

**POLYNUCLEAR AROMATIC HYDROCARBONS IN URBAN AND RURAL
SOILS FROM THE CHANIA AREA**

E. KOUKOURAKI, V. KATSOULI and E. DIAMANTOPOULOS

*Laboratory of Environmental Engineering and Management, Technical University of
Crete, 73100 Chania, GREECE*

ABSTRACT

This work investigated the concentration of 16 Polynuclear Aromatic Hydrocarbons (PAH) in urban and rural soils from the Chania area. Two organic solvents were tested with regards to their ability to extract the PAHs from the soil samples. The quantitative analysis took place by means of HPLC using a fluorescence detector. The results showed that the measured concentrations were low both in terms of individual compounds, as well as their overall concentration. Among the individual compounds, benzo(b)fluoranthene showed the highest concentration. This compound is considered to be among those with the most severe effects of human health.