

PERSONAL INFORMATION

Dr. Manolis Tsapakis



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 State personal website(s)

Sex Male | Date of birth 09/10/1971 | Nationality Greek

WORK EXPERIENCE

- 1995-1998 **Technical scientist at the Institute of Marine Biology of Crete, Heraklion - Crete (Greece)**

Active participation in the research projects in the field of Chemical Oceanography and organise multidisciplinary field and laboratory experiments at a European scale.
[Business or sector](#) Research centre
- 1998-2001 **Research scientist at the Environmental Chemical Processes Laboratory, Department of Chemistry, University of Crete**

Active participation in the research projects in the field of environmental and atmospheric chemistry
[Business or sector](#) Academic University
- 1998-2011 **Part-time professor at the Technological University of Crete, Heraklion Greece.**

Teaching and supervising laboratory exercises of chemical technology course
[Business or sector](#) Academic University
- 2001-2006 **Research scientist at the Hellenic Centre of Marine Research (HCMR), Greece**

Active participation in the research projects in the field of chemical oceanography as a team leader
[Business or sector](#) Research Centre
- 2006-2012 **Associated Researcher (Grade C) at the Institute of Oceanography, Hellenic Centre of Marine Research, Greece**

Principal investigator and team leader in several national and EU research projects
[Business or sector](#) Research Centre
- 2012-2017 **Senior Researcher (Grade B) at the Institute of Oceanography, Hellenic Centre of Marine Research, Greece**

Principal investigator and team leader in several national and EU research projects
[Business or sector](#) Research Centre
- 2017-today **Research Director (Grade A) at the Institute of Oceanography, Hellenic Centre of Marine Research, Greece**

Principal investigator and team leader in several national and EU research projects
[Business or sector](#) Research Centre

EDUCATION AND TRAINING

- 1998-2003. Date of award 25/7/2003 **PhD student at the Department of Chemistry, University of Crete, Greece**

Ph.D. in Environmental Organic Chemistry, University of Crete, Dept of Chemistry (Supervisor Professor E.G. Stephanou) «Study of the atmospheric physical-chemical and transport processes governing the budget of PAHs in the Eastern Mediterranean Basin»

1989-1993 Post graduated studies at the department of Chemistry, University of Crete, Greece

PERSONAL SKILLS

Mother tongue(s) Greek

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	21	B2	B2	B2	B2

Communication skills High communication skills gained as a member of active research team, participation in several national and international conferences, member of the various committees and teaching at undergraduate and postgraduate courses.

Organisational / managerial skills High organizational skills through participation in several projects as a team leader of a large research team and head of many research missions with oceanographic vessels.

Job-related skills Good command of quality control processes

Digital skills Good command of Windows and word processing applications, as well as basic statistical software

Driving licence A1, A, B, BE

Publications in peer reviewed journals

- 1998 Karakassis I., **Tsapakis M.**, Hatziyanni E. (1998) Seasonal variability in sediment profiles beneath fish farm cages in the Mediterranean. *Marine Ecology Progress Series*, 162: 243-252.
- 1999 Pitta P., Karakassis I., **Tsapakis M.**, Zivanovic S. (1999) Natural vs. mariculture induced variability in nutrients and plankton in the Eastern Mediterranean. *Hydrobiologia* 391: 181-194
- 1999 Karakassis I., Hatziyanni E., **Tsapakis M.**, Plaiti W. (1999) Benthic recovery following cessation of fish farming: a series of successes and catastrophes. *Marine Ecology Progress Series* 184: 205-218.
- 2000 Karakassis I., **Tsapakis M.**, Hatziyanni E., Papadopoulou K.-N., Plaiti W. (2000) Impact of cage farming of fish on the seabed in three Mediterranean coastal areas. *ICES Journal of Marine Science*, 57:1462-1471.
- 2001 Kavouras I.G., Koutrakis P., **Tsapakis M.**, Lagoudaki E., Stephanou E.G., Baer D. and Oyola P. (2001). Source apportionment of urban aliphatic and polynuclear aromatic hydrocarbons (PAHs) using multivariate methods. *Environmental Science and Technology* 35, 11, 2288-2294.
- 2001 Mandalakis M., **Tsapakis M.** and Stephanou E.G. (2001). Optimization and application of high-resolution gas chromatography with ion trap tandem mass spectrometry to the determination of polychlorinated biphenyls in atmospheric aerosols. *Journal of Chromatography A* 925, 183-196.
- 2001 Karakassis I., **Tsapakis M.**, Hatziyanni E., Pitta P. (2001). Diel variation of nutrients and chlorophyll in sea bream and sea bass cages in the Mediterranean. *Fresenius Environmental Bulletin* 10: 278-283.
- 2002 Karakassis I., **Tsapakis M.**, Smith C.J., Rumohr H. (2002) Fish farming impacts in the Mediterranean studied through sediment profiling imagery. *Marine Ecology Progress Series*, 227: 125-133.
- 2002 **Tsapakis M.**, Lagoudaki, E., Stephanou E.G., Kavouras I.G., Koutrakis, P., Oyola P. and von Baer P. (2002). The composition and sources of PM_{2.5} Organic Aerosol in two Urban Areas of Chile. *Atmospheric Environment* 36, 3851-3863.
- 2002 Mandalakis M., **Tsapakis M.**, Tsoga A. and Stephanou E.G. (2002). Gas-Particle concentrations and distribution of aliphatic hydrocarbons, PAHs, PCBs and PCDD/Fs in the atmosphere of Athens (Greece). *Atmospheric Environment* 36, 4023-4035.
- 2003 **Tsapakis M.**, Stephanou E.G. and Karakassis I. (2003). Evaluation of atmospheric transport as a non-point source of polycyclic aromatic hydrocarbons in marine sediments of the Eastern Mediterranean. *Marine Chemistry* 80, 283-298.

- 2003 **Tsapakis M.** and Stephanou E.G. (2003). Collection of gas and particle semi volatile organic compounds: use of an oxidant denuder to minimize polycyclic aromatic hydrocarbons degradation during High-Volume air sampling. *Atmospheric Environment* 37, 4935-4944.
- 2003 Apostolaki E., **Tsapakis M.**, Tsagaraki T., Papadopoulou K., Karakassis (2003) Effect of time of first deployment and duration on the succession of benthic organisms on biofilters used to mitigate impact of fish farms on water quality in Crete. *Annales Series Historia Naturalis* 13, 29-31.
- 2003 Lojen S., Angel D., Katz T., **Tsapakis M.**, Kovac N., Malej A. (2003) ¹⁵N enrichment in fouling communities influenced by organic waste deriving from fish farms. *Annales Series Historia Naturalis* 13, 9-12.
- 2004 Boy, M., Petaja, T., Dal Maso, M., Rannik, U., Rinne, J., Aalto, P., Laaksonen, A., Vaattovaara, P., Joutsensaari, J., Hoffmann, T., Warnke, J., Apostolaki, M., Stephanou, E. G., **Tsapakis, M.**, Kouvarakis, A., Pio, C., Carvalho, A. Rompp, A., Moortgat, G., Spirig, C., Guenther, A., Greenberg, J., P. Ciccioli, P. Kulmala, M. (2004). Overview of the field measurement campaign in Hyytiälä, August 2001 in the framework of the EU project OSOA, *Atmos. Chem. Phys.* 4, 657-678, 2004.
- 2005 **Tsapakis, M.**, Stephanou E.G. (2005). Occurrence of gaseous and particulate polycyclic aromatic hydrocarbons in the urban atmosphere: study of sources and ambient temperature effect on the gas/particle concentration and distribution, *Environmental Pollution* 133, 147-156.
- 2005 **Tsapakis, M.**, Stephanou E.G. (2005). Polycyclic aromatic hydrocarbons in the atmosphere of the Eastern Mediterranean, *Environmental Science and Technology*, 39, 6584-6590.
- 2006 **Tsapakis M.**, Pitta P., Karakassis I. (2006). Nutrients and fine particulate matter released from sea bass (*Dicentrarchus labrax*) farming, *Aquatic Living Resources*, 19, 69-75.
- 2006 Cook E.J., Black K.D., Sayer M.D.J., Cromey C.J., Angel D., Spanier E., Tsemel A., Katz T., Eden N., Karakassis I., **Tsapakis M.**, Apostolaki E., Malej A. (2006). The influence of caged mariculture on the early development of sub-littoral fouling communities: a pan-European study, *ICES Journal of Marine Science*, 63, 637-649.
- 2006 Pitta P., Apostolaki E.T., Tsagaraki T., **Tsapakis M.**, Karakassis I. (2006). Fish farming effects on chemical and microbial variables of the water column: a spatio-temporal study along the Mediterranean Sea, *Hydrobiologia*, 563, 99-108.
- 2006 **Tsapakis, M.**, Apostolaki, M., Eisenreich, S., Stephanou, E.G. (2006). Atmospheric deposition and marine sedimentation fluxes of polycyclic aromatic hydrocarbons in the Eastern Mediterranean Basin *Environmental Science and Technology*, 40, 4922-4927.
- 2006 Apostolaki E.T, Tsagaraki, T., **Tsapakis, M.**, Karakassis, I. (2006) Fish farming effects on macrofaunal communities associated with Mediterranean seagrass meadows. *Biologia Marina Mediterranea* 13(4): 119-121.
- 2007 Holmer M., Marba N., Diaz-Almela E., Duarte C.M., **Tsapakis M.**, Danovaro R. (2007). Sedimentation of organic matter from fish farms in oligotrophic Mediterranean assessed through bulk and stable isotope ($\delta^{13}C$ and $\delta^{15}N$) analyses, *Aquaculture*, 262, 268-280.
- 2007 Apostolaki E.T., Tsagaraki, T., **Tsapakis, M.**, Karakassis, I. (2007). Fish farming impact on sediments and macrofauna associated with seagrass meadows in the Mediterranean, *Estuarine Coastal and Shelf Science*, 75, 408-416.
- 2007 **Tsapakis M.**, Stephanou E.G. (2007). Diurnal cycle of PAHs, nitro-PAHs and oxy-PAHs in a high oxidation capacity marine background atmosphere, *Environmental Science and Technology*, 41, 8011-8017.
- 2008 Holmer M., Argyrou M., Dalsgaard T., Danovaro R., Diaz-almela E., Duarte C.M, Frederiksen M., Karakassis I., Marbà N., Mirtó S., Pérez M., Pusceddu A., **Tsapakis M.** (2008). Effects of fish farm waste on *Posidonia oceanica* meadows: synthesis and provision of monitoring and management tools. *Marine Pollution Bulletin* 56, 1618–1629.
- 2009 Pitta P., **Tsapakis M.**, Apostolaki E.T., Tsagaraki T., Holmer M., Karakassis I. (2009). ‘Ghost nutrients’ from fish farms are transferred up the food web by phytoplankton grazers. *Marine Ecology Progress Series* 374: 1-6.
- 2010 **Tsapakis M.**, Dakanali E., Stephanou E.G., Karakassis I., (2010). PAHs and n-alkanes in Mediterranean coastal marine sediments: Aquaculture as a significant point source. *J. Environ. Monit.* 12, 958-963.
- 2011 Tsagaraki, T.M., Petihakis, G., Tsiaras, K., Triantafyllou, G., **Tsapakis, M.**, Korres, G., Kakagiannis, G., Frangoulis, C., Karakassis, I. (2010). Beyond the cage: Ecosystem modelling for impact evaluation in Aquaculture. *Ecological Modelling*, 222, 2512-2523.
- 2012 Petihakis, G., Tsiaras, K., Triantafyllou, G., Korres, G., Tsagaraki, T.M., **Tsapakis, M.**, Vavillis, P., Pollani, A., Frangoulis, C. (2012) Application of a complex ecosystem model to evaluate effects of finfish culture in Pagasitikos Gulf, Greece. *Journal of Marine Systems*, 94, S65-S77.
- 2012 Black, K.D. Calder, L.A., Nickell, T.D., Sayer, M.D.J., Orr, H., Brand, T., Cook, E.J., Magill, S.H., Katz, T., Eden, N., Jones, K.J., **Tsapakis, M.**, Angel, D. (2012). Chlorophyll, lipid profiles and bioturbation in sediments around a fish cage farm in the Gulf of Eilat, Israel. *Aquaculture*, 356, 317-327
- 2015 Simboura, N., **Tsapakis, M.**, Pavlidou, A., Assimakopoulou, G., Pagou, K., Kontoyiannis, H., Zeri, C., Krasakopoulou, E., Rousselaki, E., Katsiaras, N., Diliberto, S., Naletaki, M., Tsiamis, K., Gerakaris, V., Drakopoulou, P., Panayotidis, P. Assessment of the environmental status in the Hellenic coastal waters (Eastern Mediterranean): From the Water Framework Directive to the Marine Strategy

- Framework Directive (2015) *Mediterranean Marine Science*, 16 (1), 46-64.
- 2015 Pavlidou, A., Simboura, N., Rousselaki, E., **Tsapakis, M.**, Pagou, K., Drakopoulou, P., Panayotidis, P. (2015). Methods of eutrophication assessment in the context of the water framework directive: Examples from the Eastern Mediterranean coastal areas. *Continental Shelf Research*, 108, 156–168.
- 2015 Dimitriou, P. D., Karakassis, I., Pitta, P., Tsagaraki, T. M., Apostolaki, E. T., Magiopoulos, I., **Tsapakis, M.** (2015). Mussel farming in Maliakos Gulf and quality indicators of the marine environment: Good benthic below poor pelagic ecological status. *Marine Pollution Bulletin*, 101(2), 784–93.
- 2016 Lammel, G., Meixner, F. X., Vrana, B., Efstathiou, C., Kohoutek, J., Kukučka, P., Mulder, M.D., Příbylová, P., Prokeš, R., Rusina, T.P., Song, G.Z., **Tsapakis, M.** (2016). Bi-directional air-sea exchange and accumulation of POPs (PAHs, PCBs, OCPs and PBDEs) in the nocturnal marine boundary layer. *Atmos. Chem. Phys.* 16, 6381-6393.
- 2016 Kalantzi, I., Pergantis, S. A., Black, K. D., Shimmield, T. M., Papageorgiou, N., **Tsapakis, M.**, & Karakassis, I. (2016). Metals in tissues of seabass and seabream reared in sites with oxic and anoxic substrata and risk assessment for consumers. *Food Chemistry*, 194, 659–70.
- 2016 Toncelli, C., Mylona, K., **Tsapakis, M.**, Pergantis, S.A (2016). Flow Injection with On-line Dilution and Single Particle Inductively Coupled Plasma - Mass Spectrometry for Monitoring Silver Nanoparticles in Seawater and in Marine Microorganisms. *Journal of Analytical Atomic Spectrometry*, 31, 1430-1439.
- 2016 Simboura, N., Pavlidou, A., Bald, J., **Tsapakis, M.**, Pagou, K., Zeri, Ch., Androni, A., Panayotidis, P., (2016) Response of ecological indicators to nutrient and chemical contaminant stressors in eastern Mediterranean coastal waters. *Ecological Indicators*, 70, 89-105.
- 2016 Kalantzi, I., Zeri, C., Catsiki, V-A., Tsangaris, C., Stroglyoudi, E., Kaberi, H., Vergopoulos, N., **Tsapakis, M.** (2016). Assessment of the use of copper alloy aquaculture nets: Potential impacts on the marine environment. *Aquaculture*, 465, 209-222.
- 2016 Lohmann, R., Muir, D., Zeng, E.Y., Bao, L.J., Allan, I.J., Arinaitwe, K., Booi, K., Helm, P., Kaserzon, S., Mueller, J.F., Shibata, Y., Smedes, F., **Tsapakis, M.**, Wong, C.C., You, J. (2016). Aquatic Global Passive Sampling (AQUA-GAPS) Revisited: First Steps toward a Network of Networks for Monitoring Organic Contaminants in the Aquatic Environment. *Environmental Science and Technology*, 51, 1060-1067.
- 2017 Toncelli, C., Mylona, K., Kalantzi, I., Tsiola, A., Pitta, P., **Tsapakis, M.**, Pergantis, S.A (2017). Silver nanoparticles in seawater: A dynamic mass balance at part per trillion silver concentrations. *Science of the Total Environment*, 601-602, 15-21.
- 2017 Kalantzi, I., Mylona, K., Sofoulaki, K., **Tsapakis, M.**, Pergantis, S.A. (2017) Arsenic speciation in fish from Greek coastal areas. *Journal of Environmental Sciences*, 56, 300-312.
- 2017 Tsagaraki, T.M., Herut, B., Rahav, E., Berman Frank, I.R., Tsiola, A., **Tsapakis, M.**, Giannakourou, A., Gogou, A., Panagiotopoulos, C., Violaki, K., Psarra, S., Lagaria, A., Christou, E.D., Papageorgiou, N., Zervoudaki, S., de Puellas, M.L.F., Nikolioudakis, N., Meador, T.B., Tanaka, T., Pedrotti, M.L., Krom, M.D., Pitta, P. (2017) Atmospheric deposition effects on plankton communities in the Eastern Mediterranean: A mesocosm experimental approach. *Frontiers in Marine Science*, 4, art. no. 210.
- 2017 Pitta, P., Kanakidou, M., Mihalopoulos, N., Christodoulaki, S., Dimitriou, P.D., Frangoulis, C., Giannakourou, A., Kagiorgi, M., Lagaria, A., Nikolaou, P., Papageorgiou, N., Psarra, S., Santi, I., **Tsapakis, M.**, Tsiola, A., Violaki, K. & Petihakis, G. (2017) Saharan dust deposition effects on the microbial food web in the Eastern Mediterranean: A study based on a mesocosm experiment. *Frontiers in Marine Science*, vol. 4, no. MAY.
- 2017 Tsiola, A., Pitta, P., Callol, A.J., Kagiorgi, M., Kalantzi, I., Mylona, K., Santi, I., Toncelli, C., Pergantis, S., **Tsapakis, M.** The impact of silver nanoparticles on marine plankton dynamics: Dependence on coating, size and concentration (2017) *Science of the Total Environment*, 601-602, 1838-1848.
- 2017 Toncelli, C., Mylona, K., Kalantzi, I., Tsiola, A., Pitta, P., **Tsapakis, M.**, Pergantis, S.A. Silver nanoparticles in seawater: A dynamic mass balance at part per trillion silver concentrations (2017) *Science of the Total Environment*, 601-602, 15-21.
- 2018 Tsiola, A., Toncelli, C., Fodelianakis, S., Michoud, G., Bucheli, T.D., Gavrilidou, A., Kagiorgi, M., Kalantzi, I., Knauer, K., Kotoulas, G., Mylona, K., Papadopoulou, E., Psarra, S., Santi, I., Tsapakis, M., Daffonchio, D., Pergantis, S.A., Pitta, P. Low-dose addition of silver nanoparticles stresses marine plankton communities (2018) *Environmental Science: Nano*, 5 (8), 1965-1980.
- 2018 Tsikopoulou, I., Moraitis, M.L., **Tsapakis, M.**, Karakassis, I. Can intensive fish farming for 20 years induce changes in benthic ecosystems on a scale of waterbody? An assessment from Cephalonia bay (Ionian Sea)(2018) *Environmental Monitoring and Assessment*, 190 (8)
- 2018 Sofoulaki, K., Kalantzi, I., Machias, A., Mastoraki, M., Chatzifotis, S., Mylona, K., Pergantis, S.A., **Tsapakis, M.** Metals and elements in sardine and anchovy: Species specific differences and correlations with proximate composition and size (2018) *Science of the Total Environment*, 645, pp. 329-338.
- 2019 Sofoulaki, K., Kalantzi, I., Machias, A., Pergantis, S.A., **Tsapakis, M.** Metals in sardine and anchovy from Greek coastal areas: Public health risk and nutritional benefits assessment(2019) *Food and Chemical Toxicology*, 123, 113-124.
- 2019 Kalantzi, I., Mylona, K., Toncelli, C., Bucheli, T.D., Knauer, K., Pergantis, S.A., Pitta, P., Tsiola, A., **Tsapakis, M.** Ecotoxicity of silver nanoparticles on plankton organisms: a review (2019) *Journal of Nanoparticle Research*, 21 (3), art. no. 65
- 2019 Kalantzi, I., Mylona, K., Pergantis, S.A., Coli, A., Panopoulos, S., **Tsapakis, M.** Elemental distribution in the different tissues of brood stock from Greek hatcheries (2019) *Aquaculture*, 503, 175-185.
- 2019 de Kock, W., Hasler-Sheetal, H., Holmer, M., **Tsapakis, M.**, Apostolaki, E.T. Metalomics and traditional indicators unveil stress of a seagrass (*Cymodocea nodosa*) meadow at intermediate distance from a fish farm (2020) *Ecological Indicators*, 109, art. no. 105765

Recent and Ongoing Research Projects

- 2018-2021 IDMA "Innovative Development of Multitrophic Aquaculture" Ministry of Rural Development and Food (**Scientific Coordinator**).
- 2018-2021 LIFE-AQUAPEF Promote the effective implementation of the Product Environmental Footprint in the Mediterranean aquaculture sector (**Principal Investigator**).
- 2018-2023 WFD "Monitoring network for the ecological status quality of the inland, transitional and coastal waters of Greece-Classification of their ecological quality status according to the WFD 2000/60/EK. HCMR-MINENV". Principal Investigator for Coastal and Transitional waters part. HCMR-MINENV
- 2017-2021 EU network of mesocosms facilities for research on marine and freshwater ecosystems open for global collaboration, AQUACOSM, EU H2020-INFRAIA-project No 731065 (**Member**).
- 2016-2020 Tools for Assessment and Planning of Aquaculture Sustainability — TAPAS, H2020, call SFs-11b-2015, project number (**Principal Investigator**).
- 2016-2019 Photochemistry at the Ocean's Surface: Effects and Interaction of Dissolved Organic Matter with Microplastics, POSEIDOMM, MARIE Skłodowska-CURIE ACTIONS, Individual Fellowships (IF), Call: H2020-MSCA-IF-2015 (**Principal Investigator**).
- 2010-today Establishment of Greek Allocated Zones for Aquaculture in Greece, site selection and interaction and monitoring of marine environment (**Scientific Coordinator**).
- 2016-today AQUA-GAPS. Global Aquatic Passive Sampling Network (**Principal Investigator**).