## **Curriculum Vitae**

#### Dr. THEODOROS P. GEROSTATHIS

**Associate Professor** 

Department of Naval Architecture School of Engineering University of West Attica

January 2023

**PERSONAL INFO** 

Name/Sir name: Theodoros P. Gerostathis, Associate Professor,

Department of Naval Architecture,

School of Engineering, University of West Attica (UNIWA)

Address: Agiou Spiridonos,

Egaleo 122 43

**ATHENS** 

Tel. +30-210-5385808, +30-210-5385310 (secretariat).

email: <u>tgero@uniwa.gr</u>

web: <a href="http://www.na.uniwa.gr/en/gerostathis-th/">http://www.na.uniwa.gr/en/gerostathis-th/</a>

Birth date: 16/02/1973

#### **ACADEMIC DEGREES**

2004 Doctor of Engineering,

School of Naval Architecture and Marine Engineering,

National Technical University of Athens.

1997 Diploma in Naval Architecture and Marine Engineering,

School of Naval Architecture and Marine Engineering,

National Technical University of Athens.

ACADEMIC POSITIONS	
2018 – Today	Department of Naval Architecture, School of Engineering, University of West Attica, Associate Professor.
2017 - 2018	Department of Naval Architecture, Faculty of Technological Applications, Technological Educational Institute of Athens, Associate Professor.
2007 – 2017	Department of Naval Architecture, Faculty of Technological Applications, Technological Educational Institute of Athens, Assistant Professor.
2006 - 2008	School of Naval Architecture and Marine Engineering, National Technical University of Athens, Adjunct Professor.
2004 – 2007	Department of Naval Architecture, Faculty of Technological Applications, Technological Educational Institute of Athens, Adjunct Professor.

Courses	
2022 – Today	Fluid Mechanics (undergraduate),
2022 Today	Department of Naval Architecture, School of Engineering, UNIWA.
2022 - 2023	Numerical Analysis (undergraduate),
	Department of Naval Architecture, School of Engineering, UNIWA.
2019 – Today	Seakeeping and maneuvering (undergraduate),
_017 10 day	Department of Naval Architecture, School of Engineering, UNIWA.
2019 - 2020	Lifting Flows and Propeller Theory (undergraduate),
	Department of Naval Architecture, School of Engineering, UNIWA.
2019	Computational Ship and Marine Hydrodynamics (undergraduate),
	Department of Naval Architecture, School of Engineering, UNIWA.
2018 – Today	Advanced 3D Design of Ship Systems (postgraduate),
J	Postgraduate Studies Program: Advanced Technologies in Naval
	Architecture and Marine Engineering, Department of Naval
	Architecture, School of Engineering, UNIWA.
2018 – Today	Hydrodynamic behavior of a ship in sea waves (postgraduate),
·	Postgraduate Studies Program: Advanced Technologies in Naval
	Architecture and Marine Engineering, Department of Naval
	Architecture, School of Engineering, UNIWA.
2018 - Today	Computer Aided Geometric Design of Marine Structures (undergraduate)
	Department of Naval Architecture, School of Engineering, UNIWA.
2008	Fluid Mechanics II (undergraduate),
	Department of Naval Architecture, School of Engineering, UNIWA.
2017 – Today	Computational fluid dynamics with applications in Naval Architecture
	and Marine engineering (postgraduate),
	Postgraduate Studies Program: Advanced Technologies in Naval
	Architecture and Marine Engineering, Department of Naval
	Architecture, School of Engineering, UNIWA.
2015 – 2018	Computer Applications to Ship Design II (undergraduate),
	Department of Naval Architecture, Faculty of Technological
	Applications, Technological Educational Institute of Athens.
2008 – 2017	Fluid Mechanics II (undergraduate),
	Department of Naval Architecture, Faculty of Technological
	Applications, Technological Educational Institute of Athens.
2008 – 2018	Fluid Mechanics I (undergraduate),
	Department of Naval Architecture, Faculty of Technological
2222 2242 1	Applications, Technological Educational Institute of Athens.
2008 – 2010 and	Computer Applications to Ship Design I (undergraduate),
2015 - 2018	Department of Naval Architecture, Faculty of Technological
2006 2000	Applications, Technological Educational Institute of Athens.
2006 – 2008	Fluid Mechanics (undergraduate),
	Department of Naval Architecture, Faculty of Technological
2004 2000	Applications, Technological Educational Institute of Athens.
2004 – 2008	Computer Applications to Ship Design (undergraduate),

	Department of Naval Architecture, Faculty of Technological
	Applications, Technological Educational Institute of Athens.
2008 - 2009	Special subjects of applied mathematics and use of symbolic
	languages on mathematical and physical problems (postgraduate),
	Postgraduate Studies Program: Marine and Sea Technology and
	Science, School of Naval Architecture and Marine Engineering,
	National Technical University of Athens.
2006 - 2008	Ship dynamics & laboratory (undergraduate),
	(former title: Ship dynamics in waves and ship motion control)
	School of Naval Architecture and Marine Engineering,
	National Technical University of Athens.
2005 - 2006	Ship dynamics in waves and ship motion control (undergraduate),
	School of Naval Architecture and Marine Engineering, National
	Technical University of Athens.
2004 - 2006	Parallel and Network Computing (postgraduate),
	Postgraduate Studies Program: Mathematical Modelling in
	Modern Technologies and Financial Engineering,
	School of Applied Mathematical & Physical Sciences,
	National Technical University of Athens.

## INTERNATIONAL RECOGNITION

- 2008 2011, 2013, 2017-2019. Reviewer in "International Conference on Offshore Mechanics and Arctic Engineering".
- 2007. Session chair in the thematic area of "Marine Environment-Waves" of "International Congress of the International Maritime Association of the Mediterranean", IMAM2007.
- 2009. Reviewer in "10th International Conference on Fast Sea Transportation", (FAST 2009).
- 2016 2022. Reviewer in "International Ocean and Polar Engineering Conference" (ISOPE).
- 2023. Reviewer in "International Symposium on Ship Operations, Management & Economics (SOME)"
- Review in Journals: Computer-Aided Design (2016), European Journal of Mechanics
   B/Fluids (2017), Ocean Modeling (2018), Ocean Engineering (2019, 2020,2022).

# **MEMBERSHIPS**

- Society of Naval Architects & Marine Engineers.
- Technical Chamber of Greece.

#### **RESEARCH INTERESTS**

- Free surface hydrodynamics, ship hydrodynamics and wave-current-body interaction, hydroelasticity, energy production through sea waves and currents.
- Parallel and distributed scientific computing with applications to wave propagation problems in sea environment and ship hydrodynamics. Development of numerical models using computer clusters and computational grids.

- Wave phenomena in the sea environment, including surface gravity waves, acoustic waves in water column, propagation-scattering.
- Development of integrated software packages concerning the sea environment (geographical background, databases of environmental parameters, numerical models) for solving composite scientific and technical problems.
- Application of Mesh and Meshless Methods for the simulation of the flow field around floating or submerged bodies near the free surface.
- Computer aided geometric/ship design (CAGD/CASD). Isogeomeric analysis with applications in ship hydrodynamics.
- Multiresolution analysis and wavelets.

## **RESEARCH PROJECTS**

Participated for many years in projects, funded by European and Greek national resources (*selected projects*):

- 2017 2019, "Support Mediterranean member states towards coherent and coordinated implementation of the second phase of the MSFD-MEDCIS", National Technical University of Athens (NTUA). Funding: EU, DG ENV/MSFD Second Cycle.
- 2015 2017, "**Flapping foil power generation**", TEI of Athens. Funding: TEI of Athens, Scientific responsible.
- 2013 2015, "Augmenting ship propulsion in rough sea by biomimetic-wing system" (BIO-PROPSHIP), National Technical University of Athens (NTUA). Funding: General Secretariat for Research and Technology (GSRT) National Strategic Reference Framework of Greece (NSRF). ARISTEIA Programme.
- 2012 2014, "Estimating the effects of Climate Change on SEa level and WAve climate of the Greek seas, coastal Vulnerability and Safety of coastal and marine structures (CCSEAWAVS)". Aristotle University of Athens. Funding: National Strategic Reference Framework of Greece (NSRF). THALES Programme.
- 2011 2014, "An integrated system for monitoring ship's emissions and operating parameters with application to optimal management of the ship energy demands during operation (e-greenship)". Technological Educational Institute of Athens (TEI-A). Funding: Greek General Secretariat for Research and Technology.
- 2012, "Marine Renewable Integrated Application Platform (MARINA Platform)". National and Kapodistrian University of Athens. Funding: EU, FP7.
- 2009–2011, "Exact geometry simulation for optimized design of vehicles and vessels (EXCITING)". Hellenic register of shipping National Technical University of Athens (NTUA). Funding: EU, FP7.
- 2005–2007, "Study of wave-current interaction problems in nonhomogenous sea environment and applications", Operational Programme for Education and Initial Vocational Training, (in greek ΕΠΕΑΕΚ- II), Pythagoras II. NTUA. Funding: EU and national.
- 2004–2006, "Development of models for predicting waves in sea and coastal environment and exploitation to the optimization of naval technology for

**marine pollution problems**", ARCHIMEDES I, EΠΕΑΕΚ. Dept. of Naval Architecture, Faculty of Technological Applications, Technological Educational Institute of Athens. Funding: EU and national.

- 2005, "Elimination Units for Marine Oil Pollution (EU-MOP)". NTUA. Funding: EU, FP6-Transport.
- 2002–2005, "Development and Application of Validated Geophysical Ocean Wave Products from ENVISAT ASAR and RA-2 Instruments (ENVIWAVE)". NTUA. Funding: EU, FP5-EESD.
- 2001–2003, "An Advanced Lightweight Architecture for Accessing Scientific Collections (ARION)". NTUA. Funding: EU, FP5-IST.
- 1997–2000, "A European-wide offshore/nearshore statistical toolbox and data base for timely wave climate assessment (EUROWAVES)". NTUA. Funding: EU, MAST-III.
- 1994–1997, "Systematic study of the hydroacoustic characteristics of the Aegean Sea (AMFITRITI)". NTUA. Funding: national.

#### LIST OF PUBLICATIONS

#### A. JOURNAL PAPERS

- 1. Gerostathis, T.P., Koras, G. and Kaklis, P. 1998, Numerical experimentation with the Roulier-Rando fairness metrics, Mathematical Engineering in Industry, Vol. 7, No.2, pp. 195-209.
- 2. Belibassakis, K.A., Athanassoulis, G.A., Gerostathis, Th., 2001, A coupled-mode system for the refraction-diffraction of linear waves over steep three dimensional topography, Applied Ocean Research, Vol. 23, pp. 319-336.
- 3. Athanassoulis, G.A., Belibassakis, K.A., Gerostathis, Th., 2002, The POSEIDON nearshore wave model and its application to the prediction of the wave conditions in the nearshore/coastal region of the Greek Seas, Journal of Atmospheric & Ocean Science, Vol 8 (2-3), pp. 201-217.
- 4. Gerostathis, Th., Politis, K., Belibassakis, K.A., Athanassoulis, G.A., 2007, A Wavelet Galerkin technique for the wave-current-seabed interaction in variable bathymetry regions, Bulletin of the Greek Mathematical Society, Vo.54, 167-178.
- 5. Gerostathis, T., Belibassakis, K.A., Athanassoulis, G.A., 2008, A coupled-mode model for the transformation of wave spectrum over steep 3d topography. A Parallel-Architecture Implementation, Journal of Offshore Mechanics and Arctic Engineering, JOMAE, Vol.130(1), 011001.
- 6. Belibassakis, K.A., Gerostathis, T.P., Athanassoulis, G.A., 2011, A coupled-mode model for water wave scattering by horizontal, non-homogeneous current in general bottom topography, Applied Ocean Research, Vol. 33(4), pp. 384-397.
- 7. Belibassakis, K.A., Gerostathis, Th.P., Kostas, K.V., Politis, C.G., Kaklis, P.D., Ginnis, A.I., Feurer, C., 2013, A BEM-isogeometric method for the ship wave-resistance problem, Ocean Engineering, Vol.60, pp. 53-67.
- 8. Ginnis A.I., Kostas K.V., Politis C.G., Kaklis P.D., Belibassakis K.A., Gerostathis, Th.P., Scott M.A., Hughes T.J.R., 2014, Isogeometric boundary-element analysis for the

- wave-resistance problem using T-splines, Computer Methods in Applied Mechanics and Engineering, Vol.279, 425-439.
- 9. Belibassakis K.A., Athanassoulis G.A., Gerostathis Th.P., 2014, Directional wave spectrum transformation in the presence of strong depth and current inhomogeneities by means of coupled-mode model, Ocean Engineering, Vol. 87, 84–96.
- 10. Diakaki Chr., Panagiotidou N., Pouliezos A., Kontes G, Stavrakakis G., Belibassakis K., Gerostathis Th., Livanos G., Pagonis D.-N., Theotokatos G., 2015, A decision support system for the development of voyage and maintenance plans for ships, Inter. Journal of Decision Support Systems (InterScience Publishers), Vol. 1, No. 1, 42-71.
- 11. Gerostathis, Th.P., Belibassakis, K.A., Athanassoulis, G.A., 2016, 3D hydroelastic analysis of very large floating bodies over variable bathymetry regions, Journal of Ocean Engineering and Marine Energy, Vol 2, 159–175.
- 12. Makris C., Galiatsatou P., Tolika K., Anagnostopoulou C., Kombiadou K., Prinos P., Velikou K., Kapelonis Z., Tragou E., Androulidakis Y., Athanassoulis G., Vagenas C., Tegoulias I., Baltikas V., Krestenitis Y., Gerostathis T., Belibassakis K., Rusu E., 2016, Climate change effects on the marine characteristics of the Aegean and Ionian Seas, Ocean Dynamics, Vol. 66 (12), 1603–1635.
- 13. Filippas, E.S., Gerostathis, Th.P., Belibassakis, K.A., 2018, Semi-activated oscillating hydrofoil as a nearshore biomimetic energy system in waves and currents, Ocean Engineering, Vol. 154, 396-415.
- 14. Karathanasi, F., Karperaki, A., Gerostathis, T., Belibassakis, K., 2020, Offshore-to-Nearshore Transformation of Wave Conditions and Directional Extremes with Application to Port Resonances in the Bay of Sitia-Crete, Atmosphere, Vol. 11(3), 280.

## B. PAPERS IN CONFERENCE PROCEEDINGS (REVIEW BASED ON FULL PAPER)

- 1. Athanassoulis, G.A., Belibassakis, K.A., Gerostathis, Th., 2000, A coupled-mode theory for the diffraction of water waves by localized scatterers over a parallel-contour bathymetry, WAVES 2000, Mathematical and Numerical Aspects of Wave Propagation, organized by SIAM and INRIA, Spain, June 2000.
- Athanassoulis, G.A., Belibassakis, K.A., Gerostathis, Th., 2002, A coupled-mode model for acoustic scattering by a general seafloor topography, 10th Congress of International Maritime Association of the Mediterranean, IMAM 2002, Rethymnon-Crete.
- 3. Barstow, S., Mørk, G., Lønseth L, Schjølberg, P., Machado, U., Athanassoulis, G., Belibassakis, K., Gerostathis, T., Stefanakos, Ch., Spaan, G., 2003, WORLDWAVES: Fusion of data from many sources in a user-friendly software package for timely calculation of wave statistics in global coastal waters, 13th Intern. Offshore and Polar Engineering Conference, ISOPE2003, Honolulu, Hawaii, USA.
- 4. Barstow, S., Mørk, G., Lønseth L, Schjølberg, P., Machado, U., Athanassoulis, G., Belibassakis, K., Gerostathis, T., Stefanakos, Ch., Spaan, G., 2003, WORLDWAVES: High quality coastal and offshore wave data within minutes for any global site, 22nd International Conference on Offshore Mechanics and Arctic Engineering, OMAE2003, Cancun, Mexico.

- Gerostathis, Th.P., Belibassakis, K.A. and Athanassoulis, G.A. 2005, A coupled-mode, phase-resolving model for the transformation of wave spectrum over steep 3D topography. A parallel architecture implementation, 24th International Conference on Offshore Mechanics and Arctic Engineering, OMAE 2005, Halkidiki, Greece 12-17 June.
- 6. Belibassakis, K.A., Hatzikonstadis, G.K., Theotokatos, G., Stefanakos, Ch.N., Sarantopoulos, S., Gerostathis, Th., Georgiou, Y.G., 2005 New challenges in the education of Naval Architects in TEI of Athens, WSEAS International Conference on Engineering Education, Vouliagmeni, Athens, Greece, July 8-10.
- 7. Athanassoulis, G.A., Belibassakis, K.A., Gerostathis, T., 2006, Wave data along ship routes in the Mediterranean Sea, 9th Int Conf. on Stability of Ships and Ocean Vehicles, STAB2006, Rio de Janeiro, Brazil.
- 8. Belibassakis K.A., Gerostathis, Th.P. and Athanassoulis G.A., 2007, A coupled-mode technique for the prediction of wave-induced set-up and mean flow in variable bathymetry domains, 26th International Conference on Offshore Mechanics and Arctic Engineering, OMAE2007, San Diego, USA.
- 9. Belibassakis, K.A., Gerostathis, Th.P., Athanassoulis, G.A., 2007, A phase-resolving, coupled-mode model for wave-current-seabed interaction over steep 3D bottom topography. Parallel architecture implementation, 17th Intern. Offshore and Polar Engineering Conference, ISOPE2007, Lisbon.
- 10. Belibassakis, K.A., Gerostathis, Th.P., Athanassoulis, G.A., 2007, Calculation of wave-induced set-up in variable bathymetry regions and groundwater flow in permeable beaches by a coupled-mode method, 8th HSTAM International Congress on Mechanics, Patras, Greece.
- 11. Belibassakis, K.A., Gerostathis, T., Athanassoulis, G.A., 2007, Wave-current systems in variable bathymetry regions, 12th International Congress of the International Maritime Association of the Mediterranean IMAM2007, Varna Boulgaria.
- 12. Belibassakis, K.A., Gerostathis, Th.P., Athanassoulis, G.A., 2008, A weakly nonlinear couple-mode model for wave-current-seabed interaction over general bottom topography, 27th International Conference on Offshore Mechanics and Arctic Engineering, OMAE2008, Estoril, Portugal.
- 13. Belibassakis, K.A., Gerostathis, T.P., Politis, C.G., Kaklis, P.D., Ginnis, A.I., Mourkogianis, D.N., 2009, A novel BEM-isogeometric method with application to the wavemaking resistance problem of bodies at constant speed. 13th Congress of Int. Maritime Assoc. of the Mediterranean, IMAM2009.
- 14. Belibassakis, K., Gerostathis, Th, & Athanassoulis G.A., 2010, A coupled-mode model for the transformation of wave systems over inhomogeneous sea/coastal environment. 29th International Conference on Offshore Mechanics and Arctic Engineering, OMAE2010, Shanghai.
- 15. Belibassakis, K., Gerostathis, Th., Kostas, K., Politis, C. Kaklis, P., Ginnis A. and Feurer, C., 2011, A BEM-isogeometric method with application to the wavemaking resistance problem of ships at constant speed, 30th International Conference on Offshore Mechanics and Arctic Engineering, OMAE2011, Rotterdam, The Netherlands.
- 16. Belibassakis, K.A., Athanassoulis, G.A., Gerostathis, Th.P. 2013, Hydroelastic analysis of Very Large Floating bodies over variable bathymetry regions, 10th HSTAM International Congress on Mechanics, Chania, Crete, Greece.

- 17. Belibassakis, K.A., Gerostathis, Th.P., Politis, G.K., 2013, Calculation of ship hydrodynamic propulsion in rough seas by non-linear BEM with application to reduction of energy losses in waves, 32th International Conference on Offshore Mechanics and Arctic Engineering, OMAE2013, Nantes, France.
- 18. Belibassakis, K.A., Athanassoulis, G.A., Gerostathis, Th.P., Katsardi V., 2013, Transformation of wave conditions in nearshore and coastal areas by a 3D coupled-mode wave model. 15th International Congress of the International Maritime Association of the Mediterranean, IMAM 2013, A Coruña, Spain.
- 19. Politis C.G., Papagiannopoulos A., Belibassakis K.A., Kaklis P.D., Kostas K.V., Ginnis A.I. Gerostathis T.P., 2014, An isogeometric BEM for exterior potential-flow problems around lifting bodies, 11th World Congress on Computational Mechanics (WCCM XI & ECCM V & ECFD VI), July 20-25, Barcelona, Spain.
- 20. Belibassakis K., Gerostathis Th., Filippas E., Touboul J., Rey V., 2015, Oscillating hydrofoils as energy devices operating in waves and currents, 11th European Wave & Tidal Energy Conference (EWTEC2015), September 6-11, Nantes, France.
- 21. Belibassakis K., Filippas E., Gerostathis Th., 2016, Biomimetic marine energy devices in waves and sheared currents, 2<sup>nd</sup> International Conference on Renewable Energies Offshore, October 24 26, Lisbon, Portugal.
- 22. Belibassakis K., Gerostathis Th., Athanassoulis G.A., 2016, A 3D-BEM coupled-mode method for WEC arrays in variable bathymetry, 2<sup>nd</sup> International Conference on Renewable Energies Offshore, October 24 26, Lisbon, Portugal.
- 23. Athanassoulis, G., Belibassakis K., Gerostathis, Th., Prospathopoulos, A., 2018, A software tool for estimating shipping noise footprint with application to South Adriatic Ionian Sea, Proceedings Euronoise 2018, Hersonissos Crete.

#### C. Papers in Conference Proceedings (review based on abstract)

- 1. Athanassoulis, G.A., Belibassakis, K.A., Gerostathis, Th., 2000, A coupled-mode theory theory for the scattering of acoustic waves from localized 3D scatterers superimposed over a parallel contour bathymetry, 5th European Conference on Underwater Acoustics, Lyon 2000.
- 2. Stefanakos, Ch.N., Gerostathis, Th.P., Athanassoulis, G.A., Houstis, C., Vavalis, E., 2002, Building ontologies of environmental applications for a digital library of scientific collections", 16th International Symposium Environmental Informatics, EnviroInfo 2002, Technical University of Vienna, Vienna, Austria, September 25-27.
- 3. Steve Barstow, Gunnar Mørk, Lasse Lønseth, Peter Schjølberg, Gerassimos Athanassoulis, Kostas Belibassakis, Theodore Gerostathis and Gerard Spaan, 2003, WORLDWAVES: High quality coastal and offshore wave data within minutes for any global site, Coastal and Port Engineering in Developing Countries, COPEDEC VI 2003, Colombo, Sri Lanka, September 2003.
- 4. Steve Barstow, Gunnar Mørk, Lasse Lønseth, Peter Schjølberg, Ulla B. Machado, Gerassimos Athanassoulis, Kostas Belibassakis, Theodore Gerostathis and Gerard Spaan, 2003, WORLDWAVES: High quality coastal and offshore wave data within minutes for any global site, Coasts and Ports 2003, Auckland, New Zealand.
- 5. Athanassoulis, G.A., Belibassakis, K.A., Gerostathis, Th., 2006, Long-term wind and wave data for Port & Harbour Engineering: Exploiting existing offshore data and

- numerical models to get a timely, site-specific nearshore analysis, 4<sup>th</sup> Hellenic Conference on Port Engineering, Athens, November 2006 (in Greek).
- 6. Belibassakis, K.A., Gerostathis, T., Athanassoulis, G.A., 2008, Wave current seabed interaction over general bottom topography, Coastal Technology (Coast 2008), International Workshop, NTNU, Trondheim, Norway, May 29-30, 2008.
- 7. Ginnis, A.I., Kostas, K.V., Feurer, C., Belibassakis, K.A., Gerostathis, Th.P., Politis, C.G., Kaklis, P.D., 2011, "A CATIA® Ship-Parametric Model for Isogeometric Hull Optimization with Respect to Wave Resistance", in Proc. of the International Conference on Computer Applications in Shipbuilding, ICCAS 2011, Trieste, 20-22 September.
- 8. Politis, C.G., Belibassakis, K.A., Kostas, K.V., Gerosthathis, Th.P., Kaklis, P.D., Ginnis, A.I. and Feurer, C., 2012, "A BEM-Isogeometric method with application to the wavemaking resistance problem of surface piercing and fully submerged bodies", in Isogeometric Analysis and Applications, IGAA 2012, March 12-16 2012, Linz, Austria.
- 9. Kostas, K.V., Ginnis, A.I., Kaklis, P.D., Politis, C.G., Belibassakis, K.A., Gerosthathis, Th.P. and Feurer, C., 2012, "Isogeometric ship hull optimization with respect to wave resistance" in Isogeometric Analysis and Applications, IGAA 2012, March 12-16 2012, Linz, Austria.
- 10. Athanassoulis, G. A., Belibassakis, K. A. and Gerostathis, Th.P., 2012, Offshore to nearshore wave spectrum transformation, taking into account wave current seabed interaction, World Congress on Advances in Civil, Environmental, and Materials Research 2012 (ACEM' 12), Seoul, Korea, August 26-30, 2012.
- 11. Ginnis, A.-A.I, Duvigneau, R., Politis, C., Kostas, K., Belibassakis, K., Gerostathis, T., Kaklis, P.D., 2013, A multi-objective optimization environment for ship-hull design based on a BEM-isogeometric solver, V International Conference on Computational Methods in Marine Engineering (MARINE 2013), Hamburg, Germany.
- 12. Belibassakis, K.A., Filippas, E.S. and Gerostathis, Th.P., 2016, Biomimetic systems operating as marine energy devices in waves and currents, 11th HSTAM International Congress on Mechanics, May 27-30, Athens, Greece.
- 13. Belibassakis K.A., Gerostathis, Th.P and G.A. Athanassoulis, 2016, Performance of arrays of wave energy converters operating in variable bathymetry regions, 11th HSTAM International Congress on Mechanics, May 27-30, Athens, Greece.

## **D. POSTER PRESENTATIONS IN CONFERENCES**

- 1. Johnsen H., Kallos G., Krogstad H., Athanassoulis G., Barstow S., Heiberg H., Carretero J.C., Chapron B., Queffeulou P., Morales G., Emmanouil G., Galanis G., Gerostathis T.P., Belibassakis K.A., Stefanakos C.N., Croize-Fillon D, 2005, Development and Application of Validated Geophysical Ocean Wave Products from ENVISAT ASAR and RA-2 Instruments,  $\pi\alpha\rhoou\sigma$ iáσθηκε ως poster στο 4th EuroGOOS Conference Brest France June 6-9, 2005.
- 2. Gerostathis, Th.P., Belibassakis, K.A., Athanassoulis, G.A., 2015, Application of a 3D coupled-mode model to the hydroelastic analysis of very large floating bodies over inhomogeneous seabeds, παρουσιάσθηκε ως poster στο International Conference 'Science in Technology' (SCinTE 2015), Athens, Greece.
- 3. Belibassakis, K., Gerostathis, T., Filippas, E., Touboul, J. and Rey, V., 2015, Energy harvesting from sea waves and currents using oscillating hydrofoils, παρουσιάσθηκε

ως poster στο International Conference 'Science in Technology' (SCinTE 2015), Athens, Greece.

## D. ACADEMIC WORKS / BOOKS / CHAPTERS IN COLLECTIVE VOLUMES / ENCYCLOPEDIAS

#### **D1.** ACADEMIC WORKS

- 1. Gerostathis, Th.P., Non-linear variational techniques for faring tensor product Bezier and B-spline surfaces, Diploma Thesis, School of Naval Architecture and Marine Engineering, National Technical University of Athens, 1997.
- 2. Gerostathis, Th.P., Wave propagation in the nearshore/coastal environment using models appropriate for parallel processing, Ph.D. Thesis, School of Naval Architecture and Marine Engineering, National Technical University of Athens, 2004.

## D2. BOOKS

1. Athanassoulis, G.A., Stefanakos, Ch.N., Gerostathis, Th.P., Gaillard, P., Ravazzola P., Kontolios, Ch., Arrivet, L., Cavaleri, L., Bertotti, L., Sclavo, M., Ramieri, E., Dentone, L., Noel, C., Viala, C., Lefevre, J.-M. "Wind and wave Atlas of the Mediterranean Sea", Athens (iv+34+386pp.), April 2004.

#### D3. CHAPTERS IN COLLECTIVE VOLUMES/ENCYCLOPEDIAS

1. Kaklis P.D., Politis C.G., Belibassakis K.A., Ginnis A.I., Kostas K.V., Gerostathis Th.P., 2018, Boundary-Element Methods and Wave Loading on Ships, Encyclopedia of computational mechanics, Second edition. Edited by Stein, E., Borst, R. de, Hughes, T.J.R. ed. Wile, Chichester, West Sussex, England; Hoboken, NJ, ISBN: 978-1-119-00379-3.

## E. VARIOUS

Author or co-author of research project reports.