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Education

1984. Ph.D., Dynamic Oceanography, University of East Anglia (U.K).

1980. M.Sc., (by research), Physical Oceanography, University of Liverpool (U.K).

1977. B.Sc., (Honours), Oceanography, University of Liverpool (U.K).

1976. B.Sc., Physics, University of Liverpool (U.K).

1972. Degree in Natural Sciences and Geography, University of Athens, Greece.

Academic and Professional Experience

1997-	Professor in Oceanography. University of Thessaly.
1999-	Teaching <i>Operational Oceanography</i> and <i>Advanced Oceanography</i> in the Programs of Graduate Studies at the School of Agricultural Sciences of University of Thessaly
1998-	Teaching in the graduate course "Environmental Oceanography", at the Department of Geology, University of Patras.
1992 -1997	Associate Professor in Oceanography. University of Thessaly
1992-1984	Oceanographer at General Secretariat of the Ministry of Environment Planning and Public Work. Duties: coordination of the oceanographic work for the planning and design of Athens Sea Outfall in Saronikos Gulf.
1988-1985	Teaching <i>Oceanography</i> and <i>Marine Meteorology</i> at the Department of Meteorology of Hellenic Air Force
1982-1979	Teaching <i>Oceanography</i> and <i>Environmental Mathematics</i> at the School of Environmental Sciences of the University of East Anglia, U.K.
1968-1966	Assistant in the Zoological Laboratory. University of Athens (Director Professor V. Kiortsis).

Books

Theodorou A., G. Ferentinos and G. Papatheodorou. 2003. **HYDROSPHERE**. Greek Open University. 672 p. (in Greek)

Theodorou A. 2004. **OCEANOGRAPHY: An Introduction to the Marine Environment**. A. Stamoulis Publications. 712 p. (in Greek)

Selected Conferences

Petihakis G., Triantafyllou G.N and **A. Theodorou**, 2000: Enrichment of Pagasitikos Gulf by run off fertilizers. A modeling study. Fifth International Conference on

Environmental Pollution, 28 August – 1 September 2000, Thessaloniki, Greece pp 130-142.

Triantafyllou G.N, Petihakis G., Dounas C. and **A. Theodorou**, 2000: Assessing marine ecosystem response to nutrient inputs. IMEMS 2000, Fourth International Marine Environmental Modeling Seminar, 4 – 6 October 2000, Athens Greece

Petihakis G., Triantafyllou G.N., and **A. Theodorou**, 2000: Modeling the response of a semi – enclosed marine ecosystem (Pagasitikos Gulf) to enrichment by run off fertilizers. EurOCEAN 2000, The European Conference on Marine Science and Ocean Technology, 29 August – 2 September Hamburg, Germany.

Petihakis G., Triantafyllou G.N and **A. Theodorou**, 2000: A numerical approach to simulate nutrient dynamics and primary production of a semi enclosed coastal ecosystem (Pagasitikos Gulf Western Aegean Greece). Littoral 2000 Fifth International Conference – Responsible Coastal Zone Management – The Challenge of the 21st Century, 13-17 Sept 2000, Cavtat – Dubrovnik, Croatia

Γκάνιας Κ., Σωμαράκης Σ., Μαχιάς Α., Κουτσιακόπουλος Κ, Χριστόπουλος Π., **Θεοδώρου Α.** (2001). Μπορεί ο γοναδοσωματικός δείκτης να χρησιμοποιηθεί για να περιγράψει την αναπαραγωγική κατάσταση ενός πολλαπλού αποθέτη όπως η σαρδέλα; *Πρακτικά 10^{ου} Πανελλήνιου Συνεδρίου Ιχθυολόγων, Χανιά*, 97-100.

Ganias K., Somarakis S., Caragitsou E., Koutsikopoulos C., Machias A., **Theodorou A.** (2001). Differential egg production of sardine off the central Hellenic coasts in December 1999. *Rapp. Comm. Int. Mer. Medit.* 36, 268.

Ganias K., Somarakis S., Koutsikopoulos C., Machias A., **Theodorou A.** (2002). Seasonal variation of somatic and organ weight indices of sardine in the Aegean and Ionian Seas. *Proc. 9th ICZEGAR*, 37.

Ganias K., Somarakis S., Koutsikopoulos C., Machias A., **Theodorou A.** (2002). Identifying high frequency of spawning fish in sardine samples using somatic indices and sample sex ratio. *1st scientific conference of the EFMS*, F-3.

Petihakis G., Triantafyllou G. and **A. Theodorou**, 2002: A time dependent ecosystem operational tool for Pagasitikos gulf. Part-I, Data analysis and simulations of the hydrodynamics. EGS XXVII General Assembly, Nice, France, 21 - 26 April 2002.

Petihakis G., Triantafyllou G. and **A. Theodorou**, 2002: A time dependent ecosystem operational tool for Pagasitikos gulf. Part-II, Simulation of biochemical variables in space and time. EGS XXVII General Assembly, Nice, France, 21 - 26 April 2002.

Γκάνιας Κ., Σωμαράκης Σ., Κουτσιακόπουλος Κ., Μαχιάς Α., **Θεοδώρου Α.** (2003). Ρυθμοί ατρησίας στις ωοθήκες της Μεσογειακής σαρδέλας. *7^ο Παν/νιο Συμπόσιο Ωκεανογραφίας & Αλιείας, Χερσόνησος Κρήτης*, 183.

Ψόχιου Ε., Πετυχάκης Γ., Τριανταφύλλου Γ., Κολιού Α. και **Α. Θεοδώρου**, 2003: Μελέτη της δυναμικής του Παγασητικού κόλπου. 11^ο Πανελλήνιο Συνέδριο Ιχθυολόγων, Οι εξελίξεις και η αξιοποίηση της επιστήμης και της τεχνολογίας στους τομείς αλιείας υδατοκαλλιέργειας και διαχείρισης υδάτινων πόρων, Πρέβεζα 10-13 Απριλίου

Petihakis G., Triantafyllou G. and **A. Theodorou**, 2003: A time dependent ecosystem operational tool for Pagasitikos Gulf. Simulation of biogeochemical variables in space and time, EGS-AGU-EUG Joint Assembly, Nice, France, 06 - 11 April 2003, Geophysical Research Abstracts, Vol. 5, pp 03454.

Πετυχάκης Γ., Τριανταφύλλου Γ., Κολιού Α. και **Α. Θεοδώρου**, 2003: Μελέτη της δυναμικής του οικοσυστήματος του Παγασητικού κόλπου. 7^ο Πανελλήνιο Συμπόσιο Ωκεανογραφίας & Αλιείας, Χερσόνησος Κρήτης 6-9 Μαΐου, σελ.61

Πετυχάκης Γ., Τριανταφύλλου Γ. και **Α. Θεοδώρου**, 2004: Εφαρμογή ενός σύνθετου διαχειριστικού εργαλείου στο Παγασητικό κόλπο. 7^ο Πανελλήνιο Γεωγραφικό Συνέδριο, Μυτιλήνη, 14-17 Οκτωβρίου 2004.

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Iona A., Lykiardopoulos A., Lakes V., **Theodorou A.**, 2007. On the development of a Geospatial Web Services System for oceanographic data at the Mediterranean and Black Seas. NATO Advanced Research Workshop "Challenges for the Black Sea operational oceanography to increase the regional environmental security" NATO ARW Series C. *Environment Security* (in print).

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Selected Journal Papers

Theodorou, A. J. 1990. "The extent of the Atlantic water influence in the northeastern Ionian sea (late winter/early spring 1986)". *Bollettino di Oceanologia Teorica ed Applicata*, Vol. VIII, No. 4, 237-250.

Theodorou, A.J. and C. Perissoratis. 1991. "Environmental considerations for design of the Athens Sea Outfall (Saronikos Gulf, Greece)", *Environmental Geology and Water Sciences*, Vol.17, No.3, 233-248.

Theodorou, A.J. 1991. "Some considerations on Neutral Surface Analysis", *Oceanologica Acta*, Vol.14, No. 3, 205-222.

Theodorou, A.J. 1991. "The circulation of Levantine Intermediate water in the northeastern Ionian Sea (late winter/early spring 1986)", *Journal of Marine Systems*, Vol.1, 359-372.

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- Theodorou, A.J.** 1995. An assessment of water quality in a coastal embayment (Phaleron bay, Greece). *Water Science and Technology* Vol. 32, No. 7, pp 25-32 .
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- Theodorou, A.J.**, Theocharis, A., Balopoulos, E. 1997. Hydrographic structure of the Cretan Sea and adjacent regions in late winter 1994. *Bollettino di Geofisica Teorica ed Applicata*. Vol. 38. N. 1-2: 103-118.
- Theodorou, A.J.** 1997. Ecological implications of raw sewage sea disposal in Elefsis Bay (Saronikos Gulf, Greece). *Fresenius Environmental Bulletin*, 6, 397-402.
- Mamouris, Z., A. Apostolidis, P. Panagiotaki, **A.J. Theodorou**, C. Triantafyllidis. 1997. Morphological variability between red mullet (*Mullus barbatus* L.) populations in Greece. *Journal of Fish Biology*, 52, 107-117.
- Mamouris, Z., Apostolidis, A.P., **Theodorou, A.J.**, and C. Triantaphylidis. 1998. Application of random amplified polymorphic DNA (RAPD) markers to evaluate intraspecific genetic variation in red mullet (*Mullus barbatus* L.) *Journal of Marine Biology*, 132,171-178.
- Zodiatis, G., **Theodorou, A.J.**, and A., Demetropoulos. 1998. Hydrography and Circulation in the area south of Cyprus in late summer 1995 and in spring 1996. *Oceanologica Acta*, 21,3, 447-458.
- Petihakis G., Triantafyllou G. N. and **A. Theodorou** 2000. A numerical approach to simulate nutrient dynamics and primary production of a semi-enclosed coastal ecosystem (Pagasitikos Gulf, Western Aegean, Greece). *Periodicum Biologorum*, 102(1), 339-348.

Triantafyllou G.N, Petihakis G., Dounas C. and **A. Theodorou**, 2001. Assessing marine ecosystem response to nutrient inputs. *Marine Pollution Bulletin*, Vol. 41, Nos. 7-12, pp 175-186.

Petihakis, G., Triantafyllou, G., Koliou, A., and **A. Theodorou**, 2002: Exploring the Dynamics of a Marine Ecosystem (Pagasitikos Gulf, Western Aegean, Greece) through the Analysis of Temporal and Spatial Variability of Nutrients. In *Littoral 2002, The Changing Coast*, Ed. EUROCOAST, Portugal. (ISBN 972-8558-09-0).

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Petihakis G., Triantafyllou, G., Korres, G. and **A. Theodorou**, 2004: An integrated mathematical tool. Part-I: Hydrodynamic modeling. Lecture Series on Computer and Computational Sciences, International Conference of Computational Methods in Sciences and Engineering (ICCMSE 2004). Ed. T.E.Simos, and G. Maroulis, VSP International Science Publishers, The Netherlands, pp. 424-427, (ISBN 90-6764-418-8).

Arvanitoyannis, I.S., Krystallis, A., Panagiotaki, P. **Theodorou, A.J.** 2004. A marketing survey on Greek consumers' attitudes towards fish. *Aquaculture International*, V. 12, 3, 259-279

Petihakis G., Triantafyllou, G., Korres, G. and **A. Theodorou**, 2004: An integrated mathematical tool. Part-II: Ecological modeling. Lecture Series on Computer and Computational Sciences, International Conference of Computational Methods in Sciences and Engineering (ICCMSE 2004). Ed. T.E.Simos, and G. Maroulis, VSP International Science Publishers, The Netherlands, pp. 428-431, (ISBN 90-6764-418-8).

Ganias K., Somarakis S., Machias A., **Theodorou A.**, 2004. Pattern of oocyte development and batch fecundity in the Mediterranean sardine. *Fisheries Research* 67 (1): 13-23.

Ganias K., Somarakis S., Machias A., Koutsikopoulos C., **Theodorou A.**, 2004. Identifying newly spawned female sardines by means of common fisheries data. (in press) *στο Cybium* 28 (1):43-46.

Petihakis G., Triantafyllou G., Pollani, A., Koliou A. and **A. Theodorou**, 2005: Field data analysis and application of a complex water column biogeo-chemical model in different areas of a semi-enclosed basin: Towards the development of an ecosystem management tool. *Marine Environmental Research*. 59: 493-518.

Petihakis G., Triantafyllou G. N., Kores G., A. Pollani and **A. Theodorou**, 2011. Ecosystem modelling: Towards the development of a management tool for a marine coastal system. Part-I, General circulation, hydrological and dynamical structure. *Journal of Marine Systems* (accepted).

Petihakis G., Triantafyllou G. N., G. Korres, K. Tsiaras and **A. Theodorou**, 2011. Ecosystem modelling: Towards the development of a management tool for a marine

coastal system Part-II, Ecosystem processes and biogeochemical fluxes. Journal of Marine Systems (accepted).

Recent Research Projects

Long term variability of the hydrological characteristics of the Mediterranean Sea and its basins.

Research Interests

- Regional Oceanography: circulation and hydrology
- Ecological state of marine environment
- Deep Circulation and climate change