

## Europass Curriculum Vitae



### Personal information

**First name(s) / Surname(s)** **Liliana Celia Rusu**  
**Address** 9, Traian Street, Bl. W3, Ap. 11, 800 043 Galati (Romania)  
**Telephone(s)** +40 236410434 **Mobile** +40 745399426  
**E-mail(s)** [lrusu@ugal.ro](mailto:lrusu@ugal.ro) ; [liliana.rusu@centec.tecnico.ulisboa.pt](mailto:liliana.rusu@centec.tecnico.ulisboa.pt) ; [lcrusu@gmail.com](mailto:lcrusu@gmail.com)  
**Nationality** Romanian  
**Date of birth** 11/01/1962  
**Gender** Female

### Work experience

**Dates** 15/03/2016 →  
**Occupation or position held** Professor, Department of Mechanical Engineering <http://www.im.ugal.ro/AcademicStaff.htm>  
**Main activities and responsibilities** Teaching and research  
**Name and address of employer** "Dunarea de Jos" University of Galati, <http://www.ugal.ro/>  
 47, Domneasca St., 800008 Galati, Romania  
**Type of business or sector** Public University

**Dates** 01/10/2012 – 14/03/2016  
**Occupation or position held** Associate Professor, Department of Mechanical Engineering <http://www.im.ugal.ro/AcademicStaff.htm>  
**Main activities and responsibilities** Teaching and research  
**Name and address of employer** "Dunarea de Jos" University of Galati, <http://www.ugal.ro/>  
 47, Domneasca St., 800008 Galati, Romania  
**Type of business or sector** Public University

**Dates** 24/02/2004 – 30/09/2012  
**Occupation or position held** Assistant Professor, Department of Applied Mechanics  
**Main activities and responsibilities** Teaching and research  
**Name and address of employer** "Dunarea de Jos" University of Galati, <http://www.ugal.ro/>  
 47, Domneasca St., 800008 Galati, Romania  
**Type of business or sector** Public University

**Dates** 2004 →  
**Occupation or position held** Associate Researcher, <http://www.mar.ist.utl.pt/en/centec/personnel.aspx?id=1>  
**Main activities and responsibilities** Scientific research focused mainly on: wave modelling, implementation and developing of an operational wave prediction system for the Portuguese Coastal area, analysis of the environmental data. As Postdoc Researcher I gave courses in the area of Modelling and Analysis of Sea Waves (Part B - Modelling the Physics of Wave Generation and Propagation), Doctoral Program in Naval Architecture and Marine Engineering, Instituto Superior Técnico.

Name and address of employer	Centre for Marine Technology and Engineering - CENTEC, Technical University of Lisbon 1, Rovisco Pais Street, 1049-001 Lisbon, Portugal
Type of business or sector	Public University – Research Centre
Dates	01/12/2001 - 23/02/2004
Occupation or position held	Researcher
Main activities and responsibilities	Processing and analysis of the data registered by the wave-buoy network maintained by IH. Statistical analysis of environmental parameters. Extreme event analysis.
Name and address of employer	Instituto Hidrográfico - IH (Portuguese Hydrographic Institute of the Navy), 49, Rua das Trinas Street, 1249-093 Lisbon (Portugal) <a href="http://www.hidrografico.pt/">http://www.hidrografico.pt/</a>
Type of business or sector	Military and Research
Dates	01/08/1985 - 30/06/2001
Occupation or position held	Engineer
Main activities and responsibilities	ship reparations
Name and address of employer	DAMEN Shipyard (member of the Dutch Damen Group) 132, Moruzzi Street, 800 223 Galati (Romania)
Type of business or sector	Industrial (ship building)

## Education and training

Dates	October 2015
Title of qualification awarded	Habilitation
Principal subjects / occupational skills covered	Thesis title: <i>Engineering applications with spectral phase averaged wave models</i>
Name and type of organisation providing education and training	“Dunarea de Jos” University of Galati, 47, Domneasca Street, 800008 Galati, Romania
Dates	2010 - 2013
Title of qualification awarded	Post-doctoral specializations
Principal subjects / occupational skills covered	Data assimilation for regional wave prediction Development of a joint model system for wave predictions and assessing seakeeping performances
Name and type of organisation providing education and training	Centre for Marine Technology and Engineering - CENTEC, Technical University of Lisbon 1, Rovisco Pais Street, 1049-001 Lisbon, Portugal
Dates	2004 - 2009
Title of qualification awarded	PhD in Naval Architecture and Marine Engineering, Technical University of Lisbon, Portugal
Principal subjects / occupational skills covered	Studies concerning wave modelling in coastal areas and effects of currents on waves, ship dynamic responses. Thesis title: <i>Wave modelling and ship response in coastal waters with currents</i>
Name and type of organisation providing education and training	Technical University of Lisbon 1, Av. Rovisco Pais Street, 1049-001 Lisbon, Portugal
Dates	2002 - 2006
Title of qualification awarded	PhD in Mechanical Engineering, University <i>Dunarea de Jos</i> of Galati, Romania
Principal subjects / occupational skills covered	Modelling of the free-surface hydrodynamics Thesis title: <i>Researches and contributions to the spectral and Hamiltonian models applied to study wave dynamics</i>
Name and type of organisation providing education and training	“Dunarea de Jos” University of Galati 47 Domneasca Street, 800008 Galati, Romania
Dates	1980 - 1985
Title of qualification awarded	Diploma of Mechanical Engineering

Principal subjects / occupational skills covered  
 Mechanical Engineering

Name and type of organisation providing education and training  
 "Dunarea de Jos" University of Galati,  
 47, Domneasca Street, 800 008 Galati, Romania

**Personal skills and competences**

- Classical and fluid mechanics. Mathematical modeling of free-surface hydrodynamics and wave-body interaction problems using Hamiltonian approach. Water wave mechanics.
- Waves in ocean and coastal areas, wave propagation and coastal transformation, nearshore processes, wave-current interactions: modeling, mathematical theory and simulations with numerical wave models (SWAN, STWAVE, REF/DIF models).
- Data processing and visualization using MATLAB environment
- Spectral analysis
- Wave energy assessment, Wave energy extraction and its coastal impact

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment <i>European level</i> (*)	Understanding		Speaking		Writing	
	Listening	Reading	Spoken interaction	Spoken production		
<b>Portuguese</b>	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user
<b>English</b>	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user
<b>French</b>	B1 Independent user	B1 Independent user	A2 Basic User	A2 Basic User	A2 Basic User	A2 Basic User

Social skills and competences  
 Team work: I have worked in various research teams and most of my major publications were resulted from working in a team.  
 Good ability to adapt to multicultural environments, gained though my work experience abroad.  
 Good communication skills: I have to deal with a lot of students, so human communication is in some sense my job. I have also a large experience in participating to international meetings where I presented communications.

Organisational skills and competences  
 I am currently supervising Master students in both Romania and Portugal.

Technical skills and competences  
 I have accumulated during the time considerable competencies and skills in various technical areas related to my main fields of expertise: Marine and Mechanical Engineering.  
 Due to my current scientific work I have special competences as regards environmental data.

Computer skills and competences  
 very good command of Matlab - data processing and visualisation using MATLAB environment  
 good command of Microsoft Office tools (Word, Excel and PowerPoint);  
 good command of graphic design applications (Paint Shop Pro, Photo Shop, etc)

Other skills and competences  
 I have a great capacity of concentration on my work and focus on the most essential issues.

Driving licence(s) **Category B**

**Additional information**

**Membership**

National Ethics Council for Research Activities <http://cne.ancs.ro/membri-si-comisii/>  
 OCEANEXPERT <http://oceanexpert.org/viewMemberRecord.php?&memberID=14478>  
 IMAM – International Maritime Association of the Mediterranean,  
 ART, ROAMET  
 International Scientific Advisory Committee, International Conference on Energy for Environmental and Economic Sustainability <http://iceees2016.umt.edu.pk/committees.aspx>

**Awards/Prizes:**

- **Best Paper Award 2014**, Recognition for acting as first author on a top cited paper, awarded by Elsevier and *Renewable Energy* journal.  
[https://www.researchgate.net/publication/281279053\\_RENE\\_Best\\_Paper\\_Award\\_Rusu\\_Liliana](https://www.researchgate.net/publication/281279053_RENE_Best_Paper_Award_Rusu_Liliana)
- **Prize acorded in 2015 by UEFISCDI** in the framework of PN II program, for Habilitation degree.
- **Prize acorded in 2010 and 2015 by UEFISCDI** in the framework of PN II program, for two paper (single author).
- **Prize acorded in 2015 by UEFISCDI** in the framework of PN II program, for a paper (principal author).

- **'Anghel Saligny' Award** for results of excellence in teaching position as associate professor, awarded by the Board of the Faculty of Engineering, "Dunarea de Jos" University of Galati, for three successive years: 2013, 2014, 2015

**Researcher ID:** <http://www.researcherid.com/rid/B-6823-2011> **H index = 14**

**SCOPUS ID:** <http://www.scopus.com/authid/detail.url?authorId=24067330300> **H index = 14**

**Google:** <https://scholar.google.com.br/citations?user=DUgsKoQAAAAJ&hl=ro&oi=ao> **H index = 16**

**ORCID:** <http://orcid.org/0000-0002-8179-1347>

**Researchgate:** [https://www.researchgate.net/profile/Liliana\\_Rusu/?ev=hdr\\_xprf](https://www.researchgate.net/profile/Liliana_Rusu/?ev=hdr_xprf)

## **Annexes**      **List of Relevant Publications and Participation to Research Projects**

# ANNEX

## LIST OF RELEVANT PUBLICATIONS AND PARTICIPATION TO RESEARCH PROJECTS

### A1 Publications in international journals with ISI quotations

1. Rusu, L., Onea, F., 2017. The performance of some state-of-the-art wave energy converters in locations with the worldwide highest wave power. *Renewable and Sustainable Energy Reviews* 75, 1348-1362. <http://dx.doi.org/10.1016/j.rser.2016.11.123>
2. Bernardino, M., Rusu, L., Guedes Soares, C., 2017. Evaluation of the wave energy resources in the Cape Verde Islands. *Renewable Energy* 101, 316-326. <http://dx.doi.org/10.1016/j.renene.2016.08.040>
3. Almeida, S., Rusu, L., Guedes Soares, C., 2016. Data assimilation with the ensemble Kalman filter in a high-resolution wave forecasting model for coastal areas. *Journal of Operational Oceanography* 9(2), 1-21. <http://dx.doi.org/10.1080/1755876X.2016.1244232>
4. Onea, F., Deleanu, L., Rusu, L., Georgescu, C., 2016. Evaluation of the wind energy potential along the Mediterranean Sea coasts. *Energy Exploration & Exploitation*, 34 (5), 766-792. <http://dx.doi.org/10.1177/0144598716659592>
5. Rusu, L., 2015. Assessment of the Wave Energy in the Black Sea Based on a 15-Year Hindcast with Data Assimilation. *Energies*, 8 (9), 10370-10388. <http://dx.doi.org/10.3390/en80910370>
6. Rusu, L., Butunoiu, D., 2015. Numerical modelling of the wave propagation close to the Sacalin island in the Black Sea. *Journal of Marine Science and Technology – Taiwan* 23 (5), 669-677. <http://jmst.ntou.edu.tw/marine/23-5/669-677.pdf>
7. Rusu, L., Guedes Soares, C., 2015. Impact of assimilating altimeter data on wave predictions in the western Iberian coast. *Ocean Modelling* 96, 126-135. <http://dx.doi.org/10.1016/j.ocemod.2015.07.016>
8. Rusu, L., Onea, F., 2015. Assessment of the performances of various wave energy converters along the European continental coasts. *Energy* 82, 889-904. <http://dx.doi.org/10.1016/j.energy.2015.01.099>
9. Ivan, A., Rusu, L., 2015. Validation of the SWAN model for the influence of opposite currents on the wave spectra. *Environmental Engineering and Management Journal* 14(4), 751-761. [http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol14/no4/5\\_564\\_Ivan\\_11.pdf](http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol14/no4/5_564_Ivan_11.pdf)
10. Omer, I., Mateescu, R., Rusu, L., Niculescu, D., Vlasceanu, E., 2015. Coastal works extensions on the romanian touristic littoral, its ecological impacts on the nearshore bathing areas. *Journal of Environmental Protection and Ecology* 16(2), 424-433. <http://www.jepe-journal.info/journal-content/vol-16-no-2-2015>
11. Rusu, L., Guedes Soares, C., 2014. Local data assimilation scheme for wave predictions close to the Portuguese ports. *Journal of Operational Oceanography* 7(2), 45-57. <http://www.tandfonline.com/doi/abs/10.1080/1755876X.2014.11020158>
12. Rusu, L., Guedes Soares, C., 2014. Forecasting fishing vessel responses in coastal areas. *Journal of Marine Science and Technology* 19 (2), 215-227. <http://dx.doi.org/10.1007/s00773-013-0241-2>
13. Rusu, L., Butunoiu, D., Rusu, E., 2014. Analysis of the extreme storm events in the Black Sea considering the results of a ten-year wave hindcast. *Journal of Environmental Protection and Ecology* 15 (2), 445-454. <http://www.jepe-journal.info/vol-15-no-2-2014>
14. Rusu, L., Bernardino, M., Guedes Soares, C., 2014. Wind and wave modelling in the Black Sea. *Journal of Operational Oceanography* 7(1), 5-20. <http://www.tandfonline.com/doi/abs/10.1080/1755876X.2014.11020149>
15. Gasparotti, C., Rusu, L., 2014. Prediction of the dynamic responses for two containerships operating in the Black Sea. *Journal of Naval Architecture and Marine Engineering* 11 (1), 55-68. <http://dx.doi.org/10.3329/jname.v11i1.17289>
16. Rusu, L., Butunoiu, D., 2014. Evaluation of the wind influence in modeling the Black Sea wave conditions. *Environmental Engineering and Management Journal* 13 (2), 305-314. [http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol13/no2/10\\_573\\_Rusu\\_11.pdf](http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol13/no2/10_573_Rusu_11.pdf)
17. Rusu, L., Guedes Soares, C., 2013. Evaluation of a high-resolution wave forecasting system for the approaches to ports. *Ocean Engineering* 58, 224-238. <http://dx.doi.org/10.1016/j.oceaneng.2012.11.008>
18. Rusu, L., Guedes Soares, C., 2012. Wave energy assessments in the Azores islands. *Renewable Energy* 45, 183-196. <http://dx.doi.org/10.1016/j.renene.2012.02.027>
19. Rusu, L., Bernardino, M., Guedes Soares, C., 2011. Modelling the influence of currents on wave propagation at the entrance of the Tagus estuary. *Ocean Engineering* 38 (10), 1174-1183. <http://dx.doi.org/10.1016/j.oceaneng.2011.05.016>
20. Rusu, L., Guedes Soares, C., 2011. Modelling the wave-current interactions in an offshore basin using the SWAN model. *Ocean Engineering* 33(1), 63-76. <http://dx.doi.org/10.1016/j.oceaneng.2010.09.012>
21. Guedes Soares, C., Rusu, L., Bernardino, M., Pilar, P., 2011. An operational wave forecasting system for the Portuguese continental coastal area. *Journal of Operational Oceanography* 4 (2), 17-27. <http://www.tandfonline.com/doi/abs/10.1080/1755876X.2011.11020124>
22. Rusu, L., 2010. Application of numerical models to evaluate oil spills propagation in the coastal environment of the Black Sea. *Journal of Environmental Engineering and Landscape Management* 18 (4), 288-295. <http://www.tandfonline.com/doi/abs/10.3846/jeelm.2010.33>

23. Rusu, L., Ivan, A., 2010. Modelling Wind Waves in the Romanian Coastal Environment. *Environmental Engineering and Management Journal* 9(4), 547-552. [http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol9/no4/18\\_2\\_Rusu\\_10.pdf](http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol9/no4/18_2_Rusu_10.pdf)
24. Rusu, L., Bernardino, M., Guedes Soares, C., 2009. Influence of Wind Resolution on the Prediction of Waves Generated in an Estuary. *Journal of Coastal Research* SI 56, 1419- 1423. [http://e-geo.fcsh.unl.pt/ICS2009/ docs/ICS2009\\_Volume\\_II/1419.1423\\_L.Rusu\\_IC2009.pdf](http://e-geo.fcsh.unl.pt/ICS2009/ docs/ICS2009_Volume_II/1419.1423_L.Rusu_IC2009.pdf)
25. Rusu, L., Pilar, P., Guedes Soares, C., 2008. Hindcast of the wave conditions along the west Iberian coast. *Coastal Engineering* 55(11), 906-919. <http://dx.doi.org/10.1016/j.coastaleng.2008.02.029>
26. Rusu, E., Silva, R., Soares, C.V., Rusu, L., 2003. Wave Forecast in the Coastal Environment Affected by M/V Prestige Breakdown, paper presented at the 4<sup>th</sup> Symposium on the Atlantic Iberian Continental Margin, Vigo, Spain, 7-10 July, published in *Thalassas – An International Journal of Marine Science*, 161-162. [http://webs.uvigo.es/thalassas/thalassas\\_marco%20principal.htm](http://webs.uvigo.es/thalassas/thalassas_marco%20principal.htm)

## A2 Books

1. Rusu, L., Raileanu, A., Onea, F., 2016. Asimilarea de date cu aplicații la predicția climatului de val în bazinul Mării Negre (Data Assimilation with application to the wave prediction in the Black Sea), Ed. Zigotto, Galati, 300p, ISBN 978-606-669-182-6 (in Romanian).
2. Rusu, L., 2015. Mecanica - Statica, Notiuni teoretice si aplicatii. Editura Zigotto Galati, ISBN 978-606-669-140-6, 192p (in Romanian).
3. Rusu, L., Ivan, A., 2011. Modelling of the hydrodynamic processes in delta and estuary areas. Publishing House of the Romanian Technical Academy and General Association of the Romanian Engineering - AGIR Ed., Research and Studies Series, Bucharest, ISBN 978-973-720-365-6, 184 p (in Romanian). [http://www.edituraagir.ro/catalogul\\_editurii.php](http://www.edituraagir.ro/catalogul_editurii.php)
4. Matulea, I., Slamnoiu, G., Popa, V., Rusu, L., Nastase, I., Oancea, G., 2007. Spectral and Probabilistic Models in Marine Technology, Publishing House of University "Dunărea de Jos" of Galati, ISBN978-973-627-366-7, 248p (in Romanian).

## A3 Book chapters

1. Rusu, L., Guedes Soares, C., 2016. Comparison of various data assimilation methods to improve the wave predictions in the Portuguese coastal environment. *Maritime Technology and Engineering 3* – Guedes Soares & Santos (Eds), Taylor & Francis Group, London, 1087-1093.
2. Guedes Soares, C., Salvação, N., Gonçalves, M., Rusu, L., 2016. Validation of an operational wave forecasting system for the North Atlantic area. *Maritime Technology and Engineering 3* – Guedes Soares & Santos (Eds), Taylor & Francis Group, London, 1037-1043.
3. Rusu, L., Guedes Soares, C., 2015. Application of data assimilation for improving the predictions of storm conditions close to the West Iberian coast, *Towards Green Marine Technology and Transport* - Guedes Soares, Dejhalla, & Pavletic (Eds), CRC Press, Taylor & Francis Group, London, 795-800. <https://www.crcpress.com/Towards-Green-Marine-Technology-and-Transport/Soares-Dejhalla-Pavletic/9781138028876>
4. Răileanu, A., Rusu, L., Rusu, E., 2015. Wave modelling with data assimilation in the Romanian nearshore. *Towards Green Marine Technology and Transport* - Guedes Soares, Dejhalla, & Pavletic (Eds), CRC Press, Taylor & Francis Group, London, 837-843. <https://www.crcpress.com/Towards-Green-Marine-Technology-and-Transport/Soares-Dejhalla-Pavletic/9781138028876>
5. Rusu, L., Ponce de Léon, S., Guedes Soares, C., 2015. Numerical modelling of the North Atlantic storms affecting the West Iberian coast, *Maritime Technology and Engineering* – Guedes Soares & Santos (Eds), CRC Press, Taylor & Francis Group, London, Vol 2, 1365-1370. <http://www.crcpress.com/product/isbn/9781138027275>
6. Almeida, S., Rusu, L., Guedes Soares, C., 2015. Application of the Ensemble Kalman Filter to a high-resolution wave forecasting model for wave height forecast in coastal areas, *Maritime Technology and Engineering* – Guedes Soares & Santos (Eds), CRC Press, Taylor & Francis Group, London, Vol 2, 1349-1354. <http://www.crcpress.com/product/isbn/9781138027275>
7. Sohrabi, M., Rusu, L., Guedes Soares, C., 2015. Comparison of altimeter derived wave periods and significant wave heights with buoy data in the Portuguese coastal environment, *Maritime Technology and Engineering* – Guedes Soares & Santos (Eds), CRC Press, Taylor & Francis Group, London, Vol 2, 1403-1409. <http://www.crcpress.com/product/isbn/9781138027275>
8. Rusu, L., Guedes Soares, C., 2014. Forecasting containership responses in the Azores Archipelago, *Developments in Maritime Transportation and Exploitation of Sea Resources* – Guedes Soares & López Peña (eds), Taylor & Francis Group, London, Vol 2, 987-993.
9. Molina Andres, O., Castro Ruiz, F., Rusu, L., 2014. Efficiency assessments for different WEC types in the Canary Islands, *Developments in Maritime Transportation and Exploitation of Sea Resources* – Guedes Soares & López Peña (eds), Taylor & Francis Group, London, Vol 2, 879-887.
10. Rusu, L., Pilar, P., Guedes Soares, C., 2012. Modelling the Wave Condition in the Arquipelago of Azores. *Maritime Engineering and Technology*, Guedes Soares et al. (Eds), Taylor & Francis Group, London, 533-538.
11. Bernardino, M., Salvação, N., Rusu, L., 2012. Evaluation of the Wind and Wave Simulations in the Black Sea Using Satellite Altimeter Data. *Maritime Engineering and Technology*, Guedes Soares et al. (Eds), Taylor & Francis Group, London, 467-471.
12. Rusu, L., Bernardino, M., Pilar, P., Guedes Soares, C., 2011. Hindcast studies of the wave conditions on the Portuguese coast, *Maritime Technology and Engineering* - Guedes Soares et al. (Eds), Taylor & Francis Group, London, Vol. I, 181-198.
13. Guedes Soares, C., Bernardino, M., Rusu, L., Pilar, P., 2008. Implementação de um Sistema de Previsão da Agitação Marítima para os Portos de Leixões e Sines, O Sector Marítimo Português, C. Guedes Soares e C. Costa Monteiro (Eds.), Salamandra, Lisbon, Portugal, 397-411 (in Portuguese).

14. Pereira, A.I.S., Rusu, L., Pilar, P., Guedes Soares, C., 2008. Distribuição Espacial da Energia das Ondas na Região de Peniche, O Sector Marítimo Português, C. Guedes Soares e C. Costa Monteiro (Eds.), Salamandra, Lisbon, Portugal, 441-458 (in Portuguese).
15. Rusu, L., Guedes Soares, C., 2008. Modelling of the wave-current interactions in the Tagus Estuary. *Maritime Industry, Ocean Engineering and Coastal Resources*, Editors Taylor & Francis, London, Vol. II, 801-810.
16. Rusu, L., Guedes Soares, C., 2006. High resolution SWAN simulations in the Tagus Estuary. *Inovação e Desenvolvimento nas Actividades Marítimas*, Salamandra Ed., Lisbon, Portugal, 503-519, (in Portuguese).
17. Rusu, L., Pilar, P., Guedes Soares, C., 2005. Reanalysis of the Wave Conditions in the Approaches to the Portuguese Port of Sines. *Maritime Transportation and Exploitation of Ocean and Coastal Resources*, Editors Taylor & Francis, London, Vol II, 1137-1142.
18. Rusu, E., Soares, C. V., Rusu, L., 2005. Computational Strategies and Visualization Techniques for the Waves Modeling in the Portuguese Nearshore, *Maritime Transportation and Exploitation of Ocean and Coastal Resources*, Editors Taylor & Francis, London, Vol II, 1129-1136.
19. Guedes Soares, C., Rusu, L., Pilar, P., 2004. Wave hindcast in the coastal environment of Portugal. *As Actividades Marítimas e a Engenharia*, Salamandra Ed., Lisbon, Portugal, 73-82, (in Portuguese)

#### A4 Publications in the proceedings of international conferences

1. Rusu, L., 2016. Assessment of the synergy between wind and wave power in the Black Sea based on a 15-year hindcast. In: *Proc. of 11<sup>th</sup> Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2016)*, 4-9 September, Lisbon, Portugal.
2. Rusu, L., 2016. Data assimilation method based on the Kalman filter associated with the wave modeling in the western Black Sea. In: *Proc. of 16<sup>th</sup> International Multidisciplinary Scientific GeoConference (SGEM2016) – Marine and Ocean Ecosystems*, June 28 - July 6, Albena, Bulgaria, Book3 Vol. 2, 727-734. <http://www.sgem.org/sgemlib/spip.php?article7936>
3. Rusu, L., 2016. Assessment of the renewable energy resources in the Romanian nearshore at the Black Sea, paper presented at *Int. Conference on Advances on Clean Energy Research (ICACER2016)*, 16-18 April, Bangkok, Thailand, <http://www.icacer.com/> **received 'Best presentation award'**.
4. Raileanu, A., Rusu, L., Rusu, E., 2016. Data assimilation methods to improve the wave predictions in the Romanian coastal environment. In: *Proc. of 16<sup>th</sup> International Multidisciplinary Scientific GeoConference (SGEM2016) – Photogrammetry and Remote Sensing*, June 28 - July 6, Albena, Bulgaria, Book2 Vol. 2, 855-862. <http://www.sgem.org/sgemlib/spip.php?article8396>
5. Modiga, A., Gasparotti, C., Rusu, L., Popescu, G., 2016. Analysis of the main operations and the characteristics of the environmental matrix at the Romanian harbors in the Black Sea. *International Conferences on Traffic and Transport Engineering (ICTTE2016)*, Belgrad, Serbia, [http://www.iitte.com/article/102/ICTTE\\_Belgrade\\_2016.html](http://www.iitte.com/article/102/ICTTE_Belgrade_2016.html)
6. Rusu, L., 2015. Wave modelling with data assimilation to evaluate the wave energy patterns in the Black Sea. In: *Proc. of 15<sup>th</sup> International Multidisciplinary Scientific GeoConference (SGEM2015) – Energy and Clean Technologies*, 16-25 June, Albena, Bulgaria, Vol. 4, 597-606. <http://www.sgem.org/SGEMLIB/spip.php?article6182>
7. Onea, F., Rusu, L., 2015. Coastal impact of a hybrid marine farm operating close to the Sardinia island. In: *Proc. of OCEAN'15 MTS/IEEE Conference - Discovering Sustainable Ocean Energy for a New World*, 18-21 May, Genova, Italy. <http://oceans15mtsieeenova.org/namesandtitles.cfm> <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7271249>
8. Rusu, L., Răileanu, A., 2015. Assimilation of satellite data to increase the reliability of the wave predictions in the Black Sea. Poster presented at *European Geosciences Union General Assembly 2015 (EGU2015)*, *Geophysical Research Abstracts*, Vol. 17, EGU2015-4816, 12-17 April, Vienna, Austria <http://meetingorganizer.copernicus.org/EGU2015/EGU2015-4816.pdf>
9. Rusu, L., 2014. A data assimilation scheme to improve the wave predictions in the western side of the Black Sea. In: *Proc. of 14<sup>th</sup> International Multidisciplinary Scientific GeoConference (SGEM2014) – Marine and Ocean Ecosystems*, 17-26 June, Albena, Bulgaria, Vol. II, 539-545. <http://dx.doi.org/10.5593/SGEM2014/B32/S15.071>
10. Rusu, L., Răileanu, A., 2014. Wave modelling to assess the storm conditions in the Black Sea. Poster presented at *European Geosciences Union General Assembly 2014 (EGU2014)*, Vol. 16, EGU2014-2140. 27 Apr–02 May, Vienna, Austria. <http://meetingorganizer.copernicus.org/EGU2014/EGU2014-2140.pdf>
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## A6 PARTICIPATION TO RELEVANT RESEARCH PROJECTS

- 2013 - 2016: Data Assimilation Methods for improving the WAVE predictions in the Romanian nearshore of the Black Sea – DAMWAVE (PN-II-ID-PCE-2012-4-0089), at “Dunarea de Jos” University of Galati, Romania, **project responsible**.  
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- 2013 - 2015: WAVE predictions in the Nearshore with Data Assimilation (WANDA), research project (PTDC/ECM-HID/1896/2012), at CENTEC - Centre for Marine Technology and Ocean Engineering, University of Lisbon, Portugal, **project responsible**.
- 2014 – 2015: Present and future marine climate in the Iberian coast (CLIBECO), research project (EXPL/AAG-MAA/1001/2013), at CENTEC - Centre for Marine Technology and Ocean Engineering, University of Lisbon, Portugal.
- 2010 - 2013 Wave Prediction System for Coastal Maritime Traffic and Port Approaches, **individual grant** (SFRH/BPD/65553/2009), at CENTEC - Centre for Marine Technology and Ocean Engineering, University of Lisbon, Portugal.
- 2008 – 2011: NEARPORT – Development of a real-time nearshore wave prediction system for the Portuguese ports, at CENTEC - Centre for Marine Technology and Ocean Engineering, University of Lisbon, Portugal.  
<http://www.mar.ist.utl.pt/nearport/en/home.aspx>
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- 2006 – 2008: RADMONITOR – Radar Monitoring of the Sea States at the Port of Sines, at CENTEC - Centre for Marine Technology and Ocean Engineering, University of Lisbon, Portugal.
- 2004 – 2008: Wave-current Interactions in the Nearshore, **individual grant** (SFRH/BD/13176/2003), at CENTEC - Centre for Marine Technology and Ocean Engineering, University of Lisbon, Portugal.
- 2001 – 2004: MOCASSIM - Development of national competences for the implementation of oceanographic models with data assimilation, at the Hydrographic Institute of the Portuguese Navy. <http://www.hidrografico.pt/mocassim.php>

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