

## CHEMISTRY LABORATORY

**Lab Numbers: 4313.4313 A, 4315**

### **List of Experiments**

- 1. Preparation of coordination complex NiDMG Complex
- 2. Determination of surface tension
- 3. Determination of viscosity
- 4. Saponification /acid value of an oil
- 5. Estimation of Hardness of water by EDTA Method
- 6. Determination of chloride content of water
- 7. Determination of cell constant and conductance of solutions (HCl Vs NaOH / Mixture of acid Vs Strong base)
- 8. Potentiometry - determination of redox potential and EMF (FeSO<sub>4</sub> Vs KMNO<sub>4</sub>/ HCl Vs NaOH)
- 9. Determination of the rate constant of acid catalyzed hydrolysis of methyl acetate
- 10. Synthesis of a polymer- Thiokol rubber / Urea-Formaldehyde resin
- 11. Synthesis of a drug- Aspirin
- 12. Thin layer chromatography.

### EQUIPMENT DETAILS

| <b>Equipments</b>    | <b>Make</b> | <b>Nos.</b> |
|----------------------|-------------|-------------|
| Conductivity meter   | Infra       | 8           |
| Potentiometer        | Spectronics | 8           |
| Redwood Viscometer   | Infra       | 4           |
| Bomb Calorimeter     | Indian      | 1           |
| Flash and fire point | Indian      | 1           |
| Magnetic Stirrer     | Elico       | 2           |
| Electronic Balance   | scaltech    | 2           |
| Analytical Balance   | Indian      | 3           |
| Water bath           | rio         | 3           |

|                        |              |   |
|------------------------|--------------|---|
| UV Chamber             | Superior     | 1 |
| TLC chamber            | Borosilicate | 3 |
| Water Distillation set | Equitron     | 1 |
| Colorimeter            | Elico        | 8 |
| Ion exchange Column    | Borosilicate | 1 |
| Hot air Oven           | Ria          | 3 |

**LAB-1 4313**



**LAB -2 4313(A)**



**LAB-3 (4315)**



