

Lab 8 Photoelectric Effect Tasks

Full report (all sections) due Friday,
November 20th at 6pm

Using filters to isolate a spectral line from a mercury lamp or using the light from a red laser, shine the light on the anode of a vacuum tube. For each frequency of light, find the stopping voltage V_s that prevents any current flow from anode to cathode. Then plot V_s vs. frequency and use this plot to find a value for Planck's constant divided by the electron charge.

Wavelengths	Violet	Blue	Green	Yellow	Red
in nm	405	435	546	578	633