



Personal information

First name(s) / Surname(s) **Anton FICAI**

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Nationality Romanian

Current employment / Occupational field Professor, Ph. D. Habil. Eng. UPB; Faculty of Chemical Engineering and Biotechnologies
Full member of Academy of Romanian Scientists; Scientific Secretary of the section Chemical Sciences

Work experience

Dates 25 September 2017 – onward

Occupation or position held **Prof. Habil. Dr. Eng. (habilitation #3266/02.03.2016)**

Main activities and responsibilities **Teaching activities** (classes and/or applications): Composite Materials for Medicine, Chemistry, Drug Delivery Systems, Chemistry and Characterisation of Materials, Nanobiomaterials for Tissue Engineering; **Research activities**

Name and address of employer POLITEHNICA University of Bucharest, Faculty of Chemical Engineering and Biotechnologies, Department of Oxide Materials and Nanomaterials

Type of business or sector Education + Research

Dates February 2015 – September 2017

Occupation or position held **Assoc. prof. PHD**

Main activities and responsibilities Teaching activities (classes and/or applications): Composite Materials for Medicine, General Chemistry, Drug Delivery Systems, Bioceramics; 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	Oct. 2011 – 2015
Occupation or position held	Lecturer, PHD
Main activities and responsibilities	Teaching activities: Composite Materials for Medicine, Chemistry and Drug Delivery Systems; 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 & 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
Dates	14-20 July 2014
Occupation or position held	Invited professor
Main activities and responsibilities	Teaching activities in the field of composite materials and biomaterials
Name and address of employer	University Beira Interior
Type of business or sector	Education

Education and training

Dates	May 2010 – March 2013
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. (OMEC 3492/23.03.2010; 228/13.04.2010)
Principal subjects/occupational skills covered	Chemical Engineering

Name and type of organisation 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	Organic Chemistry;
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Department of Bioengineering and Biotechnology
Level in national or international classification	PhD studies
Dates	2000-2005
Title of qualification awarded	Chemical Engineer (Valedictorian diploma)
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	Understanding				Speaking				Writing	
<i>European level (*)</i>	Listening		Reading		Spoken interaction		Spoken production			
ENGLISH	B2	Independent User	B2	Independent User	B2	Independent User	B2	Independent User	B1	Independent User
ITALIAN	A1	Basic user	A2	Basic user	A1	Basic user	A2	Basic user	A1	Basic user
FRENCH	A1	Basic user	A2	Basic user	A1	Basic user	A2	Basic user	A1	Basic user

(*) Common European Framework of Reference for Languages

Social skills and competences	Team work: I was employed as researcher or as manager in over 50 national or international research projects (14 as project manager/responsible)
Organisational skills and competences	During the faculty's years I was involved in most of the student activities (chief of the student hostel) acquiring good organizational skills; manager of multiple projects (including large consortia); I was involved in the organizing committee of the "CD Nenițescu Days"
Technical skills and competences	Technical skills were obtained and continuous improved due to the various attended training courses: chromatography, IR, AAS and ICP-MS spectroscopy
Computer skills and competences	Independent USER of WINDOWS XP and Windows 7, MS Office, Macromedia Firefox, Fireworks, Origin etc..

Additional information

Fields with specific interests:	Bone, Bone grafts, Biomaterials, Nanomaterials and Technologies, Chemistry; Prosthetic Tubular Devices, Drug Delivery System; Materials for Environmental Applications, etc.
Publications:	· Over 350 per-reviewed published works (over 300 is indexed in ISI Web of Science); cumulative impact factor >740; Hirsh index 43 (ISI); Times of citations ~ 6000 (self-citations excluded); · 23 Books and Chapters of Books; · 10 patents issued by OSIM and 26 pending Patent Applications
Editorial Boards	Editorial board: · Coatings – MDPI (2019-onward) - ISI journal – Section Editor in Chief · Revista Romana de Materiale - Romanian Journal of Materials (2017-onwards) – ISI Indexed · Advanced Nano-Bio-Materials and Devices – SciEdTech – Editor in Chief · Jacobs Journal of Materials Science (Remedy Publications) (2016-onwards) · Resource-Efficient Technologies (2016-onward) · Dovepress (2015 – onwards) – consulting editor · Bentham Science – Bentham Ambassador · Materials Science and Engineering Journal (2017-onwards) · Quantitative Imaging in Medicine and Surgery (2015–2017) – SCOPUS indexed · Journal of Nanomaterials, Nanotechnology and Nanomedicine, (2015-2024) · Biointerface Research in Applied Chemistry (2011-present) – ISI indexed · Scientific Bulletin of University „POLITEHNICA” of Bucharest – Serie B: Chemistry and Materials Sciences (2010-present) – ISI indexed. Guest editor: • Design and performances of medical devices: from bulk to surface modification, Current Medicinal Chemistry (2019); • New challenges in cancer treatment, from novel agents to innovative administration, Anti-Cancer Agents in Medicinal Chemistry (2019); • Nanobiosensors in Food Industry, Sensors (2017) • Sustainability of Nanotechnology: Novel Approaches; Sustainability (2017); • Smart Drug Delivery Systems, Current Drug Targets (2015); • Engineered Magnetic Core@Shell Structures, Current Pharmaceutical Design 2015; • Engineered Biomaterials for Tissue Regeneration, The Science World Journal

(2014).

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.
Research Projects	55 research projects with national and international financing (23 of them being project manager/responsible) 1. RO-MD2023; Nanostructured bone grafts with predetermined properties / Grefoase nanostructurate cu proprietăți prestabilite; Project Manager; total Budget 500 000Eur; Period of implementation: 2024-2026 2. M Era Net; Innovative stent coating with polyphenol-rapamycin complex with improved drug-eluting properties to target in-stent-restenosis; Project Manager from Romanian Side / responsible; Budget share of UNSTPB 182 551Eur - total Budget 1.149.922Eur; 3. Flag Era; Smart nerve Grafts based on Graphene-related composite materials with electric-triggering capability for central and peripheral nervous system regeneration Smart2Graph; Role: Project Coordinator Budget: 971 732Eur; 4. PN-III-P1-1.1-TE-2021-1242; Glass functionalisation and decoration with nanoparticles: a challenging way to induce new applications; Role: Project manager, Period of implementation: 2022-2024 5. PN-III-P2-2.1-PED-2021-3177; Superior recovery of recycled polyethylene by compounding with chemically modified starch and nanopowders in order to obtain materials with antimicrobial properties for REPRAP 3D printers; Role: researcher, Period of implementation: 2022-2024 6. PN-III-P2-2.1-PED-2021-0627; Innovative multifunctional composites for the protection of cultural heritage objects; Role: Researcher, Period of implementation: 2022-2024 7. PN-III-P2-2.1-PED-2021-3414; Innovative antimicrobial food packages for advanced food security; Role: Researcher, Period of implementation: 2022-2024 8. PN-III-P2-2.1-PED-2021-1788; Innovative nanostructured nutraceuticals with synergistic bioactivities for hepato-digestive protection; Role: Researcher, Period of implementation: 2022-2024 9. Action CA20126, "Network for research, innovation and product development on porous semiconductors and oxides" (NANOPORE); Role: Responsible Romanian side; Period of implementation: 2021-2025 10. PN-III-P1-1.1-PD-2019-1156; Novel 2D nanocomposite membranes based on chitosan for water purification/ Noi membrane nanocompozite 2D pe bază de chitosan pentru purificarea apei; Postdoctorand Angela SPOIALA; Period of implementation: 2020-2022 (Rol – Mentor). 11. PN-III-P1-1.1-PD-2019-1185- Nanomateriale bioactive pentru terapie combinată: modularea infecțiilor microbiene și prevenția recurenței tumorale; Postdoctorand Valentina Grumezescu (Rol – Mentor). 12. PN-III-P1-1.1-TE-2019-1450/TE 103/Platformă microfluidică multifuncțională de tipul lab-on-a-chip pentru fabricarea nanoparticulelor/Multifunctional lab-on-a-chip microfluidic platform for the fabrication of nanoparticles; Rol: Cercetator; Period of implementation: 23.10.2020-22.10.2022 13. PN III (2013-2020) / PED 2019; Valorificarea nanoparticulelor magnetice in dezvoltarea unui micro-dispozitiv magnetic / contract No. 522/23.10.2020; Role: Researcher; Period of implementation: 23.10.2020-22.10.2022 14. PN III (2013-2020) / PED 2019; Evaluarea potentialului de exploatare a materialelor poroase in tratarea disbiozelor microbiotei / Evaluation of the exploitation potential Potential of Porous Materials in the tREatment of Microbiota-related dISeasEs – contract No. 524/23.10.2020; Role: Researcher; Period of implementation: 23.10.2020-22.10.2022 15. PN-III-P2-2.1-PED-2019-1375; Elaborarea de noi antiseptice pe baza de oxid de zinc pentru tratarea clinica a plagilor; Role: Researcher; Period of implementation: 2020-

2022

16. **Action CA17118**, "Identifying Biomarkers Through Translational Research for Prevention and Stratification of Colorectal Cancer" (TRANSCOLONCAN); Role: Researcher/ **Responsible of UPB**; Period of implementation: 2018-2022
17. **Action CA18132**; Functional Glyconanomaterials for the Development of Diagnostics and Targeted Therapeutic Probes; Role: Researcher/ **Responsible of UPB**; Period of implementation: 2018-2022
18. PN-III-P4-ID-PCCF-2016-0114; Antibiotic Resistance in Wastewater: Transmission Risks for Employees and Residents around Waste Water Treatment Plants / Rezistența la antibiotice în apele uzate: Riscuri de transmitere la angajați și la rezidenții din proximitatea stațiilor de tratare a apelor reziduale; Role: Researcher/ **Responsible of UPB**; Period of implementation: 2018-2022
19. PN-III-P1-1.2-PCCDI-2017-0697; Intelligent therapies for non-communicable diseases based on controlled release of pharmacological compounds from encapsulated engineered cells and targeted bionanoparticles / Terapii inteligente pentru boli non-comunicabile bazate pe eliberarea controlată de compuși farmacologici din celule încapsulate după manipulare genetică sau bionanoparticule vectorizate; Period of implementation: 2018-2020
20. PN-III-P1-1.2-PCCDI-2017-0629; Innovative Bionanomaterials for Treatment and Diagnosis / Bionanomateriale inovative pentru tratament și diagnostic; Period of implementation: 2018-2020
21. PN-III-P1-1.2-PCCDI-2017-0749; Bioactive nanostructures for innovative therapeutical strategies / Nanostructuri bioactive pentru strategii terapeutice inovatoare; Period of implementation: 2018-2020;
22. PN-III-P1-1.2-PCCDI-2017-0689; Lib2Life- Revitalizarea bibliotecilor și a patrimoniului cultural prin tehnologii avansate; Period of implementation: 2018-2021;
23. Grants JINR-RO 2018; Complementary characterization and SANS modelling of magnetic multilayered suprastructures for targeted cancer therapy; Topic #04-4-1121 2015/2020; **Responsible UPB**; Period of implementation: 2018-2020;
24. Project JINR-RO 2018; Development and characterisation of magnetic nanostructures for targeted cancer therapy; **Responsible UPB**; Period of implementation: 2018;
25. Project JINR-RO 2018; Mesoporous silica doped with magnetite nanoparticles for controlled release rate of biologically active substances; Role: member of team/researcher; Period of implementation: 2018;
26. PN-III-P2-2. 1-PED-2016-0427; Realizare demonstrator în tehnologia planară de tranzistor cu tunelare a izolatoarelor ultrasubțiri - ca promotor al unei serii de nano-dispozitive și evidențierea utilității în industrie; Role: Researcher; Period of implementation: 2017-2018;
27. PN-III-P2-2. 1-PED-2016-0952 "Biomimetic 3D-printed porous scaffolds for bone tissue engineering / Structuri poroase biomimetice obținute prin imprimare 3D pentru ingineria țesutului osos" Role: Researcher; Period of implementation: 2017-2018;
28. **63/10. 04. 2017/IUCN DUBNA; Nanostructured magnetic colloids for targeted cancer therapy; Role: project manager; Period of implementation: 2017;**
29. 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;
30. PN-III-P2-2. 1-PTE-2016-0156; Harnessing recycled thermoplastic polymers by reinforcement with functionalized natural fibers to obtain new added-value products; Role: Researcher; Period of implementation: 2016-2018;
31. 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;
32. **POC-D; Prototip pentru validare nanotehnologie inovatoare și linie de producție (P_39_240), manager de proiect;**
33. 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: 2016-2018;
34. 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;
35. „**Installations of National Interest / Instalații de Interes Național: Crearea Centrului Național de Micro și Nanomateriale / Creation of the National Centre of**

Micro- and Nanomaterials” Role: project manager; Period of implementation: 2014-2019;

36. PNCDI 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: 2014-2017;
37. PNCDI 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 Cercetător; Period of implementation: 2014-2017;
38. POSSCE-A2-O2. 2. 1. -2013-1 - *Crearea Centrului Național de Cercetări Științifice pentru Siguranța Alimentară*; Nr 1970, Cod SMIS – CSNR 48652; Role: **Scientific Responsible**; Period of implementation: 2014-2016;
39. MPNS COST Action MP1301: New Generation Biomimetic and Customized Implants for Bone Engineering; Role: member of the Romania team; 2013-2017
40. TD COST Action TD1305: Improved Protection of Medical Devices Against Infection (IPROMEDAI); Role: member of the Romania team; 2013-2017
41. 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;
42. **PNCDI 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: Project manager; Period of implementation: 2012-2016;**
43. PNCDI 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: Researcher; 2012-2016;
44. PNCDI II – CAPACITATI (Modulul II) Perspective Studies „NanoProspect”; Role: Researcher; Period of implementation: 2010-2011;
45. PNCDI II – CAPACITATI (Modulul III) - Bilaterală Romania-Germania/Natural nanoparticles in soil as possible environmental vectors for contaminants; Ctr. Nr. 327/18. 08. 2009; Role: Researcher; Period of implementation: 2009;
46. PNCDI II – Partnership: Multifunctional nanobiocomposites used as regenerative and drug delivery support–SIMAC; Ctr. Nr. 72_198; Role: Researcher; Period of implementation: 2008– 2011;
47. PNCDI II – Partnership: Lead-free piezoelectric materials chemically processed from aqueous solution / Materiale piezoelectrice fara plumb procesate prin metode chimice in solutie – MPPC; Ctr. Nr. 72_153; Role: Researcher; Period of implementation: 2008 – 2011;
48. PNCDI II – Partnership: Miniaturized biosensor, micro technology, organophosphorous insecticides, acetylcholinesterase (AChE), acetylthiocholine (ACh) / Microtehnologia obtinerii de biosenzori miniaturizati pentru detectare rapida a contaminantilor din produsele alimentare; Ctr. Nr. 52_173; Role: Researcher; Period of implementation: 2008 – 2011;
49. PNCDI II – Partnership: Experimental and Epidemiological study related to the action of Persistent Organic Pollutants on growing, development, function of tiroidian immunity and estrogenic secretion / Studiu epidemiologic si experimental privind actiunea poluantilor organici persistenti (POP) pe cresterea, dezvoltarea, functia si imunitatea tiroidiana si pe secretia estrogenica; Ctr. Nr. 32_176/01. 10. 2008; Role: Researcher; Period of implementation: 2008–2011;
50. **Proiect PN II_MC – Electric field influence on collagen mineralization process; Role: Project manager; Period of implementation: 2008;**
51. 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;
52. **PN II_TD – Collagen/Hydroxyapatite Composite Materials; Role: Project manager; Period of implementation: 2007 – 2009;**
53. **PN II_BD – Composite Biomaterials based on Collagen and Hydroxyapatite; Role: Project manager; Period of implementation: 2006 – 2009;**
54. 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;
55. PNCDI I-CERES type PED/Hybrid membranar materials with polyphosphazenic

backbone; Role: Researcher; Period of implementation: 2002- 2004.

- Prizes and Awards:** **Over 100 prizes and awards**
- 2024 15th International Conference on Nanotechnology: Fundamentals and Applications (ICNFA 2024), Barcelona, Spain – August 25-27, 2024;**
Denisa FICAI, Ludmila MOTELICA, Cristina Chircov, Roxana Doina Trusca, Adrian Vasile Surdu, Bogdan Stefan Vasile, Ovidiu Cristian Oprea, Geanina Voicu, Manuela Calin, Victor-Eduard Peteu, Anton FICAI, PEG and aspartic acid-functionalized Fe₃O₄ nanoparticles as efficient theranostic vectors in cancer,
Best Paper Award
- 2024 1st International Innovation and Invention Show EURO POLITEHNICUS – 22-24 November 2024, Bucharest, Romania**
Cornelia Ioana ILIE, Ludmila MOTELICA, Angela SPOIALĂ, Denisa FICAI, Ovidiu Cristian OPREA, Anton FICAI; Glass functionalization and decoration with nanoparticles: a challenging way to induce new applications; Patent application No. A100797/06.12.2022
“**Silver medal**” awarded by the International Jury of the Salon
Mariana JIAN, Anton FICAI, Denisa FICAI, Viorel NACU, Vitalie COBZAC, Ludmila MOTELICA, Andrei MOSTOVEI, Ovidiu Cristian OPREA si Oleg SOLOMON. Grefă osoasă nanostructurată; AGEPI, 6291/29.10.2024
“**Gold medal**” awarded by the International Jury of the Salon
Thailand Award for the Best International Invention & Innovation
Liliana MARINESCU, Laura-Florentina BOANTA, Anton FICAI, Denisa FICAI, Ecaterina ANDRONESCU, Procedeu de tratament a diverselor substraturi naturale sau sintetice în vederea inducerii de activități antimicrobiene, antibiofilm, antifungice, antialgice sau chiar antivirale bazate pe nanotehnologii; A/00075/25.02.2021
“**Gold medal**” awarded by the International Jury of the Salon
Ovidiu Cristian OPREA, Ludmila MOTELICA, Anton FICAI, Denisa FICAI, Viorel NACU, Vitalie COBZAC, Anton FICAI, Denisa FICAI, Ecaterina ANDRONESCU. Innovative Composition for Biodegradable, antimicrobial packaging based on cellulose derivatives, zinc oxide nanoparticles and mesoporous silica loaded with essential oils;
“**Gold medal**” awarded by the International Jury of the Salon
- 2024 9th International Invention Innovation Competition in Canada – ICan 2024; August 24, Toronto, Canada**
Cornelia Ioana ILIE, Ludmila MOTELICA, Angela SPOIALĂ, Denisa FICAI, Ovidiu Cristian OPREA, Anton FICAI; Glass functionalization and decoration with nanoparticles: a challenging way to induce new applications; Patent application No. A100797/06.12.2022
“**Gold medal**” awarded by the International Jury of the International Salon
“**International Special Award**” awarded by The First Institute of Inventors and Researchers in I.R. IRAN (FIRI)
“**Canadian Special Award**” awarded by Innovation Initiative Co-operative Inc. “The Inventors Circle”
- 2023 Romanian Research Gala (Gala Cercetării Românești), 1st edition, Bucharest, Romania, Organized by the Ministry of Research, Innovation and Digitization under the Aegis of the Romanian Government**
Special Award for Transfer of the Results into Economy
Capital Gala, Special Prize for Research
“**Gândit in Romania**” Gala, **Special Prize for Research**
- 2023 International Salon of Invention and Innovative Entrepreneurship, 12-13 October 2023, Chisinau, Moldova**
Ovidiu-Cristian OPREA, Anton FICAI, Denisa FICAI, Ludmila MOTELICA, Ecaterina ANDRONESCU, Roxana Doina TRUȘCĂ; Antimicrobial Compositions based on cellulose and ZnO loaded with Citronellor for restoring paper from documents affected by the microorganisms; A/00615/06.10.2021
“**Gold medal**” awarded by the International Jury of the International Salon

Denisa FICAI, Ludmila MOTELICA, Cornelia Ioana ILIE, Angela SPOIALĂ, Ovidiu Cristian OPREA, Anton FICAI; Long-Lasting Innovative NanoCoatings for Heritage preservation; Project PN-III-P2-2.1-PED-2021-2526, no 736

“Gold medal” awarded by the International Jury of the International Salon

Gabriela PETRIȘOR, Ludmila MOTELICA, Ioana BARDIS, Laura-Denisa DRAGU, Lilia MATEI, Ioana-Madalina PITICA, Denisa FICAI, Irina FIERASCU, Radu Claudiu FIERASACU, Ovidiu Cristian OPREA, Anton FICAI, Coralia BLEOTU; Controlled release systems for maintaining the balance of the gastrointestinal microbiota and improving health and method of obtaining them

“Gold medal” awarded by the International Jury of the International Salon

Toma FISTOS, Radu Claudiu FIERASCU, Irina FIERASCU, Alina MELINESCU, Anton FICAI, Denisa FICAI; Lia Mara DITU, Carmen CURUTIU; Hydrophobic coating with self-cleaning and antimicrobial properties for artificial elements of vernacular constructions and method of obtaining it

“Gold medal” awarded by the International Jury of the International Salon

Cornelia Ioana ILIE, Ludmila MOTELICA, Angela SPOIALĂ, Denisa FICAI, Ovidiu Cristian OPREA, Anton FICAI; Glass functionalization and decoration with nanoparticles: a challenging way to induce new applications; Patent application No. A100797/06.12.2022

“Silver medal” awarded by the International Jury of the International Salon

2023 15th European Exhibition of Creativity and Innovation-EuroInvent 2023, 13 May 2023, Iași, Romania

Denisa FICAI, Ludmila MOTELICA, Cornelia Ioana ILIE, Angela SPOIALĂ, Ovidiu Cristian OPREA; Anton FICAI; Magnetic smart drug delivery systems for theranostic using a personalized approach; Project PN-III-P1-1.1-TE-2021-1342, no 96

“Bronze medal” awarded by the International Jury of the International Salon

Excellence Diploma awarded by Asociația Justin Capra

Excellence Diploma with Special Mention awarded by USMF

Carol Davila Award awarded by UMFC

Cornelia Ioana ILIE, Ludmila MOTELICA, Angela SPOIALĂ, Denisa FICAI, Ovidiu Cristian OPREA, Anton FICAI; Glass functionalization and decoration with nanoparticles: a challenging way to induce new applications; Patent application No. A100797/06.12.2022

“Gold medal” awarded by the International Jury of the International Salon

“Certificate of Excellence” awarded by the University POLITEHNICA of Timișoara

Special Award Croatian Inventors Network

Excellence Diploma awarded by Asociația Justin Capra

Gabriela PETRIȘOR, Ludmila MOTELICA, Ioana BARDIS, Laura-Denisa DRAGU, Lilia MATEI, Ioana-Madalina PITICA, Denisa FICAI, Irina FIERASCU, Radu Claudiu FIERASACU, Ovidiu Cristian OPREA, Anton FICAI, Coralia BLEOTU; Controlled release systems for maintaining the balance of the gastrointestinal microbiota and improving health and method of obtaining them; A/00649/18.10.2022

“Gold medal” awarded by the International Jury of the International Salon

Excellence Diploma awarded by Asociația Justin Capra

Denisa FICAI, Ludmila MOTELICA, Cornelia Ioana ILIE, Angela SPOIALĂ, Ovidiu Cristian OPREA, Anton FICAI; Long-Lasting Innovative NanoCoatings for Heritage preservation; Project PN-III-P2-2.1-PED-2021-2526, no 736

“Silver medal” awarded by the International Jury of the International Salon

Excellence Diploma awarded by Asociația Justin Capra

Organizing committee

2024: Virtual International Scientific Conference on “Applications of Chemistry in Nanosciences and Biomaterials Engineering – NanoBioMat 2024”, 27-29 November 2024

2024: Virtual International Scientific Conference on “Applications of Chemistry in Nanosciences and Biomaterials Engineering – NanoBioMat 2024”, 19-21 June

- 2024
- 2024: International Chemical Engineering and Materials Symposium, SICHEM 2024; POLITEHNICA Bucharest, Romania, 11– 12 April
- 2023: Virtual International Scientific Conference on “Applications of Chemistry in Nanosciences and Biomaterials Engineering – NanoBioMat 2023”, 22-24 November 2023
- 2023: Virtual International Scientific Conference on “Applications of Chemistry in Nanosciences and Biomaterials Engineering – NanoBioMat 2023”, 28-30 June 2023
- 2022: 6th International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry 2022 (hybrid); 22-23 November, 2022 Bucharest, Romania
- 2022: Virtual International Scientific Conference on “Applications of Chemistry in Nanosciences and Biomaterials Engineering – NanoBioMat 2022”, 24-26 November 2022;
- 2022: International Symposium of Chemical Engineering and Materials SICHEM 2022, 17-18 November 2022;
- 2022: Virtual International Scientific Conference on “Applications of Chemistry in Nanosciences and Biomaterials Engineering – NanoBioMat 2022”, 22-24 June 2022;
- 2022: 35th International Conference on Nanomaterials and Nanotechnology; March 25-26, 2022 Berlin, Germany;
- 2022: Conferința Științifico-Practică Internațională „Instruire prin Cercetare pentru o Societate Prosperă”, ediția a IX-a; Chișinău, 19 – 20 martie 2022;
- 2021: Virtual International Scientific Conference on “Applications of Chemistry in Nanosciences and Biomaterials Engineering – NanoBioMat 2021” 25-26 June and 25-27 November 2021;
- 2021: A XIII-a Conferință de Știința și Ingineria Materialelor Oxidice, CONSILOX, Alba Iulia, România 1-3 Octombrie 2021;
- 2021: Conferința științifică internațională „Abordări Inter/ Trans-disciplinare în Predarea Științelor Reale, (Concept STEAM)”; Republica Moldova, Chișinău, 29 - 30 octombrie 2021;
- 2020: The 8 International Conference on Advanced Materials and Systems, 1-3 October, Bucharest, ROMANIA;
- 2020: International Symposium of Chemical Engineering and Materials SICHEM 2020; 17-18 September 2020, Bucharest;
- 2020: Simpozionul internațional “Prioritățile Chimiei pentru o Dezvoltare Durabilă”, PrioChem Editia XVI, Bucuresti, 28-30 Octombrie 2020;
- 2020: 10th International Conference on Environmental Pollution and Remediation (ICEPR'20); 19-21 August 2020, Prague, Czech Republic;
- 2019: Școala De Vară: “Nanoparticule inteligente pentru livrarea direcționată de compuși bioactivi: preparare, caracterizare si aplicații”; 23-24 mai 2019;
- 2019: Romanian International Conference on Chemistry and Chemical Engineering 2018, 6-7 September, Romania;
- 2018: International Symposium of Chemical Engineering and Materials SICHEM 2018
- 2018: 2nd Biennial Oil, Gas and Petrochemical Conference (OGPC2018), Bushehr, Iran, 14 Nov 2018
- 2018: 8th International Conference on Environmental Pollution and Remediation (ICEPR'18); 19-21 August 2018, Madrid, Spain
- 2017: Romanian International Conference on Chemistry and Chemical Engineering, 6-9 September 2017; Poiana Brasov, Romania.
- 2017: 2017 ICG Annual Meeting and 32nd Şişecam Glass Symposium; October 22-25th 2017, Istanbul, Turkey
- 2016: 6th International Advances in Applied Physics and Materials Science Congress & Exhibition, 1-3 June 2016, Steigenberger Hotel Maslak, İstanbul, Turkey

Specializations:

- 25-26 June 2009: How to write scientific papers: organized by CNCSIS-UPB
- 12-16 June 2009: ESF Summer School in Nanomedicine, Lisbon, Portugal
- June – August 2004 Research stage at Università degli Studi di Modena e Reggio Emilia, Italy; New electrochemical sensors; (3 months)
- September – December 2005 Research stage at OrtoCycle Co. Hollywood, Florida, USA; Improving dental adhesives
- Graduation certificate of the courses for operation and use of GC, HPLC, GC-MS, LC-MS, UV-Vis, FTIR spectroscopy and microscope, ICP-OES, ICP-MS, AAS

Publication List
Anton FICAI

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2. Ludmila Motelica, Ovidiu Oprea, Denisa Fikai, and Anton Fikai; Introduction to Biomaterials and Tissue Engineering, (Chapter 1, pages 1-30) in Biomaterials and Tissue Engineering; Oguzhan Gunduz, Christophe Egles, Román A. Pérez, Denisa Fikai, Cem Bulent Ustundag (Editors); Springer; ISBN 978-3-031-35831-9; 390pages
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7. **Anton Fikai**, Alexandru Grumezescu (Editors); Nanostructures for Antimicrobial Therapy; Elsevier Science Publishing Co Inc; 722pages; ISBN 0323461522; 2017; (**English**)
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9. Fikai D, **Fikai A**. Prevention of biofilm formation by material modification. Biofilms and Implantable Medical Devices: Infection and Control: Elsevier Inc.; 2016. p. 160-180; (**English**)
10. Mariana Carmen Chifiriuc, **Anton Fikai**, Alexandru Mihai Grumezescu, Lia-Mara Ditu, Marcela Popa, Carmen Iordache, Alina Maria Holban, Șerban Vifor Gabriel Beresteanu, Raluca Grigore, Veronica Lazar; Chapter 1 - Soft tissue engineering and microbial infections: Challenges and perspectives; in *Nanobiomaterials in Soft Tissue Engineering, 2016, 1-29; (**English**)*
11. Denisa Fikai, Madalina Georgiana Albu, Maria Sonmez, **Anton Fikai**, Ecaterina Andronescu; Chapter 13 - Advances in the field of soft tissue engineering: From pure regenerative to integrative solutions in *Nanobiomaterials in Soft Tissue Engineering Applications of Nanobiomaterials Volume 5; Alexandru Grumezescu (Ed); Elsevier, 2016; 355-386; (**English**)*
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14. Alexandru Mihai Grumezescu, Alina Maria Holban, **Anton Fikai**, Valentina Grumezescu, Veronica Lazar and Mariana Carmen Chifiriuc: Nanosized Materials with Antibiofilm Activity. Recent Developments in Biotechnology Vol. 10: Nano-Biotechnology, Studium Press LLC, Houston, USA, 2013 (**English**);
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12. Oprea Ovidiu-Cristian, Motelica Ludmila, Fikai Denisa, Fikai Anton, Trusca Roxana - „Procedeu de depunere a oxidului de zinc pe filmele de polietilenă pentru obținerea de ambalaje antimicrobiene” - – A/00335 / 18.06.2024 (Method of depositing zinc oxide on polyethylene films to obtain antimicrobial packaging)
13. Oprea Ovidiu-Cristian, Motelica Ludmila, Fikai Anton, Fikai Denisa, Andronesu Ecaterina - “Compoziție inovativă pentru ambalaje biodegradabile, antimicrobiene, pe bază de derivați de celuloză, nanoparticule de oxid de zinc și silice mezoporoasă încărcată cu uleiuri esențiale” - A/00336 / 18.06.2024
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20. Codina MOVILEANU, Denisa FICAI, Anton FICAI, Manuela CĂLIN, Maria Florentina ANGHELACHE, Anca Violeta GAFENCU, Gheorghe FUNDUEANU-CONSTANTIN, Mariana PINTEALA, Maya SIMIONESCU, Ecaterina ANDRONESCU; Sisteme inteligente de nanoparticule pentru internalizare celulară; A/00339/15.06.2021
21. Liliana MARINESCU, Laura – Florentina BOANȚĂ, Anton FICAI, Denisa FICAI, Ecaterina ANDRONESCU, Mariana Carmen CHIFIRIUC, Alina-Maria HOLBAN; Siloxane-based solution for the cleaning and conservation of the natural and synthetic surfaces / Soluții de impregnare pe bază de siloxani cu rol de curățare și conservare pentru substraturi naturale și sintetice; A/00356 / 22.06.2021
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23. Anton FICAI, Denisa FICAI, Ludmila MOTELICA, Ovidiu-Cristian OPREA, Ecaterina ANDRONESCU; Compoziții și procedeu de tratare a materialelor destinate dezvoltării de dispozitive (medicale) de protecție cu rol antiviral și antimicrobian; OSIM, A/00244/06.05.2020.
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25. SUCIU Alexandru, SEMENESCU Augustin, FICAI Anton, SUCIU Ioan Alexandru; Preparat farmaceutic semisolid pentru terapia topică combinată a patologiei anorectale;
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27. Ovidiu-Cristian OPREA, Anton FICAI, Denisa FICAI, Ludmila MOTELICA, Roxana TRUȘCĂ, Ecaterina ANDRONESCU; “Compoziții și procedeu de tartare a obiectelor din piele pentru conferirea activității antibacteriene și antifungice”; A00794 /27.11.2019;
28. Coralia Bleotu; Laura Denisa Dragu; Lilia Matei; Carmen Cristina Diaconu; Mihaela Chivu-Economescu; Andrada Sabina Zurac; Ana Iulia Neagu; Laura Georgiana Necula; Alina Maria Holban; Lia-Mara Ditu; Mariana Carmen Chifiriuc; Veronica Lazar; Gradisteanu Gratiela; Ionela-Andreea Neacsu; Vladimir Lucian Ene; Ecaterina Andronesu; **Anton Fikai**; Cristina Balas; Cristina Ciobanu; Laurentiu Cezar Irimia; Stela Daniela Dragan. Procedeu de obținere a unor hidrogeluri compozite pe bază de collagen și nanoparticule de argint pentru prevenirea infecțiilor de plagă, Nr Inregistrare OSIM: A1009/29.11.2018; RO134197 (A2) / 2020-06-30;
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