

Photo conductive cell: B.Sc. Part-2

Dr. Supriya Rani

Guest Faculty, Department of Physics,

Magadh Mahila College, PU

Email id- supriya.physics@gmail.com

Photo conductive cell :

These cells are based on the property that the resistance of certain substances such as selenium, lead-sulphate, some compounds of thallium etc. decreases with increase in illumination.

In such a cell a thin layer of selenium is placed below a metallic transparent film. This combination is fixed on iron plate. When light falls on the metallic film, the resistance of selenium decreases and a current begins to flow through the external circuit containing resistance R and battery B connected between iron plate and metallic film. The current varies with the variation of intensity of light. There is considerable lag between the incidence of light and the time taken for the resistance of the cell to drop to the minimum and also in its recovery back, when the source of illumination is withdrawn the use of such cells is now confined to operation relays for controlling illumination.

