Curriculum Vitae

Personal Information

Last Name	:	Savvidis
First Name	:	Yiannis
Position	:	Professor
Academic Field	:	Coastal Engineering and Physical Oceanography
Work Address	:	International Hellenic University, School of Engineering, Department of Environmental Engineering, P.O. Box 141, 574 00, Sindos, Thessaloniki, Greece
Research Interests	:	Coastal Hydrodynamics; Physical Oceanography; Numerical Modelling, Sediment Transport, Dispersion of Pollutants in Marine Environment , Environmental Coastal Engineering
Contact Details:	:	**tel.: +302310013691**

e-mail: savvidis@ihu.gr
savvidis@civil.auth.gr

Education

1993	**Diploma of the Civil Engineering Department**
1997	Successful attendance of **postgraduate courses** focused on **Marine Fluid Mechanics, Advanced Hydraulic Engineering and Environmental Design**
2000	**Ph.D. Diploma** of the Civil Engineering Department, in March 2000. **Title of the Ph.D. thesis**: Mathematical simulation of cohesive sediment transport in coastal basins. Application to Thermaikos Gulf.

Professional Experience

2002 -2005	Civil Engineer of the Port Authority of Thessaloniki
2000- 2005	Assistant Professor (adjunct) of Alexander Technological Educational Institute of Thessaloniki (ATEITh), Department of Fisheries and Aquaculture Technology
2005	Associate Prof. of the Dept. of Fisheries and Aquaculture Technology, ATEITh
2006-07	Head of the Department of Fisheries and Aquaculture Technology, ATEITh
2007 -2009	Assistant Professor (adjunct) of the Civil Engineering Dept. University of Thessaly
2015 - 2019	Associate Professor of the Dept. of Civil Infrastructure Engineering and later Civil Engineering Department, ATEITh
2019 -	Professor of the Department of Environmental Engineering, International Hellenic University (IHU)

Teaching Experience

A. Undergraduate

2000 -2022	Physical Oceanography, General and Applied Hydraulics Coastal and Harbor Engineering Coastal Oceanography River Training Hydrodynamic Projects Hydrology

B. Postgraduate

2019 -	Hydraulic and Coastal Projects
	Environmental Projects Design

C. Supervision of Post Graduate Theses

2019-2021	Successful Completion of four (4) postgraduate Theses

Departmental Administrative Work

2006-07	Head of the Department of Fisheries and Aquaculture Technology, ATEITh

Committees

2005 -2022	Member in many Department and University committees

Research Programs

International	Participation in three International Research Programs.
National	Participation in thirteen National Research Programs.

Publications

Publications in Scientific Journals (peer reviewed)

1. 2001 **Y. Savvidis**, C. Koutitas &Y. Krestenitis, (2001). 'Development and application of a three dimensional cohesive sediment transport mathematical model.' Journal of Marine Environmental Engineering, Vol. 6, pp. 229-255.
2. 2002 M. Dodou, **Y. Savvidis,** Y. Krestenitis and C. Koutitas, (2002). 'Development of a two-layer mathematical model for the study of hydrodynamic circulation in the

		sea. Application to Thermaikos Gulf', Mediterranean Marine Science, Vol. 3, No.2, pp 5 – 25.
3.	2004	V.H. Kourafalou, **Y.G. Savvidis**, Y.N. Krestenitis and C.G. Koutitas, (2004). 'Modelling studies on the processes that influence matter transfer on the Gulf of Thermaikos (NW Aegean Sea)', Continental Shelf Research, Vol. 24, Issue 2, pp. 203-222.
4.	2004	**Y. Savvidis,** M. Dodou, Y. Krestenitis and C. Koutitas, (2004). 'Modelling of the upwelling hydrodynamics in the Aegean Sea', Mediterranean Marine Science, Vol. 5, No.1, pp.5–18.
5.	2005	**Y. G. Savvidis,** Y. N. Krestenitis and C. G. Koutitas, (2005) 'Modeling the water mass exchange through navigational channels connecting adjacent coastal basins. Application to the Channel of Potidea (North Aegean Sea), Annales Geophysicae, Vol. 23, Number 2, pp. 231-238.
6.	2006	Sofia Galinou -Mitsoudi, **Yiannis Savvidis** and Xenofon Dimitriadis, (2006). 'Interaction between mussel cultures and hydrodynamics; a preliminary study in Thessaloniki & Thermaikos Gulfs' Journal of Biological Research, Vol. 6, pp. 139-145.
7.	2007	Krestenitis Y. N., Kombiadou K.D. and **Savvidis Y.G.** (2007). 'Modelling the cohesive sediment transport in the marine environment: the case of Thermaikos Gulf" Ocean Science, Vol.3, pp.91-104.
8.	2008	Moriki A., S. Galinou-Mitsoudi, D. Petridis, D. Kosti, **Y. Savvidis,** X. Dimitriadis, C. Koutitas and L. Alvanou (2008) 'ENVIRONMENTAL IMPACTS OF INTENSIVE MUSSEL CULTURE IN THE COASTAL WATERS OF THE GULF OF THESSALONIKI (N. GREECE)' Fresenius Environmental Bulletin, Vol. 17, No 11b, pp 1945 – 1955.
9.	2009	**Yiannis Savvidis**, Constantinos Georgiadis and Evagelia Datsi (2009). 'INVESTIGATING THE WATERS' FLUSHING OF THE INNER BASIN OF NEA MOUDANIA HARBOR (NORTHERN GREECE)' Journal of Environmental Protection and Ecology Vol. 10, No.3, pp 732-742.
10.	2010	Patoucheas D.P. and **Savvidis Y. G**. (2010) "A HYDROBIOLOGICAL MODEL AS A TOOL FOR THE DETECTION OF HAB EPISODES. APPLICATION TO THERMAIKOS GULF", Fresenius Environmental Bulletin Vol. 19 – No 9b, pp. 2100-2108.
11.	2011	**Savvidis Y. G.,** D.P. Patoucheas, G. Nikolaidis and C.G. Koutitas (2011) 'MODELING THE DISPERSION OF HARMFUL ALGAL BLOOM IN THE THERMAIKOS GULF (NW AEGEAN SEA)' Global NEST Journal (Global Network of Environmental Science and Technology) vol. 13, no 2, pp. 119-129.
12.	2011	**Yiannis Savvidis,** Constantinos Georgiadis Evagelia Datsi and C. Koutitas (2011) FIELD AND MODELLING STUDY ON THE HYDRODYNAMICS OF THE HARBOR OF NEA MOUDANIA (NW AEGEAN SEA), Journal of Environmental Protection and Ecology, vol. 12, No. 4A, pp. 2311-2321.

13.	2012	Zoi Konstantinou, Yannis N. Krestenitis, Dionisis Latinopoylos, Popi Pagou, Sofia Mitsoudi, **Yiannis Savvidis** (2012) "Aspects of the mussel-farming activity in Chalastra, Thermaikos Gulf, Greece: An Effort to Untie a Management Gordian knot", Journal of Ecology and Society, 17 (1): 1.
14.	2012	Gravas Athanasios, **Yiannis Savvidis** and Christopher Koutitas (2012) "MODELLING STUDY ON WAVE ENERGY HARNESSING PORT STRUCTURES", Fresenius Environmental Bulletin, vol. 21, No 8, pp. 3069-3076.
15.	2013	**Savvidis Yiannis**, Stefanos Zafiriou and Vangelis Keramaris (2013) "ENERGY PRODUCTION FROM SEA WAVES AND CURRENTS. A GENERAL REVIEW" Journal of Environmental Protection and Ecology,Vol.14, No3, pp. 922-932.
16.	2013	Moriki A., **Savvidis Y.,** Kombiadou K., Dimitriadis X., Hatzinikolaou A. and Houlli F. (2013) "PHYSICOCHEMICAL CHARACTERISTICS OF WATER QUALITY IN THE POTIDEA CHANNEL (NORTHERN GREECE)" Journal of Environmental Protection and Ecology, Vol. 14, No 3, pp. 843-850.
17.	2015	**Savvidis Y.** and C. Koutitas (2015) "A NESTED MODELLING OF MATTER TRANSFER IN COASTAL BASINS CONNECTED WITH A CHANNEL, Fresenius Environmental Bulletin Volume 24, No. 11, pages 3627-3635.
18.	2016	Pechlivanidis G, **Y. Savvidis**, E. Keramaris and C. Koutitas (2016) "INVESTIGATION OF THE OPTIMUM CONNECTION OF A FISHPOND WITHTHE ADJACENT MAIN RIVERINE FLOW", Procedia Engineering, 162, pp. 349 – 356.
19.	2017	**Y. Savvidis**, E. Keramaris, Pechlivanidis G and C. Koutitas (2017) Optimum Design of the Entrance of a Fishpond Laterally to the Main Stream of an Open Channel, Environmental Science and Pollution Research, 24(25), 20122-20133.
20.	2018	**Savvidis Yannis**, Keramaris Evangelos, Pechlivanidis George, Koutitas Christoforos, (2017) COMPUTATION OF OPTIMUM WATER COURSE FLOW VELOCITY FOR THE SUSTAINABLE OPERATION OF A FISH REFUGE LATERALLY TO THE FLOW" HYDROTECHNICS, 26 (41-52) (National Journal)
21.	2017	**Y. Savvidis,** E. Keramaris (2017) NUMERICAL STUDY OF PARTICLE TRANSPORT IN A RIVER WITH A LATERAL HARBOR BASIN, Special Topics & Reviews in Porous Media - An International Journal Porous Media Journal, 8(2), pp. 127-135
22.	2017	Pechlivanidis G, A. Antoniou **Y. Savvidis**, (2017) Experimental-laboratory study of the flow around mussel shocks International Journal of Engineering Research & Science Vol-3, Issue-8, August- 2017, pp. 76-83
23.	2018	George Pechlivanidis, Evangelos Keramaris, and **Yiannis Savvidis** (2018). Turbulent simulation of the flow around different positions of mussel shocks. Proceedings 2018, 2(11), 574

24. 2018 **Savvidis Yiannis**, Evangelos Keramaris, George Pechlivanidis and Christopher Koutitas (2018). Modelling of environmental parameters of a harbor basin in a coastal zone with a seawall. Proceedings 2018, 2(11), 575

25. 2019 Moriki A., A. Antoniou, C.A. Papadimitriou, V. O. Stoilas, **Y. Savvidis** (2019). Nutrient limitation in a coastal system influenced by mussel farming, river outflow and on-shore circulation of waters, Environmental Processes, An International Journal

26. 2019 **Yiannis Savvidis**, Alexander Antoniou, Amalia Moriki, Vasilis-Orestis Stoilas (2019) Downwelling events in a Coastal Mussel Farming Area, NW Thessaloniki's Gulf (NW Aegean Sea) Ocean Science Journal, December 2019, Volume 54, Issue 4, pp 543–558

27. 2021 **Savvidis Y**. and E. Keramaris (2021) Study of waters' renewal and sedimentation of a square harbour encapsulated in a coastal front with seawalls due to wind induced hydrodynamic circulation. International Journal of Sediment Research. Volume 36, Issue 3, June 2021, Pages 373-383

28. 2021 Papadimitriou C.A., **Savvidis Y**., Galinou - Mitsoudi S., and Moriki A (2021) The role of Hydrodynamics on the sustainable mussels' culture activity. The case of Chalastra basin (NW Gulf of Thessaloniki) Hydrology (Special Issue "Aquatic Ecosystems and Water Resources") Hydrology 2021, 8, 105

29 2022 **Savvidis** Y. and S. Mamtsadeli (2022) "Environmental state of a harbor in terms of waters' renewal. A case study for a fishery harbor of Thessaloniki Bay (NW Aegean Sea)" Journal of Geoscience and Environment Protection Vol.10, No.8, pp. 385-406

30. 2022 Leousidis Alexandros, George Pechlivanidis, Evangelos Keramaris, **Yiannis Savvidis** (2022) Experimental Study of the Effects of Heating or Cooling on the Water Surface in an Open Channel, Environmental Sciences Proceeding, Environ. Sci. Proc. 2022, 21(1), 60,

31. 2024 Leousidis Alexandros, Evangelos Keramaris, George Pechlivanidis, **Yiannis Savvidis** (2024) STUDY OF THE EFFECT OF A COOLING LOAD ON A FLUID SURFACE (WATER) IN AN OPEN CHANNEL, Volume 17, Number 5 (May 2024), Journal of Applied Fluid Mechanics, 17(5), pp. 951–966

32. 2024 Christos Ntafloukas and **Yiannis Savvidis** (2024) "Climate-Driven Wave Analysis Reveals Changes in Alongshore Sediment Transport: The Case of the Coastal Zone of a Harbor in Thermaikos Bay (NW Aegean Sea), Water 2024, 16 (12), 1703. https://doi.org/10.3390/w16121703

Publications in Scientific Conference Proceedings (peer reviewed)

International

1. 2000 **Y. Savvidis** & C. Koutitas, 'Simulation of transport & fate of suspended matter along the coast of Agathoupolis (N. Greece)', Proceedings of the 5th International Conference Protection and Restoration of the Environment, Thassos, Greece, July, 2000

2.	2000	Christopher Koutitas & **Yiannis Savvidis**, 'Management of dredged disposal in Thermaikos Bay', Proceedings of the 5th Int. Conference in Environmental Pollution, Thessaloniki, Greece, 28 August - 1 September 2000
3.	2000	**Y. Savvidis,** V. Kourafalou, Y. Krestenitis & C. Koutitas, 'Sediment particle transport prediction, based on the Random Walk simulation', Lagrangian Analysis and Predictability of Coastal and Oceanic Dynamics, Aural Presentation & Abstracts, Session D: Assimilation of Lagrangian data and predictability of trajectories, International meeting, Ischia, Italy, October 2-6, 2000
4.	2001	Y. Krestenitis, V. Kourafalou and **Y. Savvidis,** "Numerical studies of the matter transfer in the Thermaikos Gulf", 21st Century: The New Era for Hydraulic Research and Its Applications, Hydraulics for Maritime Engineering, Proceedings of Theme E, XXIX IAHR Congress, Beijing, China, 16-21 September, 2001

5. 2001 **Savvidis, Y.;** Koutitas, C; Krestenitis, Y.; Kourafalou, V "Stochastic model simulations on the transport of river-borne sediment particles", EGS (European Geophysical Society) XXVI General Assembly, Aural Presentation & Abstracts, Nice, France, March 25–30, 2001. In: Geophysical Research Abstracts, GRA3, 3531, 2001

6. 2002 M. Dodou, **Y. Savvidis**, Y. Krestenitis and C. Koutitas, 'Tracing upwelling coastal zones based on mathematical simulations', 1st International Conference in Aquaculture, Fishery Technology and Environmental Management, Athens, 8-10 June 2002.

7. 2002 **Y. Savvidis**, Y. Krestenitis and C. Koutitas, 'Observations and Modeling of Water Mass Exchange between Thermaikos and Toroneos Bays', EuroGoos (European Global Ocean Observing Systems), International Conference, Athens, 2-6 December, 2002.

8. 2002 **Y. Savvidis,** Y. Krestenitis and V. Kourafalou, 'Modelling matter transfer in the gulf of Thermaikos', First Scientific Conference, on Oceanographic Aspects for a Sustainable Mediterranean, the Hellenic Oceanographers' Association, 27-29 September 2002, Athens.

9. 2004 M. Gousidou, **Y. Savvidis**, C. Koutitas. 'A computational model for the forced resuspension of sea bed sediment caused by trawling', 5th International Symposium on Ecohydraulics, Madrid SPAIN, 12-17 Sept 2004

10. 2005 Y. Krestenitis, K. Kombiadou and **Y. Savvidis**, 'Modelling sediment transport in coastal basins: The case of the Thermaikos Gulf', Conference of EGU 2005 (European Geosciences Union), Aural Presentation & Abstracts, Vienna, Austria, 24-29 April 2005: In Geophysical Research Abstracts, Vol. 7, 04768, 2005

11. 2007 A.Moriki, S Galinou – Mitsoudi, D. Petridis, D. Kosti, **Y. Savvidis**, X.Dimitriadis, C.Koutitas and L. Alvanou 'ENVIRONMENTAL IMPACTS OF INTENSIVE MUSSEL CULTURE IN THE COASTAL WATERS OF THE GULF OF THESSALONIKI (N. GREECE)' 14th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, October 10-14, 2007, Sevilla, Spain

12. 2007 S. Galinou-Mitsoudi, A. Moriki, **Y. Savvidis**, D. Petridis, X. Dimitriadis, Ch. Koutitas and L. Alvanou; 'SPATIAL FLUCTUATION OF THE QUALITY OF MUSSELS FROM LONGLINE CULTURES IN TERMS OF ENVIRONMENTAL, BIOLOGICAL AND CULTURISTS OPERATION PARAMETERS'. 14th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. October 10-14, 2007, Sevilla, Spain

13. 2007 **Yiannis Savvidis**, Antoniou Alexandros, Dimitriadis Xenofon, Koutitas Christophoros, Moriki Amalia, Galinou-Mitsoudi Sofia, Petridis Dimitris, and Alvanou Lydia 'HYDRODYNAMICS IN A MUSSEL CULTURE AREA IN THERMAIKOS GULF' Proceedings of the 8th International Conference MEDCOAST 2007,

		Alexandria Egypt, 13-17 November 2007
14.	2008	Koutitas C.G. and **Y.G. Savvidis** 'Modelling of a Wave Energy Harnessing Breakwater' the 18th International Offshore (Ocean) and Polar Engineering Conference & Exhibition Vancouver, British Columbia, Canada, July 6-11, 2008.
15.	2009	Galinou-Mitsoudi S., A. Moriki, **Y. Savvidis**, D. Petridis, X. Dimitriadis, "Mussel production in relation to ecohydraulic conditions in the culture area of NW Thessaloniki Gulf (NW Aegean, Greece)" 1st Euroshell thematic session during the EAS Conference in Trondheim Norwegian University of Science and Technology, Trondheim, Norway August 15-17, 2009
16.	2009	**Savvidis Y. G**., D.P. Patoucheas, G. Nikolaidis and C.G. Koutitas 'MODELING THE DISPERSION OF HARMFUL AN ALGAL BLOOM IN THE THERMAIKOS GULF (NW AEGEAN SEA)', 11th Inter. Conf. on Environmental Science and Technology, Greece, 1-3/9/2009
17.	2009	Patoucheas D.P. and **Savvidis Y. G**, "A HYDROBIOLOGICAL MODEL AS A TOOL FOR THE DETECTION OF HAB EPISODES. APPLICATION TO THERMAIKOS GULF" 15th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, October 7 to 11, 2009, Bari – Italy
18.	2010	**Savvidis Y. G.,** Moriki Amalia, K. Kombiadou, X. Dimitriadis, E. Tsianaka, S. Kerpitsopoulou, and A. Hatzinikolaou "INVESTIGATING THE HYDRODYNAMICS AND WATER QUALITY IN THE POTIDEA CHANNEL (NW AEGEAN SEA)", 10th In. Conf. Protection & Restoration of the Environment, Corfu, Greece, July 2010
19.	2011	Gravas Athanasios, **Yiannis Savvidis** and Christopher Koutitas (2011) "MODELLING STUDY ON WAVE ENERGY HARNESSING PORT STRUCTURES" 16th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, September 2011
20.	2011	Zoi Konstantinou, **Yiannis Savvidis**, Katerina Kombiadou, Yannis Krestenitis, "Mussel farm layout scenarios as management alternatives" 10th International Conference MEDCOAST 2011, Rhodes, Greece, October 25-29, 2011
21.	2012	Moriki A., **Savvidis Y.,** K. Kombiadou, X. Dimitriadis, "NUTRIENTS AND ORGANIC CARBON FLUXES AT THE POTIDEA CHANNEL (NW AEGEAN SEA)", 11th In. Conf. Protection & Restoration of the Environment, Thessaloniki, Greece July 2012
22.	2012	**Savvidis Y**. and S. Zafeiriou (2012) «Energy production from sea waves and currents» 2nd International Conf. of Green Infrastructures, Grand Hotel, Thessaloniki, Greece, November 2012
23.	2015	Amalia Moriki, **Yiannis Savvidis**, Chrysa Papadimitriou, Irene Fantidou, Nikos Kapageridis, Vasilis-Orestis Stoilas, Alexandros Antoniou, Sofia Galinou – Mitsoudi (2015) "Physicochemical parameters variation in a longline mussel culture system » 18th International Symposium on Environmental

Pollution and its Impact on Life in the Mediterranean Region, Crete, September 2015 (abstract & poster).

24. 2015 **Yiannis Savvidis**, Alexandros Antoniou, Vasilis-Orestis Stoilas and Sofia Galinou-Mitsoudi (2015) "Hydrodynamics in longline mussel culture layouts" 12h International Conference MEDCOAST 2011, Varna,Bulgaria, 6-10 Oct. 2015

25. 2016 Sofia Galinou-Mitsoudi, Antonios Dafnakis, Dimitrios Petridis, **Yiannis Savvidis** (2016) "The mussel culture sustainability in Greece: Is the temperature change a limited parameter?" 6th International Conference "PROTECTION OF NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT: THE MAIN TOOLS FOR SUSTAINABILITY", PRONASEM 2016, Bucharest, Romania 11-13 November 2016

26. 2019 **Savvidis Yiannis** and Sofia Galinou-Mitsoudi (2019) "Sustainable musselculture activity in terms of hydrodynamics. The case study of Chalastra basin (NW Gulf of Thessaloniki)", CEST2019, Rhodes Island, 4-8 September

27. 2022 Leousidis A., Pechlivanidis G., Keramaris E., **Savvidis Y.** (2022) EXPERIMENTAL STUDY OF THE EFFECTS OF HEATING OR COOLING ON THE WATER SURFACE IN AN OPEN CHANNEL (accepted) EWaS5 Conference, Napoli, Italy

National

18 papers presented in Greek National Conferences

Collective Volumes

1. 2015 Dimitrios Patoucheas and **Yiannis Savvidis** (2015). «MODELLING OF HYDROBIOLOGICAL PROCESSES IN COASTAL WATERS». **Chapter** in the book: Hydrodynamics - Concepts and Experiments, ISBN 978-953-51-2034-6 Book edited by: Prof. Harry Edmar.

Course Books/Scientific Books

Research Program Reports

Authored or co-authored of ten technical reports of research projects

Acknowledgement of Scientific Expertise

A.Awards - Distinctions – Scholarships- Patents

1987 Scholarship of admission to the Civil Engineering Department of Aristotle University of Thessaloniki

2000	Scholarship of the Aristotle University of Thessaloniki for the attendance of "Leonardo da Vinci" INTERNATIONAL ADVANCED SCHOOL "PROCESSES IN THE COASTAL ZONE: LINKS TO MANAGEMENT ISSUES" 3-14 July, 2000, Bologna, Italy

B. Citations/ h-index

309 citations / h-index: 11 (Google Scholar)

C. Reviewer in Scientific Journals

2009-2024	Reviewer for many international and national journals and conferences.

D. Member of Conference Scientific and Organizing Committees

E. Member of other Scientific Committees or Professional Associations

1994 -	Member of Technical Chamber of Greece (T.E.E.) (as Civil Engineer)
2003 -	Member of Greek Oceanographers Association ιδιότητα (Physical Oceanographer)
2008 -	Member of Greek Hydrotechnical Association (EYE)
2012-	Member of BALKAN ENVIRONMENTAL ASSOCIATION (BENA)

Other Activities - Interests

Studies in Music Education, University of Reading, UK (2000-2004)