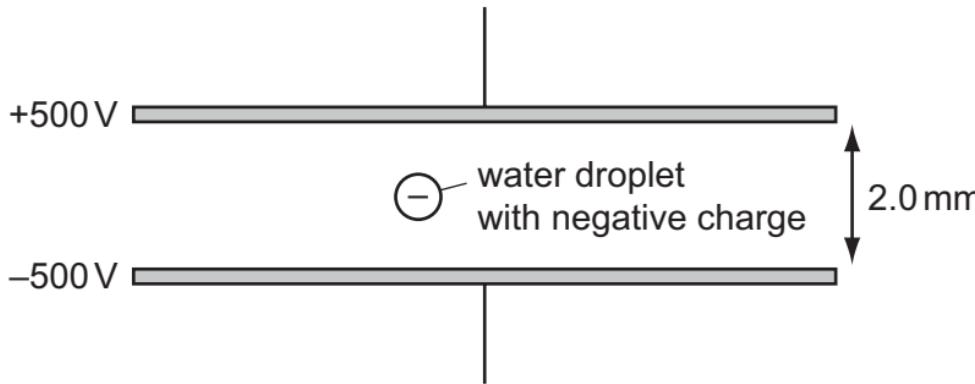


- 13 A small water droplet of mass  $3.0 \mu\text{g}$  carries a charge of  $-6.0 \times 10^{-11} \text{ C}$ . The droplet is situated in the Earth's gravitational field between two horizontal metal plates. The potential of the upper plate is  $+500 \text{ V}$  and the potential of the lower plate is  $-500 \text{ V}$ .



What is the motion of the droplet?

- A It accelerates downwards.
- B It remains stationary.
- C It accelerates upwards.
- D It moves upwards at a constant velocity.

- 14 A horizontal bar is supported on a pivot at its centre of gravity. A fixed lead is attached to one end