

Anton FICAI

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Contact information

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Education and training

Dates	2010 – present
Title of qualification awarded	Postdoctoral fellow
Principal subjects/occupational skills covered	Nanomaterials - Biomaterials
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Oxide Materials and Nanomaterials
Level in national or international classification	Postdoctoral studies
Dates	2006-2009
Title of qualification awarded	PhD. Eng.
Principal subjects/occupational skills covered	Chemical Engineering
Name and type of organization providing education and training	POLITEHNICA University 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	Materials, Substances and Biocompatible Systems
Name and type of organization providing education and training	University POLITEHNICA of Bucharest, Department of Bioengineering and Biotechnology
Level in national or international classification	MSc studies
Dates	2000-2005
Title of qualification awarded	Chemical Engineer
Principal subjects/occupational skills covered	Organic Chemistry
Name and type of organization 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

Professional experience

Dates	Oct. 2011 – present
Occupation or position held	Lecturer, PHD
Main activities and responsibilities	Teaching activities in the field of “Composite Materials for Medicine” and Chemistry Research activities

Name and address of employer	Politehnica University of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Oxide Materials and Nanomaterials
Type of business or sector	Education
Dates	2006 – 2011
Occupation or position held	Assistant professor
Main activities and responsibilities	Teaching activities Research activities
Name and address of employer	Politehnica University of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Analytical Chemistry and Instrumental Analysis
Type of business or sector	Education

Academic and research interests

By very short, the academic and research interests are focused:

- synthesis and characterization of composite biomaterials, ceramic powders,
- synthesis and characterization of drug delivery systems
- bone grafts and bone cancer treatment
- synthesis and characterization of industrial materials

Teaching activity

<i>Studies</i>	<i>The name of Programme</i>	<i>Code</i>	<i>Course title</i>	<i>Activity type</i>
<i>Bachelor</i>	Biomaterials and Medical Devices	CNCIS_RO-14.S.07.O.207	Drug Delivery Systems of Active Biosubstances	Course and laboratory
	Biomaterials and Medical Devices	CNCIS_RO-14.S.07.A.214	Nanoparticles/Living Cells interactions	Course and laboratory
	-	-	Chemistry	Course and laboratory
<i>Master</i>	Advanced Composite Materials for Special Applications	CNCSIS-RO-MI2S3C2	Composite Biomaterials for Medicine	Course and laboratory

Publication (selective):

Books

1. Ecaterina ANDRONESCU, Alexandru Mihai GRUMEZESCU, Cristina GHITULICA, **Anton FICAI**, Denisa FICAI and Mariana Carmen CHIFIRIUC; Novel Approach to Fabricate Magnetic Nanostructures for Biomedical Applications; Nanotechnology – Vol. 5 Drug Delivery & Nanomedicine; STUDIUM PRESS LLC, 38pages, **in press** (English)
2. Denisa FICAI, **Anton FICAI**, Alexandru Mihai GRUMEZESCU; Organic Chemistry; Workbook of theoretical Applications; SITECH Publishing House, Craiova 2012; ISBN 978-606-11-2343-8 (340 pages, Romanian)
3. **Anton FICAI**, Ecaterina ANDRONESCU; Biomateriale compozite pe bază de colagen și hidroxiapatită utilizate în reconstrucția osoasă (*Collagen and hydroxyapatite based composite biomaterials for bony tissue reconstruction*); Politehnica Press, 2011; ISBN: 978-606-515-257-1 (180 pages, Romanian)
4. **Anton FICAI**, Ecaterina ANDRONESCU, Georgeta VOICU and Denisa FICAI; “Advances in Collagen/Hydroxyapatite Composite Materials” in “Advances in composite materials for medicine and nanotechnology” Editura INTECH, 2011, ISBN 978-953-307-235-7 pg. 3-32 (**English**);
5. **Anton FICAI**, Denisa Mânzu, Volumetrie. De la teorie la aplicații de laborator, Editura Politehnica Press, 2009 ISBN 978-606-515-037-9 (170 pg) (Romanian);

Articles (selection – only ISI papers between 2010 and 2012)

1. Alexandru Mihai GRUMEZESCU, Ecaterina ANDRONESCU, **Anton FICAI**, Coralia BLEOTU, Dan Eduard MIHAIESCU, Mariana Carmen CHIFIRIUC; Synthesis, characterization and in vitro assessment of the magnetic chitosan–carboxymethylcellulose biocomposite interactions with the prokaryotic and eukaryotic cells; International Journal of Pharmaceutics; 2012:436:771–777;

2. **Anton FICAI**, Ecaterina ANDRONESCU, Denisa FICAI, Maria SONMEZ, Madalina Georgiana ALBU, Georgeta VOICU; Mimicking the morphology of long bone, Central European Journal Of Chemistry; 2012:10(6):1949-1953;
3. Mădălina Georgiana FLOREA, **Anton FICAI**, Ovidiu OPREA, Cornelia GURAN, Denisa FICAI, Liv PALL, Ecaterina ANDRONESCU; Drug delivery systems based on silica with prolonged delivery of folic acid; Revista Română de Materiale / Romanian Journal of Materials 2012, **42**(3), 313–316;
4. Mihail SCURTU, Ecaterina ANDRONESCU, Cornelia GURAN, Maria SONMEZ, Alexandru GRUMEZESCU, Liv PALL, **Anton FICAI**, Denisa FICAI; Colloidal silica use as dyes removing system; Revista de Chimie; 2012, 63(10) 1013-1015;
5. Maria SONMEZ, Denisa FICAI, Ana STAN, Coralia BLEOTU, Lilia MATEI, **Anton FICAI**, Ecaterina ANDRONESCU; Synthesis and characterization of hybrid PVA/Al₂O₃ thin film; Materials Letters 2012:74C:132-136

Research projects (selection – 5/15)

Program/Project	Role	Period: from... to...
1. PNCDI II – Partnership / Novel nanostructured prosthetic tubular devices with antibacterial and antibiofilm properties induced by physico-chemical and morphological changes – AntiBioTube 43_094	Project manager	2012-2015
2. PNCDI II – Partnership / Hybrid composite materials with thermoplastic matrices doped with fibres and disperse nano fillings for materials with special purposes – HybridMat 73-168	Researcher	2012-2015
3. PNCDI II – Partnership / Multifunctional nanobiocomposites as regenerative scaffold and delivery support – SIMAC 72_198	Researcher	2008 – 2011
4. PN II_TD – Composite biomaterials based on collagen and hydroxyapatite	Project manager	2007 - 2009
5. PN II_BD – Collagen/Hydroxyapatite Composite Materials	Project manager	2006 - 2009

Other information

Prizes and awards:

- 2012: “**Gold medal**” awarded by BRUSSELS INNOVA - The World Exhibition on Inventions, Research and New Technologies (for bone cancer treatment)
- 2012: Prize: “**Best Published Paper – 2009**” awarded by Syscomm – “Materiale Plactice” Journal
- 2011: Prize: “**In Tempore Opportuno**” awarded by University POLITEHNICA of Bucharest
- 2005: 2nd Prize: Annual Session of Scientific Communications - Analytic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2005: 2nd Prize: Annual Session of Scientific Communications – Organic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2004: 2nd Prize: Annual Session of Scientific Communications – CD Nenitzescu Days awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2004: Special Prize: Annual Session of Scientific Communications – CD Nenitzescu Days awarded by prof. dr. eng. Claude Matasa, general manager of OrthoCycle Company, Hollywood, Florida, USA
- 2002: 2nd Prize: Annual Session of Scientific Communications - Inorganic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2001: 1st Prize: Annual Session of Scientific Communications - Inorganic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2001: 1st Prize: Petru Spacu Analytical Chemistry Contest awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2000: Honorary Citizen of Baia Mare issued by Local Council and Municipality of Baia Mare, Romania
- 2000: Special Prize: Selection for the “Romanian National Chemistry Team” awarded by Romanian Ministry of Education
- 1999: 3rd Prize: III Chemistry National Olympiad, Brasov awarded by Romanian Ministry of Education
- 1998: 3rd Prize: Chemistry National Olympiad, Baia Mare awarded by Romanian Ministry of Education

Reviewer:

- Journal of Cellular and Molecular Medicine (Wiley, ISI factor 5,6)
- Journal of Molecular Structure (Elsevier, ISI factor 1,594)
- Materials Letters (Elsevier, ISI factor 1,94)
- Materials Chemistry and Physics (Elsevier, ISI factor 2,353)
- Materials Science and Engineering B (Elsevier, ISI factor 1,56)

- Journal of Applied Polymer Science (Wiley, ISI factor 1,24)
- Journal of Nanoparticle Research (Springer, ISI factor 3.287)
- Chemical paper (Springer, ISI factor 1.076)
- Current Nanoscience (Bentham, ISI factor 1,776)
- Romanian Journal of Materials (ISI factor 0.378)
- Iranian Polymer Journal (Springer, ISI factor 0.936)
- Journal of Research in Environmental Science and Toxicology
- Journal of Nanoscience and Nanotechnology