

$$3-10 \quad V_0 = \phi / \lambda \quad \lambda_c = 325.6$$

$$E = h V_0 = \phi \Rightarrow \frac{hc}{\lambda_0} = \phi$$

$$eV_s = \frac{hc}{\lambda_0} - \phi \quad \lambda = 259.8 \text{ nm}$$

$$= hc \left(\frac{1}{259.8 \text{ nm}} - \frac{1}{325.6 \text{ nm}} \right)$$

$$= 1240 \text{ eV} \cdot \text{nm} \left(\frac{1}{259.8 \text{ nm}} - \frac{1}{325.6 \text{ nm}} \right)$$

$$= 0.9645 \text{ eV}$$

$$V_s = \cancel{0} 0.9645 \text{ V}$$