

Prof. Dr. Ing. Philippe RIGO

Age: 59

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Research profile: <http://orbi.uliege.be/ph-search?uid=p001477>



SKILLS

Ships and Offshore Structures,	Teaching, Project
Offshore Wind Turbine	Research, Project
Ultimate Strength , Crashworthiness and Optimisation	Research, Project
Inland navigation and Hydraulic Structures	Intern. Collaboration

WORK HISTORY

2008 - Present	Professor, University of Liege, Head of ANAST, Belgium
1999 - 2000	Visiting Prof. University of Michigan (Naval Architecture), USA
1991 – 2008	Research Director, National Funds of Scientific Research (FNRS)
1990 – 1991	University of Kyoto, Post doc, Japan
1983 - 1990	Research Associate, Univ. of Liege, Belgium.

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

HOLISHIP	H2020, 2016 – 2020 - Ship Structure Optimization
LBR5	Ship Structure Opimisation, Least cost optimization (developer)
ISSC	Co-Chairman 2015-2018 ; Members of ISSC committee since 1999

EDUCATION

1999	Highest Academic Degree delivered in Belgium), University of Liège,
1988	PhD in Engineering, Univ of Liege
1982 & 1985	Civil Engineer (Ir.) ; Naval Architect (MSc)

SOME PUBLICATIONS

- [1] Bela, A., Le Sourne, H., Buldgen, L., **Rigo, P.** (2017). Ship collision analysis on Offshore Wind Turbine monopile foundations. *Marine Structures*, 51, 220-241. <http://hdl.handle.net/2268/204003>
- [2] Caprace, J.-D., Petcu, C., Velarde, M., **Rigo, P.** (2013). Optimization of Shipyard Space Allocation and Scheduling using Heuristic Algorithm. *Journal of Marine Science & Technology*, 18(3), 404-417. <http://hdl.handle.net/2268/154022>
- [3] Rigo, P., & Rizzutto, E. (2003). Analysis and Design of Ship Structure (Chap 18). *Ship Design and Construction (Vol 1)* (T. Lamb, pp. 18-76). USA: SNAME., <http://hdl.handle.net/2268/28142>
- [4] Pradillon, J. Y., **Rigo, P.**, and ISSC IV.2 Committee. (2012). DESIGN METHODS Report of Technical Committee IV.2 of ISSC. 18th, *INTERNATIONAL SHIP AND OFFSHORE STRUCTURES CONGRESS (ISSC)* (pp. 60). ELSEVIER., <http://hdl.handle.net/2268/117198>
- [5] Bayatfar, A., **Rigo, P.** (2014). Residual Ultimate Strength of Cracked Steel Unstiffened and Stiffened Plates under Longitudinal Compression. *Thin-Walled Structures*, 84, 378-392., <http://hdl.handle.net/2268/182621>

Prof. HAGE André

Age: 62

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Research profile: <http://www.anast.ulg.ac.be>



SKILLS

Ship Project & Ship Design	Teaching, Project
Ship Theory and Offshore (static, dynamic and propulsion)	Teaching, Project

WORK HISTORY

2004 - Present	Associate professor at University of Liège Director of the towing tank (ship model test laboratory)
2007 - Present	Professor HZS (HOGERE ZEEVAARTSCHOOL - Ecole de Navigation de la marine Marchande à Anvers)
2006 - Present	General Manager of DN&T Design Naval & Transport company
1986 - 2004	Civil Engineer in naval Architecture

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

Industrial Project	Several design project for working ships (fishing vessel, patrol boat, passengers ships,..).
European and regional	Improve, HLC-AIM, Easyship, Genhull
ISSC	Member of committee IV.2 Design Method since 1991

EDUCATION

1986	Civil Engineer In naval Architecture
1985	Civil Engineer - Transport and Logistics

SOME PUBLICATIONS

- [1] "Development of CAD/CAE system for ship design suitable for SME" - 1988-1992 (BRITE-EURAM).
- [2] International conference on Computer Application on Board the ships. CABS'95 VARANA, Volume 1- Bulgaria September 1995 – pp III.1 – III.10 A. HAGE
- [3] The effect of hull modification on Design parameters of medium-speed monohull passenger ferries: Wolter Roberth HETHARIA, Andre HAGE, Philippe RIGO, ICOST Ambon- Indonesia 2012
- [4] Hull Dimensions Optimization of Medium-Speed Monohull Passenger Ferries Wolter Roberth HETHARIA, Andre HAGE, Philippe RIGO Hiper 2014

Prof. Dr. Ing. Pierre FERRANT

Age: 60

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Research profile: <https://scholar.google.com/citations?user=07Hvy1UAAAAJ&hl=en>



SKILLS

Water Waves	Research, Teaching, Expertise,
Wave-Structure Interactions	Research, Teaching, Expertise
Free Surface Hydrodynamics	Research, Teaching, Expertise
Numerical modelling	Research, Expertise, Project Supervision

WORK HISTORY

2012 - Present	Head of LHEEA Lab., Ecole Centrale de Nantes, https://lheea.ec-nantes.fr
2008 - Present	Full Professor, Ecole Centrale de Nantes
1998 - 2008	Associate Professor, Ecole Centrale de Nantes
1988 - 1998	Research Engineer, Sirehna Company, Nantes
1983 - 1988	Research Assistant, Ecole Centrale de Nantes

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

NEMO	Extension of Model test basins, Ecole Centrale de Nantes, 2015-2020, Budget 16 MEuros
University of Osaka	Specially Appointed Professor, 2014-2017
ITTC	Member of Advisory Council, former chairman of Ocean Engg. Committee

EDUCATION

2006	Habilitation to conduct research (HDR) (Ecole Centrale de Nantes)
1988	PhD in Hydrodynamics (Ecole Centrale of Nantes)
1982	Advanced Engineer Diploma in Naval Hydrodynamics (SSHNA), Ecole Centrale de Nantes
1981	Engineer Diploma, Ecole Centrale de Nantes (Naval Hydrodynamics and Shipbuilding)

SOME PUBLICATIONS

- [1] **M. Gouin, G. Ducrozet, P. Ferrant** : *Propagation of 3D Nonlinear Waves over an Elliptical Mound with a High-Order Spectral Method*, European Journal of Mechanics –B –Fluids, 63:9 - 24, 2017. <https://doi.org/10.1016/j.euromechflu.2017.01.002S>.
- [2] **G. Ducrozet, F. Bonnefoy, D. Le Touzé, P. Ferrant** : *HOS-ocean: Open-source solver for nonlinear waves in open ocean based on High-Order Spectral method*, Computer Physics Communications, 2016.
- [3] **G. Ducrozet, H.B. Bingham, A.P. Engsig-Karup, P. Ferrant** : *A non-linear wave decomposition model for efficient wave-structure interaction. Part A: Formulation, validations and analysis*, Journal of Computational Physics, Vol. 257, pp 863-883, 2014.

L. GENTAZ

Age: 50

E-mail : lionel.gentaz@ec-nantes.fr

Research profile: http://www.researchgate.net/profile/Lionel_Gentaz

SKILLS

Numerical methods under potential flow and viscous flow theories	Teaching
Wave resistance	Teaching
Viscous flow modelling for wave-structure interactions	Expertise

WORK HISTORY

1996 - Present	Assistant Professor in Ecole Centrale Nantes
1995 – 1996	Teaching and Researching assistant in Ecole Centrale Nantes

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

Optiroutes	FUI (Single Inter-Ministry Fund), reduction of ship consumption, 2016 to 2018. Partners: Bureau Veritas, CMA-CGM, IFREMER, HydrOcean, ADRENA, Nextflow software, ENSM and ECN
PREDEMO-Nav	ANR (National Research Agency), improvement of security for marine operations, 2016 to 2018. Partners : Sirehna (research part of Naval-Group), MIO (Mediterranean Institute of Oceanology), DGA-TH (French Defence Procurement Agency-Hydrodynamic Department) and ECN

EDUCATION

1995	PhD in Fluid Dynamics (Ecole Centrale of Nantes)
1991	Engineer diploma in Fluid Mechanics (Ecole Centrale Nantes)

SOME PUBLICATIONS

- [1] Monroy, C., Ducrozet, G., Bonnefoy, F., Babarit, A., Gentaz, Ferrant, P., 2011. *RANS Simulations of CALM Buoy in Regular and Irregular Seas Using SWENSE Method*, International Journal of Offshore and Polar Engineering (ISSN 1053-5381), Vol. 21, No. 3, p 1-8.
- [2] Bhinder, M. A., Babarit, A., Gentaz, L., Ferrant, P., 2015. *Potential Time Domain Model with Viscous Correction and CFD Analysis of a Generic Surging Floating Wave Energy Converter*, International Journal of Marine Energy 10. DOI 10.1016/j.ijome.2015.01.005.
- [3] Reliquet, G., Drouet, A., Guillerm, P.-E., Jacquin, E., Gentaz, L., Ferrant, P., *Simulation of Wave-Body Interaction Using a Single-Phase Level Set Function in the SWENSE Method*, ASME 32rd International Conference on Ocean, Offshore and Arctic Engineering, Nantes. DOI 10.1115/OMAE2013-11097.

Guillaume DUCROZET

Age: 36

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Research profile: https://www.researchgate.net/profile/Guillaume_Ducrozet

SKILLS

Water waves modelling	Teaching
Fluid Mechanics	Teaching
Analytical and numerical modelling	Expertise

WORK HISTORY

2010 - Present	Assistant Professor – LHEEA Lab., Ecole Centrale de Nantes
2009 - 2010	Research engineer (Ecole Centrale Nantes)
2008 - 2009	Post-Doctoral fellow (Technical University of Denmark (DTU) – Mechanical Engineering dept.)
2007 - 2008	Research engineer (Ecole Centrale Nantes)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

SimAvHy	PIA (IRT Jules Verne), Numerical simulation, 2012-2017, partners: BV, HydrOcean, Nextflow, STX, Sireha (Naval group), Alstom (GE)
LabexMER	PIA, Ocean dynamics, 2012-2019, partners: UBO, UBS, Univ Nantes, Ifremer, CNRS, IRD
REM	EMJMD on Marine Renewable Energy, 2018-2022, partners: UPV (coordinator), Univ. Strathclyde, NTNU

EDUCATION

2007	PhD in Hydrodynamics (Ecole Centrale de Nantes)
2004	Master of Engineering, major in Hydrodynamics and Ocean Engineering (Ecole Centrale de Nantes)

SOME PUBLICATIONS

- [1] B. R. Seiffert, **G. Ducrozet**, F. Bonnefoy, Simulation of breaking waves using the high-order spectral method with laboratory experiments: Wave-breaking onset, In *Ocean Model.*, Vol. 119, pp. 94-104, 2017
- [2] M. Gouin, **G. Ducrozet**, P. Ferrant, Propagation of 3D nonlinear waves over an elliptical mound with a High-Order Spectral method. *Eur. J. Mech. B-Fluid*, Vol. 63, pp. 9-24, 2017.
- [3] **Ducrozet G.**, Bonnefoy F., Le Touzé D. and Ferrant P. : HOS-ocean: Open-source solver for nonlinear waves in open ocean based on High-Order Spectral method. *Comp. Phys. Comm.*, 2016
- [4] **Ducrozet, G.**, Bonnefoy, F., Le Touzé, D., and Ferrant, P.: A modified High-Order Spectral method for wavemaker modeling in a numerical wave tank, *Eur. J. Mech. B-Fluid*, 34, 19-34, 2012.
- [5] **Ducrozet, G.**, Bonnefoy, F., Le Touzé, D., and Ferrant, P.: 3-D HOS simulations of extreme waves in open seas, *Nat. Hazards Earth Syst. Sci.*, 7, 109-122, 2007.

Prof. Dr.Eng Patrick KAEDING

Age: 47

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Research profile: <https://www.lsk.uni-rostock.de/en/>



SKILLS

Structural Design	Teaching
Finite Element Analysis	Expertise
Analytical and Numerical Modelling	Expertise
Ultimate Strength Analysis	Expertise

WORK HISTORY

2015 - Present	Vice-Rector of Academic Studies, Teaching and Evaluation, Univ. of Rostock
2009 - Present	University of Rostock, Faculty of Mechanical Engineering and Marine Technology, Professor holding the Chair of Ship Structures
2005 - 2009	ThyssenKrupp Marine Systems: Research, Development & Product Development
2001 - 2005	ThyssenKrupp Marine Systems: Structural Analysis

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

3D Vorm:	Forming of Thick of Thick Plates, 2010-2013
POLAR:	Production, Operations and Living in Arctic Regions, 2010-2013
SOF:	Floating Offshore Foundations, 2010-2013
DüsenForm:	Forming of Ducts, 2013-2015
ISSC	Member of Standing Committee

EDUCATION

2001	Doctor of Engineering, Hiroshima University, Japan
1998	Dipl.-Ing. (Schiffbau), University of Hamburg

SOME PUBLICATIONS

Lettau, W-D, Kaeding, P (Hg.) (2017). **Lebenslanges Lernen an Hochschulen** (Einblicke in die Begleitforschung zur wissenschaftlichen Weiterbildung), Akademische Verlagsgemeinschaft München

Oksina, A, Lindemann, T, Kaeding, P (2017). **Idealized Structural Unit Method for Dynamic Collapse Analysis of Plates**, Proceedings of the OMAE 2017 International Conference on Ocean, Offshore & Arctic Engineering, OMAE2017-61152

Lindemann, T, Kaeding, P (2017). **Application of the Idealized Structural Unit Method for Ultimate Strength Analyses of Stiffened Plate Structures**, Ship Technology Research (Schiffstechnik), Taylor & Francis, Vol. 64, No. 1, 15-29

Prof. Dr. Ing. Robert Bronsart

Age: 63

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Research profile: <http://www.schiffbauforschung.de/en>



SKILLS

Ship Design	Expertise
Information Technologies, Collaboration Infrastructures in Ship Design and Production	Expertise
Ship Operation Optimization	Expertise
Ship Hydromechanics	Teaching

WORK HISTORY

1996 - present	University of Rostock, Faculty of Mechanical Engineering and Marine Technology, Professor holding the Chair of Ship Design
1988 - 1996	Germanischer Lloyd, IT development
1983 - 1988	Technical University of Hamburg-Harburg, Researcher at Chair of Ship Structures
1982 - 1983	University of Hannover, Researcher at Chair of Ship Design and Ship Theory

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

PerSee	Performance of Ships in Seaways
DFG	German Research Foundation : Advisory Board for Research Vessels
ISSC	Active member since 2000 serving several committees, organizing ISSC 2012
ICAM	Lectures in shipping logistics

EDUCATION

1989	Dr.-Ing. (University of Hamburg)
1982	Diplom Ingenieur Schiffbau (University of Hamburg)
1974 - 1982	Studying at universities in Hannover, UoM(USA), Hamburg

SOME PUBLICATIONS

Greshake, Sebastian H., **Robert Bronsart**. *Application of subdivision surfaces in ship hull form modelling*. Computer-Aided Design 100 (2018): 79–92

Desta Milkessa Edessa; Lutz Kleinsorge; **Robert Bronsart**, *A tool for ship hull surface healing and domain preparation for downstream applications*, International Journal of Computer Aided Engineering and Technology, 2017 Vol. 9 No. 1, pp 18-37, DOI: 10.1504/IJCAET.2017.10001015

Hmeshah, K., Erbach, N., **Bronsart, R.** *Impact of production requirements on high-quality ship product data models*, Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering for the Maritime Environment, DOI: 10.1177/1475090215597593, (2016)

M. Abdel-Maksoud, **R. Bronsart**, G.F. Clauss, W. Fricke, U. Glowalla, T. Rung, M.-C. Wanner, P. Müsebeck, *E-Learning Infrastructure for Naval Architecture and Ocean Engineering Education*, 13th International Conference on Computer Applications in Shipbuilding (ICCAS), Portsmouth, England, 2007

Dr. hab. inż. Maciej TACZAŁA

Age: 57

E-mail : maciej.taczala@zut.edu.pl

Research profile: http://www.researchgate.net/profile/Maciej_Taczala



SKILLS

Structural mechanics	Teaching, Expertise
Finite Element Analysis	Teaching, Expertise

WORK HISTORY

2014 - present	Professor (West Pomeranian University of Technology, Szczecin, Faculty of Maritime Technolog and Transport)
1996 - 2014	Researcher and lecturers (Technical University of Szczecin, Faculty of Maritime Technology)
1984 - 1995	Research Assistant (Technical University of Szczecin, Ship Research Institute)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

INBAT	Innovative Barge Trains for Effective Transport on Shallow Waters”, 5FP, 2001-2004
MARSTRUCT	„Network of Excellence on Marine Structures”, 6FP, 2004-2008
Static and dynamic analysis of layered plate structures resting on elastic foundation	financed by the Polish National Science Centre (NCN) under contract 2012/05/B/ST6/03086, 2013-2015.

EDUCATION

2010	D.Sc. (Habilitation) (Technical University of Gdańsk)
1995	PhD in Civil Engineering (Technical University of Gdańsk)
1984	M.Sc. in Naval Architecture (Technical University of Szczecin)

SOME PUBLICATIONS

- [1] Kleiber M., **Taczala M.**, Buczkowski R., (2018) Elasto-Plastic Response of Thick Plates Built in Functionally Graded Material Using the Third Order Plate Theory. In: Advances in Computational Plasticity. Computational Methods in Applied Sciences, vol 46. Springer, Cham.
- [2] **Taczala M.**, Buczkowski R, Kleiber M, (2017) Nonlinear buckling and post-buckling response of stiffened FGM plates in thermal environments, Composites Part B, 109: 238-247.
- [3] **Taczala, M.**, Buczkowski, R., Kleiber, M., Nonlinear free vibration of pre- and post-buckled FGM plates on two-parameter foundation in the thermal environment, Composite Structures, 137: 85-92, 2016.
- [4] **Taczala, M.**, Buczkowski, R., Kleiber, M., Postbuckling analysis of functionally graded plates on an elastic foundation, Composite Structures, 132: 842-847, 2015.

Prof. Dr. Ing. Zbigniew SEKULSKI

Age: 56

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Research profile: Ship Structure



SKILLS

Ship and offshore structural design	Expertise, Teaching
Multi-objective optimization	Expertise, Teaching
Optimization and cost-benefit analysis	Expertise, Teaching

WORK HISTORY

2009 - Present	Assistant Professor (West Pomeranian University of Technology, Szczecin)
1987 - 2008	Research assistant (Szczecin University of Technology)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

BALTECOLOGICAL SHIP	“Environment Friendly Ships For Baltic Area”, Eureka Project - E! 2772, 2002-2003.
INBAT	„Innovative Barge Trains for Effective Transport on Shallow Waters”, 5FP, 2001-2004.
MARSTRUCT	„Network of Excellence on Marine Structures”, 6FP, 2004-2008.
EMSHIP	Teacher of the Erasmus Mundus EMSHIP programme: Design of Ships and Offshore Structures.
IMO	Sub-Committee on Ship Design and Construction International Maritime Organization; member of the local polish team.
ISSC	The International Ship and Offshore Structures Congress; member of the committee IV.2, “Design Methods”.

EDUCATION

2013	Habilitation in Machine Construction and Operation (Gdańsk University of Technology)
2001	PhD in Machine Construction and Operation (Szczecin University of Technology)
1995	Master in Physics (Szczecin University)
1987	Master in Naval Architecture (Szczecin University of Technology)

SOME PUBLICATIONS

- [1] Lazakis, I., Bronsart, R., Caprace, J-D., Chen, Y., Georgiev, P., Ilnitskiy, I., Moro, L., Prebeg, P., Mendonça Santos, J., **Sekulski, Z.**, et al., (2018) Design methods, *Proceedings of the 20th International Ship and Offshore Structures Congress*, ISSC 2018, Volume 1, 2018, pp. 609-708.
- [2] Collette, M., Bronsart R., **Sekulski, Z.**, et al., V. (2015) Design methods, *Proceedings of the 19th International Ship and Offshore Structures Congress*, ISSC 2015, Volume 1, 2015, pp. 459-518.
- [3] **Sekulski Z.** (2014) Ship hull structural multiobjective optimization by evolutionary algorithm. *Journal of Ship Research*, Vol. 58, no. 2 (2014), pp. 45-69.
- [4] **Sekulski Z.** (2010) Multi-objective topology and size optimization of high-speed vehicle-passenger catamaran structure by genetic algorithm. *Marine Structures*, Vol. 23, No 4, pp. 405–433.

Dr. Ing. Tomasz URBAŃSKI

Age: 41

E-mail : tomasz.urbanski@zut.edu.pl

Research profile:



SKILLS

Welding Technology	Teaching
Production Technology of Ship and Offshore Structures	Teaching
Mechanics of Ship and Offshore Structures	Teaching
Experimental investigations and thermo-mechanical analysis of welding distortions	Expertise

WORK HISTORY

2015 - Present	Head of Large Size Welding Laboratory (Faculty of Maritime Technology and Transport)
2012 - 2016	V-ce Dean of the Faculty of Maritime Technology and Transport (West Pomeranian University of Technology in Szczecin)
2004 - Present	Adjunct Professor in Department of Ships and Yachts Building (Faculty of Maritime Technology and Transport)
2003 - 2004	Production Engineer and Inspector of Quality Control (PORTA ODRA Shipyard in Szczecin)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

MARSTRUCT „Network of Excellence on Marine Structures”, 6FP, 2004-2008

EDUCATION

2009	PhD in Mechanical Engineering (West Pomeranian University of Technology in Szczecin)
2003	M.Sc. in Naval Architect (Szczecin University of Technology)

SOME PUBLICATIONS

- [1] **Urbański T.**, *Hybrid node – predictions of angular distortion of the connector on the basis of three-dimensional designed experiment* (2017), *Welding Technology Review*, Vol. 89 No. 9/2017, pp. 2-9.
- [2] **Urbański T.**: *Analysis of assembly suitability of the hybrid node based on weld distortion prediction models* (2015), *Advances in Science and Technology Research Journal*, Vol. 9, No. 27, pp. 28–34.
- [3] **Urbański, T.**, Taczała, M., *Experimental investigation of welding deformations of hybrid structural joint* (2013) *Analysis and Design of Marine Structures - Proceedings of the 4th International Conference on Marine Structures, MARSTRUCT 2013*, pp. 441-446.
- [4] Metschkow B., **Urbański T.**: *Prediction of a transverse shrinkage of butt welded joints* (2008), *Maritime Industry, Ocean Engineering and Coastal Resources - Proceedings of the 12th International Congress of the International Maritime Association of the Mediterranean, IMAM 2007*, pp. 483-487.

Prof. Dr. Ing. Adrian Lungu

Age: 59

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Research profile: http://www.researchgate.net/profile/Adrian_Lungu



SKILLS

Computational Fluid Dynamics	Teaching
Numerical ship hydrodynamics	Expertise
Ship hydrodynamics	Project supervision

WORK HISTORY

2000 - Present	Professor – Faculty of Naval Architecture („Dunărea de Jos” din Galați)
1998-2004, 2012-2016	Deputy – Rector – Dunărea de Jos” din Galați
2004 - 2012	Dean – Faculty of Naval Architecture („Dunărea de Jos” din Galați)
1996 - 1998	PD Fellow, Visiting Professor (SMU Dallas TX, USA)
1987 - 1991	Professor – Faculty of Naval Architecture („Dunărea de Jos” din Galați)
1984 - 1987	Technology Engineer (Galati Shipyard)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

ASIGMA	POSDRU, education, 2010, partners : OPB, UTB, UPT, ARACIS
VORTEX	CNCSIS, Vortex hydrodynamics, 2006, partners: UPB, UPT, UTC
European Academy of Sciences and Arts	Member

EDUCATION

2005	Habilitation to conduct research (HDR) („Dunărea de Jos” din Galați)
1998	PhD in Fluid Mechanics (Hiroshima University, Japan)
1993	Engineer in Shipbuilding („Dunărea de Jos” din Galați)

SOME PUBLICATIONS

- [1] **A. Lungu**, F. Pacuraru – *Free-Surface Flow around an Appended Hull* – Proceedings of the 25th IAHR Symposium on Hydraulic Machinery and Systems, Timisoara, vol. 2, pp.628-635, 2010
- [2] **A. Lungu**, F. Pacuraru – *Numerical Study of the Hull-Propeller-Rudder Interaction* – Numerical Analysis and Applied Mathematics, AIP Proc., Melville New York, Vol.1169, pp. 693-696, 2009
- [3] **A. Lungu**, C. Ungureanu – *Numerical Study of a 3-D Juncture Flow* – Numerical Analysis and Applied Mathematics, AIP Proc., Melville New York, Vol.1048, pp.839-842, 2008

Prof. PhD. Eng. Leonard DOMNISORU

Age: 52

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Research profile: www.naoe.ugal.ro



SKILLS

Seakeeping & Hydroelasticity	Teaching
Finite Element Analysis & Structural Dynamics	Teaching
Structural Analysis and Hydroelasticity	Expertise
Structural Analysis, Seakeeping and Hydroelasticity	Project supervision

WORK HISTORY

1990 - Present	Professor – Faculty of Naval Architecture („Dunărea de Jos” of Galati)
2012 - 2015	Dean – Faculty of Naval Architecture („Dunărea de Jos” of Galati)
2008 - 2012	Deputy Dean – Faculty of Naval Architecture („Dunărea de Jos” of Galati)
2002 - 2008	Head of Ship Structure Department („Dunărea de Jos” of Galati)
1996 - 2002	Member of the Shipbuilding Department Council („Dunărea de Jos” of Galati)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

MARSTRUCT	Grant EU-FP6 MARSTRUCT, Network of Excellence on Marine Structures, Project No.FP6-PLT-506141, Contract No. TNE3-CT-2003-506141, Commission of the European Communities, (2003-2010), coordinators Technical University of Lisbon, Portugal (Prof.PhD.Eng.Dr.H.C.Guedes Carlos Soares), Universities of Glasgow and Strathclyde, United Kingdom (Prof.PhD.Eng.Purnendu K. Das), 33 EU partners, topics: ship global strength, ship vibrations, seakeeping, slamming, hydroelasticity.
MARGAS	Grant MCT-CEEX-M1/ MARGAS-X2C16/ PC-D07-PT26-4409/2006, Models and Advanced Numerical Methods for the LPG and LNG ship transport engineering, (2006-2008), MedC-ANCS/S.C.IPA.S.A Bucharest, coordinator ICE ICEPRONAV S.A. Galati, partners University „Dunarea de Jos” of Galați, University „Politehnica” of Timisoara, Romanian Academy Branch Timisoara, topics: ship global strength, hydroelasticity, fatigue.
STG	Member of Schiffbautechnische Gesellschaft e.V.,Hamburg (since 1994)
GFTU	Member of Gesellschaft zur Förderung der Technischen Universität Hamburg-Harburg e.V. (since 1999)

EDUCATION

2007	Habilitation, PhD research advisor in Mechanical Engineering („Dunărea de Jos” University of Galati)
1996	PhD in Ship Hydrodynamics and Structures („Dunărea de Jos” University of Galați & DAAD Scholarship Technische Universität Hamburg-Harburg)
1990	Engineer in Shipbuilding („Dunărea de Jos” University of Galati)

SOME PUBLICATIONS

- [1] Obreja, D., Nabergoj, R., Crudu, L., Domnisoru, L., *Seakeeping Performance of a Mediterranean Fishing Vessel*, Developments in Maritime Transportation and Harvesting of Sea Resources (Editors Carlos Guedes Soares, Ângelo Teixeira), CRC Press / A.A. Balkema Publishers a member of Taylor & Francis Group London, ISBN 978-0-8153-7993-5, pp.483-491, 2017, 17th International Congress of the

International Maritime Association of the Mediterranean, 9-11 October 2017, Lisbon, Portugal ,
<http://www.worldcat.org/isbn/9780815379935>;

- [2] Domnisoru, L., Rubanenco, I., Amoraritei, M., *Structural Safety Assessment of a 1100 TEU Container Ship, Based on a Enhanced Long Term Fatigue Analysis*, Advanced Materials Research, Vol. 1036, pp. 935-940, Trans Tech Publications, Zurich, Switzerland, (ISBN 978-3-03835-255-6 / ISSN 1022-6680), (doi:10.4028/www.scientific.net/AMR.1036.935), ModTech 2014 International Conference, 13-16 July 2014, Gliwice;
- [3] Domnisoru, L., Domnisoru, D., *The Numerical Analysis of Transitory Dynamic Response, based on the Non-linear Hydroelasticity Theory, for a Barge Test Ship*, Romanian Journal of Physics, Publishing House of the Romanian Academy, Section Applied Physics–Mechanics, Volume 53, Number 1-2 (ISSN 1221-146X), pp.129-136, Bucharest, 2008;
- [4] Domnisoru, L., Dragomir, D., Ioan, A., *Numerical Methods for Hull Structure Strengths Analysis and Ships Service Life Evaluation, for a LPG Carrier*, The 27th International Conference on Offshore Mechanics and Arctic Engineering OMAE 2008, 15-20 June 2008, Paper No. OMAE2008-57602, ISBN 978-0-7918-4819-7, pp.509-518, Estoril, The American Society of Mechanical Engineers (ASME International Conference), (www.asmeconferences.org/OMAEO8);
- [5] Domnisoru, L., Ioan, A., *Non-linear Hydroelastic Response Analysis in Head Waves, for a large Bulk Carrier Ship Hull*, Advancements in Marine Structures (Editors C.Guedes Soares, P.K.Das), CRC Press /A.A. Balkema Publishers a member of Taylor & Francis Group London, ISBN 978-0-415-43725-7, pp.147-158, Glasgow, 2007;
- [6] Domnisoru, L., Domnisoru, D., *The Analysis of Stress Distribution in Round or Broken Line Form Bracket Flanges of Ship Structural Joints*, International Shipbuilding Progress, Marine Technology Quarterly, Volume 49, Number 3 (ISSN 0020-868X), pp.215-229, Delft, 2002;
- [7] Domnisoru, L., Domnisoru, D., *The Unified Analysis of Springing and Whipping Phenomena*, The Transactions of the Royal Institution of Naval Architects, W4 / London, 1997 & Part A, Volume 140, (ISSN 0373-529X), pp.19-34, 1998.

Assoc. prof. dr. ing. Florin PACURARU

Age: 41

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Research profile: https://www.researchgate.net/profile/Florin_Pacuraru



SKILLS

Hull form hydrodynamics	Teaching
Ship resistance	Teaching
Numerical and experimental ship hydrodynamics	Expertise
Computational fluid dynamics	Project supervision

WORK HISTORY

2003 - Present	Professor - Faculty of Naval Architecture (“Dunarea de Jos” University)
2016 - 2017	Deputy Dean - Faculty of Naval Architecture (“Dunarea de Jos” University)
2016 – present	CFD service owner (NAPA)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

ASIGMA	POSDRU, education, 2010, partners : OPB, UTB, UPT, ARACIS
ADAM4EVE	FP 7, Ship hydrodynamics, 2015, partners: CMT, RINA, VTT, HSVA, LR, STX
RINA	Member

EDUCATION

2015	PhD in Ship Hydrodynamics (“Dunarea de Jos” University)
2003	Master in Integrated Shipbuilding
2002	Engineer in Economical engineering in Shipbuilding (“Dunarea de Jos” University, Faculty of Shipbuilding and Electrical Engineering)

SOME PUBLICATIONS

- [1] A. Caramatescu, C.I. Mocanu, **F. Pacuraru** – *Estimation of planing forces in numerical and full scale experiment* – IMAM 2017 International Maritime Association of the Mediteranean, pp., 403-408, 2017
- [2] **F. Pacuraru**, A. Lungu, O. Marcu – *Self-Propulsion Simulation of a Tanker Hull* – Numerical Analysis and Applied Mathematics, AIP Proceedings, Melville New York, Vol. 1389, pp. 191-194, 2011;
- [3] A. Lungu, **F. Pacuraru** – *Numerical Study of the Hull-Propeller-Rudder Interaction* – Numerical Analysis and Applied Mathematics, AIP Proc., Melville New York, Vol.1169, pp. 693-696, 2009.

Prof. Dr. Ing. Hervé LE SOURNE

Age: 51

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Research profile: http://www.researchgate.net/profile/Herve_Sourne



SKILLS

Structural Dynamics – Fluid structure interactions	Teaching
Composite structures dimensioning	Teaching
Analytical and numerical modelling	Expertise
Finite Element Analysis	Project supervision

WORK HISTORY

2017 - Present	Research Manager – ICAM Engineering Schools (West campuses)
2008 - 2016	Head of Mechanical Engineering Department (ICAM Nantes campus)
1999 - 2008	Research project manager (French Shipbuilding Research Institute)
1996 - 1998	Structural Engineer (French Navy Shipbuilding Design Department)
1988 - 1995	Development Engineer (French Navy Shipbuilding Propulsive Department)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

SUCCESS	National funding, Explosions, 2017, <u>partners</u> : DGA, MULTIPLAST, MECA
CHARGEOL	Ship-jackets collision, 2014, <u>partners</u> : STX France, Bureau Veritas
SHARP	JIP, Ship collisions, 2009, <u>partners</u> : TOTAL, DCNS, BV, GDF, PRINCIPIA

EDUCATION

2015	Habilitation to conduct research (HDR) (University of Nantes)
1998	PhD in Structural Mechanics (Ecole Centrale of Nantes)
1993	Engineer in Numerical Analysis & Scientific Computing (Conservatoire National des Arts et Métiers)

SOME PUBLICATIONS

- [1] **H. Le Sourne**, A. Barrera, J.B. Maliakel – *Numerical crashworthiness analysis of an offshore wind turbine jacket impacted by a ship* – Journal of Marine Science and Technology, Vol 23 (5) pp 694-704, 2015 – DOI: 10.6119/JMST-015-0529-1
- [2] S. Elhers, **H. Le Sourne**, L. Buldgen, J. Ollero, C. Robertson, Ph. Rigo – *A review of technical solutions and simulation approaches for ship collisions with lock gates* – Ship Technology Research Journal, Vol 62 (1) pp 14-25, 2015 – DOI 10.1179/0937725515Z
- [3] L. Buldgen, **H. Le Sourne**, Ph. Rigo – *A simplified method to evaluate the seismic pressure on plane lock gates* – Journal of Engineering Structures, Vol 100, 2015– DOI 10.1016/j.engstruct. 2015.06.030
- [4] **H. Le Sourne**, N. Besnard, C. Cheylan, N. Buannic – *A Ship Collision Analysis Program Based on Upper Bound Solutions and Coupled with a Large Rotational Ship Movement Analysis Tool* – Journal of Applied Mathematics, 2012 – DOI 10.1155/2012/375686

Prof. Dario BOOTE

Age: 64

E-mail: dario.boote@unige.it

Research profile: Ship Structure, Sailing Yacht and motor Yacht



SKILLS

Structures design of merchant ships and pleasure vessels

Teaching, Research

WORK HISTORY

- | | |
|----------------|--|
| 1991 – Present | Professor of Ship Construction, University of Genova |
| 1983 | Researcher at the Department of Naval Architecture and Ship Construction, University of Genova |
| 1981 | Employed at CETENA, the Fincantieri research office, in Genova |

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

- | | |
|----------------|--|
| 2009 – Present | President of Yacht Design Courses of La Spezia |
| 1990 | Active participation in the Foundation of the BE and MSC courses in Yacht Design in La Spezia |
| 2000-2015 | From 2012 to 2015 Member of ISSC V.7 Committee (Structural Longevity)
From 2009 to 2012 Chairman of ISSC V.8 Committee (Yacht Design)
From 2006 to 2009 Member of ISSC V.8 Committee (Sailing Yacht Design)
From 2000 to 2006 Member of ISSC V.9 Committee (Design Methods) |

EDUCATION

- | | |
|------|---|
| 1980 | Graduated in Naval Architecture, University of Genova |
|------|---|

SOME PUBLICATIONS

- 1) Ocera, M., Boote, D, Vergassola, G, Faloci, F., “Simplified analytical method for the evaluation of longitudinal strength of large sailing yachts”, Ocean Engineering, Volume 133, Pages 182-196, 15 March 2017.
- 2) Pais T., Boote D., “Developments of Tuned Mass Damper for yacht structures”, Ocean Engineering, Volume 141, Pages 249-264, 1 September 2017.
- 3) Boote D., Pais T., Vergassola G., Tonelli A., Gragnani L., “On the damping coefficient of laminated glass for yacht industry”, International Shipbuilding Progress 00 (2017) 1–16 1, DOI 10.3233/ISP-170131, IOS Press.
- 4) D. Boote, G.M. Vergassola, D. Giannarelli, R. Ricotti, “Thermal load effects on side plates of superyachts”, Marine Structures 56, Elsevier Ltd, pp. 39-68, 2017.

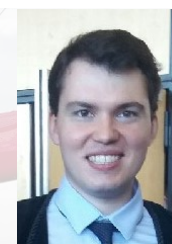
Jean-Baptiste R. G. SOUPEZ

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ACADEMIC CV

28 janvier 2019

**SKILLS**

Small craft structures and composite engineering.	Teaching and UK principal expert.
Experimental and computational fluid dynamics.	Teaching and supervision.
Yacht design and velocity prediction programs.	Teaching and supervision.
Learning and teaching in higher education.	Fellow of the Higher Education Academy

WORK HISTORY

11/17 - Present	Senior Lecturer in Yacht Design and Composite Engineering. Southampton Solent University.
09/16 - Present	UK Principal Expert in Small Craft Structures. British Standard Institution.
10/15 – 11/17	Lecturer in Yacht Design and Composite Engineering. Southampton Solent University.
08/14 - 11/14	Teaching Assistant. The University of Auckland.

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

ISO TC188 / WG18	UK principal expert for the development of international scantlings regulations, in partnership with British Marine, Federation Francaise des Industries Nautiques, etc...
SLTI	Funded research into the use of lecture capture to promote student engagement in Higher Education
Sustainable Composites	Research into sustainable and recycled composite materials, in partnerships with the ant-arctic lab, Ben Ainslie Racing (America's Cup team).

EDUCATION

2017	PhD in Computational Fluid Dynamics. The University of Edinburgh
2017	Postgraduate Certificate in Teaching and Learning in Higher Education. Southampton Solent University
2015	Master of Engineering Studies in Yacht Engineering. The University of Auckland.
2014	Diploma in Computer Aided Design and Manufacturing. Lowestoft College.
2014	Diploma in Practical Traditional Wooden Boatbuilding. International Boatbuilding Training College
2013	Bachelor of Engineering (Honours) in Yacht and Powercraft Design. Southampton Solent University.

SOME PUBLICATIONS

- [1] Soupez, J.-B. R. G., 2018. Ships and Maritime Transportation. In: Grote, K.-Q. and Antonsson, E. K. (Eds). Springer Handbook of Mechanical Engineering. Springer, 2nd edition.
- [2] ISO, 2018. BS EN ISO 12215 Small Craft – Hull Construction and Scantlings – Part 5: Design Pressures for Monohulls, Design Stresses, Scantlings Determination.
- [3] Soupez, J.-B. R. G., 2017. 'Interdisciplinary Pedagogy: A Maritime Case Study'. *Dialogue: Learning and Teaching Journal*, Southampton.
- [4] Soupez, J.-B. R. G., 2016. 'On the Applications of Modern Naval Architecture Techniques to Historical Crafts'. *Historic Ships*, The Royal Institution of Naval Architects, London.

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Age: 68

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Research profile: <http://www.etsin.upm.es>



SKILLS

Ships propulsion systems	Research and Lecturer
Marine Renewable Energies	Research and Lecturer
Ships design	Research

WORK HISTORY

2013-Present	Director (Dean) of ETS Ingenieros Navales (UPM)
2005-2013	Professor of Ships Propulsion System and Marine Renewable Energies
2001-2005	Director (Dean) of ETS Ingenieros Navales (UPM)
1994-2001	Associate Professor ETS Ingenieros Navales (UPM)
1992-1994	Assistant Professor ETS Ingenieros Navales (UPM)
1987-1992	Senior Lecturer ETS Ingenieros Navales (UPM)
1985-1987	Lecturer ETS Ingenieros Navales (UPM)
1983-1984	Engineer (Astilleros Españoles)
1982-1983	Engineer (Astilleros Españoles)

TYPICAL PROJECTS (Research, Education) and INTERNATIONAL CONTACTS

Director of 18 Research Projects, between them 1 with European Funds and 8 with Spanish Government Funds. Some of the partners were Iberdrola, SOERMAR, Union Naval de Levante, IZAR, INNOVAMAR and PYMAR.

He has been member of 11 International Scientific Committees and 9 National ones.

EDUCATION

1992	Dr. Ingeniero Naval (Ph. Doctor) (Universidad Politecnica de Madrid)
1984	Master Science Ingeniero Naval (Universidad Politecnica de Madrid)

SOME PUBLICATIONS

He has been published 29 International Peer Reviewed Papers and 30 International conference Papers between them are the following:

- [1] Luis R. Nuñez et al. “Conceptual design of Offshore Platform supply vessel based on hybrid diesel generator-fuel cell power plant”- Applied Energy Vol 116 , 2014, Paper 11 pages 91-100 ISSN 0306-2619 Elsevier
- [2] Luis R. Nuñez et al. “Challenger and solution for a new underwater moored TEC” Proceedings EWTEC 2017, ISSN 2309-1983 Cork September 2017
- [3] Luis R. Nuñez et al. “Dynamic model and experimental validation for the control of emersion manoeuvres of devices for marine currents harnessing”, Renewable Energy (RENEW) Vol. 103, April 2017, pages. 333-345 N° ISSN 0960-1481 Elsevier.