

**Personal information**

First name(s) / Surname(s) **Denisa FICAI**  
Address(es) 30-32, Rahovei st, Bragadiru, Ilfov, ROMANIA  
Telephone(s) +4 021 402 3852 +4 0724361569  
Fax(es) +4 021 402 3852  
E-mail [denisaficai@yahoo.ro](mailto:denisaficai@yahoo.ro)

Nationality Romana

Date of birth 10.11.1976

Gender Female

**Desired employment / Occupational field**  
**UPB Responsible****Work experience**

Dates	Oct. 2014 – onwards
Occupation or position held	Associated professor, PHD
Main activities and responsibilities	Teaching activities in the field of “Inorganic chemistry, The chemistry of transitional metals, Inorganic and organometalics polymers. Research activities
Name and address of employer	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Inorganic Chemistry.
Type of business or sector	Education
Dates	Oct. 2011 – Oct. 2014
Occupation or position held	Lecturer, PHD
Main activities and responsibilities	Teaching activities in the field of “Inorganic chemistry, The chemistry of transitional metals, Inorganic and organometalics polymers. Research activities
Name and address of employer	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Inorganic Chemistry.
Type of business or sector	Education
Dates	2008 – Oct. 2011
Occupation or position held	Assistant professor
Main activities and responsibilities	Teaching activities Research activities
Name and address of employer	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Inorganic Chemistry
Type of business or sector	Education

**Education and training**

Dates	2010 – 2013
Title of qualification awarded	Postdoctoral stage
Principal subjects/occupational skills covered	Nanomaterials – Multifunctional nanomaterials
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Inorganic Chemistry
Level in national or international classification	Postdoctoral studies
Dates	2005-2010
Title of qualification awarded	PhD. Eng.
Principal subjects/occupational skills covered	Chemical Engineering
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science
Level in national or international classification	PhD studies
Dates	2005-2007
Title of qualification awarded	Master of Science degree
Principal subjects/occupational skills covered	Special inorganic synthesis.
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Department of Inorganic Chemistry
Level in national or international classification	PhD studies
Dates	2000-2005
Title of qualification awarded	Chemical Engineer
Principal subjects/occupational skills covered	Organic Chemistry
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Organic Chemistry
Level in national or international classification	Academic degree

**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			
B2	Independent User	B2	Independent User	B2	Independent User	B2	Independent User	B1	Independent User
A1	Basic user	A2	Basic user	A1	Basic user	A2	Basic user	A1	Basic user

(\*) [Common European Framework of Reference for Languages](#)

Technical skills and competences Technical skills was obtained and continuous improved due to the various attended training courses: IR, atomic absorption spectrometry and mass spectroscopy

Computer skills and competences

Independent USER of WINDOWS XP, Office, Macromedia Firefox, Fireworks, Origin etc..

**Additional information**

**Fields with specific interests:**

Nanomaterials and Nanotechnologies, Inorganic Chemistry; Drug Delivery System; Materials for Environmental Applications, etc.

**Publications**

- 61 published works (over 48 ISI ranked papers); cumulative impact factor >70; Hirsh index 9 (Scopus); No. of citations > 300;
- 7 Books and Chapters of books;
- 8 Patent Applications

**Reviewer**

- JOURNAL OF NANOPARTICLE RESEARCH
- ROMANIAN JOURNAL OF MATERIALS
- JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY.
- POLYMER CHEMISTRY;
- RSC ANALYST,
- RSC ADVANCES;

**Research Projects**

22 research project with national and international financing (3 of them being project manager and 1 of them UPB responsible).

1. **PN-III-P2-2.1-PTE-2016-0146; Novel nanostructured polymeric composite designed for pallet lining, connecting plate and other components for the railway industry; Role: Researcher/ Responsible of UPB; Period of implementation: 2016-2018;**
2. **PN-III-P2-2.1-PTE-2016-0156;** Harnessing recycled thermoplastic polymers by reinforcement with functionalized natural fibers to obtain new added-value products; Rol: Researcher; Period of implementation: 2016-2018;
3. **PN-III-P2-2.1-PTE-2016-0177; Composite hydrogels based on inorganic nanoparticles and collagen with prolonged antimicrobial activity designed for the infection prevention of wound; Role: Researcher/ Responsible of UPB; Period of implementation: 2016-2018;**
4. **Era Net Rus Plus project,** „Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology- TIOXTECH-BIO”; Role: Researcher/ Responsible of UPB; Period of implementation: 2015-2016;
5. **MANUNET ERA-NET Project;** "Multiphase elasto-plastic architectures dynamically vulcanized and reinforced with nanoparticles for specific products used in food and pharmaceutical industries - ARHNANOTPV" Role: Researcher/ Responsible of UPB; Period of implementation: 2015-2016;
6. **PNCIDI II – Partnership:** Ligaments reconstruction by using advanced materials based on synthetic and natural polymers / Reconstrucția ligamentelor utilizand materiale structurate avansate pe baza de polimeri sintetici si naturali; Ctr. Nr. PN-II-PT-PCCA-2013-4-0891; Role: Researcher; Period of implementation: 2014-2016;
7. **PNCIDI II – Partnership:** Inovative dental products with multiple applications/ Produse inovative de uz dentar cu aplicatii multiple – LavEndo; Ctr. Nr. PN-II-PT-PCCA-2013-4-0891; Role Researcher; Period of implementation: 2014-2016;
8. **POSSCE-A2-O2.2.1.-2013-1 - Crearea Centrului Național de Cercetări Științifice pentru Siguranța Alimentară; Nr 1970, Cod SMIS – CSNR 48652; Role: Researcher; Period of implementation: 2014-2016;**
9. **ADER 8.1.4 -** Integrated tracking and control systems of animal and non-animal food to identify potential carcinogenic risk factors in relation to environmental, farm, processing, transport, consumption / Sisteme integrate de trasabilitate și control ale unor alimente de origine animală și nonanimală pentru identificarea unor factori de risc potențial cancerigeni în relația mediu, fermă, procesare, transport, consum; Ctr. Nr. 67/ADER 8.1.4; Role Researcher; Period of implementation: 2013-2014;
10. **PNCIDI II – Partnership:** Novel nanostructured prosthetic tubular devices with antibacterial and antibiofilm properties induced by physico-chemical and morphological changes – AntiBioTube; Ctr. Nr.43\_094; Role: Researcher; Period of implementation: 2012-2015;
11. **PNCIDI II – Partnership: Hybrid composite materials with thermoplastic matrices doped with fibres and disperse nano fillings for materials with**

**special purposes – HybridMat; Ctr. Nr.73-168; Role: Project manager 2012-2015;**

12. **PNCDI II – CAPACITATI** (Modulul II) Perspective Studies „NanoProspect”; Role: Researcher; Period of implementation: 2010-2011;
13. **PNCDI II– Partnership:** The achievement of new biomaterials with collagenic, supramolecular doped structures with piezoelectrical, liquid crystals, electrical and magnetical properties used for biotechnology; Ctr. Nr.71\_147; Role: Researcher; Period of implementation: 2007 – 2010;
14. **PNCDI II – Partnership:** Multifunctional nanobiocomposites used as regenerative and drug delivery support–SIMAC; Ctr. Nr.72\_198; Role: Researcher; Period of implementation: 2008– 2011;
15. **PNCDI II – Project PN II\_TD – New inorganic materials based on phosphazene and their applications, Role: Project manager; Period of implementation: 2007 – 2008;**
16. **PNCDI II – Project PN II\_MC – New inorganic materials based on phosphazene and their applications, Role: Project manager; Period of implementation: October 2007 – December 2007;**
17. **PN II\_TD – Phosphazene based new inorganic materials and their applications** Role: Researcher; Period of implementation: 207-2008
18. **PN II\_AT – Nanostructured inorganic matrices based on immobilized crown ethers for selective extraction of ion pairs, Role: Researcher; Period of implementation: 2007-2009.**
19. **PNCDI II – CNMP / Phenothiazinic hybrids - heterocycles containing nitrogen and sulfur atoms with potential pharmacological effects, Role: Researcher; Period of implementation: 2006-2008**
20. **PNCDI II - Parteneriship/CO<sub>2</sub> trapping from fossil fuel combustion, Role: Researcher; Period of implementation: 2006- 2008**
21. **P-CD CEEEX / Combinatorial library for the synthesis of neutral receptors of inorganic anions; from project to potential applications, Role: Researcher; Period of implementation: 2006- 2008**
22. **PNCDI I-CERES type PED/Hybrid membranar materials with polyphosphazenic backbone; Role: Researcher; Period of implementation: 2002- 2004.**

**Prizes and Awards:**

**2017 Best paper awarded** by ASET during 8<sup>TH</sup> International Conference on Nanotechnology: Fundamentals and Applications - ICNFA'17 held at Rome, Italy.

**2017 Best paper awarded** by WASET during 19th International Conference on Nanotechnology and Nanomedicine the - ICNN 2017: held at Prague, Czech Republic.

**2017: 21th International Exhibition of Inventics - Inventica; 28-30.06.2017, Iasi, Romania**

**“Gold medal”** (for the project “Cellulose fibers functionalization in order to design the properties of the finite products” authors Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELUCU; Madalina Georgiana ALBU);

**“Gold medal”** (for the invention “*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*” authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)

**“Gold medal”** (for the project “*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment*” authors: A FICAI, E ANDRONESCU, C.D. GHITULICA, D. FICAI, Georgeta VOICU, G. M. ALBU)

**“Gold medal”** (for the project “Bone grafts based on collagen, calcium phosphate and zinc and process for their manufacturing” authors A. FICAI, E.ANDRONESCU, D.FICAI, M. SONMEZ, I.A. NEDELUCU, M.G. ALBU)

**”Special prize** awarded by Romanian Association for alternative Technologies – ARTA Sibiu (for the invention “*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*” authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU);

**“Special prize”** awarded by State University of Medicine and Pharmacy “Nicolae Testemițanu”, Moldova (for the project “*Synthesis procedure of*

*some multifunctional composite materials with potential applications in bone cancer treatment*” authors: Anton FICAI, Ecaterina ANDRONESCU, Cristina Daniela GHITULICA, Denisa FICAI, Georgeta VOICU, Georgiana Madalina ALBU);

”**Special prize**” awarded by State University of Medicine and Pharmacy “Nicolae Testemițanu”, Moldova (for the invention “*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*” authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)”.

**2017: 9<sup>th</sup> European Exhibition of Creativity and Innovation-EuroInvent 2017, 25-27.05.2017; Iași, Romania**

”**Gold medal**” (for the invention “Bone grafts based on collagen, calcium phosphates and zinc and process for their manufacturing” authors Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELICU; Madalina Georgiana ALBU);

”**Special prize** awarded by Institutul de Chimie al Academiei de Științe din Moldova (for the invention “Bone grafts based on collagen, calcium phosphates and zinc and process for their manufacturing” authors Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELICU; Madalina Georgiana ALBU);

”**Special prize** awarded by Universitatea Lucian Blaga din Sibiu (for the invention “Bone grafts based on collagen, calcium phosphates and zinc and process for their manufacturing” authors Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELICU; Madalina Georgiana ALBU);

”**Silver medal**” (for the invention “*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*” authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)

”**Special prize** awarded by Universitatea de Stat din Tiraspol (for the invention “*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*” authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)

**2016: BRUSSELS INNOVA - The World Exhibition on Inventions, Research and New Technologies, 17 – 19.11.2016; Bruxelles, Belgium**

”**Gold medal**” (for the invention “*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer*”)

”**Special Prize**” awarded by Taiwan during the Award Ceremony

**2016: 2016: 8<sup>th</sup> European Exhibition of Creativity and Innovation-EuroInvent 2016, 19-21.05.2016; Iași, Romania**

”**Gold medal**” (for the invention “*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer*”)

”**Gold medal**” (for the invention “*Synthesis procedure of some multifunctional composite materials with potential application in bone cancer treatment*”)

”**Silver medal**” (for the invention “*Osteoconductive and osteoinductive bone grafts and process for their manufacturing*”)

”**Silver medal**” (for the invention “Functionalized magnetic systems for environmental applications, A00164/2011”); all these were awarded by the 8<sup>th</sup> European Exhibition of Creativity and Innovation, 19-21.05.2016

”**Special prize**” (for the invention “*Synthesis procedure of some multifunctional composite materials with potential application in bone cancer treatment*”) awarded by iSentinel – Mircea MANOLESCU

2016: ”**Gold medal**” awarded by 44<sup>th</sup> International Exhibition of Inventions GENEVA (for the invention “*Osteoconductive and osteoinductive bone grafts and process for their manufacturing*”)

”**Best Invention Award – Special Prize**” awarded by Hong-Kong Science and Technology Parks Corporation

”**Honorable mention – Special Prize**” awarded by China Delegation of Inventions and Innovation

”**Special prize**” awarded by Turkish Patent Institute

**Specializations:**

**Annexes**

2015: “**Gold medal**” awarded by European Exhibition of Creativity and Innovation - EUROINVENT (for patent application “**Layered Composite Based on Polypropylene Reinforced with Treated Glass Fibre Fabric**”)

2012: Prize: “**Best Published Paper–2009**” awarded by Syscomm – “Materiale Plastice”

2012: Prize: The special prize of Romanian Chemistry Society at 4<sup>th</sup> International Conference "Students for students"

2<sup>nd</sup> Prize – Annual scientific communications of students; Section Organic Chemistry;

The special mention of Romanian Chemistry Society at 4<sup>th</sup> International Conference "Students for students".2007

1. How to write scientific papers CNCSIS-UPB, 25-26 June 2009
2. Graduation certificate of the courses for operation and use of GC, HPLC, GC-MS, LC-MS, UV-Vis, FTIR spectroscope and microscope, ICP-OES, ICP-MS, AAS

28.02.2017

Denisa FICAI