











**RESEARCH & DEVELOPMENT CELL**

**Details of research facility/consultancy facility**

**DEPARTMENT: PHYSICS**

S. No	Name of the Equipment/ Device	Funding Source (DST/AICTE/ APSCD/MITS)	Cost of Equipment in Rs.	Specifications	Image of the Equipment/Device
1	Spray Pyrolysis	MITS	3,99,605.00	Chemical deposition method for deposition of oxide thin films. Temperature: 400 °C	
2	Quartz Tube Furnace	MITS		Annealing of samples up to 1000 °C. Size of the sample : <1inch	
3	Vacuum Coating Unit Electron Beam Evaporation	DST-FIST	10,08,974.00	3 kW electron beam and thermal evaporation system	
4	Glad Electron Beam Evaporation Unit	DST-ECRA	13,24,800.00	Deposition of metals, oxides and semiconducting materials in a vacuum chamber	

5	Furnace Unit (1400°C)	DST-ECRA	1,56,940.00	Annealing of samples under inert atmosphere at high temperatures (up to 1400 °C)	
6	DC/RF sputtering unit	DST-ECRA	11,80,200.00	Deposition of oxides and semiconducting materials in a vacuum chamber under Argon and oxygen atmosphere. Substrate rotation: Yes. Substrate temperature: 600 °C	
7	Spin coating unit	DST-ECRA	99,750.00	Deposition of thin films by solution method (non-vacuum process). RPM:10000	
8	Glove box	DST-ECRA	3,25,500.00	Chamber with nitrogen atmosphere.	
9	Desiccator and vacuum pump	DST-ECRA	18,408.00	Storing the samples under vacuum.	

10	Spin coating unit	DST-ECRA	99,750.00	500-10,000 R.P.M	
11	Spectral Response Monochromatic System	DST-ECRA	23,50,000.00	To analyze electrical properties of photodetectors with interdigitated electrodes in ultraviolet and visible regions (300-1100 nm)	