



## Europass Curriculum Vitae

### Personal information

Surname / First name **CHIRITA IONEL**  
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Nationality Romanian  
Date of birth 17 September 1960  
Gender Male

### Occupational field **Applied Research in Electrical Engineering**

#### Work experience

Dates	April 2008 – present
Occupation or position held	Head of Efficiency in Energy Conversion and Consumption – ECCE Department, Technological Development Engineer - 1st degree
Main activities and responsibilities	Research, Development and Design in following fields: Electrical Micro machines, Wind Turbines, Electromagnets for Particle Accelerators, Positioning Systems
Name and address of employer	National Institute for R&D in Electrical Engineering ICPE-CA; 313 Unirii Avenue, district 3, Bucharest, Romania
Type of business or sector	Research and Development in Electrical Engineering
Dates	January 2006 – March 2008
Occupation or position held	Head of Technical Department
Main activities and responsibilities	Coordination of technical activities: certification of power generators and construction equipment, development of products technical and technological documentation, organization and support of training for salespeople, production and service staff within the company and the distribution companies, developing products presentation and promotional materials (catalogs, brochures, web pages)
Name and address of employer	AGENT TRADE SRL Bucharest, Romania
Type of business or sector	Manufacturing and distribution
Dates	October 1985 – December 2005
Occupation or position held	Technological Development Engineer
Main activities and responsibilities	Research, design, construction, testing and approval in the following fields: micro turbo generators with military applications, electro pneumatic drives for industrial robots, NDT equipment. Design and manufacturing of devices for electric machines, including plastics processing.
Name and address of employer	National Institute for R&D in Electrical Engineering ICPE; 313 Unirii Avenue, district 3, Bucharest, Romania
Type of business or sector	Research and development

## Education and training

Dates September 1996 – December 2003  
 Title of qualification awarded Ph.D. of Electrical Engineering  
 Principal subjects/occupational skills covered Electro pneumatic drives for industrial robots  
 Name and type of organization providing education and training Civil Engineering University of Bucharest  
 Level in national or international classification Ph.D.

Dates September 1980 – June 1985  
 Title of qualification awarded Engineer  
 Principal subjects/occupational skills covered Fine Mechanics  
 Name and type of organization providing education and training Polytechnic University of Bucharest Faculty of Mechanical Engineering  
 Level in national or international classification Diplomat engineer

## Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s) **English, French**

Self-assessment  
*European level (\*)*

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
B2	Independent user	C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user

(\*) Common European Framework of Reference for Languages

Social skills and competences Strong team working, leadership and communication skills

Organizational skills and competences Effective at time management and prioritizing tasks to achieve deadlines

Technical skills and competences Highly experienced in electromechanical design

Computer skills and competences Highly proficient at SolidWorks CAD software, Word, Excel and Adobe Acrobat Professional. Knowledge of PowerPoint, Access, SolidCAM, NX Siemens and AutoCAD

Artistic skills and competences Engraving

Other skills and competences

Driving license B category

## Additional information

Include here any other information that may be relevant, for example contact persons, references, etc. (Remove heading if not relevant, see instructions)

A1 - Relevant experience for the project

Program/project	Position	Period
RELANSIN / Airborne lock for hanging anti-submarine weapons	Project Manager	2001 – 2004
RELANSIN / Modernization of control at wire EDM machine ELEROFIL 10 type	Project Manager	2001 – 2004
INVENT / Electro pneumatic equipment for incremental adjustment of the working fluid parameters from automation installations	Project Manager	2002 - 2003
CALIST / Equipment for verification and control of ferromagnetic parts and assemblies, using nondestructive methods with magnetic powders	Project Manager	2003 – 2005
PNCIDI II / Hydro pneumatic power plant driven by waves	Research team member	2008 - 2009
PNCIDI II / innovative micro power plant, based on renewable resources (wind and hydraulic) with extended speed range of the working fluids, beyond the usual	Research team member	2007 - 2010
PNCIDI II / Clean electro-energy application in a location on Prut river, of an unconventional micro hydro power plant, with submerged aggregate	Research team member	2008 - 2011
FAIR / Contract no. IKC2.11.2.3 on the in-kind contribution consisting of sextupole electromagnets, vertical steerer electromagnets, horizontal steerer electromagnets and power supplies for HESR sextupole and steerer electromagnets	Project Manager	2013 - 2019
PN II - CAPACITĂȚI / Electromagnetic field quality characterization of the HESR normal conducting electromagnets, as preparatory action for the PANDA experiment	Research team member	2014 - 2016
PN III, Subprogram 2.1 (Solutions) / UAV (Unmanned Aerial Vehicles) Platforms with dedicated capabilities and support infrastructure for national security mission applications	Research team member	2017 - 2020
POC / Transfer of knowledge to the private environment in the energy field based on the scientific experience of ICPE-CA	Research team member	2016 - 2021

## A2 - List of main papers

1. **Chiriță, I.**; Tănase, N.; Apostol, S.; Ilie, C.; Popa, M. – *Design Optimization of a Flywheel using SolidWorks Modeling and Simulation Capabilities*, IEEE 8th International Conference on ENERGY and ENVIRONMENT - CIEM 2017, Location: University Politehnica of Bucharest, Romania, October 19 - 20, 2017, Published in Conference Proceedings, Pages: 344 – 348, DOI: 10.1109/CIEM.2017.8120858.
2. **Chiriță, I.**; Apostol, S.; Tănase, N.; Ilie, C.; Popa, M. – *Mathematical Modelling of the Induction Soldering Process for Coils Connection*, International Conference of Mechatronics & CyberMixmechatronics – ICOMECYME 2017, Bucharest, Romania, September 7 – 8, 2017, Published in International Journal of Mechatronics and Applied Mechanics – IJOMAM, Issue 1, 2017, ISSN 2559-6497, Pages: 202 – 205.
3. Popa, M.; Ilie, C.; Lipcinski, D.; **Chiriță, I.**; Tănase, N.; Apostol, S. – *Coupling and Assembly Elements Using Microfabrication*, International Conference of Mechatronics & CyberMixmechatronics – ICOMECYME, Bucharest, Romania, September 7 – 8, 2017, Published in International Journal of Mechatronics and Applied Mechanics – IJOMAM, Issue 1, 2017, ISSN 2559-6497, Pages: 95 – 100.
4. Daniel, D.; Tănase, N.; Apostol, S.; **Chiriță, I.**; Ilie, C. – *An Overview Regarding the Analytical vs. Numerical Computation for a PMB used for FESS*, IEEE Conference: 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Location: University Politehnica of Bucharest, Faculty of Electrical Engineering, Romania, March 23-25, 2017; Published in Conference Proceedings, Pages: 458-462.
5. Apostol, S.; Nedelcu, A.; Dan, D.; **Chiriță, I.**; Tănase, N. - *Mathematical Modeling of Eddy Current Non-Destructive Testing*, IEEE Conference: 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Location: University Politehnica of Bucharest, Faculty of Electrical Engineering, ROMANIA, March 23-25, 2017; Published in Conference Proceedings, Pages: 469-474.
6. Dan, D.; Ioan, D.; Apostol, S.; **Chiriță, I.** – *Numerical Modeling and Theoretical Characterization of Experimental Procedures of Steerer Magnets for Particle Accelerators*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES APPLIED MATHEMATICS AND PHYSICS, Volume: 78, Issue: 2, Pages: 255-266, Published: 2016.
7. **Chiriță, I.**; Dan, D.; Tănase, N. - *Magnetic and mechanical optimization of a sextupole magnet prototype*, Proceedings of The 9th International Symposium on ADVANCED TOPICS IN ELECTRICAL ENGINEERING ATEE 2015, Bucharest, 7-9 May 2015, 978-1-4799-7514-3/15/\$31.00 ©2015 IEEE, DOI: 10.1109/ATEE.2015.7133848, pp. 368 - 373.
8. Dan, D.; **Chiriță, I.**; Tănase, N.; Mălureanu, S. - *Analysis, characterization and optimization of a steerer magnet prototype*, Proceedings of The 9th International Symposium on ADVANCED TOPICS IN ELECTRICAL ENGINEERING ATEE 2015, Bucharest, 7-9 May 2015, 978-1-4799-7514-3/15/\$31.00 ©2015 IEEE, DOI: 10.1109/ATEE.2015.7133847, pp. 362 - 367.
9. **Chiriță, I.**; Dan, D.; Tănase, N. - *Magnetic field distribution inside the aperture of a steerer magnet prototype*, Proceedings of "STOR14", 9th International Conference on Nuclear Physics and Storage Rings, September 29 to October 3, 2014, Sankt Goar, Germany & Revista "Physica Scripta" (article reference: physscr-102286), ISSN 1402-4896.
10. Pinteau, J.; Dumitru A.; Dănescu - Pislaru, L.; **Chiriță, I.**, - *Piezoelectric Transducer For Fluid Viscosity Measurement*, Revista ELECTRONICĂ, ELECTROTEHNICĂ, AUTOMATICĂ, Vol. 60, Nr. 3, iulie - septembrie 2012, ISSN 1582-5175, pp. 63 - 66.
11. Nedelcu, A.; Oprina G.; Samoilescu Gh.; **Chiriță I.**; Nicolaie S. - *Numerical simulation of an innovative pneumatic turbine used to capture and convert wave energy*, Proceedings of the 7th International Conference on Management of Technological Changes, 1 - 3 Sept. 2011, Alexandroupolis, Greece, ISBN (vol.1) 978-960-99486-2-3, pp. 581-584.
12. Strâmbeanu, D.; Popovici, I.; Lipcinski, D.; Ignat, M.; Zănescu, G.; Dumitru, A.; Pinte, J.; Ilie, C.; **Chiriță, I.** - *Sistem pentru compensarea vibrațiilor prin suspensii active*, Buletinul AGIR nr. 3, iulie - septembrie 2011, ISSN-L 1224-7928, pp. 98 - 102.
13. Ilie, C.; Popa, M.; Prioteasa, P.; **Chiriță, I.**; Tănase, N. - *Applications of LIGA Technology for the Development of Micromechanical Systems*, Buletinul UPB, seria D, volumul 73, ISS. 2, 2011, ISSN 1454-2358, pp. 137 - 150.
14. Tsakiris, V.; Ilie, C.; Marinescu, V.; Reșu, R.; Petică, A.; Popa, M.; **Chiriță, I.** - *Pivots for magnetical fixing of dental prosthesis obtained by diffusion welding technique*, Proceedings of the 4th International Conference - Innovative Technologies for Joining Advances Materials, 10 - 11 June 2010, Timișoara, România, ISSN 1844-4938, pp. 266-271.

15. Nicolaie, S.; Mihăiescu, M.; Marin, D.; Ilie, C.; **Chiriță, I.**; Samoilescu, Gh.; Zus, M., Cazacu, M. - *A New Way of Sailing in Danube Delta*, Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium, vol. 20, pp 557 - 558, ISBN 978-3-901509-70-4, ISSN 1726-9679, , Published by DAAAM International, Vienna, Austria 2009.
16. **Chiriță, I.**; Ionescu, C. - *Electromagnetic equipment for nondestructive examination of ferromagnetic components and assemblies*. Volume of the XXXIX<sup>th</sup> Automation National Conference, October 2004, , Sinaia, Romania, ISBN 973-685-812-X.
17. **Chiriță, I.**; Ionescu, C. - *Experimental results achieved at the testing of an electro pneumatic equipment driven by an electrical stepper motor*. Volume of the X<sup>th</sup> Faculty of Building Services Conference, November 2003, Bucharest, Romania, ISBN 973-685-705-0.
18. **Chiriță, I.** - *Pressure regulator driven by an electrical stepper motor*. Volume of the XXXVIII<sup>th</sup> Automation National Conference, October 2003, Sinaia, Romania, ISBN 973-685-643-7.
19. **Chiriță.** - *Tendencies and anticipations in robotics*. Volume of the XXXVIII<sup>th</sup> Automation National Conference, October 2003, Sinaia, Romania, ISBN 973-685-643-7.
20. Chefneux, M.; **Chiriță, I.**; Costoiu, S. - *Generateurs brushless pour des centrales eoliennes de petite capacite*. Volume of the "Electrotechnique du futur" Symposium, EF'2001, November 2001, Nancy, France.

### A3 – List of patents

1. Ilie, C.; Popa, M.; **Chiriță, I.**; Tănase, N.; Prioteasa, P. - *Method for making miniature gear wheels with cycloid-profiled toothing for watchmaking*, patent no.: RO 128393, released on 28 February 2017.
2. Mateescu, C.; **Chiriță, I.**; Stancu, N.; Băbuțanu, C. - *Biogas installation for individual rural farms*, patent no.: RO 125902, released on 30 April 2014.
3. **Chiriță, I.** - *Pneumatic pressure regulator*, patent no.: RO 117214, released on 30 October 2002.

Date: February 2018

Signature,