

GC Analysis of Benzene, Toluene and Xylene in Petroleum Products and Vehicle Emission

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ABSTRACT

Benzene, toluene and xylene (BTX) are well known toxic aromatic compounds present in petroleum products. These compounds are emitted to the environment with the combustion of petroleum products. Exposure to these compounds may rapidly increase with increasing number of vehicles. Developing country like Sri Lanka needs rapid, cost effective analyzing method for BTX when monitoring the air pollution. Gas chromatography (GC) with the flame ionization detector (FID) is a promising precise tool for analyzing BTX. In this research we mainly focused on analyzing the BTX content in the gasoline and optimizing the conditions for sampling, extraction and analyzing the BTX content in vehicle emission using GC and FID.