

List of Research Equipments available in Physics

Department Name: Physics
Equipment Name: DC/RF MAGNETRON SPUTTERING UNIT
Specifications: DC/RF MAGNETRON SPUTTERING UNIT consists of <ul style="list-style-type: none">● RF Power 100W to 600W● Substrate temperature RT to 800 °C● Oxygen reactive sputtering● Rotary pump● Diffusion pump● Digital pirani gauge● Digital penning Gauge,● 2 Inch magnetron Sputtering target holder● Substrate heater with Controller● RF Power supply● DC power supply● Matching network● Argon& Oxygen gases with regulator
Functions: Preparation of thin films of metal and metal oxide materials by reactive Sputtering. Preparation of thin films of some superconductors, insulators and ceramics materials can also be done with this unit.
Photograph: 

Department Name: Physics

Equipment Name: Nebulizer assisted spray pyrolysis unit

Specifications: Thin film coating unit

Functions: Nebulizer assisted spray pyrolysis unit consists of air compressor, Nebulizer, Spray gun, micro-controlled spray set up and a furnace. Aerosols of aqueous solution of different compounds are formed using compressed air and nebulizer arrangement. Aerosols are sprayed on a substrate to form thin films using gun. Furnace is used to maintain different substrate temperature.

Photograph:



Department Name: Physics

Equipment Name: HORIZONTAL TUBULAR FURNACE

Specifications: Annealing unit (100-1000 °C)

Functions: It is used to anneal the sample under different ambient conditions such as temperature, gas and vacuum.

Photograph:

