

**CONCENTRATION OF MTBE IN TEHRAN'S ATMOSPHERE****F.S. Halek<sup>1</sup>, H. Keshavarzi Shirazi<sup>2</sup>, M. Mir Mohamadi<sup>2</sup>**<sup>1</sup>*Environmental Group, Materials & Energy Research Center, Tehran, Iran*<sup>2</sup>*Faculty of Environment Engineering, Tehran University, Tehran, Iran*

Tehran is amongst a few capitals of the world, which mountains surround the city from the North and East. The total area of the city is 700 km<sup>2</sup>. There are four accurate seasons, with the annual mean rainfall at about 230 mm. The basin's topographical situation does not allow, the major part of the time, the free circulation of winds and good ventilations. Both the EPA and the NIOSH, Have implied that this type of emissions could represent an occupational carcinogenic hazard. Methyl tert-butyl ether (MTBE) is the most widely used fuel and is added to gasoline at 5-15 % in gasoline. The aim of this study was determination of MTBE concentration and its role on Tehran pollution. The BTEX were measured at two gas stations and 20 main cross streets during summer and winter. For each collected sample, MTBE were analyzed by using a GC with A flame ionization detector (FID). The established calibration curves for the MTBE samples were found with R<sup>2</sup> -value>0.995. Mean values of MTBE concentrations in Tehran atmosphere were 0.1- 0.55 ppm. It is expected that most of MTBE be emitted through exhaust pipe.