



Curriculum Vitae

Full name: Mirela-Fernanda ZALTARIOV

Address: "Petru Poni" Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, 41A, 700487, Iasi, Romania

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Citizenship: Romanian

Gender/status: female/married, 1 child

Education and training:

2010-2014-PhD in Chemistry; PhD Thesis: "Metal complexes, coordination polymers and networks based on siloxane and silane ligands", Romanian Academy-"Petru Poni" Institute of Macromolecular Chemistry, Iasi.

2006-2007- Master's Degree- Specialization in Natural Products-"Gheorghe Asachi" Technical University, Iasi, Romania.

2000-2006-Bachelor's Degree, Faculty of Medical Bioengineering, Specialization in Biomaterials and Prosthetic Technology, "Grigore T. Popa" University of Medicine and Pharmacy, Iasi.

1996-2000 – High School Diploma, "Calistrat Hogaş" National College, Tecuci, Romania, Specialization in Chemistry-Biology

Profession:

2026 – Scientific Researcher II (Renowned Researcher **R3**) - Department of Inorganic Polymers – "Petru Poni" Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, no. 41A, 700487, Iaşi, Romania.

2021- 2025 – Scientific researcher III (Recognized Researcher **R2**) – Department of Inorganic Polymers – "Petru Poni" Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, no. 41A, 700487, Iaşi, Romania.

2017 – 2021 - Scientific researcher (Junior Researcher **R1**) – Department of Inorganic Polymers – "Petru Poni" Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, no. 41A, 700487, Iaşi, Romania.

2014 – 2017 – Scientific Research Assistant (ACS) – Department of Inorganic Polymers – "Petru Poni" Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, no. 41A, 700487, Iaşi, Romania.

2010-2014 – PhD student – School of Advanced Studies of the Romanian Academy (SCOSAAR) – Department of Inorganic Polymers – "Petru Poni" Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, no. 41A, 700487, Iaşi, Romania.

Expertise:

Obtaining, structural characterization, and applications of: metal-organic frameworks (MOFs), coordination polymers and supramolecular structures, functionalized silane/siloxane derivatives and their metal complexes; compounds with antitumor activity (thiosemicarbazones (ligands and metal complexes), studies on establishing the structure-activity relationship of compounds with antitumor activity; techniques for crystallizing ligands and metal complexes; Natural deep eutectic solvents (NaDES) in multicomponent matrices, obtaining pharmaceutical formulations based on NaDES, mucoadhesive polymers, biomaterials, and controlled drug delivery systems; catalysis (obtaining new catalysts and catalytic precursors for hydrosilylation, reduction, alcohol oxidation, hydrocarboxylation, photodecomposition of dyes and drugs, etc.); IR, UV-vis and fluorescence spectroscopy (characterization of materials, study of hydrogen bonding dynamics, crystallinity, hydrolytic and enzymatic stability, degree of aging of polymers/polymer blends, protein binding capacity, etc.)

Internships/postgraduate courses:

May-June 2019 – Postgraduate courses “In vivo/in vitro evaluation for regenerative medicine” Gr. T. Popa University of Medicine and Pharmacy, Faculty of Medical Bioengineering, Iași, Romania.

July–October, 2017 – Research internship at SRL POLIVALENT-95 Chișinău, funded by the H2020-MSCA-RISE-2016 project, SPINSWITCH No. 734322.

July - August, 2015 and June, 2014 - Research internships at the Institute of Inorganic Chemistry, University of Vienna, funded by the Bilateral Romania-Austria Project No./contract: 749/01.01.2014

October 29 - November 5, 2014, and June, 2013 - Research internships at the Institute of Chemistry of the Academy of Sciences of Moldova within the bilateral project Romania-Republic of Moldova PN-II-CT-RO-MD-2012-1, Contract No.: 690/16.04.2013

Scientific activity:

106 scientific articles published in ISI-recognized journals (75 in Q1/Q2), 1 patent, 5 book chapters, 7 invited conferences, 68 oral presentations at national and international scientific events.

Research projects:

Project director: PN-III-P1-1.1-PD-2016-1027 - "New building blocks for expanding studies on the structure-activity relationship of metal-based anticancer drugs" (2018-2020)

Project director: PN-IV-PCB-RO-MD-2024-0372 - "Bionanocomposite formulations based on kaempferol encapsulated in eutectic solvents for corneal regeneration" (2025-2027)

Team member in 13 research projects (2010-2025).

Scientific visibility:

Hirsch Index: 22; Citations: 1646

<https://www.brainmap.ro/public-profile-82821159>

<https://orcid.org/0000-0001-6692-0481>

<https://www.scopus.com/authid/detail.uri?authorId=5533263720>

<https://scholar.google.com/citations?hl=en&user=mIfh6zEAAAAJ>

Awards/distinctions:

2026 - Diploma and Gold Medal at the EUROINVENT European Exhibition of Creativity and Innovation, 18th edition, May 28–30, 2026, Iași, Romania, for the research project "Bionanocomposites-encapsulating Natural Deep Eutectic Solvents-kaempferol formulations for corneal regeneration", authors: M. Zaltariov, I. Corețchi, N. Vornicu, D. Peptanariu, M. Balan-Porcarășu, S. L. Nica, I. Grecu, E. Pavlovschi, A. Beșliu, C. Ceban, I. Casian, A. Casian, A. Sulaiman, A. Chiaburu, B.-I. Ciubotaru

2025 - Certificate of Excellence with Special Award and Gold Medal at the EUROINVENT European Salon of Creativity and Innovation, 17th edition, May 8–10, 2025, Iași, Romania, for the research project "Silsesquioxanes based materials obtained by photo-induced thiol-ene reaction, for environmental applications (CO2 capture)", authors: A. Bargan, M. Dascalu, B.I. Ciubotaru, M. Zaltariov, G. Stiubianu, A. Bele, M. Demir, A. Stoica, M. Cazacu, C. Cojocar, R. Solomon

2024 – Certificate of Excellence at “Cultural Heritage of the Past – Implications for the Development of a Sustainable Society” Conference over ten editions (2019 - 2024).

2018 – Romanian Academy “Gheorghe Spacu” Award – Group of works: “Ligands and coordination polymers with siloxane units”

2016 – Conference Award for Oral Presentation – SCTE 2016 – 20th International Conference on Solid Compounds of Transition Elements, Zaragoza, Spain, April 11–15 (2016)

2013 – Excellence Award – “Iasi Academic Days”, 24th Session of Scientific Communications of the “Petrut Poni” Institute of Macromolecular Chemistry, MACRO IASI 2013, October 3-5 (2013)