

BIOGRAPHICAL SKETCH

Nikolaos I. Xiros, DEng

University of New Orleans – EN914, 2000 Lakeshore Dr., New Orleans, Louisiana 70148
School of Naval Architecture and Marine Engineering, Tel 504 280 3130, email nxiros@uno.edu

A. PROFESSIONAL PREPARATION

- National Technical University of Athens, Electrical & Computer Engineering, Engineer Degree, 1995
- National Technical University of Athens, Naval Architecture & Marine Engineering, Dr. Eng., 2001

B. ACADEMIC/PROFESSIONAL APPOINTMENTS

2012-present	Assoc. Prof.	Naval Arch. & Marine Eng.	University of New Orleans
2010-2011	Assoc. Prof.	Aerospace & Ocean Engr.	Virginia Tech
2007-2010	Assist. Prof.	Ocean & Mechanical Eng.	Florida Atlantic University
2007	Researcher	SeaTech Institute	Florida Atlantic University
2002-2007	Lecturer	Naval Arch. & Marine Eng.	National Technical Univ. of Athens

C. PUBLICATIONS

C.1 Related Publications

- [1] Tzelepis, V., VanZwieten, J.H., Xiros, N.I., Sultan, C. (2016). System Modeling and Simulation of In-Stream Hydrokinetic Turbines for Power Management and Control. *Journal of Dynamic Systems, Measurement, and Control (ASME)*(accepted for publication).
- [2] Tsakyridis, G., Xiros, N.I., Sultan, C., Scharringhausen, M., VanZwieten, J.H. (2016). A Hydrogen Storage System for Efficient Ocean Energy Harvesting by Hydrokinetic Turbines. *The 26th International Ocean and Polar Engineering Conference (ISOPE-2016)*, June 26-July 1 2016, Rodos, Greece.
- [3] Lee, J.H., Xiros, N.I., Bernitsas, M.M. (2011) Virtual damper–spring-system for VIV experiments and hydrokinetic energy conversion, *Ocean Engineering* 38 (2011) 732–747.
- [4] Dhanak, M., Xiros, N.I. (eds.)(2016). *Springer Handbook of Ocean Engineering*. Springer, Heidelberg, Germany.
- [5] Xiros, M.I., Xiros, N.I. (2007). Remarks on wind turbine power absorption increase by including the axial force due to the radial pressure gradient in the general momentum theory. *Wind Energy*, Vol. 10, Issue 1, pp. 99-102.

C.2 Other Significant Publications

- [1] Xiros, N.I., Kaiser, M.K. (2013) An integrated methodology for the optimal thermal design of an ocean turbine pressure vessel: A soft-computing approach, IMarEST Journal of Marine Engineering and Technology, accepted for publication, January 2013.
- [2] Xiros, N.I., Chatjigeorgiou, I.K. (2007). Nonlinear Identification and Input-Output Representation of the Modal Dynamics of Marine Slender Structures. J. Offshore Mech. Arct. Eng. Volume 129, Issue 3, pp. 188-200.
- [3] Kazangas, D.C., Xiros, N.I., Chatjigeorgiou, I.K. (2012) Reduced-order, nonlinear approximation of catenary riser dynamics using frequency domain identification, Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering for the Maritime Environment November 2013 227: 343-356, first published on September 24, 2012 doi:10.1177/1475090212456139.
- [4] Xiros, N.I. (2002). Robust Control of Diesel Ship Propulsion. Springer-Verlag, London, UK.
- [5] Xiros, N.I. (2015) Nonlinear Dynamic Analysis for Control of Electromechanical Systems with Coupled Oscillators, J. Mechatron. (Journal of Mechatronics) 2015, Vol. 3, pp. 1-16, doi:10.1166/jom.2015.1092.

D. SYNERGISTIC ACTIVITIES

D.1 Teaching

Undergraduate and graduate courses in ocean engineering, marine engineering, electrical system design, ocean energy, control systems, prognostics, diagnostics

D.2 Service to engineering & science community

Member of ASME Technical Committee for Dynamics & Control of Structures & Systems

ASME Int'l ME Congress & Expo (IMECE) co-organizer of Track 11-9 Reduced Order Modeling & Diagnostics for Multi-Physics Dynamical Systems

Reviewer service: NOAA Sea Grant (SBIR); IMechE Transactions – Part M: J. of Eng. for the Maritime Environment; Journal of Field Robotics; Ocean Engineering (Elsevier); Transactions on Systems, Man, and Cybernetics–Part B: Cybernetics; Journal of Marine Science and Technology (IMAREST)

Member of ASNE (American Society of Naval Engineers)

Member of Technical Chamber of Greece

Professional Engineer registered in Greece