

## PERSONAL INFORMATION

### Lavinia Liliana Ruță



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<http://www.researcherid.com/rid/P-2102-2014>

Sex F | Date of birth 006/08/1978 | Nationality Romanian

## WORK EXPERIENCE

**2019-ongoing**

### Lecturer

University of Bucharest, Panduri Street, No. 90-92, Bucharest, [www.unibuc.ro](http://www.unibuc.ro)  
Faculty of Chemistry, Department of Inorganic, Organic, Biochemistry and Catalysis  
Teaching and research

**2021-2023**

### Expert chemist

DDS Diagnostic SRL, Vulcan Judetu 7, Bucharest  
Research in molecular biology

**2004-2019**

### Professor assistant

University of Bucharest, Panduri Street, No. 90-92, Bucharest, [www.unibuc.ro](http://www.unibuc.ro)  
Faculty of Chemistry, Department of Organic, Biochemistry and Catalysis  
Teaching and research

**2011-2013**

### Pharmacist

SC Eliflor SERV SRL, Tudor Vladimirescu Street, no. 1, Domnesti

**2001-2009**

AD DamiMar SRL, 1 Colentina Street, Bucharest, Romania  
People's health care and aid

## EDUCATION AND TRAINING

**2005-2014**

### Doctor of Chemistry

EQF  
Level  
8

Name and type of organisation

University of Bucharest, Faculty of Chemistry, Dept. of Organic Chemistry, Biochemistry and Catalysis

Principal subjects skills covered

Thesis Title: Molecular mechanism involved in metallic ions bioaccumulation

**2002-2004**

### Master of Science in Physical Chemistry and Applied Radiochemistry

EQF  
Level  
8

Name and type of organisation

University of Bucharest, Faculty of Chemistry, Dept. of Physical Chemistry

Principal subjects skills covered

Thesis Title: Stabilization of low-density polyethylene using amine antioxidants by gamma radiation exposure. Practical research that contributes directly to the analysis of an amine antioxidant (Tinuvin 123)

## 1998-2002 Bachelor of Science

EQF  
Level  
7

Name and type of organisation University of Bucharest, Faculty of Chemistry  
Principal subjects skills covered Radiochemistry, Ionization Radiations, Environmental Radioactivity, Radiochemical techniques

## 1996-2001 Bachelor of Science

EQF  
Level  
6

Name and type of organisation *Carol Davila* University of Medicine and Pharmacy, Bucharest, Faculty of Pharmacy  
Principal subjects skills covered Pharmacology, Pharmacognosy, Botanic, Pharmaceutical Physic, Cellular and Molecular Biology, Biochemistry, Pathology, Pharmaceutical Techniques, Toxicology, Immunology, Clinic Biochemistry

### PERSONAL SKILLS

Mother tongue(s) Romanian

#### Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C2	C2	C1
French	A1/A2	A1/A2	A1/A2	A1/A2	A1/A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

#### EXPERTISE FIELD

- Biochemistry
- Organic Chemistry
- Biotechnologies
- Pharmaceuticals

#### EXTRACURRICULAR ACTIVITIES

Activities for improving the faculty visibility (Chimia prieten sau dușman, Noaptea cercetătorilor, Student pentru o zi, Zilele Porților Deschise).

#### MENTOR OF STUDENTS

- Bachelor- 16 students (last 5 years)
- Master of Science-2 students (last 5 years)
- Lectures: Pharmacology and toxicology, Metabolism and metabolites, Clinic Biochemistry, Special chapters of medical biochemistry, labs: Molecular Biology, DNA recombinant technology, Cellular and molecular biochemistry.
- Coordinator of Master's program (Biomolecule), member of PhD committees. Coordinator, on behalf of UB, of the EUROPEAN MASTER CIVIS program ***Drug development: from natural products to formulations and applications.***

#### ISI PUBLICATIONS

1. Gogianu, L. I., Ruta, L. L., Popa, C. V., Ghenea, S., & Farcasanu, I. C. (2025, April 11). KCS1 and VIP1, the genes encoding yeast phosphoinositol pyrophosphate synthases, are required for Ca<sup>2+</sup>-mediated response to dimethylsulfoxide (DMSO). FEBS Open Bio. Advance online publication. <https://doi.org/10.1002/2211-5463.70039>
2. Gogianu, L. I., Ruta, L. L., & Farcasanu, I. C. (2024). Shedding light on calcium dynamics in the budding yeast: A review on calcium monitoring with recombinant aequorin. Molecules, 29(23), Article 5627. <https://doi.org/10.3390/molecules29235627>
3. Gogianu, L. I., Ruta, L. L., & Farcasanu, I. C. (2024). Kcs1 and Vip1: The key enzymes behind inositol pyrophosphate signaling in *Saccharomyces cerevisiae*. Biomolecules, 14(2), 152. <https://doi.org/10.3390/biom14020152>
4. Bocancia-Mateescu, L.-A., Stan, D., Mirica, A.-C., Ghita, M. G., Stan, D., & Ruta, L. L. (2023). Nanobodies as diagnostic and therapeutic tools for cardiovascular diseases (CVDs). Pharmaceuticals, 16(6), 863. <https://doi.org/10.3390/ph16060863>

5. Maxim, C., Ene, C. D., Nicolau, I., Ruta, L. L., & Farcasanu, I. C. (2022). Enantiomeric pairs of copper(II) complexes with tridentate Schiff bases derived from R- and S-methionine: The role of decorating organic groups of the ligand in crystal packing and biological activity. *Dalton Transactions*, 51, 18383–18399. <https://doi.org/10.1039/D2DT02620A>
6. Argăseală, A., Maxim, C., Badea, M., Ioniță, L., Chifiriuc, M. C., Rostas, A. M., Bacalum, M., Răileanu, M., Ruță, L. L., Farcașanu, I. C., Iorgulescu, E. E., & Olar, R. (2022). *Insights into structure and biological activity of Copper(II) and Zinc(II) complexes with triazolopyrimidine ligands*. *Molecules*, 27(3), 765. <https://doi.org/10.3390/molecules27030765>
7. Olar, R., Badea, M., Bacalum, M., Răileanu, M., Ruta, L. L., Farcasanu, I. C., Rostas, A. M., Vlaicu, I. D., Popa, M., Chifiriuc, M. C. (2021). Antiproliferative and antibacterial properties of biocompatible Copper(II) complexes bearing chelating N,N-heterocycle ligands and potential mechanisms of action. *Biometals*, 34(5), 1155–1172. <https://doi.org/10.1007/s10534-021-00334-9>
8. Ruta, L. L., Farcasanu, I. C., Bacalum, M., Răileanu, M., Rostas, A. M., Daniliuc, C., Chifiriuc, M. C., Măruțescu, L., Popa, M., Badea, M., Iorgulescu, E. E., & Olar, R. (2021). Biological activity of triazolopyrimidine Copper(II) complexes modulated by an auxiliary N-N-chelating heterocycle ligands. *Molecules*, 26(22), 6772. <https://doi.org/10.3390/molecules26226772>
9. Ruta, L. L., & Farcasanu, I. C. (2021). *Saccharomyces cerevisiae concentrates subtoxic copper onto cell wall from solid media containing reducing sugars as carbon source*. *Bioengineering*, 8(3), 36. <https://doi.org/10.3390/bioengineering8030036>
10. Ruta, L. L., & Farcasanu, I. C. (2021). *Coffee and yeasts: From flavor to biotechnology*. *Fermentation*, 7(1), 9. <https://doi.org/10.3390/fermentation7010009>
11. Ruta, L. L., & Farcasanu, I. C. (2020). *Interaction between polyphenolic antioxidants and Saccharomyces cerevisiae cells defective in heavy metal transport across the plasma membrane*. *Biomolecules*, 10(11), 1512. <https://doi.org/10.3390/biom10111512>
12. Ruta, L. L., Oprea, E., Popa, C. V., & Farcasanu, I. C. (2020). *Saccharomyces cerevisiae cells lacking transcription factors Skn7 or Yap1 exhibit different susceptibility to cyanidin*. *Heliyon*, 6(10), e05352. <https://doi.org/10.1016/j.heliyon.2020.e05352>
13. Ruta, L. L., & Farcasanu, I. C. (2020). *Saccharomyces cerevisiae and caffeine implications on the eukaryotic cell*. *Nutrients*, 12(8), 2440. <https://doi.org/10.3390/nu12082440>
14. Ruta, L. L., Popa, C. V., & Farcasanu, I. C. (2020). *Cytotoxicity of oleandrin is mediated by calcium influx and by increased manganese uptake in Saccharomyces cerevisiae cells*. *Molecules*, 25(18), 4259. <https://doi.org/10.3390/molecules25184259>

### NON- ISI PUBLICATIONS BREVETS

-  
Roșca EV., Barbuceanu SF, Apostol TV, Manda G, Draghici C, Farcasanu IC, Neagoe IV, Surcel M, Ruta LL, Nitulescu GM, Barbuceanu F, Iscrulescu L, Dinu Parvu CE, Fluorescent, non-cytotoxic 4-(4-(dialkylamino)benzylidene)oxazol-5(4H)-one derivatives with biomedical applications containing an arylsulfonylphenyl radical in the 2-position, Invention patent, RO 134761/30.12.2020.

### CHAPTER OF BOOKS

- Oprea, E., Ruta, L. L., & Farcasanu, I. C. (2019). Pharmacological aspects and health impact of sports and energy drinks. In *Sports and Energy Drinks*. <https://doi.org/10.1016/B978-0-12-815851-7.00003-6>
- Farcasanu, I. C., Popa, C. V., & Ruta, L. L. (2018). Calcium and cell response to heavy metals: Can yeast provide an answer? In *Calcium and Signal Transduction*. <https://doi.org/10.5772/intechopen.78941>
- Farcasanu, I. C., & Ruta, L. L. (2017). Metallothioneins, *Saccharomyces cerevisiae*, and heavy metals: A biotechnology triad? In *Old Yeasts - New Questions*. <https://doi.org/10.5772/intechopen.70340>

### BOOKS

- Organic chemistry – Active biological compounds, Zalaru CM, Ionita P, Zarafu I, Marinescu M, Nicolau I, Ruta LL, Ed. Univ. din Bucuresti, ISBN 978-606-16-0742-6, 229 pages, 2016
- Separation and purification of organic compounds, Baciou I, Dobrota C, Dumitru I, Matache M, Paraschivescu CC, Ruta LL, ISBN 978-973-737-656-5, Ed. Univ. din Bucuresti, 124 pages, 2009
- Dictionary of specific terms from areas related to chemistry, Cercasov C, Lazar V, Oprea E, Popa CV, Farcasanu IC, Balotescu MC, Paraschivescu CC, Ruta LL, Ed. Univ. din Bucuresti, ISBN 978-973-737-214-7, 200 pages, 2006

**PROJECTS (last 10  
years)**

Institutional projects - 1 project

National Projects – 1 project as team leader, 1 project as team member

International projects- 2 projects as team member