

Transport, deposition and distribution of the sediments and suspended matter on marine coastal area (Ligurian Sea)

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An environmental research was conducted by ENEA on the ligurian coastal area. The most relevant factor which characterize this area are the presence of the Centa mouth, the turistic harbour of Allassio, the large town of Albenga and the island of Gallinara.

This study examines the processes which are responsible for the transport and deposition of sediments and particulate matter on the marine platform and represents an example of research aimed to the determination of the influence of local natural inputs and anthropogenic activities on the coastal environment.

During the summer were sampled alluvial and marine sediments as well as suspended matter from surface and bottom waters (Fig.1). Subottom profiles provided morphological descriptions of the submarine area (CORRADI *et al* 1984).

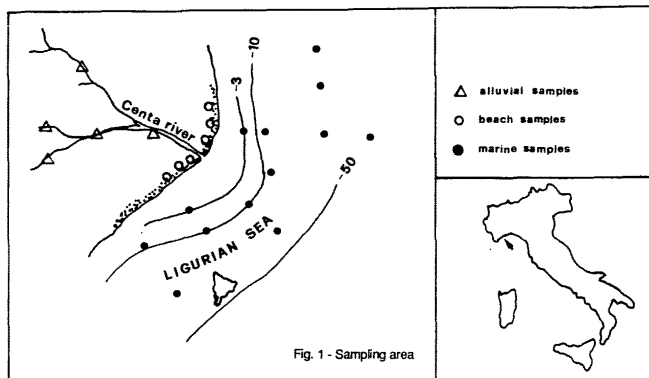


Fig. 1 - Sampling area

All samples were analyzed for granulometric and mineralogical parameters by the Coulter Counter, X-Ray diffraction and Electron Microscopy (COCITO *et al.*, 1985).

Two main alluvial inputs, reflecting the different limestone, flysh and crystalline rocks of the source basins, were identified.

The homogeneous dispersion of sediments in the cone area of the river may, in this case, point to a negligible influence of the longshore current.

Textural and mineralogical characters of suspended matter, however, exhibited an eastward drift (PAPA, 1980).

The heaviest effects of anthropic activity were observed on the beaches near the river mouth, in the areas close to the large urban centres and in the area including the harbour.

The coastline pattern and the peculiar morphology of the shelf are the main factors controlling the settlement of all sedimentary material entering the sea which is of natural as well as of anthropogenic origin.

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