

# Marios G. Kostakis



## Assistant Professor

LAB OF ANALYTICAL CHEMISTRY, DEPARTMENT OF CHEMISTRY, NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

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## EDUCATION

2005-2009 Bachelor in Chemistry, Department of Chemistry, National and Kapodistrian University of Athens

2009-2012 Master in "Chemical analysis – Quality Control", Department of Chemistry, National and Kapodistrian University of Athens (NKUA). Thesis Title: "Development and validation of method for the determination of hexavalent chromium in food and soil"

2013-2019 Ph.D. in Analytical Chemistry, Department of Chemistry, National and Kapodistrian University of Athens (NKUA). Thesis Title: "Development of methods for determination and identification of chemical freshness indices with mass spectrometry techniques"

## RESEARCH FIELDS

Analytical Method Development – Atomic Spectrometry – Separation Techniques ( Liquid Chromatography – Gas Chromatography)  
Mass Spectrometry – Low and High Resolution – Tandem Mass Spectrometry  
Validation of Analytical Methods  
Chemical Metrology – Uncertainty of Chemical Measurements

## EDUCATIONAL EXPERIENCE

### UNDERGRADUATE COURSES

- Analytical Chemistry I/ Compulsory/ Department of Pharmacy/ NKUA
- Instrumental Analysis II (course/lab)/ Compulsory/ Department of Chemistry/ NKUA
- Modern Analytical Techniques / Elective / Department of Chemistry / NKUA
- Quality Control and Quality Assurance - Accreditation / Elective/ Department of Chemistry / NKUA

### GRADUATE COURSES

- Laboratory of Analytical Chemistry/ Department of Chemistry/ Master's degree program "Analytical Chemistry-Quality Assurance"/ Spectrochemical techniques (Atomic spectrometry, Mass Spectrometry)
- Laboratory of Analytical Chemistry/ Department of Chemistry/ Master's degree program "Analytical Chemistry-Quality Assurance"/ Separation Techniques (Gas Chromatography, Hyphenated techniques)
- Laboratory of Analytical Chemistry/ Department of Chemistry/ Master's degree program "Analytical Chemistry-Quality Assurance"/ Chemometrics
- Laboratory of Analytical Chemistry/ Department of Chemistry/ Master's degree program "Analytical Chemistry-Quality Assurance"/ Quality Assurance Systems
- Laboratory of Analytical Chemistry/ Department of Chemistry/ Master's degree program "Analytical Chemistry-Quality Assurance"/ Food and Beverage Quality Control
- Laboratory of Food Chemistry/ Department of Chemistry/ Master's degree program "Food Chemistry"/ Food Analysis (Atomic Spectrometry Techniques, Quality Assurance)
- Department of Biology / Interdepartmental Postgraduate Program "Clinical Biochemistry - Molecular

## DISCRIMINATIONS / SCHOLARSHIPS

- 2010-2011, scholarship for postgraduate studies from the Public Benefit Foundation "Alexander S. Onassis"
- Poster Award, poster presentation at Eurachem Workshop: "Method Validation - Current Practices and Future Challenges", Ghent, 2016. Marios Kostakis, Michael A. Koupparis, Nikolaos S. Thomaidis "ANOVA: A TOOL FOR BETTER EXPERIMENTAL DESIGN AND EVALUATION OF METHOD VALIDATION"
- Poster Award, poster presentation at the Eurachem Workshop: Uncertainty in Qualitative and Quantitative Analysis", Dublin, 2018. Marios Kostakis, Reza Aalizadeh, Marilena Dasenaki, Nikolaos Thomaidis "Exploring data quality of multivariate HRMS data in food authenticity research"
- Poster Award, poster presentation at the 11th Aegean Analytical Chemistry Days, Chania, 2018. MC. Nika, D. Damalas, G. Koulis, N. Alygizakis, V. Nikolopoulou, S. Drakopoulou, A. Psoma, M. Kostakis, R. Aalizadeh, P. Oswald, J. Slobodnik, N. Thomaidis, "Extended Monitoring of Legacy Pollutants and Emerging Contaminants in the Marine Environment of Black Sea"
- Poster Award, poster presentation at the Eurachem Workshop: "Quality Assurance in Chemical, Medical and Microbiological Laboratories", Lithuania, 2024. Eirini Siandri, Katerina Mavraki, Marios Kostakis, Nikolaos Thomaidis, "Method Validation of PFAS compounds in fish tissue based on guidelines of EURL-POPs."
- 2020, Fellowship Hellenic Academy of Neuroimmunology, ELLANA, "Study and quantification of molecular biomarkers in biological fluids of patients with multiple sclerosis"

## REVIEWER OF SCIENTIFIC JOURNALS

Foods, Molecules, Agronomy, Talanta, Toxins, Toxins, AppliedChem, Applied Sciences, Horticulturae, Resources, Environmental Science and Pollution Research, Environmental Chemistry and Ecotoxicology, Journal of Food Science and Nutrition Therapy, Global Nest Journal, Sustainability, Separations

## EDITOR OF BOOKS AND SPECIAL VOLUMES

I. C Martakos, M. G Kostakis, M. E Dasenaki, N. S Thomaidis, "Authenticity and Chemometrics of Olive Oil", Chemometrics and Authenticity of Foods of Plant Origin, CRC Press, 2022.

## ADDITIONAL INFORMATION

- Presentations at conferences: **45**
- Supervision of doctoral theses: **3**
- Supervision of graduate students: **1**
- Supervision of undergraduate students: **3**

## SELECTED PUBLICATIONS (link OF PUBLICATIONS)

1. Galani, A., Aalizadeh, R., Kostakis, M., Markou, A., Alygizakis, N., Lytras, T., Adamopoulos, P.G., Peccia, J., Thompson, D.C., Kontou, A. and Karagiannidis, A., 2022. SARS-CoV-2 wastewater surveillance data can predict hospitalizations and ICU admissions. *Science of The Total Environment*, 804, p.150151.
2. Martakos, Ioannis, Marios Kostakis, Marilena Dasenaki, Michalis Pentogennis, and Nikolaos Thomaidis. "Simultaneous determination of pigments, tocopherols, and squalene in Greek olive oils: A study of the influence of cultivation and oil-production parameters." *Foods* 9, no. 1 (2019): 31.
3. Papastavropoulou, Konstantina, Anastasia Koupa, Evangelia Kritikou, Marios Kostakis, and Charalampos Proestos. "Edible insects: Benefits and potential risk for consumers and the food industry." *Biointerface Research in Applied Chemistry* 12, no. 4 (2021): 5134-5149.
4. Katsa, Maria, Natalia Papalouka, Theodora Mavrogianni, Irene Papagiannopoulou, Marios Kostakis, Charalampos Proestos, and Nikolaos S. Thomaidis. "Comparative study for the determination of fat-soluble vitamins in rice cereal baby foods using HPLC-DAD and UHPLC-APCI-MS/MS." *Foods* 10, no. 3 (2021): 648.
5. Logotheti, Maria, Konstantina Theochari, Marios Kostakis, Ioannis N. Pasias, and Nikolaos S. Thomaidis. "Development and validation of a HILIC-UV method for the determination of nucleotides in fish samples." *Food chemistry* 248 (2018): 70-77.