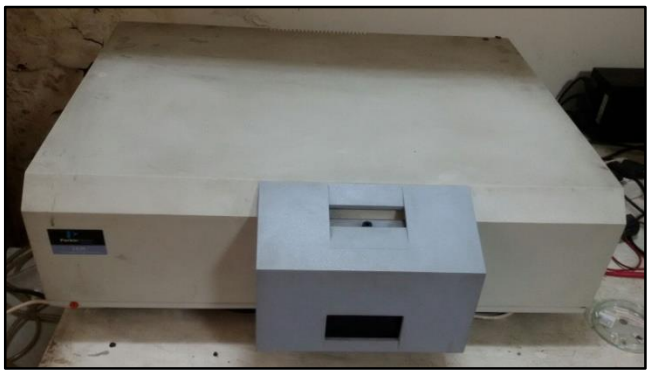
Measurement of: Photoluminescence spectrometer

Equipment: LS 55 Photoluminescence spectrometer (M/s Perkin Elmer)

Property Measured: Photoluminescence emission and excitations of luminescent materials

Photograph (small size)



Basic Principle:

Photoluminescence spectroscopy is a contact less, nondestructive method of probing the electronic structure of materials. Light is directed onto a sample, where it is absorbed and imparts excess energy into the material in a process called photo-excitation. One way this excess energy can be dissipated by the sample is through the emission of light, or luminescence. In the case of photo-excitation, this luminescence is called photoluminescence.

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Capabilities: Photoluminescence spectrometer has following salient features:

- Excitation scan range from 200-800 nm.
- Emission scan range from 200-700 nm with standard photomultiplier with optional R928 photomultiplier.

Sample Requirement: Thin Films, Powders and liquid sample.