

## EDUCATION

- Ph.D. Engineering Mechanics, Clemson University, 1975 (NSF Research Traineeship)
- M.S. Engineering Mechanics, Clemson University, 1971 (NSF Research Traineeship)
- B.S. Ocean Engineering, Florida Atlantic University, 1970

## EMPLOYMENT

- **Owner and Founder**  
*Ocean Systems Development Corporation Inc., [www.osdc.com](http://www.osdc.com) 1981 – Present*  
Established engineering firm specializing in marine systems development and deployment. OSDC delivers innovative solutions for oceanographic research and commercial applications. [billvenezia@gmail.com](mailto:billvenezia@gmail.com) (561-706-7843)
- **Visiting Professor, Adjunct Professor, Affiliate Faculty**  
*Florida Atlantic University, 1980 – Present*  
Contributing to academic mission as an external expert, who participates in academic activities. [wvenezil@fau.edu](mailto:wvenezil@fau.edu)
- **Federal Government Contractor (Seated)**  
*Naval Surface Warfare Center, Carderock Division (NSWCCD), Advanced Technology Research Corp., 2018 – 2024*  
Provided expert consultation and project leadership, leveraging decades of experience in marine technology and system development.
- **Chief Engineer**  
*Naval Surface Warfare Center, Carderock Division (NSWCCD), Detachment South Florida Ocean Measurement Facility, 1984 – 2016*  
Led the technical team responsible for engineering and operations at a NAVSEA RDT&E facility. Managed complex projects related to underwater sensing, contributing to the U.S. Navy's capability development. Contributed to advancements in underwater technology through both theoretical analysis and practical experimentation.
- **Principal Scientist**  
*General Offshore Corporation, 1981 – 1984*  
Led scientific research and engineering projects focused on offshore technology.
- **Senior Staff Engineer**  
*Johns Hopkins University Applied Physics Laboratory, 1975 – 1980*  
Played a pivotal role in research and development projects, focusing on oceanographic sensors and marine systems. Contributed to advancements in underwater technology through both theoretical analysis and practical experimentation.

## PATENTS

- **"METHOD AND SYSTEM FOR MEASURING PHYSICAL PHENOMENA IN AN OPEN WATER ENVIRONMENT"**, 16 May 2017 # 9,651,374, Inventors: Robert Andrew Wingo, John J. Holmes, and William A. Venezia
- **"UNDERWATER ELECTROMAGNETIC FIELD MEASUREMENT THAT FACTORS IN OCEAN DYNAMICS"** Date of Patent: October 1, 2019, Patent number: # 10429538 Inventors: William A. Venezia, John J. Holmes, Eric S. Dykes
- **"DEPLOYABLE AND AUTONOMOUS MOORING SYSTEM"**, # 7,179,145, 2007, Inventors: F. R. Driscoll, T., W. Venezia, T. Pantelakis, and C. Castanier.

## AWARDS, AND REPRESENTATIVE PUBLICATIONS

- **MARINE TECHNOLOGY FELLOW:** October 2004 - Recognizes those who have distinguished achievements with significant impact on the fields of marine science and technology and who promote marine technology awareness, understanding, advancement, and application.
- **Rear Admiral David W. Taylor Award for Outstanding Scientific Achievement:** April 2013 - Recognizes outstanding scientific contribution to the development of future maritime systems through the creation of technology based upon research.
- **MTS Lockheed Martin Award for Ocean Science and Engineering,** 2018 - Recognizes outstanding contribution to the field of ocean engineering and marine science.

## EXPERIENCE

Dr. William A. Venezia's career is distinguished by his interdisciplinary approach to solving complex challenges in marine environments. With a foundation in Engineering Mechanics and a specialization in soil mechanics, he has cultivated a broad academic and professional perspective that integrates engineering principles with ecological and environmental considerations. This balance has enabled him to address practical problems with innovative solutions, informed by a comprehensive understanding of natural systems and regulatory frameworks. His ability to draw connections across disciplines underscores his commitment to advancing marine science and technology while considering the broader societal and environmental implications of his work.

Throughout his career, Dr. Venezia has excelled in advancing ocean engineering through innovative system development and impactful research. His work on reducing induced noise in underwater electromagnetic sensors has the potential to revolutionize submarine detection technologies, offering practical solutions that extend detection ranges and reduce false positives. By exploring the interplay between the ocean environment and sensor performance, his research has influenced both academic understanding and naval applications, setting new benchmarks for passive electromagnetic detection systems.

Dr. Venezia's contributions extend beyond research to leadership and international collaboration. As Chief Engineer at the Naval Surface Warfare Center's Detachment South Florida Ocean Measurement Facility, he led multidisciplinary teams in designing and deploying advanced marine systems that enhanced the U.S. Navy's operational capabilities. His leadership ensured the successful completion of complex projects that continue to impact maritime defense and oceanographic research.

Internationally, Dr. Venezia has represented the United States in significant collaborative efforts, such as a Coastal Zone Management delegation to China in 1985, sponsored by the China State Science Technology Commission and the U.S. State Department. He also played a pivotal role in U.S.-Russian experiments on mooring and spar buoy installations, reinforcing his reputation as a respected leader in marine systems design and deployment.

In academia, Dr. Venezia has shared his expertise as an adjunct professor at Nova Southeastern University and Florida Atlantic University, where he mentored future generations of engineers. His dedication to education and mentorship has inspired students to approach marine engineering with a balanced perspective, combining theoretical knowledge with practical application.

Dr. Venezia's career reflects a demonstrated ability to integrate scientific inquiry with innovative engineering solutions, demonstrating a unique breadth of expertise that positions him to address the challenges of modern times with insight and creativity.

REPRESENTATIVE PAPERS. PUBLICATIONS AND PRESENTATIONS

1. "Bonded elastic half-planes with an interface crack and a perpendicular intersecting crack that extends into the adjacent material. I, II", Goree, J. G. (Clemson University Clemson, S.C.), Venezia, W. A. (Johns Hopkins University Laurel, Md), January 1, 1977
2. "Reduction to Practice of a Towed Ocean Profiling System", Oceans 80, Published Ocean Engineering, October 1981.
3. "Ocean Outfall Dilution and Dispersion Measurements With Horizontal and Vertical Profiling Sensors", Presented at MTS/IEEE Oceans'82.
4. "Instruments for Mapping Water Born Pollutants in the Near Shore Environment", Presented Dalian Technology Institute, China, 1985.
5. "Expert System for Location and Recovery of Objects From the Sea Floor", Military and Space Robotics Conference, NASA, 1988.
6. "APL Spar Buoy Analysis Loch Linnhe Experiment 1989", JHU/APL Subcontract 605202-S, Final Report Documents theoretical analysis and experimental verification of a compliant 3-point mooring specially designed to perform well in a fjord with high tidal currents and extreme tides.
7. "Impact of Advancing Sea Mine Technology on Telemetry Methods and Test Range Techniques", American Defense Preparedness Association, Austin, TX April 1990.
8. "At Sea Testing in High Currents" Classified Session American Defense Preparedness Association, Mine Warfare Conference, 1990.
9. "Advanced Methods and Instruments for At-Sea Test and Evaluation in the Florida Current", Presented Classified Session MTS ROV 91.
10. "Mooring and Spar Buoy Installation United States – Russian Experiment", August 1992, JHU/APL Subcontract 605786-S Documents the design and deployment of three OSDC designed moorings from R/V Academic IOFFE
11. "A Real Time Talking Port Entrance Current Monitoring System", MTS Florida Coastal Ocean Science and Technology Symposium, FCOTS '96, with A. Shefter.
12. "Development of a Six Degree of Freedom Buoy Design and Analysis Program with Validating Data", OCEANS 93, Victoria, British Columbia with A. Clark, K. Schmitt.
13. "Design Construction and Load Testing of a Large Scale Helicopter Deployed Spar Buoy", OCEANS 93, Victoria British Columbia, with B. Pellegrini.
14. "Turbine Under Gulf Stream: Potential Energy Source", MTS/IEEE, OCEANS 94 Brest, France Reprinted in Sea Technology, 1994 with J. Holt.
15. "Magnetic Spar Buoy", OSDC-94-TR01, January 1994, JHU/APL Contract NO. 606016-S, Final Report
16. "Development of a 10m-Diesel Powered life support and Communications Buoy for the Aquarius Habitat" MTS Ocean Community Conference, Baltimore Md., with A. Clark, November 1998.
17. Final Report Waterway Expert Traffic System (WETS), Dr. William Venezia, Adjunct Professor and Dr. Richard Dodge, Dean, Nova Southeastern University, Oceanographic Center, November 30, 1998.
18. 'Ocean Acoustic Sensor Installation at the South Florida Ocean Measurement Center, Dania Beach, FL', EOS, Transactions, Amer. Geophysics. Union, 1999 Fall Meeting, Vol. 80, No. 46, Nov. 16, 1999/supplement, p F543. Williams, N. J., H. A. DeFerrari, H. B. Nguyen, and W. A. Venezia.

19. "APL Wave Spr Deployment Loch Linnhe, Scotland", August 1999, JHU/APL Contract NO.605616-S, Final Report
20. Waterway Expert Traffic System, Final Report, Documents Development of a Tool for Coastal Zone Management, William A. Venezia, Ph. D., and Richard E. Dodge Ph. D., Nova Southeastern University Oceanographic Center, November 1999.
21. Shallow water acoustic propagation experiments in the Florida Straits-Preliminary results", J. Acoustic. Soc. Am., 107(5), Pt. 2, p. 2831. DeFerrari, H.A., N.J. Williams, H.B. Nguyen, and W.A. Venezia, 2000.
22. A Successful Navy and Academic Partnership Providing Sustained Ocean Observation capabilities in the Florida Straits, Marine Technology Society Journal, Volume 37, Number 3, Fall 2003, p 81-91, W. A. Venezia with others.
23. Ocean Acoustic Sensor Installation at SFOMC, IEEE J. Oceanic Engineering, 27(2), p.235-244 Nguyen, H.B., H.A. DeFerrari, N.J. Williams, and W.A. Venezia, 2002.
24. Portable Wireless Waterway Expert Traffic System Final Report: Development of a Portable Tool for Coastal Zone Management, Kenneth W. Holappa, Ph. D. and William A. Venezia, Ph. D., Richard E. Dodge Ph. D., Dean, Nova Southeastern University Oceanographic Center, June 17, 2002.
25. "Development and Testing of an A-Sized Rapidly Deployable Navigation and Communication GATEWAY Buoy," F.R. Driscoll, P.P. Beaujean, and W.A. Venezia, 2006 the Marine Technology Society Journal, Vol. 40, 36-46.
26. MARELEC July 2009, Stockholm Sweden, Technical Poster accepted with M. Danhak Chairman of FAU OE Department and R Dodge chairman NSU Oceanographic Center.
27. Coastal Mixing and Magnetics Project: A quantified approach to an accelerated research initiative, MARELEC July 2009, Stockholm Sweden with John Holmes (NSWCCD Senior scientist) and Karl von Ellenrieder (FAU).
28. South Atlantic Underwater Research Network (SATURN) - A Navy Electromagnetic, Oceanographic, and Acoustic Observatory, DEA 4241, 25 May 2012, Bundeswehr Technical Centre for Ships and Naval Weapons, Eckernfoerde, Germany.
29. "Measurement and modeling of small-scale to mesoscale ocean circulation in the Straits of Florida" Vanderplow, Breanna ; Kluge, John ; Soloviev, Alexander ; Dodge, Richard ; Wood, Jon ; Evans, Johanna ; Venezia, William ; Ferrar, Michael EGU22, the 24th EGU General Assembly, held 23-27 May, 2022 in Vienna, Austria and Online
30. "The Use of Torpedo-Shaped Buoys on Subsurface Moorings in High Velocity Currents" Jon Wood, Ocean Data Tech., Hyannis, MA, Alexander Soloviev, Geoff Morrison, Brian Ettinger, John Kluge, Nova Southeastern Univ., Dania Beach, FL, Johanna Evans, Matt Young, William Venezia, U.S. Navy South FL Ocean Measurement Facility, Dania Beach, FL: MTS 14th Biennial BUOY WORKSHOP, September 2022
31. Characterizing Ocean Surface and Internal Wave Magnetic Signatures: Laboratory, Field, and Glider-based Observations Dissertation September 2023 Ph.D. John Alexander Kluge Nova Southeastern University Halmos College of Natural Sciences and Oceanography Committee: Dr. Alexander Soloviev, Major Advisor, NSU Dr. Richard Dodge, Member, NSU Dr. Bernhard Riegl, Member, NSU Dr. Diego Castano, Member, NSU Dr. Brian Glover, Member, NSWC Dr. William Venezia, Member, NSWC