CURRICULUM VITAE

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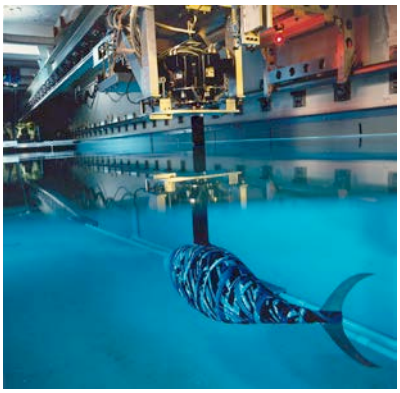
Michael Triantafyllou is the William I. Koch Professor of Marine Technology at the Massachusetts Institute of Technology. He is the Director of the Center for Ocean Engineering in the Department of Mechanical Engineering, with thirteen primary faculty members and ten associated faculty members.



He teaches and has published over 200 journal articles and refereed conference papers in the areas of biomimetics, dynamics and control of marine systems, and experimental fluid mechanics. He pioneered the development of science-driven biomimetic robots to study the basic mechanisms of flow control that lead to the outstanding agility of fish and cetaceans. The *RoboTuna* original design is at the Science Museum in London, while a second version of the robot, shown at left, is on exhibit at the MIT Museum. He is currently studying the physics of flow sensing in fish and marine mammals to achieve super-maneuverability in ocean vehicles through flow feedback control.

He has served as Associate Department Head in the Department of Mechanical Engineering (2008-2010) and has been a Visiting Scientist at the Woods Hole Oceanographic Institution since 1991. He is Chairman of the Board of the National Technical University of Athens (2013-2017).

Google Scholar: http://scholar.google.com/citations?user=Q7BIbQ8AAAAJ&hl=en

Professional Experience

CURRENT POSITION: William I. Koch Professor of Marine Technology
Director, Center for Ocean Engineering (2004 -)
Director, Chevron-MIT University Partnership Program (2007 -)
Director, O. E. Testing Tank Facility (1988-) and Propeller Tunnel (2002 -)
Department of Mechanical Engineering, Massachusetts Institute of Technology

Visiting Scientist (1991 -) *Woods Hole Oceanographic Institution*

PREVIOUS POSITIONS:

Massachusetts Institute of Technology:

Department of Ocean Engineering: Research Associate (1978-1979); Assistant Professor (1979-1983); Associate Professor (1983-1990); Professor (1990-2005); Chairman, Joint Committee, Applied Ocean Sciences & Engineering, MIT/WHOI Joint Program in Oceanography (1997-2002).

Department of Mechanical Engineering: Professor of Mechanical and Ocean Engineering (2005-); Head, Area of Ocean Science & Engineering (2005- 2008); Associate Department Head for Ocean Engineering (2008-2010).

Woods Hole Oceanographic Institution:

Guest Investigator (Summers 1989 through 1996)

Research Interests

Biomimetic Robotics. Flow-structure interaction and vorticity control. Dynamics and control of marine vehicles and structures.

Education

Massachusetts Institute of Technology:

ScD in Ocean Engineering (1979)
SM in Naval Architecture & Marine Engineering (1977)
SM in Mechanical Engineering (1977)

National Technical University of Athens:

Diploma in Naval Architecture & Marine Engineering (1974)

Consulting Record

Ropes & Gray, Endeco, EG&G, Conoco USA, Conoco UK, Conoco Indonesia, Noble & Denton, D.S. Tein Consulting Engrs., Chevron, Exxon, Noble Drilling, Stone & Webster, Woods Hole Oceanographic Institution, Amoco, Sedco-Forex (Schlumberger), SAIC, ExxonMobil, Chevron-Texaco, BP, Akker, Deepstar. Conducted Joint Industry Projects with multiple industrial sponsors: Resulting vortex-induced vibration software VIVA and VIVARRAY in use by more than 30 offshore companies worldwide.

Honors and Awards

- William I. Koch Professor of Marine Technology (2008 -)
- Guest Editor, Special issue on animal swimming, *Experiments in Fluids*, November 2007; edited as a book by Springer-Verlag, *Animal Locomotion: The Physics of Flying, The Hydrodynamics of Swimming* (2010).
- Article on trout swimming in vortices also on cover of Science, Nov. 28, 2003.
- First generation RoboTuna on permanent exhibit at the Museum of Science, London (since 1998). Prototype RoboTuna in national traveling exhibit on robots, organized by the Science Museum of Minnessota (2003-2004); currently on permanent exhibit at the MIT Museum.
- Smithsonian Magazine Article on Robotic Tuna (August 2000).
- Discover Magazine Awards for Technological Innovation (1998).

- ABS/Linnard Prize for best paper in the Transactions of SNAME (1997).
- Work on Robotic Tuna on the cover of Scientific American (March 1995).
- Highlight Paper of 1995 Scientific American.
- Visiting Professor: Singapore–MIT Alliance, NUS, Singapore (2012), NTNU, Trondheim, Norway (1993, 2001, & 2011); ETH Zurich (April 1999); National Technical University of Athens, Greece (1994-1995 & 2007-2008); Kyushu University, Japan (April 1986).
- H. L. Doherty Professorship in Ocean Utilization (1983-1985).
- Best Graduate paper award (SNAME) 1978.
- Special award for top performance, National Technical University of Athens (1972).
- Merit scholarship, National Technical University of Athens (1969-1974).

Former Students and Post-docs in Faculty Positions

D. Barrett (Olin College), R. Bourguet (U. Toulouse), J. Dahl (U. Rhode Island), F. Hover (MIT), Y.C. Kim (Korea), S. Licht (U. Rhode Island), D. Lucor (U. Paris VI), Y. Modarers-Sadeghi (U. Massachusetts, Amherst), P. Prempraneerach (Rajamangala U., Thailand), D. Rival (U. Calgary), L. Shen (U. Minnesota), H. Shin (Korea), A. Techet (MIT), J. Stettler (Naval Academy), G. Weymouth (U. Southampton), Q. Zhu (UCSD).

Professional Societies

American Physical Society: Life member. Society of Naval Architects and Marine Engineers (SNAME): Life member; Papers committee; Education committee; Vice-chairman OC-2 committee on moorings and offshore terminals. International Society of Offshore Mechanics and Polar Engineers (Associate Editor, J. ISOPE): Charter Member. American Society of Mechanical Engineers (ASME).

PUBLICATIONS

Journal Articles

1. M.S. Triantafyllou, 1979, "Computer Aided Propeller Preliminary Design Using the B – series", *Marine Technology*, **16** (4), 381-391.
2. M.S. Triantafyllou, 1980, "Strip Theory of Ship Motions in the Presence of a Current", *Journal of Ship Research*, **24** (1), 40-44.
3. M.S. Triantafyllou, 1982, "Preliminary Design of Mooring Systems", *Journal of Ship Research*, **26** (1), 25-35.
4. M.S. Triantafyllou, 1982, "A Consistent Hydrodynamic Theory for Moored and Positioned Vessels", *Journal of Ship Research*, **26** (2) 97-105.
5. M.S. Triantafyllou, M. Bodson, & M. Athans, 1983, "Real Time Estimation of Ship Motions Using Kalman Filtering Techniques", *Journal of Oceanic Engineering* (IEEE), **OE-8** (1), 9-20.
6. M.S. Triantafyllou, 1984, "The Dynamics of Taut Inclined Cables", *Quarterly Journal of Mechanics and Applied Mathematics*, **37**, 421-440.
7. Y.C. Kim, & M.S. Triantafyllou 1984, "The Nonlinear Dynamics of Long Slender Cylinders", *Journal of Energy Resources Technology*, **106** (2), 250-256.
8. M.S. Triantafyllou 1985, "The Dynamics of Translating Cables", *Journal of Sound and Vibration*, **103** (2), pp. 171-182.

9. M.S. Triantafyllou, A. Bliek, & H. Shin, 1985, "Dynamic Analysis as a Tool for Mooring System Design", *Transactions of the Society of Naval Architects and Marine Engineers*, **93**, 303-324.
10. M.S. Triantafyllou, & L. Grinfogel, 1985, "Natural Frequencies and Natural Mode Shapes of Inclined Cables", *Journal of Structural Engineering* (ASCE), **112** (1), 139-148.
11. G.S. Triantafyllou, M.S. Triantafyllou & C. Chryssostomidis, 1986, "On the formation of vortex streets behind stationary cylinders", *Journal of Fluid Mechanics*, **170**, 461-477.
12. G.S. Triantafyllou, M.S. Triantafyllou, & C. Chryssostomidis, 1987, "Stability Analysis to Predict Vortex Street Characteristics and Forces on Circular Cylinders", *Journal of Offshore Mechanics and Arctic Engineering* (ASME), **109**, 148-154.
13. J.H. Milgram, M.S. Triantafyllou, F. Frimm, & G. Anagnostou, 1988, "Seakeeping and Extreme Tensions in Offshore Towing", *Transactions of the Society of Naval Architects and Marine Engineers*, **96**, 35-72.
14. J.J. Burgess, & M.S. Triantafyllou, 1988, "The Elastic Frequencies of Cables", *Journal of Sound and Vibration*, **120** (1), pp. 153-165.
15. V. Papazoglou, S. Mavrakos, & M.S. Triantafyllou, 1990, ``Nonlinear cable response and model testing in water'', *Journal of Sound and Vibration*, **140** (1), 103-115.
16. M.S. Triantafyllou, & M.A. Grosenbaugh, 1991, "Robust Control for Underwater Vehicle Systems with Time Delays", *Journal of Oceanic Engineering* (IEEE), **OE-16** (1), 146-151.
17. D.R. Yoerger, M.A. Grosenbaugh, M.S. Triantafyllou, & J.J. Burgess, 1991, "Drag Forces and Flow-Induced Vibrations of a Long Vertical Tow Cable - Part I: Steady-State Towing Conditions", *Journal of Offshore Mechanics and Arctic Engineering* (ASME), **113**, 117-127.
18. M.A. Grosenbaugh, D.R. Yoerger, M.S. Triantafyllou, & F.S. Hover, 1991, "Drag Forces and Flow-Induced Vibrations of a Long Vertical Tow Cable - Part II: Unsteady Towing Conditions", *Journal of Offshore Mechanics and Arctic Engineering* (ASME), **113** (3), 199-204.
19. M.S. Triantafyllou, & G.S. Triantafyllou, 1991, "The Paradox of the Hanging String: An Explanation using Singular Perturbations", *Journal of Sound and Vibration*, **148** (2), 343-351.
20. M.S. Triantafyllou, & G.S. Triantafyllou, 1991, "Frequency Coalescence and Mode-Localization Phenomena: A Geometric Theory", *Journal of Sound and Vibration*, **150** (3), 485-500.
21. M.S. Triantafyllou, G.S. Triantafyllou, & R. Gopalkrishnan, 1991, "Wake Mechanics for Thrust Generation in Oscillating Foils", *Physics of Fluids A*, **3** (12), 2835-2837.
22. M.S. Triantafyllou, & C.T. Howell, 1992, "Nonlinear Impulsive Motions of Low Tension Cables", *Journal of Engineering Mechanics*, **118** (4), 807-830.
23. C.T. Howell, & M.S. Triantafyllou, 1993, "Stable and Unstable Nonlinear Resonant Response of Hanging Chains: Theory and Experiment", *Proceedings of the Royal Society of London,* **A 440**, 345-364.
24. G.S. Triantafyllou, M.S. Triantafyllou, & M.A. Grosenbaugh, 1993, "Optimal Thrust Development in Oscillating Foils with Application to Fish Propulsion", *Journal of Fluids and Structures*, **7**, 205-224.
25. M.S. Triantafyllou, & C.T. Howell, 1993, "Nonlinear unstable response of hanging chains", *Journal of Sound and Vibration*, **162** (2), 263-280.
26. C.T. Howell, & M.S. Triantafyllou, 1993, "Investigation of Large Amplitude Nonlinear Dynamics of Hanging Chains"', *Int. J. Offshore Polar Engng.*, **3** (3), 162-167.

27. M.S. Triantafyllou, & C.T. Howell, 1993, "The Ill-Posed Problem of a Cable in Compression", *Int. J. Offshore Polar Engng.*, **3** (3), 168-171.
28. C.N. White, R.G. Goldsmith, & M.S. Triantafyllou, 1993, "Heave restrained platform reduces costs and eases operations", *J. Petrol. Technol.*, **45** (8), 752-761.
29. F.S. Hover, M.A. Grosenbaugh, & M.S. Triantafyllou, 1994, "Calculation of Dynamic Motions and Tensions in Towed Underwater Cables", *IEEE Journal of Oceanic Engineering*, **19** (3), 449-457.
30. M.S. Triantafyllou, & C.T. Howell, 1994, "Dynamic Response of Cables under Negative Tension: An Ill-Posed Problem", *Journal of Sound and Vibration*, **173** (4), 433-447.
31. R. Gopalkrishnan, M.S. Triantafyllou, G.S. Triantafyllou, & D.S. Barrett, 1994, "Active Vorticity Control in a Shear Flow Using a Flapping Foil", *Journal of Fluid Mechanics*, **274**, 1-21.
32. K. Streitlien, & M.S. Triantafyllou, 1995, "Force and Moment on a Joukowski Profile in the Presence of Point Vortices", *AIAA Journal*, **33** (4), 603-610.
33. M.S. Triantafyllou, & G.S. Triantafyllou, 1995, "An Efficient Swimming Machine", *Scientific American*, **272** (3), 64-70.
34. M.S. Triantafyllou, & D.K.P. Yue, 1995, "Damping Amplification in Highly Extensible Hysteretic Cables", *Journal of Sound and Vibration*, **186** (3), 355-368.
35. T. Tjavaras, & M.S. Triantafyllou, 1996, "Nonlinear response of two disordered pendula", *Journal of Sound and Vibration*, **190**, 65-76.
36. T. Tjavaras, & M.S. Triantafyllou, 1996, "Shock waves in curved synthetic cables", *Journal of Engineering Mechanics*, **122** (4), 308-315.
37. S. Mavrakos, V. Papazoglou, M.S. Triantafyllou, & J. Chatjigeorgiou, 1996, "Deep Water Mooring Dynamics", *Marine Structures*, **9** (1), 181-209.
38. M.S. Triantafyllou, D.S. Barrett, D.K.P. Yue, J.M. Anderson, M.A. Grosenbaugh, K. Streitlien, & G.S. Triantafyllou, 1996, "A New Paradigm of Propulsion and Maneuvering for Marine Vehicles", *Transactions of the Society of Naval Architects and Marine Engineers*, **104**, 81-100.
39. K. Streitlien, G.S. Triantafyllou, & M.S. Triantafyllou, 1996, "Efficient Foil Propulsion through Vortex Control", *AIAA Journal*, **34** (11), 2315-2319.
40. F.S. Hover, S.N. Miller, & M.S. Triantafyllou, 1997, "Vortex induced vibration of marine cables: Experiments using force feedback", *Journal of Fluids and Structures*, **11**, 307-326.
41. F.S. Hover, S.N. Miller, & M.S. Triantafyllou, 1997, "Vortex-induced oscillations in inclined cables", *Journal of Wind Engineering and Industrial Aerodynamics*, **69-71**, 203-211.
42. J.M. Anderson, K. Streitlien, D.S. Barrett, & M.S. Triantafyllou, 1998, "Oscillating foils of high propulsive efficiency", *Journal of Fluid Mechanics*, **360**, 41-72.
43. A.H. Techet, F.S. Hover, & M.S. Triantafyllou, 1998, "Vortical patterns behind tapered cylinders oscillating transversely to a uniform flow", *Journal of Fluid Mechanics*, **363**, 79-96.
44. F.S. Hover, A.H. Techet, & M.S. Triantafyllou, 1998, "Forces on oscillating uniform and tapered cylinders in crossflow", *Journal of Fluid Mechanics*, **363**, 97-114.
45. A.A. Tjavaras, Q. Zhu, Y. Liu, M.S. Triantafyllou & D.K.P. Yue, 1998, "The mechanics of highly-extensible cables", *Journal of Sound and Vibration*, **213**, 709-737.
46. Q. Zhu, Y. Liu, A.A. Tjavaras, M.S. Triantafyllou, & D.K.P. Yue, 1999, "Mechanics of nonlinear short-wave generation by a moored near-surface buoy", *Journal of Fluid Mechanics*, **381**, 305-335.

47. M.J. Wolfgang, J.M. Anderson, M.A. Grosenbaugh, D.K.P. Yue, & M.S. Triantafyllou, 1999, "Near-body flow dynamics in swimming fish", *Journal of Experimental Biology*, **202**, 2303-2327.
48. D.S. Barrett, M.S. Triantafyllou, D.K.P. Yue, M.A. Grosenbaugh, & M.J. Wolfgang, 1999, "Drag reduction in fish-like locomotion", *Journal of Fluid Mechanics*, **392**, 183-212.
49. M.J. Wolfgang, D.K.P. Yue, & M.S. Triantafyllou, 1999, "Visualization of complex near-body transport processes in flexible-body propulsion", *Journal of Flow Visualization*, **2**(2), 143-151.
50. F.S. Hover, & M.S. Triantafyllou, 1999, "Linear dynamics of curved tensioned elastic beams", *Journal of Sound and Vibration*, **228**(4), 923-930.
51. K. Burr, D.K.P. Yue, & M.S. Triantafyllou, 2000, "Asymptotic analysis of wave propagation along weakly non-uniform repetitive systems", *Journal of Sound and Vibration*, **229** (1), 21-64.
52. M.S. Triantafyllou, G.S. Triantafyllou, & D.K.P. Yue, 2000, "Hydrodynamics of Fish Swimming", *Annual Review of Fluid Mechanics*, **32**, 33-53.
53. H. Kagemoto, M.J. Wolfgang, M.S. Triantafyllou, & D.K.P. Yue, 2000, "Force and power estimation in fish-like locomotion using a vortex-lattice method", *Journal of Fluids Engineering*, **122**, 239-253.
54. T.R. Consi, P.A. Seifert, M.S. Triantafyllou, & E.R. Edelman, 2001, "The Dorsal Fin Engine of the Seahorse, *Hippocampus sp.*", *Journal of Morphology*, **248** (1), 80-97.
55. F.S. Hover, & M.S. Triantafyllou, 2001, "Galloping response of a cylinder with upstream wake interference", *Journal of Fluids and Structures*, **15**, 503-512.
56. K. Burr, D.K.P. Yue, & M.S. Triantafyllou, 2001, "Asymptotic governing equation for wave propagation along weakly non-uniform Euler-Bernoulli beams", *Journal of Sound and Vibration*, **247** (4), 577-613.
57. J.C. Liao, D.N. Beal, G.V. Lauder, & M.S. Triantafyllou, 2001, "Novel body kinematics of trout swimming in a von Karman trail; can fish tune to vortices", *American Zoologist*, **41** (6), 1505-1506.
58. S.J. Brown, M.S. Triantafyllou, & D.K.P. Yue, 2001, "Complex analysis of resonance conditions for coupled capillary and dilational waves", *Proc. Roy. Soc. London A*, **A 458**, 1167-1187.
59. F.S. Hover, H. Tvedt, & M.S. Triantafyllou, 2001, "Vortex-induced vibrations of a cylinder with tripping wires", *Journal of Fluid Mechanics*, **448**, 175-195.
60. Q. Zhu, M.J. Wolfgang, D.K.P. Yue, & M.S. Triantafyllou, 2002, "Three-dimensional flow structures and vorticity control in fish-like swimming", *Journal of Fluid Mechanics*, **468**, 1-28.
61. J.I Gobat, M.A. Grosenbaugh, & M.S. Triantafyllou, 2002, "Generalized-α time integration solutions for hanging chain dynamics", *Journal of Engineering Mechanics*, **128** (6), 677-687.
62. D.A. Read, F.S. Hover, & M.S. Triantafyllou, 2003, "Forces on oscillating foils for propulsion and maneuvering", *Journal of Fluids and Structures*, **17**, 163-183.
63. M.S. Triantafyllou, A.H. Techet, Q. Zhu, D.N. Beal, F.S. Hover, & D.K.P. Yue, 2003, "Vorticity control in fish-like propulsion and maneuvering", *Integ. Comp. Biol.*, **42** (5), 1026-1031.
64. J.C. Liao, D.N. Beal, G.V. Lauder, & M.S. Triantafyllou, 2003, "The Karman gait: novel body kinematics of rainbow trout swimming in a vortex street", *Journal of Experimental Biology*, **206**, 1059-1073.

65. A.H. Techet, F.S. Hover, & M.S. Triantafyllou, 2003, "Separation and Turbulence Control in Biomimetic Flows", *Flow, Turbulence and Combustion*, **71** (1-4), 105-118.
66. L. Shen, X. Zhang, D.K.P. Yue, & M.S. Triantafyllou, 2003, "Turbulent Flow over a Flexible Wall Undergoing a Streamwise Traveling Wavy Motion", *J. Fluid Mech.*, **484**, 197-221.
67. J.C. Liao, D.N. Beal, G.V. Lauder, & M.S. Triantafyllou, 2003, "Fish exploiting vortices use less muscle", *Science*, **302** (5650), 1566-1569, November 28, 2003.
68. F.S. Hover, O. Haugsdahl, & M.S. Triantafyllou, 2004, "Control of angle of attack profiles in flapping foil propulsion", *Journal of Fluids and Structures*, **19**, 37-47.
69. F.S. Hover, J.T. Davis, & M.S. Triantafyllou 2004, "Three-dimensionality of mode transition in vortex-induced vibrations of a circular cylinder", *European Journal of Mechanics B - Fluids*, **23** (1), 29-40.
70. R. Pouliot, R. Azhari, H.F. Qanadilo, M.S. Triantafyllou, & R. Langer, 2004, "Tissue engineering of fish skin: behavior of fish cells on poly(ethylene glycol terephthalate) /poly(butylene terephthalate) copolymers in relation to the composition of the polymer substrate as an initial step in constructing a robotic/living tissue hybrid", *Tissue Engineering*, **10** (1-2), 7-21.
71. M.S. Triantafyllou, A.H. Techet, & F.S. Hover, 2004, "Review of Experimental Work in Biomimetic Foils", *J. Oceanic Engng. (IEEE)*, **29** (3), 585-594.
72. S. Licht, V. Polidoro, M. Flores, F.S. Hover, & M.S. Triantafyllou, 2004, "Design and Projected Performance of a Flapping Foil AUV", *J. Oceanic Engng. (IEEE)*, **29** (3), 786-794.
73. P. Blondeaux, L. Guglielmini, & M.S. Triantafyllou, 2005, "Chaotic flow generated by an oscillating foil", *AIAA J.*, **4**3 (4), 918-921.
74. L. Schouveiler, F.S. Hover, & M.S. Triantafyllou, 2005, "Performance of flapping foil propulsion", *Journal of Fluids and Structures*, **20**, 949-959.
75. J.R. Chaplin, P.W. Bearman, Y. Cheng, E. Fontaine, J.M.R. Graham, K. Herfjord, F.J. Huera Huarte, M. Isherwood, K. Lambrakos, C.M. Larsen, J.R. Meneghini, G. Moe, R.J. Pattenden, M.S. Triantafyllou, & R.H.J. Willden, 2005, "Blind predictions of laboratory measurements of vortex-induced vibrations of a tension riser", *Journal of Fluids and Structures*, **21**, 25-40.
76. J.W. Stettler, F.S. Hover, & M.S. Triantafyllou, 2005, "Investigating the steady and unsteady maneuvering dynamics of an azimuthing podded propulsor, *Transactions of the Society of Naval Architects and Marine Engineers*, **113**.
77. P. Blondeaux, F. Fornarelli, L. Guglielmini, M.S. Triantafyllou, & R. Verzicco, 2005, "Numerical experiments on flapping foils mimicking fish-like locomotion", *Physics of Fluids*, **17**, 113601.
78. M.S. Triantafyllou, F.S. Hover, A.H. Techet, & D.K.P. Yue, 2005, "Review of Hydrodynamic Scaling Laws in Aquatic Locomotion and Fish-Like Swimming", *Applied Mechanics Reviews*, **58**, (4), 226-237.
79. F.S. Hover, & M.S. Triantafyllou, 2006, "Application of polynomial chaos in stability and control", *Automatica*, **42**, 789-795.
80. D.N. Beal, F.S. Hover, M.S. Triantafyllou, J.C. Liao, & G.V. Lauder, 2006, "Passive propulsion in vortex wakes", *Journal of Fluid Mechanics*, **549**, 385-402.
81. G.V. Papaioannou, D.K.P. Yue, M.S. Triantafyllou, & G.E. Karniadakis, 2006, "Evidence of holes in the Arnold tongues of flow past two oscillating cylinders", *Physical Review Letters*, **96**, 014501 (4 pp).

82. G.V. Papaioannou, Dick K.P. Yue, M.S. Triantafyllou, & G.E. Karniadakis, 2006, "Three-dimensionality effects on the flow around two tandem cylinders in the lower subcritical regime", *Journal of Fluid Mechanics*, **558**, 387-413.
83. J.M. Dahl, F.S. Hover, & M.S. Triantafyllou, 2006, "Two-degree-of-freedom vortex-induced vibrations using a force assisted apparatus", *Journal of Fluids and Structures*, **22**, 807-818.
84. D. Lucor, H. Mukundan, & M.S. Triantafyllou, 2006, "Riser modal identification in CFD and full-scale experiments", *Journal of Fluids and Structures*, **22,** 905–917.
85. Q. Zhu, J. Zeng, M.S. Triantafyllou, & D.K.P. Yue, 2006, "Direct numerical simulation of single-molecule DNA by cable dynamics", *IEEE Journal of Microelectromechanical Systems (MEMS)*, **15** (5), 1078-1087.
86. J.M. Dahl, F. Hover, M.S. Triantafyllou, S. Dong, & G.E. Karniadakis, 2007, "Resonant vibrations of bluff bodies cause multi-vortex shedding and high frequency forces", *Physical Review Letters*, **99** (14) Article 144503, 5 October, 2007.
87. P. Prempraneerach, F.S. Hover, M.S. Triantafyllou, T.J. McCoy, C. Chryssostomidis, & G.E. Karniadakis, 2007, "Sensitivity Analysis of the Shipboard Integrated Power System", *Naval Engineers Journal*, **12**, article 25.
88. D. Lucor, H. Mukundan, & M.S. Triantafyllou, 2008, "Parametric study of a two degree–of–freedom cylinder subject to vortex–induced vibrations", *Journal of Fluids and Structures*, **24**, 1284-1293.
89. D. Lucor, & M.S. Triantafyllou, 2008, "Riser response analysis by modal phase reconstruction", *J. Offshore Mech. Arct. Eng.*, **130**, 011008.
90. R. Galvao, E. Lee, D. Farrell, F.S. Hover, M.S. Triantafyllou, N. Kitney, & P. Beynet, 2008, "Flow Control in Flow-Structure Interaction", *Journal of Fluids and Structures*, **24**, 1216-1226.
91. G.V. Papaioannou, D.K.P. Yue, M.S. Triantafyllou, & G.E. Karniadakis, 2008, "On the effect of spacing on the vortex-induced vibrations of two tandem cylinders", *J. Fluids Struct.*, **24**, 833-854.
92. H. Mukundan, Y. Modares-Sadeghi, F.S. Hover, & M.S. Triantafyllou, 2009, "Monitoring fatigue damage on marine risers", *Journal of Fluids and Structures*, **25**, 617-628.
93. H. Mukundan, F. Chasparis, F.S. Hover, & M.S. Triantafyllou, 2010, "Optimal lift coefficient databases from riser experiments", *Journal of Fluids and Structures*, **26**, 160-175.
94. Y. Modares-Sadeghi, H. Mukundan, J.M. Dahl, F.S. Hover, & M.S. Triantafyllou, 2010, "The effect of higher harmonic forces on fatigue life of marine risers", *Journal of Sound and Vibration*, **329**, 43-55.
95. J.M. Dahl, F. Hover, M.S. Triantafyllou, & O.H. Oakley, 2010, "Dual resonance in VIV at subcritical and supercritical Reynolds numbers", *Journal of Fluid Mechanics*, **643**, 395-424.
96. S. Licht, M. Wibawa, F. S. Hover, & M.S. Triantafyllou, 2010, "In-line motion causes high thrust and efficiency in flapping foils that use power downstroke", *Journal of Experimental Biology*, **213**, 63-71.
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