

## Curriculum vitae

**1. Nume** FLOREA

**2. Prenume** OLIVIA ANA

**3. Data și locul nașterii** 14.04.1979, Brasov

**4. Cetățenie** romana

**5. Studii**

Universitare/postuniversitare/doctorat/postdoctorat

<b>Instituția</b>	Universitatea Transilvania Din Brasov Facultatea De Matematica Si Informatica, Sectia Matematica	Universitatea Transilvania Din Brasov, Facultatea De Matematica Si Informatica, Studii Aprofundate: “Metode Matematice Si Produse Software”	Universitatea Transilvania Din Brasov, Facultatea De Inginerie Mecanica – Prof. Dr. Ing. Mat. Adrian Postelnicu	Universitatea Transilvania din Brasov, Facultatea de Design de Produs si Mediu - Prof. Dr. Ing. Ileana Constanta Rosca
<b>Perioada: de la (anul) până la (anul)</b>	1997 - 2001	2001-2002	2004 – 2010	Apr.2014 - oct 2015
<b>Grade sau diplome obținute</b>	Licenta	Dizertatie	Doctorat	PostDoctorat

### 6. Alte specializări și calificări:

- 2014 – POSDRU/87/1.3/S/60891- DIDATEC, Program Postuniversitar de formare și dezvoltare profesională continua: Program de formare în blended – learning și tehnologii educaționale modern pentru învățământul universitar, în domeniul Inginerie electronica și telecomunicații, Științe ale educației, Universitatea Transilvania din Brașov (80 ore)
- 2013 – curs Teacher Training in English for Vocational Purposes, Centrul Cultural Britanic (30 ore)
- 2011 - 2012 – POSDRU/57/1.3/S/32629, Program de formare a cadrelor didactice: Dezvoltarea de competențe specific proiectării și implementării programelor de formare în tehnologia educației la distanță, Universitatea București.
- 2011 – 2012 POSDRU/57/1.3/S/26646 Program Postuniversitar în cadrul proiectului Formare continua de tip blended learning pentru cadrele didactice universitare, cursul: Învățământul centrat pe student – strategii de proiectare, implementare și evaluare instituțională, Modulul – Strategii centrate pe student, Universitatea din București, Facultatea de Psihologie și Științele Educației, (66 ore)
- 2004 - Diplomă Examinator Autorizat ECDL

**7. Titlul științific: Doctor in Inginerie Mecanica 2010**, titlul tezei: „Metode Analitice si Numerice in Rezolvarea Problemelor Sistemelor Dinamice Aplicate in Simularea Unor Componente Ale Sistemelor Hidraulice” – Conducator Stiintific Prof. Dr. Ing. Mat. Adrian Postelnicu, Facultatea de Inginerie Mecanica, Universitatea Transilvania Din Brasov

## 8. Experiența profesională si didactica

Funcția	Prof. Matematica	Prof. Matematica	Preparator universitar	Asistent universitar	Lector universitar
Perioada	2002-2004	2003-2004	2004-2007	2007 – 2011	2011 - prezent
Instituția	Colegiul National Unirea	Sc. Gen. Nr. 13	Univ. Transilvania Brasov, Facultatea De Matematica Si Informatica	Univ. Transilvania Brasov, Facultatea De Matematica Si Informatica	Univ. Transilvania Brasov, Facultatea De Matematica Si Informatica
Locul	Brasov	Brasov	Brasov	Brasov	Brasov

## 9. Locul de muncă actual

Universitatea Transilvania din Brasov,  
Facultatea de Matematica si Informatica,  
Departamentul de Matematica si Informatica

## 10. Vechime la locul de muncă actual

12 ani

## 11. Limbi străine cunoscute

Engleza, franceza

**12.1 Lucrări publicate:** Peste 50 de articole științifice publicate sau în curs de publicare, dintre care 10 în reviste cotate ISI Web of Science. (Anexa 1)

## 12.2. Cărți

O. FLOREA, C. IDA, *Aplicații practice ale sistemelor dinamice in inginerie*, Editura Lux Libris 2011, Braşov, 155 pag., ISBN 978-973-131-119-7.

## 12.3 Cursuri în format electronic

1. O. Florea – Matematici Speciale
2. O. Florea – Instruire asistată de calculator
3. O. Florea – Rezolvarea asistată de calculator a problemelor de matematică
4. O. Florea – Tehnologia informației și comunicației, Ed. Univ. Transilvania, 2012, 262 pag

## 12.4 Contracte de cercetare

Grant	Function	Period
Romanian Academy, Politechnica University of Bucharest, interacademic bilateral România-Belarus, Project: <i>Applications of Finsler–Lagrange geometric methods to the field theory and to the physics of thin films</i> , leader of project: Prof. dr. Vladimir Balan	Member	2014-2016

Partnerships in Priority Domains (PN II), financed by ANCS, CNDI - UEFISCDI, under the project nr. 130/2012: HEART-High Performance Computing of PersonAlized CaRdio ComponenT Models, leader of project. Assoc. Prof. Ph.D Eng. Ctin Suci	Member	2012-2015
Cncsis Project 405/2006: <i>The dynamical modeling of the blood flow in the Willis circle with clinical applications in the cerebral accident</i> , leader of project Prof. PhD. Eng. Adrian Postelnicu	Member	2006 – 2008
CEEX Project, Nr. 2-Cex06-8-85 / 19.09.2006: <i>Models and indicators for evaluating the quality of scientific research in universities in the context of knowledge-based society</i> Leader of project Prof. PhD. Eng. Elene Helerea	Member	2006-2008

### 13. Membru în asociații profesionale și științifice :

membru al Societății de Științe Matematice din România

### 14. Alte competențe (coordonare specializări, discipline, laboratoare)

Coordonator Program Conversia Cadrelor didactice din Invatamantul preuniversitar in Matematica

### 15. Alte mențiuni

#### 15.1. Participări la activități didactice în universități din țară și străinătate

- 2013 - Mobilitate de Predare în cadrul Programului Erasmus la Slovak University of Technology in Bratislava, Faculty of Mechanical Engineering, Slovakia (2 weeks)
- 2012 - Mobilitate de Predare în cadrul Programului Erasmus la Slovak University of Technology in Bratislava, Faculty of Mechanical Engineering, Slovakia (2 weeks)

#### 15.2. Organizare de evenimente științifice (conferințe, workshop-uri, etc.)

- 2016 Membru în comitetul de organizare MACOS'16 - International Conference on Mathematics and Computer Science, 2016, 8-10 Septembrie, Universitatea Transilvania din Brașov
- 2014 Membru în comitetul de organizare MACOS'14 - International Conference on Mathematics and Computer Science, 2014, 26-28 Iunie, Universitatea Transilvania din Brașov
- 2013 Membru în comitetul de organizare Autumn Scientific Session of Academy of Scientists, Eco - Economy and the Durable Development, 20-21 Septembrie 2013, Brasov, Universitatea Transilvania din Brașov
- 2011 Membru în comitetul de organizare of The Seventh Congress of Romanian Mathematicians, 2011, June 29- July 5, Transilvania University of Brasov, Romania

2006 Membru în comitetul de organizare al Caius Iacob Conference Fluid Mechanics and its Technical Applications, 2006, 19-21 October, Transilvania University of Brasov, Romania16. Premii și distincții

### **17. Experiența managerială**

2016 - Prodecan responsabil cu activitatea studenților, asigurarea calității și internaționalizare

**Data:**

**7.06.2016**

**Lect. Univ. Dr. Olivia Ana Florea**



## LISTA ARTICOLELOR PUBLICATE

### Lect. Univ. dr. Olivia Ana FLOREA

#### A. Lista celor 10 lucrări cele mai relevante pentru realizările profesionale

1. M. Marin, R.P. Agarwal, **O. Florea**, *A nonlinear equation for fluids in multiconnected domain*, Boundary Value Problems 2015, 2015:198 doi:10.1186/s13661-015-0461-y
2. **O. Florea**, *A novel approach of the conformal mappings with applications in biotribology*, Universitatea Ovidius – Constanța, România, Analele Științifice ale Universității Ovidius Constanța, Seria Matematică, volumul 23, fascicula 1, 2015, pp. 99-114
3. M. Marin, **O. Florea**, S.R. Mahmoud, *A Result regarding the Seismic Dislocations in Microstretch Thermoelastic Bodies*, Mathematical Problems in Engineering, Volume 2015, Article ID 850261, 8 pages
4. **O. Florea**, I. Rosca, *Stokes' Second Problem for a Micropolar Fluid with Slip*, PLOS One, July 10, 2015
5. A. Ishkhanyan, **O. Florea**, E. Ovsiyuk, V. Red'kov, *Dirac-Kähler particle in Riemann spherical space: boson interpretation*, Canadian Journal Physics, Volume 92, 2015
6. M. Neagu, **O. Florea**, O. Veko, E. Ovsiyuk, V. Red'kov, *From quantum dynamics of spin 1 particle in Coulomb field to jet geometric-physical objects*, Applied Sciences, Vol. 16, 2014, pp. 72-98.
7. M. Marin, **O. Florea**, *On temporal behavior of solutions in Thermoelasticity of porous micropolar bodies*, Analele Științifice ale Universității Ovidius Constanța, Vol. 22(1), 2014, pp. 169-188
8. **O. Florea**, I.C. Rosca, *A novel approach of the Stoke's second problem for the synovial fluid in knee osteoarthritis*, Osteoarthritis And Cartilage Volume: 22 Published: APR 2014
9. **O. Florea**, *A novel approach for computing pressure drop in healthy and mildly stenosed arteries*, Proc. of the 4th IEEE International Conference on E-Health and Bioengineering, 2013, ISBN: 978-1-4799-2372-4
10. M. Lupu, **O. Florea**, C. Lupu, *The Structural Influence Of The Forces Of The Stability Of Dynamical Systems*, An. St. Univ. Ovidius Constanța, Seria Matematica, Vol. 17(3), 2009, Pp. 159-169, Issn 1224-1784

#### B. Teza de doctorat:

*Metode analitice și numerice în rezolvarea problemelor sistemelor dinamice aplicate în simularea unor componente ale sistemelor hidraulice*, coordonator Prof. dr. ing. Mat. Adrian Postelnicu, Universitatea Transilvania din Brașov

#### C. Cărți

1. **O. Florea**, C. Ida, *Aplicații practice ale sistemelor dinamice în inginerie*, Editura Lux Libris 2011, Brașov, 155 pag., ISBN 978-973-131-119-7.

#### D. Lucrări indexate ISI Web of Science

1. M. Marin, R.P. Agarwal, **O. Florea**, *A nonlinear equation for fluids in multiconnected domain*, Boundary Value Problems 2015, 2015:198 doi:10.1186/s13661-015-0461-y
2. **O. Florea**, *A novel approach of the conformal mappings with applications in biotribology*, Universitatea Ovidius – Constanța, România, Analele Științifice ale Universității Ovidius Constanța, Seria Matematică, volumul 23, fascicola 1, 2015, pp. 99-114
3. M. Marin, **O. Florea**, S.R. Mahmoud, *A Result regarding the Seismic Dislocations in Microstretch Thermoelastic Bodies*, Mathematical Problems in Engineering, Volume 2015
4. **O. Florea**, I. Rosca, *Stokes' Second Problem for a Micropolar Fluid with Slip*, PLOS One, July 10, 2015
5. A. Ishkhanyan, **O. Florea**, E. Ovsiyuk, V. Red'kov, *Dirac-Kähler particle in Riemann spherical space: boson interpretation*, Canadian Journal Physics, Volume 92, 2015
6. M. Marin, **O. Florea**, *On temporal behavior of solutions in Thermoelasticity of porous micropolar bodies*, Analele Științifice ale Universității Ovidius Constanta, Vol. 22(1), 2014, pp. 169-188
7. **O. Florea**, I.C. Rosca, *A novel approach of the Stoke's second problem for the synovial fluid in knee osteoarthritis*, Osteoarthritis And Cartilage Volume: 22 Published: APR 2014
8. **O. Florea**, *A novel approach for computing pressure drop in healthy and mildly stenosed arteries*, Proc. of the 4th IEEE International Conference on E-Health and Bioengineering, 2013, ISBN: 978-1-4799-2372-4
9. A. Postelnicu, C. Falup Pecurariu, **O. Florea**, O. Falup Pecurariu, R. Ilea, *Computerized Modelling Of The Willis Circle Using Quemada Model*, European Journal Of Neurology, Vol. 15, 2008, Pp. 255, 12th Congress Of The European Federation Of Neurological Societies, Madrid, 2008
10. M. Lupu, **O. Florea**, C. Lupu, *The Structural Influence Of The Forces Of The Stability Of Dynamical Systems*, An. St. Univ. Ovidius Constanta, Seria Matematica, Vol. 17(3), 2009, Pp. 159-169, Issn 1224-1784

#### E. Lucrări indexate BDI

1. **O. Florea**, I. Rosca, *The mechanical behavior and the mathematical modeling of an intervertebral disc*, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering Vol. 58, Issue II, June, 2015
2. M. Neagu, **O. Florea**, O. Veko, E. Ovsiyuk, V. Red'kov, *From quantum dynamics of spin 1 particle in Coulomb field to jet geometric-physical objects*, Applied Sciences, Vol. 16, 2014, pp. 72-98.
3. E. Ovsiyuk, **O. Florea**, A. Chichurin, V. Red'kov, *Electromagnetic Field in Schwarzschild Black Hole Background. Analytical Treatment and Numerical Simulation*, Computer Algebra Systems in Teaching and Research, Vol IV (2013), Nr. 1, ISSN 2300-7397, Siedlce, Poland
4. **O. Florea**, C. Ivascu, *A Practical Approach Of The Traffic Flow Using Fluid Dynamics*, Bulletin Of The Transilvania University Of , Vol. 6(55), 2013, pp. 1-10
5. **O. Florea**, *The study of a nonlinear system in the case with two oscillating mass*, Journal of Applied Mathematics, Vol V(2012) nr. 2, ISSN 1337-6365, Bratislava, Slovakia

6. **O. Florea** - *Mathematical Modeling Of A Hydraulic System Equipped With A Valve With Negative Coverage*, Bulletin Of The Transilvania University Of Brasov - Series III: Mathematics. Informatics. Physics, Vol 3(52) - 2010, pp. 27-32
7. M. Lupu, **O. Florea**, C. Lupu - *Studies and applications of absolute stability in the automatic regulation case of the nonlinear dynamical systems*, ROMAI JOURNAL, VOL. 6, 2(2010), pp. 185–198
8. **O. Florea**, *Mathematical Modeling Of The Flow Process For A Hydraulic System Of Automatic Regulation*, Analele Univ. Oradea, Fasc. Management And Technological Engineering, Volume VIII(XVIII), 2009, Pp. 238-235, Issn 1583-0691
9. **O. Florea**, *Hydraulic Servomechanisms Installed In Ideal And Real Conditions - Mathematical Modeling And Numerical Simulation*, An. Univ. Ovidius, Seria Ing. Mecanica, Vol. X, Nr. 1, 2008, Pp. 80-86, Issn 12241776
10. **O. Florea**, *Study On A Mathematical Model Regarding The Automatic Regulation Of A Dynamic System*, Bulletin Of The Transilvania University Of Brasov, Seria Matematica, Vol 1(50) - 2008, Pp. 465-468, Issn 2065-2151
11. **O. Florea**, *Laminar Movement Of A Viscous Incompressible Fluid In A Plane, Parallel Stream*, Bulletin Of The Transilvania University Of Brasov Series B, Romania, 2005 Vol. 12 (47)
12. Postelnicu, C. Falup Pecurariu, **O. Florea**, *Steady Flow In The Willis Circle Using A Quemada Model*, Bulletin Of Transilvania University , 2006 Vol. 13(48)
13. **O. Florea**, *Mathematical Modeling Of A Hydraulic System Equipped With A Pipe Rupture Valve*, Bulletin Of Transilvania University, 2006 Vol. 13(48)
14. M. Marin., **O. Florea**, *A Generalization Of The Cowin And Nunziato's Domain*, Bulletin Of Transilvania University, 2006 Vol. 13(48)

#### **F. Lucrări publicate în volumele unor conferințe internaționale**

1. **O. Florea**, *Graphical Representation Of Implicit Functions In Maple*, Aplimat 2016, Proceedings Of 15th Conference On Applied Mathematics, Bratislava, Slovak Republic
2. D. Şova, **O. Florea**, *Application Of Non-Equilibrium Thermodynamics To The Estimation Of Phenomenological Transfer Coefficients In Convective Wood Drying*, Proceedings Of The 6th International Conference "Computational Mechanics And Virtual Engineering" Comec 2015: 15 - 16 October 2015, Brasov, Romania
3. M. Lupu, **O. Florea**, C. Lupu, *The absolute stabilization of the ships course in the case of rolling oscilations*, The 5th International Conference "Advanced Composite Materials Engineering" and The 3rd International Conference "Research & Innovation in Engineering", „COMAT 2014”, 16-17 October 2014, Braşov, Romania
4. **O. Florea**, I. Rosca, *The mechanical behavior and the mathematical modeling in the case of the vibrations induced to the spine*, The 5th International Conference "Advanced Composite Materials Engineering" and The 3rd International Conference "Research & Innovation in Engineering", „COMAT 2014”, 16-17 October 2014, Braşov, Romania
5. **O. Florea**, *Modelling and simulation environment for 3d biomechanical systems*, Aplimat 2015, Proceedings Of 14th Conference On Applied Mathematics, February 3 5, 2015, Bratislava, Slovak Republic

6. E. Ovsiyuk, **O. Florea**, A. Chichurin, V. Red'kov, *Electromagnetic field in Schwarzschild black hole background. Analytical treatment and numerical simulation*, The 7th International Workshop on CASTR, Poland, 22-25 September, 2013
7. **O. Florea**, *The Numerical And Analytical Analysis Of Some Practical Problems With High Impact In The Engineering Learning*, 12th International Conference On Applied Mathematics - Aplimat 2013, February 5 - 7, 2013, Bratislava, Slovakia, Isbn 978-80-227-3865-1
8. M.A.P. Purcaru, M. Tarnoveanu, **O. Florea**, *On General Conformal Metrical N-Linear Connections On Dual Bundle Of K-Tangent Bundle*, Nternational Conference Of Scientific Paper Afases 2012 Brasov, 24-26 May 2012, Organised By: "Henri Coanda" Air Force Academy Academy Romania And "General M.R. Stefanik" Armed Forces Slovak Republic
9. **O. Florea**, M.A.P. Purcaru, *Mathematical Modeling And The Stability Study Of Some Chemical Phenomena*, Nternational Conference Of Scientific Paper Afases 2012 Brasov, 24-26 May 2012, Organised By: "Henri Coanda" Air Force Academy Academy Romania And "General M.R. Stefanik" Armed Forces Slovak Republic
10. **O. Florea**, *The Study Of A Nonlinear System In The Case With Two Oscillating Mass*, 11th International Conference On Applied Mathematics - Aplimat 2012, February 7 - 9, 2012, Bratislava, Slovakia, Isbn 978-80-89313-58-7
11. **O. Florea**, M. Purcaru: *A geometrical study of the behavior of some dynamical systems*, Proceedings of the Internatonal Conference on theory and applications of mathematics and informatics, ICTAMI 2011, Alba Iulia, pp. 159 – 168
12. C. Ida, **O. Florea**: *On the Lagrangian formalism and the stability of a dynamical system*, Proceedings of the Internatonal Conference on theory and applications of mathematics and informatics, ICTAMI 2011, Alba Iulia, pp. 359 - 370
13. M. Lupu, E. Scheiber, **O. Florea**, *Automatic Regulation Of Absolute Stability For The Dynamics Tools Cutting Machine Case In Composite Material Structure*, 3rd International Conference Advance Composite Materials Engineering, COMAT 2010, 27-29 Oct., Brasov, under FISITA patronage, Vol. II, pp. 246-255
14. M. Lupu, **O. Florea**, C. Lupu - *Studies and applications of absolute stability in the automatic regulation case of the nonlinear dynamical systems*, The 18th Conference On Applied And Industrial Mathematics, Caim, 2010, October 14-17, Iasi, Romania
15. M. Lupu, **O. Florea**, C. Lupu, *Theoretical And Practical Methods Regarding The Absorbitors Of Oscillations And The Multi-Model Automatic Regulation Of Systems*, Proceedings Of The 5th International Conference Dynamical Systems And Applications, Ovidius University Annals Series: Civil Engineering, Volume 1, Special Issue 11, (2009) Pg. 63-72
16. **O. Florea**, *Mathematical Model Of A Hydraulic Model With Applications In The Vibrations Of The Mechanical Machines*, Proceedings Of The Afases 2009 - Scientific Research And Education In The Air Force, Pp. 887-894, Isbn 978-973-8415-67-6
17. M. Marin, **O. Florea**, *A New Approach Of The Domain Of Influence For The Theory Of Microstretch Elastic Materials*, Iwcmm'19, 1-4 September 2009, Constanta, Pp. 17-18
18. **O. Florea**, *Mathematical Models And The Dynamics Optimization For Hidraulic Servomechanisms Installed In Ideal Conditions*, Proceedings Of International Conferences Nav-Mar-Edu, 2008, Pp. 337 - 348, Isbn 978-973-8303-84-3



19. M. Lupu, **O. Florea** , *Studies And Contributions In The Equilibrium State Stability Of A Solid Body Floating On A Liquid Surface*, Proceedings Of International Conference Nav-Mar-Edu, 2008, Pp 349 - 356, Isbn 978-973-8303-84-3
20. **O. Florea**, *Stability Study Of A System Equipped With A Hydraulic Valve*, Proceedings Of The International Conference "Scientific Research And Education In The Air Force", Pp 732-739, Isbn 978-973-8415-56-0
21. M. Lupu, **O. Florea**, *Complex Mathematical Analysis Applied On Potential Theory And Dynamical Systems In Engineering Problems*, Vol. 6 (Part I), Proceedings Challenges In Higher Education And Research In The 21th Centuri, June 4-7, 2008, Sozopol, Bulgaria Heron Press Ltd 2008, Pp. 237-245, Isbn 978-954-580-247-8
22. M. Lupu, **O. Florea** – *The mass and heat transfer study in the stationary movement of the viscous fluids between the coaxial cylinders nonconcentric*, Proceedings “International Session Of Scientific Papers – Air Force Academy – Henri Coanda” Brasov, 2007, Isbn 978-973-8415-45-4
23. A. Postelnicu, **O. Florea**, C. Falup Pecurariu, *Steady Flow In The Willis Circle Using A Quemada Model*, PAMM Journal, pp. 4020021-4020022, Published Online: Oct 6 2008 6:37am Doi: 10.1002/Pamm.20070058, Sixth International Congress On Industrial Applied Mathematics (Iciam07) And Gamm Annual Meeting, Zürich 2007
24. **O. Florea** - *Mathematical Models And The Dynamics Optimization For Hidraulic Servomechanisms Installed In Ideal Conditions*, Proceedings Nav-Mar-Edu, Constanta, 2007, Isbn 978-973-8303-84-3
25. M. Lupu, **O. Florea** - *Studies And Contributions In The Equilibrium State Stability Of A Solid Body Floating On A Liquid Surface*, Proceedings Nav-Mar-Edu, Constanta, 2007, Isbn 978-973-8303-84-3
26. **O. Florea** - *About The Solutions Of Navier-Stokes Equation For The Symmetrical Axial Flow Of Compressible Gases* , Air Forces Academy, Henri Coandă, Braşov, May 2006, Issn 1453-0139
27. M. Lupu, **O. Florea**, *Exact Solutions And Analytical Methods For Special Limit Problems Applied In Continuous Environments Mechanics*, International Symposium On Complex Function Theory And Applications, Transilvania University Of Brasov, 2006
28. **O. Florea**, *Mathematical Model For Some Following Type Hydraulic Systems Dynamic Problems*, International Conference Nav-Mar-Edu, Naval Academy, Constanta, Romania June 2005, Isbn 973-8303-54-0 On Cd
29. **O. Florea**, C. Ida, *Lagrangian Formalism Of A Dynamic System*, Air Forces Academy, Henri Coandă, Braşov, November 2004, Issn1453-0139

**Data: 7.06.2016**

**Lect. Univ. dr. Olivia Florea**

