

9.2 - Electric Conduction in Gases

PJ Gibson - Peace Corps Tanzania

May 2020

- (1998) What is thermionic emission?
- (2013) Explain the following observation:
 - Light in the bulb comes on once the switch is kept on despite the drift velocity of electrons being very low.
 - The potentiometer is said to be a better device for measuring the potential difference (p.d) than a moving coil voltmeter.
- (2013) A milliammeter connected in series with a hydrogen discharge tube indicates a current of 1.0×10^{-3} A. If the number of electrons passing the cross section of the tube at a particular point is 4.0×10^{15} per second, find the number of protons that pass the same cross section per second.
- (2015) Sketch the diagram showing the variation of current with potential difference across the following:
 - Filament electric bulb.
 - Gas-filled diode.
- (2018) Distinguish between ionization energy and excitation energy.