

Curriculum Vitae

Personal information

Name:	Razvan Ghiarasim
Date and place of birth	March 2, 1996, Constanta, Romania
Adress:	Gr. Ghica Voda Alley, no. 41A, Iasi, 700487, ROMANIA
Gender:	Male
Nationality:	Romanian
Phone number:	+40 743 31 87 73
E-mail:	ghiarasim.razvan@icmpp.ro
Maternal Language:	Romanian
Foreign language:	English (B2)

Studies

November 2020 - present	<ul style="list-style-type: none">• PhD studies of the Romanian Academy at the "Petru Poni" Institute of Macromolecular Chemistry in Iași.• Title of the PhD thesis: "Synthesis of advanced (macro)molecular systems, which produce well-defined supramolecular aggregates, functional (macro)molecular structures and systems for biomedical applications", (in progress), PhD supervisor Dr. Mariana Pinteală.
September 2021 – October 2021	<ul style="list-style-type: none">• Performed a Secondment for 1 (one) month from 19th September to 18th October 2021 in the framework of project H2020-MSCA-RISE-2019 Project, NoBiasFluors No 872331 at Scientific Services Company Otava Ltd, Kyiv, Ukraine.
September 2018 – July 2020	<ul style="list-style-type: none">• Master's degree studies at the Faculty of Chemistry of the „Alexandru Ioan Cuza,, University in Iași.• Master's thesis title: "Functionalization of folic acid with polyethylene glycol and the interaction with the alpha folate receptor".
February 2019 – August 2020	<ul style="list-style-type: none">• Analytical chemist in the Quality Control department at the Fiterman Pharma company in Iași.
September 2018 – December 2018	<ul style="list-style-type: none">• Performed a Secondment for 3 (three) months from 15th September to 14th December 2018 in the framework of project “TROPSENSE” MSCA-RISE-2014- Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE), H2020 Program of European Commission R&D under contract No.645758/ 2014 with European Commission for the project partner IMNR at the Sensor Electronic and Instrumentation Group, Faculty of Sciences, Department of Physics, B.P. 11201, Zitoune, Meknes, Morocco.

December 2018 – October 2020	<ul style="list-style-type: none"> • Volunteering at the "Petru Poni" Institute of Macromolecular Chemistry in Iași in the Centre of Advanced Research in Bionanoconjugates and Biopolymers (IntelCentru).
October 2015 – July 2018	<ul style="list-style-type: none"> • Bachelor studies at the Faculty of Chemistry of the Alexandru Ioan Cuza University in Iași. • Title of the bachelor's thesis: "Theoretical study of the interactions of vitamin C".

Involvement in projects (director or member)

January 2021 - present	<ul style="list-style-type: none"> • Key expert in the project <i>Restore Her2 dependent sensibility using AXL inhibitors packed in pH dependent nanostructures (NanoHer2Restore)</i> (EEA-RO-NO-2018-0246) 2020 – 2023 at the "Petru Poni" Institute of Macromolecular Chemistry in Iași within the Centre of Advanced Research in Bionanoconjugates and Biopolymers (IntelCentru).
September 2020 – September 2022	<ul style="list-style-type: none"> • Key expert in the project <i>Modular approach to the synthesis of multifunctional polymer coated nanoparticles for applications in nanomedicine (ModNanoMPol)</i> (PN-III-P1-1.1-TE-2019-0922) 2020 – 2022 at the "Petru Poni" Institute of Macromolecular Chemistry in Iași within the Centre of Advanced Research in Bionanoconjugates and Biopolymers (IntelCentru).

Scientific Domains

- Synthesis, purification and physico-chemical analysis of small molecular compounds.
- Synthesis, purification and physico-chemical analysis of magnetic nanoparticles based on iron oxides obtained by the coprecipitation method.
- Synthesis, purification and physico-chemical analysis of methacrylate-type polymers obtained by surface-initiated atom transfer radical polymerization (SI-ATRP).
- Post-polymerization modification with biologically active molecules;
- Studies on the assembly of copolymers in micelles sensitive to pH variations based on polyhistidine and polyethylene glycol, the physical loading of these micelles with biologically active molecules or dyes, the functionalization of the surfaces of these micelles with proteins.
- *In vitro* cytotoxic activity studies of magnetic nanoparticle systems decorated with polymers functionalized with biologically active molecules on healthy cell lines and tumor cell lines.
- Cytotoxic activity studies *in vitro* on 2D and 3D breast cancer cell lines of micelles loaded with different inhibitors, drugs or dyes, and the surface functionalized with trastuzumab (drug that specifically binds to human epidermal growth factor receptor 2 (HER2)).
- Obtaining and characterizing hydrogels based on guanosine quartets;
- Molecular docking studies of cyclodextrin inclusion complexes with different ligands;

Personal Skills

- Attention, cooperation, creativity, discipline, achieving goals, positive attitude, critical thinking, optimism, order, prudence at work, sociability, stability.

Skills related to the research activity

- Advanced knowledge in the use of techniques and interpretation of data obtained by Fourier transform infrared spectroscopy (FTIR), ultraviolet-visible spectroscopy (UV-Vis), fluorescence spectroscopy, dynamic light scattering (DLS), zeta potential, circular dichroism (CD), technique for tracking the trajectory of nanoparticles in solution (NTA);
- Good knowledge in the interpretation of data obtained from physicochemical analyzes of small molecular or macromolecular compounds by scanning electron microscopy (SEM), transmission electron microscopy (TEM), scanning transmission electron microscopy (STEM), atomic force microscopy (AFM), thermogravimetric analysis (TGA), differential scanning calorimetry (DSC), mass spectrometry (MS), high performance liquid chromatography (HPLC), gas chromatography (GS).

Digital skills

- Good knowledge of the Microsoft Office package (Word, Excel, PowerPoint).
- Scientific programs (Origin, ImageJ, Specman, Mendeley).
- Scientific illustration tools (ChemDraw, BioRender).
- Statistical software (SPSS).
- Basic knowledge of the Python programming language, especially the Matplotlib package.
- Computational chemistry programs (Visual Molecular Dynamics, Avogadro, Gaussian).
- Artificial Intelligence Platform (OpenAI).

Scientific Contribution

- 4 ISI rated scientific articles;
- 3 oral presentations at national and international conferences;
- 4 posters presented at national and international conferences;

Scientific Visibility (Hirsh, Citations, etc.)

- H-Index: 1 (according to ISI Web of Science, February 2022).
- Total citations: 4 (according to ISI Web of Science, February 2022).