Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Mihaela RACILĂ**

E-mail mihaela.racila@edu.ucv.ro

Orcid ID: https://orcid.org/0000-0002-8277-1487

Scopus ID: https://www.scopus.com/authid/detail.uri?authorId=8966995400

Class Website: https://mracila.com

Work experience

Dates **Since 2012**

Occupation or position held **Associate Professor**

Department of Applied Mathematics, University of Craiova

https://www.ucv.ro/departamente_academice/dma/

Main activities and responsibilities

Research and teaching

Teaching Courses, Seminars and Project work class:

- Mathematical Analysis for the first year students of Faculty of Automation, Systems Engineering (specializations: Automation and Applied Informatics, Multimedia Systems Engineering), Mechatronics and Robotics
- Numerical Methods for the first year students, second semester, on the licence fields of Systems Engineering (specializations: Automation and Applied Informatics, Multimedia Systems Engineering), Mechatronics and Robotics

Name and address of employer University of Craiova, 13, A.I. Cuza Street, 200585, Craiova, Dolj, Romania

Dates **September 2007** to **September 2012**

Occupation or position held **Lecturer**

Department of Applied Mathematics, University of Craiova

https://www.ucv.ro/departamente_academice/dma/

Main activities and responsibilities

Research and teaching

Teaching Courses, Seminars and Project work class:

- Mathematical Analysis for the first year students of Faculty of Automation, Systems Engineering (specializations: Automation and Applied Informatics, Multimedia Systems Engineering), Mechatronics and Robotics
- Numerical Methods for the first year students, second semester, on the licence fields of Systems Engineering (specializations: Automation and Applied Informatics, Multimedia Systems Engineering), Mechatronics and Robotics

Name and address of employer University of Craiova, 13, A.I. Cuza Street, 200585, Craiova, Dolj, Romania

Dates **September 2004** to **September 2006**

Occupation or position held **ATER (Attaché Temporaire à l'Enseignement et à la Recherche)**

Laboratoire de Mathématiques, University of Franche-Comté, France

http://lmb.univ-fcomte.fr/

Main activities and responsibilities	Research and teaching Teaching Courses, Seminars and Project work class: • Numerical Algebra for the students in 2nd year of Mathematical Licence, University of Franche-Comté, France (2004-2005) • Mathematical Analysis for the 1st year students in Economic Science (Licence), University of Franche-Comté, France (2004-2005) • Numerical Approximations of EDP for the students in 1st year of Master of Mathematics, University of Franche-Comté, France (2005-2006) • Linear Algebra for the students in 1st , 2nd and 3rd year in Economic Science (Licence), University of Franche-Comte, France (2005-2006)
Name and address of employer	Université de Franche-Comté, 16 Route de Gray, 25000 Besançon, France
Dates	**September 1997** to **September 2007**
Occupation or position held	**Assistant Professor** Department of Applied Mathematics, University of Craiova https://www.ucv.ro/departamente_academice/dma/
Main activities and responsibilities	Research and teaching Teaching Seminars: • Mathematical Analysis I: Differential Calculus of Several Variables for the first year students of Faculty of Mechanics and Electrotechnics, University of Craiova, Romania • Mathematical Analysis II: Integral Calculus for the first year students of Faculty of Mechanics and Electrotechnics, University of Craiova, Romania
Name and address of employer	University of Craiova, 13, A.I. Cuza Street, 200585, Craiova, Dolj, Romania
Dates	**September 1995** to **September 1997**
Occupation or position held	**Junior Assistant Professor** Department of Applied Mathematics, University of Craiova https://www.ucv.ro/departamente_academice/dma/
Main activities and responsibilities	Research and teaching Teaching Seminars: • Mathematical Analysis I: Differential Calculus of Several Variables for the first year students of Faculty of Mechanics, University of Craiova, Romania • Mathematical Analysis II: Integral Calculus for the first year students of Faculty of Mechanics, University of Craiova, Romania
Name and address of employer	University of Craiova, 13, A.I. Cuza Street, 200585, Craiova, Dolj, Romania

Education and training

Dates	**September 2002 – November 2005**
Title of qualification awarded	**Doctor in Mathematics**
Principal subjects/occupational skills covered	Applied Mathematical and Computational Sciences
Name and type of organisation providing education and training	University of Franche-Comté, France (Diploma no. 4663766/2006200405102) and University of Craiova (Diploma no. Seria D, Nr. 0000339 / 89/ 10.05.2006, Ordinul M.I. nr. 3824/03.05.2006) Title: *Elaboration d'une modélisation mathématique du transfert multi échelle des signaux mécaniques dans l'os cortical humain. Aspects théoriques et simulations numériques* Dissertation Advisors: Prof. J.M. Crolet (University of Franche-Comté, Besançon, France) and Prof. C. Niculescu (University of Craiova, Romania) Members of the commission : D. Cioranescu, Univ. Paris VI (France), M. El Hatri, Univ. Fès (Maroc), M.C. Ho Ba Tho, Univ. Compiègne (France), M. Panfilov, Univ. Nancy I (France), J.N Pernin, Univ. Besançon (France), V. Radulescu, Univ. Craiova (Romania) For this thesis I have received the mention: très honorable.

Dates	**March 1996 – June 1996**
Title of qualification awarded	**M.S. (DEA) dissertation in Applied Mathematics**
Principal subjects/occupational skills covered	Applied Mathematics, Computational Sciences
Name and type of organisation providing education and training	University of Franche-Comté, France Grade obtained : 16 (out of 20), on the French grading system and 10 (out of 10), on the Romanian grading system
Dates	**October 1995 – June 1996**
Title of qualification awarded	**M.S. in Mathematics**
Principal subjects/occupational skills covered	Dynamical Systems, Variational Methods
Name and type of organisation providing education and training	University of Craiova
Dates	**October 1993 – June 1994**
Title of qualification awarded	**Diploma of Maîtrise de Mathématiques – mention Ingénierie Mathématique**
Principal subjects/occupational skills covered	Applied Mathematics
Name and type of organisation providing education and training	University of Jean Monnet, Saint Etienne, France
Dates	**October 1990 – June 1995**
Title of qualification awarded	**B.S. in Mathematics**
Principal subjects/occupational skills covered	Mathematical Analysis, Algebra, Geometry, Statistics, IT, Pedagogy
Name and type of organisation providing education and training	University of Craiova
Dates	**September 1986 – June 1990**
Title of qualification awarded	**Graduation Diploma**
Principal subjects/occupational skills covered	Mathematics and Informatics
Name and type of organisation providing education and training	Nicolae Balcescu High School, Craiova

Personal skills and competences

Mother tongue(s): **Romanian**

Other language(s)

Self-assessment / Official certificate	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	B2	Independent user	B2	Independent user	B1	Independent user	B1	Independent user	B2	Independent user
French	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
(*) Common European Framework of Reference for Languages,

Social skills and competences	Works well in teams, sociable, communicative, conscientious, responsible, creative, determined, well organized, dynamic, attention to details.
Computer skills and competences	Operating systems: Linux, Windows Programming languages: Fortran 77, C++ Calculus software: Scilab, Matlab, Mathematica, Maple FEM software: Modulef, Méfisto, Comsol Text processing: Word, Latex, Sciword

Domains of competence

Numerical Analysis; Partial Differential Equations; Computational Methods

Modelization, programming and numerical simulation

Homogenization of strongly heterogeneous media: multiple scale method

Biomedical Applications: Modelling of human cortical bone; Mechanical properties of the cortical bone at micro and macro level; Role of the bony fluid in the remodelling process; investigations and already realized applications on human cortical bone
Finite Element Analysis

Research Grants

As grant director:

Research project for researchers' reintegration, RP Program, code CNCSIS 7 (contract no. 1/03.11.2008): *"Multi scale mathematical modelling of the coupled phenomena in the porous environment: application to the bone remodelling - the case of healthy and pathological bone",* duration 2 years, **2009-2011**, financed by CNCSIS, amount: 414.596 RON (112.527 €).

AUF Post-doctoral fellowship (Agence Universitaire de la Francophonie) at the University of Franche-Comté, Besançon, France - francophone competition for research projects, **September 2007 – July 2008,** financed by AUF, amount: 10.000 €.

As member in the research team:

Dynamical systems and their applications, **FP7-PEOPLE-2012-IRSES-316338**, director: Prof. Univ. Dr. Gheorghe Tigan, Universitatea de Vest Timisoara, director UCV: Conf. Univ. Dr. Dana Constantinescu, **2012-2016,** amount**:** 47.700 €.

Miotheris Project (*Micro Innovative OncoTherapeutics Injection System*), duration: **2010-2015**, France; University of Franche-Comté Director: Prof. Jean-Marie Crolet, financed by OSEO, France.
GDR "Mécanotransduction" (GDR3162), duration : 3 years, **2008-2011**, financed by CNRS (Centre National de la Recherche Scientifique) France, project manager: Prof. Thierry Hoc (MSSMat, UMR8579, France), Ecole Centrale de Paris.
Grant: 2766/14.03.2005, theme 14, code CNCSIS 80: "Integration in the European space of the master Romanian education: promoting the interdisciplinary research through the study of not-linear analysis and of the evolution problems", duration 2 years, **2005-2007**, financed by CNCSIS, project manager: Prof. Univ. Dr. Constantin Niculescu, University of Craiova, Faculty of Mathematics and Informatics.
Project IT2B, France, "Caractérisation et modélisation multi échelles de l'os (CMOS)"duration: 2 years, **2004-2006**, financed by CNRS (Centre National de la Recherche Scientifique) France, project manager: Prof. MC Ho Ba Tho, Université de Technologie de Compiegne, France.
Grant: 2766/14.03.2005, theme 16, code CNCSIS 81: "The geometry of Finsler, Lagrange and Hamilton subspaces. Applications in mechanics.", duration 1 year, **2005-2006**, financed by CNCSIS, project manager: Conf. Univ. Dr. Marcela Popescu, University of Craiova, Department of Applied Mathematics.

Research Experience

1993-1994: TEMPUS Scholarship, University Jean Monnet of St Etienne, France (Diploma of Maîtrise de Mathématiques).
1996: TEMPUS Scholarship, University of Franche-Comté, Besançon, France (M.S. dissertation in Applied Mathematics).
2003-2004: ERASMUS Scholarship, University of Franche-Comté, Besançon, France (Ph. D in Applied Mathematics).
2004-2006:ATER (Teaching and Research Assistant and Ph. D in Applied Mathematics (until november 2005)), University of Franche-Comté, Besançon, France.
2006-2007: Post-doctoral research at the University of Franche-Comté, Besançon, France.
2007-2008: AUF Post-doctoral fellowship at the University of Franche-Comté, Besançon, France.

Additional informations

Memberships

Romanian Mathematical Society (SSMR) - since 1996

European Women in Mathematics (EWM) - since 1998

Society for Industrial and Applied Mathematics (SIAM) - since 2006

American Mathematical Society (AMS) - since 2006

Société de Mathématiques Appliquées et Industrielles (SMAI) - since 2006

European Mathematical Society (EMS) - since 2006

Association Nationale des Docteurs en Science (ANDES) - since 2006

Société de Biomécanique (SB) - since 2007
CSMA - since 2007
American Nano Society – since 2011

Awards

UEFISCDI awards for 9 ISI papers.
2 scientific communications at international conferences, financed by the **CNCS Mobility MC Program** (in 2008).

Citations

Over 160 citations of the results of my research in international papers, of which 46 in ISI journals, with an impact factor/AIS over 0.5.

Qualification in France (national contest) as an Associate Professor, CNU (Conseil National des Universités) sections : 26 (Mathématiques Appliquées) and 60 (Mécanique) – No. of qualifications: MCF-2011-26-11226171536 and MCF-2011-60-11260171536.

Grants

8 research grants – 3 nationals (of which 1 as project manager) and 5 internationals (of which 1 as project manager).

Conferences attended

Over 60 conferences (49 are internationals).

Invited communications

3 invited lectures at universities from France : Paris 12 Val de Marne UMR 7052 (April 22, 2008); Ecole Centrale de Paris and Laboratoire Jacques-Louis Lions, Université Paris 6 (January 16, 2006) and one at the Belarusian State University, Minsk, Belarus (June 29, 2015). (http://km.mmf.bsu.by/events/150629-romania.html)

Publications

Over 50 published articles in journals from within the country and from abroad (ISI and BDI journals).
Over 15 published articles in proceedings of the internationals conferences (since 2005).
Over 10 books and chapters in books (since 2005).

Research trainings

12-16 of July 2021: Summer school on Qualitative Theory of Piecewise Ordinary Differential Equations.
march – april 2017: Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).
23 of June – 23 of July 2015: Belarusian State University, Minsk, Belarus (invited by Prof.Valery Gromak)
10 – 19 of April 2015: Erasmus, Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).
March – July 2011: Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).
14-21 of March 2010 : Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).
4-23 of October 2010 : Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).
25 of October-1st of November 2010 : Laboratoire de Biomécanique et Mécanique des Chocs, Université de Lyon 1, France (invited by Prof. Laurence CHEZE).
1-12 of November 2010 : Ecole Nationale Supérieure de Géologie, Nancy, France (invited by Prof. M. Panfilov).
15-22 of November 2010 : Ecole Supérieure de Technologie de Fès, Maroc (invited by Prof. M. El Hatri)
22-30 of November 2010 : Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).
16-23 of March 2009 : Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).
30 of May – 6 of June 2009 : Laboratoire de Biomécanique et Mécanique des Chocs, Université de Lyon 1, France (invited by Prof. Laurence CHEZE).
22 – 29 of June 2009 : Instituto Ortopedico Rizzoli, Bologna, Italy (invited by Dr. Ing. Marco Viceconti).
6-16 of November 2009: Université de Franche-Comté, Besançon, France (invited by Prof. J.M. Crolet).

Other activities

Thesis jury member at the University of Franche-Comte, France:

- July the 19th 2007 – Mr. R. Mahraoui thesis
- October the 15th 2010 – Mr. J. M. Dialo thesis (http://tel.archives-ouvertes.fr/docs/00/54/57/70/PDF/ex-these.pdf)
- March the 17th 2010 – Mr. Walid Miladi thesis
- November the 30th 2010 – Mrs. C.M. Stroe thesis (http://hal.archives-ouvertes.fr/tel-00563580)

Doctoral co-framing at the University of Franche-Comte, France (2006-2010) in a proportion of 25% (Mrs. Cristina Stroe).
Doctoral co-framing at the University of Franche-Comte, France (2008-2010) in a proportion of 25% (Mr. Walid Miladi).
M. S. Dissertation co-framing at the University of Franche-Comte, France:

- SerchiValéria, february 2012 - july 2012
- Barthold-Malat, october 2010 - juin 2011
- Esther Baruffini, march-juin 2011

Member of the committee for 3 job interviews and examinations at the Department of Applied Mathematics, University of Craiova.
Preparing and guiding high school students in order to pass the baccalaureate exam (every year, at the initiative of the University of Craiova, starting with 2014).
Responsible for the scientific seminary of the Numerical Analysis and Scientific Calculus team of the University of Besançon, France (2007-2008).
Member of the organisation committee of three workshops in Besançon, France (in 2007 - Technique de l'Ingénieur pour la reconstruction osseuse et cutanée, 2008 - Tissue Repair and 2010 - New biomedical advances in Franche-Comté).

Member of the research group OSPR2 (Remodelage et Régénération), Franche-Comté, France.
Articles expertise for: Real Analysis Exchange magazine, Michigan State University; Journal of the Mechanical Behavior of Biomedical Materials; International Journal for Numerical Methods in Biomedical Engineering; Applied Mathematical Modelling.
Realized informatics applications: 1) SiNuPrOs – Simulation Numerique des Proprietes de l'Os (in Matlab), informatic program for the calculus of the mechanical properties of the human cortical bone at each of its architectural levels; 2) SiNuPrOs-Fast (in Excel) that serves for the determination of cortical architectures corresponding to experimental measured mechanical properties at a macroscopic level.
Creating educational content:

- Worksheets for seminars and project work class (also method sheets, review sheets)
- Exam question models and multiple-choice test models for exams
- Algorithms and programs in C
- Supportive slides for lectures, seminars and project work class
- Manuals for courses, seminars and project work class
- ADL-type sheets (Advantages, Disadvantages, Limitations) for numerical methods taught to engineering students
- Keeping updated the class website
- Other materials needed by students (such as advanced use of Google Classroom, using and understanding grading rubrics in GClass, viewing semester and final grades on the platform, also the attendance and absences for labs on the GClass platform, etc.)
- Worksheets and other materials necessary for preparing the baccalaureate exam and the admission to the Faculty of Automation and Computers

Annex

Papers

See the attached list of papers.

Annex | Papers

Books and chapters in books (since 2005)

1. D. Bălă, M. M. Boureanu, L. Bucur, C.P. Dăneț, L. Grecu, F. Munteanu, G. Popescu, M. Racilă, L.E. Temereancă, C. Vladimirescu, Teste grilă pentru proba scrisă la Matematică a examenului de admitere la Licență la Facultatea de Automatică, Calculatoare și Electronică, Ed. Universitaria, Craiova, ISBN 978-606-14-2002-5, pp. 102-126, pp. 294-314 (in romanian), 2024.
2. M. Racilă, Metode numerice pentru studenții automatiști, ISBN: 978-606-14-1629-5, Ed. Universitaria, Craiova, 366 pag (in romanian), 2020.
3. M. Racilă, J.M. Crolet, "Numerical simulations and some applications in cortical bone behavior", in "Qualitative Study of Differential Equations, Geometrical and Dynamical Aspects of Some Mechanical Systems, Numerical Treatment, and Applications", pp. 73-115, ISBN 978-606-26-0168-3, Editura Universitaria, 2014.
4. Maria Predoi, Dana Constantinescu, Mihaela Racilă, Teme de Analiză Matematică. Teorie și Aplicații, Editura Universitaria Craiova, 464 pp, ISBN 978-606-510-233-0 (in romanian), 2010.
5. M. Racilă, Os cortical humain: modélisation mathématique et simulation numérique, Ed. Universitaria, Craiova, ISBN : 978-606-510-937-7, 208 pages (in french), 2010.
6. Rôle de la piézoélectricité du collagène dans la mécanotransduction osseuse. Approche numérique, J.M. Crolet, M.C. Stroe, M. Racilă, Bioreconstruction de l'os à la peau, Tome 2, ISBN 978-2-84023-705-1, pp . 43-54, Ed. Sauramp Médical (in french), 2010.
7. M. Racilă, C. Stroe, J.M. Crolet, "SiNuPrOs : Etude de la perméabilité multi échelle de l'os cortical humain", in "Reconstruction osseuse et cutanée: biomécanique et techniques de l'ingénieur", Ed. Sauramp Médical, ISBN : 978-2-84023-583-5, pp 13-24 (in french), 2008.
8. J.M. Crolet, M. Racilă, "SINUPROS, modèle numérique de l'os cortical. Modélisation du fluide et méthode de quantification des champs physiques à diverses échelles", in "Reconstruction osseuse et cutanée:xbiomécaniquexetxtechniquesxdexl'ingénieur", Ed. Sauramp Médical, ISBN : 978-2-84023-583-5, pp 25-46 (in french), 2008.
9. M. Racilă, J.M. Crolet, "Orientation de la minéralisation et propriétés mécaniques de l'os cortical. Une approche numérique", in "Reconstruction osseuse et cutanée: biomécanique et techniques de l'ingénieur", Ed. Sauramp Médical, ISBN : 978-2-84023-583-5, pp 47-56 (in french), 2008 .
10. Crolet J. M., M. Racilă, "Un modèle numérique au service de l'orthopédie", Bio ingénierie et reconstruction osseuse, Ed. Sauramps Medical, France, ISBN : 978-2-84023-532-3, pp. 81-105 (in french), 2007.

ISI and BDI Papers (since 2005)

1. Matei, L., Iliescu, M., Dumitru, I., Racila, M., Benec Mincu, G.-M., Racila, L., Reconfigurable/Foldable Overconstrained Mechanism and Its Application, Appl. Sci., 12, 262, ISSN: 2076-3417, 2022. https://doi.org/10.3390/app12010262
2. Gencarau, N, Oprica, T, Otat, O, Racila, L, Matei, L, Racilă, M, Dumitru, I, Oprica, A, Road traffic analisys in the context of heavy traffic transport removal policy, Acta Technica Napocensis series-Applied Mathematics Mechanics and Engineering, Volume 65, 337-342, 2022.
3. M. Racilă, J.M. Crolet, Fiber orientation of composite materials – effect on mechanical properties, Applied Mechanics and Materials (BDI), vol. 880, ISSN 1662 – 7482, pp. 273 – 278, 2018.
4. L. Ellejmi, A.M. Mancuso, M. Racilă, J.M. Crolet , Numerical simulations in a bony callus, Computer Methods in Biomechanics and Biomedical Engineering, DOI:10.1080/10255842.2014.931134, vol. 17, S1, pp. 70-71, 2014 (ISI). (http://www.tandfonline.com/doi/abs/10.1080/10255842.2014.931134?journalCode=gcmb20#.VGjj_TSsXJc)
5. J.M. Crolet, M. Racilă, A. Marguier and O. Placide, Electro osmosis and bone remodeling – a numerical simulation, International Journal of Biology and Biomedical Engineering, Volume 8, pp. 21-26, ISSN: 1998-4510, 2014 (ISI).
6. M.C. Stroe, J.M. Crolet and M. Racilă, Mechanotransduction in cortical bone and the role of piezoelectricity: a numerical approach, Computer Methods in Biomechanics and Biomedical Engineering, Vol. 16, Issue 2, pp. 119-129, DOI: 10.1080/10255842.2011.608661, ISSN: 1025-5842, 2013 (ISI) (http://dx.doi.org/10.1080/10255842.2011.608661) - CNCS award, CNCS code: PN-II-RU-PRECISI-2012-6-1325.
7. J. M. Crolet, M. Racilă, A. Marguier, O. Placide, Osteosynthesis by electro-osmosis. A numerical simulation, Recent Researches in Medicine, Biology and Bioscience, ISSN: 1790-5125, ISBN: 978-960-474-326-1, pp. 39-44, 2013 (ISI).
8. J. M. Crolet, S. Acciardo, M. Racilă, Simulation of bone ingrowth in non-resorbable substitutes, Computer Methods in Biomechanics and Biomedical Engineering, Vol. 16 Supp. 1, pp. 251-253, DOI: 10.1080/10255842.2013.815925, ISSN: 1025-5842, 2013 (ISI). http://www.tandfonline.com/doi/full/10.1080/10255842.2013.815925#.Um4uRnCOhG0

9. J. M. Crolet, S. Acciardo, M. Racilă, B de Billy, Dissecan osteochondritis of the elbow: a possible explanation with a numerical study, Computer Methods in Biomechanics and Biomedical Engineering, Vol. 16 Supp. 1, pp. 234-236, DOI: 10.1080/10255842.2013.815946, ISSN: 1025-5842, 2013 (ISI). http://www.tandfonline.com/doi/full/10.1080/10255842.2013.815946#.Um4uZHCOhG0
10. Racilă M., Crolet J.M, Collagen's role in the cortical bone's behavior: a numerical approach, Computer Methods in Biomechanics and Biomedical Engineering, vol. 14, issue 7, pp. 621-631, ISSN: 1025-5842, july 2011 (ISI) (DOI: 10.1080/10255842.2010.493509) (http://www.tandfonline.com/doi/abs/10.1080/10255842.2010.493509) – CNCS award, CNCS code: PN-II-RUPRECISI-2012-6-0444.
11. Racilă M., Crolet J.M, Numerical simulation of thermoablation in living tissues, Computer Methods in Biomechanics and Biomedical Engineering (ISI), vol. 14, S1, pp. 279-281, ISSN: 1025-5842, august 2011, DOI:10.1080/10255842.2011.595244. (http://www.tandfonline.com/doi/abs/10.1080/10255842.2011.595244)
12. M.C. Stroe, Racilă M., Crolet J.M, Quantitative investigation for properties of osteoporotic cortical bone: a numerical study, Computer Methods in Biomechanics and Biomedical Engineering (ISI), vol. 14, S1, pp. 99-101, ISSN: 1025-5842, august 2011, DOI:10.1080/10255842.2011.592375 (http://www.tandfonline.com/doi/abs/10.1080/10255842.2011.592375)
13. Racilă M., Stroe M.C., Crolet J.M., Human cortical bone: the SiNuPrOs model. Part II - a multi-scale study of permeability, Computer Methods in Biomechanics and Biomedical Engineering, ISSN: 1025-5842, Vol. 13, Issue 1, pp. 81-89, 2010 (ISI), (IDS Number: 551PM; DOI: 10.1080/10255840903045037) (PMID:19639487) –CNCS award (code: 572).
14. J. M. Crolet, C. M. Stroe, M. Racilă, Decreasing of mechano transduction process with age, Computer Methods in Biomechanics and Biomedical Engineering, ISSN: 1025-5842, Vol. 13, S 1, pp. 43-45, 2010 (ISI), (IDS Number: 646UE; DOI:10.1080/10255842.2010.491950) 2010 – CNCS award (code: 1065).
15. J.M. Crolet, M. Racilă, "Elaboration of assumptions for the fluid problem at microscopic scale in Sinupros, mathematical model of cortical bone", Mathematical and Computer Modelling, vol. 49, issue 11-12, 2009, ISSN: 0895-7177, pp. 2182-2190 (ISI) (IDS Number: 441CD; DOI: 10.1016/j.mcm.2008.07.027) – CNCS award (code: 1599).
16. M. Racilă and J.M. Crolet, "SiNuPrOs : Mathematical Model of Human Cortical Bone", Recent Advances in Mathematics and Computers in biology and chemistry, ISBN: 978-960-474-062-8, ISSN: 1790-5125, published by WSEAS Press (www.wseas.org), pp. 53-58, march 2009 (ISI) (IDS Number: BJF25).
17. Crolet J.M., Racilă M., Mathematical modelization of fluid flow in osteonal structures, Computer Methods in Biomechanics and Biomedical Engineering, ISSN: 1025-5842, Volume 12, Supplement 1, pp 87-89, 2009 (ISI), (DOI: 10.1080/10255840903077220) – CNCS award (code: 1583).
18. Stroe, C.M., Racilă M., Crolet J. M., Numerical simulation of fluid flow in the cortical part of a human femur, Computer Methods in Biomechanics and Biomedical Engineering, ISSN: 1025-5842, Volume 12, Supplement 1, pp 235-237, 2009 (ISI), (DOI: 10.1080/10255840903094043) – CNCS award (code: 1585).
19. Miladi W., Racilă M., Mathematical model of fluid flow in an osteon. Influence of cardiac system, Computer Methods in Biomechanics and Biomedical Engineering, ISSN: 1025-5842, Volume 12, Supplement 1, pp 187-189, 2009 (ISI), (DOI: 10.1080/10255840903091502) – CNCS award (code: 1584).
20. Racilă M., Crolet J.M., "Human cortical bone : the SINUPROS model. Part I - Description and macroscopic results", Computer Methods in Biomechanics and Biomedical Engineering, ISSN: 1025-5842, Taylor & Francis, Volume 11, Issue 2, pp. 169-187, April 2008 (ISI), (DOI: 10.1080/10255840701695140; IDS Number: 277UV) – CNCS award (code: 441).
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Associate Prof. Mihaela RACILĂ