



Curriculum vitae **EUROPASS**

Informatii Personale

Nume	Mocanu Costel Iulian
Adresa	Universitatea Dunarea de Jos din Galati, Facultatea de Arhitectura Navala RO-800201, Galati, Romania
Telefon	(+40) 236 495400
Fax	(+40) 236 495400
E-mail	costel.mocanu@ugal.ro
Nationalitate	Romana
Data nasterii	5 Februarie 1957
Sexul	Masculin

Competente	Rezistenta materialelor, lasticitate si plasticitate, programarea calculatoarelor, analiza structurilor folosind Metoda Elementului Finit, masuratori tensometrice in regim static si dinamic
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Experienta profesionala

Data	- 2006 – azi Profesor doctor la Facultatea de Arhitectura Navala a Universitatii “Dunarea de Jos” din Galati - 1998 - 2006 Conferentiar doctor inginer la Facultatea de Mecanica a Universitatii “Dunarea de Jos” din Galati - 1996 - 1998 Sef de lucrari inginer la Facultatea de Mecanica a Universitatii “Dunarea de Jos” din Galati - 1986 - 1998 Inger cercetator la Facultatea de Mecanica a Universitatii “Dunarea de Jos” din Galati - 1983 - 1986 Inger la Santierul Naval Galati - 1978 - 1983 Student la Facultatea de Mecanica sectia Nave a Universitatii “Dunarea de Jos” din Galati - 1972 - 1977 liceu, Liceul Mecanic 1, Galati - 1964 - 1972 Scola generala
Pozitia actuala ocupata	Profesor Unversitar Doctor la Facultatea de Arhitectura Navala a Universitatii “Dunarea de Jos” din Galati

Educatie si formare

Data	- 1992-1998 sesiune de pregatire in stagiul de doctorat - 1989-1990 Curs de tensometrie la UP Bucuresti - 1978-1983 student la Facultatea de Mecanica sectia Nave a Universitatii “Dunarea de Jos” din Galati
Titluri si calificari obtinute	- 1998 Titlul de doctor inginer in specialitatea Rezistenta materialelor, elasticitate si plasticitate - 1990 Diploma de ansolvire curs de tensometrie

Membru in asocitii profesionale	- ARTENS (Asociatia Romana de Tensometrie) - AGIR (Asociatia Inginerilor din Romania)
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Pregatire profesionala si competente

Limbi straine

Engleza
Franceza

Intelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversatie		Discurs oral		Exprimare scrisa	
C1	experienced user	B2	independent user	B2	independent user	B2	independent user	B2	independent user
A1	basic user	A1	basic user	A1	basic user	A1	basic user	A1	basic user

Competente si abilitati sociale

- Conducerea echipelor de cercetare - experiența acumulată în diverse contracte de cercetare la care am luat parte în calitate de membru sau de manager de contract
- Organizarea de măsuratori prin tensometrie electrica pe diferite tipuri de structuri: arbori navali, elici navale, structurilor de corp nava

Alte competente

- Programator în diferite limbaje de programare: Pascal, Fortran. Experiența dobândită în studiile efectuate pe baza contractelor sau în diverse lucrări de cercetare științifică

Infomrmatii aditionale

În cadrul contractelor de cercetare efectuate am colaborat cu oameni de stiinta, cum ar fi: profesor universitar doctor inginer Liviu Dan Stoicescu, profesor universitar doctor inginer Modiga Mircea, profesor universitar doctor inginer Adrian Lungu, profesor universitar doctor inginer Ceangă Valeriu.

DOCTOR'S DEGREE PAPER – „Contributii la calculul static si dinamic al liniilor de arbori navale” – Galați 1998, Conducator stiintific: profesor, doctor inginer Liviu Dan Stoicescu.

CARTI

Rezistenta materialelor	Costel Iulian Mocanu , Ionel Gavrilescu, Editura Fundatiei Universitatea “Dunarea de Jos” din Galati, 1999
Analiza cu elemente finite	Ionel Gavrilescu, Costel Iulian Mocanu , Editura Fundatiei Universitatea “Dunarea de Jos” din Galati, 1999
Dinamica sistemelor de propulsie	Valeriu Ceangă, Costel Iulian Mocanu , Cristian Teodorescu, Editura Didactica si Pedagogica, Bucuresti, 2003.
Rezistenta materialelor (a II a editie)	Costel Iulian Mocanu , Editura Fundatiei Universitatea “Dunarea de Jos” din Galati, 2005.
Metode numerice in ingineria mecanica. Diferente finite	Costel Iulian Mocanu , Editura Fundatiei Universitatea “Dunarea de Jos” din Galati, 2005

ARTICOLE STIINTIFICE

1. *Experimental researches on models of low weight naval propellers blades resistance*
M. Modiga, V. Ceangă, **C. Mocanu**, A. Lungu, D. Micu
Magazine of transports and telecommunications, Year “XVI”, No. 8, Bucharest, 1989
2. *Assessment of the participation degree of the longitudinal coamings of hatches at ship's bending*
M. Modiga, V. Ceangă, **C. Mocanu**, A. Lungu, P. Tăutu, D. Micu
Magazine of transports and telecommunications, Year “XVI”, No. 8, Bucharest, 1989
3. *Theoretical and experimental analysis on the stress state of the crane JIB MB-1979 during the static and dynamic testing*
M. Modiga, R. Lipșa, I. Chirică, **C.I. Mocanu**, L. Domnișoru, P. Donescu
Works of the 5th National Symposium of Tensiometry, Galați, September 1989.
4. *The naval shaft vibration*
Ionel Chirică, **Costel Iulian Mocanu**, Liviu Stoicescu
Annals of “Low Danube” University in Galați, Fascicle “X”, Applied Mechanics, Year “IX”, 1991.
5. *Optimisation of centring of naval shafts making use of the Finite Element Method and the linear programming*
Mircea Modiga, Ionel Gavrilescu, **Costel Iulian Mocanu**, Doina Boazu
National Conference of Finite and Boundary Elements ELFIN'91, Section II. Cluj-Napoca, 19-21 September 1991.
6. *Modelling of constrained vibrations of the shafts lines*
Sorin Dumitru Mușat, **Costel Iulian Mocanu**, Ionel Chirică, Liviu Stoicescu
National Conference of Finite and Boundary Elements ELFIN'91, Section II. Cluj-Napoca, 19-21 September 1991.
7. *Problems regarding the naval shafts vibrations*
L.D. Stoicescu, S. Mușat, I. Chirică, **C. Mocanu**
40 years since the foundation of the Mechanic-Naval Institute, Galați, 25-26 October 1991
8. *Reaction Forces Distribution in case of surface supporting of a propeller shaft*
I. Gavrilescu, **Costel Iulian Mocanu**, D. Boazu, D. Olaru
Works of symposium “Realisations and perspectives in naval industry”, Galați, 28-30 October 1993.

9. *The modelling of coupled vibrations of the naval shafts*
S. D. Muşat, **C. I. Mocanu**, I. Chirică, I. Gavrilăscu, L.D. Stoicescu
Works of the 2nd National Conference of Finite and Boundary Elements, ELFIN 2, Sibiu,
13-15 May 1993
10. *Modelling of coupling of twisting, transversal and axial vibrations of naval shafts*
C. I. Mocanu, I. Chirică, S.D. Muşat, L.D. Stoicescu
The 18th Conference of Solid Materials Mechanics, Volume 1, Constanţa, 09-11 June
1994
11. *Calculation of tensions and deformations in the turning ship sections process in shipyards*
I. Chirică, **C. I. Mocanu**, L.D. Stoicescu
The 18th Conference of Solid Materials Mechanics, Volume 1, Constanţa, 09-11 June
1994
12. *Modelling of non-linear geometric behaviour of off-shore structures under the action of
environment stress*
I. Chirică, **C.I. Mocanu**
The 18th Conference of Solid Materials Mechanics, Volume 1, Constanţa, 09-11 June
1994
13. *The influence of the gyroscopic moments on the coupling vibrations of the naval shafts*
Costel Iulian Mocanu, Ionel Chirică, Sorin Dumitru Muşat, Liviu Stoicescu
Annals of "Low Danube" University in Galaţi, Fascicle "X", Applied Mechanics, Year
"XII (XVII)", 1994.
14. *Bent centring methods at naval shafts lines in order to optimize the bearing stress*
V. Ceangă, A. Lungu, **C. Mocanu**
Works of Symposium "Special and Unconventional Technologies", Galaţi, 12-13
October 1995.
15. *The whirling effects influence on the coupled vibration of the naval shaft*
I.C. Mocanu, I.Chirică, S.D. Muşat, L.D. Stoicescu
Works of the 3rd international conference of Finite and Boundary Elements, ELFIN 3,
Section 2.1, Constanţa, 25-27 May 1995.
16. *Bending centring methods at naval shafts in order to optimize the bearing stress*
V. Ceangă, A. Lungu, **C. Mocanu**
Works of Symposium "Special and Unconventional Technologies", Galaţi, 12-13
October 1995.
17. *Finding the optimum position of the ship on syncrolift for launching*
C.I. Mocanu, I. Gavrilăscu, D. Boazu, I.Chirică
The 27th session of scientific communication with international participation, Military
Technical Academy Bucharest, Volume 8, Bucharest, 1997
18. *Calculation of the response hull-transfer slide assembly at launching*
I. Chirică, **C. I. Mocanu**, I. Gavrilăscu
The 26th session of scientific communications with international participation, Military
Technical Academy Bucharest, Volume. 8, Bucharest, 1997
19. *The naval shaft vibration*
I. Chirică, **C. Mocanu**, L.D. Stoicescu
IMEKO TC3/APMF 1998, Theory and practice, Taejon, Korea, 14-18 September 1998
20. *Naval Shaft Analysis after Alignment*
I. Chirică, **C.I. Mocanu**, L.D. Stoicescu
Works of symposium Danibia-Adria, Cluj-Napoca, 24 May 1999.
21. *Naval Shaft Bending Vibration Analysis*
C.I. Mocanu, I. Chirică, R. Belea
Works of symposium Danibia-Adria, Cluj-Napoca, 24 May 1999.
22. *Optimisation of bending centring of naval shafts*

- C.I. Mocanu**, I. Gavrilesu, I. Chirică
 Gazette of "Petrol-Gas" University, Ploiești, Volume LI – 1999, No. 1.
23. *Studies on the after-centring response of naval shafts*
I.C. Mocanu, I.Chirică
 Gazette of "Petrol-Gas" University, Ploiești, Volume LI – 1999, No. 1.
 24. *Considering the width of bearings when calculating reactions that appear in the bearings in the stern frame pipe of the naval shafts*
I.C. Mocanu, D. Boazu
 Gazette of "Petrol-Gas" University, Ploiești, Volume LI – 1999, No. 1.
 25. *Identification of bending vibrations of naval shafts*
I.C. Mocanu, I. Chirică, R. Belea
 Gazette of "Petrol-Gas" University, Ploiești, Volume LI – 1999, No. 1.
 26. *Naval shaft behaviour analysis*
C.I. Mocanu, I.Chirică, L.D. Stoicescu
 Proceedings of Romanian – Japanese Workshop on "Fracture and Damage Mechanics and Experimental Mechanics in Marine Engineering", Constanta, June 1999.
 27. *On the gyroscopic effects in the dynamic analysis of the naval shafts*
C. I. Mocanu, I. Chirică, L.D. Stoicescu
 Computing no. 11, 2000
 28. *Calculations and measurements in dynamic regime to find out the own pulsations of the naval shafts*
C. I. Mocanu, I. Chirică, L.D. Stoicescu
 The 8th International Conference Tehnonav 2000, București-Constanța 1-3 June 2000
 29. *Static calculations and measurements concerning the after-centring response of naval shafts*
C. I. Mocanu, I. Chirică, M. Modiga, L.D. Stoicescu
 The 8th International Conference Tehnonav 2000, București-Constanța 1-3 June 2000
 30. *A Study of Geared Shafts System Using the Finite Element Method*
 D. Boazu, I. Gavrilesu, **C.I. Mocanu**
 The 5th International Conference of Finite and Boundary Elements, ELFIN 5, Oradea, 25-27 May 2000
 31. *An assessment method of the drawing force*
C.I. Mocanu, D. Boazu
 Annals of "Low Danube" University in Galați, Year XX (XXV) 2002
 32. *Experimental study of the tension state when radially compressing a dust disk*
 Viorel Păunoiu, Mircea Modiga, **Costel Iulian Mocanu**
 Annals of "Low Danube" University in Galați, Year "XXI (XXVI)" 2003
 33. *The Pressure Transducer Analysis*
C.I.Mocanu, E.F.Beznea
 Annals of "Low Danube" University in Galați, Year "XXI (XXVI)" 2003
 34. *Dynamic Analysis of the Naval Shaft*
C.I.Mocanu, E.F.Beznea
 Annals of "Low Danube" University in Galați, "Year XXII (XXVII)" 2004
 35. *Training ship "Mircea" rigging equilibration by strain gauges*
 Ionel Chirică, **Costel Iulian Mocanu**, Ionel Gavrilesu, Iulian Barsan, Vasile Giuglea,
 Proceedings of the 10th international symposium on experimental stress analysis and material testing, Volume 1, p1-3, 21-23 October 2004, Sibiu, Romania.
 36. *True strain-stress curve in numerical modelling for thick plates forming the ship hull*
 Găvan E., **Mocanu C.I.**, Dimache A. TMCR 2005, volume 1, pages 396-399, Chișinău, 2005, ISBN 9975-9875-4-0.
 37. *Stress and Deformations in the Structure of a Floating Excavator using FEM*
Costel Iulian Mocanu, Doina Boazu, the Annals of "Low Danube" University of Galați, Fascicle X, Applied Mechanics, ISSN 1221-4612, 2005.

38. *Dynamic stress in the Structure of a Floating Excavator using FEM*
Costel Iulian Mocanu, Doina Boazu, the Annals of “Low Danube” University of Galati, Fascicle X, Applied Mechanics, ISSN 1221-4612, 2005.
39. *Machining of CESTILENE HD 500 thermoplastic*
Catalin Fetecau, Ana Munteanu, Felicia Stan, **Costel Mocanu**, Proceeding of The 1st International Conference on Polymers Processing in Engineering PPE 2007, Galati, Romania, 25-26 october 2007, ISBN 978-973-30-1970-1
40. *Dynamic stress in the Structure of a Floating Excavator Using FEM*
Costel Mocanu, Doina Boazu, the Annals of “Low Danube” University of Galati, Fascicle XI, Shipbuilding, ISSN 1221-4620, 2007.
41. *Numerical and experimental Results on the Corrosion Effect on Beam Members*
Sandita Pacuraru, **Costel Mocanu**, the Annals of “Low Danube” University of Galati, Fascicle XI, Shipbuilding, ISSN 1221-4620, 2007.
42. *Stress and Deformations in a Submarine Vehicle Porthole*
Costel Mocanu, Doina Boazu, the Annals of “Low Danube” University of Galati, Fascicle XI, Shipbuilding, ISSN 1221-4620, 2008.
43. *Stress Measurement for a 1000 m³ Spherical Tank Using the Strain Gauge Method*
Costel Mocanu, Doina Boazu, the Annals of “Low Danube” University of Galati, Fascicle XI, Shipbuilding, ISSN 1221-4620, 2008.
44. *Stress Measurement for a Spherical Tank of 1000 m³ on Hydraulic tests*
Costel Mocanu, Doina Boazu, the Annals of “Low Danube” University of Galati, Fascicle X, Applied Mechanics, ISSN 1224-5615, 2008.
45. *Stress in a Submarine Vehicle Porthole*
Costel Mocanu, Doina Boazu, Liviu Dan Stoicescu, Adrian Bejan, the Annals of “Low Danube” University of Galati, Fascicle X, Applied Mechanics, ISSN 1224-5615, 2008.
46. *Influence of corrosion on the fatigue resistance of steel structures*
Oana-Mirela DOBROT, **Costel Iulian MOCANU**, INTERNATIONAL SCIENTIFIC WORKSHOP FOR STUDENTS, ISSN 2068-8652, pag.113-121, 2010 (Constanta)
47. *Environmental factors on the behavior of a boat stern structure made of composite materials*
Florentina TOCU, **Costel Iulian MOCANU**, Proceedings of the INTERNATIONAL SCIENTIFIC WORKSHOP FOR STUDENTS, ISSN 2068-8652, pag.296-303, 2010
48. *Numerical and experimental stress study on resonance in an offshore platform leg*
Oana – Mirela Dobrot, **Costel Iulian Mocanu**, , The Annals of “ Dunarea de Jos” University of Galati, Fascicle XI - SHIPBUILDING, Years XXVIII, ISSN 1221-4620, p. 159 – 166, 2010.
49. *Study of the destruction influence of elements from offshore platform leg on stress and vibration modes*
Oana – Mirela Dobrot, **Costel Iulian Mocanu**, Analele Universitatii Maritime din Constanta, Anul XI, Volumul 14, ISSN 1582-3601, p. 25 – 30, 2010.
50. *Influence of corrosion on the state of stress wich appear in the legs of a offshore structure*
Oana – Mirela DOBROT, **Costel Iulian MOCANU**, , The Annals of “ Dunarea de Jos” University of Galati, Fascicle IX, Metallurgy and Materials Science, Years XXIX (XXXIV) , Special ISSUE, ISSN 1443-083X, p. 222 – 229, May 2011.
51. *Experimental study on the influence of cycle number at variable load on the mechanica, characteristic of GRP*
Florentina Tocu, **Costel Iulian Mocanu**, Viorel Silviu Lefler, The Annals of “Dunarea de Jos” University of Galati, Fascicle XI, SHIPBUILDING, ISSN 1221-4620, pag.191, 2010.
52. *The number of layers influence for composite materials subjected to fatigue at the request of force breaking to axial load*
Florentina Tocu, **Costel Iulian Mocanu**, Viorel Silviu Lefter, Constanta Maritime University Annals, ISSN 1582-3601, pag. 101, 2010.

53. *Influence of cycle number on the fatigue resistance of fibreglass reinforced polyester*
 Florentina Tocu, **Costel Iulian Mocanu, Viorel Silviu Lefter**, The Annals of “Dunarea de Jos” University of Galati, Fascicle IX, METALLURGY AND MATERIALS SCIENCE, ISSN 1453-083X, pag. 188, 2011.
54. *Influence of corrosion on the fatigue resistance of steel structures*
 Oana - Mirela DOBROT, **MOCANU Costel Iulian**, International Scientific Workshop for Students Constanta Maritime University 22 May 2010 oral presentation
55. *Environmental factors on the behavior of a boat stern structure composite materials*
 Florentina TOCU, **MOCANU Costel Iulian**. International Scientific Workshop for Students Constanta Maritime University 22 May 2010 oral presentation
56. *Study of the stress state around a crack in welding link between tubular beams*
 Oana-Mirela Dobrot , **Costel Iulian Mocanu**, *ModTech International Conference-New face of TMCR Modern Technologies, Quality and Innovation- New face of TMCR 24-26 May 2012, Sinaia, Romania, Volume II, nr.285 -288, 2012*
57. *Study on the layer strain state in delaminations*
 Florentina Tocu, **Costel Iulian Mocanu**, *ModTech International Conference-New face of TMCR Modern Technologies, Quality and Innovation- New face of TMCR 24-26 May 2012, Sinaia, Romania, Volume II, nr.957 - 960, 2012*
59. *The determination of the cumulative deterioration factor in the composite materials fatigue strain*
 Florentina Tocu, **Costel Iulian Mocanu, Ovidiu-Alexandru Donu.**, *ModTech International Conference-New face of TMCR Modern Technologies, Quality and Innovation- New face of TMCR 24-26 May 2012, Sinaia, Romania, Volume II, nr.961 - 965, 2012*
60. *The plate shape influence over the stress variation under the impact loads*
 Mirel Balan, Dumitru Lavrente, Manuela Nechita, Andreea Muscalu, **Costel Iulian Mocanu.**, *ModTech International Conference-New face of TMCR Modern Technologies, Quality and Innovation- New face of TMCR 24-26 May 2012, Sinaia, Romania, Volume II, nr.69 - 72, 2012*
61. *Influence of corrosion on the fatigue resistance of steel structures*
 Oana - Mirela DOBROT, **MOCANU Costel Iulian**, , International Scientific Workshop for Students Constanta Maritime University 22 May 2010 oral presentation
62. *Environmental factors on the behavior of a boat stern structure composite materials*
 Florentina TOCU , **MOCANU Costel Iulian** International Scientific Workshop for Students Constanta Maritime University 22 May 2010 oral presentation
63. *Influence of corrosion on the state of stress which appear in the legs of a offshore structure*
 Oana – Mirela Dobrot, **Costel Iulian Mocanu**, The Annals of “ Dunarea de Jos” University of Galati, Fascicle IX, Metallurgy and Materials Science, The International Conference of Young Researchers, 18-20 May 2011.
64. *Numerical and experimental method for 2500 TF. align press columns*
 Dobrot Oana –Mirela, Tocu Florentina, **Mocanu Costel Iulian**, , “ Vasile Alecsandri” University of Bacau, The 9th International Conference OPROTEH 2011, May 24-26, 2011.
65. *Variation of stress created by waves and maritime currents in a leg of offshore platform*
 Dobrot Oana –Mirela, **Mocanu Costel Iulian**, “ Vasile Alecsandri” University of Bacau, The 9th International Conference OPROTEH 2011, May 24-26, 2011.
66. *Comparative study of stress ans trains that occur in structural elements made of composite materials considering the model with and without layers*
 Florentina Tocu, **Costel Iulian Mocanu**, “Vasile Alecsandri” University of Bacau, International Conference OPROTEH 2011, 24-26 mai, 2011.
67. *Influence of noise on the working environment on board ships*

F. Tocu, O.M. Dobrot, **C.I. Mocanu**, B.E.N.A, organize the : INTERNATIONAL ENVIRONMENTAL CONFERENCE “ENVIRONMENTAL CAPACITY BUILDING” 11-13 November 2011, Bucharest, Romania

68. *Comparative study to improve the mechanical characteristics of strenght on structures made of fibbers reinforced glas to the static and dynamic loads*

Florentina Tocu, Oana - Mirela Dobrot, Viorel Silviu Lefter, **Costel Iulian Mocanu**,
DANUBIA – ADRIA – SYMPOSIUM. 28 sep- 01oct 2011

CONTRACTE DE CERCETARE

- 1.** *Substantiation of requests regarding the building of low weight propellers.*
Beneficiary: RNR Bucharest 1986.
C. Valeriu, M. Modiga, L.Stoicescu, **C. I. Mocanu**, A. Lungu.
- 2.** *Static and dynamic measurements: board crane 1978.*
Beneficiary: IMN Galați 1988.
M. Modiga, L.Stoicescu, **C. I. Mocanu**, R. Lipșa.
- 3.** *Theoretical and experimental researches regarding the stress states within the structure of the metallic object of ships as result of the welding technological methods.*
Beneficiary: ICEPRONAV Galați 1988-1989
M. Modiga, E. Constantin, L. Stoicescu, **C. I. Mocanu**, I. Gavrilesu, I. Iordăchescu.
- 4.** *Substantiation of RNR norms and recommendations concerning the centring of shafts.*
Beneficiary: RNR Bucharest 1989-1992
M. Modiga, L. Stoicescu, I. Gavrilesu, **C. I. Mocanu**, D. Badea, D. Boazu.
- 5.** *Substantiation of RNR requests concerning the axial vibrations of shafts.*
Beneficiary: RNR București 1989-1993
S. Mușat, L. Stoicescu, **C. I. Mocanu**, I. Chirică, I. Gavrilesu.
- 6.** *Calculation methodology for manipulating the plane and volume sections in 2 Mai Shipyard Mangalia.*
Beneficiary: Ș.N. Mangalia 1993
C. I. Mocanu, L. Stoicescu, I. Chirică.
- 7.** *Finding the manoeuvre forces before repairs and equilibration of manoeuvres – centring of masts after repairs on Mircea Training Ship.*
Beneficiary: SANAB Brăila 1995.
M. Modiga, L. Stoicescu, **C. I. Mocanu**, D. Olaru.
- 8.** *Implementation of materials trial procedures, according to the quality assuring system, having as basis the cold rolled steel strips production.*
Beneficiary: Galfindband SA Galați 1994-1998
L. Stoicescu, M. Modiga, D. Olaru, D. Boazu, **C. I. Mocanu**.
- 9.** *Study on the transfer and launching of 16000 tdw chemical tanker.*
Beneficiary: S.N. Tulcea 1995.
C. I. Mocanu, I. Gavrilesu.
- 10.** *Measurements of twisting vibrations at river pusher tug.*
Beneficiary: SANAB Brăila 1996.
I. Chirică, R. Lipșa, **C. I. Mocanu**.
- 11.** *Study of collision effect on the metal structure of ships and establishing a calculation way of the resistance capacity of the hull elements in the area of impact to prevent leaking from tanks, respectively the water pollution.*
Beneficiary: ICEPRONAV Galați, 1996
I. Gavrilesu, L. Stoicescu, **C. I. Mocanu**, D. Boazu.
- 12.** *Studies and researches regarding the designing of a type of ship (Modelling and calculations of twist resistance, at shearing, static and dynamic response of the shafts).*

Beneficiary: MEI, Grant 1996-1998

I. Chiriță, L. Stoicescu, **C. I. Mocanu**, D. Boazu

- 13.** *Study of hydrodynamic forces that operate on the ship hull which operates with drift angle and angular swing speed.*

Beneficiary: ICEPRONAV Galați 1997.

I. Gavrilăscu, L. Stoicescu, **C.I. Mocanu**, D. Boazu.

- 14.** *Documentation regarding the experimental stand and the data acquisition equipment in order to carry out experimental shock trials on elastic models with big misalignments. Methodology regarding the carrying out of trials.*

Contract no. 224/1998.

Beneficiary: ICEPRONAV SA Galați.

C.I. Mocanu.

- 15.** *Experimental finding of traction breaking resistance, bending breaking resistance and of the longitudinal elasticity module for the PAFS fibre glass polyester material.*

Contract no. 233/1998.

Beneficiary: SPAT SA Galați.

C.I. Mocanu.

- 16.** *Study of the tension state and deformation in the shafts of 39.000 tdw tanker.*

Contract no. 212/1998.

Beneficiary Ș.N Galați SA

I. Chiriță, **C.I. Mocanu.**

- 17.** *Numeric simulation of free surface floating – investigation of wave-breaking phenomenon.*

Beneficiary: Hiroshima University by ANSTI, 1999.

L. Adrian, T. Munteanu, **C.I.Mocanu**, O. Ionaș.

- 18.** *Elaboration of programs set for the naval hydrodynamics.*

Beneficiary: CNCSIS București, 1999.

L. Adrian, **C.I. Mocanu**, T.Munteanu.

- 19.** *Shock trials on the simplified experimental model of a deck crane.*

Contract no. 241/1999.

Beneficiary: ICEPRONAV SA Galați.

C.I. Mocanu.

- 20.** *Numeric simulations for the DELFIN profile, with application in the shipbuilding field. Numeric simulations within BRAKE project (complex installation to protect against storms, energy production and environment protection)*

Contract 269/2000.

Beneficiary: S.C. ICEPRONAV S.A. Galați.

Director: professor doctor engineer Adrian Lungu; Collective: Fetecău Catalin, Munteanu Toader, **Mocanu Costel Iulian**, Dumitrescu Mariana.

- 21.** *Testing and calibration of mathematic model. Elaboration of simulation informatics system.*

Contract 273/2000

Beneficiary: The National Scientific Research Institute in the Labour and Social Security Field, INCSMPS București.

Director: professor doctor engineer Adrian Lungu; Collective: Fetecău Catalin, Cobzaru Alexandru, **Mocanu Costel Iulian.**

- 22.** *Calculation grids. Algorithm for generating adaptive grids - Ac4576/022.101.102.*

Contract 305/2001

Beneficiary: S.C. ICEPRONAV S.A. Galați.

Director: professor doctor engineer Adrian Lungu; Collective: **Mocanu Costel Iulian.**

- 23.** *Hull Form Optimisation for the Vessel CV 1100-Plus - AC 4510.1.6.*

Contract 275/2001.

Beneficiary: SCHIFFKO GmbH (Germany) by ICEPRONAV Galați.

Director: professor doctor engineer Adrian Lungu; Collective: **Mocanu Costel Iulian.**

24. *Product/Chemical Oil Tanker – 47500 tdw - Ac4563. Model Tests and Lines Optimisation. Hull Form Optimisation with CFD.*
Contract 303/2001.
Beneficiary: DAMEN Hoogezand (Netherlands) by ICEPRONAV Galați.
Director: professor doctor engineer Adrian Lungu; Collective: Fetecău Cătălin, **Mocanu Costel Iulian**, Domnișoru Leonard, Ionaș Ovidiu.
25. *Tensiometric measurements fix manoeuvres at the masting of Mircea training ship.*
Contract no. 42/2004
Beneficiary S.N Brăila and the Romanian Military Marine
C.I. Mocanu, I. Chirică.
26. *Analysis regarding the static and dynamic response of the SALONTA tug shafts after re-motorization.*
Contract no. 382/2005
Beneficiary SC SHIPYARD ATG SRL Giurgiu
C.I. Mocanu, I. Chirică.
27. *Experimental finding of the tension state of the dredger hull.*
Contract no. 409/2005
Beneficiary SC UZINSIDER ENGINEERING SA Galați
C.I. Mocanu, Doina Boazu, Sorin Blumer (ICEPRONAV Galați)
28. *Finding the bending properties (breaking bending resistance), traction properties (breaking bending resistance) and of the elastic constants (longitudinal elasticity module) for PAFS (fibre glass polyester).*
Contract no. 420/2005
Beneficiary SC Brateșul SA Galați
C.I. Mocanu, Alina Dimache
29. *Experimental finding of the bending and traction properties in order to certify the mechanical characteristics of materials (PAFS) and elaboration of a sheet set of mechanical trials.*
Contract no. 425/2005
Beneficiary SC Naval Service SRL Galați
C.I. Mocanu, Alina Dimache
30. *Experimental determination of the stress and deformations for a spherical tank of 1000 m³ using strain gauge method*
Contract no. 541/2008
Beneficiary SC Carborex SRL Bucuresti
C.I. Mocanu

ALTE ACTIVITATI SI CONTRIBUTII STIINTIFICE (PATENTE)

1. *Elaboration of measuring methodology of the specific deformations of the naval shafts in dynamic regime.*
Study for elaborating the doctor's degree paper.
2. *Roll force cell for measuring the strip forming force at the cold steel strips rolling mill in the Arcelor-Mittal Galați metallurgic plant.*
Study in the metallurgy lab of the Metallurgy Faculty Galați.
3. *Gauge for pressure measuring.*
Study carried out to elaborate a diploma project.
4. *Measurement system of the splintering force in the PVC splintering technological system.*
Study on contract basis at TCM (Machines Building Technology) department of the Faculty of Mechanics.
5. *New method for PAFS materials discretization*
Study for replacing old method for PAFS calculus.