HEAVY METAL CONCENTRATIONS IN ROADSIDE DEPOSITED SEDIMENTS IN KUWAIT CITY

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Abstract: In the present study, roadside deposited sediments samples collected from Kuwait city district, in Kuwait were analyzed for specific heavy metals (As, Cr, Cu, Mn, Ni, Pb and Zn). Contamination assessment status of heavy metals in roadside sediments was made using mathematical models in terms of enrichment factor (EF), geo-accumulation index (I_{geo}) and contamination factor (CF). The sediments showed remarkably high levels of all the metals, except Ni, above background concentrations in the following order (As, Cu, Pb, Zn, Mn and Cr). Contamination factor and index of geoaccumulation revealed overall moderately uncontaminated and moderate contamination, respectively, but the enrichment factors for all metals ranged between moderate to significant enrichment.

Keywords: Roadside Sediments; Heavy Metals; Contamination Assessment.