

## **DISTRIBUTION AND QUALITY OF SOLID DISCHARGES IN THE ACHELLOOS RIVER DELTA.**

**CHATZIOPOULOS E., SIOULAS A. & KARAGEORGIS A.**

National Center for Marine Research - Institute of Oceanography  
Ag. Kosmas, 166 04, Elliniko, Athens, Hellas

### **ABSTRACT.**

In this study, are presented the results of the laboratory analysis in surface sediments samples of Achelloos's River Delta. During the last years, Achelloos is an endangered system, due to the anthropogenic pressures on the area.

The quality of the materials of the sea bed, has been studied by taking samples of surface sediments. This method was used to determine the way that natural processes of settlements and deposition of materials that come to the coastal zone through the river takes place. Also, to determine the indicators of the quality and quantity of human influence on the system.

To do that, grain size analysis of sediments samples have been carried out and the distribution of some metals (Cr, Pb, Mn, Ti, V, Co, Ni, Cu, Zn, Si, Al, S, Fe, Ca, P) has been studied. Maximum metal concentrations have been found in the sea area in front of the Achelloos's estuary, close to the river mouth. Finally, for the elimination of the grain size differences of the samples, normalization of metal concentrations based on the concentration of the finer grain part of the sample, took place.