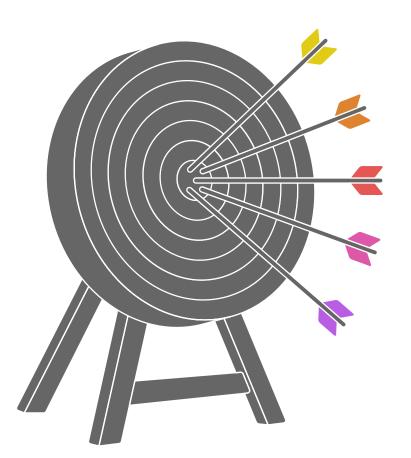
Photoelectric Effect





Photoelectric Effect

Emission of electrons by light



Light Frequency

Determines electron emission



Photon Nature of Light

Light as energy packets



Experimental Observations

Validates the effect

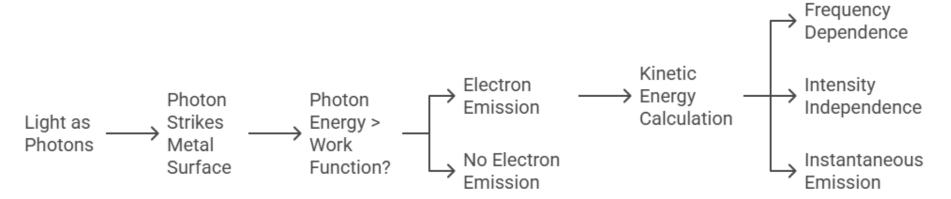


Applications

Uses of the effect in technology

Unraveling the Photoelectric Effect Einstein's Breakthrough Einstein provides a quantum mechanical explanation, resolving the Lenard's mysteries of the photoelectric effect. Observations Philipp Lenard finds electron energy depends Thomson's on light frequency, not intensity. Identification J. J. Thomson identifies the emitted particles as electrons. Hallwachs's **Findings** Wilhelm Hallwachs shows light causes metal plates to become positively Hertz's charged. Experiment Heinrich Hertz observes UV light affecting spark length, hinting at electron Smith's involvement. Discovery Willoughby Smith finds photoconductivity in selenium, enhancing the Becquerel's light-electricity Observation connection. Edmond Becquerel notes the photovoltaic effect, linking light and voltage.

Einstein's Explanation of the Photoelectric Effect



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