

Physics Lab Equipments & Experimental Setups

ME 858 - To find the wavelength of sodium light by Newton's Ring



Setup comprises of :

- A Plano convex lens of large radius of curvature and plane circular glass plate
- Travelling Microscope: Newton's rings Travelling Microscope
: Least Count - 0.01mm
: Scale - 22cm
- Light Source : 35 Watt Sodium vapour lamp housed in powder coated Steel cabinet with Transformer & Stand
- Plane glass plate inclined at 45 degree arrangement
(in case of compact arrangement, angle varies according to choice)

ME 858A - To determine the thickness of a thin paper by interference of light in a wedge shaped film.



Setup Consist of :

- Microscope : Newton's Travelling microscope arrangement to observe fringes
: Least Count - 1mm Scale - 22cm
- Light Source : 35 Watt Sodium vapour lamp housed in powder coated Steel cabinet with Transformer & Stand
- Two optically plane glass plates
- An arrangement having an optically plane glass plate inclined at an angle of 45 Degree
- A thin (sharply cut) piece of paper (e.g. cigarette paper, glace paper etc)

ME 859A - To study the magnetic field using vibration magnetometer



Setup Consist of:

- Box type vibration magnetometer
- Stop watch (Digital) : Least count - .01Sec
- Bar magnet : 3 inch
- Brass strip : 3 inch
- Vernier caliper : Least count - 0.01cm Range : 15cm

ME 860 - Determine the Velocity of Ultrasonic Waves by using a Crystal (Complete Setup)

Objective :

- To study the diffraction of light due to propagation of ultrasonic wave in a liquid.
- To determine the speed of sound in various liquids at room temperature
- To determine the compressibility of the given liquids



Setup Consist of:

- Radio frequency oscillator fitted with a frequency meter : 3-5MHz
- Quartz crystal slab : 4.2 MHz (fitted with two leads)
- Spectrometer : 7 Inch, Least count - 20 Sec.
- Light Source : 35 Watt Sodium vapour lamp housed in powder coated Steel cabinet with Transformer & Stand
- Glass cell with sample liquid (CCl₄/kerosene/Toluene/Turpentine oil etc.)