



# Evangelos B. Bakeas

Lecturer of Analytical Chemistry

## Education



B.Sc. in Chemistry, University of Athens (1991)  
Ph.D. in Chemistry (Analytical Chemistry), University of Athens (1997)  
Post Doctoral studies at the University of Athens (2000)



## Research Field of Interest

1. Separation Methods
2. Gas Chromatography - HPLC - IC
3. Multidimensional gas chromatography
3. Separation techniques
4. Sample preparation
5. Analysis of air pollutants (inorganics and organics)
5. Environmental Chemistry - Air pollution
7. Risk assessment



## Teaching

### Undergraduate:

Instrumental Analysis I (Separation Methods)  
Instrumental Analysis Laboratory I and II  
Atmospheric Chemistry

### Graduate:

Quality Assurance in Analytical Laboratories - Accreditation  
Separation Methods - Gas Chromatography  
Quality Control of Environment - Environmental Chemistry



## Book Authorship



## Selected Papers

1. E.B. Bakeas, P.A. Siskos: "A Four Factor Simplex Optimization of a Serially Coupled Open Tubular Columns Gas Chromatographic System", *Journal of High Resolution Chromatography*, 1996, 19, 277-283.
2. E.B. Bakeas, P.A. Siskos: "Effects of temperature programming and pressure on separation number and height equivalent to a theoretical plate in optimization of a serially coupled, open tubular columns gas chromatographic system" *Anal Chem*, 1996 68, 4468-4473.
3. P.A. Siskos, I. Lioli, E.B. Bakeas, V.N. Smirnioudi, P. Koutrakis: "Seasonal variation of chemical composition of urban aerosols collected in Athens - Greece" *Environmental Technology*, 2001, 22, 687-695.
4. E.B. Bakeas, P.A. Siskos: "Volatile Hydrocarbons in the atmosphere of Athens, Greece",

- Environmental Science Pollution Research*, 2002, 9, 234-240.
5. E.B. Bakeas, P.A. Siskos: "Photochemical episodes and volatile hydrocarbons in Athens Greece" *Fresenius Environ Bull*, 2002, 11, 312-317.
  6. E.B. Bakeas, P.A. Siskos: "Dispersion of volatile hydrocarbons in urban street canyons" *J Air & Waste Manag Assoc*, 2003, 53, 497-504.
  7. P.A. Soldatos, E.B. Bakeas, P.A. Siskos: "Occupational Exposure to BTEX of Workers in Car Parkings and Gasoline Service Stations in Athens, Greece", *Fresenius Environ Bull*, 2003, 12, 1064-1070.
  8. E.B. Bakeas, A.G. Economou, P.A. Siskos, H. Frank: "Determination of chloroacetates in atmospheric particulate matter", *Environmental Science Technology*, 2003, 37, 2336-2339.
  9. N.S. Thomaidis, E.B. Bakeas, P.A. Siskos: "Characterization of lead, cadmium, arsenic and nickel in PM2.5 particles in the Athens atmosphere, Greece", *Chemosphere*, 2003, 52, 959-966.
  10. E.B. Bakeas, D.I. Argyris, P.A. Siskos: "Carbonyl compounds in the urban environment of Athens, Greece ", *Chemosphere*, 2003, 52, 805-813.
  11. M.P. Baya, E.B. Bakeas, P.A. Siskos: "Volatile Organic Compounds in the Air of 25 Greek Homes", *Indoor Built Environment*, 2004, 13, 53-61.
  12. I.E. Sitaras, E.B. Bakeas, P.A. Siskos: "Gas/particle partitioning of seven volatile polycyclic aromatic hydrocarbons in a heavy traffic urban area", *Science of the Total Environment*, 2004, 327, 249-264.
  13. A.V. Dremetsika, P.A. Siskos, E.B. Bakeas: "Determination of formic and acetic acid in the interior atmosphere of display cases and cabinets in athens museums by reverse phase high performance liquid chromatography", *Indoor Built Environment*, 2005, 14, 51-58.
  14. A. Valavanidis, K. Fiotakis, E. Bakeas, T. Vlahogianni: "Electron paramagnetic resonance study of the generation of reactive oxygen species catalysed by transition metals and quinoid redox cycling by inhalable ambient particulate matter", 2005, *Redox Report* 10, 37-51.
  15. P. Mihopoulos, G. Baloutsos, A. Economou, N. Nikolis, E. Bakeas, N. Thomaidis: "Biogeochemistry of lead in an urban forest in Athens, Greece", *Biogeochemistry*, 2005, 73, 345-357.
  16. N.G. Tsiropoulos, E.B. Bakeas, V. Raptis, S. Batistatou: "Evaluation of solid sorbents for the determination of fenhexamid, metalaxyl-M, pyrimethanil, malathion and myclobutanil residues in air samples. Application to monitoring malathion and fenhexamid dissipation in greenhouse air using C-18 or Supelpak-2 for sampling", *Analytica Chimica Acta*, 2006, 573-574.
  17. A. Valavanidis, K. Fiotakis, T. Vlahogianni, E. Bakeas, S. Triantafillaki, V. Paraskevopoulou, M. Dassenakis: "Characterization of atmospheric particulates, particle-bound transition metals and polycyclic aromatic hydrocarbons of urban air in the centre of Athens (Greece)", *Chemosphere*, 2006, 65, 760-768.

### Contact



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