

PERSONAL INFORMATION

Margarita Kapsi

📍 Hellenic Centre for Marine Research (HCMR), Institute of Oceanography, Gournes - Pediados, Heraklion, Crete, Greece P.C.70014

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Sex: Female | Date of birth: 23/04/1986 | Nationality: Hellenic

RESEARCH EXPERIENCE
2/2021-Current
Chemist

Institution: Institute of Oceanography, H.C.M.R.

Project: EU Water Framework Directive

Duties: organization and participation in field sampling campaigns, participation in Oceanographic cruises at the Aegean and Ionian Sea (with the R/V AEGAE0, R/V FILIA), data analysis and reporting, chemical processes in the water column of marine environments

4/2019-9/2019
Analytical Chemist

Institution: Lab of Industrial Chemistry, Dept. of Chemistry, University of Ioannina

Project: "Determination of the removal efficiencies before and after the establishment of the photocatalytic treatment plants and risk assessment for the concentration levels detected on the aquatic food chain. (PHAREM)"

Duties: Sampling campaign, method verification and validation- Technical reports and publication

7/2019-10/2019
Analytical Chemist

Institution: Lab of Industrial Chemistry, Dept. of Chemistry, University of Ioannina

Project: "Quality monitoring of environmental pollution in aquaculture facilities with a system prototype" (Enviaquaman)

Duties: Method development, sampling campaigns, analysis of samples, data process

5/2015-1/2017
Analytical Chemist

Institution: Lab of Analytical Chemistry, Dept. of Chemistry, University of Ioannina

Project: "Real time monitoring of sea contaminants by an autonomous lab-on-a-chip biosensors" (Sea-on-a-chip, FP7-OCEAN-2013)

Duties: Verification and validation of analytical methods for the determination of biocides in sea water, urchins, mussels and sediment-Technical reports and publications

3/2013-11/2015
Analytical Chemist

Institution: Lab of Analytical Chemistry, Dept. of Chemistry & University of Ioannina

Project: "Wireless water quality monitoring of Arachthos and Vjose rivers (WWQM_AVR)"

Duties: Sampling campaign, method development for the determination of pesticides, monitoring of physicochemical parameters - Technical reports and publication in conferences, report on evaluation and verification of the first system prototype

5/2012-4/2014
Analytical Chemist

Institution: Lab of Analytical Chemistry, Dept. of Chemistry, University of Ioannina

Project: "Development and application of an integrated monitoring methodology for the determination of priority pollutants in the aquatic bodies of Amvrakikos Gulf" (NSRF 2007-2013)

Duties: Method development and validation for environmental monitoring of pesticides in surface waters

2/2014-4/2015
Analytical Chemist

Institution: Lab of Analytical Chemistry, Dept. of Chemistry, University of Ioannina

Project: “Development of advanced oxidation processes (aops) with the use of nanomaterials and sunlight, for the removal of various organic toxic micropollutants, endocrine disrupters and cyanotoxins from natural waters and sewages (THALES)”

Duties: Synthesis and characterization of new nanomaterials of modified TiO₂ suitable for the photocatalytic degradation of pollutants Evaluation of the degradation kinetics of the compounds by using GC and LC. Identification and toxicity evaluation of the transformation products Construction and optimization of operation of a pilot plant photocatalytic treatment system-Technical reports and publications

1-30/4/2015

Analytical Chemist

Institution: Lab of Analytical Chemistry, Dept. of Chemistry, University of Ioannina

Project: “Environmental monitoring of pollution parameters of wetlands areas with high environmental importance”

Duties: Sampling campaigns, sampling analysis, data process

EDUCATIONAL BACKGROUND

11/2013-2020

PhD in Environmental Analytical Chemistry

Faculty of Applied Sciences Department of Chemistry, University of Ioannina, Greece

Doctorate Thesis: “Modern analytical methods for the determination of pesticides residues in aquaculture facilities”

11/2010 -07/2013

Master of Science (MSc) in Analytical Chemistry Techniques & Applications

Faculty of Applied Sciences Department of Chemistry, University of Ioannina, Greece

Master Thesis: “Optimization of analytical techniques for the determination of pesticides in fresh waters of Louro’s river and Amvrakikos gulf- ecotoxicological risk assessment”

9/2005 -9/ 2010

Bachelor in Chemistry (BSc, 4-years studies, 240 ECTS)

Department of Chemistry, University of Ioannina, Greece

Bachelor Thesis: “Non-heme Iron Catalysts for alkane and alken oxidation.

CONTINUING EDUCATION

26/6-2/7/2016

- ISO/IEC 17025:2005 “General requirements for the competence of testing and calibration laboratories”- Association of Greek Chemists (16 Hours)

23-24/5/2015

- ISO 22000:2005 “Basic principles of food safety management systems”- TÜV HELLAS, Ioannina Greece (16 Hours)

29/6-1/7/2011

- Integrated Coastal Zone Management in the frame of the international coastal collaboration of the Mediterranean and Black Sea organized by B.EN.A (Balkan Environmental Association)

5-6/11/2009

- Training in ISO 9001:2005, Hellenic Gas Transmission System Operator (DESFA S.A-16 hours)

AWARDS

18-21/2014

1st prize for the best young researcher oral presentation was awarded by GRIFA (Italian research group on pesticides and environment) for the presentation in title: “Evaluation of a multiresidue methodology for the determination of pesticides residues in natural waters. A case study: Louros river (Epirus region)”

PERSONAL SKILLS

Mother tongue(s)
English

Greek

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2

COMPUTER LITERACY

ECDL core (Windows/ Word/ Excel/ Power Point)

MEMBERSHIPS-COMMUNITIES

02/2021- today

AQUAGAPS network, European Marine Aquaculture Society

12/2010-today

Association of Greek Chemists

Publications in peer-reviewed scientific journals

1. Christina I. Kosma, **Margarita G. Kapsi**, Panagiotis-Spyridon Konstas, Epameinondas P. Trantopoulos, Vasiliki I. Boti, Ioannis K. Konstantinou and Triantafyllos A. Albanis "Assessment of multiclass pharmaceutical active compounds (PhACs) in hospital WWTP influent and effluent samples by UHPLC-Orbitrap MS: Temporal variation, removals, and environmental risk assessment" Vol 191, pp 110152 (2020)
2. **Margarita Kapsi**, Charoula Tsoutsis and Triantafyllos Albanis "Simple analytical methodology based on solid phase extraction for monitoring pesticide residues in natural waters" *MethodsX*, Vol7, pp 101011 (2020)
3. Jorge A. Donadelli, Bruno Caram, Maria Kalaboka, **Margarita Kapsi**, Vasilios A. Sakkas, Luciano Carlos and Fernando S. García Einschlag "Mechanisms of 4-phenylazophenol elimination in micro- and nano-ZVI assisted-Fenton systems" *Journal of Environmental Chemical Engineering*, Vol 8(1), pp. 103624 (2020)
4. **Margarita Kapsi**, Charoula Tsoutsis, Anastasia Paschalidou and Triantafyllos Albanis, 2019. "Environmental monitoring and risk assessment of pesticide residues in surface waters of the Louros River (N.W. Greece)", *Science of The Total Environment*, Vol. 650, Part 2, pp. 2188-2198, (2019)
5. Juliana Gadelha; A. Cristina Rocha; Carolina Camacho; Ethel Eljarrat; Andrea Peris; Yann Aminote; James Readman; Vasiliki Boti; Christina Nannou; **Margarita Kapsi**; Triantafyllos Albanis; Filipa Rocha; Ana Machado; Adriano Bordalo; Luisa Valente; Leonor Nunes; Antonio Marques; Marisa Almeida, "Persistent and emerging pollutants assessment on aquaculture oysters (*Crassostrea gigas*) from NW Portuguese coast (RIA DE AVEIRO)" *Science of The Total Environment*, Vol 666, Part 2, pp. 731-742, (2019)

Publications in International and European Conferences

1. **Kapsi**, V.Sakkas and T.Albanis, "Development and application of methods for the determination of pesticide residues in natural waters and sediments", *7th International Conference on Industrial and Hazardous Waste Management*, July 27–30, **2021**, Crete island, Greece
2. **M.Kapsi**, V.Sakkas and T.Albanis, "Validation and application of method for the determination of pesticide residues in natural waters and sediments, coupled to GC-MS determination", *11th International Conference on Instrumental Methods of Analysis*, September 22-25 **2019**, Ioannina
3. **Margarita Kapsi**, Panagiotis Konstas, Epameinondas Trantopoulos, Christina Kosma, Athanasios Karkabounas, Vasiliki Boti, Ioannis Konstantinou, Triantafyllos Albanis, 22-25/9/2019, "Pharmaceutical residues in hospital wastewaters using Liquid Chromatography coupled to High-Resolution Mass Spectrometry", *11th International Conference on Instrumental Methods of Analysis*, September 22-25 **2019**, Ioannina
4. **M.Kapsi**, V.Sakkas and T.Albanis, 22-25/9/2019, "Magnetic solid-phase extraction of pesticides in natural waters using Fe₃O₄@SiO₂@C18 nanoparticles as adsorbent coupled to GC-MS determination", *11th International Conference on Instrumental Methods of Analysis*, September 22-25 **2019**, Ioannina
5. **M.Kapsi**, V.Sakkas and T.Albanis, "Synthesis and characterization of Fe₃O₄@SiO₂@C18 nanoparticles for the determination of pesticides in environmental water samples using GC-MS determination", *16th International Conference on Environmental Science and Technology*, September 4-7 **2019**, Rhodes island
6. **M.Kapsi**, V.Sakkas and T.Albanis, "Development and application of methods for the determination of pesticide residues in natural waters and sediments, coupled to GC-MS", *16th International Conference on Environmental Science and Technology*, September 4-7 **2019**, Rhodes island
7. **M.Kapsi**, V.Sakkas and T.Albanis, "Validation and application of a SPE and of a QuEChERS method for the determination of pesticides in natural waters and sediments, combined with GC-MS", *10th European Conference on Pesticides and Related Organic Micropollutants in the Environment*, September 12-14 **2018**, Bologna- Italy
8. **M.Kapsi**, Ch.Tsoutsis and T. Albanis, "Determination of multiclass pesticides in water samples with the aid of Solid Phase Extraction (SPE) followed by GC-MS and LC-MS. A case study: Louros River (N.W. Greece)", *Final open technical meeting & Workshop, Sea-on-a-chip- project*, May 16-17 **2017**, Olhão, Portugal
9. **M.Kapsi**, V.Sakkas and T.Albanis, "Development and application of methods for the determination of pesticide residues in natural waters and sediments", *10th International Conference on Instrumental Methods of Analysis*, September 17-21 **2017**, Heraklion- Crete island
10. **M.Kapsi**, V.Sakkas and T.Albanis, "Synthesis of Magnetic Ionic Liquid for the determination of pesticides in aqueous samples", *10th International Conference on Instrumental Methods of Analysis*, September 17-21 **2017**, Heraklion-Crete island

11. **M.Kapsi**, V.Sakkas and T.Albanis, "Development of a method for the simultaneous determination of pesticides by GC-MS and LC-MS: Optimization of the Solid Phase Extraction procedure using an experimental design approach", *19th International Symposium on Advances in Extraction Technologies*, June 27-30 **2017**, Santiago de Compostela-Spain
12. **Margarita Kapsi**, Christina Nannou, Vasiliki Boti, Triantafyllos Albanis, "Screening of pesticides used in marine aquacultures with the aid of LC-High Resolution Orbitrap MS", *9th European Conference on Pesticides and Related Organic Micropollutants in the Environment*, October 4-7 **2016**, Santiago de Compostela-Spain
13. V.Boti, Ch.Nannou, **M.Kapsi**, T.Albanis, "Determination of pesticides used in marine aquaculture by LC-High Resolution Orbitrap MS", *2nd Progress Workshop, Sea-on-a-chip-project*, April 13-15 **2016**, Ferrara, Italy
14. V.I.Boti, **M.G.Kapsi**, Ch.I.Nannou, J.W.Readman, T.A.Albanis, "Screening of the antifouling biocide irgarol in marine aquaculture of Sagiada (N.W. Greece) using LC-Hybrid LTQ Orbitrap MS", *1st Progress Workshop, Sea-on-a-chip-project*, April 27-29 **2015**, Sivota
15. T. Albanis, **M. Kapsi** and Ch. Tsoutsis, "Assessment of the risk posed by multiclass pesticides residues to the ecosystem of Louros River and Amvrakikos Gulf (N.W. Greece)", *1st Progress Workshop, Sea-on-a-chip-project*, April 27-29 **2015**, Sivota
16. **M.Kapsi**, V.Sakkas and T.Albanis, "Determination of multiclass pesticides in water samples combining Solid Phase Extraction (SPE) coupled to GC-MS and LC-MS. A case study: Louros River (N.W. Greece)", *9th International Conference on Instrumental Methods of Analysis*, September 20-24 **2015**, Kalamata
17. **M.Kapsi**, Ch.Tsoutsis and T.Albanis, "Risk Assessment of pesticides in surface water of Louros River (N.W. Greece) after off-line Solid Phase Extraction Coupled GC-MS and LC-MS", *14th International Conference on Environmental Science and Technology*, September 3-7 **2015**, Rhodes island
18. **M.Kapsi**, Ch.Tsoutsis and T.Albanis, "Monitoring and risk assessment of pesticides in Louros River (N.W. Greece)", *5th International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2015) and SECOTOX*, June 14-18 **2015**, Mykonos island
19. **Kapsi M.**, Tsoutsis Ch., Albanis T., "Validation of an analytical strategy based on SPE/LC-MS and GC-MS for the determination of different classes of pesticides residues in natural waters: Application and characterization of ecosystem exposure in Louros River (N.W. Greece)", *9th Aegean Analytical Chemistry Day*, 29 September-3 October **2014**, Chios island
20. **Kapsi M.**, Tsoutsis Ch., Albanis T., "Evaluation of a multiresidue methodology for the determination of pesticides residues in natural waters. A case study: Louros River (Epirus Region)", *8th European Conference on Pesticides and Related Organic Micropollutants in the Environment*, September 18-21 **2014**, Ioannina
21. Ourania D. Christopoulou, **Margarita G. Kapsi**, Maria-Evangelia S. Synaridou, Eliona C. Zota, Fotakis V. Lezos, Kleio N. Teloni, Vasilios A. Sakkas, Triantafyllos A. Albanis, "Comparison of three microextraction techniques for the rapid and sensitive determination of fragrance allergens in water samples", *8th European Conference on Pesticides and Related Organic Micropollutants in the Environment*, September 18-21 **2014**, Ioannina
22. **M.Kapsi**, Ch.Tsoutsis and T.Albanis, "Development of a multiresidue methodology for the simultaneous determination of pesticides in natural waters, by GC-MS and LC-MS: Optimization of the Solid Phase Extraction procedure using an experimental design approach.", *16th International Conference on Environmental Science and Technology*, May 25-28 **2014** Chania- Crete island
23. **M.Kapsi**, Ch.Tsoutsis and T.Albanis, "Development of a method for the simultaneous determination of pesticides by GC-MS and LC-MS: Optimization of the Solid Phase Extraction procedure using an experimental design approach", *4th International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2013) and SECOTOX*, June 24-28 **2013**, Mykonos island
24. **M.Kapsi**, Ch.Tsoutsis and T.Albanis, "Validation and application of a SPE method for the determination of priority pesticides in water samples, combined with GC-MS and LC-MS. A case study: Louros River (Epirus region)", *8th International Conference on Instrumental Methods of Analysis Modern Trends and Applications – IMA*, September 15-19 **2013**, Thessaloniki
25. **M.Kapsi**, Ch.Tsoutsis and T.Albanis, "Application of solid-phase extraction in the monitoring of priority pesticides in the Louros River (N.W. Greece)", *13th International Conference on Environmental Science and Technology-CEST*, September 5-7, **2013**, Athens
26. **Kapsi M.**, Tsoutsis Ch., Albanis T., "Optimization of solid phase extraction of multiclass pesticides in natural waters by experimental design methodology", *7th European Conference on Pesticides and Related Organic Micropollutants in the Environment*, October 7-10 **2012**, Porto-Portugal

Publications in National Conference:

1. **Kapsi M.**, Tsoutsis Ch., Albanis T., "Pesticides concentration in Louros River (Epirus Region): Ecotoxicological risk assessment", *5th Conference of Dept. of Chemistry (UOI)*, September 29-30 **2017**, Ioannina
2. **Kapsi M.**, Tsoutsis Ch., Albanis T., "Analytical method development and application for the determination of pesticides in natural waters and sediments", *22th Panhellenic Conference in Chemistry*, December 2-4, **2016**, Thessaloniki
3. **Kapsi M.**, Tsoutsis Ch., Albanis T., "Concentration levels of pesticides in Louros River (Epirus Region): Ecotoxicological risk assessment", *5th Macedonian Environmental Conference*, March 14-16 **2014**, Thessaloniki