



Curriculum Vitae

PERSONAL INFORMATION



PÎRGHIE CRISTIAN

ȘTEFAN CEL MARE UNIVERSITY OF SUCEAVA

0230216147/122

cristian.pirghie@cern.ch; cristipirghie@gmail.com

ID Skype: cristian.pirghie

Sex M | Date of birth 22/07/1974 | Nationality ROMANIAN

POSITION WITHIN THE PROJECT

SCIENTIFIC RESEARCHER III

WORK EXPERIENCE

03.2010 – PRESENT

Lecturer

Faculty of Mechanical Engineering, Mechatronics and Management

"Ștefan cel Mare" University of Suceava, Suceava, www.fim.usv.ro

Teaching activities (courses, seminars, laboratories of Physics, Optical and Ultra Acoustical Devices, Applied Informatics Environmental Physics, Sources of Radiation and Protective Techniques, Biophysics, Research apparatus, Microelectromechanical systems - MEMS) and scientific research

Sector Higher Education

10.2001 - 03.2003

Associate Lecturer

Faculty of Mechanical Engineering, Mechatronics and Management

"Ștefan cel Mare" University of Suceava, Suceava, www.fim.usv.ro

Teaching activities (courses, seminars, laboratories of Physics) and scientific research

Sector Higher Education

10.2010 – PRESENT

COORDINATOR

Astronomical Observatory and Planetarium, observator.usv.ro

"Ștefan cel Mare" University of Suceava

EDUCATION AND TRAINING

10.1999 - 02.2007

PhD in Physics

"Al. I. Cuza" University of Iași – Faculty of Physics

10.2007 - 06.2009

Master's degree Diploma – Biomechatronics

"Ștefan cel Mare" University of Suceava

Faculty of Mechanical Engineering, Mechatronics and Management

10.1992 – 06.1997

Postgraduate Computer Science

"Al. I. Cuza" University of Iași – Faculty of Informatics

10.1992 - 06.2001

BSc Diploma in Physics

"Al. I. Cuza" University of Iași – Faculty of Physics

Principal subjects: Programming languages, Physical data processing and numerical methods, Electrodynamics and Theory of Relativity, Quantum mechanics, Thermodynamics and statistical physics, Nuclear physics and elementary particles

PERSONAL SKILLS

Mother tongue(s)

Romanian

Other language(s)

English

| UNDERSTANDING | | SPEAKING | | WRITING |
|---------------|---------|--------------------|-------------------|---------|
| Listening | Reading | Spoken interaction | Spoken production | |
| B2 | B2 | B2 | B2 | B2 |



Curriculum Vitae

Digital competence

| SELF-ASSESSMENT | | | | |
|------------------------|-----------------|------------------|-----------------|-----------------|
| Information processing | Communication | Content creation | Safety | Problem solving |
| Proficient user | Proficient user | Proficient user | Proficient user | Proficient user |

Office, MathCad, Matlab, Root, C++, SageMath, LAMMPS

Organisational/managerial skills: Member of the organizing team and chairman of the International Olympiad on Astronomy and Astrophysics 2014, Suceava, Romania

Other skills: Driving licence (category B)

Publications

ISI Papers

1. N. Sulițanu, **C. Pîrghie**, F. Brînză, *Effect of Ultrasounds Sonication on Surface Microstructure of the Electrodeposited Ni-Zn Thin Films*, Journal of Optoelectronics and Advanced Materials (JOAM), Vol. 8, No. 5, p. 1889 – 1891, 2006, impact factor 1,106 in 2006
2. N. Sulițanu, **C. Pîrghie**, I. Sandu, *Effect of ultrasound sonication on the electrolytic growth of Ni thin films*, Rev. Chim. (Buch) 58, 1, 20-24, 2007, impact factor 0.287, ISSN 0034-7752
3. **C. Pîrghie**, N. Sulițanu, V. Nica, *Microstructure and Magnetic Properties of the Ni-Zn and Fe-Zn Thin Films Electrodeposited in Ultrasound Field*, Journal of Optoelectronics and Advanced Materials (JOAM), Vol. 9, No. 5, p. 1462–1464, 2007, impact factor 1.106, ISSN 1454-4164
4. G.I.Rusu, M. Diciu, **C. Pîrghie**, M.E.Popa, *Structural Characterization and Optical Properties of ZnSe Thin Films*, Applied Surface Science, Vol. 253, No. 24, p. 9500-9505, 2007, impact factor 1.436, ISSN 0169-4332
5. P. PREPELITA, G. I. RUSU, **C. PIRGHIE**, *The structural and optical characterization of thin-film ZnTe/CdSe heterojunctions*, Journal of Optoelectronics and Advanced Materials (JOAM), Vol. 9, No. 10, p. 3200 – 3205, 2007, impact factor 1.106, ISSN 1454-4164
6. Ioan Mihai, **Cristian Pîrghie** and Vlad Zegrean, *Research Regarding Heat Exchange Through Nanometric Polysynthetic Thermal Compound to Cooler-CPU Interface*, Heat Transfer Engineering, vol. 31, Issue 1, p. 90-97, 2010, impact factor 0.841 in 2009, ISSN 0145-7632
7. Pinzaru D, Tanase SI, Pascariu P, Vlad L, **Pîrghie C**, Georgescu V, *Microstructure, Magnetic and Magnetoresistance Properties of Electrodeposited [Fe/Pt] Granular Multilayers*, Journal of Superconductivity and Novel Magnetism, vol. 24, Issue 7, p. 2145-2152, 2011, impact factor 0.650
8. **Pîrghie C.**, Pîrghie A.C., Eder S., Franek F., *PFPE-Z lubricant thin films in molecular dynamics simulations – shear thinning and friction law*, Optoelectronics and Advanced Materials - Rapid Communications, vol.7, issue 5-6, p. 434-438, 2013, impact factor 0.449
9. **Pîrghie C.**, Pîrghie A.C., Eder S., Franek F., *Effect of steady shear and loading pressure on thin PFPE-Z lubricant films in molecular dynamics simulations*, Journal of the Balkan Tribological Association, vol.20, issue 2, p. 291-299, 2014, impact factor 2013 - 0.321
10. **C. Pîrghie**, A.C. Pîrghie, *Molecular dynamics simulations of viscosity in confined lubricant film*, Journal of the Balkan Tribological Association, Vol. 22, No 2A-II, 2008-2020, 2016, ISSN: 1310-4772

ISI Proceedings

1. **Cristian Pîrghie**, Petru Stiuca, *Magnetic and microstructure properties for the Ni-Zn thin films electrodeposited in ultrasounds field*, 9th WSEAS Int. Conf. on Acoustics & Music: THEORY & APPLICATIONS (AMTA '08), Bucharest, Romania, June 24-26, 2008, Proceedings ISI, p. 61-66, ISBN 78-960-6766-74-9, ISSN 1790-5095
2. Milici D., **Pîrghie C.**, Milici M., Rata M. - *Numerical analysis of factors which influent the biotic systems using the ferment activity* - "Recent Advances in Electrical Engineering", ISSN 1790-5117, published by WSEAS Press, www.wseas.org, p. 26-30, 2008
3. Petronela Prepelită, **C.Pîrghie**, G.I.Rusu, *Effects of Post-Deposition Heat Treatment on the Optical Characteristics of ZnTe Thin Films*, AIP Conference Proceedings - April 23, 2007 - Volume 899, p. 641, Sixth International Conference of the Balkan Physical Union
4. **C. Pîrghie**, A.C. Pîrghie, I. Musca, *On the nanolubrication as a function of load and speed wall*, Proceedings of the 16th International Conference ModTech 2012, vol. II, pag. 753-756
5. **C. Pîrghie**, A.C. Pîrghie, I. Musca, *The lubricant behavior in nanotribological systems*, Proceedings of the 16th International Conference ModTech 2012, vol. II, pag. 757-760



International Database Papers

1. **Cristian Pîrghie**, Ana-Camelia Pîrghie, Ciprian Dariescu, *Applied geometry of gauge-invariance to inhomogeneous Robertson-Walker cosmologies*, International Journal of Arts&Sciences, 4(20):1-6 (2011)
2. **Cristian Pîrghie**, *Correlations between microstructure and magnetic properties of the Ni-Zn thin films electrodeposited in ultrasounds field*, International Journal of Arts&Sciences, 4(19):121-129 (2011)
3. **Cristian Pîrghie**, Ana-Camelia Pîrghie, Some aspects of the nanotribological film in nanotribological applications, TEHNOMUS - New Technologies and Products in Machine Manufacturing Technologies (ISSN 2247-6016), No. 21, Issue 1, p. 122-125, 2014
4. **Cristian Pîrghie**, Ana-Camelia Pîrghie, Characterizing the behaviour of the lubricant films using molecular dynamics simulations, Fiability & Durability (ISSN 1844-640X), Issue 1, p. 49-56, 2014

List of scientific papers published in proceedings of conferences

1. **Cristian Pîrghie**, Ana-Camelia Pîrghie, *Investigations of nanotribological systems using molecular dynamics simulations*, VAREHD 16 International Conference on EHD Lubrication and Traction, 25-27 octombrie 2012, Universitatea „Ștefan cel Mare” Suceava, pag. 53-60
2. Ilie Muscă, **Cristian Pîrghie**, *A lubricating fluid compressibility study. Part 1: Experiments and simple liquids theory model*, VAREHD 16 International Conference on EHD Lubrication and Traction, 25-27 octombrie 2012, Universitatea „Ștefan cel Mare” Suceava, pag. 61-66
3. **Cristian Pîrghie**, Ilie Muscă, *A lubricating fluid compressibility study. Part 2: Molecular dynamics modeling*, VAREHD 16 International Conference on EHD Lubrication and Traction, 25-27 octombrie 2012, Universitatea „Ștefan cel Mare” Suceava, pag. 67-70
4. **Cristian Pîrghie**, Stefan Eder, Georg Vorlaufer, Andras Vernes and Friedrich Franek, Viscosity of highly confined PFPE-Z nanofilms with molecular dynamics, Proceedings of the 5th World Tribology Congress (WTC 2013), Torino, Italy, 2013, ISBN 978-88-908185

Areas of specialization and qualifications

1. 14 – 18.01.2008, Thessaloniki, Grecia, Physics of Advanced Materials Winter School
2. 27.05 – 13.06.2008, Visiting Professor at the Polytechnic University of Turin, Italy, teaching courses “Physics Metallurgy and Surface Engineering”
3. 14.06 – 14.09.2011, Research stage in the project "Progress and development through post-doctoral research and innovation in engineering and applied sciences– PRIDE - Contract no. POSDRU/89/1.5/S/57083", project co-funded from European Social Fund through Sectorial Operational Program Human Resources 2007-2013, at the Austrian Center of Competence for Tribology, Wiener Neustadt, Austria
4. 01.06 – 01.09.2012, Research stage in the project "Progress and development through post-doctoral research and innovation in engineering and applied sciences– PRIDE - Contract no. POSDRU/89/1.5/S/57083", project co-funded from European Social Fund through Sectorial Operational Program Human Resources 2007-2013, at the Austrian Center of Competence for Tribology, Wiener Neustadt, Austria

Projects – researcher team member (2015) in the LHCb project, contract no. 3/03.01.2012

Projects – researcher team member (2016-2018) in the LHCb project, contract no. 7/16.03.2016

Date,
2.10.2018

Signature,