



# **1 On salt composition of highly mineralized Aral Sea waters as revealed from field campaigns of 2002-2004**

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Four field surveys in the western, deep part of the Aral Sea were undertaken in November 2002, October 2003, April 2004, and August 2004. Along with the CTD profiling, an extensive water sampling was carried out during these surveys. Chemical analyzes of the samples collected at different locations and depth levels were done at the Institute of Geology and Geophysics, Uzbekistan. Simultaneously, the analyzes were done at the Alfred Wegener Institute, Germany, which allows for comparison of the results.

As obtained through the dry residue method, the surface salinity in the Sea has increased from 82 g/l in 2002 to about 110 g/l in late 2004. Considerable and interannual and seasonal changes of the salt composition have been observed, which may reflect the dependence of the solubility of different salts on the temperature. It is shown that for high salinities, the relation between the salinity and the chlorinity is no longer linear, which is attributed to high content of  $Mg^{+2}$  and  $SO_4^{-2}$  ions.