



► Maragou Niki

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Education

B.Sc. in Chemistry (1998 - 2003), National and Kapodistrian University of Athens

M.Sc. in Chemical Analysis & Quality Control (2003-2005), National and Kapodistrian University of Athens

Ph.D. in Analytical Chemistry (2005-2010), National and Kapodistrian University of Athens (Part of the PhD thesis implemented in the Laboratory for Trace Organic Analysis at the Institute of Chemical Technologies and Analytics, Vienna University of Technology)

Research Topics

Master Thesis: Determination of Bisphenol A in milk with solid phase extraction and liquid chromatography – mass spectrometry.

PhD Thesis: Development of analytical methods for the determination of potential endocrine compounds with liquid chromatography – mass spectrometry

Work Experience:

8/2022 – present: Post-doc researcher at National and Kapodistrian University of Athens

3/2021 – present: Academic Fellow at the Department of Agricultural Development, Agrofood and Management of Natural Resources (NKUA) and at the Department of Food Science and Technology, University of West Attica.

3/2021 – 1/2022: Senior Researcher, Laboratory of Chemical Control of Pesticides, Benaki Phytopathological Institute

07/2016 – 3/2021: Researcher, Laboratory of Chemical Control of Pesticides, Benaki Phytopathological Institute

08/2014 – 07/2016: Regulatory Chemist, Laboratory of Chemical Control of Pesticides, Benaki Phytopathological Institute

10/2013 – 01/2015: Lecturer, New York College, Athens

2/2006 – 08/2011: Chemist – Research Associate, National and Kapodistrian University of Athens - Department of Chemistry, Athens

Research Interests

General research and scientific interests:

- Contaminants and natural occurring compounds in food, environmental and biological samples. Targeted, wide-scope targeted and suspect analysis
- Chromatography
- Mass spectrometry - Atomic Absorption- Atomic Emission Spectrometry
- Quality control of pesticides' formulations
- Food chemical safety – Food quality
- Dietary exposure
- Environmental risk assessment

Projects:

- 2022 – present: Partnership for the Assessment of Risks from Chemicals (PARC), EU Horizon Europe
- 2022 – present: Determination of organic contaminants in water of EYDAP S.A. before and after treatment
- 2022 – 2023: Determination of organic contaminants in environmental samples from Israel by LC-QTOFMS (Ruppiner Academic Center)
- 2022: Analysis of metals and organic contaminants in biota samples (livers and bird eggs) (LUBW Landesanstalt für Umwelt, Baden-Württemberg,)
- 2022: On-site Integrated Hospital Liquid Waste Management (University of Aegean)
- 2022: Omega 3-Nutricare – Research and development of high nutritional value anti-inflammatory functional foods, enriched in n-3 fatty acids sourced from Greek fisheries and farming byproducts.
- 2014 – 2022: Participation in research and scientific projects of Benaki Phytopathological Institute on the determination and risk assessment of pesticides, biocides, macro and trace elements.
- 2006 – 2011: Participation in research and scientific projects of NKUA on development and application of analytical methods for the determination of contaminants in environmental and food samples.

Scholarships – Awards

2006 – 2009: National scholarship for post graduate studies in Environmental Analytical Chemistry after examination.

2007: 1st Roland W. Frei Award for best poster presentation, 3rd International Symposium on Recent Advances in Food analysis (RAFA 2007), 7-9 November, 2007, Prague.

2007: ERASUMS scholarship for post graduate studies in Vienna University of Technology (Austria)

2004: Distinction scholarship for post graduate studies “Chemical Analysis – Quality Control”.

Memberships

1. Member of the Association of Greek Chemists

2. Member of the Department of Education of the Association of Greek Chemists

Participation in European working groups

2016 – 2021: ECHA - Alternate core member of the Working Group “Analytical Methods and Physico-chemical Properties, APCP” for biocides of European Chemicals Agency.

2016 -2018: EFSA - Expert at EFSA Peer Review 150 and 189 Experts' meetings on Pesticides - Physical and Chemical Properties and Analytical methods.

Publications in peer reviewed journals

1. Panagiotis-Loukas P. Gialouris, Georgios A. Koulis, Eleni S. Nastou, Marilena E. Dasenaki, Niki C. Maragou, Nikolaos S. Thomaidis, Development and validation of a high-throughput headspace solid-phase microextraction gas chromatography-mass spectrometry methodology for target and suspect determination of honey volatiles, *Heliyon* 9 (2023) e21311, <https://doi.org/10.1016/j.heliyon.2023.e21311>
2. Nikolaos Vrachnis, Nikolaos Loukas, Nikolaos Antonakopoulos, Niki Maragou, Marios Kostakis, Aliko Tsakni, Dionysios Vrachnis, Despina Vougiouklaki, Nikolaos Machairiotis, Arhodooula Chatzilazarou, Dimitra Houhoula, Rozeta Sokou, Sofoklis Stavros, Peter Drakakis, George Mastorakos and Zoi Iliodromiti, Detection and Quantification of Acrylamide in Second Trimester Amniotic Fluid Using a Novel LC-MS/MS Technique to Determine Whether High Acrylamide Content during Pregnancy Is Associated with Fetal Growth, *Biology* 2023, 12, 1425. <https://doi.org/10.3390/biology12111425>
3. George P. Laliotis, Anthimia Batrinou, Maria Giannakourou, E. Tsakali, Sophia Letsiou, Panagiotis Halvatsiotis, Simen Akkermans, Jan Van Impe, Niki C. Maragou & Dimitra Houhoula, Detection of Authentication of Meat Products by Low Cost Closed-tube Molecular Methods, *Journal of Food Research*; Vol. 12, No. 4; 2023, <https://doi.org/10.5539/jfr.v12n4p61>
4. Petros Mastoras, Eirini Zkeri, Anthi Panara, Marilena E. Dasenaki, Niki C. Maragou, Stergios Vakalis, Michail S. Fountoulakis, Nikolaos S. Thomaidis, Athanasios S. Stasinakis, Application of a pilot-scale solar still for wine lees management: characterization of by-products and valorization potential, *Journal of Environmental Chemical Engineering* 11 (2023) 111227, <https://doi.org/10.1016/j.jece.2023.111227>
5. Nikiforos Alygizakis, Kelsey Ng, Niki Maragou, Sylvana Alirai, Peter Behnisch, Harrie Besselink, Peter Oswald, L'uboš Cirka, Nikolaos S. Thomaidis, Jaroslav Slobodnik, Battery of In Vitro Bioassays: A Case Study for the Cost-Effective and Effect-Based Evaluation of Wastewater Effluent Quality, *Water* 2023, 15, 619. <https://doi.org/10.3390/w15040619>
6. Olga S. Arvaniti, Marilena E. Dasenaki, Alexandros G. Asimakopoulos, Niki C. Maragou, Vasilios G. Samaras, Korina Antoniou, Georgia Gatidou, Daniel Mamais, Constantinos Noutsopoulos, Zacharias Frontistis, Nikolaos S. Thomaidis, Athanasios S. Stasinakis, Effectiveness of tertiary treatment processes in removing different classes of emerging contaminants from domestic wastewater, *Frontiers of Environmental Science and Engineering*, 2022, 16(11): 148, <https://doi.org/10.1007/s11783-022-1583-y>
7. Niki C. Maragou, George Balayiannis, Evangelos Karanasios, Emilia Markellou and Konstantinos Liapis, Targeted Multiresidue Method for the Analysis of Different

- Classes of Pesticides in Agro-Food Industrial Sludge by Liquid Chromatography Tandem Mass Spectrometry, *Molecules* 2021, 26, 6888. <https://doi.org/10.3390/molecules26226888>
8. Nikolaos I. Rousis, Maria Denardou, Nikiforos Alygizakis, Aikaterini Galani, Anna, A. Bletsou, Dimitrios E. Damalas, Niki C. Maragou, Kevin V. Thomas and Nikolaos S. Thomaidis, "Assessment of Environmental Pollution and Human Exposure to Pesticides by Wastewater Analysis in a Seven-Year Study in Athens, Greece" *Toxics* 2021, 9, 260. <https://doi.org/10.3390/toxics9100260>
 9. Elvira S. Plakidi, Niki C. Maragou, Marilena E. Dasenaki, Nikolaos C. Megoulas, Michael A. Koupparis and Nikolaos S. Thomaidis, "Liquid Chromatographic Determination of Biogenic Amines in Fish Based on Pyrene Sulfonyl Chloride Pre-Column Derivatization" *Foods*, 2020, 9, 609; doi:10.3390/foods9050609.
 10. Niki C. Maragou, Nikolaos S. Thomaidis, Georgios A. Theodoridis, Eugenia N. Lampi, Michael A. Koupparis, "Determination of bisphenol A in canned food by microwave assisted extraction, molecularly imprinted polymer-solid phase extraction and liquid chromatography-mass spectrometry", *Journal of Chromatography B*, 2020, 1137, 121938, doi.org/10.1016/j.jchromb.2019.121938
 11. Niki C. Maragou, George Balayiannis, "Determination of Ethephon in Pesticide Formulations by Ion Exchange Chromatography with Indirect Spectrophotometric Detection", *Analytical Letters*, 2019, 53:5, 795-806, doi.org/10.1080/00032719.2019.1677700.
 12. Athanasios I. Moukas, Niki C. Maragou, Nikolaos S. Thomaidis, Antonios C. Calokerinos, "Determination of Polybrominated Diphenyl Ether Flame Retardants in Surface Water by Liquid Chromatography Atmospheric Pressure Photoionization Tandem Mass Spectrometry", *Analytical Letters*, 2017, 51(1-2): 96-110. DOI: 10.1080/00032719.2017.1339713
 13. Niki C. Maragou, George Pavlidis, Helen Karasali, Fani Hatjina, "Determination of Arsenic in Honey, Propolis, Pollen and Honey Bees by Microwave Digestion and Hydride Generation Flame Atomic Absorption", *Analytical Letters*, 2017, 50(11):1831-1838.
 14. Niki C. Maragou, George Pavlidis, Helen Karasali, Fani Hatjina, "Major and minor element levels in Greek apicultural products", *Global Nest Journal*, 2017, 19(3):423-429
 15. Nikolaos S. Thomaidis, Pablo Gago-Ferrero, Christoph Ort, Niki C. Maragou, Nikiforos A. Alygizakis, Viola L. Borova, and Marilena E. Dasenaki, "Reflection of Socioeconomic Changes in Wastewater: Licit and Illicit Drug Use Patterns", *Environmental Science & Technology*. 2016, 50 (18), 10065–10072, DOI: 10.1021/acs.est.6b02417
 16. N.C. Maragou, G. Pavlidis, H. Karasali, F. Hatjina "Cold Vapor Atomic Absorption and Microwave Digestion for the Determination of Mercury in Honey, Pollen, Propolis and Bees of Greek Origin", *Global NEST Journal*, 2016, 18(4):690-696.
 17. Viola L. Borova, Niki C. Maragou, Pablo Gago-Ferrero, Constantinos Pistos, Nikolaos S. Thomaidis "Highly sensitive determination of 68 psychoactive pharmaceuticals, illicit drugs, and related human metabolites in wastewater by liquid chromatography – tandem mass spectrometry", *Analytical and Bioanalytical Chemistry*, 2014, 406, 4273-4285.
 18. Niki C. Maragou, Nikolaos S. Thomaidis, Michael A. Koupparis, "Optimization and comparison of ESI and APCI LC-MS/MS methods: A Case Study of Irgarol1051, Diuron and their degradation products in environmental samples", *Journal of the American Society for Mass Spectrometry*, 2011, 22, 1826-1838
 19. Despina K. Alexiadou, Niki C. Maragou, Nikolaos S. Thomaidis, Georgios A. Theodoridis, Michael A Koupparis, "Molecularly imprinted polymers for bisphenol

- A for HPLC and SPE from water and milk” *Journal of Separation Science*, 2008, 31, 2272 – 2282.
20. Niki C. Maragou, Erwin Rosenberg, Nikolaos S. Thomaidis, Michael A. Koupparis “Direct determination of the estrogenic compounds 8-prenylnaringenin, zearalenone, α - and β -zearalenol in beer by liquid chromatography–mass spectrometry” *Journal of Chromatography A*, 2008, 1202, 47–57.
 21. N.C. Maragou, A. Makri, E.N. Lampi, N.S. Thomaidis, M.A. Koupparis “Migration of bisphenol A from polycarbonate baby bottles under real use conditions”, *Food Additives and Contaminants*, 2008, 25(3), 373–383.
 22. N.C. Maragou, E.N. Lampi, N.S. Thomaidis, M.A. Koupparis “Determination of bisphenol A in milk by solid phase extraction and liquid chromatography – mass spectrometry”, *Journal of Chromatography A*, 2006, 1129, 165-173.

Chapters in books

1. Niki C. Maragou, Irini F. Strati, Panagiotis-Loukas Gialouris, Marilena Dasenaki, Vassilia J. Sinanoglou, Marijana Ačanski, Jaroslava Švarc Gajić, and Kristian Pastor (2023) «Honey and Bee Products» in K. Pastor (ed.), *Emerging Food Authentication Methodologies Using GC/MS*, https://doi.org/10.1007/978-3-031-30288-6_7
2. Karasali H., and Maragou N. (2016) “Pesticides and Herbicides: Types of Pesticide”. In: Caballero, B., Finglas, P., and Toldrá, F. (eds.) *The Encyclopedia of Food and Health* vol. 4, pp. 319-325. Oxford: Academic Press.

Conference Presentations (Last 5)

- N.Maragou, *Food Contact Materials: Exploring the chemical space of migration*, Food Authenticity Workshop, Unveiling The Truth, Journey Into The Authenticity And Quality Of Food Through Mass Spectrometry Workshop, Athens, 8 - 9 November 2023 (oral)
- M.-A. Priakou, N. Maragou, E. G. Custodio Da Silva, M. Kostakis, L. Gialouris, M. Karvouni, A. Kostaki, M.-Ch.Serdari, E. Nastou, E. Kritikou, C. Santos Silva, M. F. Pimentel Avelar, N. Thomaidis and M. Dasenaki, *Classification of Greek honeys according to their botanical origin using physicochemical properties and macro-elements profile*, 13th International Conference on Instrumental Methods of Analysis: Modern Trends and Applications Chania, Crete | September 17-20, 2023
- Boinis N., Diamanti K. S., Panagopoulou E. I., Gkotsis G., Maragou N., Nika M. C., Vasilatos K., Höpker K. A., Schäfer H., Wiczorek M., Osteraurer R., Thomaidis N. S., *Unveiling the occurrence of organic micropollutants in different species of terrestrial mesocarnivores utilizing HRMS techniques*, Proceedings of the 18th International Conference on Environmental Science and Technology, Rhodes, Greece, 30 August to 2 September 2023
- K. Ng, N. Alygizakis, M.-C. Nika, A. Galani, N. Maragou, S. Alirai, P. Behnisch, H. Besselink, P. Oswald, M. Oswaldova, L. Čirka, U. Kunkel, A. Macherius, M. Sengl, G. Mariani, S. Tavazzi, H. Skejo, B. M. Gawlik, N. S. Thomaidis, J. Slobodnik, *Effluent wastewater management by chemical screening and in vitro bioassays: a case study in*

the Danube River Basin, Water Innovation & Circularity Conference-WICC / 7-9 June 2023 / Athens-Greece

- Nikiforos A Alygizakis, Kelsey Ng, Niki Maragou, Sylvana Alirai, Peter Behnisch, Harrie Besselink, Peter Oswald, Luboš Čírka, Jaroslav Slobodnik and Nikolaos Thomaidis, *Cost-Effective and Effect-based Evaluation of the Wastewater Quality Using a Battery of In Vitro Bioassays*, 4.06.P-Th285, SETAC EUROPE 33RD ANNUAL MEETING 30 APRIL-4 MAY 2023 | DUBLIN, IRELAND

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