

- 28** The metal cathode of a photocell is illuminated by light quanta of energy  $3.5 \times 10^{-19}$  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**  $2.9 \times 10^{-19}$  J      **B**  $3.1 \times 10^{-19}$  J      **C**  $3.5 \times 10^{-19}$  J      **D**  $3.9 \times 10^{-19}$  J