

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **BULINSKI Mircea**

Address(es) No.3, Fierari str., ap. 1, sect. 2, 020545, Bucharest, Romania

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Nationality Romanian

Gender Male

Work experience

Dates Oct.1990 – present

Occupation or position held Assistant Prof. (2001), Associate Prof. (2009)

Main activities and responsibilities Teaching university courses, implementation and support for related laboratories, conducting research programs, academic activities

Name and address of employer University of Bucharest (Faculty of Physics, Department “Departamentul de Fizică Teoretică, Matematici, Optică, Plasmă și Laseri”) Blvd. M. Kogălniceanu, nr. 36-46, sector 5, 050107 Bucharest

Type of business or sector Higher education

Dates 1990 – 1991

Occupation or position held Scientific researcher

Main activities and responsibilities Research and development of LIDAR - YAG:Nd detection systems

Name and address of employer National Institute for Laser, Plasma & Radiation Physics, Special Laser Devices Division, Str. Atomiştilor, Nr. 409 , PO Box MG-36, 077125, Măgurele, Bucharest, Romania

Type of business or sector Scientific research

Dates 1986 - 1989

Occupation or position held Professor of Physics

Main activities and responsibilities Specific activities in middle school and high school teaching

Name and address of employer “Școala cu clasele I-X”, “Curcani”

Type of business or sector Pre-university and secondary education

Education and training

Dates April 1999

Title of qualification awarded Ph. D. Diploma

Principal subjects/ skills covered Physics, „Studies on detection and restoration of the optical fields”

Name and type of organization University of Bucharest

Level in international classification ISCED 6

Dates 1982 – 1986

Title of qualification awarded Diploma – Physician
Principal subjects/ skills covered Physics, „Optical Data Processing”
Name and type of organization University of Bucharest
Level in national classification ISCED 5
Dates 1974 – 1980
Title of qualification awarded Baccalaureate in „Fine and decorative arts”
Principal subjects/ skills covered Drawing, painting, interior design, monumental art
Name and type of organization High School of Fine Arts „N. Tonitza” Bucharest
Level in national classification ISCED 3

Personal skills and competences

Mother tongue(s) **Specify mother tongue** (if relevant add other mother tongue(s), see instructions)

Other language(s)

Self-assessment

European level (*)

English

French

Russian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1		B2		C1
B2		A2		A1
B1		A2		A1

Social skills and competences Member of „European Physical Society”; member al „Romanian Physical Society”, member of „Association for Alternative Sciences” – Romania

Organisational skills and competences Working and team building, communication and organization of activities - organizing international summer school “Econophysics and complexity (2005-2008), organizing Faculty of Physics from Bucharest University representation to: “Education Fair”; (2001-2016), “Reaserchers Night” (2009 - 2016); Faculty of Physics Conference (2001-2017)

Technical skills and competences Computer simulation of complex processes (MatLab, LabVIEW, Mathematica), Software development (VisualBasic, VisualFox, Excel, VisulC + +, VisualJava), hardware and software design microcontroller (Z80, PIC), design of optical systems for detection and analysis, processing digital images and video, 3D modeling and animation

Computer skills and competences MalLab, SciLab, Python, LabView, Mathematica, C++, M.S.Office, etc.

Artistic skills and competences Drawing, painting, poetry, photography

Driving licence Driving license „B”

Additional information

Member of the organizing committees of the International Summer Schools on the topic „Econophysics and Complexity”, edițiile I (Navodari, 2005), II (Sinaia, 2006) III (Sibiu, 2007), IV (Bucuresti, 2008), Publications and Research Contracts: 2 single author manuals; 4 co-author manuals; 1 monograph as sole author; 20 ISI publications; 14 non-ISI; 5 monographs as editor (e-format with ISBN); 5 lessons invited to international conferences, summer schools; 9 studies published in extenso in the volumes of international scientific events; 23 national and international contracts as director, member of the action committee or scientific responsible; 11 university courses / laboratories, of which 9 are newly established;
As an activity for the benefit of the academic community: they are part of the Image Commission of the Faculty of Physics, a quality within which they contribute to the organization of the participation of the Faculty of Physics in the "Education Fair – University of Bucharest" (2003-2016). Member of the team organizing the annual events: "Annual Scientific Session of the Faculty of Physics - Bucharest" (2003-2021), "Science Show" (2009-2011), "Researchers' Night" (2013-2020); Children's University (2009-2016), National Physics Competition for students "Hands on Universe" (2013-2020); etc

Annexes List of publications and research programs

Date 01.02.2026

Annexes - List of selected publications

Books: Ovidiu Toma, Doina Bejan, Marian Băzăvan, Iulian Ioniță, Mircea **Bulinski**, „Geometrical Optics, Practical Works, Exercises and Problems” Editura Universitatii Bucuresti (2021); •"Shapes and patterns in matter and fields: inter-related microscopic and macroscopic physical properties", in "On Form and Pattern", București, Editura Academiei (2015) ; •Geometrical Optics, Mircea **Bulinski** , Editura Universitatii Bucuresti (2014); •Doina Bejan, Marian Băzăvan, Iulian Ioniță, Ovidiu Toma, Mircea **Bulinski**, Ion Gruia; "Lucrări practice de optică geometrică", Editura Univ. Bucuresti, 2013; •Modelare si Simulare – aplicații în OSPL, Mircea **Bulinski**, Editura Universitatii Bucuresti (2011); •Econofizica si Complexitate, M. **Bulinski**, Ed. Univ. Buc. 2007; Optica, St. Levai, M. **Bulinski**, O. Toma, Ed. Univ. Buc. 2005; •Optica - teorie, probleme, lucrări de laborator, St. Levai, M. **Bulinski**, O. Toma, Ed. Univ. Buc. 2002; •Spectroscopie și laseri. aplicații, I. Iova, M. **Bulinski**, F. Iova, M. Băzăvanm, C. Biloiu, I. Gruia, Gh. Ilie, I. Winkler, Ed. Univ. Buc. 2001; • Ed. Carmen Costea, Mircea **Bulinski**, Econophysics and complexity – adding value beyond training and mentoring (CD teaching support support – Summer School Bucharest - Romania), Editura Universitatii Bucuresti (2008); • Ed, Mircea **Bulinski**, Econophysics and complexity – science and education in a world of diversity: applications to the knowledge-based society (CD teaching support support – Summer School Sibiu - Romania), Editura Universitatii Bucuresti (2007) ; •Ed, Mircea **Bulinski**, Identity versus Diversity: Essays on the complexity of the living entity (workshop „Complexitatea întregului viu: identitate si diversitate”, Bucuresti 2007), Editura Universitatii Bucuresti (2007) ; •Ed, Mircea **Bulinski**, Econophysics and complexity - alternative science bridging education, research and economics (CD teaching support support – Summer School Sinaia - Romania), Editura Universitatii Bucuresti (2006) ; •Ed, Mircea **Bulinski**, Emmanuel Haven, Econophysics and complexity – research of excellence between philosophical dreams and real applications (CD teaching support – Summer School Navodari - Romania), Editura Universitatii Bucuresti (2005)

Scientific articles published in journals listed in the ISI system: **Bulinski**, I.R. Andrei, S Simion, F Garoi, **M Bulinski**, M.L Pascu; Optical cryptographic communications with non-identical chaotic laser systems, Romanian Reports in Physics, 75, pp408, 2023s M. Metal Doped PVA Films for Opto-Electronics-Optical and Electronic Properties, an Overview. Molecules 2021, 26, 2886. doi.org/10.3390/molecules26102886; •C. Onea, I.R. Andrei, P.E. Sterian, M.L. Pascu, M. **Bulinski**, Numerical simulation of the chaotic multimode dynamics of a semiconductor laser optical coupled with two external cavities, U.P.B. Sci. Bull. Series A V, 2020, ISSN 1223-7027; •M. **Bulinski**, G. Moagăr-Poladian, Fourier-transform interference lithography, Romanian Reports in Physics, Vol. 68, No. 2, P. 713–724, 2016; C.M. Ticos, I.R. Andrei, M.L. Pascu and M. **Bulinski**, Experimental control of power dropouts by current modulation in a semiconductor laser with optical feedback, Phys. Scr. Vol. 83, No. 5 (2011) p; •I.R. Andrei, C.M. Ticos, M. **Bulinski**, M.L. Pascu, Chaotic behaviour in the emission of semiconductor lasers optically coupled with an external cavity, J. Optoelec. and Adv. Mat. Vol. 12, No. 1(2010), p63-67; •Elisa M., Grigorescu C., Vasiliu I., **Bulinski** M., Kuncser V., Predoi D., Filoti G., Meghea A. Iftimie N., Giurginca M., Onose, C., Optical characterization of the phosphate glasses containing pair transition ions, Optical and Quantum Electronics 39 (4-6): 523-531 MAR 2007; •A. Emandi, C. Vasiliu, R. Georgescu, I. Iulian, M. **Bulinski**, Spectral studies of some Ni(II), Pd(II), Cu(II) azo-dye complexes in a polymeric matrix of polyvinil alcohol, Rev. Chem. (Bucharest), 57, 11, pp. 1098-1104 (2006) ; •C. M. Ticos, M. **Bulinski**, R. Andrei, M. L. Pascu, Power drop-out control by optical phase modulation in a chaotic semiconductor laser, JOSA B, Vol. 23, Issue 12 (2006), pp. 2486-2493; •Obreja, P, Cristea, D, Budianu, E, Rebigan, R, Kuncser, V, **Bulinski**, M, Filoti, G, Effect of dopant on the physical properties of polymer films for microphotonics, PROGRESS IN SOLID STATE CHEMISTRY, 34 (2-4), pp. 103-109, (2006) ; •V.Kuncser, M.**Bulinski**, S.Krautwald, H.Franke, F.E.Wagner, D.Cristea, P.Palade, C.Plapcianu, G.Filoti, Optical and Electronic Properties of (Fe+Sb):PVA for Real Time Holography, J. Optoelec. and Adv. Mat. Vol. 8, No. 3(2006), p1225-1229; •M.Elisa, C. Grigorescu, C. Vasiliu, M.Mitrea, M.**Bulinski**, V.Kuncser, D. Predoi, G.Filoti, A. Meghea, N. Iftimie, M. Giurginca, Optical and electronic properties of the aluminophosphate glasses doped with 3d- transition metal ions, Reviews on Advanced Materials Science 10 (4) 367-374 (2005) ; •V. Kuncser, M. Valeanu, F. Lifei, D. Predoi, A. Jianu, W. Kappel, M. Codescu, E. Patroi, I. Pasuk, M.**Bulinski** and G. Filoti, Micro-structure and magnetic properties of Fe-Cu nanocomposites for anisotropic permanent magnets, Journal of Alloys and Compound 395(1-2) 1-6 (2005) ; •Mircea **Bulinski**, Victor Kuncser, Carmen Plapcianu, Stefan Krautwald, Hilmar Franke, P Rotaru and George Filoti, Optical and electronic properties of polyvinyl alcohol doped with pairs of mixed valence metal ions, J. Phys. D: Appl. Phys. 37 (2004) 2437-2441; •M. **Bulinski**, M. L. Pascu, I. R. Andrei., Phase synchronization and coding chaos with semiconductor lasers, J. Optoelec. and Adv. Mat. Vol. 6, No. 1(2004), p77-86; •Mircea **Bulinski**, Victor Kuncser, Dana Cristea, Carmen Plapcianu, Stefan Krautwald, Hilmar Frank, F.E.Wagner, G.Filoti, Optical and electronic properties of metal doped polymers for integrated optics, J. Optoelec. and Adv. Mat. Vol. 5, No. 1(2003), p331-335; •Gabriel Moagar-Poladin, Mircea **Bulinski**, Optical reconfigurable neuron by using the transverse Pockels effect, J. Optoelec. and Adv. Mat. Vol 4, No. 4, pp.929-936(2002)

Invited lessons to international conferences, workshops, summer schools, scientific seminars: • M. **Bulinski**, Chaotic behaviour and control of a semiconductor laser, International Student Workshop on Laser Applications 2010 (ISWLA10) - Bran – Romania 2010; •M. **Bulinski**, Behrens and Feichtinger model expansion – a simple analyze, Summer School “Econophysics and Complexity - III” Sibiu – Romania 2007) ; •M. **Bulinski**, , Chaos in dynamical systems – introduction, Summer School “Econophysics and Complexity - II” Sinaia – Romania 2006) ; •M. **Bulinski**, Controlling the chaos in lasers physics and econophysics, Summer School “Econophysics and Complexity - I” Navodari – Romania 2005) ; •M. **Bulinski**, V. Kuncser, I. Iova, A. Belea, H. Franke, G. Filoti, Mixed valence metal ion doped PVA as a potential material for the real time holography SPIE – 4068-03 (2000) pp.17-25, Optical International Conference - ROMOPTO 2000 Bucuresti

Studies published in extenso in the volumes of internationally and national scientific manifestations recognized:

I.R. Andrei, C. Onea, M.L. Pascu, M. **Bulinski**, Numerical model and simulation of the multimode visible emission of a chaotic laser device, The 15th Chaotic Modelling & Simulation International Conference (CHAOS-2022), virtual participation, Athens, Greece, June 14 - 17, 2022; •High resolution optical system for the magnetic characterization of thin films by longitudinal magneto-optic Kerr effect, Iulian Ionita, Mircea **Bulinski**; Optics and Photonics 2017, San Diego (USA) 6-10 august 2017, SPIE International Conference; •Ionut R. Andrei, Catalin M. Ticos, Mircea **Bulinski**, Mihail L. Pascu, *Chaotic behaviour of the semiconductor laser emission cupled with a external cavity*; International Conference “Micro-to Nano-Photonics II - ROMOPTO 2009”, August 31 – Septembrie 3, Sibiu, Romania; •Mircea **Bulinski**, *Econofizica realizare interdisciplinară pentru învățământ și cercetare*, „Inovare, Competitivitate și Etică în Afaceri”, Conferința cu participare internațională Universitatea Româno-Americană, București (2008) Ed. Universitară, București 2008, pp239-255; •Beniamin Cotigaru, Viorel Petrescu, Mircea **Bulinski**, Dorin Groapă, Octavian Cristea, *Interdisciplinarietatea, imperativ al valorificării cunoașterii spre economia durabilă*, Conferința cu participare internațională „Inovare, Competitivitate și Etică în Afaceri”, Universitatea Româno-Americană, București (2008), Ed. Universitară, București 2008, pp179-201; •M. **Bulinski**, Catalin M. Ticos, I. R. Andrei, M:N phase synchronization of LFF in a chaotic ECLS system, SPIE, Volume 6603, pp. 660329 (2007);

Experience in international / national research programs: Handle with Science HSciRO: EUROPEAN RESEARCHERS' NIGHT (H2020-MSCA-NIGHT-2018-2020, Marie Sklodowska-Curie COFUND), Responsabil științific din partea partenerului P4 din consorțiu; • SCIENTIX- comunitatea pentru educație în domeniul științelor din Europa. FP7 programme – proiect Scientix 2 (Grant agreement N. 337250) - membru in echipa de implementare; •2016-2018 ERIS - Exploration of Research results In School practice - Project ERASMUS- membru in echipa de implementare; •RoTalkScience: EUROPEAN RESEARCHERS' NIGHT (H2020-MSCA-NIGHT-2014-2015, Marie Sklodowska-Curie COFUND), Responsabil științific din partea partenerului P4 din consorțiu; • RoTalkScience: EUROPEAN RESEARCHERS' NIGHT (FP7-PEOPLE-2013-NIGHT, Marie Sklodowska-Curie COFUND), Responsabil științific din partea partenerului P4 din consorțiu; • “Physics of Competition and Conflicts - COST MP0801” - membru in Comitetul de Management al Acțiunii (2008-2011); •Efficient Lighting for the 21st Century, European Concerted Research Action designated as COST 529 - membru in Comitetul de Management al Acțiunii – Romania (coordonator retea nationala) (2002-2006); •Physics of Risk, European Concerted Research Action designated as COST P10, membru in Comitetul de Management al Acțiunii – Romania (coordonator retea nationala) (2003-2007); 2014-2018:

Proprietati opto-electronice ale polimerilor dopati cu ioni metalici, Programul CNCIS - 37116/2000, Director de proiect in calitate de coordonator (2000-2001); •Noi compusi organo-metalici; Studiul proprietatilor opto-electronice, Programul CNCIS - nr. 33618/2002, Director de proiect in calitate de coordonator (2000-2004); Tehnologie haotica pentru testarea metodelor și platformelor utilizate in sistemele de criptare, PNCDI III CTECrypt nr. 420PED/2020, Responsabil științific din partea partenerului P1 din consorțiu (2020-2022); •95PED/2017-2018; Metoda magneto-optica de investigare a filmelor magnetice microstructurate. Responsabil științific din partea partenerului P1 din consorțiu;•Accelerarea de electroni in plasma produsa de laser de putere la GeV, E06/2014 Program Capacitati-RO-CERN, Responsabil științific din partea partenerului P3 din consorțiu (2014-2016); •Controlul si

sincronizarea laserilor cu semiconductori haotici prin tehnici de modulare optica, electrica si mecanica, - 3943 PNCDII Responsabil stiintific din partea partenerului P1 din consorțiu (2008-2011); •Aplicațiile tehnologiilor de vârf pe bază de structuri de tip MEMS și efecte optice neliniare în măsurarea parametrilor curentului electric pe liniile de înaltă tensiune, 31 PNCDI/2007, Responsabil stiintific din partea partenerului P2 din consorțiu (2007-2010); •Promovarea instrumentelor si tehnicilor de econofizica si complexitate la dezvoltarea durabila a societatii bazate pe cunoastere, la diminuarea riscului si rezolvarea crizelor, 08CEEX3/07.09.2005 (2005-2007), Responsabil stiintific din partea partenerului P2 din consorțiu; •Microstructuri poli-compozite emițătoare și modulate de lumină - proprietăți electro-optice, 44CEEX1/10.10.2005, Responsabil stiintific din partea partenerului P2 din consorțiu (2005-2008); •Materiale Neconvenționale pentru Microtehnologie – Cercetare și Experimentare Microstructuri pe bază de Elastomeri pentru Aplicații în Domeniul Microsistemelor, Programul 15CEEX, Responsabil stiintific din partea partenerului P1 din consorțiu (2005-2007) ; •Unitate de procesare optica analogica a informației de tip imagine, Programul CEEX Nr.139103/2006 (2006-2008), Responsabil stiintific din partea partenerului P1 din consorțiu; •Econofizica – abordarea fenomenelor economice folosind analiza seriilor temporale, modelarea si controlul haosului deterministic in modelele economice cu aplicatii in domeniul pietei competitive si al sectorului bancar, Programul CERES-2002 Nr. 4-260/02.12.2004 (2004-2006), Responsabil stiintific din partea partenerului P1 din consorțiu; •Studiul emisiei luminoase haotice a diodelor laser in cavitate extinsa si folosirea cuplajului sistemelor haotice in codificarea informației pe purtatoare optica, Programul CERES-2002 Nr. 81/11.11.2002 (2003-2005), Responsabil stiintific din partea partenerului P1 din consorțiu; •Neuron optic reconfigurabil – cercetare, experimentare demonstrator și evaluare parametri funcționali Programul MATNANTECH-2001, Nr. 631/15.11.2001, Responsabil stiintific din partea partenerului P1 din consorțiu (2001-2003);