



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Ioan Strat**  
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E-mail [istrat@ugal.ro](mailto:istrat@ugal.ro)  
Nationality Romanian  
Date of birth 02.02.1951  
Gender Male

### Work experience

Dates Since 2000  
Occupation or position held Assoc. Professor – Faculty of Mechanical Engineering , Head of Department of Applied Mechanics  
<http://www.mrm.ugal.ro/CadreDidactice.htm>  
Main activities and responsibilities Teaching, research, supervising Master students  
Name and address of employer Dunarea de Jos Galati University, <http://www.ugal.ro/> 47, Domneasca St., 80008 Galati, Romania  
Type of business or sector Public University  
Dates 1979 - 2000  
Occupation or position held Successively positions from research engineer to Assistant professor  
Main activities and responsibilities Teaching and research  
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

### Education and training

Dates October 1990 – March 1999  
Title of qualification awarded PhD  
Principal subjects/occupational skills covered Studies concerning submarine pipe-laying for transport to shore of the hydrocarbons in Black Sea.  
Thesis title: "Installing of the submarine pipelines by free immersion"  
Name and type of organisation providing education and training University "Dunarea de Jos" of Galati,  
Dates October 1970 – July 1976  
Title of qualification awarded Naval Architect  
Principal subjects/occupational skills covered Naval and Marine engineering

Name and type of organisation 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 (\*)

**French**

**English**

**Portuguese**

**Spanish**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
B1	Independent user	B2	Independent user	A2	Basic user	A1	Basic user	A1	Basic user
B1	Independent user	B2	Independent user	A2	Basic user	A1	Basic user	A1	Basic user
A2	Basic user	A2	Basic user	A1	Basic user	A1	Basic user	A1	Basic user

(\*) Common European Framework of Reference for Languages

Social skills and competences

- I am Associate Professor and I have to deal with a lot of students (series from 20 to 200 students).

Organisational skills and competences

- I am Head of Applied Mechanics Department  
 - Member in the Council of Mechanical Faculty  
 - Supervisor in license Projects and dissertation Papers for Master students

Technical skills and competences

I am Assoc. Professor in Engineering, so it is supposed that I have accumulated during the time competencies and skills in various technical areas related to my main fields of expertise (Marine and Mechanical Engineering).

Computer skills and competences

- very good command of Microsoft Office tools (Word, Excel and PowerPoint);  
 - good command of graphic design applications (Paint Shop Pro, Phot Shop, etc)  
 - good command of Matlab

Driving licence

Category B

**Annex**

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

## Annex

# LIST OF RELEVANT PUBLICATIONS AND PARTICIPATION TO RESEARCH PROJECTS

## A. BOOKS

1. Strat, I., 2007: Mechanics with applications, Publishing House of University Foundation " Dunarea de Jos" Galati, ISBN978-973-627-372-8, 401 p., (in Romanian).
2. Strat, I., Rusu, E., 2001: Mechanics (Kinematics and Dynamics) . House of University Foundation " Dunarea de Jos" Galati, ISBN973-8139-47-3, 129 p., (in Romanian).
3. Strat, I., 2000: Mechanics (Static), House of University Foundation " Dunarea de Jos" Galati, ISBN973-8139-01-5, 131 p., (in Romanian).
4. Matulea, I., Popa, V., Strat, I., Talmaciu, N., Rusu, E., Crudu, L., 1988: Mechanics- Numerical methods. Mechanics of Wires Applied in Marine Technology, House of Galati University, 100 p., (in Romanian).
5. Matulea, I., Strat, I., Popa, V., 1986: Mechanics - Problems, vol.1 - Static, 453 p., vol.2, Kinematics, 302 p., vol.3, Dynamics, 522 p., House of Galati University, (in Romanian).
6. Balan, G., Matulea, I., Musat, S., Strat, I., Popa, V., Pitulice, D., Lipsa, R., 1983: Mechanics and Vibrations – Laboratory, House of Galati University, 105 p., (in Romanian).

## B - PUBLICATIONS IN THE PROCEEDINGS OF RELEVANT INTERNATIONAL CONFERENCES (SELECTED)

1. E. Rusu, I. STRAT: Renewable energy in island environment with emphasis on the Portuguese archipelagos, *5th International Week - Porto (26- 30)th March 2012*.
2. I. STRAT, E. Rusu.: Vizualization techniques in Env Fluid Mechanics, *5th International Week - Porto (26- 30)th March 2012*.
3. E. Rusu, I. STRAT: Numerical modelling to estimate the spatial distribution of the wave energy in the Portuguese nearshore; *4th International Week - Porto (21- 25)th March 2010*.
4. Strat, I., Rusu, E., Matulea, I.: Dynamics of a Moored Buoy Operating in the Western Side of the Black Sea. “*Tenth International Conference on Marine Sciences and Technologies – Black Sea 2010*”, Varna – Bulgaria
5. Onea, F., Rusu, E., Strat, I.: Evaluation of the Wave Energy Potential in the Black Sea Using Remotely Sensed Data. “*Tenth International Conference on Marine Sciences and Technologies – Black Sea 2010*”, Varna – Bulgaria
6. Strat, I., Matulea, I., Rusu, E., Ionita, B.: Studies on the motion of a moored floating body. Maritime Industry, Ocean Engineering and Coastal Resources – Guedes Soares & Kolev (eds) © 2008 Taylor & Francis Group, London, ISBN 978-0-415-45523-7.
7. Strat, I., Popa, V.: Behaviour in Static Regime of the Submarine Pipeline Model Installed by Free Immersion. “*Eight International Conference on Marine Sciences and Technologies – Black Sea 2006*”, Varna – Bulgaria.
8. Strat, I., Popa, V.: Modeling in dynamic regime of the submarine pipe-laying by free immersion. “*Eight International Conference on Marine Sciences and Technologies – Black Sea 2006*”, Varna – Bulgaria.
9. Matulea, I., Strat, I., Rusu, E.: Pipeline installed by free immersion in the Black Sea offshore areas. *International Conference IMAM - Maritime Transportation and Exploitation of Ocean and Coastal Resources – 2005 Portugal, Taylor & Francis Group, London, ISBN 0 415 39036 2*
10. Matulea, I., Strat, I., Popa, V.: Static and dynamic analysis of pipeline installed by free immersion in the Black Sea offshore areas. *20<sup>th</sup> International Congress of Theoretical and Applied Mechanics, 2000, Chicago, Illinois, USA*.
11. Strat, I., Matulea, I., Popa, V.: Pipeline installed by free immersion in the Black Sea offshore areas. *International Workshop on Deep water mooring and related topics in Offshore Engineering - 1998, Galati- Romania, 9.1-9.7*.
12. Strat, I., Matulea, I., Momanu, G., Pinho L.: Simultaneous laying of the multidiameter submarine pipes. *The Second International Conference “SHIPBUILDING ‘98” , Varna- Bulgaria, 1998, 67-73*.
13. Matulea, I., Strat, I.: Pipeline installed by free immersion. *8<sup>th</sup> International Congress on Marine Technology 1997, Tuzla- Istanbul , Turkey, 8. 2- 19 - 8. 2- 26*.

## C. PUBLICATIONS IN ROMANIAN JOURNALS

1. Strat, I., Popa, V., Pinho, L., 2005: Behaviour of the Offshore Pipeline Model During Installing by Free Immersion. *The Annals of “Dunarea de Jos” University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 69-74.
2. Popa, V., Strat, I., Gallina, P., 2005: On the Dynamic Response of a Submarine Pipeline During Laying. *The Annals of “Dunarea de Jos” University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 53-60.
3. Strat, I., A. Coelho, A., 2003: Axiomatic design, a New Conception of the Design Process. *The Annals of “Dunarea de Jos” University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 55-60.
4. Strat, I., Talmaciu, N., Matulea, I., 2003: Sea State in the Offshore Black Sea Areas. *The Annals of Technical University “ Oil - Gas ”, Ploiesti*, ISSN 1221- 9371, vol. LV, nr.4, 140 - 144.
5. Popa, V., I. Strat, I., 2003: Static and Dynamic Stresses in Submarine Pipeline, Installed by Free Immersion Method. *The Annals of “Dunarea de Jos” University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 31-42.
6. Matulea, I., Strat, I., Popa, V., 2002: The Influence of the Connecting Point Cable-Under-Water Vehicle on the Motion Stability.. *The Annals of University “Dunarea de Jos” of Galati*, Fascicle X Applied Mechanics, ISSN 1221- 4612, 3-8.
7. Matulea, I., Strat, I., Popa, V., 2001 : Towed line’s sensitiveness under external excitations. *The Annals of University “Dunarea de Jos” of Galati*, Fascicle X Applied Mechanics, ISSN 1221- 4612, 15-22.

8. Strat, I., Matulea, I., 2001: Simulation of Dynamic Response of an Undersea Towed Body. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle XIV Mechanical Engineering, ISSN 1224-5615, 45-51.
9. Matulea, I., Strat, I., Nastase, A., 2000: Motion of a Moored Buoy. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 37-46.
10. Strat, I., Matulea, I., Rusu, E., 1999: Static configuration of the submarine pipelines installed by free immersion. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 27-32.
11. Strat, I., Matulea, I., N.Talmaciu, 1999: Coupling on the lay-barge with a new pipe section of the submerged pipe end. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 33-36.
12. I. Matulea, I., Caciuc, S., I. Strat, I., 1999: Les mouvements d'équilibre du véhicule remorque dans le plan vertical. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4612, 3-10.
13. Strat, I., Matulea, I., Caciuc, S., 1999: Biurfacations and chaotic response of a single line moored storage tank. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle XIV Mechanical Engineering, ISSN 1224-4615, 97-100.
14. Strat, I., Matulea, I., Pinho, L., 1999: Static loadings of the submarine pipeline installed by free immersion with floats. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle XIV Mechanical Engineering, ISSN 1224-4615, 101-104.
15. I. Matulea, I., Caciuc, S., Strat, I., 1999: Stability of free movement of barges anchored propeller / trailer with a single line. *The Bulletin of "Oil and Gas" University of Ploiesti*, vol.LI, 1, 67-72.
16. Strat, I., Matulea, I., 1999: Model tests on installing submarine pipelines by free immersion. *The Bulletin of "Oil and Gas" University of Ploiesti*, vol.LI, 1, 73-78.
17. Strat, I., Matulea, I., Pinho, L., 1998: Dynamic loadings of the submarine pipeline installed by free immersion with floats. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle XIV Mechanical Engineering, ISSN 1224-5615, 33-36.
18. Talmaciu, N., Matulea, I., Strat, I., 1999: The installing of marine energy cables by using a surface vessel. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4621, 35-40.
19. Strat, I., 1997: Simultaneous Submarine Pipelaying. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4621, 41-46.
20. Matulea, I., Stefan, A., Strat, I., 1993: La reponse dynamique de la conduite soumarine installée par libre immersion. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle XI, Shipbuilding, year XI, 17-35
21. Matulea, I., Strat, I., 1992: Three dimensional static analysis of the pipeline installed by free immersion. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4621, 3-12.
22. Matulea, I., Strat, I., 1990: Dynamic frequency response analysis of the pipeline installed by free immersion. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle X, Applied Mechanics, ISSN 1221-4621,, 3-16.
23. Musat, S., Strat, I., 1983: Le corps solide auxiliaire dans l'étude de la transmission du mouvement par des fils flexibles et inextensibles. *The Annals of "Dunarea de Jos" University of Galati*, Fascicle II, Mathematics, Physics, Theoretical Mechanics, second year (VI), 27-32.
24. Balan, G., Popa, V., Strat, I., 1982: Contributions to the study of stochastic dynamics of machine-tools. *The Bulletin of "Dunarea de Jos" University of Galati*, Fascicle II, year V, 45-55.
25. Matulea, I., Strat, I., Popa, V., 1978: Le modelage des proces dynamique du système cable-chalut. *The Bulletin of "Dunarea de Jos" University of Galati*, Fascicle VII, year I, 89-96.

## **D. PARTICIPATION TO RELEVANT RESEARCH PROJECTS**

### **GRANTS OBTAINED BY NATIONAL COMPETITION**

- 1999** Studies on the influence of wave action on the offshore operations in marine continental shelf. *Grant no. 34234/1999, poz. 18/177*, funded by the Ministry of Education and CNCSU (National Council of University Scientific Research). Project manager – Conf.dr.ing. E. Rusu.
- 1997** The stability of marine objects with and without self towed, Part two. *Grant no. 7007/1997, poz. 15/276*, funded by MEN (Ministry of Education) by CNCSU (National Council of University Scientific Research). Project manager - Prof.dr.ing. I. Matulea.
- 1997** Dynamic operating system for marine oil transfer, Part three. *Grant no.7007/1997, poz. 30/277*, funded by MEN (Ministry of Education) by CNCSU (National Council of University Scientific Research). Project manager - Prof.dr.ing. I. Matulea.
- 1996** Dynamic operating system for marine oil transfer, Part two. *Grant nr. 5007/1996, poz. 1174*, funded by MEN (Ministry of Education) by CNCSU (National Council of University Scientific Research). Project manager - Prof.dr.ing. I. Matulea.
- 1996** The stability of marine objects with and without self towed, Part one". *Grant nr. 5007/1996, poz. 1173*, funded by MEN (Ministry of Education) by CNCSU (National Council of University Scientific Research). Project manager - Prof.dr.ing. I. Matulea.
- 1995** Dynamic operating system for marine oil transfer, Part one. *Grant nr. 4007/1995, poz. B10*, funded by MEN (Ministry of Education) by CNCSU (National Council of University Scientific Research). Project manager - Prof.dr.ing. I. Matulea.

### **PROJECTS IN INVESTMENT FUNDS**

- 1998** Analysis of the simultaneous launch of submarine pipelines  $\varnothing$  60.3 mm (2 pcs.) and  $\varnothing$  88.9 mm (1 pc.). *Contract no. 184/1998*, Beneficiary: PETROSTAR Ploiesti. Project manager – Assist. Prof. ing. I. Strat, (in Romanian).
- 1997** Study Solution: Technology laying submarine power cables. *Contract no. 174/1997*, Beneficiary PETROSTAR Ploiesti. Project manager - Assist. Prof. ing. N. Talmaciu, (in Romanian).
- 1993** Study Solution: Installation of gas submarine pipeline  $\varnothing$  14" by free immersion method. *Contract no. 5226/30.06.1993*. Beneficiary PETROSTAR Ploiesti. Project manager - Prof.dr.ing. I. Matulea, (in Romanian).
- 1992** Hydroelastic vibration of the ships and structures used in Offshore. *Contract no. 12/01.01.1992* – Beneficiary, MIS (Ministry of Education and Science). Project manager – Conf.dr.ing. I. Chirică (phase 1), Prof.dr.ing. I. Matulea (phase 2), (in Romanian).

- 1991** The study and development of documentation on hydrodynamic characteristics of a towed immerse container. *Contract no. 25/2.09.1991* - Beneficiar MapN (Ministry of National Defense) – UM 02190 Constanta. Project manager - Prof.dr.ing. I. Matulea, (in Romanian).
- 1989** Drag in the guide tubes J of submarine pipelines. *Contract no. 10/1989* – Beneficiary PETROMAR Constanta. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1988** Establishing mechanical efforts that appear in the system of elastic compensation (elastic hose) that connects the ends of submarine pipelines  $\varnothing$  6.5 / 8" respectively  $\varnothing$  12.3 / 4" and buoy. *Contract no. 38/1988* - Beneficiary PETROMAR Constanta. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1988** Technology laying submarine power cable 6 kV and 50 Hz., with rubber insulation and jacket, resistant to flame propagation. *Contract no. 28/1988* - Beneficiary ICPE Bucuresti. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1988** Aanalysis of launching simultaneous of four subsea pipelines  $\varnothing$  168 mm. *Contract no. 5/1988* - Beneficiary PETROMAR Constanta. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1988** Study Solution: Calculation of resistance to combined efforts of the pipeline  $\varnothing$  16 "installed by free immersion method. *Contract no.5/1988* - Beneficiary PETROMAR Constanta. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1987** Theoretical and experimental models to establish methods for determining the hydrodynamic forces and behavior of marine structures anchored. *Contract no. 21/1987* - Beneficiary ICEPRONAV Galati. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1987** Study solution: Calculus to combined efforts of submarine gas pipeline  $\varnothing$  20 "installed by free immersion method. *Contract no. 43/1987* - Beneficiary PETROMAR Constanta. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1987** Float for gas pipeline  $\varnothing$  20 " - study and project. *Contract no. 44/1987* - Beneficiary PETROMAR Constanta. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1985** Calculus of submarine pipelines resistance installed by free immersion method. *Contract no. 41/1985* - Beneficiary PETROMAR Constanta. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).
- 1983** Experimental model to hold slag from metallurgical aggregates. *Contract no. 23/1983* – Beneficiary CS Galati. Project manager - Prof.dr.ing. A. Oranescu, (in Romanian).
- 1983** Making super-finishing pieces needed to CS Galati. *Contract no. 50/1983* – Beneficiary CS Galati. Project manager – Assoc.Prof.dr. ing. G. Balan, (in Romanian).
- 1983** Research on the implementation of automated control facilities viscosity heavy fuel used in the operation of marine engines. *Contract no. 60/1983* – Beneficiary SN Braila. Project manager - Conf.dr.ing. V. Ceanga, (in Romanian).
- 1980** Robot for cleaning and painting the body of the ship. *Contract no. 13/1980* – Beneficiary ICPTT Bucuresti. Project manager - Conf.dr.ing. I. Matulea, (in Romanian).

January 2013

Conf.dr.ing. Ioan Strat

