



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) Anca DUTA CAPRA
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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 – to date 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 – present, Member of the evaluators group for Quality Assurance in Higher Education
2008 – 2011 Member of the National Council for Research in Higher Education, CNCSIS

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

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 – 20012, 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 CEEX, 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)*

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

- 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, Csiezyn 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 competencesMother tongue(s) **Romanian****Other language(s)**

Self-assessment	Understanding		Speaking		Writing
<i>European Level</i>	English	C2	English	C2	C1
	German	C1	German	C1	B2
	French	A2	French	A2	A1

(*) *Common European Framework of Reference for Languages*

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, chapters in books:

1. 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
2. Duta A., Andronic L., Perniu D., Manceriu 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
3. Cazan C., Duta A., *Rubber/Thermoplastic Blends: Micro and Nano Structured*, Advances in Elastomers I, Ed. Springer, series Advanced Structured Materials Volume 11, 2013, pp 183-228
4. Cazan C., Duta A., *Rubber: Type, Properties and Use*, Ed. Popa, A.G., Ed. Nova Science Publishers, Inc., 2011
5. Anicai, L., Iulian O., Duta, A., s.a., *Electrochimie si Corozione pentru Doctoranzi*, Ed. Politehnica Press, 2008
6. Vişa I., Duţă A., *Sustainable Energy*, Ed. Univ. Transilvania, 2008
7. Vişa I., Duţă A., *Renewable Energy Systems, Applications*, Ed. Univ. Transilvania, 2006
8. Visa I., Duta A., *Renewable Energy Systems, Basics*, Ed. Univ. Transilvania, 2005, ISBN 973-635-541-1
9. J.vanPaemel, L. Bergmans, L. Moens, A. Duta, *Computer Use In Experimental Chemistry*, Ed. Univ. Transilvania Brasov, 60 p., 2002
10. R. Tica, A. Duta, D. Perniu, L. Isac, *Chimie Generala*, Ed. Universităţii Transilvania, 190 p., 2002
11. A.Duta, Poluarea, *Monitorizarea si Tratarea Apelor*, Ed. Univ. Transilvania, 240 p., 2001
12. A.Duta, R. Tica, *Chimia Materialelor Industriale*, Ed. Gryphon, Brasov, 198 p., 1999

2. LIST OF ISI JOURNAL PUBLICATIONS - selection past five years (over 250 published papers, 161 papers in ISI journals, $h=16$)

1. A. Enesca, M. Baneto, D. Perniu, L. Isac, C Bogatu, A. Duta, Solar-activated tandem thin films based on CuInS₂, TiO₂ and SnO₂ in optimized wastewater treatment processes, *Applied Catalysis B: Environmental*, 186, 2016, p. 69-76 (IF = 7.435)
2. 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 = 2.259)
3. 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)
4. Cazan C., Cosnita M., Duta A., Effect of PET functionalization in composites of rubber–PET–HDPE type, *Arabian Journal of Chemistry*, Available online 20 October 2015, ISSN 1878-5352 (IF = 3.725)
5. Bogatu C., Perniu D., Duta A., Challenges in developing photocatalytic inks, *Powder Technology*, 287, 2016, p. 82-95 (IF = 2.349)
6. I. Visa, A. Duta, M. Comsit, M. Moldovan, D. Ciobanu, R. Saulescu, B. Burduhos, Design and experimental optimisation of a novel flat plate solar thermal collector with trapezoidal shape for facades integration, *Applied Thermal Engineering*, 90, 2015, p. 432-443 (IF = 2.739)
7. Y. Mouchaal, A. Enesca,, C. Mihoreanu, A. Khelil, A. Duta, Tuning the opto-electrical properties of SnO₂ thin films by Ag+1 and In+3 co-doping, *Materials Science and Engineering B.*, 199, 2015, p. 22–29 (IF = 2.169)
8. M. Visa, C. Bogatu, A. Duta, Tungsten oxide – fly ash oxide composites in adsorption and photocatalysis, *Journal of Hazardous Materials* 289, 2015, p.244–256 (IF = 4.529)
9. A. Duta, M. Visa, Simultaneous removal of two industrial dyes by adsorption and photocatalysis on a fly-ash–TiO₂ composite, *Journal of Photochemistry and Photobiology, A*, 306, 2015, p. 21-30 (IF = 2.459)
10. M. Visa, L. Isac, A. Duta, New fly ash TiO₂ composite for the sustainable treatment of wastewater with complex pollutants load, *Applied Surface Science* 339, 2015, 62–68 (IF = 2.711)
11. A. Datcu, L. Duta, A. P´erez del Pino, C. Logofatu, C. Luculescu,, A. Duta, D. Perniu, E. György,, One-step preparation of nitrogen doped titanium oxide/Au/reduced graphene oxide composite thin films for photocatalytic applications, *RSC Advances*, 2015, 5, 49771 – 49779 (IF = 3.840)
12. Visa M, Andronic L, Duta A, Fly ash-TiO₂ nanocomposite material for multi-pollutants wastewater treatment, *Journal of Environmental Management*, 150, 2015, p. 336-343 (IF = 3.188)
13. Manceriu LM, Rougier A, Duta A, Comparative investigation of the Ti and Mo additives influence on the opto-electronic properties of the spray deposited WO₃ thin films, *Journal of Alloys and Compounds*, 630, 2015, p. 133-145 (IF = 2.726)
14. Baneto M, Enesca A, Mihoreanu C, Lare Y, Jondo K, Napo K, Duta A, Effects of the growth temperature on the properties of spray deposited CuInS₂ thin films for photovoltaic applications, *Ceramics International*, 41, 3, B, 2015, p. 4742-4749 (IF = 2.086)
15. Enesca A, Isac L, Duta A, Charge carriers injection in tandem semiconductors for dyes mineralization, *Applied Catalysis B: Environmental*, 162, 2015, p. 352-363 (IF = 6.007)
16. Duta M., Perniu D., Duta A., Photocatalytic zinc oxide thin films obtained by surfactant assisted spray pyrolysis deposition, *Applied Surface Science*, Volume 306, 1 July 2014, Pages 80-88 (IF = 2.538)
17. Baneto M., Enesca A., Lare Y., Jondo K., Napo K., Duta A., Effect of precursor concentration on structural, morphological and opto-electric properties of ZnO thin films prepared by spray pyrolysis, *Ceramics International*, 40, 6, July 2014, p. 8397-8404 (IF = 2.086).
18. Duta L., C. Popescu, A. Popescu, M. Motoc, C. Logofatu, A. Duta, E. Gyorgy, Nitrogen-doped and gold-loaded TiO₂ photocatalysts synthesized by sequential reactive pulsed laser deposition, *Applied Physics A*, 01, 2014 (IF = 1.694)
19. Cosnita M., Cazan C., Duta A., Interfaces and mechanical properties of recycled rubber–polyethylene terephthalate–wood composites, *Journal of Composite Materials*, 48, 2014, 683-694 (IF = 1.257)
20. Enesca A., Isac L., Andronic L., Perniu D., Duta A., Tuning SnO₂–TiO₂ tandem systems for dyes mineralization, *Applied Catalysis B: Environmental*, 147, April 2014, P. 175–184 (IF = 6.007)

21. Visa I., Moldovan M.D., Comsit M., Duta A., Improving the renewable energy mix in a building toward the nearly zero energy status, *Energy and Buildings*, 68, Part A, January 2014 (IF = 2.465)
22. Dudita, M., Manceri, L. M., Anastasescu, M., Nicolescu, M., Gartner, M., Duta A., Coloured TiO₂ based glazing obtained by spray pyrolysis for solar thermal applications, *Ceramics International*, 40, April 2014, P. 3903–3911 (IF = 2.086)
23. György E., Del Pino A.P., Logofatu C., Cazan C., Duta A., Simultaneous Laser-Induced Reduction And Nitrogen Doping Of Graphene Oxide In Titanium Oxide/Graphene Oxide Composites, *Journal of The American Ceramic Society*. 05/2014; (IF = 2.428)
24. Sica, M., Duta A., C. Teodosiu, C. Draghici, Thermodynamic and kinetic study of ammonium removal from a synthetical solution using ion exchange, *Clean Technologies and Environmental Policies*, 16, 351 – 359, 2014, (IF = 1.671)
25. Perez A., Popescu C., Popescu A., Motoc M., Logofatu C., Duta A., Gyorgy E., Study of the deposition of graphene oxide by matrix-assisted pulsed laser evaporation, *Journal of Physics D Applied Physics*, 11, 2013; 46(50), 505309 (IF = 2.521)
26. Enesca A., Isac L., Duta A., Hybrid structure comprised of SnO₂, ZnO and Cu₂S thin film semiconductors with controlled optoelectric and photocatalytic properties, *Thin Solid Films*, 542, 2013, P. 31–37 (IF = 1.867)
27. Andronic L., Perniu D., Duta A., Synergistic effect between sol-gel TiO₂ and Degussa P25 in dye photodegradation, *Journal of Sol-gel Science and Technology*, 66, 472 - 480, 2013 (IF = 1.547)
28. Bertus, L.M., Faure, C., Danine, A., Labrugere, C., Campet, G., Rougier, A., Duta, A. Synthesis and characterization of WO₃ thin films by surfactant assisted spray pyrolysis for electrochromic applications, *Materials Chemistry and Physics*, P. 49-59, 2013 (IF = 2.129)
29. Milea A.C., Ienei I., Bogau C., Duta, A., Sol-gel Al₂O₃ powders – matrixes in solar thermal absorbers, *Journal of Sol-gel Science and Technology*, 66, 112-120, 2013 (IF = 1.547)
30. Visa M., Duta A., TiO₂/fly ash novel substrate for simultaneous removal of heavy metals and surfactants, *Chemical Engineering Journal*, 223, P. 860-868, 2013 (IF = 4.058)
31. Cazan, C., Cosnita, M., Perniu, D., Duta A., Polymeric Wastes From Automotives As Second Raw Materials For Large Scale Products, *Environmental Engineering and Management Journal*, Vol. 12, p. 1649-1655, 2013 (IF = 1.012)
32. Isac, L., Andronic, L., Enesca, A., Duta, A., Copper sulfide films obtained by spray pyrolysis for dyes photodegradation under visible light irradiation, *Journal of Photochemistry and Photobiology A: Chemistry* 252, p. 53– 59, 2013 (IF = 2,291)
33. Visa, M., Duta, A., Methyl-orange and cadmium simultaneous removal using fly ash and photo-Fenton systems, *Journal of Hazardous Materials* 244– 245, P. 773– 779, 2013 (IF = 4.331)
34. Enesca A., Duta A., The influence of selective doping ions (Na + , Ta 5+) on the optoelectronic properties of WO 3 thin films, *Applied Physics* 03, 2013, 111, 639-643 (IF = 1.6).
35. Andronic, L., Duta, A, Photodegradation processes in two-dyes systems – Simultaneous analysis by first-order spectra derivative method, *Chemical Engineering Journal*, 198–199, P. 468-475, 2012 (IF = 4.058)
36. Carcel, R.A., Andronic, L., Duta, A., Photocatalytic activity and stability of TiO₂ and WO₃ thin films, *Materials Characterization*, 70, p. 68-73, 2012 (IF = 1.925)
37. Visa, M., Isac L., Duta, A., Fly ash adsorbents for multi-cation wastewater treatment, *Applied Surface Science*, 258 (17), p. 6345-6352, 2012 (IF = 2.538)
38. Bertus L. M.; Duta A., Synthesis of WO₃ thin films by surfactant mediated spray pyrolysis, *Ceramics International*, 38(4), p. 2873-2882, 2012 (IF = 2.086)
39. Bertus L. M.; Enesca A.; Duta A., Influence of spray pyrolysis deposition parameters on the optoelectronic properties of WO₃ thin films, *Thin Solid Films*, 520(13), p. 4282-4290, 2012 (IF = 1.867)
40. Enesca A., Andronic L., Duta A., The influence of surfactants on the crystalline structure, electrical and photocatalytic properties of hybrid multi-structured (SnO₂, TiO₂ and WO₃) thin films, *Applied Surface Science*, 258(10), p. 4339-4346, 2012 (IF = 2.538)
41. Enesca A., Andronic L., Duta A. Optimization of Opto-Electrical and Photocatalytic Properties of SnO₂ Thin Films Using Zn²⁺ and W⁶⁺ Dopant Ions, *Catalysis Letters*, 142(2), p.224-230, 2012 (IF = 2.244)
42. Andronic, L., Duta, A., The influence of precursor's composition and concentration on cadmium doped TiO(2) film , *Central European Journal Of Chemistry*, Volume: 10, 2011, pg: 85-90 (IF = 1.329)
43. Visa M., Pricop F., Duta A., Sustainable treatment of wastewaters resulted in the textile dyeing industry , *Clean Technologies And Environmental Policy*, 13, 2011, p. 855-861 (IF = 1.671)
44. Isac, L., Popovici, I., Enesca, A., Duta, A., Copper Sulfides Thin Films With Controlled Properties For Photovoltaic Cells, *Environmental Engineering And Management Journal*, 10, 2011, p. 1235-1241 (IF – 1.012)
45. Lucaci, D., Duta, A., Removal Of Methyl Orange And Methylene Blue Dyes From Wastewater Using Sawdust And Sawdust-Fly Ash As Sorbents *Environmental Engineering And Management Journal*, 10, 2011, p. 1255-1262 (IF = 1.012)
46. Motoc, A.M., Piticescu R. R.; Carcel R. A., Duta, A., Hydrothermal Synthesized TiO₂ Based Nanopowders For Photocatalytic Applications , *Environmental Engineering And Management Journal*, 10, 2011, p. 1299-1303 (IF = 1.012)
47. Dudita, M., Bogatu, C., Enesca, A., Duta, A., The influence of the additives composition and concentration on the properties of SnOx thin films used in photocatalysis, *Materials Letters*, 65 (14), p. 2185-2189 (IF = 2.261)
48. Enesca, A., Duta, A., The influence of organic additives on the morphologic and crystalline properties of SnO₂ obtained by spray pyrolysis deposition, *Thin Solid Films* , 519 (17), p. 5780-5786, 2011 (IF = 1.867)
49. Andronic, L., Isac, L., Duta, A., Photochemical synthesis of copper sulphide/titanium oxide photocatalyst, *Journal Of Photochemistry And Photobiology A: Chemistry*, 221 (1), p. 30-37, 2011 (IF = 2.291)
50. Andronic, L., Andrasi, D., Enesca, A., Visa, M., Duta, A., The Influence Of Titanium Dioxide Phase Composition On Dyes Photocatalysis, *Journal Of Sol-Gel Science And Technology* 58 (1), P. 201-208, 2011 (IF = 1.547)
51. R.A. Carcel, L. Andronic, A. Duta, Photocatalytic Degradation of Methylorange Using TiO₂, WO₃ and Mixed Thin Films Under Controlled pH and H₂O₂, *Journal of Nanoscience and Nanotechnology*, 11, p. 1-7, 2011 (IF = 1.339)

52. Visa, M., Andronic, L., Lucaci, D., Duta, A., Concurrent Dyes Adsorption And Photo-Degradation On Fly Ash Based Substrates, Adsorption 17 (1), P. 101-108, 2011 (IF = 1.735)

3. PATENTS

1. Visa, I, Duta A., Lates R.S., Lates M., Totu I., Diaconescu D., Solar thermal collector, Certificate registration of the model no. RO201200009U1
2. Visa I; Duta C A; Diaconescu D, Saulescu R., Popa M.V., Burduhos B.G., Guiding Mechanism, RO125253-B1
3. Diaconescu D; Duta-Capra A; Negrea I; Pop V P; Totu I; Visa I, Wind turbine rotor, RO125465-A2, RO125465-B1
4. Visa I., Duta A., Jaliu C., Enesca A., Device for hydrogen production via photoelectrolysis, RO 125540- B1
5. Visa I, Duta, C A Diaconescu D., Vatasescu, M.V., Hermenean, , I Saulescu, R. Velicu, M. Totu, I. Steering Mechanism, RO126334-B1
6. Visa, I. Duta, A.C. Totu, I., Flat Solar-Thermal Collector With Flat Tubes, Patent Number: RO125994-B1
7. Visa I; Duta, A.C. Diaconescu, D.V. Saulescu, R. Vatasescu, M. Burduhos, B.G. Totu, I. Creanga, N. Steering Mechanism: RO126335-B1

Patent proposals (under evaluation, cited in ISI Thomson)

1. Visa I, Duta A., Ciobanu D., Totu I., Testing rig and method for testing flat plate solar thermal collectors in saline media, CBI A/00493/10.07.2015
2. Vișa I., Comșit M., Duță A., Neagoe M., Saulescu R., Ciobanu D., Moldovan M., Burduhos B., Perniu D., Enesca A., Isac L., Mihoreanu C., Ienei E., Totu I., Modular solar thermal collector to optimize the conversion efficiency and increase the architectural acceptance, RO130275 (A0)/29.05.2015
3. Vișa, I., Duță, A., Neagoe, M., Comșit, M., Moldovan, M., Burduhos, B. System of flat plate solar thermal polygonal panels in a modular structure for facades integration, Nr. înregistrare CBI la OSIM A/00156/18.02.2013.
4. Enesca, A. Duta A; Visa, I. Device For Determining Optoelectric Properties Of Materials, Patent Number: RO126234-A0

4. LIST OF RESEARCH GRANTS AS PROJECT COORDINATOR AND TEAM LEADER

International grants

1. TNW AC/PPZ2005, *Development of a new technology for industrial production of absorber thin films for Solar Cells* (2005 – 2006)
2. TNW 03.466, Research Agreement, TU DELFT: *Spray Deposition of Photoactive Materials* (2003 – 2005)
3. DCT AC/TTF2002, Research Agreement, TU Delft, *Nanostructured layers of semiconductor oxides* (2002 – 2004)
4. INCO EC-FP7, *Ener2i*, 2014 – 2016 (CO: ESEIA)
5. IEE, 100% RES Communities,, IEE/11/014/SI.2616363, 2013-2015, (CO: CREL France)
6. H2020, *Bioenergy Train*, GA 656760 — BioEnergyTrain — H2020-LCE-2014-2015/H2020-LCE-2014-2, 2015 – 2018, (CO: ESEIA)
7. M-ERA NET Watersafe (CO: Institute of Physical Chemistry, Bucharest, 2016 - 2018)
8. AUF Constantin Brancusi doctoral and post-doctoral mentorship (2013 - 3, 2014- 1)

National grants

9. PNII, Parteneriate, 71047/2007, *FOTOCOMPLEX: Photocatalytic materials for the advanced treatment of wastewaters with complex pollutants load* (2007-2010, financing Romanian Authority of Research, ANCS)
10. CNCSIS, A400, *Increasing the conversion efficiency in solid state solar cells* (2006-2008, financing Romanian Council for Academic Research, CNCSIS)
11. CEEX 277/2006 *Multifunctional materials for the efficient solar-thermal energy conversion* (2006 – 2008, financing Romanian Authority of Research, ANCS)
12. CNCSIS, A665, nr 33.456/17.07.2002 *Optimizing the CVD synthesis of nanofunctional TiO2 materials for solid state solar cells* (2002-2004)
13. PNII Parteneriate, 162/2012, *Complex high surface area photoactive nano-materials for environmentally-friendly energy production and organic pollutants degradation, NANOVISMAT*, (CO: INCD-INFPL, 2012 – 2016, financing Romanian Authority of Research, ANCS)
14. PNII Parteneriate 72-184/2007, *TECNANOECO* (CO: INCD-IMNR, 2007 – 2010, financing Romanian Authority of Research, ANCS)
15. CEEX, Modul 1, 69 / 2006 *Research and services network for nanostructures synthesis for advanced textile products and environmental protection SINAPS* (CO: INCD-IMNR, 2006-2008, financing Romanian Authority of Research, ANCS)
16. CEEX, Modul 3, 36 / 2006 *Supporting the integration of Romanian research on new and renewable energy sources in the Hydrogen and Fuel Cells European T.P.* (CO: INCD - ICSI, 2006 – 2008, financing Romanian Authority of Research, ANCS)
17. POSDRU "Quality and expertise in developing the methodology for manufacturing and testing competitive products through training at masterate level with high impact on the labour market", POSDRU 86/1.2/S/56711 (CO: UPB, 2010 – 2013)
18. POS-CCE, Axa 2, O2.2.1. *R&D Institute: High-tech products for sustainable development, PRO-DD*, ID123, SMIS 2637, ctr. No. 11/2009, Amount 20 million EUR, (CO: Transilvania University of Brasov, Project administrator, 2009-2013)

Team member in over 20 grants

5. OTHER ACTIVITIES:

Reviewer (ISI journals): Materials Science and Engineering, B; Surface & Coatings Technologies; Materials Chemistry and Physics; Materials Letters; Thin Solid Films, Journal of Photochemistry and Photobiology; Journal of Materials Chemistry; Catalysis Today; Physica Status Solidi A; Applied Surface Science; Water Science and Technology; International Journal of Environmental Science and Technology; Solid State Sciences; Desalination; Journal of Hazardous Materials, Comptes Rendus Chimie; Chemical Engineering Journal; Materials Characterization; Process Safety and Environmental Protection; Journal of Materials and Design; Solar Energy Materials and Solar Cells

Membership: American Chemical Society (ACS), International Adsorption Society, International Solar Energy Society (ISES), Association of Plastics Engineers, IEEE, Societatea Romana de Chimie (SRC), Societatea Romana de Electrochimie, Societatea Romana de Corozione,

Awards:

Young Scientist Award (World Crystallography Union), 2000;
ANCS – Advanced Materials Award, 2008

Member in the Editorial Committee:

Environmental Engineering and Management Journal (factor de Impact, FI = 1,004); Journal of Energy, Annals of the Academy of Romanian Scientists Series on Chemistry, Procedia Environmental Science, Engineering and Management (P - ESEM)

Co-organizer:

ESEIA Summer School, *Smart Regions of Tomorrow* : 2013, 2014
International Conference for Sustainable Energy, CSE 2005, 2008, 2011, 2014

Invited key-note speaker in over 20 international scientific events