## Distribution of Ionic zinc in North Adriatic

par

SERDJO BUBIĆ and MARKO BRANICA

Center for Marine Research, "Rudjer Boškovic" Institute, Zagreb, Croatia (Yugoslavia)

The distribution of ionic zinc concentration at 52 stations in the area of the North Adriatic Sea has been determined during the period from May 1973 to April 1974. The seawater samples are taken from several depths and 663 analyses (each duplicated) have been performed in total.

Seawater samples are analysed by adapted Macchi's method [MACCHI, 1965] based on slowly dropping mercury electrode in connection with Davies cathode ray polarograph — Southern Analytical Co. BUBIĆ *et al.* 1972].

The distribution of ionic zinc concentration in sea water samples taken from surface and from other depths has been found as follows :

other deptilis	nus seen round us r		
Depth	Sample No.	Average concn. Standard de	viation
0.5 m	194	15.9 ± 17.9 μg Zn/l	
>0.5 m	469	$6.0 \pm 3.0 \ \mu g \ Zn/l$	1

From the frequency distribution of concentration from different sea depth, one can conclude that the concentration of ionic zinc in the surface seawater layer is highly influenced by pollution. This conclusion is in a very good agreement with observed correlation between concentration of ionic zinc and turbidity in the North Adriatic area [PETEK & BRANICA, 1969].

## References

BUBIĆ (S.), SIPOS (L.) & BRANICA (M.), 1972. — Comparison of Different Analytical Techniques for Determination of Heavy Metals in Sea Water. *Thalassia Jugoslavica*.

MACCHI (G.), 1965. — The Determination of Ionic Zinc in Sea-water by Anodic Stripping Voltammetry Using Ordinary Capillary Electrodes, J. Electroanal. Chem. 9, pp. 290-298.

PETEK (M.) & BRANICA (M.), 1969. — Hydrographic and Biotical Conditions in North Adriatic. III. Distribution of Ionic Zinc and Iodate, *Thalass. Jug.* 5, pp. 257-261.

Rapp. Comm. int. Mer Médit., 23, 7, p. 61 (1976).