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EDUCATION	
1997	Doctor of Philosophy, School of Chemistry, University of Bristol, U.K
1994	Maîtrise de Chimie (Summa Cum Laude; Grade; Très-Bien), Universitè Montpellier II Sciences et Techniques du Languedoc, France
1993	Licence de Chimie, Universitè Montpellier II Sciences et Techniques du Languedoc, France
1992	Diplôme d' Études Universitaires Générales (D.E.U.G. A), Sciences des Structures et de la Matière, Universitè Montpellier II Sciences et Techniques du Languedoc, France
ACADEMIC PO	SITIONS
2015-Present	Professor, School of Environmental Engineering, TUC, Greece
2017-2019	Director Graduate Studies, School of Environmental Engineering, TUC, Greece
2014-2016	Deputy Rector of Academic Affairs and Research, TUC, Greece
2013-2021	Member of the Dean's Committee, School of Environmental Engineering, TUC, Greece
2012-2014	Director Graduate Studies, School of Environmental Engineering, TUC, Greece
2010-2015	Associate Professor, School of Environmental Engineering, TUC, Greece
2008	Assistant Professor with tenure, Department of Environmental Engineering, TUC, Greece
2007	Visiting Professor, Fulbright Research Award, CALTECH, USA
2005	Assistant Professor, Department of Environmental Engineering, TUC, Greece
1998	Research Associate, Department of Environmental Engineering, TUC, Greece
1997	Postdoctoral Fellow, Foundation of Research & Technology Hellas, Greece
MILESTONES/A	AWARDS
2021	Featured in the Power List 2021 of the magazine "The Analytical Scientist" as one of the Top 100 mos
	influential people in analytical science
2021	Co-Chair of the IUPAC Project: Greenness of official standard sample preparation methods
2021	Editor-in-Chief of Advances in Sample Preparation, Elsevier
2021	Specialty Chief Editor of Environmental Analysis for Frontiers in Analytical Science, Frontiers
2020	Invited contribution in the Topical Collection featuring "Female Role Models in Analytical Chemistry Analytical and Bioanalytical Chemistry, Springer
2019	Founder/owner of ExtraTech Analytical Solutions Single Member PC (TUC spin off company)
2019	Head of the "Sample Preparation" Study Group and Network of the European Chemical Society Division of Analytical Chemistry
2019	Senior Associate Editor of Journal of Separation Science, Wiley
2017	Leader of Work-Group 4 "Sample preparation and microfluidics", European network for the promotio of portable, affordable and simple analytical platforms, COST Action CA16215
2015	President of the board of Greek Deputy Rectors of Academic Affairs at the Synod of Greek Higher Education Institutions
2014	Deputy Rector of Academic Affairs and Research, TUC, Greece
2013	Top-10 most cited articles 2010-2011 Award, <i>Talanta</i> , Elsevier
2012	Vice-Chair of the Evaluation Chemistry Panel for EU FP7 Marie Curie Actions
2011	Vice-Chair of the Evaluation Chemistry Panel for EU FP7 Marie Curie Actions
2010	Top-50 most cited articles 2005-2009 Award, <i>Analytica Chimica Acta</i> , Elsevier
2007	Fulbright Research Award 2007-2008, used it at CALTECH, USA
2006	Top cited article 2001-2006 Award, <i>Journal of Chromatography A</i> , Elsevier
1994 1994	PhD Scholarship, School of Chemistry, University of Bristol, UK Highest total mark award/top student on graduation from Maîtrise de Chimie
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<sup>‡</sup> Citations, last update September 2021, Scopus, Google and Publons/Web of Science

	Scopus	Google scholar	Publons/Web of Science
h-index:	38	44	40
Sum of Times Cited:	5735	7434	6021

## **RESEARCH INTERESTS**

- Understanding, developing and applying novel analytical procedures used for detecting trace amounts of organic pollutants in a variety of environmental and treated samples
- Studying the fate of organic pollutants in natural and treated water

### ISI PUBLICATIONS IN REVERSE CHRONOLOGICAL ORDER

- 94. N. Solomou, M. Minella, D. Vione, E. Psillakis, UVC-induced direct photolysis as an efficient process for the degradation of cilastatin in natural and waste water, Chemosphere, 280(2021), 130668 (https://doi.org/10.1016/j.chemosphere.2021.130668)
- 93. S. Alberti, M. Sotiropoulou, E. Fernández, N. Solomou, M. Ferretti and E. Psillakis\*, "UV-254 degradation of nicotine in natural waters and leachates produced from cigarette butts and heat-not-burn tobacco products" Environmental Research, 2021, Environmental Research, 194, 110695 (https://doi.org/10.1016/j.envres.2020.110695).
- 92. F. Pena-Pereira, C. Bendicho, D. Mutavdžić Pavlović, A. Martín-Esteban, M. Díaz-Álvarez, Y. Pan, J. Cooper, Z. Yang, I. Safarik, K. Pospiskova, M. A. Segundo, E. Psillakis, "Miniaturized analytical methods for determination of environmental contaminants of emerging concern A Review", 2020, Analytica Chimica Acta, 2021, 1158, 238108 (https://doi.org/10.1016/j.aca.2020.11.040).
- 91. E. Psillakis, "The effect of vacuum: an emerging experimental parameter to consider during headspace microextraction sampling", Analytical and Bioanalytical Chemistry, 2020, 412(24), 5989-5997. Invited contribution. Special issue "Female Role Models in Analytical Chemistry" (https://doi.org/10.1007/s00216-020-02738-x)
- 90. E. Psillakis, "Editorial for the Special Issue Emerging Thought Leaders in Separation Science", Journal of Separation Science, 2020, 43(9-10), 1622-1622 (https://doi.org/10.1002/jssc.202070095)
- 89 N. Koutela, E. Fernández, M.-L. Saru and E. Psillakis\*, "A comprehensive study on the leaching of metals from heated tobacco sticks and cigarettes in water and natural waters" *Science of the Total Environment*, 2020, 714, 136700 (https://doi.org/10.1016/j.scitotenv.2020.136700)
- 88 S. Mascrez, E. Psillakis and G. Purcaro, "A multifaceted investigation of the effect of reduced pressure condition on the headspace-solid phase microextraction", 2019, *Analytica Chimica Acta*, 2020, 1103, 106-114 (https://doi.org/10.1016/j.aca.2019.12.053)
- N. Solomou, C. Bicchi, B. Sgorbini, E. Psillakis\*, "Vacuum-assisted headspace sorptive extraction: Theoretical considerations and proof-of-concept extraction of polycyclic aromatic hydrocarbons from water samples". *Analytica Chimica Acta*, 2020, 1096, 100-107. (https://doi.org/10.1016/j.aca.2019.10.050)
- 86 E. Psillakis\*, N. Koutela, A.J. Colussi, "Vacuum-assisted headspace single-drop microextraction: eliminating interfacial gas-phase limitations" *Analytica Chimica Acta*, 2019, 1092, 9-16. (https://doi.org/10.1016/j.aca.2019.09.056)
- 85 B. Bojko, B. Onat, E. Boyaci, E. Psillakis, T. Dalianis, J. Pawliszyn, "Application of in-situ Solid-Phase Microextraction on Mediterranean Sponges for Untargeted Exometabolome Screening and Environmental Monitoring" *Frontiers in Marine Science*, 2019, 6 (632), 1-13. (https://doi.org/10.3389/fmars.2019.00632)
- 84 E. Kourounioti, E. Psillakis\*, D. Vione, "UV-induced transformation of 2,3-dibromo-5,6-dimethyl-1,4-benzoquinone in water and treated wastewater", *Environmental Research*, 2019, 175, 343-350 (https://doi.org/10.1016/j.envres.2019.05.018)
- 83 M. Vakinti, S.-M. Mela, E. Fernández, E. Psillakis\*, "Room temperature and sensitive determination of haloanisoles in wine using vacuum-assisted headspace solid-phase microextraction", *Journal of Chromatography A*, 2019 (1602) 142–149. (https://doi.org/10.1016/j.chroma.2019.03.047)
- 82. E. Psillakis\*, Vortex-assisted liquid liquid microextraction revisited, *TrAC-Trends Analytical Chemistry*, 2019, 113, 332-339 (https://doi.org/10.1016/j.trac.2018.11.007) *Invited*
- 81. K. Karkanorachaki, S. Kiparissis, G.C. Kalogerakis, E. Yiantzi, E. Psillakis, N. Kalogerakis, "Plastic Pellets, Meso-and Microplastics on the Coastline of Northern Crete: Distribution and Organic Pollution", *Marine Pollution Bulletin*, 2018, 133, 578–589 (https://doi.org/10.1016/j.marpolbul.2018.06.011)
- 80. D. Orazbayeva, B. Kenessov, E. Psillakis, D. Nassyrova, M. Bektassov, "Determination of transformation products of unsymmetrical dimethylhydrazine in water using vacuum-assisted headspace solid-phase microextraction" *Journal of Chromatography A*, 2018, 1555, 30-36 (https://doi.org/10.1016/j.chroma.2018.04.048)
- 79. E. Psillakis\*, "Vacuum-assisted headspace-solid phase microextraction: A tutorial review" *Analytica Chimica Acta*, 2017, 986, 12-24 (http://dx.doi.org/10.1016/j.aca.2017.06.033) *Invited*
- D. Raynie, H.K. Lee, L. Ramos, J.L. Anderson, E. Psillakis, D. Benanou. "Sample Preparation: State of the Art" LC GC EUROPE, 2018, 30, 604-608 *Invited*
- M.J Trujillo-Rodríguez, V. Pino\*, E. Psillakis\*, J.L Anderson, J.H Ayala, E, Yiantzi, A.M Afonso, "Vacuum-assisted headspace-solid phase microextraction for determining volatile free fatty acids and phenols. Investigations on the effect of pressure on competitive adsorption phenomena in a multicompo nent system", *Analytica Chimica Acta*, 2017, 962, 41-51 (http://dx.doi.org/10.1016/j.aca.2017.01.056)

- M.-L. Glykioti, E. Yiantzi, E. Psillakis\*, "Room temperature determination of earthy-musty odor compounds in water using vacuum-assisted headspace solid-phase microextraction", *Analytical Methods*, 2016, 8(45), 8065-8071 (http://dx.doi.org/ 10.1039/C6AY02210C)
- 75. R. Zouboulaki, E. Psillakis\*, "Fast determination of aqueous fullerene C60 aggregates by vortex-assisted liquid-liquid microextraction and liquid chromatography-mass spectrometry" *Analytical Methods*, 2016, 8(24), 4821-4827 (http://dx.doi.org/10.1039/c6ay00885b)
- 74. E. Yiantzi, N. Kalogerakis, E. Psillakis\*, "Design and testing of a new sampler for simplified vacuum-assisted headspace solid-phase microextraction" *Analytica Chimica Acta*, 2016, 927, 46-54 (http://dx.doi.org/10.1016/j.aca.2016.05.001)
- 73. C.-E. Nika, E. Yiantzi, E. Psillakis\* "Plastic pellets sorptive extraction: Low-cost, rapid and efficient extraction of polycyclic aromatic hydrocarbons from environmental waters" *Analytica Chimica Acta*, 2016, 922, 30-36 (http://dx.doi.org/ 10.1016/j.aca.2016.03.037)
- 72. E. Yiantzi, N. Kalogerakis, E. Psillakis\*, "Vacuum-Assisted Headspace Solid Phase Microextraction of Polycyclic Aromatic Hydrocarbons from Solid Samples" *Analytica Chimica Acta*, 2015, 890, 108-116 (http://dx.doi.org/10.1016/j.aca.2015.05.047)
- 71. I. Roman, A. Mastromihali, K. Tyrovola, A. Canals, E. Psillakis\*, "Rapid Determination of Octanol-Water Partition Coefficient using Vortex-Assisted Liquid-Liquid Microextraction" *Journal of Chromatography A*, 2014, 1330, 1-5 (http://dx.doi.org/ 10.1016/j.chroma.2014.01.003)
- 70. E. Psillakis\*, E. Yiantzi, N. Kalogerakis, "Downsizing Vacuum-Assisted Headspace Solid Phase Microextraction" *Journal of Chromatography A*, 2013, 1300, 119-126 (http://dx.doi.org/10.1016/j.chroma.2013.02.009)
- 69. L. Sanchez-Prado, K. Kalafata, S. Risticevic, J. Pawliszyn, M. Lores, M. Llompart, N. Kalogerakis, E. Psillakis\*, "Ice photolysis of 2,2',4,4',6-pentabromodiphenyl ether (BDE-100): Laboratory investigations using solid phase microextraction" *Analytica Chimica Acta*, 2012, 742, 90-96 (http://dx.doi.org/10.1016/j.aca.2012.06.012)
- 68. E. Psillakis\*, A. Mousouraki, E. Yiantzi, N. Kalogerakis, "Effect of Henry's Law Constant and Operating Parameters on Vacuum-Assisted Headspace Solid Phase Microextraction" *Journal of Chromatography A*, 2012, 1244, 55-60 (http://dx.doi.org/10.1016/j.chroma.2012.05.006)
- 67. E. Psillakis\*, E. Yiantzi, L. Sanchez-Prado, Nicolas Kalogerakis, "Vacuum-Assisted Headspace Solid Phase Microextraction: Improved Extraction of Semivolatiles by Non-Equilibrium Headspace Sampling under Reduced Pressure Conditions" *Analytica Chimica Act*a, 2012, 742, 30-36 (http://dx.doi.org/10.1016/j.aca.2012.01.019)
- N. Ratola, J. M. Amigo, S. Lacorte, D. Barceló, E. Psillakis, A. Alves, "Comparison of PAH-Levels and sources in pine needles from Portugal Spain and Greece" *Analytical Letters* 2012, 45(1-2), 508-525 (http://dx.doi.org/10.1080/00032719.2011.649452).
- 65. A. Papadopoulou, I.P Román, A. Canals, K. Tyrovola, E. Psillakis\*, "Fast screening of perfluorooctane sulfonate in water using vortex-assisted liquid-liquid microextraction coupled to liquid chromatography-mass spectrometry" *Analytica Chimica Acta*, 2011, 691(1-2), 56-61 (http://dx.doi.org/10.1016/j.aca.2011.02.043)
- 64. F.E. Stamati, N.P. Nikolaidis, D. Venieri, E. Psillakis, N. Kalogerakis, "Dissolved organic nitrogen as an indicator of livestock impacts on soil biochemical quality" *Applied Geochemistry*, 2011, 26, S340–S343 (http://dx.doi.org/10.1016/j.apgeochem.2011.03.070)
- 63. N. Ratola, A. Alves, E. Psillakis\*, "Biomonitoring of Polycyclic Aromatic Hydrocarbons Contamination in the Island of Crete Using Pine Needles" *Water, Air, Soil Pollution*, 2011, 215(1-4), 189-203 (http://dx.doi.org/10.1007/s11270-010-0469-y)
- 62. P. Karageorgos, M. Latos, .C. Mpasiakos, E. Chalarakis, E. Dimitrakakis, C. Daskalakis, E. Psillakis, M. Lazaridis, N. Kalogerakis, "Characterization and Dispersion Modelling of Odors from a Piggery Facility" *Journal of Environmental Quality*, 2010, 39, 2170–2178 (http://dx.doi.org/10.2134/jeg2010.0083)
- 61. N. Barakat D.P. Makris, P. Kefalas, E. Psillakis, "Removal of olive mill waste water phenolics using a crude peroxidase extract from onion by-products" *Environmental Chemistry Letters*, 2010, 8(3), 271-275 (http://dx.doi.org/10.1007/s10311-009-0216-z)
- M.J. Bonne, E. Galbraith, T.D. James, M.J. Wasbrough, K.J. Edler, A. Toby, A. Jenkins, M. Helton, A. McKee, W. Thielemans, E. Psillakis, F. Marken, "Boronic acid dendrimer receptor modified nanofibrillar cellulose membranes" Journal of Materials Chemistry, 2010, 20, 588–594 (http://dx.doi.org/10.1039/b918308f)
- 59. E. Yiantzi, E. Psillakis\*, K. Tyrovola, N. Kalogerakis, "Vortex-assisted liquid-liquid microextraction of octylphenol, nonylphenol and bisphenol-A" *Talanta*, 2009, 80(5), 2057-2062 (http://dx.doi.org/10.1016/j.talanta.2009.11.005)
- 58. J. Regueiro, M. Llompart, E. Psillakis, J.C. Garcia-Monteagudo, C. Garcia-Jares, "Ultrasound-assisted emulsification-microextraction of phenolic preservatives in water" *Talanta*, 2009, 79(5), 1387-1397 (http://dx.doi.org/10.1016/i.talanta.2009.06.015)
- 57. L. Sanchez-Prado, S. Risticevic, J. Pawliszyn and E. Psillakis\*, "Low temperature SPME device: a convenient and effective tool for investigating photodegradation of volatile analytes" *Journal of Photochemistry and Photobiology A: Chemistry*, 2009, 206, 227–230 (http://dx.doi.org10.1016/j.jphotochem.2009.07.009)
- 56. E. Psillakis, J. Cheng, M. R. Hoffmann, A. J. Colussi, "Enrichment factors of perfluoroalkyl oxoanions at the air/water interface" *Journal of Physical Chemistry A*, 2009, 113(31), 8826-8829 (http://dx.doi.org/10.1021/jp902795m)

- 55. J. Cheng, E. Psillakis, M. R. Hoffmann, A. J. Colussi, "Acid Dissociation versus Molecular Association of Perfluoroalkyl Oxoacids: Environmental Implications" *Journal of Physical Chemistry A*, 2009, 113(29), 8152-8156 (http://dx.doi.org/10.1021/jp9051352)
- 54. K. Tsourounaki, M.J. Bonné, W. Thielemans, E. Psillakis, M. Helton, A. McKee, F. Marken, "Nano-Fibrillar Cellulose-Chitosan Composite Film Electrodes: Competitive Binding of Triclosan, Fe(CN)<sub>6</sub><sup>3-/4-</sup>, and SDS Surfactant" *Electroanalysis*, 2008, 20(22), 2395-2402 (hhtp://dx.doi.org/10.1002/elan.200804338)
- 53. N. Ratola, A. Alves, N. Kalogerakis, E. Psillakis\*, "Hollow fibre liquid phase microextraction: A simple and fast cleanup step used for PAHs determination in pine needles" *Analytica Chimica Acta*, 2008, 618(1), 70-78 (http://dx.doi.org/10.1016/j.aca.2008.04.054)
- 52. L. Vidal, A. Chisvert, A. Canals, E. Psillakis, A. Lapkin, F. Acosta, K.J. Edler, J.A. Holdaway, F. Marken, "Chemically surface-modified carbon nanoparticle carrier for phenolic pollutants: Extraction and electrochemical determination of benzophenone-3 and triclosan" *Analytica Chimica Acta*, 2008, 616(1), 28-35 (http://dx.doi.org/10.1016/j.aca.2008.04.011)
- 51. L. Sanchez-Prado, R. Barro, C. Garcia-Jares, M. Llompart, M. Lores, C. Petrakis, N. Kalogerakis, D. Mantzavinos, E. Psillakis\*, "Sonochemical degradation of triclosan in water and wastewater" *Ultrasonics Sonochemistry*, 2008, 15(5), 689-694 (http://dx.doi.org/10.1016/j.ultsonch.2008.01.007)
- M.J. Bonné, K. Edler, J.G. Buchanan, D. Wolverson, W. Thielemans, E. Psillakis, M. Helton, F. Marken, "Thin Film Modified Electrodes with Reconstituted Cellulose-PDDAC Films for the Accumulation and Detection of Triclosan" Journal of Physical Chemistry C, 2008, 112(7), 2660-2666 (http://dx.doi.org/10.1021/jp709783k)
- 49. F.J. Pena Pereira, C. Bendicho, N. Kalogerakis, E. Psillakis\*, "Headspace single drop microextraction of methylcyclopentadienyl-manganese tricarbonyl from water samples followed by gas chromatography-mass spectrometry" *Talanta*, 2007, 74(1), 47–51 (http://dx.doi.org/10.1016/ j.talanta.2007.05.024)
- 48. M. A. Ghanem, R. G. Compton, B. A. Coles, E. Psillakis, M. A. Kulandainathan, F. Marken, "Microwave Activation of Electrochemical Processes: High Temperature Phenol and Triclosan Electro-oxidation at Carbon and Diamond Electrodes" *Electrochimica Acta*, 2007, 53(3), 1092-1099 (http://dx.doi.org/10.1016/j.electacta.2007.01.065)
- 47. O. Mihas, N. Kalogerakis, E. Psillakis\*, "Photolysis of 2,4-dinitrotoluene in various water solutions: effect of dissolved species" *Journal of Hazardous Materials*, 2007, 146(3), 535-539 (http://dx.doi.org/10.1016/j.jhazmat.2007.04.054)
- 46. M. Amiri, S. Shahrokhian, E. Psillakis, F. Marken "Electrostatic Accumulation and Determination of Triclosan in Ultrathin Carbon Nanoparticle Composite Film Electrodes" *Analytica Chimica Acta*, 2007, 593(1), 117-122 (http://dx.doi.org/10.1016/j.aca.2007.04.042)
- 45. L. Vidal, C.E Domini, N. Grané, E. Psillakis, A. Canals, "Microwave-assisted headspace single-drop microextration of chlorobenzenes from water samples" *Analytica Chimica Acta*, 2007, 592(1), 9-15 (http://dx.doi.org/10.1016/j.aca.2007.03.066)
- 44. D. E. Kritikos, N.P. Xekoukoulotakis, E. Psillakis, D. Mantzavinos, "Photocatalytic degradation of reactive black 5 in aqueous solutions: Effect of operating conditions and coupling with ultrasound irradiation" *Water Research*, 2007, 41(10), 2236-2246 (http://dx.doi.org/10.1016/ j.watres.2007.01.048)
- 43. L. Vidal, E. Psillakis, C. E. Domini, N. Grané, F. Marken, A. Canals, "An ionic liquid as a solvent for headspace single drop microextraction of chlorobenzenes from water samples *Analytica Chimica Acta*, 2007, 584(1), 189-195 (http://dx.doi.org/10.1016/j.aca.2006.10.053)
- 42. D. Mekiki, N. Kalogerakis, E. Psillakis\* "Application of Solid-Phase Microextraction for the Analysis of Nitropolycyclic Aromatic Hydrocarbons in Water" *Chromatographia*, 2006, 63(1-2), 85–89 (http://dx.doi.org/10.1365/s10337-005-0693-6)
- 41. M. Gotsi, N. Kalogerakis, E. Psillakis, P. Samaras, D. Mantzavinos, "Electrochemical oxidation of olive mill wastewater" *Water Research*, 2005, 39(17), 4177-4187 (http://dx.doi.org/10.1016/j.watres.2005.07.037)
- 40. L. Vidal, A. Canals, N. Kalogerakis, E. Psillakis\*, "Headspace single-drop microextraction for the analysis of chlorobenzenes in water samples" *Journal of Chromatography A*, 2005, 1089(1-2), 25-30 (http://dx.doi.org/10.1016/j.chroma.2005.06.058)
- M. Charalabaki, E. Psillakis\*, D. Mantzavinos, N. Kalogerakis, "Analysis of polycyclic aromatic hydrocarbons in wastewater treatment plant effluents using hollow fibre liquid-phase microextraction" *Chemosphere*, 2005, 60(5), 690-698 (http://dx.doi.org/10.1016/ j.chemosphere.2005.01.040)
- 38. N. Kalogerakis, E. Psillakis, P. Alvarez, "Special issue: recent advances in bioremediation Preface" *Environment International*, 2005, 31(2), 147 (http://dx.doi.org/10.1016/ j.envint.2004.09.007)
- 37. D. Atanassova, P. Kefalas, E. Psillakis\*, "Measuring the antioxidant activity of olive-oil mill wastewater using chemiluminescence" *Environment International*, 2005, 31(2), 275-280 (http://dx.doi.org/10.1016/j.envint.2004.10.003)
- 36. D. Atanassova, P. Kefalas, C. Petrakis, D. Mantzavinos, N. Kalogerakis, E. Psillakis\*, "Sonochemical reduction of the antioxidant activity of olive mill wastewater" *Environment International*, 2005, 31(2), 281-287 (http://dx.doi.org/10.1016/j.envint.2004.10.004)
- 35. E. Manousaki, E. Psillakis\*, D. Mantzavinos, N. Kalogerakis, "Degradation of sodium dodecylbenzenesulfonate in water by means of ultrasonic irradiation" *Water Research*, 2004, 38(17), 3751-3759 (http://dx.doi.org/10.1016/j.watres.2004.06.002)

- C. Vassilakis, A. Pantidou, E. Psillakis, N. Kalogerakis, D. Mantzavinos, "Sonolysis of natural phenolic compounds in aqueous solutions: Effect of operating conditions, reaction intermediates and pathways and aerobic biodegradability" Water Research, 2004, 38(13), 3110-3118 (http://dx.doi.org/ 10.1016/j.watres.2004.04.014)
- 33. D.A. Lambropoulou, E. Psillakis, T.A. Albanis, N. Kalogerakis, "Single-drop microextraction for the analysis organophosphorus insecticides in water" *Analytica Chimica Acta*, 2004, 516(1-2), 205-211 (http://dx.doi.org/10.1016/j.aca.2004.03.055)
- 32. E. Psillakis, G. Goula, N. Kalogerakis, D. Mantzavinos, "Degradation of polycyclic aromatic hydrocarbons in aqueous solutions by ultrasonic irradiation *Journal of Hazardous Materials*, 2004, B108(1-2), 95-102 (http://dx.doi.org/10.1016/j.jhazmat.2004.01.004)
- 31. D. Mantzavinos, E. Psillakis, "Enhancement of biodegradability of industrial wastewaters by chemical oxidation pretreatment" *Journal of Chemical Technology and Biotechnology*, 2004, 79(5), 431-454 (http://dx.doi.org/10.1002/jctb.1020)
- E. Psillakis\*, D. Mantzavinos, N. Kalogerakis, "Monitoring the sonochemical degradation of phthalate esters in water using Solid-Phase Microextraction" *Chemosphere*, 2004, 54(7), 849-857 (http://dx.doi.org/ 10.1016/j.chemosphere.2003.09.039)
- 29. E. Psillakis\*, D. Mantzavinos, N. Kalogerakis, "Development of a hollow fibre liquid phase microextraction method to monitor the sonochemical degradation of explosives in water *Analytica Chimica Acta*, 2004, 501(1), 3-10 (http://dx.doi.org/ 10.1016/j.aca.2003.09.015)
- 28. E. Psillakis\* and N. Kalogerakis, "Developments in liquid-phase microextraction *TrAC-Trends Analytical Chemistry*, 2003, 22(10), 565-574 (http://dx.doi.org/10.1016/S0165-9936(03)01007-0)
- 27. E. Psillakis\*, N. Kalogerakis, "Hollow-Fibre Liquid-Phase Microextraction of phthalate esters from water" *Journal of Chromatography A*, 2003, 999(1-2), 145-153 (http://dx.doi.org/10.1016/S0021-9673(03)00390-X)
- 26. E. Psillakis\*, A. Ntelekos, D. Mantzavinos, E. Nikolopoulos, N. Kalogerakis, "Solid-Phase Microextraction to monitor the sonochemical degradation of Polycyclic Aromatic Hydrocarbons in water" *Journal of Environmental Monitoring*, 2003, 5(1), 135-140 (http://dx.doi.org/ 10.1039/b208970j)
- 25. E. Psillakis, N. Kalogerakis, "Determination of phthalates in bottled Greek mineral water using SPME/GC-MS" Protection and Restoration of the Environment VI, July 2-5, 2002, Skiathos, Greece
- 24. E. Psillakis, N. Kalogerakis, "Developments in single-drop Microextraction" *TrAC-Trends Analytical Chemistry*, 2002, 21(1), 53-63 (http://dx.doi.org/10.1016/S0165-9936(01)00126-1)
- 23. E. Psillakis and N. Kalogerakis, "Solid-Phase Microextraction versus single drop microextraction for the analysis of nitroaromatic explosives in water samples" *Journal of Chromatography A*, 2001, 938(1-2), 113-120 (http://dx.doi.org/10.1016/S0021-9673(01)01417-0)
- 22. E. Psillakis, N. Kalogerakis, "Application of solvent microextraction to the analysis of nitroaromatic explosives in water samples" *Journal of Chromatography A*, 2001, 907(1-2), 211-219 (http://dx.doi.org/10.1016/S0021-9673(00)01017-7)
- 21 E Psillakis, G Naxakis, N Kalogerakis, "Detection of TNT-contamination in spiked-soil samples using SPME and GC/MS", Global Nest: The Int. J., 2000, 2(3), 227-236 (
- 20. E. Psillakis, P.K.A. Shoenfield, A.A. Jouaiti, J.P. Maher, J.A. McCleverty, M.D. Ward, "Redox-mediation of electronelectron spin-spin interactions, |J|, in paramagnetic trinuclear molybdenum complexes: an example of a 'J switch'" Journal of the Chemical Society-Dalton Transactions, 2000, (3), 241-249 (http://dx.doi.org/ 10.1039/a908323e)
- 19. P.K.A. Shoenfield, A. Behrendt, J.C. Jeffery, J.P. Maher, J.A. McCleverty, E. Psillakis, M.D. Ward, C. Western, "Very weak electron-electron exchange interactions in paramagnetic dinuclear tris(pyrazolyl)borato-molybdenum centres with extended bridging ligands: estimation of the exchange coupling constant *J* by simulation of second-order EPR spectra" *Journal of the Chemical Society-Dalton Transactions*, 1999, (24), 4341-4347 (http://dx.doi.org/10.1039/a908138k)
- K.L.V. Mann, E. Psillakis, J.C. Jeffery, L.H. Rees, N.M. Harden, J.A. McCleverty, M.D. Ward, D. Gatteschi, F. Totti, F.E. Mabbs, E.J.L. McInnes, P.C. Riedi, G.M. Smith, "Tetranuclear grid-like copper(II) complexes with pyrazolate bridges: syntheses, structures, magnetic and EPR spectroscopic properties" *Journal of the Chemical Society-Dalton Transactions*, 1999, (3), 339-348 (http://dx.doi.org/ 10.1039/a807599i)
- 17. C.A. Otter, S.M. Couchman, J.C. Jeffery, K.L.V. Mann, E. Psillakis, M.D. Ward, "Complexes of a new bidentate chelating pyridyl/sulfonamide ligand with copper(II), cobalt(II) and palladium(II):crystal structures and spectroscopic properties" *Inorganica Chimica Acta*, 1998, 278(2), 178-184 (http://dx.doi.org/ 10.1016/S0020-1693(98)00018-8)
- 16. J.C. Jeffery, P.A. Jelliss, E. Psillakis, G.E. Rudd, F.G.A. Stone, "Synthesis, crystal structure and some reactions of the ruthenacarborane complex [Ru(CO)<sub>2</sub>(MeCCPh) (h<sup>5</sup>-7,8-C<sub>2</sub>B<sub>9</sub>H<sub>11</sub>)]" *Journal of Organometallic Chemistry*, 1998, 562(1), 17-27 (http://dx.doi.org/10.1016/S0022-328X(98)00363-5)
- 15. J.S. Fleming, K.L.V. Mann, C.A. Carraz, E. Psillakis, J.C. Jeffery, J.A. McCleverty, M.D. Ward, "Anion-templated assembly of a supramolecular cage complex" *Angewandte Chemie-International Edition*, 1998, 37(9), 1279-1281 (http://dx.doi.org/ 10.1002/(SICI)1521-3773(19980518)37:9<1279::AID-ANIE1279>3.0.CO;2-Q)
- 14. J.S. Fleming, E. Psillakis, J.C. Jeffery, K.L V. Mann, J.A. McCleverty, M.D. Ward, "Preparation of the new podant ligand S=P(pzpy)<sub>3</sub> [pzpy = 3-(2-pyridyl)-pyrazol-1-yl], and the syntheses and the crystal structures of copper(II) and

- copper(I) complexes of its hydrolysis product  $[O_2P(pzpy)_2]^-$  and a double helical copper(I) complex of  $[O_2P(pzpy)]^-$ " *Polyhedron*, 1998, 17(10), 1705-1714 (http://dx.doi.org/ 10.1016/S0277-5387(97)00449-X)
- 13. M.D. Ward, J.S. Fleming, E. Psillakis, J.C. Jeffery, J.A. McCleverty, " [Pd(HL)Cl<sub>2</sub>] and [Pd(HL)<sub>2</sub>] where (HL) is 3-(2-pyridyl) pyrazole" *Acta Crystallographica Section C-Crystal Structure Communications*, 1998, C54(Part 5), 609-612 (http://dx.doi.org/ 10.1107/S0108270197016399)
- 12. E. Psillakis, J. P. Maher, J. A. McCleverty and M. D. Ward, "Magnetic communication in acyclic mixed-valence trimolybdenum complexes mediated by redox switching" *Chemical Communications*, 1998, (7), 835-836 (http://dx.doi.org/10.1039/a800660a)
- 11. J.S. Fleming, E. Psillakis, S.M. Couchman, J.C. Jeffery, J.A. McCleverty, M.D. Ward, "Complexes of the potentially hexadentate ligand bis{3-[6-(2,2'-bipyridyl)] pyrazol-1-yl} hydroborate with representative s-, p-, d- and f-block metal ions: factors promoting formation of mononuclear or double-helical dinuclear complexes" *Journal of the Chemical Society-Dalton Transactions*, 1998, (4), 537-543 (http://dx.doi.org/10.1039/a707936b)
- E. Psillakis, J.C. Jeffery, J.A. McCleverty, M.D. Ward, "Square prismatic vs. square-antiprismatic coordination in complexes of Lead(II) with a simple bidentate chelating ligand; effects of intermolecular hydrogen-bonding" *Chemical Communications*, 1997, (20), 1965-1966 (http://dx.doi.org/10.1039/a703643d)
- D.A. Bardwell, J.C. Jeffery, P.L. Jones, J.A. McCleverty, E. Psillakis, Z. Reeves, M.D. Ward, "Lanthanide complexes of the tetradentate N-donor ligand dihydrobis[3-(2-pyridyl) pyrazol]borate and the terdentate N-donor ligand 2,6-bis(1H-pyrazol-3-yl)pyridine: Syntheses, crystal structures and solution structures based on luminence lifetime studies" *Journal of the Chemical Society-Dalton Transactions*, 1997, (12), 2079-2086 (http://dx.doi.org/10.1039/a701297g)
- 8. E. Psillakis, J.C. Jeffery, J.A. McCleverty, M.D. Ward, "Complexes of Silver(I), Thallium(I), Lead(II) and Barium(II) with bis[3-(2-pyridyl)pyrazol-1-yl]phosphinate: One dimensional helical chains and discrete mononuclear complexes" *Journal of the Chemical Society-Dalton Transactions*, 1997, (9), 1645-1651 (http://dx.doi.org/10.1039/a700475c)
- 7. E. Psillakis, J.C. Jeffery, J.A. McCleverty, M.D. Ward, "A dinuclear double-helical complex of Potassium ions with a compartmental bridging ligand containing two terdentate N-donor fragments" *Chemical Communications*, 1997, (5), 479-480 (http://dx.doi.org/10.1039/a607984i)
- 6. J.C. Jeffery, P.L. Jones, K.L.V. Mann, E.Psillakis, J.A. McCleverty, M.D. Ward, C.M. White, "Copper(II)-templated assembly of tetranuclear grid-like complexes from simple pyridine-pyrazole ligands" *Chemical Communications*, 1997, (2), 175-176 (http://dx.doi.org/10.1039/a606827h)
- 5. P.L. Jones, A.J. Amoroso, J.C. Jeffery, J.A. McCleverty, E. Psillakis, L.H. Rees, M.D. Ward, "Lanthanide complexes of the hexadentate N-donor podant tris[3(2-pyridyl)pyrazol-1-yl]hydroborate (Tppy): Solid-state and solution properties" *Inorganic Chemistry*, 1997, 36(1), 10-18 (http://dx.doi.org/ 10.1021/ic960621m)
- J. Amoroso, J.C. Jeffery, P. L. Jones, J.A. McCleverty, E. Psillakis, M.D. Ward, "Crystal structure of Silver(I) and Thallium(I) complexes of the tris[3(2-pyridyI) pyrazol-1-yl]hydroborate; Enscapulation of either a single Thallium(I) ion or a trinuclear Silver(I) cluster by a hexadentate podant" *Chemical Communications*, 1995, (11), 1175-1176 (http://dx.doi.org/ 10.1039/c39950001175)
- 3. J.C. Jeffery, C.S.G. Moore, E. Psillakis, M.D. Ward, P. Thornton, "The coordination chemistry of the mixed pyridine-phenol and phenanthroline-phenol ligands; the crystal structure of the 2-(2-hydroxy phenyl)-1,10 (HL) and the crystal structure and properties of [FeL<sub>2</sub>][PF<sub>6</sub>]" *Polyhedron*, 1995, 14(5), 599-604 (http://dx.doi.org/10.1016/0277-5387(94)00281-I)
- 2. J.C. Jeffery, S.S. Kurek, J.A. McCleverty, E. Psillakis, M.D. Ward, A. Wlodarczyk, "Syntheses of 4-benzyl-3,5-dimethylpyrazolylborato complexes of Molybdenum and Tungsten nitrosyls; Molecular structure of [Mo(CO)<sub>2</sub>(NO)[(3,5-Me2-4-PhCH<sub>2</sub>C<sub>3</sub>N<sub>2</sub>)<sub>3</sub>], a complex with an "inverted" bowl-like structure" *Journal of the Chemical Society-Dalton Transactions*, 1994, (17), 2559-2564 (http://dx.doi.org/10.1039/dt9940002559)
- 1. D.A. Bardwell, J.G. Crossley, J.C. Jeffery, A.G. Orpen, E. Psillakis, E.M. Tilley, M.D. Ward, "A study of crystal-packing in a series of closely related square-planar Palladium(II) and Platinum(II) complexes" *Polyhedron*, 1994, 13(15-16), 2291-2300 (http://dx.doi.org/10.1016/S0277-5387(00)88139-5)

### **Under review**

- 1. A. Zhakupbekova, N. Baimatova, E. Psillakis, B. Kenessov, "Quantification of trace transformation products of rocket fuel unsymmetrical dimethylhydrazine in sand using vacuum assisted headspace solid-phase microextraction" Environmental Science and Pollution Research, 2021
- 2. E. Yiantzi, K. Murtada, K. Terzidis, J. Pawliszyn, E. Psillakis,\* "Vacuum-assisted headspace thin-film microextraction: Theoretical formulation and method optimization for the extraction of polycyclic aromatic hydrocarbons from water samples" Analytica Chimica Acta, 2021
- 3. N. Delbecque, S. Mascrez, E. Psillakis,\* G. Purcaro, "Sub-ambient temperature sampling of fish volatiles using vacuum-assisted headspace solid phase microextraction: Theoretical considerations and proof of concept" Analytica Chimica Acta, 2021
- 4. Á.I. López-Lorente, F. Pena-Pereira, S. Pedersen-Bjergaard, V.G. Zuine, S.A. Ozkan, E. Psillakis,\* "The Ten Principles of Green Sample Preparation", TrAC-Trends in Analytical Chemistry, 2021

<sup>\*</sup>Corresponding author

### PUBLICATIONS IN JOURNALS WITHOUT AN IMPACT FACTOR

- 1. E. Psillakis, "Environmental Analysis and the Dual Grand Challenge of COVID-19 and Sustainable Development", Front. Anal. Sci. 2021, 1:709748
- 2. S. Mascrez, E. Psillakis, G. Purcaro, "Vacuum Assisted Headspace Solid-phase Microextraction: A Powerful Tool for Olive Oil Analysis", Chromatography Today, 2020.
- M. Gökhan Eskin, M. Torabfam, E. Psillakis, A. Cincinelli, H. Kurt, M. Yüce. "Real-Time Water Quality Monitoring of An Artificial Lake Using Portable, Affordable, Simple, Arduino-based Open Source Sensors" EnvEng-IO, 2019, 6, 7-14

## **CHAPTERS IN BOOKS**

- 1. M. Cardenas, E. Psillakis and R. Lucena, "Liquid-liquid extraction, classic and unconfined liquid-phase microextraction" in the Book entitled Sample treatment techniques and new materials, edited by Professors M. Cardenas and R. Lucena, Elsevier.
- N. Ratola, J.M. Amigo, S. Lacorte, D. Barceló, E. Psillakis, A. Alves, "Biomonitoring of Polycyclic Aromatic Hydrocarbons by Pine Needles–Levels and Trends in Southern Europe" In: Handbook of Polycyclic Aromatic Hydrocarbons: Chemistry, Occurrence and Health Issues, Editors: Guilherme C. Bandeira and Henrique E. Meneses, Nova Science Publishers Inc., New York, 2013, pp. 83-114 (ISBN: 978-1-62257-473-5).
- 3. E. Psillakis, V. Gekas, Odor problems in the food industry, Springer, New York, 2006, pp 1-14 (ISBN 0-387-33510-2).
- 4. E. Psillakis, Odor measurement in Odors In the Food Industry, Nicolay, Xavier (Ed.), Springer, New York, 2006, pp 15-39 (DOI: 10.1007/978-0-387-34124-8).
- 5. E. Psillakis, Preconcentration prior to gas chromatography in Odors In the Food Industry, Nicolay, Xavier (Ed.), Springer, New York, 2006, pp 41-45 (DOI: 10.1007/978-0-387-34124-8).
- 6. A. Skilourakis, E. Psillakis, Endocrine disrupting compounds in olive oil, Integrating Safety and Environmental Knowledge Into Food Studies towards European Sustainable Development, Springer, 2007, Volume 6, pp 21-27 (DOI: 10.1007/978-0-387-45679-9).

# **EDITOR - SPECIAL ISSUES**

Editor-in-Chief of Advances in Sample Preparation (Elsevier)

Specialty Chief Editor of Environmental Analysis for Frontiers in Analytical Science (Frontiers)

Associate Editor in Journal of Separation Science (Wiley)

# **Editorial Board**

- Green Analytical Chemistry (Elsevier)
- Sustainable Chemistry and Pharmacy (Elsevier)
- Analytica Chimica Acta (Elsevier)
- MethodsX (Elsevier)
- Science Advances Today (Lognor)
- Reviews in Separation Sciences (Betasciencepress)

## **Guest Editor in Special Issues**

- Advances in Sample Preparation (Elsevier), Green Sample Preparation, Eds: F. David, R. Lucena, G. Ouyang, S. Pedersen-Bjergaard and E. Psillakis. Scheduled to appear in 2022.
- Advances in Sample Preparation (Elsevier), Criticality of Sample Preparation in Analytical Characterization, Eds: F.
   David, R. Lucena, G. Ouyang, S. Pedersen-Bjergaard and E. Psillakis. Scheduled to appear in 2022
- Journal of Separation Sciences (Wiley), Reviews 2021, Editor: E. Psillakis and V. Pichon. Scheduled to appear in 2022
- Journal of Separation Science (Wiley), Inspiring women in separation science, Editor: E. Psillakis. 2021
- Journal of Separation Science (Wiley), Emerging thought leaders in separation science, 2020, 43, 1616-2010. Editor: E. Psillakis.
- Analytica Chimica Acta (Elsevier), Virtual Special Issue devoted to ExTech®2014, 16<sup>th</sup> International Symposium on Advances in Extraction Technologies; Guest Editors: E. Psillakis, J. Pawliszyn
- Molecules (MDPI), Virtual Special Issue: Microextraction. Guest Editor: E. Psillakis (ISSN 1420-3049)
- Environment International (Elsevier), Special Issue devoted to Bioremediation II, 2005, 31(2), 147-312, Guest Editors: P. J. Alvarez, N. Kalogerakis, E. Psillakis (ISSN 0160 4120)

Water, Air, and Soil Pollution: Focus, Special Issue devoted to Bioremediation I (Kluwer Academic Publishers), 2003, 3(3), 5-298, Guest Editors: N. Kalogerakis, E. Psillakis (ISSN 1567-7230)

### **CHAIRING EVENTS-HEAD OF GROUPS**

## **Conference Chair**

- 2021 Conference CoChair: 1st European Sample Preparation Conference. March 11-12, 2021. Online event
- 2014 Symposium Chair, 16th International Symposium on Advances in Extraction Technologies, ExTech®2014, May 26-28, 2014, Chania, Greece

## e-Meeting Chair

2020 COST Action PortASAP Annual Meeting of the Action, Organizer, March 15-17 2020, Chania, Greece. Cancelled March 9 2020 due to COVID-19 and completed June 18-19 as a web-conference.

### **Intensive Course Chair**

- 2018 Sample preparation summer course, Course Organizer, August 22-24, 2018, Chania, Greece
- 2017 Sample preparation summer course, Course Organizer, July 3-6, 2017, Chania-Crete, Greece

### **Head of groups**

- 2019 Head of the "Sample Preparation" Task Force and Network of the European Chemical Society-Division of Analytical Chemistry
- 2017 Leader of Work-Group 4 "Sample preparation and microfluidics", European network for the promotion of portable, affordable and simple analytical platforms, COST Action CA16215
- 2015 President of the board of Greek Deputy Rectors of Academic Affairs at the Synod of Greek Higher Education Institutions

## INVITED ORAL CONTRIBUTIONS

## Plenary/Keynote/Invited lectures at conferences

- E. Psillakis. "Sample Preparation: the excluded essential in Green Analytical Chemistry" (Keynote), 2nd Pan American Essential Oils Symposium, part to the CLAQ 2020 events, Cartagena de Indias, Colombia, October 11-15, 2021. Hybrid event.
- 2. E. Psillakis. "Littered cigarette butts: A small-sized waste creating big-sized problems" (Keynote) 24nd International Symposium "The Environment and Industry" SIMI 2021, September 24 2021, Online event.
- 3. E. Psillakis. "Green Sample Preparation" (Invited), IUPAC | CCCE 2021, the 48th World Chemistry Congress and 104th Canadian Chemistry Conference and Exhibition, 13-20 August, 2021, Online event.
- 4. E. Psillakis. "Vacuum-assisted headspace microextraction: Faster, better, easier, gentler" (Keynote), 23st International Symposium on Advances in Extraction Technologies, ExTech®2021, June 29 July 3 2021, Alicante, Spain.
- 5. E. Psillakis, "Vacuum-assisted headspace microextraction: Faster, better, easier, gentler" (Invited), 4th STARSS Conference on Separation Science, Nov 30- Dec 1, 2020, Online event.
- 6. E. Psillakis "Green, simple and fast analytical tools for studying complex environmental problems", (Keynote), To be presented at the 5th Green & Sustainable Chemistry Conference, October 18-21 2020, Bonn, Germany.
- 7. E. Psillakis, Title to be announced (Invited), To be presented at 22st International Symposium on Advances in Extraction Technologies, ExTech®2020, September 28 October 2 2020, Cartagena, Colombia. Conference cancelled due to COVID-19.
- 8. E. Psillakis, Title to be announced (Keynote) 23nd International Symposium "The Environment and Industry" SIMI 2020, September 24-25 2020, Bucharest, Romania. Conference cancelled due to COVID-19. Conference cancelled due to COVID-19.
- E. Psillakis, "Vacuum-assisted headspace microextraction: Faster, better, easier, gentler" (Invited), Contribution to be presented at 44th International Symposium of Capillary Chromatography 2020, May 24-29, 2020, Riva del Garda, Italy. Conference cancelled due to COVID-19.
- 10. N. Solomou, F. Wang, G. Ouyang, S. Mascrez, G. Purcaro, B. Sgorbini, C. Bicchi, and Elia Psillakis "Vacuum-assisted headspace (micro)extraction: Analytes take the fast lane" (Plenary) 21st International Symposium on Advances in Extraction Technologies, ExTech®2019, November 9-13 2019, Guangzhou, China.
- 11. E. Psillakis, "Emerging and Persistent Organic Pollutants in Aquatic Environment: An Ever-Growing Problem", (Invited), 2019 International Green and Sustainable Chemistry Conference, October 16-19 2019, Beijing, China.
- E. Psillakis, "Leaching of chemicals from littered cigarettes and heated tobacco sticks in water: An overlooked issue?", (Keynote) 22nd International Symposium "The Environment and Industry" - SIMI 2019, September 25-27 2019, Bucharest, Romania.

- 13. E. Psillakis, Nicoleta Solomou, Evdokia Fountouli, Elena Fernández "Introduction to WG4 and the recent developments on the effect of vacuum on headspace (micro)extraction.", (Invited) Euroanalysis 2019, September 1-5 2019, Istanbul, Turkey.
- 14. E. Psillakis, "Emerging and Persistent Organic Pollutants in Aquatic Environment" (Keynote), 21st International Symposium "The Environment and The Industry", September 20-21 2018, Bucharest, Romania.
- 15. E. Psillakis, "Emerging and persistent organic compound: an ever-growing problem", (Plenary) XVII Congress of the Chemistry of the Environment and Cultural Heritages, Italian Association of Chemists July 24-27, 2018, Genoa, Italy.
- M. Vakinti, N. Solomou, S.-M. Mela, N. Koutela, E, Gionfriddo, J. Pawliszyn and E. Psillakis, Vacuum-assisted headspace (micro)extraction expands to new methods, complex matrices and automation, (Keynote) 20th International Symposium on Advances in Extraction Technologies (ExTech2018), June 19-22, 2018, Ames, Iowa, USA.
- 17. N. Koutela, M. Vakinti and E. Psillakis, "Microextraction: An ideal platform to analyze and simulate the environment", (Keynote) 18<sup>th</sup> European Meeting on Environmental Chemistry (EMEC), November 26-29, 2017, Porto, Portugal.
- 18. N. Koutela, M. Vakinti and E. Psillakis, "Microextraction: Think big, act small", (Keynote) 19th International Symposium on Advances in Extraction Technologies (ExTech2017), July 27-30, 2017, Santiago de Compostela, Spain.
- E. Yiantzi, M.-L. Glykioti and Elia Psillakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction Revisited", (Invited) 18th International Symposium on Advances in Extraction Technologies & 22nd International Symposium on Separation Sciences (ExTech-ISSS'2016), July 03-06, 2016, Torun, Poland.
- 20. E. Psillakis, E. Yiantzi, E. Nika, R. Zouboulaki and M.-L. Glykioti "Sorptive microextraction: so simple and yet so complex" (Invited) XVI Latin-American Congress on Chromatography-9th National Meeting on Chromatography, January 5-9 2016, Lisbon, Portugal.
- 21. E. Nika, E. Yiantzi, N. Kalogerakis, E. Psillakis "Sorbent-Based Sorptive Microextraction: The underestimated power of using low cost and easy to reach materials as sorbents" (Keynote) 17th International Symposium on Advances in Extraction Technologies, ExTech®2015, November 7-10 2015, Guangzhou, China.
- 22. E. Psillakis "A Novel Design for Vacuum-Assisted Headspace Solid-Phase Microextraction" (Invited) 38th International Symposium on Capillary Chromatography, ISCC2014, May 18-23, 2014, Riva del Garda, Italy.
- 23. E. Psillakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction: Low volatility compounds take the fast lane" (Invited) 15th International Symposium on Advances in Extraction Technologies, ExTech®2013, August 4-7 2013, João Pessoa, Paraiba, Brazil.
- 24. E. Psillakis, "Monitoring the degradation of micropollutants in water using LPME" (Invited) PITTCON, March 12-17, 2006, Orlando, Florida, USA.

## Departmental talks

- 1. E. Psillakis, "Simple" analytical tools for studying complex environmental problems, November 6, 2020, Department of Chemistry, University of Crete, Greece
- E. Psillakis, University of Waterloo, Canada, Microextraction techniques in sample preparation: From "fundamentals" to real-word applications, February 28, 2020, Department of Chemistry, University of Waterloo, Canada
- 3. E. Psillakis, "Emerging and Persistent Organic Pollutants in Aquatic Environment: An Ever-Growing Problem", October 4, 2019, Department of Civil and Environmental Engineering, University of California Irvine, Irvine, USA.
- 4. E. Psillakis "Microextraction techniques in sample preparation: from «fundamentals» to real-word applications" June 19, 2019, University of Turin, Turin, Italy.
- 5. E. Psillakis "Emerging and Persistent Organic Pollutants in Aquatic Environments: Mega-sized concerns from a nanosized world", March 16, 2018, Guangxi University, Nanning, P.R. China.
- 6. E. Psillakis, "Unlocking the sample prep box", March 13, 2018, Sun Yat-sen University, Guangzhou, P.R. China.
- 7. E. Psillakis "Sample preparation: think big, act small", November 28, 2017, University of Porto, Portugal.
- 8. E. Psillakis "Sample preparation: think big, act small", February 9, 2017, Department of Chemistry, University of Waterloo, Canada.
- 9. E. Psillakis "Microextraction and environmental analysis: think big, act small", December 20, 2016, Department of Analytical Chemistry, University of Valencia, Spain.
- 10. E. Psillakis "Emerging and Persistent Organic Pollutants in Aquatic Environments: Mega-sized concerns from a nanosized world", January 29, 2015, Department of Civil and Environmental Engineering, Stanford University, San Francisco, USA.
- 11. E. Psillakis "Environmental analytical chemistry: It is all about engineering", January 27, 2015, Sonny Astani Department of Civil & Environmental Engineering, University of Southern California, USA.
- 12. E. Psillakis "Emerging and Persistent Organic Pollutants in Aquatic Environment: Mega-sized concerns from a nano-sized world" April 1, 2014, Sonny Astani Department of Civil & Environmental Engineering, University of Southern California, USA.

## **Talks in Annual Meetings**

1. E. Psillakis "EuChemS-DAC Sample Preparation Study Group and Network" National Annual Analytical Chemistry meeting of the Swidish Chemical Society, 3-4 May 2021, Online event

- 2. E. Psillakis "Green, simple and fast analytical tools for studying complex environmental problems" COST Action PortASAP Annual Meeting, 10-11 February 2021. Online event
- 3. E. Psillakis "Vacuum-assisted headspace microextraction: Faster, better, easier, gentler". 4th STARSS Conference on Separation Science. 4th STARSS Conference on Separation Science (Specialized Team for Advanced Research on Separation Science), November 30 December 1, 2020,
- 4. E. Psillakis "Presentation of WG4: Sample Treatment and Microfluidic" COST Action PortASAP Annual Meeting, June 18-19 2020. Online event
- E. Psillakis "The Sample Preparation Task Force of the European Chemical Society- Division of Analytical Chemistry" COST Action PortASAP Annual Meeting, June 18-19 2020. Online event

## **CONFERENCE PROCEEDINGS**

### **Short Abstracts in Conference Proceedings**

- E. Psillakis. "Sample Preparation: the excluded essential in Green Analytical Chemistry" (Keynote), 2nd Pan American Essential Oils Symposium, part to the CLAQ 2020 events, Cartagena de Indias, Colombia, October 11-15, 2021. Hybrid event.
- 2. E. Psillakis. "Green Sample Preparation" (Invited), IUPAC | CCCE 2021, the 48th World Chemistry Congress and 104th Canadian Chemistry Conference and Exhibition, 13-20 August, 2021, Online event.
- 3. E. Psillakis, N. Solomou D. Bowman, E. Fernadez, N. Koutela, D. Venieri, "LITTERED CIGARETTE BUTTS: THE FORGOTTEN TWO-SIDED TYPE OF PLASTIC POLLUTION", 7th International Conference on Industrial and Hazardous Waste Management, 27 30 July, 2021.
- 4. E. Psillakis. "Asking better questions in microextraction", 1st European Sample Preparation Conference, March 11 12, 2021, Online event.
- 5. N. Solomou, S. Alberti, M. Sotiropoulou, E. Fernandez, M. Ferretti, R. Szafnauer, E. Psillakis, UV-254 DEGRADATION OF NICOTINE IN NATURAL WATERS AND LEACHATES PRODUCED FROM CIGARETTE BUTTS AND HEAT-NOT-BURN TOBACCO PRODUCTS, 23st International Symposium on Advances in Extraction Technologies, ExTech®2021, June 29 July 3 2021, Alicante, Spain.
- 6. N. Solomou, E. Fernandez, R. Szafnauer, E. Psillakis, LEACHING OF PAHS FROM HEAT-NOT-BURN TOBACCO PRODUCTS AND CIGARETTE BUTTS, 23st International Symposium on Advances in Extraction Technologies, ExTech®2021, June 29 July 3 2021, Alicante, Spain.
- 7. A. Pateraki, D. Tzanetou, E. Psillakis, "Sub-ambient temperature sampling of volatiles from cheese using vacuumassisted headspace thin film microextraction and solid phase microextraction", 1st European Sample Preparation Conference, March 11 12, 2021, Online event.
- 8. N. Solomou, M. Sotiropoulou, E. Fernández, E. Psillakis, "Sorptive Extraction of PAHs and nicotine in leachates produced by cigarette butts and heat-not-burn tobacco products", 1st European Sample Preparation Conference, March 11 12, 2021. Online event.
- 9. S. Mascrez, E. Psillakis, G. Purcaro, "Vacuum-Assisted Headspace SPME: A Powerful Tool for Extra Virgin Olive Oil Profiling Enhancement", 1st European Sample Preparation Conference, March 11 12, 2021, Online event.
- 10. S. Mascrez, E. Psillakis, G. Purcaro, "Vacuum-Assisted Headspace SPME Under Sub-Ambient Temperature for the Analysis of Fish Samples", 1st European Sample Preparation Conference, March 11 12, 2021, Online event.
- 11. E. Psillakis, "Vacuum-assisted headspace microextraction: Faster, better, easier, gentler" (Invited), 4th STARSS Conference on Separation Science, Nov 30- Dec 1, 2020, Online event.
- 12. E. Psillakis "Green, simple and fast analytical tools for studying complex environmental problems", (Keynote), 5th Green & Sustainable Chemistry Conference, October 18-21 2020, Bonn, Germany.
- 13. N. Solomou, N. D. Spadafora, M. Santoro, J. Dunstan, Elia Psillakis "Spice up aroma": aroma fingerprinting of ginger, black pepper, and cinnamon powder by Vac-HiSorb TD-GC-MS" 21st International Symposium on Advances in Extraction Technologies, ExTech®2019 November 9-13 2019, Guangzhou, China.
- 14. E. Psillakis, N. Koutela and E. Fernández "Leaching of metals and nicotine from littered cigarettes and heated tobacco sticks in water: An overlooked issue?", 21st International Symposium on Advances in Extraction Technologies, ExTech®2019 November 9-13 2019, Guangzhou, China.
- 15. N. Solomou, N. D. Spadafora, M. Santoro, J. Dunstan, Elia Psillakis "Spice up aroma": aroma fingerprinting of ginger, black pepper, and cinnamon powder by Vac-HiSorb TD-GC-MS" 21st International Symposium on Advances in Extraction Technologies, ExTech®2019 November 9-13 2019, Guangzhou, China.
- 16. N. Solomou, N. D. Spadafora, M. Santoro, J. Dunstan, E. Psillakis "Use of Vacuum-assisted HiSorb sorptive extraction coupled with Gas chromatography/Mass Spectrometry to assess volatile composition of Chinese green tea and coffee drinks" 21st International Symposium on Advances in Extraction Technologies, ExTech®2019 November 9-13 2019, Guangzhou, China.
- 17. N. Solomou, N. D. Spadafora, M. Santoro, J. Dunstan, E. Psillakis "Vacuum-assisted HiSorb: Enhanced aroma profiling of Chinese green tea leaves and coffee powder" 21st International Symposium on Advances in Extraction Technologies, ExTech®2019 November 9-13 2019, Guangzhou, China.

- 18. N. Solomou, F. Wang, G. Ouyang, S. Mascrez, G. Purcaro, B. Sgorbini, C. Bicchi, and Elia Psillakis "Vacuum-assisted headspace (micro)extraction: Analytes take the fast lane" (Plenary) 21st International Symposium on Advances in Extraction Technologies, ExTech®2019 November 9-13 2019, Guangzhou, China.
- S. Mascrez, E. Psillakis, G. Purcaro "Exploring the performance of vacuum-HS-SPME for volatile profiling of olive oil" RAFA, Recent Advances in Food Analysis, November 5-8, 2019, Prague, Czech Republic.
- 20. E. Psillakis, "Emerging and Persistent Organic Pollutants in Aquatic Environment: An Ever-Growing Problem", (Invited), 2019 International Green and Sustainable Chemistry Conference, 16-19 October 2019, Beijing, China.
- 21. E. Psillakis, "Leaching of chemicals from littered cigarettes and heated tobacco sticks in water: An overlooked issue?", (Plenary) 22nd International Symposium "The Environment and Industry" SIMI 2019, September 25-27 2019, Bucharest. Romania.
- 22. E. Psillakis, Nicoleta Solomou, Evdokia Fountouli, Elena Fernández "Introduction to WG4 and the recent developments on the effect of vacuum on headspace (micro)extraction.", (Invited) Euroanalysis 2019, September 1-5 2019, Istanbul, Turkey.
- 23. E. Psillakis, N. Koutela and E. Fernández "Leaching of metals and nicotine from littered cigarettes and heated tobacco sticks in water: An overlooked issue?", Euroanalysis 2019, September 1-5 2019, Istanbul, Turkey.
- 24. S. Mascrez, E. Psillakis, G. Purcaro, "A comprehensive study on the effect of vacuum on HS-SPME efficiency in lipid matrix. A case study: olive oil aroma profiling" Euroanalysis 2019, September 1-5 2019, Istanbul, Turkey.
- 25. S. Mascrez, E. Psillakis, G. Purcaro, "A comparative study on the effect of vacuum on HS-SPME of olive oil volatiles", 43rd International Symposium on Capillary Chromatography & the 16th GCxGC Symposium, May 12-17 2019, Fort Worth, Texas, USA.
- 26. E. Psillakis, N. Koutela, M.-L. Saru, and E. Fernández, "Leaching of metals from cigarettes and heated tobacco sticks in natural water", EGU General Assembly 2019, April 7-12, 2019, Vienna, Austria.
- 27. M. Vakinti, N. Solomou, S.-M. Mela, N. Koutela, E, Gionfriddo, J. Pawliszyn and E. Psillakis, Vacuum-assisted headspace (micro)extraction expands to new methods, complex matrices and automation", 42nd International Symposium on Capillary Chromatography, May 15-18, 2018, Riva del Garda, Italy.
- 28. N. Koutela, M. Vakinti and E. Psillakis, "Microextraction: An ideal platform to analyze and simulate the environment", Keynote lecture to be presented at the 18<sup>th</sup> European Meeting on Environmental Chemistry (EMEC), November 26-29, 2017, Porto, Portugal.
- 29. N. Koutela, M. Vakinti and E. Psillakis, "Microextraction: Think big, act small", 19th International Symposium on Advances in Extraction Technologies (ExTech2017), July 27-30, 2017, Santiago de Compostela, Spain.
- 30. E. Yiantzi, M.-L. Glykioti and Elia Psillakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction Revisited", 18th International Symposium on Advances in Extraction Technologies & 22nd International Symposium on Separation Sciences (ExTech-ISSS'2016), July 03-06, 2016, Torun, Poland
- 31. E. Yiantzi, M.-L. Glykioti, M. Celeiro Montero, M. Llompart and E. Psillakis, Exploiting the versatility of Vacuum-Assisted Headspace Solid-Phase Microextraction, 40th International Symposium on Capillary Chromatography, May 29 June 03, 2016, Riva del Garda, Italy
- 32. E. Psillakis, E. Yiantzi, E. Nika, R. Zouboulaki and M.-L. Glykioti, "Sorptive microextraction: so simple and yet so complex", 16th Latin-American Congress on Chromatography (XVI COLACRO) and the 9th National Meeting on Chromatography (9ENC), 5-9 January, 2016, Lisbon, Portugal
- 33. E. Dovrou, E. Psillakis "Photolysis of Aqueous Fullerene C60 agglomerates in Environmental Waters" 17th International Symposium on Advances in Extraction Technologies, ExTech®2015, November 7 11, Guangzhou Guangdong China.
- 34. E. Nika, E. Yiantzi, N. Kalogerakis, E. Psillakis "Sorbent-Based Sorptive Microextraction: The underestimated power of using low cost and easy to reach materials as sorbents" Keynote Lecture, 17th International Symposium on Advances in Extraction Technologies, ExTech®2015, November 7 11, Guangzhou Guangdong China.
- E. Yiantzi, E. Psillakis, "Application of a new vacuum-assisted headspace SPME experimental setup to the analysis
  of PCB's in water" 30th International Symposium on Chromatography, ISC2014, September 14-18, 2014 Salzburg,
  Austria.
- 36. E. Yiantzi, N. Kalogerakis, E. Psillakis, "Vacuum Assisted HSSPME Application for the Extraction of PAHs from Sandy Soil Samples" 16<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2014, May 26-28, 2014, Chania, Greece.
- 37. E. Psillakis "A Novel Design for Vacuum-Assisted Headspace Solid-Phase Microextraction" 38<sup>th</sup> International Symposium on Capillary Chromatography, ISCC2014, May 18-23, 2014, Riva del Garda, Italy.
- 38. E. Psillakis, "Vacuum-assisted headspace solid-phase microextraction 13<sup>th</sup> Hyphenated Techniques in Chromatography and Hyphenated Chromatographic Analyzers, January 28-31, 2014, Bruges, Belgium.
- 39. K. Tsourounaki, E. Psillakis<sup>,</sup> "Application of solid phase microextraction to study the photolysis of di-n-propylisocinchomeronate in water" 8<sup>th</sup> International Conference Instrumental Methods of Analysis-Modern Trends and Applications, IMA 2013, September 15-19, 2013, Thessaloniki, Greece.
- 40. E. Psillakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction: Low volatility compounds take the fast lane" 15<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2013, August 4-7, 2013, Joao Pessoa, Brazil.

- 41. A. Perraki, C. Giatatzi, S. Kyparisis, N. Kalogerakis, E. Psillakis, "Beached plastic resin pellets used to measure PCBs and PAHs in the Cretan seawater" 15<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2013, August 4-7, 2013, Joao Pessoa, Brazil.
- 42. E.Psillakis, N. Kalogerakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction: Improved extraction of semivolatiles" 14<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2012, September 24–26, 2012, Messina, Italy.
- 43. K. Kalafata, E. Psillakis, "Microplastics as a concentration medium for polybrominated compounds present in seawater" 3<sup>rd</sup> International Conference on Hazardous Waste Management, September 12-14, 2012, Chania, Greece.
- 44. G. Aroniada, K. Tsourounaki, E. Psillakis, "Photodegradation of methylparaben in various environmental aqueous solutions by 254 nm irradiation" 3<sup>rd</sup> International Conference on Hazardous Waste Management, September 12-14, 2012, Chania, Greece.
- 45. E. Psillakis, N. Kalogerakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction: Improved extraction of semivolatiles" 36<sup>th</sup> International Symposium on Capillary Chromatography and 9<sup>th</sup> GCxGC Symposium, May 27 June 1, 2012, Riva del Garda, Italy.
- 46. E. Psillakis, N. Kalogerakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction" 14<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2011, September 27 29, 2011, Kuala Lumpur, Malaysia.
- 47. A. Mousouraki, E. Yiantzi, N. Kalogerakis, E. Psillakis "Vacuum-Assisted Headspace Solid-Phase Microextraction of polycyclic aromatic hydrocarbon from water samples" 7<sup>th</sup> International Conference Instrumental Methods of Analysis-Modern Trends and Applications, IMA 2011, September 18-22, 2011, Chania, Crete Greece.
- 48. E. Yiantzi, N. Kalogerakis, E. Psillakis "Automation Possibilities for Vacuum-Assisted Headspace Solid-Phase Microextraction" 7th International Conference Instrumental Methods of Analysis-Modern Trends and Applications, IMA 2011, September 18-22, 2011, Chania, Greece.
- 49. E. Psillakis, N. Kalogerakis, "Vacuum-Assisted Headspace Solid-Phase Microextraction" 7<sup>th</sup> International Conference Instrumental Methods of Analysis-Modern Trends and Applications, IMA 2011, September 18-22, 2011, Chania, Greece.
- 50. P. Pittakaras, L. Sanchez-Prado, E. Psillakis, "Screening the presence of pyrethroid insecticide residues in edible oils by using hollow-fibre liquid phase microextraction" 5<sup>th</sup> European Conference on pesticides and related organic micropollutants in the environment, Pesticides 2008, October 22-24, 2008, Marseille, France.
- 51. A. Palaioyianni, L. Sanchez-Prado, E. Psillakis, "Application of Headspace Solid Phase Microextraction to the Analysis of Organophosphorus Pesticides in Olive Oil" 5<sup>th</sup> European Conference on pesticides and related organic micropollutants in the environment, Pesticides 2008, October 22-24, 2008, Marseille, France.
- 52. I. P. Román Falcó, A. Papadopoulou, K. Tyrovola, A. Canals, E. Psillakis "Analysis of polyfluorinated sulfonates in water samples by equilibrium solvent microextraction-liquid chromatography mass spectrometry" 12<sup>th</sup> Jornadas de Análisis Instrumenta, October 21-23, 2008, Barcelona, Spain.
- 53. K. Kalafata, L. Sanchez-Prado, E. Koukouraki, E. Psillakis, "Matrix effects on the ice photodegradation of polybrominated flame retardants" 1<sup>st</sup> International Conference on Hazardous Waste Management, October 1-3, 2008, Chania, Greece.
- 54. N. Ratola, A. Alves, N. Kalogerakis, E. Psillakis, "Hollow fiber liquid-phase microextraction to determine polycyclic aromatic hydrocarbons in pine needles Euroanalysis XIV Conference, September 9-14, 2008, Antwerp, Belgium.
- 55. A. Papadopoulou, I. P. Román Falcó, K. Tyrovola, A. Canals, E. Psillakis, "Screening the presence of polyfluorinated sulfonates in water samples" 4<sup>th</sup> European Bioremediation Conference, September 3-6, 2008, Chania, Greece.
- 56. F. Stamati, N. Nikolaidis, E. Psillakis, N. Kalogerakis "Organic nitrogen as a potential indicator of livestock grazing impacts on Mediterranean soil quality" EUROSOIL 2008-Soil -Society -Environment, August 25 29, 2008, Vienna, Austria.
- 57. E. Psillakis "New sampling modes in Liquid-Phase Microextraction" 9<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2007, June 3-6, 2007, Ålesund, Norway.
- 58. L. Sanches-Prado, C. Garcia-Jares, M. Llompart, M. Lores, E. Psillakis "Aqueous photodegradation of polybrominated diphenyl ethers: effect of matrix and comparison with ice photodegradation" 9<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2007, June 3-6, 2007, Ålesund, Norway.
- 59. E. Giantzi, E. Psillakis "Determination of bisphenol A, nonyl- and octyl-phenol in water samples using the free microdrop preconcentration method 9<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2007, June 3-6, 2007, Ålesund, Norway.
- 60. E. Giantzi, E. Psillakis "Trace analysis of nolylphenol, octylphenol and bisphenol A in water samples using free microdrop Microextraction" GSC-AON 2007 Joint meeting 1st Asian-Oceanian Conference on Green and Sustainable Chemistry and the 7th Annual Green and Sustainable Chemistry Symposium, March 7-9, 2007, Tokyo, Japan.
- 61. E. Psillakis, "Monitoring the degradation of micropollutants in water using liquid-phase microextraction" EAAOP-1: First European Conference on Environmental Applications of Advanced Oxidation Processes, September 7-9, 2006, Chania, Greece.

- 62. O. Mihas, N. Kalogerakis, E. Psillakis, "Photocatalytic degradation of 2,4-dinitrotoluene in various waters: effect of dissolved species" First European Conference on Environmental Applications of Advanced Oxidation Processes, EAAOP-1, September 7-9, 2006, Chania, Greece.
- 63. R. Barro, C. Garcia-Jares, M. Llompart, N. Kalogerakis, D. Mantzavinos, E. Psillakis, "Development of a hollow-fibre liquid-phase microextraction method used for monitoring the sonochemical degradation of triclosan in water" Protection and Restoration of the Environment VIII, July 7-10, 2006, Chania, Greece
- 64. E. Psillakis, "Monitoring the degradation of micropollutants in water using LPME" PITTCON, March 12-17, 2006, Orlando, Florida, USA.
- 65. E. Psillakis "Monitoring the sonochemical degradation of organic micropollutants using microextraction techniques" Instrumental Methods of Analysis-Modern Trends and Applications, IMA 2005, October 2-6, 2005, Iraklion, Greece.
- 66. P. Kefalas, S. Loupassaki, S. Bezzi, E. Psillakis, C. Petrakis, A.C. Calokerinos, "Chemiluminescence in the quality control of olive-oil" Instrumental Methods of Analysis-Modern Trends and Applications, IMA 2005, October 2-6, 2005, Iraklion, Greece
- 67. D. Mantzavinos, E. Psillakis, "Enhancement of biodegradability of industrial wastewaters by chemical oxidation pretreatment" 2<sup>nd</sup> European Bioremediation Conference, June 30-July 42003, Chania, Greece
- 68. E. Psillakis, N. Kalogerakis, "Hollow-fiber Liquid-Phase Microextraction of phthalate esters from water" 4<sup>th</sup> International Symposium on Advances in Extraction Technologies, ExTech®2002, July 3-5, 2002, Paris, France.
- 69. E. Psillakis, N. Kalogerakis, "Solid-Phase Microextraction (SPME) versus single-drop microextraction (SDME) for the analysis of nitroaromatic explosives in water samples" 10<sup>th</sup> Symposium on Handling of Environmental and Biological Samples in Chromatography, April 1-4, 2001, Mainz, Germany.
- 70. E. Psillakis, N. Kalogerakis, "Identification of volatile compounds in olive-oil mill wastewaters by headspace solid-phase microextraction and GC/MS 10<sup>th</sup> Symposium on Handling of Environmental and Biological Samples in Chromatography, April 1-4, 2001, Mainz, Germany.
- 71. E. Psillakis, N. Kalogerakis, "Trace analysis of explosives in soil samples using solid-phase microextraction (SPME) and GC/MS" 9<sup>th</sup> Symposium on Handling of Environmental and Biological Samples in Chromatography, October 10-13,1999, Porto, Portugal.

# Peer-Reviewed Articles in Conference Proceedings

- 1. E. Psillakis, J. Cheng, M.R. Hoffmann, A.J. Colussi, "Enrichment factors of perfluoroalkyl anionic surfactants at the air/water interface. Implications for their global dispersal, 11<sup>th</sup> International Conference on the Environmental Science and Technology, CEST2009, September 3-5, 2009, Chania, Greece.
- 2. E. Kastanaki, E. Psillakis, "Hollow fibre liquid phase microextraction of selected organochlorine pesticides" 10<sup>th</sup> International Conference on the Environmental Science and Technology, CEST2007, September 5–7, 2007, Cos, Greece.
- 3. E. Giantzi, E. Psillakis, "Determination of bisphenol A, nonyl- and octyl-phenol in wastewater samples using a free microdrop preconcentration method" 10<sup>th</sup> International Conference on the Environmental Science and Technology CEST2007, September 5–7, 2007, Cos, Greece.
- 4. M. Charalabaki, E. Psillakis, N. Kalogerakis, "Toxicity assessment of common chemicals found in the untreated influent of the WWTP at the Industrial Zone of Heraklion-Crete" 10th International Conference on the Environmental Science and Technology, CEST2007, September 5-7, 2007, Cos, Greece.
- 5. E. Psillakis, D. Mantzavinos, A. Andreadakis, A. Tzimas, D. Mamais, M. Aghelopoulos, N. Kalogerakis, "Analysis of Organic Micro-Pollutants in Wastewater Treatment Plants using Solid-Phase Microextraction" Protection and Restoration of the Environment VII, June 28-July 1, 2004, Mykonos, Greece.
- 6. K. Perdikea, E. Psillakis, N. Kalogerakis, "Solid-phase microextraction to determine the migration of phthalates from plastic-ware to drinking water" 8<sup>th</sup> International Conference on Environmental Science and Technology, September 1-4, 2003, Limnos, Greece.
- 7. E. Psillakis, N. Kalogerakis and D. Mantzavinos, "Degradation of polycyclic aromatic hydrocarbons in aqueous solutions by ultrasonic irradiation" 3rd International Conference on Oxidation Technologies for Water and Wastewater Treatment, May 18-22, 2003, Goslar, Germany.
- 8. E. Psillakis, N. Kalogerakis, "Determination of phthalates in bottled Greek mineral water using SPME/GC-MS" Protection and Restoration of the Environment VI, July 2-5, 2002, Skiathos, Greece
- 9. E. Psillakis, N. Kalogerakis, "Identification of volatile and semi-volatile compounds in olive-oil mill wastewater by headspace solid-phase microextraction and gas chromatography 7<sup>th</sup> International Conference on Environmental Science and Technology, September 3-6, 2001, Syros, Greece.
- 10. E. Psillakis, I. Nikolakaki, N. Kalogerakis, "Liquid Phase Microextraction (LPME) for the analysis of PAHs in Water Protection and Restoration of the Environment V, July 3-6, 2000, Thassos, Greece.

# INTERVIEWS/ARTICLES IN ANALYTICAL CHEMISTRY MAGAZINES

1. The Analytical Scientist, "Putting Sample Prep Centerstage" Elia Psillakis, Manuel Miró, Stig Pedersen-Bjergaard, 2020, Issue 88.

- 2. The Analytical Scientist, "The criticality in sample preparation" by E. Psillakis, 2020, Issue 86.
- 3. LCGC Europe's 30th Anniversary issue, "Sample Preparation: The State-of-the-Art", Chairperson: Doug Raynie, Participants: Hian-Kee Lee, Lourdes Ramos, Jared L. Anderson, Elia Psillakis, David Benanou. November 2017, Volume 30, Number 11.
- 4. The Analytical Scientist, "Unlocking the Sample Prep Black Box" by E. Psillakis, 2016, Issue 106.

## **WEBINARS**

- 1. LCGC and ChromSoc virtual symposium "Separation Science: The State Of The Art", 18 October 2021
- 2. LCGC Video discussion panel "Advances in Sample Preparation" 18 September 2020.

## **PATENTS**

METHODS AND VIAL CLOSURES FOR HEADSPACE EXTRACTION UNDER VACUUM, WIPO, PCT, International Publication Number.: WO 2021/100006 A1

METHODS AND VIAL CLOSURES FOR HEADSPACE EXTRACTION UNDER VACUUM, USPTO, Pub. No.: US 2021/0156768 A1

VACUUM ASSISTED HEADSPACE MICROEXTRACTION SAMPLING DEVICES AND METHODS, Patent pending, European Patent Office (Patent No: 24850335); Patent awarded from the Hellenic Industrial Property Organisation (20110100054)

## **SPIN OFF COMPANY**

Founder of ExtraTech Analytical Solutions Single Member PC (spin off company; founded in December 2019). The company capitalizes from its vast research experience in sample preparation to design and build innovative sample preparation solutions for major companies producing auto-samplers for analytical instrumentation. Products ensure fast extraction under mild experimental conditions and high sample throughput that reduce laboratory costs. The innovative solutions proposed are critical for analytical laboratories dealing with food, flavor, beverages, and environmental applications.

# **FUNDING**

# **European and National grants**

- European network for the promotion of portable, affordable and simple analytical platforms, PortASAP; COST Action CA16215; Role: Work-group Leader; MC Member; Funding Source: COST Association; Budget: € 150000/year; Duration: 2017-2021
- 2. Erasmus+ European exchanges and mobility; Role: Institutional Coordinator; Budget: € 200000 Duration: 2015-2016
- 3. New biotechnologicaL approaches for biodegrading and promoting the environmental biotransformation of synthetic polymeric materials. Role: Research Collaborator; Funding Source: FP7-KBBE; Budget: € 4000000; Duration: 2012-2015
- 4. Microalgae-bio-products. Role: Research Collaborator; National Strategic Reference Framework. Budget: € 146800 € Duration: 2012-2015
- 5. ULIXES: Unravelling and expLoiting MedIterranean Sea microbial diversity and ecology for XEnobiotics' and pollutantS' clean up. Role: Research Collaborator; Funding Source: FP7-Collaborative Research program; Budget: € 3902892 Duration: 2010-2014
- 6. Innovation Center of Crete. Role: Research Collaborator; Funding Source: Hellenic ministry of Finance and Competiveness (EEA grants); Budget: € 498800; Duration: 2011-2012
- 7. Detection and fate of pharmaceuticals and personal care products in the environment. Role: Project Coordinator; Funding Source: Heraklitus II (Operational Programme "Education & Lifelong Learning"); Budget: € 45000; Duration: 2010-2013
- Development and application of methods and software for recording and evaluating Hellenic water quality data, Role: Research Collaborator; Funding Source: Hellenic Ministry of Environment, Energy and Climate Change; Budget: € 147600: Duration: 2010-2011
- 2. Agricultural use of treated wastewater as an alternative water resource. Role: Research Collaborator; Funding Source: Hellenic ministry of Finance and Competiveness (EEA grants); Budget: € 318000; Duration: 2010-2011
- 3. Characterisation of landfill leachates. Role: Research Collaborator; Sponsor: Chania Municipal Landfills Office; Budget: € 60000; Duration: 2009-2010
- Protection of fishery resources in Laconia after extensive maritime pollution. Role: Research Collaborator; Funding Source: Prefecture of Lakonia (E.P.AL, Operational Programme for Fisheries 2006-2010); Budget: € 600000; Duration: 2008-2009

- Initiatives for protection measures for the aquaculture and fishery resources of Kavala after marine pollution emergencies Role: Research Collaborator; Funding Source: Prefecture of Kavala (E.P.AL, Operational Programme for Fisheries 2006-2010); Budget: € 70000; Duration: 2008
- 6. Integration of Environmentally Friendly Technologies in Watershed Management Plans for the Minimization of Agricultural Pollution in the Evrotas River Basin, Role: Research Collaborator; Funding Source: LIFE-Environment demonstration projects; Budget: € 2800000; Duration: 2005-2009
- 7. Development of new analytical methods used for the detection/analysis of nonylphenols in water samples (2005-2007). Role: Project Coordinator; Funding Source: Ministry of Education (EPEAEK-Pythagoras II-Support of Research Teams in Universities); Budget: € 90000; Duration: 2005-2007
- 8. Novel environmental technologies for the determination and removal of triclosan from water. Role: Project Coordinator; Funding Source: General Secretariat for Research and Technology (GSRT)-Collaboration between Greece and Britain (University of Bath); Budget: € 11795; Duration: 2006-2008
- 9. Development of a new and simple method for the determination of endocrine disrupters in olive oil Role: Research Coordinator; Funding Source: Unistep; Budget: € 9000; Duration: 2007-2008
- Microwaves and ultrasound activation in chemical analysis, COST Action No.: D32; Funding Source: COST Association; Role: MC Member; Duration: 2005-2009

## **Funding from the Private Sector**

- RASP Program for Laboratory consumables; Role: Coordinator; Funding Source: RESTEK, Budget: € 3000; Duration: 2020-2021
- 2. SPME fibers and Thermogreen Septa; Role: Coordinator; Funding Source: SUPELCO Bellefonte, USA, Budget: € 5000: Duration: 2020-2021
- 3. Leaching of chemicals of environmental concern from used heated tobacco sticks to natural water and comparison with leaching from smoked conventional cigarettes, Role: Coordinator; Funding Source: PMI Science; Budget: € 99533; Duration: 2018-2020
- 4. Vacuum-assisted headspace HiSorb, Role: Coordinator; Source: Markes International Ltd Budget: € 50000 Year: 2019 TD100-xr analytical instrumentation and related accessories and consumables installed in the laboratory.
- 5. Several contracts for routine analytical services in my laboratory with a budget up to € 5000

# Internal funding

- 1. Purchase of a GC-MS. Funding Source: TU-Crete; Budget: € 130000. Year: 2020
- 2. Purchase of a GC-lon Trap MS. Funding Source: Research Committee of TU-Crete; Budget: € 80000. Year: 2010
- 3. Purchase of an LC-MS. Funding Source: Region of Crete-Hellenic Republic Decentralized Administration of Crete; Budget: € 150000 Year: 2009
- 4. Environmental Ice Photochemistry of Chlorinated Pesticides. Role: PI; Funding Source: Research Committee of TUC; Budget: € 12000; Duration: 2008-2010.
- Development of new analytical protocols based on liquid-phase microextraction used for monitoring trace amounts of pesticides in aqueous and solid environmental samples. Role: PI; Funding Source: Research Committee of TUC; Budget: € 5000; Duration: 2005-2006.

## **Funding for International Research exchanges**

- 1. Erasmus+, International Credit Mobility, Technical University of Crete, Greece- University of South Australia, Australia, Role: Coordinator; Budget: € 6000 Duration: 2020-2022
- 2. Erasmus+, International Credit Mobility, Technical University of Crete, Greece-CALTECH, USA Role: Coordinator; Budget: € 6000 Duration: 2019-2021
- 3. Erasmus+, International Credit Mobility, Technical University of Crete, Greece- University of Waterloo, Canada Role: Coordinator; Budget: € 6000 Duration: 2019-2020
- 4. Erasmus+, International Credit Mobility, Technical University of Crete, Greece-Sun Yat-sen University, China Role: Coordinator; Budget: € 11000 Duration: 2017-2018
- 5. Erasmus+, International Credit Mobility, Technical University of Crete, Greece-lowa State University, USA, Role: Coordinator; Budget: € 5000 Duration: 2016-2017
- 6. Erasmus+, International Credit Mobility, Technical University of Crete, Greece-University of Waterloo, Canada, Role: Coordinator; Budget: € 6000 Duration: 2016-2017

# INTER-INSTITUTIONAL AGREEMENTS WITH EUROPEAN UNIVERSITIES (ERASMUS+)

- 1. Universita di Genova, Genova, Italy
- 2. Universita Degli Studi di Torino, Torino, Italy,
- 3. Universidad de Santiago de Compostela, Santiago de Compostela, Spain

- 4. Universidad de Valencia, Valencia, Spain
- 5. Universidad de la Laguna, Tenerife, Spain
- 6. Nicolaus Copernicus University in Torun, Torun, Poland

ΔΠ	MI	NIS	TRA	ΙΤΔ	O	N

2019-Present	Head of the "Sample Preparation" Task Force of the European Chemical Society-Division of Analytical Chemistry
2017-Present	Leader of Work-Group 4 "Sample preparation and microfluifics", European network for the promotion of portable, affordable and simple analytical platforms, PortASAP; COST Action CA16215
2017-2019	Director Graduate Studies, School of Environmental Engineering, TUC.
2014-2016	Deputy Rector of Academic Affairs and Research, TUC
2015	President of the board of Greek Deputy Rectors of Academic Affairs at the Synod of Greek Higher Education Institutions
2013-2021	Member of the Dean's Committee School of Environmental Engineering, TUC
2013-2014	Director Graduate Studies, School of Environmental Engineering, TUC.
2013-2014	Elected Member of the School Council, School of Environmental Engineering, TUC
2010-2011	Elected Member of the School Council, School of Environmental Engineering, TUC
2008-2009	Elected Member of the School Council, School of Environmental Engineering, TUC
2008-2014	Member of the School of Environmental Engineering Studies Committee, TUC
2005-2014	Student Affairs Committee, TUC
2005-2021	Laboratory Safety Committee, School of Environmental Engineering, TUC

DDODOGAL	EVALUATION EXPERIENCE

2020-	Expert for monitoring the progress of approved projects in ELIDEK, submitted within "Post-doctoral Research Projects"
2020	Evaluator for the Swiss National Science Foundation (SNSF) for project proposals submitted within: "Ambizione".
2019	Expert Evaluator for the Croatian Science Foundation (HRZZ) for project proposals submitted within "Research Projects"
2019	Expert evaluator for ELIDEK, Greece for project proposals submitted within "Post-doctoral Research Projects"
2018	Expert Evaluator for the Central Finance and Contracting Agency (CFCA) of the Republic of Latvia for project proposals submitted within the measure Industry-Driven Research
2018	Expert Evaluator for the State Scholarships Foundation (IKY). Remote evaluation of applications requesting funding for PhD studies.
2017	Member of the evaluation panel of "erevno-dimiourgo-kainotomo" (organized by EYDE-ETAK), involving proposals promoting innovation and collaboration between Universities and companies with a budget up to 1 million euros.
2016-2017	Member of the evaluation panel of the 9 <sup>th</sup> and 10 <sup>th</sup> International University Competition on Entrepreneurship and Innovation run by a network of 18 universities in Greece and Cyprus with the organizational support of the Athens University of Economics & Business.
2014	Invited Vice-Chair RISE Research and Innovation Staff Exchanges H2020-MSCA-RISE-2014 Evaluation Exercise.
2011-2013	Two times Invited Vice-Chair: Remote evaluation phase and panel meeting in Brussels for the FP7 People Individual Marie Curie Actions (Chemistry Panel), involving Intra-European Fellowships (EIF) International Outgoing Fellowships (OIF) and International Incoming (IIF) Fellowships.
2008-2011	Expert Evaluator: Remote evaluation phase and panel meeting in Brussels for the FP7 <i>People Individual Marie Curie Actions</i> (Chemistry Panel), involving Intra-European Fellowships (EIF) International Outgoing Fellowships (OIF) and International Incoming (IIF) Fellowships.
2009-2010	Expert Evaluator: Remote evaluation of the <i>National Framework Programme for Research</i> , Technological Development and Innovation Programme organised by the Research Promotion Foundation, Government of the Republic of Cyprus (2009-2010)
2005-2006	Expert Evaluator: Remote evaluation phase and panel meeting in Brussels for the FP6 <i>People Individual Marie Curie Actions</i> (Chemistry Panel), involving Intra-European Fellowships (EIF) International Outgoing Fellowships (OIF) and International Incoming (IIF) Fellowships.

### **TEACHING EXPERIENCE**

New courses developed at TUC

2011-Present Second-Year undergraduate course "Water Quality and Pollution", TUC

This is a laboratory course supplemented by lectures that focus on selected analytical methods used to determine water quality and pollution. The course covers introduction to water quality parameters (with a focus on emerging and persistent pollutants), pollutants properties and measurement techniques. Fate and transport of pollutants in relation with their physicochemical properties, risk assessment in relationship to water quality are also covered.

2005-Present Third Year undergraduate course "Aquatic Chemistry", TUC 2004-2005 Final-Year undergraduate course "Geochemistry", TUC

This course details the quantitative treatment of chemical processes in aquatic systems such as lakes, oceans, rivers, estuaries, groundwaters, and wastewaters. It includes a brief review of chemical thermodynamics that is followed by discussion of acid-base, precipitation-dissolution, coordination, and reduction-oxidation reactions. Emphasis is on equilibrium calculations as a tool for understanding the variables that govern the chemical composition of aquatic systems and the fate of inorganic pollutants.

2006-2012 First-Year undergraduate course "General Chemistry", TUC

This course provides an introduction to the chemistry of inorganic, and organic molecules. The emphasis is on basic principles of atomic and molecular electronic structure, thermodynamics, acid-base and redox equilibria and chemical kinetics.

2004-Present Graduate course "Advanced topics in environmental organic chemistry", TUC
This module focuses on the fate and behavior of organic pollutants in the environment, considering fundamental principles and processes, which control their fate in environment systems. The material delivered in this module will be supported by detailed case studies, taken from the peer-reviewed sources. This module aims to provide understanding of the fundamental principles relating to the fate and behavior of contaminants in environmental media for scientists with relevant degrees. The course will also cover the latest advancements in analytical methods such as liquid chromatography (LC), gas chromatography (GC) and mass spectrometry (MS). Special focus will be made on how these methods, and others, can be used to solve different problems of environmental chemical nature. Current trends in sample preparation techniques in a variety of samples will be duly covered. During the course the students will practice to independently evaluate and select between different analysis and sampling methods. Students will also practice to collaborate and solve problems in group using "problem-based learning" methods. The experimental work during the

2004-2017 Graduate course "Advanced topics in environmental chemistry", TUC

This course examines the fundamental molecular processes that govern the fate and transformation of organic and inorganic contaminants in natural environmental and engineered systems. Thermodynamic principles and molecular property descriptors are used throughout the course to develop predictive relationships for organic contaminant solubility and partitioning between environmental phases, sorption to solid surfaces and transformation processes. The course also includes laboratory (responsible: Professor E. Psillakis) and modeling (responsible: Professor N. Nikolaidis) exercises.

2002-2014 Graduate course "Analysis of environmental samples", TUC

course will be examined through carefully prepared scientific reports.

Students taking this course acquire knowledge of the advanced tools available for the chemical analysis of organic and inorganic contaminants in a variety of environmental samples (solid, liquid and gas). They learn the appropriate procedures for the collection, preservation, and treatment of environmental samples and the subsequent instrumental analysis. Data analysis methods necessary to produce accurate, sensitive and reproducible analytical results are also treated.

## **THESES SUPERVISION**

### **PhD Theses**

(2015) Tsourounaki Kostoula "Detection and fate of pharmaceuticals and personal care products in the environment" Duration: 2010-2015

(2014) Yiantzi Evangelia "Microextraction under vacuum conditions" Duration: 2011-2014

## **Current PhD Students:**

Nikoleta Solomou, 2018-Present Ageliki Pateraki, 2020-Present Irina Kandylioti, 2021-Present

## **Graduates Theses**

(2020) Koutela Niki "Leaching of metals form tobacco products"

- (2019) Vakinti Maria "Determination of haloanisoles in wine using vacuum-assisted headspace solid-phase microextraction"
- (2015) Kourounioti Efstathia "Photolytic fate of dibromodimethylbenzoquinone in environmental water samples"
- (2012) Mousouraki Antonia "Investigation of parameters affecting the solid phase microextraction under vacuum conditions"
- (2010) Kalafata Konstantina "Microplastics as a means of preconcentration and transport of hydrophobic pollutants in water: The case of brominated diphenyl ether BDE-47"
- (2010) Papadopoulou Aikaterini "Electromembrane extraction of parabens in water and wastewater samples"
- (2008) Tsourounaki Kostoula "Thin Film Modified Electrodes with Cellulose-Chitosan Films for the Accumulation and Detection of Triclosan"
- (2008) Koutsioubi Evangelia "Fast determination of octanol-water coefficients of organochlorinated compounds"
- (2007) Yiantzi Evangelia "Vortex-assisted liquid-liquid microextraction of octylphenol, nonylphenol and bisphenol-A"
- (2006) Dalaina Spyridoula "Determination of organic micropollutants using SPME/GC-MS in samples taken from the industrial site in Heraklion, Crete"
- (2005) Papadomanolaki Theodora "Recent advances in liquid phase microextraction of organic micropollutants"
- (2005) Skylourakis Antonis "Pesticide determination in olive oil samples"
- (2004) Charalabaki Magda "Analysis of polycyclic aromatic hydrocarbons in wastewater treatment plant effluents using hollow fibre liquid-phase microextraction"
- (2004) Mekiki Dorothea "Solid-Phase Microextraction for the Analysis of Nitropolycyclic Aromatic Hydrocarbons in Water»
- (2003) Manousaki Eleni "Degradation of sodium dodecylbenzenesulfonate in water by means of ultrasonic irradiation"
- (2004) Athanassova Dora "Sonochemical degradation of olive-oil wastewater phenolics monitored by Co(II) EDTA-Induced luminol chemiluminescence"

# **Undergraduate Theses**

- (2021) Kandylioti Irina, (2021) "Evaluation of the data obtained from Greek Coastal clean-ups during "Typhoon" 2019-2021 project"
- (2021) Tzanetou Dimitra, "Optimization of vacuum-assisted microextraction for the analysis of the volatile profile of dairy products"
- (2020) Sotiropoulou Maria. "Photolytic fate of nicotine in leachates produced form unused and unused tobacco prodcuts"
- (2019) Fountouli Evdokia. "Vacuum assisted eadspace microextraction sampling of volatile analytes (BTEX)
- (2018) Sofia Maria Mela, "Vacuum Assisted Headspace Solid Phase Microextraction of organochlorinated pesticides in water and fruit juices"
- (2017) Koutela Niki, "Vacuum Assisted Single Drop Microextraction of PAHs in water samples"
- (2016) Dovrou Eleni, "Photolytical fate of fullerene C60 in environmental water samples"
- (2015) Zouboulaki Rodopi, "Quantitative determination of fullerene C60 in water samples"
- (2015) Nika Eliza, "Quantitative determination of Polycyclic Aromatic Hydrocarbons using plastic resin pellets"
- (2015) Glykioti Maria-Lyto "Rapid, Room Temperature Determination of Earthy-Musty Odor Compounds in Water using Vacuum-Assisted Headspace Solid Phase Microextraction"
- (2014) Kalogeraki Georgia "Sorption of hydrophobic pollutanats on plastic resin pellets"
- (2014) Lagoudakis Charalabos "Vaccum-assisted solid-phase microextraction of organochlorinated pesticides from water samples"
- (2013) Peloubi Eneisa "Vortex-assisted liquid-liquid microextraction of of fullerene from water samples"
- (2011) Tsigarida Anastasia "Detection of organochlorinated compounds in water samples using microextraction under vacuum conditions"
- (2011) Xynogalou Maria "Determination of repellents compounds in aqueous solutions using Solid phase microextraction coupled with GC / MS"
- (2010) Voulgari Kerasa "Optimization of solid-phase microextraction under vacuum conditions"
- (2010) Papadaki Niki "Modelling solid-phase microextraction under vacuum conditions"
- (2010) Aroniada Georgia "Photolytic fate of parabens in environmental water samples"
- (2009) Mastromihali Anna "Rapid Determination of Octanol-Water Partition Coefficient using Vortex-Assisted Liquid-Liquid Microextraction"
- (2008) Kalafata Konstantina "Matrix effects on the ice photodegradation of polybrominated flame retardants"
- (2008) Pittakaras Paris "Screening the presence of pyrethroid insecticide residues in edible oils by using hollow-fibre liquid phase microextraction"
- (2008) Papadopoulou Aikaterini "Fast screening of perfluorooctane sulfonate in water using vortex-assisted liquid-liquid microextraction coupled to liquid chromatography-mass spectrometry"
- (2008) Palaioyianni Artemis "Application of Headspace Solid Phase Microextraction to the Analysis of Organophosphorus Pesticides in Olive Oil"
- (2008) Kefaloyiannis Emmanouil "Modelling liquid-phase microextraction"

- (2008) Mihas Orestis "Photolysis of 2.4-dinitrotoluene in various water solutions: effect of dissolved species"
- (2007) Che Franklin "Fate of α- and β-Endosulfan in water"
- (2005) Bakouras Xenofon "Micropollutants in wastewater"
- (2004) Theodoropoulou Despina "Phthalate esters: sources, toxicity and fate"

### **Current UG students:**

Giorgos Portokallas

### TRAINING OF INTERNATIONAL PhD STUDENTS IN THE LABORATORY

Martina Machová 01/10/2020-15/12/2020 continuation, University of Pardubice, Czech Republic

Lúa Vázquez Ferreiro 17/02/2020-31/03/2020, University of Santiago de Compostela, Spain Martina Machová 01/03/2020-30/05/2020, University of Pardubice, Czech Republic

Jose Gru Escribano 01/09/2019-30/11/2019, University of Valencia, Spain

Aray Zhakupbekova 01/09/2019-30/11/2019, Al-Farabi Kazakh National University, Kazakhstan

Stefano Alberti 21/01/2019-20/06/2019, University of Genoa, Italy
Nathalie Delbecque 11/02/2019-24/05/2019, University of Liege, Belgium
Fuxin Wang 10/10/2018-09/01/2019, Sun Yat-sen University, China

Maria Celeiro Montero 10/10/2014-19/12/2013, University Santiago de Compostela, Spain

Iván P. Román Falcó 3/3/2008-18/4/2008 and 15/9/2008-14/12/2008 University of Alicante, Spain

Mike Bonne 8/2/2008-17/3/2008, University of Bath, U.K.
Irama Sanchez Boscan 2/5/2007-3/8/2007, University Rovira i Virgili, Spain 17/4/2007-23/7/2007, University of Porto, Portugal

Lucía Sánchez Prado 15/1/2007-31/3/2007, University Santiago de Compostela, Spain

Fran J. Pena Pereira

1/10/2006-30/10/2006 and 1/12/2008-2/2/2009, University de Vigo, Spain
Ruth Barro

18/9/2005-18/12/2005, University Santiago de Compostela, Spain
Lorena Vidal

1/11/2004-30/11/2004 November 2004, University of Alicante, Spain
Petri Efstathiou

1/4/2007-30/4/2007, Chemistry Laboratory of the State of Cyprus, Cyprus

### SUPERVISION OF POST-DOCTORAL RESEARCHERS

Dr Evangelia Yiantzi (May 2020-December 2020)

Dr Elena Fernadez (September 2018-August 2019)

Dr Evangelia Yiantzi (October 2014-February 2018)

Dr Lucía Sánchez Prado (January 2008-December 2008). Funded by the Spanish Ministry of Education and Science.

### THESES EVALUATION EXPERIENCE

TUC PhD Theses: Member of the tribunal and examination committee of nine PhD Theses awarded by TUC.

**TUC Diploma and Master Theses**: Member of 60 examinations committees for Diploma and Master Theses awarded by TUC

### **International PhD Theses**

- (2021) Frederik André Hansen, University of Oslo, Norway "Electromembrane extraction of polar pharmaceutical bases and endogenous metabolites". First Opponent for the PhD Thesis (supervisor Professors S. Pederseen-Biergaard)
- (2020) Verma Neeraj, University of South Australia, Adelaide, Australia "In-vivo sampling strategies: development of a robust equilibrium approach". The doctorate thesis carried out at University of South Australia (supervisor Professor E. Hilder).
- (2017) Elena Fernadez Martinez, University of Alicante, Spain, "Nuevos avances en metodologías analíticas basadas en técnicas miniaturizadas de extracción en fase sólida y en fase líquida", Member of the tribunal committee for the European PhD dissertation of Elena Fernández Martínez, Departamento de Quimica Analitica, Universidad de Alicante (supervisor Professor L. Vidal)
- (2017) Alejandra Abellán Llobregat, University of Alicante, Spain, "Development of electrochemical sensors based on nanostructured carbon materials for health-care applications". Examiner for the European PhD dissertation of Alejandra Abellán Llobregat, Departamento de Quimica Analitica, Universidad de Alicante (supervisor Professor L. Vidal)
- (2017) Alicia Latorre Fernandez, University of Santiago de Compostela, Santiago de Compostela, Spain, "Development of new analytical methodologies to assess the incidence and stability of Fusarium fungi mycotoxins in corn silages samples". External Examiner for the European PhD dissertation of Alicia Latorre Fernandez, Departamento de

- Quimica Analitica, Nutricion y Bromatologia, Facultad de Quimica, Instituto de Investigacion y Analisis Alimentario, Universidad de Santiago de Compostela (supervisor Professo M. Llompart)
- (2017) María José Trujillo-Rodríguez, University of La Laguna, Tenerife, Spain, "Desarrollo de Metodologías Analíticas de Microextracción Empleando Novedosos Materiales Basados en Líquidos Iónicos y sus Derivados". External Examiner for the European PhD dissertation of María José Trujillo-Rodríguez Departamento de Quimica Analitica, Universidad de la Laguna, Spain (supervisor Professor V. Pino)
- (2011) Zacarías León González, University of Valencia, Valencia, Spain; Desarrollo de métodos analíticos para el estudio de procesos derivados de la absorción percutánea de los filtros UV contenidos en los productos cosméticos para la protección solar". External Examiner for the European PhD dissertation of Zacarías León González, Departamento de Química Analítica, Universidad de Valencia, Spain (supervisor Professor Alberto Chisvert Sanía)
- (2009) Gjelstad Astrid, University of Oslo, Oslo, Norway; "Development of electromembrane extraction a new principle for rapid isolation and enrichment of ionic drugs". First Opponent for the PhD Thesis of Astrid Gjelstad, University of Oslo, Norway (supervisors Professors S. Pederseen-Bjergaard and Knut Rasmussen)
- (2009) Fernandez Alvarez M., University of Santiago de Compostela, Santiago de Compostela, Spain; "Estudio del comportamiento fotoquímico y determinación de compuestos fitosanitarios en matrices medioambientales y agroalimentarias mediante técnicas avanzadas de extracción y microextracción". Member of the examination committee for the European PhD dissertation of Fernandez Alvarez M., Departamento de Quimica Analitica, Nutricion y Bromatologia, Facultad de Quimica, Instituto de Investigacion y Analisis Alimentario, Universidad de Santiago de Compostela, Spain (supervisor Professor M. Lores)
- (2009) Vidal Lorena, University of Alicante, Alicante, Spain "Development and evaluation of new strategies for the miniaturization of the sample preparation". External Examiner for the European PhD dissertation of Lorena Vidal, University of Alicante, Spain (supervisor Professor A. Canals)
- (2007) Sánchez Prado Lucia, University of Santiago de Compostela, Santiago de Compostela, Spain "Estudio de la fotodgradacion de compuestos organicos mediante microextraccion en fase solida, cromatografia de gases y espectrometria de masas". Member of the examination committee for for the European PhD dissertation of Lucia Sánchez Prado, Universidad de Santiago de Compostela, Spain (supervisor Professor M. Llompart)
- (2006) Barro Ruth, University of Santiago de Compostela, Santiago de Compostela, Spain "Optimizacion de nuevos metodos para la determinacion de contaminantes organicos en aire". Memebr of the examination commitee. The doctorate thesis carried out at Departamento de Quimica Analitica, Nutricion y Bromatologia, Facultad de Quimica, Instituto de Investigacion y Analisis Alimentario, Universidad de Santiago de Compostela, Spain (supervisor Professor M. Llompart)

## In progress

Aray Zhakupbekova, Al-Farabi Kazakh National University, Almaty, Kazakhstan (supervisor Senior lecturer N.Kh. Baimatova). Member of the tribunal committee. Expected graduation year 2020

# **REVIEWER FOR ISI JOURNALS**

Analytical Chemistry, Environmental Science and Technology, Analytica Chimica Acta, Science of the Total Environment, Journal of Hazardous Materials, Talanta, Environmental Pollution, Environment International, Environmental Research, TrAC-Trends Analytical Chemistry, Separation and Purification Technology, Microfluidics and Nanofluidics, Journal of Chromatography A, Journal of Separation Science, Water Research, Chemosphere, Journal of Agricultural and Food Chemistry, Food Analytical Methods, Journal of Chemical Technology and Biotechnology, Journal of AOAC International, Water, Air, and Soil Pollution, Chromatographia, Journal of Environmental Analytical Chemistry, Journal of Chromatographic Science, Environmental Engineering Science, Water Environmental Analytical Chemistry, Journal of Membrane Science, Analytical Methods, MethodsX, Chemical Engineering Journal, Analytical and Bioanalytical Chemistry, Sustainable Chemistry and Pharmacy.

# **OUTREACH ACTIVITIES**

2020-Collaboration with the A.C. Laskaridis Foundation for promoting the environmental problem with single-use plastics

2019-Coordination of the 2<sup>st</sup> Conference of PhD Students of the School of Environmental Engineering, Role: Chair, Technical University of Crete, December, 13, 2019

2018-Establishment and coordination of the 1<sup>st</sup> Conference of PhD Students of the School of Environmental Engineering, Role: Chair, Technical University of Crete, December, 15, 2019

2015-Science and Technology Fair for Primary School Students, Role: Coordinator, October 17, 2015, Technical University of Crete, University Campus (5000 pupils and their parents)

2014-Science and Technology Fair for Primary School Students, Role: Coordinator, October 18, 2014, Technical University of Crete, University Campus (4000 pupils and their parents)

2014-Establishment and coordination of Fresher's Day at TUC (Welcome day)

2015-Establishment and coordination of Open Day at TUC

2013-Establishment and coordination of Science and Technology Fair for Primary School Students, December 9, 2013, Technical University of Crete, University Campus (2000 pupils and their parents)

2012- Establishment and coordination of Science and Technology Fair for Primary School Students, December 8, 2012, 8<sup>th</sup> Primary School Chania, Greece (800 pupils and their parents)

# LANGUAGE SKILLS

Fluency in written and spoken English, French and Greek.

# **PERSONAL DETAILS**

Date of Birth: 31 March 1971 Gender: Female

Marrial Status: Married, two children Nationality: Greek