



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) Anca DUTA CAPRA
Address(es) Eroilor 29, 500036 Brasov, Romania
Telephone(s) +40 268 412088: Mobile: +40723561089
E-mail a.duta@unitbv.ro
Nationality Romanian
Date of birth 08.12.1961
Gender Female

Work experience

Dates (From- To) 09/1990 – to date

Occupation or position held **Didactic positions:**
2004- to date Ph.D supervisor, Materials Science, 15 finalized Ph.D. programs, 2 running programs
2002 – to date Professor
1998 – 2002 Associate Professor
1994 – 1998 Lecturer
1990 – 1994 Assistant Professor

Management positions – university level

2002 – 2012, Head of the Department for Research and Education Projects in the University
2012 – 2016 Scientific Manager of the Transilvania R&D Institute
2004 – 2011, Head of the Chemistry and Environment Department
2005 – to date, Head of the Advanced Materials Laboratory, in the RTD Centre Renewable Energy Systems and Recycling
2007 – to date: coordinator of the study programs: *Environmental Engineering and Protection in Industry (B.Sc.)* and *Wastes Engineering (B.Sc.)*

Main activities
and responsibilities

Management positions – national level

2006 – 2012 Member of national RTD Consultancy Committee; Commission 4 - New Materials, Micro- and Nanotechnologies
2007 – to date Member of the evaluators group for Quality Assurance in Higher Education (ARACIS)
2008 – 2011 Member of the National Council for Research in Higher Education, CNCSIS
2016 – to date Member of CNADTCU, Materials Engineering Commission

Management positions – international level

EC-DG Research (2010 – up to date): External expert, Project Technical Advisor, PTA for FP7/Cooperation/NMP projects (Breakingresearch A.G.)
EC-DG Research (2015 – up to date): external expert, evaluator of H2020 project proposals
EC: member of the team working on the SET Energy Plan (2012)
European Sustainable Energy Innovation Alliance, ESEIA, Co-Chairman of the Working group 2: Smart Cities and Regions (2013-2014)

Evaluator for project proposals: Comenius, Leonardo da Vinci (2006-2007), CEEPUS (2005- 2011), Bilateral Agreements, Projects of the National Research Foundation on Portugal (2012), Projects of the Graz University (Austria, 2012), H2020, PNII

Specific project experience includes:

- Main activities and responsibilities**
- 1. European Research projects:**
- 2014 – 2016, INCO EC-FP7, *Ener2i*, coordinator ESEIA, team leader
 2015 – 2018, H2020, *Bioenergy Train*, GA 656760 — BioEnergyTrain — H2020-LCE-2014-2015/H2020-LCE-2014-2 (CO: ESEIA)
 2005 – 2006 - *TNW AC/PPZ2005*, "Development of a new technology for industrial production of absorber thin films for Solar Cells", Bilateral agreement with Technical University of Delft, The Netherlands.
 2003 – 2005 - *TNW 03.466*, *Research Agreement, TU DELFT: "Spray Deposition of Photoactive Materials"*, Bilateral agreement with Technical University of Delft, The Netherlands.
 2002 – 2004 - *DCT AC/TTF2002*, *Research Agreement, TU Delft, "Nanostructured layers of semiconductor oxides"*, Bilateral agreement with Technical University of Delft, The Netherlands.
- 2. Structural Funds Projects (selection)**
- 2009 – 2012 - *RTD Institute High Tech Products for Sustainable Development, (20 M EUR)*, Project Administrative and Financial Manager
 2008 – 2011, 2009 – 2012, 2010 – 2013 - *Doctoral School for Sustainable Development, POSDRU*, Member of the Implementation team
- 3. National Funded Research Grants (selection)**
- 2002-2004 - *Romanian Research Council, Programme: CNCSIS, No. A665*, "Optimizing the CVD deposition process of nanofunctional materials based on TiO2 used for solar cells", Grant Director, (10 000 EUR)
 2006-2009 - *Romanian Research Council, Programme: CNCSIS, No. A400*, "Increasing the conversion efficiency of solid state solar cells", Grant Director, (85 000 EUR)
 2006-2009 - *Romanian National Research Agency, Programme CEEEX, Module 1, 277/2006*, "Multifunctional materials for increasing the solar to thermal energy conversion", Grant Director, (450 000 EUR)
 2006 – 2009 - *Romanian Research Council, Programme CNCSIS Platforms, No. 79/2006*, "Product Design for Sustainable Development", Scientific Director, (1 890 000 EUR)
 2007-2010 - *Romanian National Research Agency, Programme PNII Cooperation, 2007 – 2010, FOTOCOMPLEX – Photocatalytic Technologies for Wastewater treatment* , Project Coordinator (700 000 EUR)
 2012 – 2015 - *Romanian National Research Agency, Programme PNII Cooperation, NANOVISMAT, Scientific Responsible (250.000 EUR)*
 2016-2018 – *PED, PNIII Demonstrator si tehnologie in flux continuu bazata pe reactor de fotocataliza si adsorbție in film subțire pentru epurarea avansata a apelor (120000 EUR, 600 000 Lei)*
 2016-2018 *M-ERANET, WATER SAFE (monitoring system for nitrates/nitrites and heavy metals from natural waters), ctr. No 39/2016*

Name and address of employer	Transilvania University of Brasov, Eroilor 29, 500036 Brasov, Romania
Type of business or sector	Research and Education
Dates (From- To)	Jan./1989 – Sept/1990
Occupation or position held	Researcher
Main activities and responsibilities	Development of polymeric auxiliaries for the textile industry, at laboratory, pilot and industrial scale
Name and address of employer	National Institute for Chemical research ICECHIM, Division: Organic Auxiliaries, ICPAO Medias, Branch Rasnov
Type of business or sector	Research
Dates (From- To)	Sept/1985 – Dec./1988
Occupation or position held	Team manager

Main activities and responsibilities	<ul style="list-style-type: none"> • Coordinating production team for adhesives and binders • Launching, at industrial scale, new products (BUTIRAL B-150); testing of new products 																								
Name of employer	Chemical Enterprise Rasnov																								
Type of business or sector	Industry																								
Education and training (highest level attained)																									
Dates	1990 - 1996																								
Title of qualification awarded	Ph. D. in Chemical Engineering																								
Principal subjects/occupational skills covered	Physical Chemistry. The thesis subject: PVT Properties and vapour-liquid equilibrium in n-alkanes systems; Ph.D. coordinator: Prof. dr. eng. Dan Geana																								
Name and type of organisation providing education and training	Politehnica University of Bucharest, Romania																								
Level in national or international classification	Doctoral, Chemical Engineering, Physical Chemistry																								
Short term courses	1992 Rietveld Diffraction, Cieszyn Polonia 1999 - 2004 Technical University of Delft short term stages (a total of 13 month): Solar energy materials 2000 University of Essex UK (3 weeks): Waste recycling and management 2006 UE Structural Funds, Paris (France), intensive course (1 week) 2011 EU financing opportunities for Energy projects, intensive course (1 week)																								
Personal skills and competences																									
Mother tongue(s)	Romanian																								
Other language(s)																									
Self-assessment																									
<i>European Level</i>																									
	<table border="0" style="width: 100%;"> <tr> <td></td> <td style="text-align: center;">Understanding</td> <td></td> <td style="text-align: center;">Speaking</td> <td></td> <td style="text-align: center;">Writing</td> </tr> <tr> <td style="text-align: center;">English</td> <td style="text-align: center;">C2</td> <td style="text-align: center;">English</td> <td style="text-align: center;">C2</td> <td style="text-align: center;">English</td> <td style="text-align: center;">C1</td> </tr> <tr> <td style="text-align: center;">German</td> <td style="text-align: center;">C1</td> <td style="text-align: center;">German</td> <td style="text-align: center;">C1</td> <td style="text-align: center;">German</td> <td style="text-align: center;">B2</td> </tr> <tr> <td style="text-align: center;">French</td> <td style="text-align: center;">A2</td> <td style="text-align: center;">French</td> <td style="text-align: center;">A2</td> <td style="text-align: center;">French</td> <td style="text-align: center;">A1</td> </tr> </table>		Understanding		Speaking		Writing	English	C2	English	C2	English	C1	German	C1	German	C1	German	B2	French	A2	French	A2	French	A1
	Understanding		Speaking		Writing																				
English	C2	English	C2	English	C1																				
German	C1	German	C1	German	B2																				
French	A2	French	A2	French	A1																				
	(*) <i>Common European Framework of Reference for Languages</i>																								
Social skills and competences	Team builder, good communication skills, working in inter- and trans-disciplinary teams.																								
Organisational skills and competences	Management experience in R&D (advanced materials and sustainable development topics)																								
Technical skills and competences	Experimental & Theoretical skills: modelling, synthesis and characterisation of advanced materials – thin films and powders with controlled properties; Over 160 papers published in ISI journals (<i>h</i> = 16) Reviewer for over 20 ISI journals Member of the Editorial Board of Scientific World Journal - Energy; Environmental Engineering and Management Journal (IF = 1,004); Technical expert in the European Sustainable Energy Alliance, ESEIA Founding member of the NanoFuture-Romania Network																								
Member of scientific associations	American Chemical Society (ACS) International Adsorption Society (IAS) International Solar Energy Society (ISES) Romanian Chemistry Society (SRC), president of the Brasov branch																								
Additional information	SEE ANNEX																								

02.04.2016

Prof. dr. eng. Anca Duta



1. LIST OF PUBLICATIONS (selection)

Books:

1. Moldovan M., Visa I., Duta A., *Future trends in solar energy use in nearly zero energy buildings*, Chapter 20 in *Advances in solar heating and cooling*, Elsevier, **2016**, pp. 547-569
2. Visa I., Duta A., Neagoe M., *Dezvoltarea de resurse umane pentru comunitati durabile in centrul RESREC*, in *Platforme de Mecatronica* (Ed. V. Maties), UT Press, **2016**, p. 286 – 205
3. Visa I., Jaliu C., Duta A., Neagoe M., Comsit M., Moldovan M., Ciobanu D., Burduhos B., Saulescu R., *The Role of Mechanisms in Sustainable Energy Systems*, Ed. Universitatii Transilvania din Brasov, **2015**, ISBN 978-606-19-0571-3
4. A. Datcu, A. Perez del Pino, C. Logofatu, A. Duta, E. Gyorgy, *Wetting and Photoactive Properties of Laser Irradiated Zinc oxide – Graphene Nanocomposite Layers*, Chapter 13 in P. Petkov et al., (Eds.), *Nanoscience Advances in CBRN Agents Detection, Information and Security*, NATO Science for Peace and Security, Series A: Chemistry and Biology, Springer Science + Business Media, Dordrecht, **2015**, pp. 119-125
5. Duta A., Andronic L., Perniu D., Manceri L., Enesca A., *Handbook of Nanofunctional Materials, Vol. I Synthesis and Modification* (Ed. M. Aliofkhazraei), Cap. 9. *Crystalline wide band gap semiconductors*, Nova Science Publishers Inc. **2014**, p. 157 - 176
6. Visa I., Duta A., *The Built Environment In Sustainable Communities*, in *Sustainable Energy in the Built Environment – Steps Towards nZEB*, Springer Proceedings in Energy, **2014**, p. 3-30
7. Ciobanu D., Visa I., Enescu M., Duta A., *Outdoor and Indoor Testing to Increase the Efficiency and Durability of Flat Plate Solar Thermal Collectors*, *Sustainable Energy in the Built Environment - Steps Towards nZEB*, Springer Proceedings in Energy, **2014**, p. 205-219
8. Isac L., Enesca A., Mihoreanu C., Perniu D., Duta A., *Spectrally Solar Selective Coatings for Colored Flat Plate Solar Thermal Collectors*, *Sustainable Energy in the Built Environment - Steps Towards nZEB*, Springer Proceedings in Energy, **2014**, p. 279-298
9. Cazan C., Cosnita M., Visa M., Duta A., *Novel Rubber-Plastics Composites Fully Based on recycled Materials*, *Sustainable Energy in the Built Environment - Steps Towards nZEB*, Springer Proceedings in Energy, **2014**, p. 503-520
10. Duta A., Enesca A., Isac L., Perniu D., Andronic L., Bogatu C., *Thin Film Vis-Active Photocatalysts for Up-scaled Wastewater Treatment*, *Sustainable Energy in the Built Environment - Steps Towards nZEB*, Springer Proceedings in Energy, **2014**, p. 521-539
11. Cazan C., Duta A., *Rubber/Thermoplastic Blends: Micro and Nano Structured*, *Advances in Elastomers I*, Ed. Springer, series *Advanced Structured Materials Volume 11*, **2013**, p. 183-228
12. Cazan C., Duta A., *Rubber: Type, Properties and Use*, Ed. Popa, A.G., Ed. Nova Science Publishers, Inc., **2011**

13. Visa I., Jaliu C., Duta A., (editori), *Conference for Sustainable Energy*, Environmental Engineering and Management Journal, Ed. Omicron, **2011**.
14. Duta A., Perniu D., Isac L., Enesca A., *Solar Energy Materials Obtained by Spray Pyrolysis Deposition*, **2010**, chapter in e-book, <http://ebookbrowse.net/anca-duta-pdf-d130944768>
15. Anicai, L., Iulian O., Duta, A., s.a., *Electrochimie si Corozione pentru Doctoranzi*, Ed. Politehnica Press, **2008**
16. Vişa I., Duţă A., *Sustainable Energy*, Ed. Univ. Transilvania, **2008**
17. Vişa I., Duţă A., *Renewable Energy Systems, Applications*, Ed. Univ. Transilvania, **2006**
18. Visa I., Duta A., *Renewable Energy Systems, Basics*, Ed. Univ. Transilvania, **2005**, ISBN 973-635-541-1
19. J.vanPaemel, L. Bergmans, L. Moens, A. Duta, *Computer Use In Experimental Chemistry*, Ed. Univ. Transilvania Brasov, 60 p., **2002**
20. R. Tica, A. Duta, D. Perniu, L. Isac, *Chimie Generala*, Ed. Universităţii Transilvania, 190 p., **2002**
21. S. Kaplanis, I. Visa, A. Duta, 2002, *Sustainable Development, Renewable Energy Sources and Environment*, Ed. Univ. Transilvania Brasov, **2002**
22. A.Duta, Poluarea, *Monitorizarea si Tratarea Apelor*, Ed. Univ. Transilvania, 240 p., **2001**
23. A.Duta, R. Tica, *Chimia Materialelor Industriale*, Ed. Gryphon, Brasov, 198 p., **1999**

Papers published in ISI Thomson Journals, Web of Science ($h = 17$)

1. Andronic L., Isac L., Miralles-Cuevas S., Visa M., Oller I, Duta A., Malato S., *Pilot-plant evaluation of TiO₂ and TiO₂-based hybrid photocatalysts for solar treatment of polluted water*, Journal of Hazardous Materials, 320, 15 December **2016**, p. 469-478 (IF = 4.836)
2. Visa I, Burduhos B., Neagoe M., Moldovan M., Duta A., *Comparative analysis of the infield response of five types of photovoltaic modules*, Renewable Energy, 95, **2016**, p. 178-190 (IF = 3.404)
3. Bogatu C., Duţa A., de Loos T. W., Geană D., *Modelling fluid phase equilibria in the binary system trifluoromethane + 1-phenylpropane*, Fluid Phase Equilibria, 428, **2016**, p. 190-202 (IF = 1.846)
4. A. Enesca, M. Baneto, D. Perniu, L. Isac, C Bogatu, A. Duta, , *Applied Catalysis B: Environmental*, 186, *Solar-activated tandem thin films based on CuInS₂, TiO₂ and SnO₂ in optimized wastewater treatment processes* **2016**, p. 69-76 (IF = 8.328)
5. S. Kermadi, S. Sali, F. Ait Ameer, L. Zougar, M. Boumaour, A. Toumiat, N.N. Melnik, D.W. Hewak, Anca Duta, *Effect of copper content and sulfurization process on optical, structural and electrical properties of ultrasonic spray pyrolysed Cu₂ZnSnS₄ thin films*, Materials Chemistry and Physics, 169, **2016**, p. 96-104 (IF = 2.101)
6. Duta A., Enesca A., Bogatu C., Gyorgy E., *Solar-active photocatalytic tandems. A compromise in the photocatalytic processes design*, Materials Science in Semiconductor Processing, 42, **2016**, p. 94 – 98 (IF =1.955)