

31 Two parallel metal plates, a distance of 2 mm apart, have a potential difference of 1000V across them.

What is the electric field strength between the plates?

- A  $500 \text{ V m}^{-1}$
- B  $50\ 000 \text{ V m}^{-1}$
- C  $50\ 000 \text{ N C}^{-1}$
- D  $500\ 000 \text{ N C}^{-1}$

32 An oil droplet has charge  $q$  and is situated between two horizontal metal plates as shown in the diagram.