

**JCP 203 (Aug) (0-1-3)**

**Laboratory I- Organic and Inorganic Chemistry Lab**

***Instructor: Aruna Sathyamurthy***

**Organic Chemistry Lab**

- Synthesis of anthracene maleic anhydride adduct through the Diels Alder reaction by chemical method
- Synthesis of aspirin
- Extraction of caffeine from tea leaves
- Acetylation of ferrocene and its purification by column chromatography

**Inorganic Chemistry Lab**

- Synthesis and characterization of porous silica materials and to also study the change in the pore size distribution by altering the temperature of hydrothermal treatment.
  - Hydrothermal synthesis of ZnS microspheres.
  - Synthesis of MoS<sub>2</sub> nanoparticles on reduced graphene oxide (RGO) sheets suspended in solution which serves as an advanced catalyst for Hydrogen Evolution Reaction (HER)
  - Preparation of the following inorganic complexes:
    - Bis (acetyl acetonato) copper (II)
    - Tris (acetyl acetonato) iron (III)
    - Tris (acetyl acetonato) manganese (III)
  - Synthesis and characterization of Mn-Anderson Polyoxometallate complex with ligand TRIS (TBA)<sub>3</sub> [(MnMo<sub>6</sub>O<sub>18</sub> {(OCH<sub>2</sub>)<sub>3</sub> CNH<sub>2</sub>}<sub>2</sub>)]
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