



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Eugen Victor Cristian RUSU**

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Nationality Romanian

Date of birth 18.12.1957

Gender Male

### Work experience

Dates Since March 2001

Occupation or position held University Professor, Department of Mechanical Engineering, Head of Laboratory of Computations and Modelling in Applied Mechanics, <http://www.im.ugal.ro/CadreDidactice.htm>  
2013-2015, President of the Scientific Commission of the University Senate  
Since 2016, President of the Council of the Doctoral schools of University Dunărea de Jos of Galați, vicerector  
**In 2015 received the award of Doctor Honoris Causa at the Maritime University of Constanța, Romania**  
<http://www2.cmu-edu.eu/home/despre-noi/relatii-internationale/doctor-honoris-causa/>  
[http://prev.ugal.ro/stiri/profesorul\\_eugen\\_rusu\\_este\\_doctor\\_honoris\\_causa\\_al\\_universitatii\\_maritime\\_din\\_constanta](http://prev.ugal.ro/stiri/profesorul_eugen_rusu_este_doctor_honoris_causa_al_universitatii_maritime_din_constanta)  
Since 2018, **Corresponding member of the Romanian Academy**, the highest scientific and cultural forum in Romania [http://www.acad.ro/sectii/sectia08\\_tehnica/teh\\_membri.htm](http://www.acad.ro/sectii/sectia08_tehnica/teh_membri.htm)

Main activities and responsibilities Teaching, research, supervising PhD, Master students and Bachelor students.  
Supervising also post-doctoral fellows.  
2008-2011, Institutional Responsible with Structural Funding  
Since 2012 member in the commission of Mechanical Engineering of CNATDCU, National Council for Recognition of Degrees, Diplomas and Certificates, <http://www.cnatdcu.ro/>  
Since 2016, vicepresident of the commission of Mechanical Engineering of CNATDCU  
Starting with 2017, president of the commission of Mechanical Engineering of CNATDCU

Name and address of employer Dunarea de Jos Galati University, <http://www.ugal.ro/>  
111, Domneasca St., 80008 Galati, Romania,

Type of business or sector Public University

Dates Since September 2007 (also)

Occupation or position held Professor (collaborator)  
<http://www.centec.ist.utl.pt/en/centec/personnel.aspx?id=1>

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main activities and responsibilities | <p>Scientific research, focused mainly on: survey, modelling and analysis of the environmental data along the navigation routes and harbour areas correlated with the natural and technological risks that may occur in these zones. During the period, 2009-2011, manager at the project NEARPORT - Development of a real-time nearshore wave prediction system for the Portuguese ports, 112 000 Euro – project granted by the Portuguese Foundation for Science and Technology with EU funding, <a href="http://www.mar.ist.utl.pt/nearport/en/home.aspx">http://www.mar.ist.utl.pt/nearport/en/home.aspx</a>.</p> <p>Another important issue related to the most recent research interests concern the evaluation of the renewable energy resources in the marine environment, together with efficiency assessments performed for various energy converters in different coastal environments. Finally, studies of the possible coastal impacts in the shoreline dynamics of the future marine energy parks are also currently carried out. This is because such marine energy parks can play an important role also in the coastal protection.</p> |
| Name and address of employer         | CENTEC - Centre for Marine Technology and Ocean Engineering, University of Lisbon, Portugal, <a href="http://www.mar.ist.utl.pt/en/index.aspx">http://www.mar.ist.utl.pt/en/index.aspx</a> Av. Rovisco Pais, 1049-001 Lisbon, Portugal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Type of business or sector           | Public University – Research Centre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Dates                                | June – December 2005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Occupation or position held          | <b>Consulting scientist</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Main activities and responsibilities | Modelling hydrodynamic processes in coastal environments, analysis of environmental data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Name and address of employer         | <b>NATO Undersea Research Centre</b> , <a href="http://www.nurc.nato.int/">http://www.nurc.nato.int/</a> , Viale S. Bartolomeo, 400 19138 La Spezia, Italy (presently NATO Centre for Maritime Research and Experimentation)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Type of business or sector           | NATO Research Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Dates                                | September 1982 - March 2001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Occupation or position held          | Successively, positions from research engineer to Associate Professor (Senior Lecturer)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Main activities and responsibilities | Teaching and research                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Name and address of employer         | Dunarea de Jos Galati University, <a href="http://www.ugal.ro/">http://www.ugal.ro/</a> 111, Domneasca St., 80008 Galati, Romania,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Type of business or sector           | Public University                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Education and training

|                                                                |                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dates                                                          | September 1999 - September 2004                                                                                                                                                                                                                                                                                                   |
| Title of qualification awarded                                 | Postdoctoral specialization                                                                                                                                                                                                                                                                                                       |
| Principal subjects/occupational skills covered                 | Survey and analysis of the environmental data. Predictions of the environmental parameters with numerical models. Assessment of the natural and technological risks in ocean and coastal environment.                                                                                                                             |
| Name and type of organization providing education and training | Instituto Hidrográfico da Marinha Portuguesa, Lisbon, Portugal; <a href="http://www.hidrografico.pt">http://www.hidrografico.pt</a> Portuguese National Laboratory.                                                                                                                                                               |
| Dates                                                          | October 1990 – May 1997                                                                                                                                                                                                                                                                                                           |
| Title of qualification awarded                                 | PhD                                                                                                                                                                                                                                                                                                                               |
| Principal subjects/occupational skills covered                 | Studies concerning wave propagation and impact in coastal environment<br>Thesis title: <i>'Analytical Mechanics of Continuous Media with Application to Marine Technology'</i>                                                                                                                                                    |
| Name and type of organization providing education and training | University "Dunarea de Jos" of Galati, Romania co-supervision in collaboration with the National Technical University of Athens (under the co supervision of Prof. G. A. Athanassoulis, <a href="http://www.researchgate.net/profile/Gerassimos_Athanassoulis">http://www.researchgate.net/profile/Gerassimos_Athanassoulis</a> ) |
| Dates                                                          | October 1977 – July 1982                                                                                                                                                                                                                                                                                                          |
| Title of qualification awarded                                 | Naval Architect, head of series of graduates                                                                                                                                                                                                                                                                                      |
| Principal subjects/occupational skills covered                 | Naval and Marine engineering                                                                                                                                                                                                                                                                                                      |
| Name and type of organization providing education and training | University "Dunarea de Jos" of Galati, Romania                                                                                                                                                                                                                                                                                    |

## Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (\*)

|                   | Understanding      |                    | Speaking           |                  |                    |                  | Writing            |                  |
|-------------------|--------------------|--------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|
|                   | Listening          | Reading            | Spoken interaction |                  | Spoken production  |                  |                    |                  |
| <b>English</b>    | C2 Proficient user | C2 Proficient user | C2 Proficient user |                  | C2 Proficient user |                  | C2 Proficient user |                  |
| <b>Portuguese</b> | C2 Proficient user | C2 Proficient user | C2 Proficient user |                  | C2 Proficient user |                  | C2 Proficient user |                  |
| <b>Italian</b>    | C1 Proficient user | C1 Proficient user | B1                 | Independent user | B1                 | Independent user | B1                 | Independent user |
| <b>French</b>     | B1                 | Independent user   | B2                 | Independent user | A2                 | Basic user       | A1                 | Basic user       |
| <b>Spanish</b>    | A2                 | Basic user         | A2                 | Basic user       | A1                 | Basic user       | A1                 | Basic user       |

(\*) Common European Framework of Reference for Languages

Social skills and competences

- Teamwork: I have worked in various research teams and most of my major publications were resulted from working in a team. As project manager in Portugal I was also coordinating a research team.
- Good ability to adapt to multicultural environments, gained through my work experience abroad: I performed scientific work in various countries, especially in Greece, Portugal and Italy and this gave me the ability to adapt very quickly to multicultural environments and, on the other hand, gave me the facility of a better understanding of the multicultural issues in general.
- Good communication skills: First of all I am a University Professor and I have to deal with a lot of students (series from 20 to 200 students), so human communication are in some sense my job. On the other hand, I have also a very large experience in participating in international meetings since I have participated in the last 10 years to more than 50 such meetings in various countries as: Austria, Belgium, Bulgaria, Canada, Croatia, France, Greece, Italy, Moldova, Portugal, Romania, Serbia, Spain, Thailand and Turkey, where I presented communications that were usually extremely well received by the audience.

Organisational skills and competences

In my home University (Galati University) I was for a 4-year period (2008-2011) Institutional responsibilities with structural Funding and I was leading a team of more than 20 people. As a manager in Portugal (at the NEARPORT project) I was also leading a team of 7 persons. I am currently supervising PhD, Master and Bachelor students in Romania, Portugal and Spain.

Technical skills and competences

I am a University Professor in Engineering, so it is supposed that 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, Renewable Energy). Moreover, due to my current scientific work I have special competencies as regards environmental data measurements and analysis. During my work at NATO, I had the opportunity to enter in contact with the most evaluated tools and techniques related with environmental data analysis and measurements. On the other hand, as evaluator FP7 and Horizon 2020 for the European Commission I had the opportunity to evaluate the most advanced research projects in the area of the technologies to extract the renewable energy from the marine environment.

Computer skills and competences

- very good command of Microsoft Office tools (Word, Excel and PowerPoint);
- good command of graphic design applications (Paint Shop Pro, Photo Shop, etc)
- extremely good command of Matlab (I developed computer software that is currently used by NATO as reflected also by the publication: A Hybrid Framework for Predicting Waves and Longshore Currents, <http://dx.doi.org/10.1016/j.jmarsys.2007.02.009> Journal of Marine Systems 69 (2008) 59–73.

Other skills and competences - I have a great capacity of concentration on my work and focus on the most essential issues. This is reflected somehow also in my list of publications;  
Recognized reviewer: <http://www.reviewpage.com/E--Rusu>

**In 2015 received the award: Outstanding Contribution in Reviewing, Renewable Energy, ELSEVIER, in 2016 received the award: Outstanding Contribution in Reviewing, Ocean Engineering, ELSEVIER**

<https://www.researchgate.net/publication/286383778> Certificate of Outstanding Contribution in Reviewing Renewable Energy ELSEVIER

<https://www.researchgate.net/publication/313063992> Outstanding Contribution in Reviewing Ocean Engineering Elsevier

Diploma **Top 1% World Reviewer in the field of Engineering** (2018),

<https://publons.com/researcher/1170248/eugen-rusu>

Diploma **Certificate Energies 10<sup>th</sup> Anniversary Best Paper**, 2018.

**Program chair** ICACER Conferences (International Conference of advances in Energy Research) , years 2017-2019 <http://icacer.com/com.html>

**Program chair** ICEEEP Conferences – [International Conference on Energy Economics and Energy Policy](http://www.iceeep.com/com.html) , years 2018-2019, <http://www.iceeep.com/com.html>

**Program committee** International Joint Conference on Clean Energy and Smart Grid (CCESG 2019) will be held in **Phuket**, <http://www.ccesg.org/>

- I have been member in various scientific committees (for example IMAM – International Maritime Association of the Mediterranean 2005, 2007, 2009, 2011)

<http://www.mar.ist.utl.pt/imam2005/commitee.aspx>

IWEEE2013 <http://www.iweee.ugal.ro/>

AMMA2013 <http://amma2013.utcluj.ro/committees.html>

EMR 2015 <http://www.emr2015.org/committees.html>

ICACER 2016 & 2017 <http://www.icacer.com/com.html>

ICACER2018, <http://icacer.com/com.html>

Professional organizations (OCEANEXPERT <http://oceanexpert.org> ; MARTEC,

[http://www.iode.org/index.php?option=com\\_oe&task=viewMemberRecord&memberID=13477](http://www.iode.org/index.php?option=com_oe&task=viewMemberRecord&memberID=13477)

[http://ioc-unesco.org/index.php?option=com\\_oe&task=viewMemberRecord&memberID=13477](http://ioc-unesco.org/index.php?option=com_oe&task=viewMemberRecord&memberID=13477)

2017, Member of the evaluation panel of the research centre MaREI (Cork Ireland) appointed by SFI, Science Foundation Ireland <http://www.sfi.ie/>

Organizing committee member, [2nd Edition of Global Summit on Renewable Energy & Emerging Technologies](https://renewableenergy.euroscicon.com/organizing-committee) (2018), <https://renewableenergy.euroscicon.com/organizing-committee>

Technical committee member, International Maritime Association of the Mediterranean, IMAM2017 <http://www.imamhomepage.org/imam2017/structure.aspx>

Scientific committee member - [2nd International Symposium on Natural Hazards and Disaster Management \(ISHAD2018\)](http://ishad.info/Content/Pages/Committees.aspx), <http://ishad.info/Content/Pages/Committees.aspx>

Organizing committee member, [2018 International Conference on Clean Energy and Smart Grid \(CCESG2018\)](http://www.ccesg.org/), <http://www.ccesg.org/>

Workshop DAMWAVE [http://www.im.ugal.ro/DAMWAVE/index\\_files/Flyer\\_Damwave\\_RO.jpg](http://www.im.ugal.ro/DAMWAVE/index_files/Flyer_Damwave_RO.jpg)

OCEANEXPERT <http://oceanexpert.org> ; MARTEC [www.innovamar.org](http://www.innovamar.org),

[http://www.iode.org/index.php?option=com\\_oe&task=viewMemberRecord&memberID=13477](http://www.iode.org/index.php?option=com_oe&task=viewMemberRecord&memberID=13477)),

[http://ioc-unesco.org/index.php?option=com\\_oe&task=viewMemberRecord&memberID=13477](http://ioc-unesco.org/index.php?option=com_oe&task=viewMemberRecord&memberID=13477)

Driving licence Category B

**Additional information** - **FP7 - International Expert Evaluator, the calls -SMARTCITIES-2013 FP7-ENERGY-2013-1**  
<http://www.2020-horizon.com/Design-tools-enabling-technologies-and-underpinning-research-to-facilitate-ocean-energy-converter-arrays-i905.html>  
[http://ec.europa.eu/research/participants/data/ref/fp7/list\\_fp7\\_experts/cooperation/energy/energy\\_2013\\_en.xlsx](http://ec.europa.eu/research/participants/data/ref/fp7/list_fp7_experts/cooperation/energy/energy_2013_en.xlsx)

**H2020 International Expert Evaluator (Energy)**  
[http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference\\_docs.html#h2020-expertslists-excellent-erc](http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html#h2020-expertslists-excellent-erc)  
 International Expert Evaluator, Programme ERANet-LAC (2016);

- International Expert Evaluator for the Bulgarian National Fund - 73 projects evaluated in 2008 and 2009 in the fields of renewable energy and environment and selected also for 2017  
<http://www.eufunds.bg/en/all-news/item/16913-results-from-th>
- International Expert Evaluator- MARTEC;
- International Expert Evaluator / South-East Europe Program;
- Expert (ETS) in the national projects DOCIS, PERFORM and PhD EXPERT, financed from the European Social Fund. <http://www.phd-expert.ugal.ro/contact.htm>
- International reviewer (Journal of Marine Systems, Ocean Engineering, Renewable Energy, Energy Conversion and Management, Journal of Environmental Radioactivity, Journal of Coastal Research, International Journal of Green Energy, Environmental Engineering and Management Journal, IMAM and OMAE conferences), more than 50 scientific works reviewed in the last five years;
- Institutional responsible with the bilateral cooperation program for joint PhD co-supervision between UDJG and IST Lisbon:
- National evaluator CNCSIS, with more than 50 projects evaluated in the last five years;
- National evaluator CNMP (National Centre of Project Management) in the fields of Defense and National Security (16 projects evaluated);
- Included in the Romanian National Portal of the Scientists;

**Editor-in-Chief** of Journal of Marine Science <http://ojs.bilpublishing.com/index.php/jms>  
**Senior Editor**, International Journal of Advanced Alternative Energy, Environment and Ecology  
<http://scientific.cloud-journals.com/index.php/IJAAEEE/about/editorialTeam>  
**Guest Editor: Energies**, Special Issue "Offshore Renewable Energy: Ocean Waves, Tides and Offshore Wind" [www.mdpi.com/journal/energies/special\\_issues/offshore](http://www.mdpi.com/journal/energies/special_issues/offshore)

- **Associate Editor**, Journal: Frontiers in Marine Science, section Ocean Engineering, Technology, and Solutions for the Blue Economy,  
<http://journal.frontiersin.org/journal/marine-science/section/ocean-engineering-technology-and-solutions-for-the-blue-economy>

- **Member in the Editorial Boards of:**

- Advanced Shipping and Ocean Engineering (ASOE)  
<http://www.academicpub.org/asoe/editorialBoard.aspx>
- International Journal Ocean Systems Engineering  
<http://www.techno-press.org/?journal=ose&subpage=7>
- Satellite Oceanography and Meteorology  
<http://ojs.whioce.com/index.php/som/about/editorialTeam>
- Journal of Marine Science and Engineering  
<https://www.mdpi.com/journal/jmse/editors>
- Journal of Environmental & Earth Sciences  
<http://ojs.bilpublishing.com/index.php/jees/about/editorialTeam>
- Hydro Science & Marine Engineering,  
<http://ojs.bilpublishing.com/index.php/hsme/about/editorialTeam>

**Publons:** <https://publons.com/researcher/1170248/eugen-rusu/>  
**SCOPUS ID:** <http://www.scopus.com/authid/detail.url?authorId=24450974700>  
**Google Academic:** <https://scholar.google.com.br/citations?user=-0cQG-IAAAAJ&hl=ro>  
**Researchgate:** [https://www.researchgate.net/profile/Eugen\\_Rusu?ev=hdr\\_xprf](https://www.researchgate.net/profile/Eugen_Rusu?ev=hdr_xprf)  
**ORCID:** <http://orcid.org/0000-0001-6899-8442>  
**Brain map:** <https://www.brainmap.ro/profile/Rusu-Eugen>

**Press related releases or other mentions** (in Romanian and Portuguese)  
<http://www.viata-libera.ro/prima-pagina/77150-performante-universitare-internationale-o-familie-de-specialisti-galateni-studiaza-valurile>  
<http://galateni.net/forum/topic/3294-profesorul-eugen-rusu-si-colaborarile-sale-militare/>  
<http://www.viata-libera.ro/educatie/51601-galati-viata-libera-studenti-erasmus-cu-licenta-documentata-la-galati>  
<http://prev.ugal.ro/stiri/profesorul-eugen-rusu-este-doctor-honoris-causa-al-universitatii-maritime-din-constanta>  
<http://websiq.hidrografico.pt/www/content/documentacao/hidromar/2002/hidromar73.pdf>  
<https://fenix.tecnico.ulisboa.pt/downloadFile/395137910255/dissertacao.pdf>  
<http://cpoalelungi.blogspot.ro/2015/07/eugen-rusu-fitness-cerebral.html>  
<http://ciumburlia.blogspot.ro/2015/07/de-aici-din-scoala-politehnica-galateana.html>

# ANNEX

## LIST OF RELEVANT PUBLICATIONS AND PARTICIPATION TO RESEARCH PROJECTS

### A - PUBLICATIONS IN INTERNATIONAL JOURNALS (SELECTED)

1. Rusu, E., A 30-year projection of the future wind energy resources in the coastal environment of the Black Sea, *Renewable Energy*, Volume 139, August 2019, Pages 228-234, <https://www.sciencedirect.com/science/article/pii/S0960148119302368>.
2. Rusu, E., Onea, F., An assessment of the wind and wave power potential in the island environment, *Energy*, Volume 175, 15 May 2019, Pages 830-846, <https://doi.org/10.1016/j.energy.2019.03.130>
3. Rusu, E., Onea, F., A parallel evaluation of the wind and wave energy resources along the Latin American and European coastal environments, *Renewable Energy*, Volume 143, December 2019, Pages 1594-1607, <https://doi.org/10.1016/j.renene.2019.05.117>
4. Rusu, E., 2018, Study of the Wave Energy Propagation Patterns in the Western Black Sea, *Applied Sciences* 8(6), 993, <https://doi.org/10.3390/app8060993>
5. Rusu, E., 2018, Numerical Modeling of the Wave Energy Propagation in the Iberian Nearshore, *Energies* 11(4), 980, <https://doi.org/10.3390/en11040980>
6. Rusu, E., Onea, F., 2018, A review of the technologies for wave energy extraction, *Clean Energy*, 2018, 1–10, <https://academic.oup.com/ce/advance-article/doi/10.1093/ce/zky003/4924611>
7. Niculescu, D., Rusu, 2018, Evaluation of the new coastal protection scheme at Mamaia Bay in the nearshore of the Black Sea, *Ocean Systems Engineering*, Vol.8, No. 1 (2018), pp. 1-20. <http://www.techno-press.org/?page=container&journal=ose&volume=8&num=1>
8. Onea, F., Rusu, E., Onea, F., 2018, Sustainability of the Reanalysis Databases in Predicting the Wind and Wave Power along the European Coasts, *Sustainability Journal*, <http://www.mdpi.com/2071-1050/10/1/193>
9. Rusu, E., Onea, F., 2017, Joint Evaluation of the Wave and Offshore Wind Energy Resources in the Developing Countries, *Energies* 2017, 10(11), 1866; <http://www.mdpi.com/1996-1073/10/11/1866>
10. Rusu, E., Onea, F., 2017, [Hybrid Solutions for Energy Extraction in Coastal Environment](https://doi.org/10.1016/j.egypro.2017.07), *Energy Procedia*, DOI: 10.1016/j.egypro.2017.07.
11. Onea, F., Ciortan, S., Rusu, E., 2017, Assessment of the potential for developing combined wind-wave projects in the European nearshore, *SAGE Journals, Energy & Environment*, 2017, 010 <http://journals.sagepub.com/doi/abs/10.1177/0958305X17716947>
12. Ganea, D., Amortilă, V., Mereuță, E., Rusu, E., 2017, A Joint Evaluation of the Wind and Wave Energy Resources Close to the Greek Islands, *Sustainability Journal, Special Issue Wind Energy, Load and Price Forecasting towards Sustainability*, 2017, 9(6), 1025; doi:10.3390/su9061025,, <http://www.mdpi.com/2071-1050/9/6/1025>
13. Rusu, E., Onea, F., 2016, Estimation of the wave energy conversion efficiency in the Atlantic Ocean close to the European islands, *Renewable Energy* 85, 687-703, <http://dx.doi.org/10.1016/j.renene.2015.07.042>
14. Rusu, E., Onea, F., 2016, Study on the influence of the distance to shore for a wave energy farm operating in the central part of the Portuguese nearshore, *Energy Conversion and Management*, 114, 209-223, <http://dx.doi.org/10.1016/j.enconman.2016.02.020>
15. Rusu, E., Raileanu, A., 2016, A multi parameter data assimilation approach for wave predictions in coastal areas, *Journal of Operational Oceanography*, Volume: 9 Issue: 1 Pages: 13-25, <http://dx.doi.org/10.1080/1755876X.2016.1192013>
16. Onea, F., Rusu E., 2016, Efficiency assessments for some state of the art wind turbines in the coastal environments of the Black and the Caspian seas, *Energy Exploration & Exploitation*, Vol 34 (2), pp. 217-234. <http://eea.sagepub.com/cgi/reprint/0144598716629872v1.pdf?ikey=XVTfIWsevedozD&keytype=finite>
17. Makris, C., Galiatsatou, P., Tolika, K., ..... & Rusu, E., 2016, Climate change effects on themarine characteristics of the Aegean and Ionian Seas, *Ocean Dynamics*, in press, DOI 10.1007/s10236-016-1008-1, <http://rdcu.be/IL9L>

18. Onea, F., Rusu E, 2016, The expected efficiency and coastal impact of a hybrid energy farm operating in the Portuguese nearshore , *Energy*, Volume 97, 15 February 2016, Pages 411–423, <http://www.sciencedirect.com/science/article/pii/S0360544216000128>
19. Silva, D., Rusu, E, Guedes Soares, C, 2016,. High-Resolution Wave Energy Assessment in Shallow Water Accounting for Tides, *Energies* 2016, 9(9), 761, <http://www.mdpi.com/1996-1073/9/9/761/htm>
20. Rusu, E., 2016, Reliability and Applications of the Numerical Wave Predictions in the Black Sea, *Front. Mar. Sci.*, <http://dx.doi.org/10.3389/fmars.2016.00095>
21. Gonçalves, M, Rusu, E., and Guedes Soares, C., 2015, Evaluation of Two Spectral Wave Models in Coastal Areas, *Journal of Coastal Research*, Volume 31, Issue 2: 326-339, <http://dx.doi.org/10.2112/JCOASTRES-D-12-00226.1>
22. Onea, F., Raileanu, A, Rusu E., 2015: Evaluation of the Wind Energy Potential in the Coastal Environment of two Enclosed Seas, *Advances in Meteorology* 14p, <http://dx.doi.org/10.1155/2015/808617>
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## B - PUBLICATIONS IN THE PROCEEDINGS OF RELEVANT INTERNATIONAL CONFERENCES (SELECTED)

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## C - BOOKS OR BOOK CHAPTERS (SELECTED)

1. E Rusu, D Silva, C Guedes Soares, 2016. Evaluation of the shoreline dynamics in a coastal sector of the Portuguese nearshore, *Maritime Technology and Engineering 3 – Guedes Soares & Santos (Eds) © 2016 Taylor & Francis Group, London, ISBN 978-1-138-03000-8*, pp. 1079-1086.

2. F Onea, A Raileanu, E Rusu, 2016, Evaluation of the wave energy potential in some locations where European offshore wind farms operate, *Maritime Technology and Engineering 3 – Guedes Soares & Santos (Eds) © 2016 Taylor & Francis Group, London, ISBN 978-1-138-03000-8*, pp.1119-1124.

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6. A. Morales Vaquero, F. Castro Ruiz, E. Rusu, 2013: Evaluation of the wave power potential in the northwestern side of the Iberian nearshore, *Developments in Maritime Transportation and Exploitation of Sea Resources –Guedes Soares & López Peña (eds)© 2014 Taylor & Francis Group, London, ISBN 978-1-138-00124-4*, pp 1012-1019.

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## D - PARTICIPATION IN RELEVANT RESEARCH PROJECTS

### D1.1 Responsible in international projects

1. NEARPORT (2009-2011) - Development of a real-time nearshore wave prediction system for the Portuguese ports, 112 000 Euro – project granted by the Portuguese Foundation for Science and Technology with EU funding (112 000 €), <http://www.mar.ist.utl.pt/nearport/en/home.aspx>
2. LUSOWAVES (2004-2008) - Development of an operational wave prediction system for the Portuguese coastal environment, individual research grant funded by the Portuguese Foundation for Science and Technology (<http://www.fct.pt/index.phtml.en>) with EU funding (62 000 €),  
(Included also in <http://www.iugg.org/members/nationalreports/portugal2006.pdf>).
3. ENVIRONMENTAL GUIDE for the wave and current conditions in the Portuguese nearshore (2001-2003), individual research grant funded by the Portuguese Foundation for Science and Technology (<http://www.fct.pt/index.phtml.en>) with EU funding (58 000 €),  
(Included also in <http://www.iugg.org/members/nationalreports/portugal2006.pdf>).
4. NEW TECHNIQUES FOR WAVE PREDICTIONS IN SHALLOW WATER (1999-2000), NATO Individual Research Grant (15 000 €).

### D1.2 Responsible in national projects

5. REMARC (2017-2019) –Renewable energy extraction in marine environment and its coastal impact, PN-III-P4-ID-PCE-2016-0017, <http://www.im.ugal.ro/REMARCI/index.php>
6. Influence of the wave conditions on the offshore operations and structures (1999). Romanian National Research Grant financed by the National Agency of Research, No. 9007/1999 item 122, (documentation in Romanian).
7. -*Launching Technology for Energy Cables*, Research. (1989), Proj. NR. 11/1989, for the National Institute of Energy I.C.P.E. Bucuresti, (documentation in Romanian).

## D2 Participation as team member or post doc fellow

### D2.1 International research projects, or abroad

8. EMODNET (2016-2018) – European Marine Observation and Data Network, the Black Sea Check Point, member of the expert panel, <http://emodnet-blacksea.eu/expert-panel/>
9. CCSEWAVS (2012-2014) - Estimating the effects of Climate Change on the sea level and wave climate of the Greek seas, coastal vulnerability and safety of coastal and marine structures funded by the Greek state participant as international expert). <http://thalis-ccseawavs.web.auth.gr/el/> [http://thalis-ccseawavs.web.auth.gr/el/meetings/doc\\_download/35-wp2-ntua](http://thalis-ccseawavs.web.auth.gr/el/meetings/doc_download/35-wp2-ntua)
10. EXTREME SEAS (2011) - Design for Ship Safety in Extreme Seas, <http://www.mar.ist.utl.pt/en/centec/projects.aspx?id=1&projectid=95> DG RTD-H2-Transport, participation as post doc fellow at CENTEC - Center for Marine Technology and Engineering, Technical University of Lisbon, Portugal.
11. SAFEOFFLOAD (2011) Safe Offloading from Floating LNG Platforms <http://www.mar.ist.utl.pt/safeoffload/> participation as a post doc fellow at CENTEC - Center for Marine Technology and Engineering, Technical University of Lisbon, Portugal.
12. HANDLING WAVES (2010) Decision Support System for Ship Operation in Rough Weather <http://www.mar.ist.utl.pt/handlingwaves/home.aspx> , participation as a post doc fellow at CENTEC - Center for Marine Technology and Engineering, Technical University of Lisbon, Portugal.
13. MARPORT (2007-2008) System to Forecast Wave Conditions in the Portuguese Ports <https://www.apdl.pt/gca/index.php?id=1233153108> participation as a post doc fellow at CENTEC - Center for Marine Technology and Engineering, Technical University of Lisbon, Portugal.
14. RADMONITOR (2006-2008) Radar Monitoring of the sea states at the Port of Sines, participation as post doc fellow at CENTEC - Center for Marine Technology and Engineering, Technical University of Lisbon, Portugal. <http://www.centec.tecnico.ulisboa.pt/en/centec/projects.aspx?projectid=97>
15. FORWARD EYE (2005), NURC-FR-2006-014, a project developed at the NATO Undersea Research Centre (NURC), <http://www.nurc.nato.int/>, La Spezia Italy. Participation as project expert, responsible for the phase: A NATO tool for prediction of waves and longshore currents in the surf zone, [http://www.nurc.nato.int/publications/reports\\_2006.htm](http://www.nurc.nato.int/publications/reports_2006.htm)
16. HYBRID SURF MODELING (2005), NURC-FR-2006-016, a project developed at the NATO Undersea Research Centre (NURC), <http://www.nurc.nato.int/>, La Spezia Italy, participation as project expert [http://www.nurc.nato.int/publications/reports\\_2006.htm](http://www.nurc.nato.int/publications/reports_2006.htm)
17. MARSTRUCT (2004-2006) - a network of excellence on marine technology, team member from University Dunarea de Jos of Galati
18. MOCASSIM (2001-2004) - Development of national competencies for the implementation of oceanographic models with data assimilation, <http://www.hidrografico.pt/mocassim.php> , team member as a post doc fellow at the Hydrographic Institute of the Portuguese Navy.
19. DERIVA LITORAL(2003-2005); Estimation of the Nearshore Currents in the Iberian Nearshore, team member as a post doc fellow at the Hydrographic Institute of the Portuguese Navy., Coordonator al fazelor: - Assessment of the Nearshore Circulation with the Quasi 3D Model SHORECIRC; -Development and Calibration of an Operational Model Based on the Results of the Linear and Second Order Theories
20. PAMMELA (2000-2003), *Prediction of the Nearshore Wave Conditions with Spectral Models*, team member as a post doc fellow at the Hydrographic Institute of the Portuguese Navy Coordonator al fazelor: - *Analysis of Wave Conditions in the Coastal Environment of Portugal by Using SWAN, Numerical Methods for Nowcasting the Wave Conditions of the Portuguese Nearshore.*
21. The incident generated by the accident of the oil-carrier – **PRESTIGE** (November 2002- February 2003) Member in the research team that provided the environmental support, in charge with wave predictions using spectral wave models.
22. NATO exercise- **UNIFIED OYISSEY 2002** (January- February 2002), Member of the team that provided the environmental support concerning the operational predictions of the oceanographic data during the NATO exercise
23. *Development of New Techniques for Prediction of Wave Conditions in the Coastal Environment.* (1998-1999)-Bilateral joint project between Greece & Romania financed both by Greek & Romanian governments, partners NTUA Greece- University of Galati, Romania, coordinator of Phase II, *Derivation and Implementation of a Novel Approach for the Description of the Intermediate-Depth Water-Wave Dynamics, Taking into Account Variable Bathymetry, Bottom Friction and Energy Dissipation Effects*, (documentation in English).
24. **EUROWAVES** (1996-1997)- International research project financed by European Community – members of the team coordinated by Prof. G. A. Athanassoulis, NTUA Greece, (documentation in English).

## D2.2 Participation in national research projects

25. **ACCWA (PN-III-P4-ID-PCE-2016-0028)** – Evaluation of the effects of the climate changes on the wave conditions from the Black Sea (2017-2019), <http://www.im.ugal.ro/ACCWA/index.php>
26. **DAMWAVE** (2013-2016), Implementation of data assimilation methods to improve the wave predictions in the Romanian nearshore, CNCS – UEFISCDI, project number PN-II-ID-PCE-2012-4-0089, <http://www.im.ugal.ro/DAMWAVE/index.htm>
27. **COSMOMAR** (2014-2016) - Development of a center for spatial technologies dedicated to a sustainable development of the Romanian maritime and coastal zones, STAR program, participation as an expert (team member) at Grigore Antipa Research Institute in Constanta. <http://www.cosmomar.ro/>
28. *Dynamics of the Systems for the Hydrocarbons Transfer in the Marine Operations*, (part-III) - Final report -Grant nr. 7007/1997, poz. 30/277, October 1997, pag. 1-44.

29. *Stability of Underwater Moored Objects*. - Final report Grant nr. 5007/1996, poz. 1173, Oct 1996, pag. 1-21.
30. *Dynamics of the Systems for the Hydrocarbons Transfer in the Marine Operations*, (part-II) - Final report -Grant nr. 5007/1996, poz. 1174, Octombrie 1996, pag. 1-27.
31. *Dynamics of the Systems for the Hydrocarbons Transfer in the Marine Operations*, (part-I) - Final report -Grant nr. 4007/1995, poz. B10, Octombrie 1995, pag. 1-51.
32. *Study concerning installing of the pipeline for gases  $\varnothing 14''$  by a free immersion method with floats*. Contract Nr. 5226/30.06.1993 - Beneficiary PETROSTAR Ploiești.
33. *Study concerning the hydrodynamic characteristics of an imerse tracted container* Nr. 25/2.09.1991 - Beneficiary MAPN – UM 02190 Constanța.
34. *Launching of the underwater pipelines with J-tubes*, Contract Nr. 10/1989 - Beneficiary PETROMAR Constanța.
35. *The mechanical stress in the elastic compensation system that links the underwater pipelines  $\varnothing 6, 5/8''$ ,  $\varnothing 12, 3/4''$  and the buo*, Contract Nr. 38 / 1988 - Beneficiary PETROMAR Constanța.
36. *Simultaneous launching of four underwater pipelines  $\varnothing 168$  mm*, Contract Nr. 5/1988 Beneficiary PETROMAR Constanța.
37. *A study concerning the resistance to the combined stress of the gas pipeline (16'' installed by free imersion method with floats*, Contract Nr. 5/1988 - Beneficiary PETROMAR Constanța
38. *Theoretical and Experimental Research of the Hydrodynamic Forces Acting on a Floating Body*. Research project for the National Research Institute ICEPRONAV Galați, (documentation in Romanian). Contract Nr. 21 / 1987 - Beneficiary ICEPRONAV Galați.
39. *Study concerning the resistance to combined stress of the gas pipeline  $\varnothing 20''$  installed by free immersion method with floats*, Contract Nr. 43/1987 - Beneficiary PETROMAR Constanța.
40. *Float for the pipeline  $\varnothing 20''$  - study and project*. Contract Nr. 44/1987 - Beneficiary PETROMAR Constanța.
41. *A study concerning the residence of the pipelines' installed by free immersion method with floats*, Contract Nr. 41/1985 - Beneficiary PETROMAR Constanța.
42. *Experimental research by tensometric measurements concerning the stress occurring in the arm of a ship crane subjected to static and dynamic loads*, Contract Nr. 62/1985 - Beneficiary IMN Galați.
43. *Analysis of the breaking cases of a 2000 tdw barge*, Contract Nr. 28/1980 - beneficiary ICEPRONAV Galați.

#### **D3. Participation in projects financed by the European Social Fund (POSDRU)**

44. DOCIS –POSDRU-/2/1.2/S/2 – Development of an operational system of the qualifications in the Romanian Higher Education System (Dezvoltarea unui sistem operational al calificarilor din invatamantul superior din Romania )- ETS (Responsible with the area of Mechanical Engineering)
45. PhD – EXPERT (POSDRU/21/1.5/G/19524) Increasing the quality in forming researchers in the framework of the doctoral programs improved by partnerships (Cresterea calității in formarea cercetătorilor pe baza de programe doctorale imbunătățite prin parteneriat, ETS)
46. SIMBAD - Proiectul POSDRU – 6/1.5/S/15 - Management system for the scholarships granted to the PhD students (Sistem de Management al Burselor Acordate Doctoranzilor-SIMBAD) – 1 PhD student supervised
47. EFICIENT - Proiectul POSDRU/88/1.5/S/761445– Eficientizarea activitatii studentilor din cadrul ciclului de studii doctorale-EFICIENT – 3 PhD students supervised
48. EXCELDOC (POSDRU/159/1.5/S/132397) - 1 post doc fellow and 1 PhD student supervised
49. PERFORM (POSDRU/159/1.5/S/138963) – ETS, 1 post doc fellow supervised

#### **D4. Responsible in ERASMUS programs and other bilateral accords**

50. Bilateral Agreement for the academic year 2015–2020 *Lifelong Learning Programme* (LLP): HIGHER EDUCATION (ERASMUS+). Persoană de contact: Carlos Guedes Soares, Instituto Superior Tecnico-CENTEC, University of Lisbon, Portugal, și Prof. Eugen Rusu, Universitatea "Dunărea de Jos" din Galați, România.
51. Bilateral Agreement for the academic year 2014 *Lifelong Learning Programme* (LLP): HIGHER EDUCATION (ERASMUS). Persoană de contact: Carlos Guedes Soares, Instituto Superior Tecnico-CENTEC, Technical University of Lisbon, Portugal, și Prof. Eugen Rusu, Universitatea "Dunărea de Jos" din Galați, România.
52. Bilateral Agreement for the academic year 2014–2015 *Lifelong Learning Programme* (LLP): HIGHER EDUCATION (ERASMUS). Persoană de contact: Santos Martín, Francisco Javier, Universidad de Valladolid, Spania, și Prof. Eugen Rusu, Universitatea "Dunărea de Jos" din Galați, România.

53. Bilateral Agreement for the academic years 2010–2013 Lifelong Learning Programme (LLP): HIGHER EDUCATION (ERASMUS). Persoană de contact: Prof. Antonio M. Goncalves Coelho, Universidade Nova de Lisboa, Portugal, si Prof. Eugen Rusu, Universitatea "Dunărea de Jos" din Galați, Romania.

54. Bilateral Agreement for the academic year 2010–2011 Lifelong Learning Programme (LLP): HIGHER EDUCATION (ERASMUS). Persoană de contact: Prof. Flavio Martins, Universidade do Algarve, Portugal, si Prof. Eugen Rusu, Universitatea "Dunărea de Jos" din Galați, Romania.

55. Bilateral Agreement for the academic year 2010–2011 Lifelong Learning Programme (LLP): HIGHER EDUCATION (ERASMUS). Persoană de contact: Dr G. Panagiaris, Technological Educational Institution (T.E.I.) of Athens, si Prof. Eugen Rusu, Universitatea "Dunărea de Jos" din Galați, Romania

56. Responsible for the bilateral international program of collaboration in the framework of the doctoral studies between UDJG and Technical University of Lisbon (starting with 2006), Contact person Prof.: Carlos Guedes Soares, Instituto Superior Tecnico-CENTEC, University of Lisbon, Portugal, and Prof. Eugen Rusu, Universitatea "Dunărea de Jos" din Galați, România.

57. Participation to a 3-month TEMPUS Programme at NTUA (National Technical University of Athens) Greece, 1997.

## **E. PhD STUDENTS AND POST DOC FELLOWS SUPERVISED**

### **E1. PhD theses supervised and finalized**

1. **Dorin Butunoiu (PhD thesis finalized in 2012)**, Implementation of a wave prediction system to increase the safety of the harbour operations in the Romanian nearshore.

2. **Florin Onea (PhD thesis finalized in 2013)**, Studies Concerning the Renewable Energy Extraction in Marine Environment with Applications to the Black Sea Basin.

3. **Angela Stela Ivan (PhD thesis finalized in 2013)**, Study of the coastal processes at the mouths of the Danube and evaluation of their impact on the human activities.

4. **Sorin Diaconu (PhD thesis finalized in 2013)**, Studies regarding the Influence of Marine Energy Farms and Offshore Structures on Coastal Hydrodynamics

5. **Robert Toderrascu (PhD thesis finalized in 2014)**, Study concerning the implementation of a system based on numerical models to evaluate the pollution propagation in the marine environment

6. **Carmen Gasparotti (PhD thesis finalized in 2014)**, Researches and contributions on the increasing safety navigation in the Black Sea.

7. **Andrei Tanase Zanol (PhD thesis finalized in 2014)**, Researches and contributions concerning the dynamics of the coastal currents in the Romanian nearshore of the Black Sea..

8. **Alina Beatrice Răileanu (PhD thesis finalized in 2016)**. Implementation of data assimilation methods to improve the wave predictions with spectral models in the Black Sea.

9. **Dragos Niculescu (PhD thesis finalized in 2019)**. Study concerning the marine energy resources in the Black Sea.

### **E2. Post doc fellows supervised**

1. **Florin Onea** (May 2014- November 2015). Research concerning the renewable energy resources in the Romanian coastal zones (Cercetari privind resursele de energie refolosibile in zonele costiere Romanesti ale Marii Negre) POSDRU project EXCELDLOC..

2. **Dorin Butunoiu** (May 2014- November 2015). A study concerning the enhancement of the navigation safety and of the safety of the harbor operations in the Romanian nearshore (Studii privind cresterea sigurantei navigatiei si a operatiunilor portuare in Marea Neagra). POSDRU project PERFORM..

Obs. More than other 50 bachelor and master students have been also supervised by myself in relationship with their graduation theses.

**September 2019**

**Eugen Rusu**