

Short CV

Dr. Aikaterini Miki

Dr. Aikaterini Miki received her Diploma in Chemical Engineering in 1995 and her Ph.D. in Engineering in 2004 from the National Technical University of Athens (NTUA). Her doctoral research focuses on developing and applying chemometric methods in hyphenated analytical techniques.

Since 2002, she has served as a Chemical Engineer at NTUA's School of Chemical Engineering and in 2018 she joined the Laboratory Teaching Staff of the Department of Chemical Sciences.

Dr. Miki has been actively involved in supervising laboratory courses, including Analytical Chemistry, Inorganic Chemistry and Instrumental Chemical Analysis, since 1998. Additionally, she has participated in teaching the course of Modern Techniques of Chemical Analysis since 2019.

Her expertise lies in Analytical Chemistry and Chemometrics. Among her research interests are the development of advanced chemometric techniques for analyzing chemical data, the determination of volatile organic compounds in breath analysis and air quality analysis and the development of analytical methods for field chemical analysis.

She has published 22 research articles in international peer-reviewed journals and 14 papers in international conferences. Her scientific work has an h-index=13 according to Scopus database (last access 15/11/2024). She has also participated in 4 European and 4 National funded research projects since 1998.

Selected Publications

- M. Statheropoulos, K. Miki, ***PCA-ContVardia: an improvement of the PCA-Vardia technique for curve resolution in GC-MS and TG-MS analysis***, *Analytica Chimica Acta* 446 (2001) 353-370.
- M. Statheropoulos, K. Miki, N. Tzamtzis, A. Pappa, ***Application of factor analysis for resolving thermogravimetric-mass spectrometric analysis spectra***, *Analytica Chimica Acta* 461 (2002) 215–227.
- M. Statheropoulos, K. Miki, A. Agapiou, A. Georgiadou, S. Karma, ***Discriminant Analysis of Volatile Organic Compounds data related to a new location method of entrapped people in collapsed buildings of an earthquake***, *Analytica Chimica Acta* 566 (2006) 207-216.
- M. Statheropoulos, K. Miki, P. Stavrakakis, A. Agapiou, S. Karma, G.C. Pallis, A. Pappa, ***A preliminary study of combining mass spectrometric data with audio and video signals for real-time monitoring of controlled lab-scale fires***, *Sensors and Actuators B* 159 (2011) 193–200.
- K. Miki, P. Stavrakakis, A. Agapiou, K. Moirogiorgou, S. Karma, G.C. Pallis, A. Pappa, M. Statheropoulos, M. Zervakis, ***Chemical, acoustic and optical response profiling for analysing burning patterns***, *Sensors and Actuators B* 176 (2013) 290–298

- M. Statheropoulos , G. C. Pallis , K. Mikić , S. Giannoukos , A. Agapiou , A. Pappa , A. Cole, W. Vautz ¶, and C. L. Paul Thomas **Dynamic Vapor Generator That Simulates Transient Odor Emissions of Victims Entrapped in the Voids of Collapsed Buildings** Anal. Chem., **2014**, 86 (8), pp 3887–3894
- Vamvakari, J., Mikić, K., Pallis, G.C., Zorba, E., Pappa, A. **A preliminary study of a novel mass spectrometry based system for monitoring gases and VOCs evolved during composting of green kitchen waste**, Anal. Methods, 7 (2015), 6243-6250.
- A. Agapiou, E. Zorba, K. Mikić, L. McGregor, C. Spiliopoulou, M. Statheropoulos, **Analysis of volatile organic compounds released from the decay of surrogate human models simulating victims of collapsed buildings by thermal desorption–comprehensive two-dimensional gas chromatography–time of flight mass spectrometry**, Analytica Chimica Acta 883 (2015) 99–108.
- K. Mikić , G.C. Pallis, G.C. Koumoundouros, J. Vamvakari, G. Statheropoulos, G. Psaras, V.H. Moll, R. McEntee, M. Statheropoulos **Enhancing capabilities of aspiration-type Ion Mobility Spectrometer using a Pulsed Sampling System and a heated transfer line**, Sensors and Actuators B 222 (2016) 240–248.
- Agapios, Agapiou, Vasileiou Andreas, Stylianou Marinos, Mikić Katerina, and Zorpas A. Antonis. **"Waste aroma profile in the framework of food waste management through household composting."** *Journal of Cleaner Production* (2020): 120340