

## Alexandre N. SIMOS

Associate Prof., Dept. of Naval Arch. & Ocean Eng.  
Senior Researcher, Numerical Offshore Tank  
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### Personal information

First name, Surname:	Alexandre Nicolaos Simos		
Date of birth:	30/09/1972	Sex:	Male
Nationality:	Brazilian		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	ORCID: 0000-0002-1879-5468 ResearcherID: C-5999-2012 Scopus Author ID: 6603793530		
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### Education

2013	Livre Docência – Escola Politécnica/Ocean Eng – University of São Paulo - Brazil
2001	D.Sc degree – Escola Politécnica/Naval Arch & Ocean Eng – University of São Paulo - Brazil
1997	M.Sc degree – Escola Politécnica/Naval Arch & Ocean Eng – University of São Paulo - Brazil
1995	Naval Engineer - Escola Politécnica – University of São Paulo - Brazil

### Positions - current and previous

2013-	Associate Professor, Dept of Naval Arch & Ocean Eng – University of São Paulo - Brazil
2012-2013	Visiting Professor, Technical University of Madrid – Spain
2002-2013	Assistant Professor, Dept of Naval Arch & Ocean Eng – University of São Paulo - Brazil

### Project management experience

2019-	“R&D on Floating Wind Turbines for Deep Waters” – Coordinator – Financed by Petrobras
2016-2019	“Development of Tools for Design and Analysis of Floating Wind Turbines” – Coordinator – Awarded by the Office of Naval Research – Global (ONR-G)
2014-2017	“A Wave Inference Method for Estimating Waves aboard the Peregrino FPSO” – Coordinator – Financed by Statoil (currently Equinor)
2014-2017	“Predicting Greenwater events on FPSO units” – Coordinator – Financed by Petrobras
2009-2012	“A Methodology for Defining the Best Heading for FPSO Units” – Coordinator – Financed by Petrobras

### Supervision of students

Master's students	Ph.D. students	University/institution - Country
10 concluded	08 concluded	University of São Paulo - Brazil
01 concluded		(co-advisor) Instituto Superior Técnico - Portugal
	01 concluded	(co-advisor) Technical University of Madrid - Spain
01 ongoing	02 ongoing	University of São Paulo - Brazil

### Other relevant professional experiences

2019-	Member of the Offshore Wind Technical Committee of the Brazilian Society of Naval Architects (SOBENA)
2014-18	Head of the Department of Naval Arch & Ocean Eng, Escola Politécnica, University of São Paulo
2014-15	Coordinator of the Offshore Technology Symposium in the Ocean, Offshore and Arctic Eng Conference (OMAE) - OOA/ASME
2010-12	Coordinator of the Graduate Program in Naval Arch & Ocean Eng, University of São Paulo

### Track record

**ORCID:** <https://orcid.org/0000-0002-1879-5468>

**ResearcherID:** <http://www.researcherid.com/rid/C-5999-2012>

**Scopus:** <https://www.scopus.com/authid/detail.uri?authorId=6603793530>

**Google Scholar:** <https://scholar.google.com.br/citations?user=YzIpnRwAAAAJ&hl=pt-BR&oi=ao>

### Some of the most cited publications

SIMOS, A.N.; RUGGERI, F.; WATAI, R.A.; SOUTO-IGLESIAS, A.; LOPEZ-PAVON, C., Slow-drift of a floating wind turbine: An assessment of frequency-domain methods based on model tests, Renewable Energy 116, p.133-154, 2018

WATAI, R.A.; RUGGERI, F.; SIMOS, A.N., A new time domain Rankine panel method for simulations involving multiple bodies with large relative displacements, Applied Ocean Research 59, p.93-114, 2016

LOPEZ-PAVON, C.; WATAI, R.A.; RUGGERI, F.; SIMOS, A.N.; SOUTO-IGLESIAS, A., Influence of wave induces second-order forces in semi-submersible FOWT mooring design. Journal of Offshore Mechanics and Arctic Engineering 137 (3) 031602, 2015

WATAI, R.A.; DINOI, P.; RUGGERI, F.; SOUTO-IGLESIAS, A.; SIMOS, A.N., Rankine time-domain method with application to side-by-side gap flow modeling. Applied Ocean Research 50, p. 69-90, 2015

MATSUMOTO, F.T.; WATAI, R.A.; SIMOS, A.N.; FERREIRA, M.D.A.S., Wave Run-up and Air Gap Prediction for a Large-Volume Semi-Submersible Platform. *Journal of Offshore Mechanics and Arctic Engineering* 135 (1), 011302, 2013

MATOS, V.L.F.; Simos, A.N.; SPHAIER, S.H., Second-order resonant heave, roll and pitch motions of a deep-draft semi-submersible: Theoretical and experimental results. *Ocean Engineering* 38 (17-18), p. 2227-2243, 2011

SIMOS, A.N.; TANNURI, E.A.; SPARANO, J.V.; MATOS, V.L.F., Estimating wave spectra from the motions of moored vessels: Experimental validation, *Applied Ocean Research* 32 (2) p. 191-208, 2010

TANNURI, E.A.; SPARANO, J.V.; SIMOS, A.N.; da CRUZ, J.J., Estimating Directional Wave Spectrum Based on Stationary Ship Motion Measurements, *Applied Ocean Research* 25 (5), p.243-261, 2003

SIMOS, A.N.; TANNURI, E.A.; PESCE, C.P.; ARANHA, J.A.P., A Quasi-Explicit Hydrodynamic Model for the Dynamic Analysis of a Moored FPSO Under Current Action, *Journal of Ship Research* 45 (4), pp. 289 - 301, 2001

TANNURI, E.A.; SIMOS, A.N.; LEITE, A. J. P.; ARANHA, J.A.P., Experimental Validation of a Quasi-Explicit Hydrodynamic Model: Fishtailing Instability of a Single-Point Moored Tanker in Rigid-Hawser Configuration. *Journal of Ship Research* 45(4), pp.302-314, 2001

#### **National Research Grant**

Awarded with the Research Productivity Scholarship from the National Council for Scientific and Technological Development (CNPq) since 2009

#### **Notable Project with Social/Sustainability Outcome**

Paralympic Sailboat – POLI 19 – Coordinator of the project that designed and built the first sailboat for the São Paulo Sail Federation paralympic training – Financed by the Brazilian Funding Authority for Studies and Projects (FINEP) – 2017

#### **Prizes and Awards**

2018 Mérito Tamandaré Medal, Brazilian Navy

2016 Title of Honor to Merit in Naval Engineering, Directorate of Naval Engineering, Brazilian Navy

2015 «Friend of the Brazilian Navy» Medal, Brazilian Navy

2015 Speaker of the 2015 EPUSP Naval Engineering graduating class

2013 OMAE Conference Appreciation Award - Ocean, Offshore and Arctic Engineering Division/ASME

1996 Best Student Prize, EPUSP Naval Engineering course, awarded by the Brazilian Navy