



# Measuring electrical conductivity 1

**UNIT:** Micro-Siemens per centimetre ( $\mu\text{s}/\text{cm}$ )

**EQUIPMENT:** Electrical Conductivity (EC) meter which measures electricity flow between two electrodes



1. Turn **meter on** and lift the lid from the sensor.
2. **Calibrate** your meter each time. Use the 1.41 solution to do this (this is a solution of  $1413 \mu\text{s}/\text{cm}$ ). Pour the solution onto the sensor making sure you completely cover it and there are no bubbles.
3. **Hold the CAL** button. When the  icon stops blinking your calibration value will display. It should read 1413 (+/- 5). If it does not, rinse thoroughly with solution and calibrate again.
4. **Rinse** the sensor with sample water after calibration.
5. Use the pipette or pour **sample solution** on the sensor (cover it) and press the **MEAS** button.
6. The  icon will flash until the result is stable then it will stop flashing and your result will appear.
7. **Record** your result on the *water quality data sheet* or enter directly into the River Detectives website.
8. Compare your result to the rating chart for your region.
9. After measurement wash your sensor with tap water and **turn off**.

## Notes:

- 'Or' means the salinity level is too high and 'Ur' the level is too low for the EC meter. Dilute solution or contact your coordinator.
- Do not wipe or push the sensor strongly. It may damage the sensor.