

## Physics Lab Equipments & Experimental Setups

**ME 861 - To find wavelength and angular divergence of Diode laser.**

**Setup comprises of :**

- Monochromatic Light Source : Diode Laser (Power 5mW)
- Optical bench : 1.5 Meter (Full Shaper)
- Diffraction grating : 500lines/inch with grating holder
- White screen



**ME 861B - To measure the peak power and beam divergence of a given laser beam**

**Setup Consist of:**

- Monochromatic Light Source : He-Ne Laser (Power 2mW) or Diode Laser
- Optical bench : 1.5 Meter (Full Shaper)
- Laser Beam Analyzer with sensor (photovoltaic cell and digital DC micrometer (2000 $\mu$ A)
- Micrometer screw arrangement : Least count - 0.01mm

**ME 861C - To determine the particle size of micro particles (lycopodium powder) using laser.**

**Setup consist of:**

- Monochromatic Light Source : Diode Laser : Power 5mW (He-Ne Laser)
- Optical bench : 1.5 Meter (Full Shaper)
- Fine micro particles having nearly same size as that of wavelength of laser source (say Lycopodium powder)
- Glass plate with holder
- White screen

**ME 861D - To Study the Intensity Distribution Due to Diffraction from Single Slit and to determine the slit width (w).**

**Setup Consist of:**

- Optical bench : 1.5 Meter ( Full Shaper)
- Monochromatic Light Source : He-Ne Laser (Power 2mW) or Diode Laser
- Single slit with slit holder
- White screen



**ME 861E - To Study the Intensity Distribution Due to Diffraction from Double Slit**

**Setup Consist of :**

- Optical bench : 1.5 Meter (Full Shaper)
- Monochromatic Light Source : He-Ne Laser (Power 2mW) or Diode Laser
- Double slit with slit holder
- White screen

**ME 861F - To Measurement Diameter of a Thin Wire using Laser**

**Setup Consist of:**

- Optical bench : 1.5 Meter (Full Shaper)
- Monochromatic Light Source : He-Ne Laser (Power 2mW) or Diode Laser
- Slit contain thin wire in middle with slit holder
- White screen

**ME 861H - To find wavelength and angular divergence of He-Ne laser**

**Setup comprises of:**

- Optical bench : 1.5 Meter (Full Shaper)
- Monochromatic Light Source : He-Ne Laser (Power 2mW)
- Diffraction Grating : 500lines/inch with grating holder
- White screen

