

**TITLE: DETERMINATION OF CONDUCTIVITY IN WATER FOR USE AND CONSUMPTION**

**BASIS**

*To determine conductivity the capacity of the water to conduct an electric current is evaluated. This is an indirect measurement of the quantity of ions in solution (mainly chloride, nitrate, sulphate, phosphate, sodium, magnesium and calcium).*

**METHOD:** *The basic unit for measuring conductivity is siemens per centimetre.*

*The conductivity will be measured using an electronic conductivity meter, which generates a voltage difference between two electrodes submerged in the water. The drop in voltage due to the water resistance is used to calculate the conductivity per centimetre.*

**APPARATUS.** Conductivity meter.



**PROCEDURE:** - *If the conductivity of the water sample is very high, it is necessary to dilute it until the measurement comes down to within the scale of the equipment.*

- *The conductivity cell is introduced into the water sample, waiting a few seconds until the reading can be established. If a digital conductivity meter is used, the sample's conductivity measurement appears directly on the screen.*

- *Equipment with temperature compensation is recommended; otherwise the temperature compensation will have to be performed manually.*