



55864 Experimental Set-up has been designed specifically to measure optical absorption and polarised light intensity using photo resistor. The set-up consists of a Spectrometer, mercury light source, photo resistor, microammeter, optical filter, Battery eliminator etc. The set-up is complete in all respect and requires no other apparatus.

#### OBJECT

- 01 To study the variation of light intensity from a Polariser and Analyser combination. (Using photo resistor as a detector)
- 02 To estimate the absorption coefficient and transmission coefficient of various optical filters using a photo resistor as detector.

#### FEATURES

The complete Experimental Set up consists of the following :

- 01 SPECTROMETER STANDARD :  
6" dia circle reading 30 seconds. The objectives used in telescope and collimator are achromatic and provided with rack and pinion focussing arrangement. Telescope arm and prism table are provided with fine and coarse adjustment. The prism table is provided with three leveling screws and is engraved with concentric rings & lines. The scales and verniers are of stainless steel and are machine divided. Clamping devices are also provided to lock telescope and collimator after adjustment, with prism clamping device and diffraction grating stand.
- 02 Mercury light source : Complete with Mercury Vapour lamp 80W along with choke & wooden box with holes with slide covers one each on three sides.
- 03 Polaroids : 2 no. as a polariser and analyzer.
- 04 Photo resistor (LDR)
- 05 Digital microammeter having 0-200 uA range.
- 06 Three different colour optical filters.
- 07 Battery eliminator
- 08 one 1K Resistance
- 09 Adequate no. of connecting wires, 100cm long.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

Note: Specifications are subject to change.

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