CURRICULUM VITAE

NAME	:	Sverre Steen
YEAR OF BIRTH	:	1965
NATIONALITY	:	Norwegian
LANGUAGES	:	Norwegian, English
POSITION	:	Head of Department and Professor at NTNU, Department of Marine Technology

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EDUCATION:

- M.Sc. Marine Hydrodynamics, The Norwegian Institute of Technology (NTH).
- Dr.ing. Marine Hydrodynamics The Norwegian Institute of Technology (NTH). Thesis: "Cobblestone Effect on SES".

EXPERIENCE:

2016-	Head of department, Department of Marine Technology, NTNU
2009-	Chair of the Symposium of Marine Propulsors www.marinepropulsors.com
2009 -	Representing NTNU in the work group developing Ocean Space Centre www.oceanspacecentre.no
2005-	Director of Rolls-Royce University Technology Centre “Performance in a Seaway”
2005-2008	Chairman of ITTC specialist committee ”Powering Performance Prediction”
2004-	Professor in experimental marine hydrodynamics at NTNU
2003-2004	Manager of “Ship Performance” group at Marintek
2002-2004	Member of ITTC specialist committee ”Powering Performance Prediction”
2001-2004	Member of the board of MARINTEK
1999-2002	Member of ITTC specialist committee ”Procedures for resistance, propulsion, open water tests, and resistance tests for HPMV”
1998-2004	Research manager for resistance and propulsion at MARINTEK
1997-2001	Program manager of strategic research program SKIPRO 2001
1996-1999	Member of ITTC specialist committee “Model testing of HSMV”
1995-2004	Senior Research Engineer at MARINTEK, Division of Marine Vehicles.
1990-1995	Research Engineer at MARINTEK, Division of Marine Vehicles.
1989-1990	Military service in the Navy. Worked with weight control and stability calculations on the Mine counter Measure Vessels project.

MAIN FIELDS OF COMPETENCE:

- Resistance and propulsion of ships
- Experimental methods in Marine Hydrodynamics
- Hydrodynamics of propulsion in waves
- Hydrodynamics, environmental loads and motions of high speed craft.
- Seakeeping of SES craft.

EVALUATIONS, COMMITTEES ETC.

- Active reviewer for several journals; Ocean Engineering, Journal of Ship Research, Computers and Fluids etc.
- Member of several evaluation committees for new professors
- Member of many PhD evaluation committees
- Review of applications for Era-Net Martec and the Faroe Islands “Granskingar radid”
- Expert witness in several court cases

PUBLICATIONS:

1. Sørensen, A.J., Steen, S. and Faltinsen, O.M.: "Cobblestone Effect on SES". Intersociety High Performance Marine Vehicle Conference and Exhibit - HPMV'92, American Society of Naval Engineers, Washington D.C., 1992.

2. Sørensen, A.J., Steen, S. and Faltinsen, O.M.: "SES Dynamics in the Vertical Plane". Ship Technology Research Vol. 40 No. 2, 1993.

3. Steen. S, Ulstein, T. “Seakeeping and Comfort of Large SES”, FAST’93, Yokohama, Japan, 13-16 December 1993

4. Steen, T, Steen, S “Filling of a Model Left Ventricle Studied by Colour M mode Doppler”, Cardiovascular Research 1994;28:1821-1827

5. Steen, S. and Faltinsen, O.M.: "Cobblestone effect on SES with flexible bag aft seal". Journal of Ship Research, Vol. 39, No. 1, March 1995.

6. Steen, S. and Minsaas, K.J.: "Experience from Design and Testing of Waterjet Inlets for High Speed Crafts" FAST '95, Travemünde, Germany 1995.

7. Steen, S. and Faltinsen, O. M. "Added Resistance of a Ship Moving in Small Sea States", PRADS'98, The Hague, Netherlands, September 1998 (ISBN 0 444 82918 0)

8. Steen, S. Rambech, H.J., Zhao, R., Minsaas, K.J. “Resistance Prediction of Fast Displacement Catamarans”, FAST’99, Seattle, USA, 1999

9. Riksheim, R. Steen, S. ”Ship Design for Electric Propulsion”, contribution to Report from Technical Committee B: Electric Propulsion, ICMES 2000, Presented at SNAME New

York Metropolitan Section symposium, May 22-23 2000.

10. Steen, S. Strand, G. “SES Performance Evaluation in Model and Full Scale”, FAST’01, Southampton, England, 2001

11. Koushan, K.; Steen, S.; Zhao, R. ”Wake Wash Minimisation by Hull Form Optimisation Using Artificial Intelligence” Proceedings of HIPER’02, International Conference on High-Performance Marine Vehicles, pp. 262-273, Bergen, Norway

12. Steen, S. Kauczynski, W. “Integrated Systems for Ship Handling and Monitoring of Hull Loads”, Int. Stability Workshop, Glen Cove, NY, 13-16 October 2002

13. Steen, S, “Experiences in design of SES ships”, NATO AVT-110 Conference, Prague, October 2004

14. Steen, S. Adriaenssens, C. “Experimental Verification of the Resistance of a Split-Cushion Surface-Effect Ship”, International Conference on Fast Sea Transportation FAST 2005, St. Petersburg, Russia, 2005.

15. Hansvik, T, Steen, S. “Use of Interceptors and Stepped Hull to Improve Performance of High-Speed Planing Catamarans” Int. Conf. on High Speed Craft – ACV, WIGS and Hydrofoils, Royal Institution of Naval Architects, London, 1-2 Nov. 2006.

16. Morris-Thomas, M., Steen, S. “The Instability of a Flexible Sheet in Uniform Parallel Flow”, In: Proc. 26th Int. Conf. Offshore Mech. Arctic Eng., San Diego, Califarnia, USA.

17. Wines, C, Steen, S. , Tvete, M., Midtun, H.O., “Influence of Increased Weight on SES-performance in a Seaway”, Int. conf. on High Speed Marine Vehicles, FAST 2007, Shanghai, China, 23-27 Sept. 2007.

18. Steen, S. “Experimental Investigation of Interceptor Performance”, Int. conf. on High Speed Marine Vehicles, FAST 2007, Shanghai, China, 23-27 Sept. 2007.

19. Morris-Thomas, M., Steen, S. “The Response of a Flexible Sheet Under Axial Tension in Parallel flow”, In: Proc. 27th Int. Conf. Offshore Mech. Arctic Eng., Estoril, Portugal.

20. Morris-Thomas, M., Steen, S. “Experiments on the stability and drag of a flexible sheet under in-plane tension in uniform flow”, Journal of Fluids and Structures, Volume 25, Issue 5, July 2009, Pages 815-830

21. Koushan, K., Steen, S. “Proceedings of the First International Symposium on Marine Propulsors”, June 22-24, Trondheim, Norway. ISBN 978-82-7174-263-8

22. Kozlowska, A, Steen, S. “Classification of Different Types of Propeller Ventilation and Ventilation Inception Mechanism”, First International Symposium on Marine Propulsors, smp’09, Trondheim, June 22-24 2009.

23. Sileo, L., Steen, S. “Numerical Investigation of the Interaction between a Stern Tunnel Thruster and Two Ducted Main Propellers”, First International Symposium on Marine Propulsors, smp’09, Trondheim, June 22-24 2009.

24. Califano, A., Steen, S. “Analysis of different propeller ventilation mechanisms by means of

RANS simulations", First International Symposium on Marine Propulsors, smp'09, Trondheim, June 22-24 2009.

25. Steen, S., Alterskjær, S. A., Velgaard, A., Aasheim, I., "Performance of A Planing Catamaran With Mid-Mounted Interceptors. 10th International Conference on Fast Sea Transportation - FAST 2009, Athens, Greece, October 2009

26. Kozlowska, A, Steen, S. "Ducted and open propeller subjected to intermittent ventilation", Hydronav 2010, Gdansk 12-13 May 2010. ISBN 978-83-931045-0-5

27. Sileo, L., Steen, S. "Numerical Investigation of the Interaction Effects between a Stern Tunnel Thruster and Twin Ducted Main Propellers", 11th International Symposium on Practical Design of Ships and Other Floating Structures, PRADS 2010, Rio de Janeiro, Brazil.

28. Amini, H, Steen, S. "Shaft side force and bending moment on steerable thrusters in off-design conditions", 11th International Symposium on Practical Design of Ships and Other Floating Structures, PRADS 2010, Rio de Janeiro, Brazil.

29. Bingjie Guo and Sverre Steen, "Added resistance of a VLCC in short waves", OMAE 2010, June 6-11, 2010, Shanghai, China. ISBN 9780791849095.

30. Bingjie Guo and Sverre Steen, (2010) "Experiment on added resistance in short waves", 28th Symposium on Naval Hydrodynamics, 12-18 September, Pasadena, California

31. Bingjie Guo and Sverre Steen, (2010) "Computational study on ship resistance and flow field of KVLCC2" Gothenburg 2010 Workshop on Numerical Ship Hydrodynamics, Gothenburg, 8-10 dec. 2010. Chalmers University of Technology. ISSN No. 1652-9189

32. Amini, H., Steen. S. (2011)"Shaft Loads on Azimuth Propulsors in Oblique Flow and Waves", International Journal of Maritime Engineering, Vol. 153, Part A1 2011 doi: 10.3940/rina.ijme.2011.a1.199

33. Savio, L., Sileo, S., Steen, S., Glodowski, R., Hoffman, P., Kraskowski, M. (2011) "Comparison of Experimental and Numerical Predictions of Open Water Performance Characteristics of a Podded Propeller", Proceedings of AMT'11, Newcastle, England, April 4-6, 2011.

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35. Sileo, L., Steen, S. (2011) "Lateral Force and Turning Moment on a Reversing Ship", Second Symposium on Marine Propulsors, smp'11, June 15-17, Hamburg, Germany.

36. Chuang, Z., Steen, S. (2011) "Prediction of Speed Loss of a Ship in Waves", Second Symposium on Marine Propulsors, smp'11, June 15-17, Hamburg, Germany.

37. Kozlowska, A., Wöckner, K, Steen, S., Rung, T., Koushan, K., Spence, S. (2011) "Experimental investigation of the boundary between the vortex forming, non vortex forming, and free surface ventilation of marine propellers", Second Symposium on Marine Propulsors, smp'11, June 15-17, Hamburg, Germany.

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by means of dynamic-loads analysis ",Ocean Engineering **38** (14-15), October 2011, pp. 1600-1610,
doi: 10.1016/j.oceaneng.2011.07.009

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56. Guo, B.; Deng, G.B.; Steen, S. Verification and validation of numerical calculation of ship resistance and flow field of a large tanker. Ships and Offshore Structures 2013 ;Volume 8.(1) s. 3-14

57. Natskår, At, Steen, S. Rolling of a transport barge in irregular seas, a comparison of motion analyses and model tests. Marine Systems & Ocean Technology, Vol. 8 No. 1 pp. 05-19 June 2013, ISSN 1679-396X

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62. Bhattacharyya, A.; Steen, S. (2014) Propulsive factors in waves: A comparative experimental study for an open and a ducted propeller. Ocean Engineering. Vol. **91**, pp 243-251

63. Bøckmann, E.; Steen, S. (2014) Experiments with actively pitch-controlled and spring-loaded oscillating foils. Applied Ocean Research. Vol. **48**, pp 227-235

64. Taskar, B., Steen, S. (2015) Analysis of Propulsion Performance of KVLCC2 in Waves. Proceedings of Fourth International Symposium on Marine Propulsors (smp'15), Austin, Texas

65. Taskar, B., Yum, K.K., Pedersen, E., Steen, S. (2015) Dynamics of a marine propulsion system with a diesel engine and a propeller subject to waves. Proceedings of the ASME 2015 34th International Conference on Ocean, Offshore and Arctic Engineering, OMAE2015, May 31-June 5, 2015, St. John's, Newfoundland, Canada

66. Bhattacharyya, A., Neitzel, J. C., Steen, S., Abdel-Maksoud, M., Krasilnikov, V. (2015) Influence of Flow Transition on Open and Ducted Propeller Characteristics. Proceedings of Fourth International Symposium on Marine Propulsors (smp'15), Austin, Texas

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72. Bøckmann, Eirik, Steen, Sverre (2016) Model test and simulation of a ship with wave foils. Applied Ocean Research vol. **57** (2016) pp 8-18

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74. Bøckmann, Eirik, Steen, Sverre (2016) Calculation of EEDI weather for a general cargo vessel, Ocean Engineering, Volume 122, 1 August 2016, Pages 68-73

75. Yum, Kevin Koosup, Sjong, Stian, Taskar, Bhushan, Pedersen, Eilif, Steen, Sverre (2016) Simulation of a Hybrid Marine Propulsion System in Waves, in Proceedings of CIMAC congress, Helsinki, June 6-10, 2016.

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For Roll Damping of Ships, in Proceedings of IFAC Conference of Control Applications in Marine Systems, Trondheim, Norway, September 13-16, 2016.

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81. Taskar, Bhushan; Steen, Sverre; Bensow, Rickard E; Schröder, Björn. Effect of waves on cavitation and pressure pulses. Applied Ocean Research 2016 ;Vol. 60. pp. 61-74

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pulses of a tanker with twin podded propulsion. Applied Ocean Research 2017; Volume 65. s. 206-218

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