

# Routine semimicro method for chlorinity (salinity) determination using rotating Ag/AgCl electrode

by

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A routine semimicro method for salinity determination is described which uses a rotating Ag/AgCl electrode for the determination of halides present in sea water.

Instead of the potentiometric titration only once should the potential be measured after an appropriate mixing of sea water and silver nitrate solution. It is achieved by use of especially constructed pair of pipettes which enable to prepare a mixture of sea water and AgNO<sub>3</sub> in four different volume ratios. Changing the AgNO<sub>3</sub> concentration various chlorinity ranges could be covered. Using for example 0.2 M AgNO<sub>3</sub> chlorinity from 19 to 22 p. 100 could be determined.

The neutralization point is calculated on the basis of the volume ratios and correction obtained from the Ag/AgCl electrode potential. The method described combines the advantages of potentiometric end-point measurement with the volumetric neutralization.

In over one hundred of parallel salinity determinations the method is compared with the standard Mohr-Knudsen titration method. The result of this comparison showed that the new method is more rapid, economic and accurate.

