITY

Department of Industrial Chemistry

ICP 406: INORGANIC CHEMISTRY PRACTICALS-I

Course Outcomes:

Practical training in volumetric and gravimetric analysis and statistical analysis of data.

1. Analysis of Haematite-insoluble residue by gravimetry & Iron by volumetry using Ce^{4+}.
2. Analysis of Dolomite-insoluble residue by gravimetry & Ca, Mg by complexometry.
3. Pyrolusite-Insoluble residue by gravimetry and Manganese content by oxalate method.
4. Estimation of percentage of copper in brass
5. Estimation of ferrous iron by dichrometry
6. Preparation of pure sample of ferrous ammonium sulphate (Mohr's salt) [$FeSO_4.(NH_4)_2SO_4.6H_2O$]
7. Preparation of pure sample of potash alum (Fitkari) [$K_2SO_4.Al_2(SO_4)_3.24H_2O$]
8. Complexometric determination of Mn, Cu, Ni and Fe-Cr mixture
9. Hardness of water
10. Analysis of Halide Mixture - Iodide by KIO_3 and total halide by gravimetrically.
11. Colorimetric Determination of Iron by thiocyanate and Cu by aqueous ammonia.
12. Gravimetric Determinations of Mn, Ni, Mo, Pb/Cr, sulphide, thiocyanate.
13. Spot test for the detection of inorganic ions (any ten cations)
14. Statistical analysis of data.
15. Any other interesting experiments

Reference

Vogel's Text Book of Quantitative Chemical Analysis (5th Ed), G.H.Jeffrey, J. Bassette, J.Mendham and R.C.Denny, Longman, 1999.