

JCP 204 (Jan) (0-1-3)

Laboratory II - Physical Chemistry lab

Coordinator: Premkumar Senguttuvan

- Powder X-ray diffraction (XRD) study of NaCl, KCl and Cu
- TGA and DSC of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
- Characterization of charge transfer spectra in KMnO_4 and $\text{K}_2\text{Cr}_2\text{O}_7$
- Band gap analysis of a solid semiconductor by diffuse reflectance spectroscopy
- Study of thermoelectric properties of a chalcogenide material
- Study of synthesis, characterizations, and optical properties of a thermochromic material
- Study of gas adsorption behavior of porous solids
- Charge transfer studies of benzene-iodine system
- Study of ferricyanide by cyclic voltammetry
- Study of intercalation cathodes through galvanostatic cycling
- Photocatalysis of organic dyes by TiO_2 nanoparticles
- Raman spectroscopy of graphene and carbon nanotubes
- UV and PL studies of various materials
- Study of magnetism of a ferromagnetic and antiferromagnetic compound