

## Physiochemical Parameters Assessment and Evaluation of the Quality of Drinking Water in Some Parts of Lagos State

**Authors :** G. T. Mudashiru, Mayowa P. Ibitola

**Abstract :** Investigation was carried out at Ikorodu North local council development area of Lagos state using physiochemical parameters to study the quality drinking water. It was ascertained that the human functions and activities were dependent on the continuous and availability of good drinking water. Six water samples were collected at six different boreholes from various outlets and homes in Ikorodu North local council development area. Lagos state Nigeria. Analysis was carried out to determine the purity of water for domestic use. Physicochemical properties evaluation was adapted using standard chemical methods. A number of parameters such as PH, turbidity, conductivity, total dissolved solids, color, chloride, sulphate, nitrate, hardness were determined. Heavy metals such as Zn, Mg, Fe, Pb, Hg, and Mn as well as total coliform counts were observed. The resulted values of each parameter were justified with World Health Organization (WHO) and Lagos state water regulatory commission LSWRC standard values for quantitative comparison. The result reveals that all the water had pH value well below the WHO maximum permissible level for potable water. Other physicochemical parameters were within the safe limit of WHO standard showing the portability nature of the water. It can be concluded that though the water is potable, there should be a kind of treatment of the water before consumption to prevent outbreak of diseases.

**Keywords :** drinking water, physiology, boreholes, heavy metals, domestic

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