

**Department of Physics, Kanya Maha Vidyalaya, Jalandhar**

**List of Equipment's**

**AT1315 Gamma Beta Spectrometer with software/hardware tools:**

- AT1315 Gamma Beta Radiation Spectrometer (without PC and printer) 137Cs from 2 Bq/l; 90Sr from 20 Bq/l; (without sample preparation)

**Model:** AT1315 Gamma Beta Spectrometer

**Make:** ATOMTEX SPE

**Cost:** Rs.15,71,782/-

**Grant:** FIST



**Photoluminescence Spectrophotometer:**

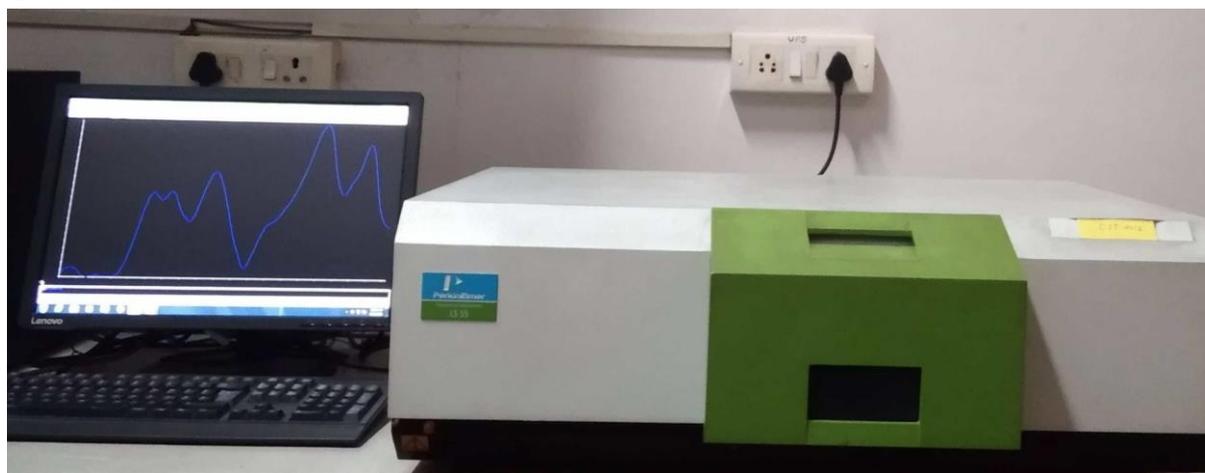
- It is used to study emission spectra of different kinds of materials.

**Model:** LS-55

**Make:** Perkin Elmer

**Cost:** Rs.12,350,00/-

**Grant:** SERB



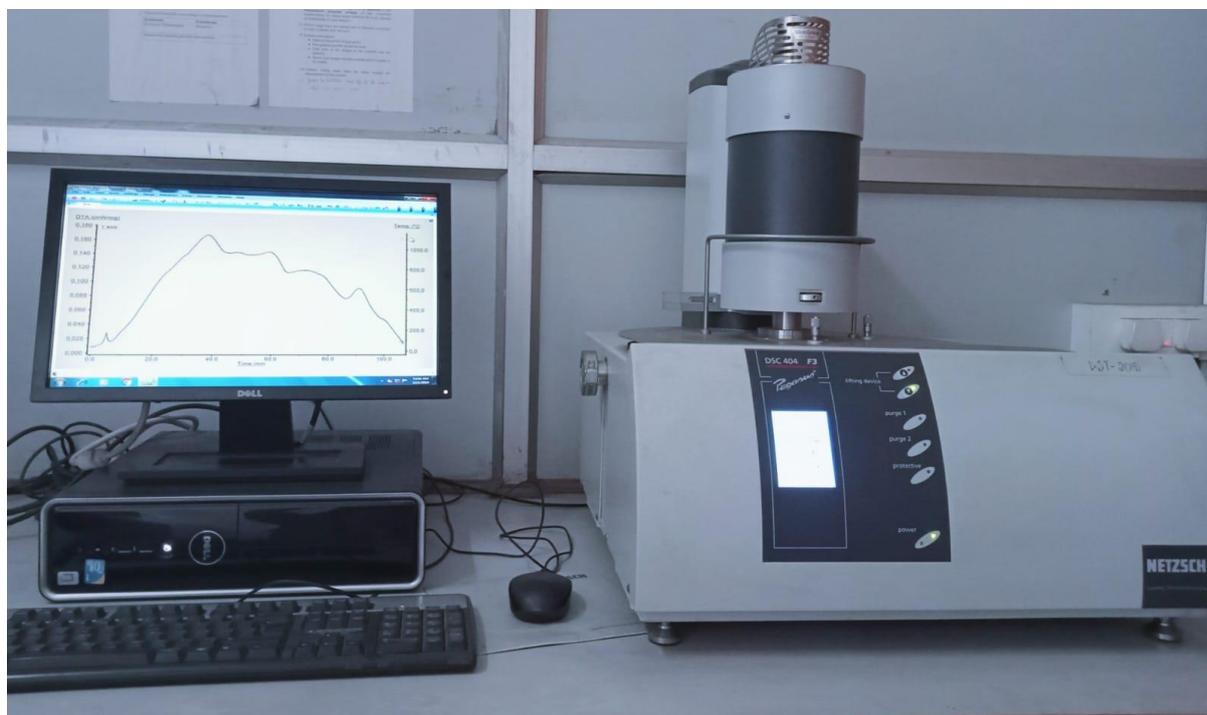
**Differential Thermal Analyser (DTA):**

**Model:** DSC 404 F3

**Make:** NETZSCH

**Cost:** Rs.18,47,445/-

**Grant:** SERB



**UV VIS Spectrophotometer:**

- PC controlled high performance double beam with variable bandwidth and double monochromator with 32-bit UV Probe software working in window environment. Wavelength range 185 nm – 900 nm, Spectral bandwidth 0.1, 0.2, 0.5, 1.2 & 5 nm. Wavelength scanning speed 4000 to .5 nm/min with light source – 50 Watt Halogen and Deuterium Lamp.
- Used to study transmission and absorption of samples, used by students and staff for project work and for Research purposes.

**Model:** UV 2600

**Make:** Shimadzu (Asia Pacific Pvt. Ltd.)

**Cost:** Rs. 9,00,000/-

**Grant:** FIST



### **FTIR Spectrophotometer:**

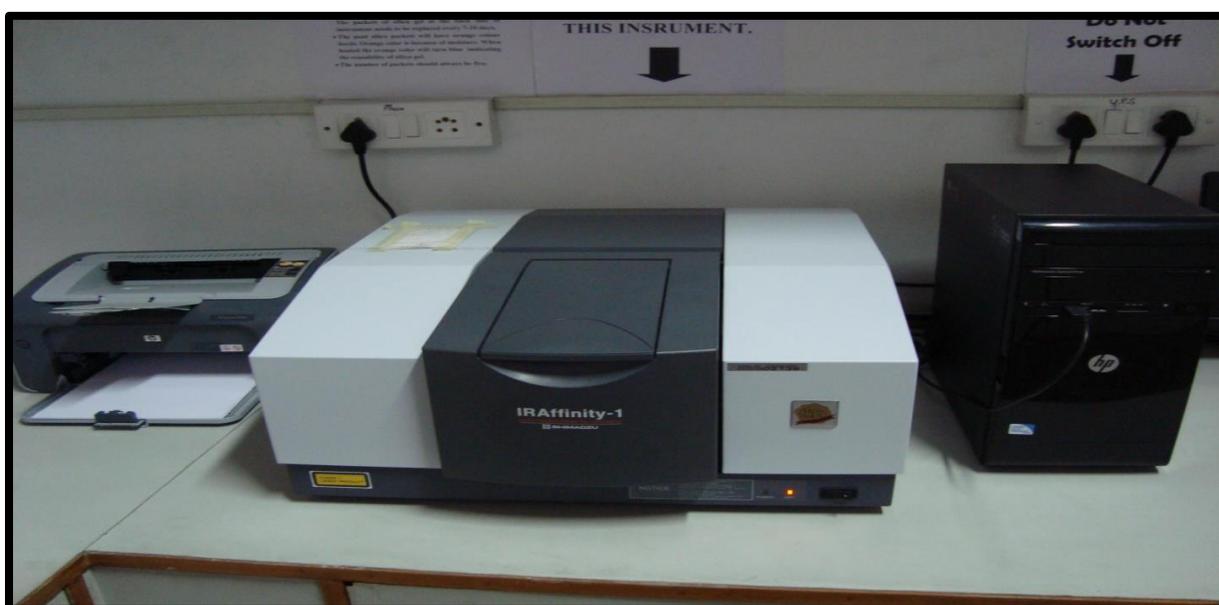
- High end advanced PC based system with 32-bit window XP/7 based IR solution Full mid-IR wavenumber range from  $7800\text{ cm}^{-1}$  to  $350\text{ cm}^{-1}$  . With Agate Pestle Mortar, hydraulic press and pellet holder, KBr dryset, data sampling by stable He-Ne laser, Michelson's Interferometer with 30 angle, maximum speed of resolution  $0.5\text{ cm}^{-1}$ .
- To study structural (vibrational) modification in various substances for research and projects.

**Model:** IR Affinity-I

**Make:** Shimadzu

**Cost:** Rs. 10,18,219/-

**Grant:** FIST



### **3632.50 LCR Hitester:**

- Provided with test fixtures 9262 and interface with RS232C Cable.
- Used for finding electronics parameters of thin films like resistance, capacitance, dielectric constant etc. (used for research purpose)

**Model:** (S.No. 120423838)

**Make:** Hioki

**Cost:** Rs. 4,35,728/-

**Grant:** FIST



### **High Temperature Muffle Furnace:**

- Provided with a Microprocessor based programme controller for furnace.
- Used for the preparation of glass samples

**Make:** Metrex

**Cost:** 1,95,400/-

**Grant:** FIST



**Rectangular Muffle Furnace:**

- Provided with Microprocessor based programme controller for furnace.
- Used for the preparation of glass samples

**Make:** Metrex

**Cost:** 2 lac

**Grant:** FIST



**Automatic Bottom Loading Furnace:**

Automatic Bottom Loading Furnace especially suited for melting of Glass Samples

**Make:** Ants Innovation Pvt. Ltd.

**Cost:** Rs.8,55,500/-

**Grant:** FIST



### Glass Lapping and Polishing Machine:

- Used for lapping and polishing the glass samples prepared for research work.

**Model:** SSM 300/4TT

**Make:** SPEEDFAM Pvt. Ltd.

**Cost:** Rs.4,99,435/-

**Grant:** CURIE

