

PERSONAL INFORMATION



Fierascu Radu Claudiu

The National Institute for Research & Development in Chemistry and Petrochemistry- ICECHIM, Bucharest, Spl. Independentei 202, sect. 6, Romania

**Dr. Habil., Scientific Researcher 1,
Technical Manager**

radu_claudiu_fierascu@yahoo.com
fierascu.radu@icechim.ro

Date of birth: 07/03/1982 | **Nationality:** Romanian
<https://erris.gov.ro/EMERGING-NANOTECHNOLOGIES>
<http://orcid.org/0000-0003-4224-9157>
SCOPUS ID 35253442000

WORK EXPERIENCE

May 2017 - present

Senior Scientific Researcher, 1st degree

The National Institute for Research & Development in Chemistry and Petrochemistry- ICECHIM, Bucharest, Spl. Independentei 202, sect. 6, Romania

- Research on X-ray and other analytical methods, synthesis and characterization of new (nano)materials with applications in biomedicine, application of natural extracts in biomedicine and cultural heritage conservation;
- Researches on chemical, pharmacological, biological activity and related aspects of medicinal and aromatic plants and natural products
- Development of scientific projects
- Member of The Board of Scientific Council - ICECHIM
- Manager of Roentgenographic Department of ICECHIM

July 2014 – May 2017

Senior Scientific Researcher, 2nd degree

The National Institute for Research & Development in Chemistry and Petrochemistry- ICECHIM, Bucharest, Spl. Independentei 202, sect. 6, Romania

- Research on X-ray and other analytical methods, synthesis and characterization of new (nano)materials with applications in biomedicine and cultural heritage preservation, application of natural extracts in biomedicine and cultural heritage conservation;
- Researches on chemical, pharmacological, biological activity and related aspects of medicinal and aromatic plants and natural products
- Development of scientific projects
- Member of The Scientific Council Of ICECHIM
- Manager of Roentgenografic Department of ICECHIM

November 2012 – July 2014

Senior Scientific Researcher, 3rd degree

The National Institute for Research & Development in Chemistry and Petrochemistry- ICECHIM, Bucharest, Spl. Independentei 202, sect. 6, Romania

- Research on X-ray and other analytical methods, synthesis and characterization of new (nano)materials with applications in biomedicine and cultural heritage preservation, application of natural extracts in biomedicine and cultural heritage conservation;
- Researches on chemical, pharmacological, biological activity and related aspects of medicinal and aromatic plants and natural products
- Development of scientific projects
- Manager of Roentgenographic Department of ICECHIM

January 2008 – November
2012

Senior Scientific Researcher

The National Institute for Research & Development in Chemistry and Petrochemistry-ICECHIM, Bucharest, Spl. Independentei 202, sect. 6, Romania

- Research on X-ray and other analytical methods, synthesis and characterization of new (nano)materials
- Researches on chemical, biological activity and related aspects of medicinal and aromatic plants and natural products
- Development of scientific projects

January 2006 – January 2008

Research assistant

The National Institute for Research & Development in Chemistry and Petrochemistry-ICECHIM, Bucharest, Spl. Independentei 202, sect. 6, Romania

- Research on X-ray and other analytical methods, synthesis and characterization of new (nano)materials

MANAGEMENT AND ORGANIZATIONAL EXPERIENCE

June 2020 – present

ICECHIM Bucharest

Technical Manager

- Proposing general, specific and operational objectives of the institute, in the technical field, of marketing and of capitalizing the research results, on short, medium and long term
- Coordination of the activities of promoting the image of the institute and following the continuous realization of this activity
- Coordination of the activities for monitoring the research contracts in the institute and for carrying out the reports required by the management of the institute or by the hierarchically superior institutions
- Coordination of industrial property protection activities in the institute

2018 – June 2020

ICECHIM Bucharest

Leader of the Emerging Nanotechnology Group

- Development, coordination and implementation of national and international scientific projects
- Administrative coordination and organization of the research group
- Increasing scientific productivity
- Guiding young employees

2018 – 2019

Ministry of Research and
Innovation

Coordinator of the RDI Specialists Group within the Technical Working Group

- Ensuring the coordination of the group of specialists appointed by research institutes for the development of the framework procedure for establishing the accounting value of the results of R&D activity and the technological audit framework procedure, from the point of view of aspects related to the evaluation of R&D activities

2019 – present

2015 - present

ICECHIM Bucharest

Member of the Bureau of the ICECHIM Scientific Council

Member of the Scientific Council - ICECHIM

- Participation in the elaboration of the Strategic Plan for Research-Development-Innovation of ICECHIM
- internal approval commissions for research projects within ICECHIM

- 2010 – present**
ICECHIM Bucharest
- Responsible for Radiological Protection**
- Establishment and CNCAN attestation for the laboratories of X-ray Diffraction and X-ray Spectrometry
 - Leading and supervising the application of analytical techniques under the control / supervision of CNCAN: X-ray diffraction, X-ray fluorescence, Electron microscopy
 - Organizing and conducting the necessary examinations for the issuance of the level 1 permits
- 2007 – present**
ICECHIM Bucharest
- Member of the Occupational Health and Safety Committee - ICECHIM**
- Fulfilling the attributions according to the Methodological Norms for applying the provisions of the Law on safety and health at work no. 319/2006, with subsequent amendments and completions

EDUCATION AND TRAINING

- HABILITATION THESIS**
2019 Politehnica University of Bucharest
Chemical Engineering
- POSTGRADUATE PROGRAM, 2013**
2013 Politehnica University of Bucharest
Environmental engineering
- PhD**
2007-2010 Valahia University of Targoviste, Materials Engineering, Mechatronics and Robotics Department
Materials Engineering
- MASTER DEGREE**
2007-2008 Valahia University of Targoviste, Materials Engineering, Mechatronics and Robotics Department
Advanced Materials
- MASTER DEGREE**
2005-2007 University of Bucharest, Chemistry Department
Chemistry and Radiochemistry
- BACHELOR'S DEGREE**
2001-2005 University of Bucharest, Chemistry Department
Chemistry and Radiochemistry

PERSONAL SKILLS

Mother tongue(s)	Romanian				
	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	C1	C1	B2	B1	B1

TRAINING COURSES

- ✚ SmartLab Application training, Rigaku Europe SE, Ettlingen, Germany, 2016
- ✚ Entrepreneurship Course, USAMV, Bucharest, 2015
- ✚ Expert in accessing European structural and cohesion funds” (occupational code: 241948), European Institute of Romania, 2011
- ✚ Radiological safety in practices with ionizing radiations sources, CPSDN-IFIN-HH, 2011
- ✚ “Project Management” - EuroBestTeam – 2010
- ✚ “Proficiency Testing Seminar”- LGC Standards – 2008
- ✚ “European and national harmonized legislation in the field of dangerous chemical

substances and preparations” - ICECHIM – 2008

✚ “Training of auditors in the laboratory quality system” - FiaTest – 2008

✚ “Work hygiene and safety” - SC Principio Consulting Ltd – 2007

✚ “Radiological safety in the use/handling of nuclear generator installations” organized by Centre for staff training and specialization in nuclear activity-2006

✚ “Presentation of the technical requirements of ISO / IEC 17025:2005 - referential for accrediting testing laboratories and ensuring metrological traceability through reference materials” organized by RENAR – 2006

✚ “Quality assurance in testing laboratories according to ISO / IEC 17025:2005” - SC SEMQ MANAGEMENT SRL – 2006

COMPUTER SKILLS

Good knowledge of Microsoft Office TM, Adobe Professional, Origin TM, Chemskech TM, etc., Internet usage, search engines, social networks and other web resources, developed capacity of using Google products: Docs, Calendar, Analytics, App Engine, Scholar, Library etc.

Good knowledge of specific software research equipment

Driving licence B

ADDITIONAL INFORMATION

Publications

- ✚ Hirsch Index (SCOPUS): 20
- ✚ author/co-author of more than 140 ISI papers
- ✚ Indexed papers in other databases and / or presented at international conferences (more than 350);
- ✚ Personal Cumulated Impact Factor over 100;
- ✚ Total number of citations 1201;
- ✚ Author/co-author of 15 books/chapter in books
- ✚ Patent applications: 14

Patents applications

- ✚ Ecological antifungal composition for controlling phytopathogenic strains affecting the grapevine and method of obtaining it, A00158/2019
- ✚ Ecological antifungal solution for controlling phytopathogenic strains affecting apple crops and method of obtaining it, A00159/2019
- ✚ Adhesive material with antimicrobial properties for the restoration of ceramic artifacts belonging to the cultural heritage and method of obtaining it, A/00914/2018
- ✚ Antimicrobial gluing agent for the restoration of paper-based artefacts belonging to the cultural heritage and the method of obtaining it, A/00915/2018
- ✚ Composition of conservation and restoration of chalk monuments surfaces and its obtaining process, 131329 B1/2018
- ✚ Core-shell adsorbents based on cyclodextrin and their applications in environmental protection, A00385/2018
- ✚ Antimicrobial pulverisable solution for treating, consolidating and protecting inorganic surfaces of buildings and / or historic monuments, A00919/2017
- ✚ Mortar with antimicrobial properties, designed for the protection of buildings and / or historical monuments, A0026/2018
- ✚ Adsorbent with magnetic properties based on apatitic material for treatment of impurified waters with organic and inorganic compounds and method of obtaining it, A00380/2019
- ✚ Method of treating water with content of hard degradable organic pollutants, A01032/2017
- ✚ Antimicrobial coating and with protective role for the natural stone surfaces with cultural

value and method of obtaining it, A00072/2020

- ✚ Antimicrobial pulverisable solution for restoration / conservation of leather supports and method of obtaining it, A00074/2020

Projects

Project manager, partner responsible, key person or member in more than 25 national and international projects:

- ✚ **Project manager** - Doctoral Research Grant (won through competition) financed by CNCSIS – 2008-2010;
- ✚ **Project Manager** – Postdoctoral Research type *PD* PN-II-RU-PD-2011-3-0023;
- ✚ **Project manager** - Increasing the institutional capacity of bioeconomic research for the innovative capitalization of the native vegetal resources, in order to obtain high added value horticultural products (BIOHORTINOV) - Component project 3 - Development of plant extracts and phytosintezed nanostructured mixtures with phytotherapeutic in order to decrease biocenotic stress in horticultural crops
- ✚ **Project manager** - Innovative apatitic materials with high antimicrobial activity for building materials and conservation of cultural heritage;
- ✚ **Project responsible** - Techniques for storing and capitalization of the advanced scientific research results
- ✚ **Project responsible** - Complex multidisciplinary project for monitoring, conservation, protecting and promoting the Romanian cultural heritage
- ✚ **Technical responsible** - Sustainable valorization of by-products from medicinal and aromatic plants industry into value-added products
- ✚ **Project responsible** - Depollution of waters with content of hard biodegradable organic compounds (endocrine disruptors) through advanced oxidation processes using innovative catalysts
- ✚ **Project responsible** - Innovative methods and techniques for evaluating conservation/restoration interventions and following restoration of traditional constructions in Romania

Honors and awards

- ✚ Awarded papers by UEFISCDI in the program “Awarding the research results - Articles”;
- ✚ Awards at International Innovation Expositions.

Memberships of the Professional Societies:

- ✚ Romanian Chemical Society
- ✚ Eurachem Romania
- ✚ Romanian Society for Biomaterials
- ✚ Romanian Association of Pteridology

Reviewer and Member in Editorial Board

- ✚ Frontiers in Materials (Guest Editor), Coatings (Guest Editor), Caryologia, Journal of Functional Foods, Journal of Thermal Analysis and Calorimetry, Applied Surface Science, Arabian Journal of Chemistry, Journal of Hazardous Materials, Journal of Cluster Science, Heritage Science, Cellulose, Industrial Crops and Production.