Curriculum vitae

PERSONAL INFORMATION

ANDRONESCU Ecaterina



University POLITEHNICA of Bucharest, Splaiul Independenței Street, Sector 6, no.313, Bucharest, RO-060042 Bucharest (Romania)

0745179909

ecaterina.andronescu@upb.ro

Nationality Romanian

WORK EXPERIENCE

2020–Present — Member in the University Senate

National University of Science and Technology POLITEHNICA Bucharest, Bucharest (Romania)

Management of Education and Research

2016–2020 — Senator in the Romanian Parliament

Romanian Parliament, Bucharest (Romania)

Public Administration, Management of Education and Research, President of the Commission for Education, Science, Youth and Sports (2012-2018)

1972–Present — Assistant professor, Lecturer, Associate Professor, Full Professor, Department of Science and Engineering of Oxide Materials and Nanomaterials, Faculty of Applied Chemistry and Materials Science

University Politehnica of Bucharest, Bucharest (Romania)

Courses: Solid State Physical-Chemistry Of Silicates, Oxide Materials Science, Thermal equilibrium in oxidic systems, Ceramic Materials With Electric And Magnetic Properties, Ceramics With Thermo-Mechanic Properties, Nanomaterials and Nanotechnologies; Correlations between composition, structure and properties in advanced oxide materials at both micro ad nanolevel

2018–2019 — Minister

Ministry of National Education

2012–2020 — President of the University Senate

University Politehnica of Bucharest, Bucharest (Romania)

Management of Education and Research

2012–2016 — Senator in the Romanian Parliament

Romanian Parliament, Bucharest (Romania)

Senator in the Romanian Parliament, President of the Commission for Education, Science, Youth and Sports (2012-2018)

2004–2013 — President of the National Council of Rectors

National Council of Rectors, Bucharest (Romania)

Management of Education and Research

06/2012–12/2012 — Minister of Education and Research

Ministry of Education and Research, Bucharest (Romania)

Management of Education and Research, Public Administration

2008–2012 **Rector of University Politehnica of Bucharest**
University Politehnica of Bucharest, Bucharest (Romania)
Management of Education and Research

2008–2012 **Senator in the Romanian Parliament**
Romanian Parliament, Bucharest (Romania)
Vice President of the Commission for Education, Science, Youth and Sports (2008-2012)

12/2008–09/2009 **Minister of Education and Research**
Ministry of Education and Research, Bucharest (Romania)
Management of Education and Research, Public Administration

2004–2008 **Rector of University Politehnica of Bucharest**
University Politehnica of Bucharest, Bucharest (Romania)
Management of Education and Research

2004–2008 **Deputy in the Romanian Parliament, Secretary and Member of the Commission for Education, Science, Youth and Sports**
Romanian Parliament, Deputy Chamber, Bucharest (Romania)
Public Administration, Legislation Development and Certification in Education and Research Domain

2000–2004 **Deputy in the Romanian Parliament, Secretary and Member of the Commission for Education, Science, Youth and Sports**
Romanian Parliament, Deputy Chamber, Bucharest (Romania)
Public Administration, Legislation Development and Certification in Education and Research Domain

1992–2004 **Dean, Faculty of Industrial Chemistry**
University Politehnica of Bucharest, Bucharest (Romania)
Management of Education and Research

2001–2003 **Minister of Education and Research**
Ministry of Education and Research, Bucharest (Romania)
Management of Education and Research, Public Administration

1996–2000 **Deputy in the Romanian Parliament, Secretary and Member of the Commission for Education, Science, Youth and Sports**
Romanian Parliament, Deputy Chamber, Bucharest (Romania)
Public Administration, Legislation Development and Certification in Education and Research Domain

1995–1996 **State Secretary for Higher Education**
Ministry of Education, Bucharest (Romania)
Public Administration, Management of Education and Research

1989–1992 **Vice-Dean, Faculty of Industrial Chemistry**
University Politehnica of Bucharest, Bucharest (Romania)

Management of Education and Research

EDUCATION AND TRAINING

1983 **Ph.D.**

University Politehnica of Bucharest, Faculty of Industrial Chemistry, Bucharest (Romania)

Thermal Phase Equilibrium Diagrams for Quaternary System CaO- MgO-CaO-Al2O3-SiO2

1972 **Engineer Degree / Diploma**

University Politehnica of Bucharest, Bucharest (Romania)

Science and Engineering of Oxide Materials

PERSONAL SKILLS

Mother tongue(s): Romanian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
French	C2	C2	C2	C2	C2
English	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages - Self-assessment grid

Organisational / managerial skills: Excellent organisational skills, considering the experience and knowledge gained through various positions involving team and organisational coordination and management.

Job-related skills: Assessment, monitoring and quality assurance, regarding the learning programs in the fields of chemistry, chemical engineering, and oxide materials science, nanobiomaterials.
Assessment, monitoring and scientific project management.
Review of scientific papers with the purpose of national or international publication.
The organisation and coordination of research laboratories in the field of Material Sciences.
Analysis and material characterization.

ADDITIONAL INFORMATION

Publications: over 400 published articles in the following fields: Solid State Physical-Chemistry Of Silicates, Thermal Phase Equilibrium Diagrams, Oxide Materials Science, Ceramic Materials With Electric And Magnetic Properties, Ceramics With Thermo-Mechanic Properties, Biomaterials, Porous Ceramic Materials, Nanomaterials and Nanotechnologies, Unconventional Synthesizing Methods of Ceramic Materials.

21 Books and chapter of books;
4 University Level Courses;
3 Laboratory guidance handbooks;
9 issued patents or patent applications.

Conferences: Over 430 papers and presentations at Scientific Conferences in Romania or abroad (more than 200 in ISI indexed/quoted journals); Hirsch index 42; over 6000 citations

Scopus			Google Scholar			Web of Science		
Nr. lucrari	h-index	Nr. Citari	Nr. lucrari	h-index	Nr. Citari	Nr. lucrari	h-index	Nr. Citari
428	43	7702	610	48	9954	436	41	6988

Projects: Coordinator of over 80 research project contracts with national and international financing

Honours and awards: **Honours**

2015 Doctor Honoris Causa – Technical University of Moldavia; Chişinău, Moldavia;

2011 Doctor Honoris Causa – National Technical University "Kharkiv Polytechnic Institute" of Ukraine;
2010 Doctor Honoris Causa – University "Valahia" of Târgovişte;
2010 Doctor Honoris Causa – University "Petru Maior" of Târgu Mureş;
2007 Doctor Honoris Causa – University of Reşiţa;
2006 Doctor Honoris Causa – University "Ovidius" of Constanţa;
2005 Doctor Honoris Causa – University "Andrei Şaguna" of Constanţa;
2004 Doctor Honoris Causa – University "POLITEHNICA" of Timişoara, University of Bacău, University „Ştefan cel Mare" of Suceava, University of Petroşani;
2003 Doctor Honoris Causa – technical University „Gh. Asachi" of Iaşi, University „Aurel Vlaicu" of Arad.

Awards

2019: International Specialized Exhibition "INFOINVENT2019"- XVIth Edition, 20-23 November 2019, Chisinau, Republic of Moldova

Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU "Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", A 01055/05.12.2018 înregistrată la OSIM

"**Gold medal**" awarded by the International Jury of InfoInvent 2019

"**Excellence diploma with gold medal**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU

"**Gold medal**" awarded by the International Jury of InfoInvent 2019

"**Gold medal**" awarded by Technical University of Moldova

"**Excellence diploma and Mechatron Group Trophy"** awarded by Mecatronic & Cyber - MixMecatronic for Future Group

"**Excellence diploma**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

2019: 4th International Invention Innovation Competition in Canada – Ican 2019; August 23-24, Toronto, Canada

"*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**" awarded by the International Jury of ICan 2019

"Special Prize and Excellence diploma" awarded by the delegate of Thailand

"*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer",* Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE A/00238/2013)

"**Gold medal**" awarded by the International Jury of ICan 2019

"Special Prize and Excellence diploma" awarded by the Moroccan Delegation

2019: 11^{h} European Exhibition of Creativity and Innovation-EuroInvent 2019, 16-18 May 2019, Iasi, Romania

"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU- ***A 01054/05.12.2018***

"**Gold medal and Excellence diploma**" awarded by the international Jury of Euroinvent 2019

Gold medal and Excellence diploma" awarded by "Carol Davila" University of Medicine and Pharmacy Bucharest

Excelence award and Gold medal and Excellence diploma" awarded by ICECHIM Bucharest

Gold medal and Excellence diploma, awarded by "Romanian Association of Pteridology, Bucharest

Special Prize awarded by "Alexandru Ioan Cuza" University of Iasi

*"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU**; National patent application A 01055/05.12.2018***

"**Gold medal and Excellence diploma**" awarded by the international Jury of Euroinvent 2019

Gold medal and Excellence diploma" awarded by NIRD URBAN-INCERC

2019: 23rd International Exhibition of Inventics – Inventica 2019, 26-18 June 2019, Iasi, Romania

*"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU**; National patent application A 01055/05.12.2018***

"**Diploma of honour and Gold Medal**" awarded by the International Jury of Inventica 2019

"**Special Prize**" awarded by SodinExpo, Russia

*"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU- **A 01054/05.12.2018***

"**Diploma of honour and Gold Medal**" awarded by the International Jury of Inventica 2019

"**Special Prize**" awarded by SodinExpo, Russia

"**Excellence diploma**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

Gold Medal Award for Excellence awarded to Anton FICAI; awarded by "Carol Davila" University of Medicine and Pharmacy, Bucharest

"Gold medal and Excellence diploma, awarded by "Romanian Association of Pteridology, Bucharest to Anton FICAI

2019: International Salon for Scientific Research, Innovation and Inventions, "ProInvent", 20-22 March 2019, Cluj Napoca, Romania

*"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU- **A 01054/05.12.2018***

Diplomă de excelență și medalia de aur awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"**Excellence diploma and Gold medal**" awarded by Technical University of Moldova

"**Excellence diploma**" awarded by Iustin Capra Association

*"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU; National patent application **A 01055/05.12.2018***

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"**Excellence diploma**" awarded by University of Agronomic Science and Veterinary Medicine, "King Mihai I of Romania", Timisoara

"Special Prize" awarded by Romanian Association for Alternative Technologies – ARTA Sibiu

Special Award awarded by Corneliu Group; Special Award awarded by Romanian Association for Alternative Technologies;

"**Excellence diploma and INCDMTM Trophy"** awarded by INCDMTM

"*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

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer",* Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE **A/00238/2013)**

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"**Excellence diploma with special mention**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

"Functionalized magnetic systems for environmental applications; Denisa FICAI, Ecaterina ANDRONESCU, Cornelia GURAN, Anton FICAI**, A00164/2011***"*

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

2019: IDEA-EXPO 2019 IDEA, Novelty, Invention, Art and Crafts International Exhibition and Fair, 06-07 April 2019, Szolnok, Hungary

"Functionalized magnetic systems for environmental applications; Denisa FICAI, Ecaterina ANDRONESCU, Cornelia GURAN, Anton FICAI**, A00164/2011***"*

"**Excellence diploma**" awarded by the International Jury of IDEA

*"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU- **A 01054/05.12.2018***

"**Excellence diploma**" awarded by the International Jury of IDEA

*"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU**; National patent application A 01055/05.12.2018***

"**Excellence diploma**" awarded by the International Jury of IDEA

"*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A Ficai, E Andronescu, C. D. Ghitulica, D. Ficai, G Voicu, G. M. Albu

"**Excellence diploma**" awarded by the International Jury of IDEA

"*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"* authors A. Ficai, E. Andronescu, M.G. Albu, D. Ficai, M. Sonmez

"**Excellence diploma**" awarded by the International Jury of IDEA

"Functionalized magnetic systems for environmental applications; Denisa Ficai, Ecaterina Andronescu, Cornelia Guran, Anton Ficai, **A00164/2011***"*

"**Excellence diploma**" awarded by the International Jury of IDEA

2019: Bangkok International Intellectual Property, Invention, Innovation and Technology Exposition - Thailand Inventors' Day 2019" 2-6 February 2019

"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**" awarded by the International Jury of IPITEX

"*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in*

cancer", Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE **A/00238/2013)**

"**Gold medal**" awarded by the International Jury of IPITEX

"**Special Award**" awarded by Advanced Tech Smart

2018: World Competition of Chemical Inventions IWIS2018_15-17Oct 2018, Warsaw, Poland

"Bronze medal" awarded for the invention "*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"* authors A. Ficai, E. Andronescu, M.G. Albu, D. Ficai, M. Sonmez;

"Silver Medal" for the patent "*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

"Silver Medal" for the patent "*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer",* Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE A/00238/2013)

"Bronze medal" awarded for "Functionalized magnetic systems for environmental applications", Denisa Ficai, Anton Ficai, Cornelia Guran, Ecaterina Andronescu, A00164/2011; (RO127889 (A2); RO127889 (B1))

2018 20th International Conference on Synthetic Polymer Chemistry, Nanoscience and Nanotechnology - ICSPCNN 2018:

Certificate of **Best Presentation Award** for the paper „Synthesis and Characterization of Some Alginate Hollow Fibres Using Co-Axial Needles" authored by Anton Ficai, Ioana Lavinia Ardelean, Roxana Doina Trusca, Bogdan Stefan Vasile, Denisa Ficai, Ecaterina Andronescu

2018 International Salon for Scientific Research, innovation and Inventions, "ProInvent", Cluj Napoca, Romania

"Gold medal with special mention" (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Excellence diploma" awarded by Justin Capra Association (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: A FICAI, D FICAI, O OPREA, E ANDRONESCU, S MANEA, A-M PANGICĂ, P BODOGA, L MOTELICA);

"Gold medal and Excellence diploma" awarded by "Nicolae Testemiţeanu" Medicine and Pharmacy State University, Moldavia (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Gold medal with special mention" (for the patent application A01045/07.12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: A FICAI, MG ALBU-KAYA, D FICAI, V MITRAN, A CIMPEAN, E ANDRONESCU)

"Excelence diploma" awarded by Justin Capra Association (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: A FICAI, MG ALBU-KAYA, D FICAI, V MITRAN, A CIMPEAN, E ANDRONESCU)

"Excellence Diploma" awarded by "Nicolae Testemiţeanu" Medicine and Pharmacy State University, Moldavia (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: A FICAI, MG ALBU-KAYA, D FICAI, V MITRAN, A CIMPEAN, E ANDRONESCU).

2018 Salonul Internaţional de Invenţii şi Inovaţii "Traian VUIA", Timişoara, Romania

"Gold Medal" for the patent "*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

"Bronze Medal" (for the patent application "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. NEDELCU, M. G. ALBU);

"Gold Medal" (for the patent application "Grefe osoase osteoinductive si osteoconductive si procedeu de obţinere a acestora" A00239/23. 03. 2013);

"Gold Medal" (for the invention "*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer"* A/00238/2013)

"Gold Medal" (for the invention "Functionalized magnetic systems for environmental applications*"*

RO 127889)

"Special Award" awarded by Otlet Club 13 for the series of the presented inventions

"Special Prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the patent application "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. Nedelcu, M.G. Albu);

"Special Prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the invention "*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"* authors A. Ficai, E. Andronescu, M.G. Albu, D. Ficai, M. Sonmez);

"Special Prize + Gold Medal" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the patent "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A Ficai, E Andronescu, C.D. Ghitulica, D. Ficai, G. Voicu, G.M. Albu);

"Special Prize" awarded by Universitatea de Medicină şi Farmacie "Victor Babeş" din Timişoara (for the patent "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A Ficai, E Andronescu, C.D. Ghitulica, D. Ficai, G. Voicu, G.M. Albu);

"Excellence Diploma" awarded by Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania", Timişoara (for the researches in the medical field for the authors A. Ficai, D. Ficai, M Sonmez, O Oprea, BS Vasile, S Manea, AM Pangica, P Bodoga, C Agapescu, C.D. Ghitulica, E Andronescu;

2018: 22th International Exhibition of Inventics - Inventica; 27-29. 06. 2018, Iasi, Romania

"Gold medal" (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: Anton FICAI, Mădălina Georgiana ALBU-KAYA, Denisa FICAI, Valentina MITRAN, Anișoara CIMPEAN, Ecaterina ANDRONESCU);

"Gold medal" (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology-TIOXTECH-BIO" authors: A Ficai, OR Duta, D Ficai, E. Andronescu, et al.)

"Excelence diploma and Gold Medal" awarded by ICECHIM (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Excelence diploma and Gold Medal" awarded by ICECHIM (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology- TIOXTECH-BIO" authors: A Ficai, OR Duta, D Ficai, E. Andronescu, et al.);

"Special Prize + Gold Medal" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology- TIOXTECH-BIO" authors: A Ficai, OR Duta, D Ficai, E. Andronescu, et al.);

"Special Prize" awarded by "Lucian Blaga" University of Sibiu (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Innovation Award" awarded by "Carol Davila" University of Medicine and Pharmacy, Bucharest (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology- TIOXTECH-BIO" authors: A Ficai, OR Duta, D Ficai, E. Andronescu, et al.);

2018: 10th European Exhibition of Creativity and Innovation-EuroInvent 2017, 17-19 may 2018, Iasi, Romania

"Gold Medal" for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA;

"Silver medal" (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: Anton FICAI, Mădălina Georgiana ALBU-KAYA, Denisa FICAI, Valentina MITRAN, Anișoara CIMPEAN, Ecaterina ANDRONESCU);

"Special Prize" awarded by Universitatea Tehnica a Moldovei (for the patent application A01045/07.

12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: Anton FICAI, Mădălina Georgiana ALBU-KAYA, Denisa FICAI, Valentina MITRAN, Anișoara CIMPEAN, Ecaterina ANDRONESCU);

2017 Best paper awarded by WASET during 19th International Conference on Environmental, Biomedical and Biotechnology – ICEBB 2017: held at Venice, Italy for the paper "Collagen/Hydroxyapatite Compositions doped with Transitional Metals for bone tissue Engineering Applications" authors; Denisa FICAI, Anton FICAI, Dragos GUDOVAN, Iulia GUDOVAN, Ioana ARDELEAN, Roxana TRUSCA, Ecaterina ANDRONESCU, Valentina MITRAN, Anisoara CIMPEAN.

2017 Best paper awarded by ASET during 8TH International Conference on Nanotechnology: Fundamentals and Applications - ICNFA'17 held at Rome, Italy for the paper Design of TiO_xN_y for coating technology, Anton Ficai, Denisa Ficai, Bogdan Stefan Vasile, Roxana Doina Trusca, Dragos Gudovan, Ovidiu Oprea, Motelica Ludmila, Ecaterina Andronescu.

2017 Best paper awarded by WASET during 19th International Conference on Nanotechnology and Nanomedicine the - ICNN 2017: held at Prague, Czech Republic for the paper: Nanostructured Wound Dressings for Prevention and Treatment of Skin Infections, Anton FICAI, Roxana Doina TRUSCA, Alina Holban, Denisa FICAI, Ecaterina ANDRONESCU.

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 NEDELCU; Madalina Georgiana ALBU);

"Gold medal" (for the patent "*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 patent application "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. NEDELCU, M. G. ALBU)

"Special prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", 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);

2017: 9th European Exhibition of Creativity and Innovation-EuroInvent 2017, 25-27. 05. 2017; Iaşi, 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 NEDELCU; Madalina Georgiana ALBU);

"Special prize" awarded by Institutul de Chimie al Academiei de Ştiinţe 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 NEDELCU; 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 A FICAI, E ANDRONESCU, M SONMEZ, D FICAI, IA NEDELCU; MG ALBU);

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: 8th European Exhibition of Creativity and Innovation-EuroInvent 2016, 19-21. 05. 2016; Iaşi, 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*"*);

"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: XXth International Salon of Research, Innovation and Technological Transfer - Inventica 2016; 29. 06-01. 07. 2016, Iasi, Romania

Gold medal – The Hamangia Thinker (for the invention "Functionalized magnetic systems for environmental applications, A00164/2011*"*);

"Gold medal" (for the invention "*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"*)

"Gold medal" (for the invention "Multifunctional system based on *Magnetite/thioacids@Ag or Au used for diagnosis and targeted delivery in cancer"*)

2016: 44th International Exhibition of Inventions, 13–17. 04. 2016; Geneva, Switzerland

"Gold medal" (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.

2015: 7th European Exhibition of Creativity and Innovation-EuroInvent 2015, Iaşi, Romania

"Gold medal" (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: BRUSSELS INNOVA - The World Exhibition on Inventions, Research and New Technologies (for bone cancer treatment)

"Gold medal" (Procedeu de obtinere a unor materiale compozite cu potentiale aplicatii în tratarea cancerului osos, Patent No. 127725/30. 03. 2015)

Memberships

2018 - Present: Member in the Tiberina già Pontificia Academy, in Rome

1996 – 2004: Member in the Commission for Chemistry and Material Sciences, the National Council for the Certification of Academic Degrees and Titles
2004 – 2005: President of the Commission for Chemistry and Material Sciences, the National Council for the Certification of Academic Degrees and Titles
2013 – 2018: President in the Commission for Chemical Engineering, the National Council for the Certification of Academic Degrees and Titles
1994 – 2000, 2004 – 2005: Member in the Engineering Sciences Commission, the National Council for the Certification of Academic Degrees and Titles
• Founding Member of Romanian Society for Biomaterials
• Founding Member of Romanian Ceramic Society
• Founding Member of Romanian Society of Chemistry
• Founding Member of the Romanian Society of Chemical Engineering
• Member of European Ceramic Society
• Member of the Romanian Academy of Scientists
• Member of the Technical Sciences Academy
• Founding Member in the Romanian Electron Microscopy Society
• Member of the European Microscopy Society
• Member of the Board Revista Română de Materiale – Romanian Journal of Materials
• Lead Guest Editor of Journal of Nanomaterials, Hindawi Publishing House
• Editor, Elsevier

Lead Editor of UPB Scientific Bulletin

Lead Editor of Romanian Journal of Materials

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Publication list

Prof. Dr. Ing. Ecaterina Andronescu

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6. Radulescu, D.M.; Surdu, V.A.; Ficai, A.; Ficai, D.; Grumezescu, A.M.; **Andronescu, E.** Green Synthesis of Metal and Metal Oxide Nanoparticles: A Review of the Principles and Biomedical Applications. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms242015397
7. Radulescu, D.E.; Vasile, O.R.; **Andronescu, E.;** Ficai, A. Latest Research of Doped Hydroxyapatite for Bone Tissue Engineering. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms241713157
8. Puiu, R.A.; Florea, D.A.; Burdușel, A.C.; Surdu, V.A.; **Andronescu, E.** METALLIC NANOPARTICLES AND METAL OXIDE USED IN BIOMEDICAL APPLICATIONS. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2023**, *85*, 111-132,
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41. Dumitru, C.D.; Neacsu, I.A.; Grumezescu, A.M.; **Andronescu, E.** Bee-Derived Products: Chemical Composition and Applications in Skin Tissue Engineering. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14040750
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