

## Water quality assessment of inorganic pollutants of some rivers and streams in Abeokuta metropolis

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Water quality assessment of inorganic pollutants in some rivers and streams of four different locations (Sokori, Gbangba, Kobiti and Oke-Ijemo) within Abeokuta metropolis was investigated to determine the extent of pollution in these settlements for environmental quality and sustainability. The pH, acidity, alkalinity and metals like chromium, iron, lead and zinc were analyzed using standard laboratory methods. The results showed that the pH of most of the water samples were slightly alkaline with the exception of Oke-Ijemo stream which was slightly acidic but the values obtained fell within the WHO standards. Sulphate and phosphates were not detected at all in the rivers Sokori and Gbangba as well as Oke-Ijemo stream but were detected in Kobiti stream which fell below the permissible limits. Iron and zinc were present in all the locations investigated with three out of the four locations having iron concentration above the permissible level and zinc concentrations were below the WHO standards. In conclusion, there was no pollution of the water bodies therein with the exception of iron and hence water sources investigated could be generally considered fit for industrial, domestic and aqua-cultural purposes but for human consumption adequate treatment with appropriate chemicals should be carried out before to prevent outbreak of water borne diseases among the living populace in these areas. However, people residing in these communities should be advised on indiscriminate dumping of any refuse and domestic wastes into the water bodies so as to prevent environmental pollution and health related hazards.

## **Biography**

Oseni O A is Principal Lecturer/Director of School of Science and Technology, Moshood Abiola Polytechnic, Abeokuta, Nigeria, graduated with BSc Honors in Chemistry in Lagos State University in 1988, MSc in Inorganic Chemistry in 1995, MSc in Soil Chemistry, University of Ibadan in 2002. His research interest is in soil and environmental pollution.

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