World Academy of Science, Engineering and Technology International Journal of Marine and Environmental Sciences Vol:12, No:09, 2018

[Keynote Talk]: Heavy Metals in Marine Sediments of Gulf of Izmir

Authors: E. Kam, Z. U. Yümün, D. Kurt

Abstract : In this study, sediment samples were collected from four sampling sites located on the shores of the Gulf of İzmir. In the samples, Cd, Co, Cr, Cu, Mn, Ni, Pb and Zn concentrations were determined using inductively coupled, plasma-optical emission spectrometry (ICP-OES). The average heavy metal concentrations were: Cd < LOD (limit of detection); Co 14.145 \pm 0.13 μ g g⁻¹; Cr 112.868 \pm 0.89 μ g g⁻¹; Cu 34.045 \pm 0.53 μ g g⁻¹; Mn 481.43 \pm 7.65 μ g g⁻¹; Ni 76.538 \pm 3.81 μ g g⁻¹; Pb 11.059 \pm 0.53 μ g g⁻¹ and Zn 140.133 \pm 1.37 μ g g⁻¹, respectively. The results were compared with the average abundances of these elements in the Earth's crust. The measured heavy metal concentrations can serve as reference values for further studies carried out on the shores of the Aegean Sea.

Keywords: heavy metal, Aegean Sea, ICP-OES, sediment

Conference Title: ICAMG 2018: International Conference on Advances in Marine Geochemistry

Conference Location : Dublin, Ireland Conference Dates : September 06-07, 2018