# Lab 10

## Calculations

**Compute the Planck’s constant**

1. Use the following formula to compute the frequencies of the five lights. Show one sample calculation and put the data in Data Table 7-1.

(7-6)

Where *c* is the speed of light (*c*=3.00×108 m/s), and *λ* is the wavelength of light.

1. Suppose that the frequency *v* and the stopping potential Δ*Vs* satisfy the relationship Δ*Vs*=*kv*+*b*. Use the data in Data Table 7-1 and the least-square fitting method to find out the values of the Planck’s constant and the work function of the metal in photoelectric tube.