



## Distribution of Trace Metals in Sediments from the Shelf Region of Karnataka, West Coast of India

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**Abstract:** The trace metals namely Fe, Al, Mn, Zn, Cu, Co, Ni, Cr and Mo of surficial sediment samples were collected at different depths from 25 stations located at three zones (in eight transects) in the Arabian Sea during 208<sup>th</sup> cruise of RV Gaveshani during January 1989. It is summarized from the present study that the distribution of metals depends on the sediment texture in particular and the concentration of humic acids and organic matter in general. The role of riverine discharge and drainage could also significantly alter the concentration of metals in the marine sediments. It was observed that parameters like nature of the sediment, humic acids, organic matter etc., significantly influenced the distribution of metals in this region. Due to heavy mining activity and transportation of mines through sea route, there is likely to be high magnitude of leaching and variation of trace metals in this coast. Using this as benchmark data (1989), an attempt was made to compare the concentration of these metals with the present (2010) data to explain the concentration of these metals with space and time.

**Key Words:** Arabian Sea, Karnataka Shelf, Trace Metals, West Coast of India

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