26. (a) For the first and second case (labeled 1 and 2) we have $eV_{01} = hc/\lambda_1 - \Phi$ and $eV_{02} = hc/\lambda_2 - \Phi$, from which h and Φ can be determined. Thus,

$$\begin{aligned} h &= \frac{e(V_1 - V_2)}{c(\lambda_1^{-1} - \lambda_2^{-1})} = \frac{1.85\,\text{eV} - 0.820\,\text{eV}}{(3.00 \times 10^{17}\,\text{nm/s})[(300\,\text{nm})^{-1} - (400\,\text{nm})^{-1}]} \\ &= 4.12 \times 10^{-15}\ \text{eV}\cdot\text{s} \ . \end{aligned}$$

(b) The work function is

$$\Phi = \frac{3(V_2\lambda_2 - V_1\lambda_1)}{\lambda_1 - \lambda_2} = \frac{(0.820\,\text{eV})(400\,\text{nm}) - (1.85\,\text{eV})(300\,\text{nm})}{300\,\text{nm} - 400\,\text{nm}} = 2.27\ \text{eV} \ .$$

(c) Let $\Phi = hc/\lambda_{\text{max}}$ to obtain

$$\lambda_{\text{max}} = \frac{hc}{\Phi} = \frac{1240\,\text{eV}\cdot\text{nm}}{2.27\,\text{eV}} = 545\ \text{nm} \ .$$