



Photoluminescence Spectroscopy: The Photoluminescence spectrophotometer consists of a continuous wave, He-Cd laser as its excitation source, $\lambda = 325$ nm. The sample under investigation is excited with the monochromatic light having wavelength 325 nm. Subsequent to the excitation most of the direct bandgap materials upon their relaxation to ground state emit radiation (luminescence). The emitted signal is focused and passed through a monochromator and finally gets recorded by the detector. With the help of a PMT detector emission in the range of 300 nm – 900 nm can be recorded. With the use of cryostat and heater, the system is also capable of measuring temperature dependence of PL spectra (from room temperature to liquid nitrogen temperature). The entire assembly is mounted on vibration free optical table.