



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **BUCUR ALEXANDRA IOANA**
Official address(es) No1 P Ispirescu Street, 300094 Timisoara, Romania
Telephone(s) : +40722853576
E-mail alexandra.i.bucur@gmail.com, iioitescu@yahoo.com
Nationality Romanian
Date of birth 11/14/1980
Gender Female

Work experience

Dates	2010-present
Occupation or position held	Scientific researcher III
Main activities and responsibilities	Synthesis and physico-chemical characterization of ceramic materials; calcium phosphates and hydroxyapatite synthesis (sol-gel, precipitation, hydrothermal) and characterization by XRD, SEM, TEM, AFM, TA, FT-IR. Operation of XRD Equipment. Member of research team of a number of national projects in the field of ceramic materials synthesis and characterization. Publication and presentation of scientific papers, patenting of original results, development and innovation in materials science.
Name and address of employer	National Institute for Research and Development in Electrochemistry and Condensed Matter Timisoara, Romania
Type of business or sector	Research and Development
Dates	2009-2013
Occupation or position held	Head of X-Ray Laboratory
Main activities and responsibilities	X-ray Diffraction Equipment and accessories functionality, Laboratory Management
Name and address of employer	National Institute for Research and Development in Electrochemistry and Condensed Matter Timisoara, Romania
Type of business or sector	Research and Development
Dates	2007-2010
Occupation or position held	Scientific Researcher
Main activities and responsibilities	Synthesis and physico-chemical characterization of ceramic materials and calcium phosphates/hydroxyapatite. Publication and presentation of scientific papers
Name and address of employer	National Institute for Research and Development in Electrochemistry and Condensed Matter Timisoara, Romania
Type of business or sector	Research and Development
Dates	2003-2007
Occupation or position held	PhD student
Main activities and responsibilities	Synthesis of calcium phosphates and hydroxyapatite by sol-gel and precipitation; physico-chemical characterization of materials by thermal analysis, xrd and ft-ir; non-isothermal kinetics by multiple methods. Materials chemistry teaching.
Name and address of employer	West University of Timisoara, Faculty of Chemistry, Romania
Type of business or sector	Research and Education
Dates	2005-2007
Occupation or position held	Research Assistant
Main activities and responsibilities	Thermal analysis of materials, data analysis and processing by non-isothermal kinetics

Name and address of employer	West University of Timisoara, Research Center “Thermal analysis in environmental problems”, Romania
Type of business or sector	Research and Development
Dates	2003-2004
Occupation or position held	Physics Teacher
Main activities and responsibilities	Teaching physics
Name and address of employer	Waldorf Highschool, Timisoara, Romania
Type of business or sector	Education
Education and training	
Dates	2009 July-November
Name and type of organisation providing education and training	S.C. Expert Consulting SRL Timisoara, Management Course
Dates	2003-2007
Name and type of organisation providing education and training	West University of Timisoara, PhD in Chemistry
Dates	2006
Name and type of organisation providing education and training	Certificate of Attendance of a series of lectures into Graduate and Postgraduate Trans-disciplinary Study of Environmental Protection – GRATE Program – General Manager of GRATE Program Prof. dr. B. Jastorff, Bremen University, West University of Timisoara
Dates	2005
Name and type of organisation providing education and training	Certificate of Attendance of the Grate Master Course <i>Metabolism of xenobiotics in animals and men</i> , prof. dr. Andrzej Skladanowski, Academia Medica Gedanensis Poland, GRATE Program, West University of Timisoara
Dates	2005
Name and type of organisation providing education and training	Certificate of Attendance of the series of lectures <i>Environmental Issues for a Sustainable Society</i> <i>Environmental Issues for a Sustainable Society</i> , Prof. dr. Kathleen C. Swallow, Massachusetts Institute of Technology, West University of Timisoara
Dates	2004
Name and type of organisation providing education and training	Summerschool in Gdansk, Poland, GRATE Program, West University of Timisoara
Dates	2004
Name and type of organisation providing education and training	Research stage at the Technical University Gdansk, Poland
Dates	2003-2005
Name and type of organisation providing education and training	Master of Science in <i>Transdisciplinary study of environmental protection</i> , West University of Timisoara
Dates	2003
Name and type of organisation providing education and training	Certificate of Attendance of the series of lectures <i>Environmental Case Studies in United States</i> , Prof. dr. Kathleen C. Swallow, Massachusetts Institute of Technology, West University of Timisoara
Dates	1999-2003
Name and type of organisation providing education and training	Faculty of Physics, West University of Timisoara, Physics-Chemistry Class
Dates	2000-2003
Name and type of organisation providing education and training	School of Arts Timisoara, Guitar Class

Expertise field

Grants and fellowships

Program/Project	Function	Period:
Grant CEEEX code 869/2005: Thermal stability of substances with pharmacological and food interest	Assistant researcher	2005
CEEEX contract MENER 633/03.10.2006 Thermal behavior of materials with impact on the environment	Assistant researcher	2006-2007
CEEEX code ET 128/2007 Kinetic analysis of the thermal behavior of some substances and materials with biological activity	Assistant researcher	2007
71056/2007 Synthesis of zeolitic materials functionalized with titanium dioxide nanocrystals and their testing in drinking water pilot stations	Scientific researcher	2007-2010
72156/2008 Use of zeolite materials functionalized with TiO ₂ nanocrystals for wastewater treatment in order to recirculate it	Scientific researcher	2008-2011
32155/2008 The development of nanostructured magnetodielectric composites for the creation of intelligent tires with a pronounced absorption of microwaves	Scientific researcher	2008-2011
22127/2008 Synthesis of Bi ₂ Te ₃ and Zn ₄ Sb ₃ -based doped nanostructured semiconductors with applications in clean energy	Scientific researcher	2008-2011
22124/2008 Photocatalytic production of hydrogen by the help of solar energy using industrial sulphurous waste (H ₂ S, SO ₂)	Scientific researcher	2008-2011
Pn 09-34 01 05 Study of obtaining, physico-chemical characterization and applications of polyurethane biomaterials in medicine	Project manager	2009
MNT 313/2009 Advanced Piezoelectric Materials Functionalized for the Quality and Security Control of Food – PIM-FCS, Program MNT.ERA-NET	Scientific researcher	2010-2012
Bilateral project Republic of Moldova: ZnO obtaining technology by hydrothermal method and of zinc oxide-based nanostructures for the manufacture of optoelectronic devices	Scientific researcher	2010-2012
PN-II-RU-TE-2011-3-0092 Organic phosphonic metal networks: complexity and diversity of structures and their applications	Scientific researcher	2011-2014
PN-II-RU-TE-2014-4-1398 Influence of physico-chemical and structural properties on the catalytic activity of phosphonic organic metallic networks with environmental impact (Acronym: PHOSPHONATE-MOF)	Scientific researcher	2015-2017
PN-III-P1-1.2-PCCDI-2017-0391 Proiect nr 30PCCDI/2018 Smart buildings adaptable to climate changes effects (Clădiri inteligente adaptabile la efectele schimbărilor climatic) (CIA_CLIM)	Cercetator stiintific	2017-2019
PN-III-P1-1.1-TE-2019-2116 Compozite din materiale naturale și hidroxiapatită pentru creșterea îmbunătățită a biomasei în biofiltre/ Composites of natural materials and hydroxyapatite for enhanced biomass growth in biofilters	Project manager	2020-2022

Scientific activity validation

72 papers presented at national and international conferences
63 published papers
1 international book chapter
20 ISI papers
14 International Data Bases/other Data Bases/non-indexed papers
Hirsh-index 8 (Scopus and Google Scholar), 7 Web of Science Core Collection
Scopus ID 24341225200
ORCID ID: 0000-0003-0915-1422
Editor of a Monography in Arts field

Peer review activity

2010-2011 Reviewer for *Journal of Thermal Analysis and Calorimetry*
2011 Reviewer for *Materials Chemistry and Physics*
2018 Reviewer for *Journal of Thermal Spray Technology*
2018-2019 Reviewer for *Materials Letters*

Personal skills and competences**Mother language(s)** Romanian

Other language(s)

1. English 2. French 3. German

Self-assessment

European level ()***Language****Language****Language**

	Understanding		Speaking		Writing	
	Listening	Reading	Spoken interaction	Spoken production		
1	C1	C2	B2	B2	C2	
2	A2	A2	A1	A1	A2	
3	A2	A2	A1	A1	A2	

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Social skills and competences

Organized, team-oriented work, social person.

Organisational skills and competences

Leadership and project management course 2009, SC EXPERT CONSULTING SRL Timisoara

Member of the organizational committee of:

1. The 11'th International Symposium for Students in Chemistry, West University of Timisoara, 2006
2. The 5'th Conference on Condensed Matter Physics, Timisoara 2008
3. The 1'st Central and Eastern European Conference on Thermal Analysis and Calorimetry, Craiova 2011

Supervisor of:

- M.Sc. Diploma "Phosphatic precursors for bone prostheses", 2006
- B.Sc. Diploma "Hydroxyapatite synthesis by precipitation from simulated body fluid", 2007

Technical skills and competences

Skills in safe handling of the laboratory equipments and machineries on duty within the institution: hydrothermal processing facilities, Diffractometer, synthesis equipments; sample preparation for TEM/SEM

Computer skills and competences

MS Office, HighScore Plus, X'Pert Data Collector, beginner in Origin software, Internet browsing

Other skills and competences

Drivers licence B category

Personal skills

01.19.2012-11.30.2013 and 05.19.2014 – 03.31.2016 Full-time mother of Maria Izabela and Sofia Ioana

Additional information

Inclusion in Marquis Who's Who in the World 2011 (28th Edition)

Inclusion in 2000 Outstanding Intellectuals of the 21'st Century, Ed. 2011

Invited lecture, Master Course *Chemical analysis techniques with applications in the food, cosmetics and pharmaceutical industry*, West University of Timisoara, 2009