

Curriculum Vitae

Personal information

First name(s) / Surname(s) **Marius-Mihai Cazacu**
Address(es) 11 Carol I Blvd., 700506 Iasi, Romania
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E-mail cazacumarius@gmail.com
Nationality Romanian
Date of birth 19.11.1981
Gender male

Present employment / position **PhD / Research and educational activities**

Work experience

1 month

Dates October 2011 - present

Occupation or position held Postdoctoral Fellowships (18 months): Atmospheric aerosols optical 3D characterization. Meteorological factors, air pollution and health, POSDRU/89/1.5/S/63663

Name and address of employer AI I Cuza University of Iasi

Type of business or sector Academic. Research&Development

Work experience

3 years

Dates 2007-2010

Occupation or position held PhD student, Atmospheric Remote sensing Investigation, PhD Thesis: *Contributions to the implementation of the first national LIDAR network for atmospheric aerosols optical characterization*

Name and address of employer AI I Cuza University of Iasi

Main activities and responsibilities

Member of the next atmospheric research projects:

1. ROLINET – ROmanian LIdar NETwork (2007 - 2010)
2. RADO – Romanian Atmospheric Research 3D Observatory (2009 - 2011)

Type of business or sector Academic. Research&Development

Work experience

3 years

Dates 01.06.2008 – 30.03.2010 01.04.2010 – 30.09.2011

Occupation or position held Research Engineer Researcher

Name and address of employer SC EnviroScopY SRL

Type of business or sector Commercial and Research&Development, Atmospheric Monitoring

Main activities and responsibilities

Atmospheric monitoring by remote sensing techniques (LIDAR & DOAS) and air pollutants monitoring (eg Horiba Instruments)

Member of the next atmospheric research project:

1. Research, development and implementation in micro-production of innovative systems for monitoring 3D LIDAR aerosols, clouds and water vapour – O233 (2010 - 2012)

Work experience

3 months

Dates Oct 2007 – Dec 2007

Occupation or position held Research Engineer

Name and address of employer SC ASAM SA

Type of business or sector Commercial and Research&Development, Quality Management

Main activities and responsibilities | Researching and production processes observation of auto parts. Reducing the number of rejects parts, activity undertaken for some auto parts

Work experience

6 months
Dates | Oct 2006 – Mar 2007
Occupation or position held | Debutant Researcher
Name and address of employer | National Institute for Applied Physics, Non-destructive testing laboratory
Main activities and responsibilities | The development and research of eddy current sensors
Type of business or sector | Research

Education

Dates | Oct 2007 – Dec 2010
Title of qualification awarded | PhD Student
Principal subjects/occupational skills covered | Contribution at the first national LIDAR network for optical investigations of atmospheric aerosols
Name and type of organisation providing education and training | Al I Cuza University of Iasi, Faculty of Physics
Dates | 2005; 2007
Title of qualification awarded | BA in Physics/Engineer; MA in Physics;
Principal subjects/occupational skills covered | Applied Physics; Physics of Advanced Materials. Nanotechnology.
Name and type of organisation providing education and training | Al I Cuza University of Iasi. Faculty of Physics.

Trainings

Dates | March 2009 – July 2010
Title of qualification awarded | CISCO – Module CCNA
Principal subjects/occupational skills covered | 1 - Network Fundamentals; 2 - Routing Protocols and Concepts; 3 - LAN Switching and Wireless; 4 - Accessing the WAN
Name and type of organisation providing education and training | Al I Cuza University, Iasi, AARNIEC/RoEduNet Department
Dates | 21 – 27 February 2010
Title of qualification awarded | Training
Principal subjects/occupational skills covered | Second Intense Training for Romanian Atmospheric Research 3D Observatory – RADO Project
Gaining of knowledge of remote sensing techniques for monitoring the Earth's atmosphere.
Theoretical and practical course, using IR and UV cameras, satellite imagery and models of dispersion of pollutant
Name and type of organisation providing education and training | Norwegian Institute for Air Research (NILU)
Dates | 9 – 13 November 2009
Title of qualification awarded | Training
Principal subjects/occupational skills covered | First Intense Training for Romanian Atmospheric Research 3D Observatory – RADO Project
Gaining of knowledge of remote sensing techniques for monitoring the Earth's atmosphere.
Theoretical and practical course by LIDAR systems use, HYSPLIT model, Basic of Atmospheric physics.

Name and type of organisation providing education and training	National Institute of Research & Development for Optoelectronics – INOE2000				
Dates	14 – 18 January 2008				
Title of qualification awarded	Winter School				
Principal subjects/occupational skills covered	Advanced Materials Physics Gaining of theoretical knowledge and analysis of advanced materials				
Name and type of organisation providing education and training	Aristotle University of Thessaloniki - Greece				
Dates	31 July – 9 August 2006				
Title of qualification awarded	Summer School				
Principal subjects/occupational skills covered	Optoelectronic Techniques for Environmental Monitoring and Risk Assessment Gaining of knowledge about remote sensing techniques for monitoring of the Earth's atmosphere				
Name and type of organisation providing education and training	North University of Baia Mare - Romania				
Dates	2 – 14 July 2006				
Title of qualification awarded	Summer School				
Principal subjects/occupational skills covered	Physico-Chimie de l'Atmosphère: des Expériences de Laboratoire aux Campagnes de Terrain Gaining of knowledge about the Atmospheric Chemistry and Physics, Perspectives Research & Atmospheric Sounding				
Name and type of organisation providing education and training	Al I Cuza University, Iasi, Faculty of Physics				
Dates	19 – 21 September 2005				
Title of qualification awarded	Electron microscopy course				
Principal subjects/occupational skills covered	Gaining of knowledge for analysis of thin films using electron microscopy techniques				
Name and type of organisation providing education and training	National Institute of Research and Development for materials physics – Bucharest, Magurele				
Short Laboratory Stages	Oct 2007 – May 2008				
Name and type of organisation providing education and training	The Characterization of Molecular Organization in BioMaterials Laboratory, Al I Cuza University, Iasi, Faculty of Physics				
Principal subjects/occupational skills covered	The obtaining of nanocomposites - platforms in bioengineering; The obtaining of nanostructured (bio)polymer matrices, for biosensors, controlled delivery systems and biointegration platforms;				
Personal skills and competences					
Mother tongue(s)	Romanian				
English					
Self-assessment <i>European level (*)</i>	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
	B1	B2	B1	B1	B1
French					
Self-assessment <i>European level (*)</i>	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
	B1	B2	A2	A2	B1

Professional skills and competences	
Organisational skills and competences	<ul style="list-style-type: none"> Member, co-organization of several National and International Conferences, Summer Schools or Workshops.
Teaching activities	Lasers, Spectroscopy, Environment, Health
Scientific research activity	<p>Air monitoring, Remote Sensing (Horiba, LIDAR, DOAS), Scientific Software; Capability to operate with different techniques of measurement and control; Technical skills mounting / dismounting; Basics of microscopy field; Capability to adapt at operating / service with complex laboratory and industrial equipments; Obtaining polymeric with nano-clusters films by electrodeposition, electrical and magnetic measurements of physical parameters; Use / service of vacuum equipments.</p>
Computer Skills	User of Windows (7, Vista, XP, 98, 95), Linux (beginner), Office (Word, Excel, PowerPoint), Origin, LabView (beginner), Corel Draw, Adobe Photoshop Software and hardware service

Scientific Papers

ISI Papers:

1. M.M. Cazacu, A. Timofte, I. Balin, D. Dimitriu, S. Gurlui, *Complementary atmospheric urban pollution studies in the north-east region of Romania, Iasi county*, Environmental Engineering and Management Journal Vol 10, Nr. 1, 139-145, 2011;
2. A. Timofte, M.M. Cazacu, R. Radulescu, C. Talianu, D. Dimitriu, S. Gurlui – *Romanian LIDAR investigation of the EYJAFJALLAJOKULL volcanic ash*, Environmental Engineering and Management Journal Vol 10, Nr. 1, 91-97; 2011;
3. I. Vetres, I. Ionel, M.M. Cazacu, I. Balin – *Necessity of complementary vertical resolved LIDAR observation towards ground air pollution analysis, in western Romania*, Journal of Environmental Protection and Ecology, acceptată spre publicare, Nr. Ref 1574B/07.07.09;
4. A. Covasnianu, M. Cazacu, N. Libralesso, L. Galisson, M. Memier, I. Balin – *Digital Terrain Model by airborne LIDAR technique: an essential tool for hydrologic risks assessment*; Journal of Optoelectronics and Advanced Materials - Vol.9 ISS.11, 3529-3532, 2007;
5. Felicia Iacomi, N. Apetroaei, G. Calin, Gh. Zoderiu, M.M. Cazacu, C. Scarlat, V. Goian, D. Menzel, I. Jursic, J. Schoenes – *Structure and Surface morphology of Mn – Implanted TiO₂*, Symposium J – article in Thin Solid Films, Volume 515, Issue 16, June 2007, Pages 6402-6406;

Papers published in journals recognized by CNCSIS:

1. A. Covasnianu, M.M. Cazacu, I. Balin, *Advanced DTM generation using airborne LIDAR technique*, Geographia Technica Issue Nr. 6 / 2008, pp 1 - 7;
2. Raimond Grimberg, Paul Barsanescu, Adriana Savin, Rozina Steigmann, Marius Mihai Cazacu – *Evaluation of carbon epoxy composites delaminations using Lamb waves*, Buletinul Institutului Politehnic Iasi, tom LIII(LVII), Fasc.2, 2007, pp. 53-60;
3. Raimond Grimberg, Ioan Curtu, Ioan Szava, Adriana Savin, Rozina Steigmann, Nicoleta Iftimie, Marius Mihai Cazacu – *Nondestructive evaluation with ultrasound of sandwich ligno-cellulose composites using noncontact transducers*, Buletinul Institutului Politehnic Iasi, tom LIII(LVII), Fasc.2, 2007, pp.61-68.

Papers published in conference proceedings:

1. Marius Mihai Cazacu, Adrian Timofte, Camelia Talianu, Doina Nicolae, Dan Gheorghe Dimitriu, Silviu Gurlui, *Iasi County: Atmospheric volcanic ash cloud investigations. Modeling-forecast and experimental environmental approach*, 5th Workshop on Optoelectronic Techniques for Environmental Monitoring – OTEM 2011, Bucuresti, Romania;

2. Ioan-Sorin Stratulat, Marius-Mihai Cazacu, Adrian Timofte, Dan-Gheorghe Dimitriu, Silviu Gurlui, *Meteo-climatic factors influence upon Cacica salt-mines, Suceava county-natural climatic areal for medical rehabilitation treatment*, 5th Workshop on Optoelectronic Techniques for Environmental Monitoring – OTEM 2011, Bucuresti, Romania;
3. Ioan-Sorin Stratulat, Adrian Timofte, Marius-Mihai Cazacu, Dan-Gheorghe Dimitriu, Silviu Gurlui, *Cacica salt-mines, Suceava county: meteorological factors and balneary-climatic potential studies*, 5th Workshop on Optoelectronic Techniques for Environmental Monitoring – OTEM 2011, Bucuresti, Romania;
4. Ovidiu-Gelu Tudose, Marius-Mihai Cazacu, Adrian Timofte, Ioan Balin, *ESYRO LIDAR system developments for troposphere monitoring of aerosols and clouds properties*, SPIE Remote Sensing, 2011, Prague, Czech Republic.
5. A. Timofte, M.M. Cazacu, D. Dimitriu, S. Gurlui, R. Radulescu, C. Talianu, *Utilizarea sistemelor LIDAR in Romania pentru investigarea norului de cenusa provenit de la vulcanul EYJAFJALLAJOKULL*, Sesiunea anuala de comunicari stiintifice, Administratia Nationala de Meteorologie, 10 – 11 Noiembrie 2010, Bucuresti, Romania
6. Timofte, M.M. Cazacu, R. Radulescu, C. Talianu, D. Dimitriu, S. Gurlui, *First Romanian LIDAR investigation of the EYJAFJALLAJOKULL volcanic ash*, 4th International Workshop on Optoelectronic Techniques for Environmental Monitoring – OTEM 2010;
7. M.M. Cazacu, A. Timofte, D. Dimitriu, S. Gurlui, *Experimental validation of MAP 3D environmental data in NE region of Romania-Iasi area*, 4th International Workshop on Optoelectronic Techniques for Environmental Monitoring – OTEM 2010;
8. M. Cazacu, I. Vetres, P. Ristori, P. Mark, O. Tudose, D. Nicolae, D. Dorohoi, I. Balin – *mESYLIDAR – a new up-gradable and versatile LIDAR configuration for 3D monitoring of atmospheric aerosols, clouds and water vapor within ROLINET project*, 3rd International Workshop on Optoelectronic Techniques for Environmental Monitoring – OTEM 2009, 30 Septembrie – 2 Octombrie 2009;
9. Adrian Covasnianu, Mihai Cazacu, Alexis Merlaud, Joelle Bechara, Victor-Daniel Cărbunaru, Daniel-Eduard Constantin, *Tropospheric exploration above Moldavia province: trace gas measurements ATR-42 flight AS0729 on the 16th of July 2007*, Present Environment and Sustainable Development, Nr.2, 2008;
10. Mihai Cazacu, Eduard-Daniel Constantin, Adrian Covasnianu, Ioan Balin – *O₃, SO₂ and NO_x urban processes: point monitor measurement & interpretation in Bucharest – spring 2006*; 1st International Summer School – Optoelectronic Techniques for Environmental Monitoring and Risk Assessment 31 iulie – 9 august 2006, Baia Mare, Romania;
11. Eduard-Daniel Constantin, Adrian Covasnianu, Mihai Cazacu, coord. Ioan Balin - *O₃, SO₂ and NO_x urban processes: interpretation in Bucharest – May 2006*; 1st International Summer School – Optoelectronic Techniques for Environmental Monitoring and Risk Assessment 31 iulie – 9 august 2006, Baia Mare, Romania.

Awards:

III:

M.M. Cazacu, A. Timofte, O.G. Tudose, D. Dimitriu, S. Gurlui, I. Balin – *mESYLIDAR – A new configuration for 3D monitoring of atmospheric aerosols and clouds*, A XXXIX-a Conferinta Nationala Fizica si Tehnologiile Educationale Moderne, 15 Mai 2010, Iasi, Romania;

I:

I. Vetres, I. Ionel, M.M. Cazacu, I. Balin – *Necessity of complementar vertical resolved LIDAR observation towards ground air pollution analysis, in western Romania*, International U.A.B. – B.E.N.A Workshop Management and Sustainable Protection of Environment, 6 -7 Mai 2009, Alba Iulia, Romania;

November 1st, 2011