

- 28** The metal cathode of a photocell is illuminated by light quanta of energy $3.5 \times 10^{-19} \text{ J}$ each. By applying a stopping potential of 0.25 V, the current through the cell is just reduced to zero.

What is the work function of the metal cathode?

- A** $2.9 \times 10^{-19} \text{ J}$ **B** $3.1 \times 10^{-19} \text{ J}$ **C** $3.5 \times 10^{-19} \text{ J}$ **D** $3.9 \times 10^{-19} \text{ J}$