

**STUDY OF THE GAS/PARTICLE PARTITIONING OF SELECTED PAHS IN
THE ATMOSPHERE OF ATHENS**

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ABSTRACT

The partition of eight selected polycyclic aromatic hydrocarbons (PAHs) between gas and particle phase has been studied in the atmosphere of Athens during an eight month period (December 1997 – July 1998) in the center of City. Gas/Particle partitioning were expressed as $(F/TSP)/A$, where A and F are concentrations (ng m^{-3}) in gas and particle phase respectively and TSP is the total suspended particle concentration ($\mu\text{g m}^{-3}$) and were related to their liquid saturation vapor pressure p_L^0 for each of nineteen samples in a broad range of temperatures (7.5-39.0 °C). Deviations from predicted aerosol behavior have been observed in the atmosphere of Athens and explanations have been proposed.