


PERSONAL INFORMATION

Dr. Andreea FAZACAȘ



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Sex F | Nationality Romanian

WORK EXPERIENCE

June 2017-present

**Head of International Cooperation Center**

Institute of Atomic Physics, 407 Atomîștilor St. Măgurele 077125, Ilfov, România, [www.ifa-mg.ro](http://www.ifa-mg.ro)

- Programme Management for 3.1 AUF-RO Programme, 5.1 ELI-RO Programme, 5.2 Programme (CERN-RO, EURATOM-RO, FAIR-RO, CEA-RO, F4E-RO Modules) under The Romanian National Programme for Research, Development and Innovation;
- Drafting Documents for Call of Proposals;
- Drafting materials requested by Ministry of Research and Innovation (Strategic Plan, Annual Report, Midyear Report);
- Attending European Organization for Nuclear Research (CERN) meetings - LHC Resources Review Boards;
- Drafting materials for International Scientific Advisory Board (ISAB) CERN-RO, ELI-RO, FAIR-RO;
- H2020 – European Research Council - National Contact Point; H2020 - NFRP-07-CONCERT - National Contact Point;
- Drafting Scientific Reports for research projects conducted by the Institute of Atomic Physics;

Public Sector, R&D management

March 2011-June 2017

**Project responsible**

Institute of Atomic Physics, 407 Atomîștilor St. Măgurele 077125, Ilfov, România, [www.ifa-mg.ro](http://www.ifa-mg.ro)

- RO-CERN Programme Project Responsible (CERN, ELI and FAIR projects);
- Drafting materials for Romania's Representative at European Organization for Nuclear Research (CERN) for Council, Financial Committee, Scientific Policy Committee and LHC Resources Review Boards;
- Drafting materials for International Scientific Advisory Board (ISAB) RO-CERN, RO-ELI, RO-FAIR;
- H2020 – European Research Council - National Contact Point; H2020- NFRP-07-CONCERT - National Contact Point;
- Drafting second part of the [CERN/3192/RA document](#) – Final Report of the CERN-Romania Joint Committee for the period 2010-2015;
- Drafting Scientific Reports for research projects;
- Outreach activities – hands-on-experiments related to physics - A Different Kind of School National Project and European Researchers' Night Event

Public Sector, R&D management

April 2009 – September 2010

**Head of Laboratory (Laser Radiation Testing Laboratory); Deputy Head of Laboratory (UV-VIS-IR Laboratory) – Decision No. 15/27.04.2009 and 16/27.04.2009**

SC. Optoelectronica 2001 S.A., 409 Atomîștilor Str., Măgurele, Ilfov, [www.optoel.ro](http://www.optoel.ro)

- Coordination of the testing laboratories;
- Collaboration with the Quality Management Department;
- Drafting and reviewing testing procedures;
- Supervising the testing staff;
- Identifying trainings for operators;
- Analysing complaints from customers;
- ISO 17025:2005;
- Drafting Project Proposals and Reports.

February 2008 – April 2009

Research, Development and Innovation; Private Sector  
**Operator (Decision No. 24/21.07.2008)**

SC. Optoelectronica 2001 S.A., 409 Atomistilor Str., Măgurele, Ilfov, [www.optoel.ro](http://www.optoel.ro)

- Knowledge of the resting procedures from laboratories (UV-VIS-IR and Laser Radiation Testing)
- Testing Measurements: laser parameters (M2, 2D and 3D profiles, laser stability, polarization, wavelengths, full width half maximum, thermal imaging parameters (minimum detectable temperature difference, modulation transfer function, field of view), focal measurements, UV-VIS and FT-IR spectroscopy, IRT spectroscopy, refractive index measurements
- Drafting Project Proposals and Reports.

RDI; Private Sector

## EDUCATION AND TRAINING

October 2010 – February 2016

### Dr. in Electronics Engineering and Telecommunications

EQF Level: 8

University “Politehnica” of Bucharest – Department of Electronics, Telecommunications and Information Technology, OM 3209/23.02.2016

- Quantum electronics, Physics of Advanced Materials, Optical Detectors, Optical Information Processing and Holography, Fundamentals of Photonics, Optoelectronic materials
- Drafting and presenting two Research Reports: Mathematical and Numerical Models for nonlinear interactions in micro- and nano- photonic systems (April 2012); Development of study methods and analysis of micro- and nano-photonic systems with applications (February 2013);
- PhD thesis title: Contribution to the study of nonlinear phenomena in micro – and nano-optical systems with applications (Coord. Prof. Dr. Eng. Paul Sterian).

October 2010 – June 2012

### Msc. in Engineering Applied Science

EQF Level: 7

University “Politehnica” of Bucharest – Department of Applied Science

- Quantum electronics, Physics of Advanced Materials , Numerical Methods in Optical Engineering, Optical Detectors, Optical Information Processing and Holography , Fundamentals of Photonics, Optoelectronic Materials, Photonic Technologies, Photonic Sources; Optical Sensors, Complexity, Nanoscience and Materials, Semiconductors and Advanced Materials, Interdisciplinary Applications of Photonics;
- Dissertation title: Study of nonlinear phenomena in optical fibres with applications (Coord. Prof. Dr. Eng. Paul Sterian).

October 2003 – June 2008

### Bsc. in Physics Engineering (Diploma Engineer)

EQF Level: 6

The University of Bucharest, Department of Physics

- Courses: Mechanics, Analytical Mechanics, Molecular Physics, Electricity, Electronics, Optics and Lasers, Atomic and Nuclear Fundamentals, Electrodynamics and Relativity Theory, Quantum Mechanics, Atom and Molecule Physics, Solid State Physics, Technical Drawing, Programming, Materials Science and Technology, Metrology, Numerical methods, Superior Mathematics, Algebra, Calculus, Mathematical Physics Equations
- Abilities: data analysis with Origin, technical drawing in AutoCAD, Programming in Fortran, C++ and IDL;
- Communications: University of Bucharest, Department of Physics (see Annex)
- Bsc. Diploma Title: Temporal Emission of White Light Acoustic Noisy Flares (Coordinators: Conf. Dr. Mircea Rusu, Dr. Diana Ionescu-Beșliu)

September 1999 – June 2003

### Bachelor Degree and Technical Mechanics Diploma

EQF Level: 2

School of Arts and Crafts “Ion Mincu” from Deva

- Practical activities in the field of automotive industry and product technologies, technical drawing, aspects related to a company with auto profile;
- Editor of “Adolescent Challenges” Magazine;
- Participation in Communication Sessions organized in Hunedoara County: Prizes – 2<sup>nd</sup> place in Mathematics (2000), Mention in Psychology (2001), 1<sup>st</sup> and 2<sup>nd</sup> Place in Physics (2002, 2003)

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	B2	B2	C1
Replace with name of language certificate. Enter level if known.					
French	B1	B2	B1	B1	B2
Replace with name of language certificate. Enter level if known.					

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

Digital skills

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

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

Replace with name of ICT-certificates

- Good command of office suite (word processor, spread sheet, presentation software);
- Good command of research software's for testing and measuring;
- Good command of data analysis software: Origin;
- Good command of CAD environment that enables the design and simulation of advanced passive and non-linear photonic components: OptiFDTD;
- Good command of 3d design software: Solidworks;
- Good command of photo editing software (Photoshop) gained as an amateur photographer;
- Good command of web design.

ANNEX

Publications

[1] A. Fazacaș, P. Sterian, Finite-Difference Time-Domain Method (FDTD) used to Simulate Micro-ring Resonator for Student Applications, Journal of Optoelectronics and Advanced Materials, vol. 14, no. 3-4, 2012, pp. 344 – 349

[2] A. Fazacaș, P. Sterian, Second and third order dispersion effects analysed by the split-step Fourier method for soliton propagation in optical fibers, Journal of Optoelectronics and Advanced Materials Vol. 14, No. 3-4, March – April 2012, p. 376 – 382

[3] A.Fazacaș, P. Sterian, Nonlinear effects in SOI micro-ring resonators, U.P.B. Sci. Bull., Series A, Vol. 75, Iss. 3, 2013

[4] A. Fazacaș, P. Sterian, Propagation of the Raman soliton in optical fibers, Romanian Reports in Physics, Vol. 65, No. 4, P. 1420–1430, 2013

[5] A. Fazacaș, P. Sterian, Nonlinear modelling of the photon pair generation in ring resonators, Journal of Optoelectronics and Advanced Materials, Vol. 17, No. 5-6, May – June 2015, p. 894 – 900

[6] A. Fazacaș, P. Sterian, Wijngaard test around inclusions in microstructured solid and hollow core optical fibers, Journal of Optoelectronics and Advanced Materials S-Rapid Communications, Vol. 9, No 5-6, Pages 880 - 884

[7] A. Surmeian, D. Manaila Maximean, B. Mihalcea, O. Danila, P. Dinca, I. Barbut, L. Tudor, A. Fazacaș, E. Displasu, P. Chapon, M. Ganciu - University "Politehnica" of Bucharest, GDOES and GDMS analytical systems, effective tools for characterization of conductive and nonconductive material surfaces, U.P.B. Sci. Bull., Series A, Vol. 77, Iss. 4, 2015

## Presentations/Conferences

### University of Bucharest, Department of Physics Scientific Communications:

- [1] "Rotational curves of galaxies", S. Paduroiu, A. Fazacas, M. Rusu, 2005
- [2] "Temporal evolution of the white light emission from acoustically noisy flares", A. Fazacas, D. Besliu, M. Rusu, 2007
- [3] "SXR Signatures and Temporal Profile of the Magnetic Field Associated with Two Acoustically Active Flares", D. Besliu, A. Fazacas, A. Donea, 2009

### Conferences

- [1] Solar Cell Characteristics during Partial Solar Eclipse from Romania, Astrophysics Conference organized by Astronomical Institute of Romanian Academy, 2006
- [2] Conference Astrophysics, Dynamical Systems and Fractals - past and future - A conference to mark the formal retirement of Professor Mircea V. Rusu - Poster, 2006
- [3] ECOIND 2009 „Environmental impact by using thermography in thermal rehabilitation”, 2009
- [4] International Student Workshop on Laser Applications, "Finite-Difference Time-Domain Method (FDTD) used to Simulate Micro-ring Resonator for Student Applications"
- [5] 12th International Balkan Workshop on Applied Physics - Second and Third Order Dispersion Effects Analyzed by the Split-Step Fourier Method for Soliton propagation in Optical Fibers, 2011
- [6] 9th ISCBPU, International Student Conference of Balkan Physical Union - Propagation of the Raman soliton in optical fibers, 2012
- [7] International Colloquium "Physics of Materials" (PM-3): Nonlinear effects in SOI micro-ring resonators; poster: Wijngaard test around inclusions in microstructured solid and hollow core optical fibres - University "Politehnica" of Bucharest, November 15-16, 2012
- [8] International Colloquium "Physics of Materials" (PM-4) – poster - GDOES and GDMS analytical systems, effective tools for characterization of conductive and nonconductive material surfaces, University "Politehnica" of Bucharest, November 13-14, 2014
- [9] Autumn Scientific Session of the Romanian Academy of Scientists, Nonlinear effects in optical microring resonators, 19 – 20 September 2014, Constanța
- [10] Romanian Space Week, STAR Programme Annual Conference 2013, 2014, 2015 - Participation to the Scientific ESA Programmes STAR SCIENCE, – 26-27 June 2013, 12-16 May 2014, 27-29 May 2015

### Other

Info Days to promote European Horizon 2020 Programme – National Contact Point for European Research Council (ERC):

- [1] West University "Vasile Goldiș" from Arad - 25 March 2014
  - How to Apply for Horizon 2020 Projects?
  -
- [2] "Ovidius" University of Constanța – 28-30 April 2014 - Workshop: Funding Opportunities in Horizon 2020 European Programme
  - Participant Portal;
  - European Research Council Grants;
  - Online Project Proposal;
  - The Role of Partners in a Project and the General Structure of a Project Proposal.
- [3] Ministry of National Education, Bucharest – 22-23 May 2014 – The first meeting of the Regional Contact Points with the National Contact Points from Horizon 2020
  - Participant Portal;
  - The general structure of a project proposal in Horizon 2020.
- [4] "Transilvania" University of Brasov – 27 – 28 May 2014;
  - Participant Portal;
  - Online Project Proposal;

- The Evaluation of Project Proposal in Horizon 2020 – Steps to Success.

[5] University of Craiova – 05 - 06 June 2014

- Participant Portal;
- Online Project Proposal;

[6] München - 18 June 2015 – WP 1 – Task 1.7 Attracting new members to the CONCERT EJP Consortium

### Projects

[1] Project director for SME (2009-2010) – FORFIRE - System for highly reliable, cost-effective, early detection and accurate localization of incipient forest fires - FP7 European Project;

[2] Project director for SME (2009-2010) – TERACAP – Portable Spectral System for Rapid Detection of the Quality of Food – financed by UEFISCDI

[3] Research Assistant (2012-2015) - STAR SCIENCE – Participation to the scientific ESA Programmes – financed by Romanian Space Agency

[4] Research Assistant (2012-2015) - STAR TECHNOLOGY – Participation to the technological ESA Programmes – financed by Romanian Space Agency (ROSA)

[5] Research Assistant – Researchers Night 2013 – Science: the Great Escape – European FP7 project;

[6] Research Assistant - Researchers Night 2014 - 2015 - ROTalkScience - #doyouspeakscience - European H2020 project;

[7] Research Assistant – LEOPARD - Laser-Plasma Acceleration of Particles for Radiation Hardness Testing – INFLPR, CETAL – financed by ROSA

[8] Research Assistant (2014 – 2016) – SCINET Science Network – financed by UEFISCDI;

[9] Research Assistant (2016 - present) – EroSpace – Establishing a Romanian National Centre for Space Strategy Fostering Extensive Capabilities Among National Stakeholders on space policy and technological transfer - financed by ROSA;

[10] Research Assistant and National Contact Point (2016-present) - CONCERT - European H2020 project;

### Courses/Certifications

[1] FIATEST – Measurement of uncertainties in testing laboratories / Applications, 25 -27 March 2009;

[2] UEFICDI – Modern TIC technologies to monitor the data activities and infrastructure from research and development, 07-08 December 2015.

### Summer Schools

[1] International Undergraduate Summer School in Particle Physics and Astronomy the University of Sheffield (UK), 2006, Project: “Quintessence models of dark energy”; supervisor A. Brookfield

[2] Perseids 2005, 2006 – organized by Astronomical Society of Meteors from Romania, Romania