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D-2(S)

Photoconductive Cell

This cell is based on the fact that the electrical resistance of certain semi conductors like Selenium, Lead Sulphate etc. decreases when the intensity of light falling on them increases. When such a material is connected to a galvanometer and a battery and the intensity of light incident on it is made to vary, the strength of the current varies. There is, however, a considerable time lag between the change in the light intensity and that of current strength. Besides the change in current strength is also not proportional to the change in light intensity. Due to these two defects, such a cell is seldom used in practice.

Applications of Photo Cells.

(1) For the reproduction of sound in Cinematography.

(2) For switching on and off the street light automatically.

(3) As a burglar's alarm.

(4) As a fire alarm
(5) In the scanning system of television.
(6) In determination of temp of ~~star~~ stars and other heavenly bodies.
(7) As light meters and exposure meters.
(8) For automatic control of traffic signals and for detection of traffic law defaulters
(9) In industry for detecting minor holes in metal sheets.
(10) As thermostat to keep the temperature of a furnace furnace constant.