

Heavy Metals and Polycyclic Aromatic Hydrocarbons in Roadside Soil Samples: A Review

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Abstract : Diverse contaminants released into the environment through progress of urbanization and industrialization adversely affect human health. Among various sources of contaminants, especially, in big cities, automobiles play a significant role in aggravating the pollution. Various pollutants viz., heavy metals (Pb, Mn, Ni, Zn, As, Hg, Cd) and Polyaromatic hydrocarbons (Benzo-a-pyrene, fluoranthene, pyrene, benzo-b-anthracene, benzo-b-fluoranthene, acenaphthylene, fluorine, phenantherene, anthracene, chrysene, benzo-k-fluoranthene, benzo-e-pyrene, indenol-1,2,3-cd-pyrene, dibenzo-a,h-anthracene, benzo-ghi-perylene) are released by vehicles. Further, these pollutants are expected to cause severe mutagenic, genotoxic and carcinogenic effects. Considering this, many authors monitored the levels of pollution in roadside soil, water and plants. The present review focuses upon the analysis and effects of heavy metals and polycyclic aromatic hydrocarbons from the roadside samples.

Keywords : Automobiles, Carcinogenicity, Atomic Absorption Spectrophotometer, Gas Chromatography - Mass Spectroscopy, Soil pollution.

Conference Title : ICEP 2014 : International Conference on Electronic Publications

Conference Location : journal city, WASET

Conference Dates : November 23-23, 2014