

Curriculum Vitae

Name	IOANNIS KARAKASSIS	
Address	Department of Biology, University of Crete (UoC), Heraklion 70013, Greece	
Tel. e-mail	+30 2810 394061 / +30 2810 394064 karakassis@uoc.gr	
Undergraduate studies	Biology Department, University of Athens	
Postgraduate studies	Post-graduate programme in Marine Biology, UoC Ph.D. in Marine Ecology, Biology Dept, UoC	
Academic Appointments	• Professor Dept Biology, UoC, Heraklion. (2011 – present) • Assoc. Professor, Dept Biology, UoC, Heraklion. (2004 – 2011) • Assistant Professor, Department of Environmental Engineering, Technical University of Crete (TUC), Chania, Greece (2001-2004) • Research scientist (C grade) Institute of Marine Biol. of Crete (2000-2001) • Technical Research scientist (C grade) Inst. Marine Biol. Crete (1997-2000) • Postgraduate research scientist. Inst. Marine Biol. Crete (1991-1997)	
Major administrative responsibilities	• Chairman of the internal evaluation committee of the Biol Department UoC • Vice Rector on Academic affairs, UoC (2016-2020) • Vice Chairperson of the Biology Department, UoC (2010-2012) • Director of the postgraduate programme in “Environmental Biology: management of marine and terrestrial biological resources” (2006-2010) • Director of the Section of “Biotechnology and Applied Biology” of the Biology Department (2005-2006)	
Teaching Responsibilities	<u>Undergraduate:</u> • Benthic Ecology (2005 -) UoC • Marine Pollution (2005-) UoC • Marine Biology (2005 -) UoC • Animal Biodiversity (2004-2006) UoC <u>Postgraduate</u> • Marine Ecosystems (2004 -) UoC • Research Methodology Principles (2007 -) UoC • Environmental Impact Assessment (2010-) UoC • Numerical Analysis of Ecological Data (2001-2004) TUC • Aquatic Ecosystems and Biodiversity (2001-2004) TUC • Environmental Impact Assessment (2002-2005) TUC	
Supervision of students	18 PhD students (11 PhD Theses completed, 8 in progress) 22 MSc Theses (21 completed, 1 in progress) 11 BSc Theses (10 completed, 1 in progress)	

<i>Research interests</i>	Biological Oceanography, Marine Ecology, Coastal ecosystems, Anthropogenic effects on biological communities and ecosystems, impacts of aquaculture on marine ecosystems, multivariate analysis, environmental impact assessment, biodiversity.
<i>Participation in research projects</i>	Participation as member of the research team, partner, or coordinator in 42 European and national research projects. Current and recent research projects: • HYPOXIA: Benthic-pelagic coupling and regime shifts (2014-2016) GSRT-Excellence in Research • AquaSpace: Ecosystem Approach to making Space for Sustainable Aquaculture (2015-2018) EU, H2020 • IDMA: Innovative Development of Multitrophic Aquaculture. (2018-2023) GR Ministry for Agriculture and Food • GLOBENTH: Global scale quantitative patterns in the response of benthic organisms to environmental disturbance (2020-2023) GR HFRI • Pinna nobilis: innovative actions for monitoring, recovery & recruitment (2020-3)
<i>Other national and international initiatives</i>	• Member of the Technical Assistance Group to the Greek Ministry for the Environment and Climate Change for the implementation of the EU Marine Strategy Framework Directive • Member of the IUCN/FEAP working group for the establishment of Guidelines for Site selection and Modelling for marine aquaculture in the Mediterranean • Member of the GFCM/CAQ working group on site selection and carrying capacity in the Mediterranean • Member of the GESAMP working group on Offshore Aquaculture • Member of the FAO Working Group on Ecosystem Approach to Aquaculture • Coordinator of the SHOCMED initiative in the framework of the GFCM/CAQ • Invited expert by FAO for the evaluation of the governmental strategy plan for the development of aquaculture in Cyprus (1997). • Member of the feasibility study Group for a European Science Plan for Marine Biodiversity established by the European Science Foundation • Member of the working group of benthic indicators established by IOC-UNESCO. • Scientific consultant to the Region of Crete for the RECITE programme (Cooperation of Regions of Crete GR and Northern Jutland DK) • Scientific consultant to the Region of Crete within the framework of the MEDPLUS initiative. • Evaluator of research proposals submitted to EU 5FW program "Quality of Life" • Member of the international Evaluation committee for research proposals on Biodiversity submitted to the ANR (France) 2007 • Responsible for the Greek reference centre for the marine environment in the framework of European Environment Agency (EEA)

	• Member of the national (GR) committee of regulating agencies for establishing site selection criteria for marine fish farming • Member of the scientific committee in 4 conferences • Invited speaker in 37 International and national conferences. • Member of the Editorial Board of the Inter-Research Journal “Aquaculture-Environment Interactions AEI” • Reviewer of articles in 18 international scientific journals • Member of the ASC Benthic Technical Group (since 2020) dealing with benthic impacts of aquaculture
<i>Recent contracts/research funding during the past 5 years</i>	• HYPOXIA 415 000 € • AquaSpace 178 000 € • IDMA 285 400 € • GLOBENTH 153 300 €
<i>Reviewed publications in scientific journals</i>	>130 (126 in ISI journals)
<i>Total citations</i>	9940 (Google Scholar) – 6337 (Scopus)

SELECTED RECENT PUBLICATIONS

Papers in international journals during the past 6 years

1. Tsikopoulou I, Moraitis ML, Geropoulos A, Papadopoulou KN, Papageorgiou N, Plaiti W, Smith CJ, **Karakassis I**, Eleftheriou A (2019) Long-term changes in the structure of benthic communities: Revisiting a sampling transect in Crete after 24 years. *Marine Environmental Research*, **144**:9-19.
2. Tsikopoulou I, Smith CJ, Papadopoulou NK, Eleftheriadou E, **Karakassis I** (2019) A fishing ground benthic ecosystem improved during the economic crisis. *ICES Journal of Marine Science*, **76**(2): 402-409.
3. Piperagkas O, Papageorgiou N, **Karakassis I** (2019) Qualitative and quantitative assessment of microplastics in three sandy Mediterranean beaches, including different methodological approaches. *Estuarine, Coastal and Shelf Science*, **219**, 169-175.
4. Tsikopoulou I, Papageorgiou N, Tsiavos T, Fodelianakis S, Kotzabasis K, **Karakassis I** (2019) Microphytobenthic response to organic matter enrichment: Does the same stressor lead to identical communities? *Regional Studies in Marine Science*, **29**, 100682
5. Moraitis ML, Valavanis VD, **Karakassis I** (2019) Modelling the effects of climate change on the distribution of benthic indicator species in the Eastern Mediterranean Sea. *Science of the Total Environment*, **667**, 16-24.
6. Santi I, Tsiola A, Dimitriou PD, Fodelianakis S, Kasapidis P, Papageorgiou N, Daffonchio D, Pitta P, **Karakassis I** (2019) Prokaryotic and eukaryotic microbial community responses to N and P nutrient addition in oligotrophic Mediterranean coastal waters: Novel insights from DNA metabarcoding and network analysis. *Marine Environmental Research*, **150**, 104752
7. Tsikopoulou I, Santi I, Dimitriou PD, Papageorgiou N, Pitta P, **Karakassis I** (2020) Response of Microphytobenthos and Benthic Bacteria Viability to Eutrophication in a Benthic–Pelagic Coupling Mesocosm Experiment. *Frontiers in Marine Science*, **7**:270

8. Tsiola A, Michoud G, Fodelianakis S, **Karakassis I**, Kotoulas G, Pavlidou A, Pavludi C, Pitta P, Simbora N, Daffonchio D, Tsapakis M (2020) Viral metagenomic content reflects seawater ecological quality in the Coastal Zone. *Viruses* **12**(8):806
9. Moraitis ML, **Karakassis I** (2020) Assessing large-scale macrobenthic community shifts in the Aegean Sea using novel beta diversity modelling methods. Ramifications on environmental assessment. *Science of the Total Environment*, **734**:139504
10. Tsikopoulou I, Lampa M, Tsiola A, Pitta P, Tsapakis M, **Karakassis I** (2021) Functional adaptations of benthic communities to organic matter enrichment at the edge of an allowable zone of effect (AZE) *Estuarine, Coastal and Shelf Science* **262**, art. no. 107596
11. Santi I, Kasapidis P, **Karakassis I**, Pitta P (2021) A comparison of DNA metabarcoding and microscopy methodologies for the study of aquatic microbial eukaryotes. *Diversity* **13**(5), art. no. 180
12. Tsikopoulou I, Dimitriou PD, **Karakassis I**, Lampadariou N, Papadopoulou N, Smith C (2021) Temporal variation in the ecological functioning of benthic communities after 20 years in the Eastern Mediterranean. *Frontiers in Marine Science*, **8**, 768051 doi: 10.3389/fmars.2021.768051
13. Papageorgiou N, Dimitriou PD, Moraitis ML, Fezzardi D, Massa F, **Karakassis I** (2021) Changes of the Mediterranean fish farm sector towards a more sustainable approach: a closer look at temporal, spatial and technical shifts. *Ocean and Coastal Management*, **214**, art. no. 105903,
14. Vetsis E, Kalantzi I, Pergantis SA, Kokokiris L, **Karakassis I** (2021) Metals in tissues of marine fish from the Thermaikos Gulf, Eastern Mediterranean Sea: detection of changes with trophic level. *Marine Pollution Bulletin* **173**, art. no. 113024.
15. Chatzivasileiou D, Dimitriou PD, Theodorou J, Kalantzi I, Magiopoulos I, Papageorgiou N, Pitta P, Tsapakis M, **Karakassis I** (2022) An IMTA in Greece: Co-Culture of Fish, Bivalves, and Holothurians. *Journal of Marine Science and Engineering*, **10** (6), art. no. 776,
16. Dimitriou PD, Santi I, Moraitis ML, Tsikopoulou I, Pitta P, **Karakassis I** (2022) Benthic–Pelagic Coupling in the Oligotrophic Eastern Mediterranean: A Synthesis of the HYPOXIA Project Results. *Frontiers in Marine Science*, **9**, art. no. 886335
17. Papageorgiou N, Dimitriou PD, Chatzivasileiou D, Tsapakis M, **Karakassis I** (2023) Can IMTA provide added ecosystem value services in the fish farms of Greece? *Frontiers in Marine Science*, **9**, art. no. 1083099,
18. Manolaki SM, Chatzivasileiou D, Lampa M, Dimitriou PD, Philippidis A, **Karakassis I**, Papageorgiou N, (2023) Microplastic contamination in cultured mussels and pearl oysters in Greece. *Microplastics* **2**:168-181.
19. Smith CJ, Papadopoulou NK, Maina I, Kavadas S, van Denderen PD, Katsiaras N, Reizopoulou S, **Karakassis I**, Tselepides A, Tsikopoulou I (2023) Relating benthic sensitivity and status to spatial distribution and intensity of trawling in the Eastern Mediterranean. *Ecological Indicators*, **150**, art. no. 110286,
20. Tsikopoulou I, Chatzivasileiou D, Dimitriou PD, Magiopoulos I, Papageorgiou N, **Karakassis I** (2023) Contribution of holothuroids to the bioremediation and stimulation of the benthic microbial metabolism in aquaculture. *Marine Pollution Bulletin*, **194**, art. no. 115418, DOI: <https://doi.org/10.1016/j.marpolbul.2023.115418>
21. Zhao Y, Song M, Yu Z, Pang L, Zhang L, **Karakassis I**, Dimitriou PD, Yuan X (2023) Transcriptomic Responses of a Lightly Calcified Echinoderm to Experimental Seawater

Acidification and Warming during Early Development. *Biology*, **12** (12), art. no. 1520, DOI: <https://doi.org/10.3390/biology12121520>

22. Chatzivasileiou D, Dimitriou PD, Tsikopoulou I, Lampa M, Papageorgiou N, Tsapakis M, **Karakassis I** (2024) Holothurians play an important role in mitigating the impacts of aquaculture on sediment conditions. *Marine Pollution Bulletin*, **198**, art. no. 115856, DOI: <https://doi.org/10.1016/j.marpolbul.2023.115856>
23. Litsi-Mizan V, Kalantzi I, Tsapakis M, Pergantis SA, **Karakassis I**, Apostolaki ET (2024) Trajectories of trace element accumulation in seagrass (*Posidonia oceanica*) over a decade reveal the footprint of fish farming. *Environmental Science and Pollution Research*, **31** (19): 28139-28152, DOI: <https://doi.org/10.1007/s11356-024-32910-0>
24. Lampa M, **Karakassis I**, Langeneck J, Rousou M, Apserou C, Chrysanthou K, Constantinou G, Kletou D, Kleitou P, Louizidou P, Moraitis ML, Papadopoulos V, Patsalidou M, Petrou A, Dimitriou PD (2025) Long-term assessment of benthic ecological status in sediments affected by offshore aquaculture: The case of the Republic of Cyprus. *Marine Pollution Bulletin*, **219** 118332, DOI: <https://doi.org/10.1016/j.marpolbul.2025.118332>
25. Graversen AEL, Lønborg C, Addamo AM, Pedersen SG, Chemello S, [...], **Karakassis I**, ... (2025) A marine and salt marsh sediment organic carbon database for European regional seas (EURO-CARBON). *Data in brief* **60**, 111595, DOI: <https://doi.org/10.1016/j.dib.2025.111595>
26. Manolaki SM, Dimitriou PD, Lampa M, **Karakassis I**, Papageorgiou N (2025) Microplastic concentration of Mediterranean commercial fish: A systematic review. *Microplastics* (*in press*)
27. Chatzivasileiou D, Pananganan BGS, Dimitriou PD, Papageorgiou N, Lampa M, Manolaki S, Yu Z, Da Huo D, Yuan X, **Karakassis I** (2025) Use of Sediment Geochemistry and Video Analysis for habitat description of the sea cucumber *Holothuria poli* Delle Chiaje, 1823. *Mediterranean Marine Science* (*in press*)
28. Chatzivasileiou D, Baltadakis A, Dimitriou PD, Magiopoulos I, Pergantis SA, Manolis Tsapakis M, **Karakassis I**, Ioanna Kalantzi I (2025) Metal Content in IMTA Products: Assessing Health Risks and Nutritional Benefits of Co-Cultured Bivalves and Holothurians in Fish Farm. *Aquaculture* (*in press*)