

IV-E597 Millikan's Oil Drop Experiment Setup

Millikan's Oil Drop:

- Millikan's Oil Drop Experimental Setup is a useful apparatus for understanding the concept

Experiment:

- Determination of 'e' by Millikan's method

Apparatus Supply:

- Millikan's Oil Drop Apparatus
- Power Supply for Millikan's Apparatus
- Working manual



Technical Specifications:

- Stable triangular base that supports the main steel pillar on which lamp house, condenser, microscope and atomizer system is mounted.
- Lamp house encloses a 6volt 21 watt lamp and a condenser lens to focus the bright light on the oil drops. It can be adjusted in the horizontal plain by a slow motion screw.
- Microscope is mounted on the opposite side of the lamp house. It is mounted with rough and fine slow motions. It can be roughly moved in the horizontal plain as well as can be moved gradually by a spring loaded slow motion screw. It can also be moved in vertical plain by a fine motion screw. Focusing is done by rock & pinion arrangement. By all these motions it becomes very easy to bring the charged oil drops on the vertical micrometer scale provided near the eye piece.
- Condenser plates are made of brass mounted at the top of the central pillar insulated from the rest of the apparatus. Top plate has a small hole through which sprayed oil drops enter into the condenser chamber, separated by a distance of approx 6 to 7mm. and are also provided with terminals for power supply connections.
- Atomizer is made of an aluminum box containing olive oil mounted on a steel rod.