Measurement of: Crystallographic structure and phase analysis.

Equipment: X-Ray Diffractometer (Table top) M/S. Rigaku Japan, Model- Miniflex-II,

Property Measured: Crystallographic structure and phase purity

Photograph (small size)

Basic Principle: XRD works on the principle that incident X-rays gets diffracted from atomic layers of a material following Bragg's law. The intensity of these diffracted x-rays reveals information about the crystal structure and phases that are present in the material.

Capabilities: Scanning range: 2 to 100° (2θ), Scanning speed: 0.01 to 5°/min (2θ), Minimum step width: 0.01° (2θ)

Sample Requirement: Powder and solid samples, no liquid samples