

# Hydrographic and biotical conditions of the North Adriatic : Hydrochemistry and some factors influencing hydrography (1968-70)

par

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## Summary\*

The present hydrographic investigations were begun in 1964 and have been continued as a part of the integrated North Adriatic research program. The North Adriatic is of interest specific and important oceanographic features such as :

1. Direct interdependency between the North Adriatic sea and the continental land mass with its abundant river outflow.
2. Dynamic connection of North Adriatic water with water masses of the South Adriatic.
3. Richness and diversity of biota in the North Adriatic especially with respect to the large standing stock of fish.

The program was carried out at one nearshore (Station A<sub>1</sub>) and two offshore stations (A<sub>11</sub> and A<sub>20</sub>) off the west Istrian coast. The sampling methods are described in our previous reports. The results of environmental parameters such as temperature, salinity, density, pH, alkalinity, oxygen, transparency and nutrients were presented graphically as a function of time.

The hydrographic values were in the following range : Temperature °C 9.60 - 27.57, salinity ‰ 30.39 - 37.97, density 19.98 - 29.33, pH 8.09 - 8.33, specific alkalinity  $\frac{\text{mequiv./l}}{\text{‰ Cl}}$  0.126 - 0.165, oxygen saturation ‰ 60 - 115, nutrients  $\mu\text{g-at/l}$  PO<sub>4</sub>-P 0.01 - 0.6, tot P 0.2 - 0.4, reactive silicate 0.0 - 16, NO<sub>2</sub>-N 0.0 - 2.0, NO<sub>3</sub>-N 0.0-26.0. Two opposite hydrographic aspects (continental and maritime) and two general types of geochemical migratory circulation of nutrients (agglomeration - accumulation and liberation - dispersion) are explained.

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