



Heavy Metal Status in Drinking Water and Farmland Soil within Nigeria Police Academy, Wudil –Kano State.

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Abstract:

Water and soil samples were collected in farmland areas of Nigeria Police academy, Wudil –Kano State and were analyzed for heavy metals (Cd, Fe, Cu, Pb and Zn) and some physical parameters (pH, Temperature, Conductivity and Turbidity) using standard methods and Atomic Absorption Spectroscopy (AAS).The pH results for water samples ranges from 6.6 ± 0.36 - 7.5 ± 0.32 , Temperature ranges from 23.5 ± 0.44 - $27. \pm 1.160$ C, Conductivity ranges from 63.47 ± 1.32 - 227.34 ± 3.31 μ S/cm and Turbidity ranges from 1.5 ± 0.22 - 3.0 ± 0.92 NTU. The results for all the physical parameters were within the limits of WHO limits. While the results for metals concentration in water samples ranges from 0.002 ± 0.001 - 0.022 ± 0.001 mg/L for Cd, 1.30 ± 0.002 - 3.25 ± 0.001 mg/L for Fe, 0.014 ± 0.002 - 2.088 ± 0.002 mg/L for Cu, 0.006 ± 0.001 - 0.033 ± 0.001 mg/L for Pb and 0.17 ± 0.001 - 3.34 ± 0.001 mg/L for Zn. Most of these concentrations values were within WHO limits with exception in few samples i.e Sample A for Zn, Sample C for Fe and Samples D and E for Pb. The results for geochemical distribution of the metals in the soil revealed by sequential extractions show that 90% of the metals concentrations were found in the residual fraction. Also, the results for geo-accumulation index (Igeo) ranges from unpolluted to low pollution.

Biography:

Sholadoye.Q.Oyeniya have completed his Masters from Chemistry Department, Nigeria Police Academy, Wudil-kano State,Nigeria Sholadoye.Q.Oyeniya have experienced in this academy Both cadet ASPs and cadet Inspectors programmes run for 72 weeks i.e. (18 months) and it is segmented into three stages; namely:



Publication of speakers:

- Sholadoye.Q.Oyeniya et al..Physicochemical Characterization and Corrosion Inhibition Potential of Ficus benjamina (FB) Gum for Aluminum in 0.1 M HCL.
- Sholadoye.Q.Oyeniya et al..GCMS Studies On Anogessus Leocarpus (Al) Gum and Their Corrosion Inhibition Potential for Mild Steel in 0.1 M HCL.
- Sholadoye.Q.Oyeniya et al..Theoretical and experimental studies on the corrosion inhibition potentials of 3-nitrobenzoic acid for mild steel in 0.1 M H₂SO₄.
- Sholadoye.Q.Oyeniya et al..Adsorption and Quantum Chemical Studies on the Inhibition Potentials of Some Thiosemicarbazides for the Corrosion of Mild Steel in Acidic Mediuminhibitor for aluminum in hydrochloric acid solution.
- Sholadoye.Q.Oyeniya et al..Removal of ni (ii) and pb (ii) from aqueous solution by adsorption onto vitex simplicifolia nut activated carbon

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