



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Mariana Iliescu**

E-mail Mariana.iliescu@icsi.ro

Nationality Romanian

Desired employment/
Occupational field **Research**

Work experience

Dates	2009-2016
Occupation or position held	Scientific Researcher II, National Centre for Hydrogen and Fuel Cell
Main activities and responsibilities	Research and development of controlling systems in hydrogen energy technologies and renewable energy systems Research project manager
Dates	1998 - 2009
Occupation or position held	Scientific Researcher II, R&D Department
Main activities and responsibilities	Research and executive development of apparatus for isotopic and special analysis, for cryogenic processes and environmental monitoring Research projects manager
Name and address of employer	National R&D Institute of Cryogenics and Isotopic Technology, Rm. Valcea, Romania
Type of business or sector	Research & Development
Dates	1995 - 1998
Occupation or position held	Scientific Researcher III, R&D Department
Main activities and responsibilities	Research and executive development of apparatus for isotopic and special analysis, for cryogenic processes and environmental monitoring Research projects manager
Name and address of employer	National R&D Institute of Cryogenics and Isotopic Technology, Rm. Valcea, Romania
Type of business or sector	Research & Development
Dates	1990 – 1995
Occupation or position held	Engineer, Electronics Laboratory
Main activities and responsibilities	Research and executive development of apparatus for isotopic and special analysis, for cryogenic processes
Name and address of employer	National R&D Institute of Cryogenics and Isotopic Technology, Rm. Valcea, Romania
Type of business or sector	Research & Development
Dates	1985 – 1990

Occupation or position held | Education and Personnel Organization Bureau, Head of Bureau
 Main activities and responsibilities | Coordination and planning research activities along with personnel professional advancement
 Name and address of employer | National R&D Institute of Cryogenics and Isotopic Technology, Rm. Valcea, Romania
 Type of business or sector | Research & Development

Dates | 1977 – 1985

Occupation or position held | Engineer, Electronics Laboratory
 Main activities and responsibilities | Research and executive development of apparatus for isotopic and special analysis
 Name and address of employer | National R&D Institute of Cryogenics and Isotopic Technology, Rm. Valcea, Romania
 Type of business or sector | Research & Development

Education and training

Dates | March 1986 – September 1986

Title of qualification awarded | Diploma
 Principal subjects/occupational skills covered | Applied electronics in isotope separation
 Name and type of organisation providing education and training | State Committee for Nuclear Energy, Bucharest

Dates | October 1972 – July 1977

Title of qualification awarded | Bachelor Degree
 Principal subjects/occupational skills covered | Applied electronics
 Name and type of organisation providing education and training | Traian Vuia Polytechnic Institute Timisoara, Electrotechnical Faculty, Applied Electronics specialty

Personal skills and competences

Mother tongue(s) | **Romanian**

Other language(s)

Self-assessment
European level ()*

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1		C1		C1		C1		C1	
C1		C1		C1		C1		C1	

(*) [Common European Framework of Reference for Languages](http://www.cedefop.europa.eu)

Social skills and competences | Teamwork, communication, responsibility

Organisational skills and competences	<p>Member of the Romanian Physics Society Founding Member of The Alliance for Hydrogen and Fuel Cell Reviewer for scientific journals: - Int. Journal of Hydrogen Energy; - Progress in Cryogenics and Isotopes Separation Scientific responsible, assistant project manager, project manager</p> <p>MENER 052/2001: Sistem integrat de analiza si monitorizare a gradului de poluare atmosferica pentru o platforma industriala complexa, chimica si termoenergetica (Eng: Integrated system for pollution monitoring of a complex industrial platform, chemical and energetical) – <i>project manager assistant</i></p> <p>CERES 3-69/2003: Dezvoltarea unei metode de determinare a factorilor de separare izotopica in sisteme Pd-H₂, in vederea evaluarii posibilitatilor de separare a tritiului (Eng: Development of a method for determining the isotopes separation factors in palladium-hydrogen systems, in order to assess tritium separation possibilities) - <i>project manager assistant</i></p> <p>CEEX MENER 614/2005: Monitorizarea ultrasensibila a poluantilor bazata pe sisteme tandem cu detectori neconventionali (Eng: Pollutants ultra-sensitive monitoring based on unconventional detectors tandem systems) – <i>Scientific responsible</i></p> <p>CEEX-RENAR 160/2006: Laborator de tritiu- extinderea acreditarii pentru probe biologice si de mediu (Eng: Tritium laboratory – accreditation extending for biological and environmental samples) - <i>project manager assistant</i></p> <p>CEEX AMCSIT 280/2006: Integrearea/aplicarea celulelor/ sistemelor de combustie, prioritar cu H₂, inclusiv in sisteme hibride cu regenerabile, si model pilot functional, cu conducere si conducere inteligenta si sig. anti-ex. (Eng: Integration/ application of cells/combustion systems, priority with H₂, inclusive in hybrid systems with renewables and functional pilot model, with intelligent controlling and anti-ex safety) – <i>scientific responsible</i></p> <p>PNCDI II 31-028/2007 Evaluarea si managementul zgomotului ambiental si a calitatii aerului intr-o arie pilot, periurbana, in interiorul careia exista mari obiective industriale si artere de trafic (Eng: Evaluation and management of environmental noise and air quality in a pilot peri-urban area including large industrial objects and traffic roads) - <i>project manager assistant</i></p> <p>PNCDI II 22-128/2008 Sistem optimizat de producere a energiei termice din surse regenerabile utilizand pompa de caldura (Eng: Optimized system for producing thermal energy from renewable sources using the heat pump) – <i>project manager</i></p> <p>STAR 40/2012: Advanced strategic planning to develop a turbopump system for a liquid propellant rocket engine –DevPump – <i>scientific responsible</i></p> <p>STAR 89/2013: Concept development and technology evaluation for a PEM fuel cells based auxiliary power unit for space applications – PEMSAPU - <i>project manager assistant</i></p> <p>53 PED/ 2017: Experimental validation of a hydrogen fuel cell automotive propulsion system on a Lightweight Vehicle - Hy-DeMo – Hydrogen Demonstration Mobility - <i>scientific responsible</i></p> <p>Research team member of other 28 national and international research projects.</p>
Technical skills and competences	Isotopes and special analyses apparatus, controlling systems in cryogenics, environmental and renewable energy technologies
Computer skills and competences	Good command of Microsoft Office Suite; Origin.
Additional information	Responsible for electrical testing in the Quality Assurance System

Published articles:

Extension of the use of Pt100 temperature sensor in the range 20-77 K using gas thermometer
Mariana Iliescu, Mihai Culcer, Marian Curuia, Traian Roman, Ioan Stefanescu
 E.E.A. Electrotehnica, nr. 3-4/1998, pag.17-21

Experimental Study about JFET Behaviour at Low Temperatures
Mariana Iliescu, Mihai Culcer
 Romanian Reports in Physics, 2000, pag.31-37

Romanian made semiconductor diodes as cryogenic temperature sensors
Mariana Iliescu, Mihai Culcer
 Progress of cryogenics and isotopes separation nr. 7-8/ 2001, pag. 49-51

Mass and heat transfer on B7 structured packing, at separation of hydrogen isotopes distillation
Cornelia Croitoru, Floarea Pop, Gh. Titescu, M.Culcer, Mariana Iliescu, I.Stefanescu, M.Peculea, D. Trancota
 Progress of cryogenics and isotopes separation nr. 9-10/ 2002, pag.17-25

Magnetic Filter with HGMF Matrix for Industrial Gases Depollution
Gh. Iacob, M.Chiriac, M. Curuia, M. Iliescu, I.Stefanescu
 Journal of Optoelectronics& Advanced Materials, 2004, pp.709-713

Automation System for Tritium Contaminated Surface Monitoring
M. Culcer, Mariana Iliescu, M. Curuia, M. Raceanu, A. Enache, I. Stefanescu, C. Ducu, V. Malinovschi
 Progress of cryogenics and isotopes separation nr. 15-16/2005, pag. 95-105

Experimental Plant for ¹⁸O Separation by Cryogenic Oxygen Distillation
 Floarea Pop, Iuliana Picioarea, Mariana Iliescu, M. Culcer, Cornelia Croitoru, I. Stefanescu
 Annals of University of Craiova, Electrical Engineering Series, no. 30/2006

Integrated Automation System for a Pilot Plant for Energy Conversion Using PEMFCS
M. Culcer¹, M. Iliescu¹, M. Raceanu¹, V. Stanciu¹, I. Stefanescu¹, P. G. Lazaroiu², G. Lazaroiu², A.Badea², Adrian Enache¹, in Applied energy , vol. 86, issue 2/2007, pp. 251-258

Study of a PEM Fuel Cell Functioning Performances Using a Test Station
M. Culcer, A. Enache, E. Carcadea, M. Raceanu, M.Iliescu, M. Varlam
 Progress of cryogenics and isotopes separation nr. 12, issues 23-24/2009, pp.80-83

Trend and Abatement Scenarios for Criteria Pollutants Concentrations in Rimnicu Vilcea Industrial Periurban Area
Anca Dragomir, Daniela Zisu, G. Mocioaca, M. Zaplaic, Mariana Iliescu, M.Culcer
 Progress of cryogenics and isotopes separation nr. 13. Issue 2/2010, pp. 87-93

Experimental study of a ground heat exchanger small- scale model to obtain data for a ground coupled heat pump system design
Mariana Iliescu, M.Culcer, M.Raceanu,
 Progress of cryogenics and isotopes separation nr.14 /2011, pp.73-80

PEM Fuel Cells in Automotive Applications - Realizations and Perspective within ICSI Rm. Valcea
I.Iordache, M.Culcer, Mariana Iliescu, M. Răceanu, A. Enache, Maria Simona Mosteanu, M. Varlam, I. Stefanescu
 Electromotion, ISSN 1223-057X; 20, 1-4, (2013) pp. 109-112

Fuelling Mode Effect on a PEM Fuel Cell Stack Efficiency
M. Raceanu¹, Mariana Iliescu¹, M. Culcer¹, Adriana Marinouiu¹, M. Varlam¹, N. Bizon²
 Progress of cryogenics and isotopes separation nr. 18. Issue 1/2015, pp. 5-14

Fuel Cell Based Powertrain Simulations to Find the Power Splitting Leading to Improved Characteristics
 Mariana Iliescu, M.Raceanu, M. Culcer, A. Enache, M. Varlam
 Progress of cryogenics and isotopes separation nr. 20. Issue 1/2017, pp. 5- 14