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## ANALYTICAL VARIATIONS OF MERCURY IN HAZARDOUS WASTES OFF THE KUWAIT BEACHES

## A H Bu-Olayan and B V Thomas

Kuwait University, Kuwait

Plastic wastes in the coastal waters and shoreline beaches are on the rise over the recent years. Plastic wastes classified by light and heavy density polyethylene (LDPE and HDPE) materials were found to physically obstruct marine lives as well, chemically suspected to contain mercury (Hg) that sustained as a long-term pollutant in the ecosystem. Different methods determining Hg in plastic wastes at low detectable levels showed Hg loss or accumulation besides matrices instability. Repeatable and reproducible results were obtained when micro-analytical methods, digestion of solid samples to liquid state and samples analyzed in the direct mercury analyzer (DMA-80) with absorption spectrophotometry (0.0015ng detection limits) were adopted over other instruments. Annually, quantification and dispersion of plastic wastes in beaches not only destroyed the aesthetic value of the beaches but also characterized the additive source of Hg contamination in plastics that claimed many marine organisms.

## **Biography**

A H Bu-Olayan completed his PhD from Bristol University in 1975 and BS degree from the Kuwait University. He is the Dean of Sciences. He has published more than 65 papers in the environmental sciences with specialization in the Marine, Arid and, Health Pollution in international peer reviewed journals.

abdul.buolayan@ku.edu.kw