



## **Heavy Metals and Petroleum Hydrocarbons Contamination of Bottom Sediments of Gulf of Oman area, United Arab Emirates**

A. musallam, M. El Tokhi, S. Al Abed, and B. Mahmoud

Geology Department, Faculty of Science, UAE University, Al Ain, United Arab Emirates (meltokhi@uaeu.ac.ae)

The concentrations of total petroleum hydrocarbons (TPH), total organic carbon (%TOC) and petroleum related heavy metals beside the grain size distribution of 4 stations in Gulf of Oman area (Khor Kalbaa , Debba ,Khor Fakan and Fujairah) , UAE were determined in the bottom sediment. Copper, zinc, nickel, lead, cadmium and vanadium concentration were found within the lowest effect, The contamination levels were found due to petrogenic origin and their sources are either weathered or highly weathered crude oils and or used lubricating oil. Their detection gives an indication of recent and continuous petroleum inputs.