

Curriculum Vitae

Last name, First name: Rodica-Mariana Ion

Gender:Female

Nationality: Romanian

Overall Scientific Expertise:

Full Professor of Nanomaterials, Ph.D. Supervisor at Valahia University, Targoviste and Senior Scientist at ICECHIM - Bucharest, Head of Nanomedicine Research Group. 34 years experience in analytical chemistry, physical chemistry / photochemistry (laboratory / clinical photodynamic therapy of cancer with lasers, lamps and LED sources), regulatory aspects of chemicals and nanomaterials (chemical safety and environmental protection), analysis of soils, water and depollution methods. Evaluator/reviewer for UE projects (Marie Curie). Experience in synthesis/characterization of organic/inorganic chemicals, dose-response relationships, photochemistry and light effect on humans and animals, nanotoxicology, assessment of chemicals (toys, textiles, cosmetics, food contact materials), drugs toxicology and risk assessment.

Professional Experience

Years employed from – to	Title of position	Employer – name and location	Areas of professional specialisation [^]
2013-present	Head of Nanomedicine Research Group	National Institute of R&D for Chemistry and Petrochemistry – ICECHIM, Bucharest, Romania	Medicinal chemistry, nanoscience and nanomaterials. Cancer/oncology, nanomedicine, Health and environmental impacts of nanomaterials (biophysics, photomedicine (therapy), nanotoxicology, drug interactions, medical technologies and devices.
2012-present	Member	Ministry of National Education, National Council for the Recognition of Degrees, Diplomas and Certificates, Materials Engineering Commission	Ph.D. thesis evaluation on nanomaterials, nanomedicine and risk assessment
2008-2004	Manager of Analytical Department	National Institute of R&D for Chemistry and Petrochemistry – ICECHIM, Bucharest, Romania	Environmental science (water and soil quality, climate change). Toxicology, testing strategies for chemicals, uncertainty analysis
2008-present	Board Vicepresident and President of Scientific Council	National Institute of R&D for Chemistry and Petrochemistry - ICECHIM, Bucharest, Romania	Scientific Research and management activity
2007-present	Ph.D.Supervisor	Valahia University, Targoviste	Profesor and supervisor of PhD thesis on nanomaterials production, analytical characterization and risk tests
2004-present	Full profesor	Valahia University, Targoviste	Nanoscience and nanomaterials, nanotechnologies; chemistry (inorganic)

2001-1992	Head of Photochemistry Laboratory	S.C.ZECASIN S.A., Bucharest	Chemistry (Physical-chemistry, analytical, Organic); Non-conventional technologies
1984-1992	Junior scientist	ICECHIM – Institute of Chemical and Biochemical Energetics, Bucharest, Romania	Chemistry (organic, physical chemistry, engineering, synthetic)
1984-1982	Chemist	Factory of Synthetic Fibers, IFA-VISCOFIL, Bucharest, Romania	Chemistry (analytical) Environmental science (waste treatment).

Educational Background

Year	Degree awarded	Educational Institution – name and location	Areas of educational specialisation*
2010	Diploma of master	Academy of Economical Sciences, Bucharest, Romania	University Management
2008	Certificate	FIATEST S.A., Bucharest, Romania	Management of internal and international projects
2006	Certificate	RENAR S.A., Bucharest, Romania	Quality Auditor for ISO 9001 and ISO SR EN 17025:2005 standards; Uncertainty analysis
1994-1995	Post-Doctoral Fellowship Analytical Methods and characterization of surfaces and films	Polytechnica University of Bucharest, Chemical Engineering Faculty	Chemistry (analytical, organic)
1988-1989:	Post-graduate Course on Physics	University of Bucharest, Physics Faculty	Physics (solid state)
1987-1988	Post-graduate Course on Photochemistry	Polytechnic Institute, Bucharest,	Chemistry (physical, organic)
2006	Visiting professor	Marie-Curie University, Paris, France	Chemistry (organic) Drug interactions Medicinal chemistry
1999	Invited Profesor	Universitatea Mustafa-Kemal, Antakya-Hatay, Turcia	Natural toxins Medicinal chemistry
2000	Invited Profesor	Lisbon University, Lisbon, Portugal	Inorganic chemistry
1998	Invited Profesor	Technical University Istanbul, Turcia.	Chemistry (inorganic, organic) Medicinal chemistry
1998	NATO Fellowship	Technical University Istanbul, Turkey;	Chemistry (inorganic, organic) Medicinal chemistry
1999	Visiting Professor	Mustafa Kemal University, Antakia-Hatay, Turkey	Chemistry (inorganic, organic); Medicinal chemistry
1996	Visiting Professor	Poznan Technical University, Poland	Biophysics Toxicology (Alternative methods (<i>in vitro</i>))
1997	Visiting Professor	Poznan Technical University, Poland	Biophysics Toxicology (Alternative methods (<i>in vitro</i>))

Memberships in Scientific Advisory Bodies/Committees/Panels (if any):

- Member of Romanian Commission of Research and Development in Nanomedicine (2015-)
- Member, National Scientific Council on Materials Engineering (nanotechnology and advanced materials) (2012 – present), Ministry of Education, Science and Innovation, Romania
- Scientific expertise activity as member of expert committee at the Ministry of Science and Education of Romania (IDEI, CAPACITIES, PNII) - 2000-2014

- Evaluation committee of FP7 HORIZON Marie-Curie Fellowship, Bruxelles, 2016- 2014
- National Projects competition Montenegro: 2014; Poland: 2014; Bulgaria: 2007
- Expert and lecturer in international project “IRRESISTIBLE” - (FP7-SCIENCE-IN-SOCIETY-2013-1): 2014 - present
- Romanian Representant of SUSChem Platform: 2009-present:
- Official representant of Romania in Management Committee of COST Actions: D8, D18, D20, D39, TD 1002; MC 1202: 1998-present
- Coordinator of Working Group WG0012-02, of COST D20: 2006-2010.

Memberships in Learned Societies (if any):

- Romanian Society of Chemistry
- Romanian Toxicology Society (Society of Pharmaceutical Sciences)
- EUCHEMs – member, Representant of the Romanian Society of Chemistry.

Memberships in Editorial Boards (if any):

- 1) International J.Photoenergy, 2011 “Photomedicine and Photo Nanosystems”, Guest Editors: Rodica-Mariana Ion, Tebello Nyokong, G. Gyulkhandanyan, Danuta Wrobel; <http://www.hindawi.com/journals/ijp/osi.html>
- 2) BRAIN. Broad Research in Artificial Intelligence and Neuroscience, ISSN 2067-3957, volume 1, October 2010, Special Issue on Advances in Applied Sciences, Eds Barna Iantovics, Marius Marusteri, Rodica-M. Ion, Roumen Kountchev;
- 3) Editorial Team of Journal of Biophysics and Structural Biology, <http://www.academicjournals.org/JBSB/Email.htm>
- 4) Editor at Journal of Cancer Research and Experimental Oncology; <http://www.academicjournals.org/jcreo/Editors.htm>

List of Publications:

Papers: 162 published papers in ISI journals; 200 non-ISI published papers

HIRSCH index: 19 (SCHOLAR GOOGLE); 16 (SCOPUS), 14 (ISI WEB OF KNOWLEDGE)

Books: 6 books and 14 book chapters

Patents: 15 national patents; 1 european patent

1. Efficiency of photodynamic therapy on WM35 melanoma with synthetic porphyrins: Role of chemical structure, intracellular targeting and antioxidant defense, *Journal of Photochemistry and Photobiology B Biology* (2015) 151, pp.142-152.
2. Behaviour of 316l Stainless Steel In Simulated Physiological Fluids, *Revista de Chimie (Bucharest)*, (2014) 65(11), pp.1351-1356.
3. Antioxidant silver nanoparticles green synthesized using ornamental plants, *Journal of Optoelectronics and Advanced Materials*, (2012) 14 (11-12), pp. 1016-1022.
4. Oxidative stress effects of fullerene-porphyrin derivatives in photodynamic therapy, *Journal of Porphyrins and Phthalocyanines*, (2012) 16 (7-8), pp. 870-877.
5. Designing medical devices based on silicon polymeric material with controlled release of local anesthetics, *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry* (2012) 49 (5), pp. 439-444.
6. The incorporation of various porphyrins into blood cells measured via flow cytometry, absorption and emission spectroscopy. *Acta Biochimica Polonica*, (1998) 45(3), 833-845. (300 citations).
7. Effects of hydrocarbons pollutants on aquatic organisms, *Petroleum - Gas University of Ploiesti Bulletin, Technical Series* (2010), 62 (3A), pp. 63-69.