

**CONCENTRATION LEVELS OF VOLATILE ORGANIC COMPOUNDS IN  
THE ATMOSPHERE OF URBAN AND SUBURBAN AREAS IN GREECE**

**M. LAHANIATI<sup>1</sup>, J. HATZIANESTIS<sup>1</sup>, A. BARTZI<sup>1</sup>, T. MAGGOS<sup>1</sup>,  
P. PAPAGIANAKOPOULOS<sup>2</sup> and J. BARTZIS<sup>1</sup>**

*<sup>1</sup>N.C.S.R. "Democritos", Environmental Research Laboratory,*

*<sup>2</sup>University of Crete, Department of Chemistry*

**ABSTRACT**

Volatile Organic Compounds (VOCs) are considered as important air pollutants playing an important role in photochemical smog formation. The aim of this work is to study the atmospheric concentration levels of VOCs in two cities (Athens and Thessaloniki) and in two suburban sites in Greece. In particular, the following VOCs were determined: the anthropogenic benzene, toluene, o-m-p-xylenes, ethylbenzene, 1,3,5-trimethyl benzene, hexane, heptane, octane and naphthalene and the biogenic  $\alpha$ -pinene and limonene. The aromatic compounds, benzene, toluene and xylene, were the most abundant compounds in the atmosphere of the urban and suburban sites studied.