PERSONAL INFORMATION

Lavinia Liliana Ruta

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

Sex F | Date of birth 08/06/1978 | Nationality Romanian

WORK EXPERIENCE

2019-onwards

Lecturer

University of Bucharest, Panduri Street, No. 90-92, Bucharest, www.unibuc.ro

Teaching and research in national and international projects

Education, Academic

2021-2023

Expert chemist

DDS Diagnostic SRL, Vulcan Judetu 7, Bucharest

Research in molecular biology

Academic

2004-2019:

Junior assistant, Professor assistant

University of Bucharest, Panduri Street, No. 90-92, Bucharest, www.unibuc.ro

Teaching and research in national and international projects

Education, Academic

Pharmacist

2011-2013
SC Eliflor SERV SRL, Tudor Vladimirescu Street, no. 1, Domnesti

2001-2009
AD DamiMar SRL, 1 Colentina Street, Bucharest, Romania

People health care and aid

Medical, commercial

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 7

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 exposure of gamma radiation. Practical research that contributes directly to the analysis of an amine antioxidant (Tinuvin 123)

1998-2002

Bachelor of Science

EQF Level 6

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	C1	B2	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

Communication skills

Highly adaptable professional with strong technical knowledge and consistent record of more than 10 years' experience in pharma markets, understanding business goals and bringing charisma and personal skills to meet those needs efficiently and effectively.

Organisational / managerial skills

Coordinating Bachelor and Master Thesis since 2005 (>25), organizing seminars, laboratory works, and courses for students, secretary of the master program Biomolecules in the Faculty of Chemistry, University of Bucharest.

Technical skills and competences

Techniques of cellular biology, recombinant DNA technology, PCR analysis, techniques of immobilization of biomolecules on the solid supports and physical characterization of this supports, standard techniques of yeast genetics, synthesis and purification of organic compounds, synthesis and purification of organic compounds, pharmaceutical manufacturing and technology, experimental protocols for developing microarray technology with clinical application in allergy disease, molecular and bioinformatics approaches to engineer yeast designed to hyperaccumulate heavy metals without interfering with the normal metabolism, maintaining the biologic resources (cell lines, plasmids, reagents, etc.), obtaining and characterisation of hydrogels membranes.

Professional competences

Primarily responsible for all drug distribution and control activities from the assigned pharmacy area. Evaluates, processes, and monitors physician orders for patient medications and other pharmaceutical supplies, serves as a reliable source of drug information, maintains computer records and patient profiles, and interacts with patients/families to provide medication counselling. Responsible for the safe, accurate dispensing of pharmaceuticals, in accordance with applicable laws which promote pharmaceutical care in the interest of positive patient outcomes. Monitoring drug therapy for contraindications, incompatibilities, allergies, and dosing errors. This includes monitoring dosing for patients based on age and renal function. Providing current drug information which includes a thorough understanding of new medications, dosage requirements, indications, contraindications, pharmacology, pharmacokinetics, side effects and adverse reactions and precautions. Assisting in drug inventory maintenance, assisting in quality improvement activities and directs pharmacy technicians in their daily activities. Supervising pharmacy technician functions and checking the accuracy of technician distribution functions in order to assist and/or fill-in when workload dictates. Participates in the training of new employees.

Teaching experience

Maintaining subject matter currency; Developing and revising curriculum, including curriculum delivered via different modalities; Using multimedia technologies and dedicate programs; Assessing student learning and program level outcomes; Collegial participation in departmental and discipline-specific professional activities in an environment that promotes innovation, teaching; Working with college committees and other organizations and involving in co-curricular and extra-curricular activities; Assessing student learning outcomes and active participation in training and mentoring of graduate students. Active involved in CIVIS and ERASMUS programs.

Digital competence

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
PROFICIENT USER	PROFICIENT USER	PROFICIENT USER	INDEPENDENT USER	INDEPENDENT USER

Computer literate, with high level of competence in the use of Microsoft Office suite of tools, including Microsoft Excel/Power Point/Visio/Project. Also good knowledge of professional programs like Origin, ChemDraw and IsisDraw.

Driving licence B licence driving

ADDITIONAL INFORMATION

Publications

1. Stan D, **Ruta LL**, Bocancia-Mateescu L-A, Mirica A-C, Stan D, Micutz M, Brincoveanu O, Enciu A-M, Codrici E, Popescu ID, et al. Formulation and Comprehensive Evaluation of Biohybrid Hydrogel Membranes Containing Doxycycline or Silver Nanoparticles. *Pharmaceutics*. 2023; 15(12):2696.
2. New Heterocyclic Compounds from Oxazol-5(4*H*)-one and 1,2,4-Triazin-6(5*H*)-one Classes: Synthesis, Characterization and Toxicity Evaluation. SF Barbuceanu, EV Rosca, TV Apostol, LI Socea, C Draghici, IC Farcasanu IC , **LL Ruta**, GM Nitulescu, L Iscrulescu, EM Pahontu, et al. *Molecules*.; 28(12):4834, 2023
3. Exploring the Impact of Alginate—PVA Ratio and the Addition of Bioactive Substances on the Performance of Hybrid Hydrogel Membranes as Potential Wound Dressings, D Stan, E Codrici, AM Enciu, E Olewnik-Kruszkowska, G Gavril, **LL Ruta**, C Moldovan, O Brincoveanu, LA Bocancia-Mateescu, AC Mirica, et al., *Gels*. 9(6):476, 2023
4. Nanobodies as Diagnostic and Therapeutic Tools for Cardiovascular Diseases (CVDs). LA Bocancia-Mateescu, D Stan, AC Mirica, MG Ghita, D Stan, **LL Ruta**. *Pharmaceuticals*.; 16(6):863, 2023
5. 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, C Maxim, CD Ene, I Nicolau, **LL Ruta**, IC Farcasanu - *Dalton Transactions*, 51, 18383-18399, 2022
6. Insights into Structure and Biological Activity of Copper(II) and Zinc(II) Complexes with Triazolopyrimidine Ligands, A Argaseala, C Maxim, M Badea L Ioniță, MC Chifiriuc, AM Rostas, M Bacalum, M Răileanu, **LL Ruta**, IC Farcaşanu et al. *Molecules.;* 27(3):765, 2022
7. Antiproliferative and antibacterial properties of biocompatible copper (II) complexes bearing chelating N,N-heterocycle ligands and potential mechanisms of action, R Olar, M Badea, M Bacalum, M Răileanu, **LL Ruta**, IC Farcaşanu, AM Rostas, ID Vlaicu, M Popa, MC Chifiriuc, *Biometals* 34, 1155–1172, 2021.
8. Biological Activity of Triazolopyrimidine Copper(II) Complexes Modulated by an Auxiliary N-N-Chelating Heterocycle Ligands, **LL Ruta**, IC Farcasanu, M Bacalum, M Răileanu, A M Rostas, C Daniliuc, MC Chifiriuc, L Măruțescu, M Popa, M Badea, EE Iorgulescu, R Olar, *Molecules* 26 (22) 6772, 2021
9. *Saccharomyces cerevisiae* Concentrates Subtoxic Copper onto Cell Wall from Solid Media Containing Reducing Sugars as Carbon Source, **LL Ruta**, IC Farcasanu, *Bioengineering* 8 (3), 36, 2021
10. Coffee and Yeasts: From Flavor to Biotechnology, LL Ruta, IC Farcasanu, Fermentation 7 (1), 9, 2021
11. Interaction between Polyphenolic Antioxidants and *Saccharomyces cerevisiae* Cells Defective in Heavy Metal Transport across the Plasma Membrane, **LL Ruta**, IC Farcasanu, Biomolecules 10 (11), 1512, 2020
12. *Saccharomyces cerevisiae* cells lacking transcription factors Skn7 or Yap1 exhibit different susceptibility to cyanidin, **LL Ruta**, E Oprea, CV Popa, IC Farcasanu, *Heliyon* 6 (10), e05352, 2020
13. *Saccharomyces cerevisiae* and caffeine implications on the eukaryotic cell, **LL Ruta,** IC Farcasanu, Nutrients 12 (8), 2440, 2020
14. Insight on spectral, thermal and biological behaviour of some Cu (II) complexes with saturated pentaazamacrocyclic ligands bearing amino acid residues, R Olar, E Pătraşcu, M Badea, N Čelan Korošin, R Cerc Korošec, **LL Ruta**, IC Farcaşanu, MN Grecu, G Guillaumet, *Journal of Thermal Analysis and Calorimetry*, 1-12, 2020
15. Cytotoxicity of Oleandrin Is Mediated by Calcium Influx and by Increased Manganese Uptake in *Saccharomyces cerevisiae* Cells, **LL Ruta**, CV Popa, IC Farcasanu, *Molecules*, 25 (18), 4259
16. Copper (II) complexes with mixed heterocycle ligands as promising antibacterial and antitumor species, A M Rostas, M Badea, **LL Ruta**, IC Farcasanu, C Maxim, MC Chifiriuc, M Popa, M Luca, N Celan Korosin, R Cerc Korosec, M Bacalum, M Raileanu, R Olar, *Molecules* 25 (17), 3777
17. Cobalt removal by *Saccharomyces cerevisiae* cells expressing *Arabidopsis thaliana* metallothioneins AtMT4a and AtMT4b, **Ruta LL**, Martin EC, Petrescu AJ, Farcasanu IF, *IJASEAT*, 7 (4), 45-50, 2019
18. Heavy metal accumulation by *Saccharomyces cerevisiae* cells expressing Cup1 cystein rich oligopeptides targeted to the inner face of plasma membrane, Farcasanu IF, Neagoe AD, **Ruta LL**, *IJASEAT*, 7 (4), 39-44, 2019
19. Anthocyanins and Anthocyanin - Derived Products in Yeast-Fermented Beverages. **Ruta LL**, Farcasanu IC, *Antioxidants*, *8*, 182, 2019
20. Dietary Anthocyanins and Stroke: A Review of Pharmacokinetic and Pharmacodynamic Studies, Manolescu BN, Oprea E, Mititelu M, **Ruta LL**, Farcasanu, IC, *Nutrients*, *11*, 1479, 2019

21. Manganese suppresses the haploinsufficiency of heterozygous trpy1Δ/TRPY1 *Saccharomyces cerevisiae* Cells and stimulates the TRPY1-dependent release of vacuolar Ca^{2+} under H_2O_2 stress, **Ruta LL**, Nicolau I, Popa CV, Farcasanu IC*, Cells, 8*(2),79, 2019
22. Accumulation of Ag(I) by *Saccharomyces cerevisiae* Cells Expressing Plant Metallothioneins, **Ruta LL**, Banu M, Neagoe AD, Kissen R, Bones AM, Farcasanu IF, *Cells*, 7 (266): 1-14, 2018
23. Epigallocatechin-3-O-gallate, the main green tea component, is toxic to *Saccharomyces cerevisiae* cells lacking the Fet3/Ftr1, **Ruta LL**, Popa CV, Nicolau I, Farcasanu IC, *Food Chemistry*, 266: 292-298, 2018
24. Anchoring plant metallothioneins to the inner face of the plasma membrane of *Saccharomyces cerevisiae* cells leads to heavy metal accumulation, **Ruta LL**, Lin YF; Kissen R, Nicolau I, Neagoe AD, Ghenea S, Bones AM, Farcasanu IC, *Plos One*, 12,5: 1-19, 2017
25. Heavy metal accumulation by *Saccharomyces cerevisiae* cells armed with metal binding hexapeptides targeted to the inner face of the plasma membrane, **Ruta LL**, Kissen R, Nicolau I, Neagoe AD, Petrescu AJ, Bones AM, Farcasanu IC, *Applied Microbiology and Biotechnology*, 101, 14: 5749-5763, 2017
26. Calcium signaling and copper toxicity in Saccharomyces cerevisiae cells, **Ruta LL**, Popa CV, Nicolau I, Farcasanu IC, Environmental Science and Pollution Research, 23(24):24514-24526, 2016
27. Calcium signaling mediates the response to copper toxicity in *Saccharomyces cerevisiae* cells, **Ruta LL**, Nicolau I, Farcasanu IC, *Yeast*, 32: S225-S226, 2015
28. Interaction between lanthanide ions and *Saccharomyces cerevisiae* cells, Ene, CD; **Ruta LL**, Nicolau I, et al., Journal of Biological Inorganic Chemistry, 20,7: 1097-1107, 2015
29. *KCS1* and *VIP1*, two genes encoding the yeast inositol hexakisphosphate kinases, are required for the Ca^{2+}-mediated response to dimethylsulfoxide (DMSO), Farcasanu IC, Popa CV, **Ruta LL**, *Yeast*, 32, S8, 2015
30. Calcium signaling mediates the response to cadmium toxicity in *Saccharomyces cerevisiae* cells, **Ruta LL**, Popa V.C., Nicolau I., Danet A.F., Iordache V., Neagoe ADD., Farcasanu IC, *FEBS Letters*, 588, 3202–3212, 2014
31. *Vaccinium corymbosum* L. (blueberry) extracts exhibit protective action against cadmium toxicity in *Saccharomyces cerevisiae* cells, Oprea E, **Ruta LL**, Nicolau I, Popa CV, Neagoe AD, Farcasanu IC*, Food Chemistry*,152:516-21, 2014
32. Optical manipulation of *Saccharomyces cerevisiae* cells reveals that green light protection against UV irradiation is favoured by low Ca^{2+} and requires intact UPR pathway, Farcasanu IC, Mitrica R, Cristache L, Nicolau I, **Ruta LL**, Pîslaru L, Comorosan S, *FEBS Letters*, 587 (21): 3514-3521, 2013
33. The dual action of epigallocatechin gallate (EGCG), the main constituent of green tea, against the deleterious effects of visible light and singlet oxygen-generating conditions as seen in yeast cells, Mitrica R, Dumitru I, **Ruta LL**, Ofiteru AM, Farcasanu IC*, Molecules*, 17(9):10355-10369, 2012
34. Overexpression of the *PHO84* gene causes heavy metal accumulation and induces Ire1p-dependent unfolded protein response in *Saccharomyces cerevisiae* cells, Ofiteru A.M. & **Ruta LL**, Rotaru C, Dumitru I, Ene C, Neagoe AD, Farcasanu IC, *Applied microbiology and biotechnology*, 94(2):425-435, 2012
35. Exogenous oxidative stress induces Ca^{2+} release in the yeast *Saccharomyces cerevisiae*, Popa C, Dumitru I, **Ruta LL**, Danet AF, Farcasanu IC, *FEBS Journal*, 277 (19):4027–4038, 2010
36. Study of CRP immobilization on nanostructured silicon, Simion M, **Ruta LL,** Matache M, Kleps I, Miu M, Paraschivescu CC, Brăgaru A, Ignat T, *Material Science and Engineering,* 169 (1,3): 67–72, 2010
37. Removing heavy metals from synthetic effluents using "kamikaze" *Saccharomyces cerevisiae* cells, **Ruta L**, Paraschivescu C, Matache M, Avramescu S, Farcasanu IC, *Applied microbiology and biotechnology*, 85 (3): 763-771, 2010
38. Characterization of self-assembled monolayers (SAMs) on silicon substrate comparative with polymer substrate for *Escherichia coli O157:H7* detection, Moldovan C; Mihăilescu C; Stan D; **Ruta L**, Iosub R, Gavrilă R, Munizer P, Schiopu V, *Applied Surface Science,* 255 (22): 8953-8959, 2009
39. Porous Silicon Used As Support for Protein Microarray**,** Simion M, **Ruta L**, Mihailescu C, Kleps I, Bragaru A, Miu M, Ignat T, Baciu I, *Superlattices and Microstructures*, 46 (1-2):69-76, 2009
40. Porous/Gold surface Preparation for Protein Microarray Applications*,* Simion M, **Ruta L,** Kleps I, Stan D, Bragaru A, Miu, Ignat T, Dinescu A, Matache M*, Romjist, 12 (2), 385–393, 2009*
41. Convenient preparation of unsymmetrical 2,5-disubstituted 1,3,4-oxadiazoles promoted by Dess-Martin reagent, Dobrota C, Paraschivescu CC, Dumitru I, Matache M, Baciu I, **Ruta LL**, *Tetrahedron Letters*, 50 (17): 1886-188, 2009
42. Determination of diosmin in pharmaceutical formulations using Fourier transform infrared spectrophotometry. Bunaciu AA, Udristioiu GE, **Ruta L** et al., *Saudi Pharmaceutical Journal*, 17(4): 303-6, 2009
43. Synthesis of fused dihydro-pyrimido[4,3-d]coumarins using Biginelli multicomponent reaction as key step, Matache M, Dobrota C, Bogdan ND, Dumitru I, **Ruta L** et al., Tetrahedron, 65(31): 5949-5957, 2009
44. Synthesis of new substituted indan-1,3-diones, Stan D, Matache M, **Ruta L** et al*., Revista De Chimie*, 60 (9): 876-879, 2009
45. Manipulation of Ni^{2+} tolerance of *Sacchromyces cerevisiae* cells: a primary step to bioremediation by removal and recovery of Ni^{2+} from contaminated waters, Farcasanu IC, Paraschivescu C, **Ruta L**, Oprea E, Avramescu S, *Revue Roumaine de Chimie*, 53(8), 647–651, 2008
46. Characterization of *Sacchromyces cerevisiae* mutants resistant to high concentrations of Co^{2+}: A primary step to bioremediation by removal and recovery of Co^{2+} from contaminated waters, Farcasanu IC, Oprea E, Paraschivescu C, **Ruta L**, Avramescu S, *Revista de Chimie*, 59 (9), 1041-1045, 2008

47. New non-symmetrical 2,5-disubstituted 1,3,4-oxadiazoles bearing a benzo[β] thiophene moiety, Paraschivescu CC, Dumitrascu F, Draghici C, **Ruta L**, Matache M, Baciu I, Dobrota C, Arkivoc, 198-206, 2008

Conferences

1. Yeast surface display platform for the selection of GFP and mCherry nanobodies-**LL Ruta**, oral presentation, XXVII Biochemistry Congress, 10-14 september 2023, Stary Smokovek, Slovakia
2. Synthesis, characterization and toxicity assessment against Saccharomyces cerevisiae of some new compounds from oxazol-5-(4H)-ones and 1,2,4-triazin-6(5H)-ones classes, EV Rosca, IC Farcasanu, **LL Ruta**, TV Apostol, L Iscrulescu, C Draghici, F Barbuceanu, S Baraitareanu, SF Barbuceanu, 21st Romanian International Conference on Chemistry and Chemical Engineering, September 4-7, 2019, Constanta - Mamaia, Romania
3. A chemogenomic screen reveals YPL257W as a pleiotropic determinant of polyphenol and heavy metal resistance in *Saccharomyces cerevisiae*, Nicolau I, **Ruta LL**, Farcasanu IC, 6th International Synthetic & Systems Biology Summer School, 22-26.07.2019, Pisa, Italia
4. Decorated apatitic materials: synthesis, characterization and potential application, Brazdis RI, Fierascu RC, Farcasanu IC, **Ruta LL**, Ditu LM, Sutan AN, Nicolae CA, Raditoiu V, Somoghi R, Soare CL, Priorities of Chemistry for a Sustainable Development, 15th Edition, Bucharest, Romania, 30 Oct.- 1 Nov 2019
5. Heavy metal accumulation by *Saccharomyces cerevisiae* cells expressing Cup1cystein-rich oligopeptides targeted to the inner face of the plasma membrane, Farcasanu IC, Neagoe AD, **Ruta LL**, International Conference on Chemical and Environmental Science, Beijing, China, 29 -30 August 2019.
6. Cobalt removal by *Saccharomyces cerevisiae* cells expressing *Arabidopsis Thaliana* metallothioneins at MT4A and at MT4B, **Ruta LL**, Martin EC, Petrescu AJ, Farcasanu IC, International Conference on Chemical and Environmental Science, Beijing, China, 29 -30 August 2019.
7. Synthesis, characterization, and evaluation of cytotoxic, phytotoxic and antimicrobial properties of decorated apatitic materials, Brazdis RI, **Ruta LL**, Farcasanu IC, Fierascu RC, Ditu LM, Sutan AN, Soare CL, Current trends in natural sciences, International Symposium, Pitești, Romania, 18 – 20 April 2019
8. Calcium mediated response to Cd^{2+} and Cu^{2+} stress in *Saccharomyces cerevisiae* cells, **Ruta LL**, Popa CV, Farcasanu IC. 28th International Conference on Yeast Genetics and Molecular Biology (ICYGMB), Prague, Czech Republic, August 27 – September 1, 2017
9. Determination of chitin in the cell wall of *Saccharomyces cerevisiae* by fluorescence spectroscopy, Dahham A, Popa CV, **Ruta LL**, Farcasanu IC, International Symposium Chemistry Priorities for Sustainable Development, Ed. XIII, 25-27 October 2017, Bucharest, Romania
10. Biological synthesis of silver nanoparticles using *Saccharomyces cerevisiae* cells expressing plant metallothioneins, **Ruta LL**, Banu M, Lin YF, Kissen R, Bones AM, Farcasanu IC, Norwegian Plant Biology, Trondheim, Norway, 15-17 June 2016
11. Molecular aspects of Ln^{3+} toxicity revealed through a genome-wide screen in *Saccharomyces cerevisiae*, **Ruta LL**, Ene CD, Nicolau I, Neagoe AD, Farcasanu IC , PYFF6 - 6th Conference on Physiology of Yeasts and Filamentous Fungi, Lisbon, Portugal, 10-15 July 2016
12. Calcium signaling mediates the response to copper toxicity in *Saccharomyces cerevisiae* cells, **Ruta LL**, Nicolau I, Farcasanu IC, 27° International conference on yeast genetics and molecular biology, Levico Terme, TRENTO, Italy, 6-12 Sept. 2015
13. Targeting metal-binding oligopeptides to the inner face of plasma membrane in *Saccharoyces cerevisiae* cells, Farcasanu IC, **Ruta LL**, Nicolau I, Neagoe AD, International Specialized Symposium on Yeasts (ISSY), Perugia, Italy, 13–17 Sept. 2015
14. Structural, functional and phylogenetic aproach to the study of YAP family proteinse, Ofiteru AM, **Ruta LL**, Farcasanu IC, Annual International Conference on Cellular and Molecular Biotechnologies for Medical Applications, published in Romanian Journal of Biochesmistry, Volume 49, Supplementa, 2012, Romanian Academy, Bucharest, Romania,13-14 September 2012
15. Effect of Effect of *PHO84* overexpression on heavy metal accumulation in overexpression on heavy metal accumulation in overexpression on heavy metal accumulation in *Saccharomyces cervisiae* cells, Ofiteru AM, Ene CD, **Ruta LL**, Farcasanu I, resume published in "10e rencontre Levures Modèles & Outils"; Congrès Levures Modèles et Outils, Toulouse, Toulouse, France, 2-4 April 2012
16. Evaluation of the interface between a nanostructurated surface and proteins using microarray technology**,** Simion M, Matache M, Miu M, **Ruta LL**, Bragaru A, E-MRS, Spring Meeting, Strasbourg, France, 7-11 June 2010
17. Synthesis of new selective estrogen receptor modulators (SERMs), Paraschivescu CC, Bogdan ND, Matache M, Nedelcu M, Chiric C, **Ruta LL**, Dumitru I, Farcasanu IC, Funeriu DP, ICOSECs, Bucharest Romania,15-17 Sept. 2010
18. Evaluation of porous silicon as a functional surface for protein arrays, Simion M, **Ruta LL**, Matache M, Miu M, Bragaru A, Cortojan L, Kleps I, 7th International Conference - Porous semiconductors - Science and technology, Valencia, Spain, 14 - 19 Mar. 2010
19. Laser scanning calibration for porous silicon substrate useful in microarray applications, Simion M, Kleps I, **Ruta LL**, Lazar L, Bragaru A, Miu M, Baciu I, 32 th International Semiconductor Conference – CAS, Sinaia, Romania, 12-14 Oct. 2009
20. Biohybrid system microfabrication for optimal detection of CRP, Simion M, **Ruta LL**, Kleps I, Miu M, Paraschivescu C, Ignat T, Bragaru A, E-MRS, Spring Meeting, Strasbourg France, 8 -12 June 2009

21. Study of CRP immobilization on nanostructured silicon, **Ruta LL**, Simion M, Kleps I, Miu M, Matache M, Ignat T, Bragaru A, E-MRS Spring Meeting, Strasbourg France, 8-12 June 2009
22. Porous Silicon Layer For Protein Immobilization, Simion M, Miu M, Kleps I, Bragaru A, Ignat T, **Ruta LL**, Baciu I, Mihailescu C, Stan D, First International Conference on Multifunctional, Hybrid and Nanomaterials, Tours, France, 15-19 Mar. 2009
23. Biohybrid surface preparation for protein/DNA microarray applications, Simion M, **Ruta LL**, Kleps I, Miu M, Mihailescu C, Ignat T, Bragaru A, E-MRS Spring Meeting, Strasbourg France, 26-30 May 2008
24. Nano Porous Silicon Used As Support for Protein Microarray, Simion M, Kleps I, Bragaru A, Miu M, **Ruta L**, Mihailescu C, Stan D, NanoSea 2008, Second International Conference on Nanostructures Self-Assembly, Rome, Italy, 7-10 July 2008
25. Microarray imaging from artifacts to standardisation, Kleps I, Simion M, Bragaru A, Miu M, Ignat T, **Ruta L**, Mihailescu C, 17th International Laser Physics Workshop, Trondheim Norvegia, 30 June-4 July 2008
26. Laser scanning calibration for porous silicon substrate used in microarray technology, Simion M, Kleps I, Bragaru A, Miu M, Ignat T, **Ruta LL**, 17th International Laser Physics Workshop, Trondheim (Norvegia), 30 June-4 July 2008
27. Synthesis and antimicrobial activity of some new 3-nitro-and 3,6-dintro-coumarin derivatives, Stan D, Paraschivescu C, **Ruta LL**, Matache M, Dumitru I, Savin M, Baciu I, 2nd EuCheMS Chemistry Congress, Torino, Italy, 16-20 Sept. 2008
28. Synthesis and antimicrobial, antiviral and antioxidant evaluation of new benzyl ester 3,4-dihydropyrimidine-2(1h)-ones, Matache M, Dobrota C, Farcasanu I, **Ruta LL**, Paraschivescu C, Dumitru I, Baciu I, 2nd EuCheMS Chemistry Congress, Torino, Italy, 16-20 Sept. 2008
29. Mixed-monolayers with alkane thiol on gold as substrates for microarray applications, Mihailescu CM, Stan D, Ruta L, Baciu I, Moldovan C, Schiopu V, Simion M, Gavrila R**,** IEEE International Semiconductor Conference, Sinaia, Romania, 13-15 Oct. 2008
30. Porous silicon surfaces - a proper substrate for microarray tehnology, Simion M, Mihailescu C, **Ruta LL**, Ignat T, Kleps I, Stan D, Bragaru A, Miu M, Advanced in Microarray Technology, Barcelona, Spain, 7-8 May 2008
31. Analitycal methods for characterization of steroids hydrazones, **Ruta LL**, Neata M, Paraschivescu CC, Ruta F, 4th Black Sea Basin Conference on Analytical Chemistry, Sunny Beach Bulgaria, 19-23 Sept. 2007
32. Spectral characterization of a novel series of N,N-diacetilhydrazines with benzo[1] thiophene core, Paraschivescu CC, **Ruta LL**, Neata M, 4th Black Sea Basin Conference on Analytical Chemistry, Sunny Beach, Bulgaria, 19-23 Sept. 2007
33. Protein Attachment via Polymers in Microarray Technology, Simion M, **Ruta LL**, Ignat T, Kleps I, Stan D, Mihailescu C, Paraschivescu C, Craciunoiu F, Miu M, 3rd International Symposium on Nanostructured and Functional Polymer-Based Materials and Nanocomposites, Corfu, Greece, 13-15 may 2007

Proceedings

1. Decorated Apatitic Materials: Synthesis, Characterization, and Potential Application, Fierascu RC, Brazdis RI, Farcasanu IC, **Ruta LL**, Ditu LM, Sutan AN, Nicolae CA, Raditoiu V, Somoghi R, Soare CL, Proceedings 29 (1), 33, 2009
2. Laser scanning calibration for porous silicon substrate useful in microarray applications, Simion M, Kleps I, **Ruta LL** et al., 2009 International Semiconductor Conference, Vols 1 and 2, Proceedings, 147-150, 2009
3. Biohybrid surface preparation for protein/dna microarray applications, Simion M, **Ruta LL**, Kleps I, et al. 2008 International Semiconductor Conference, Proceedings: 201-204, 2008
4. Mixed-monolayers with alkane thiol on gold as substrates for microarray applications, Mihailescu CM, Stan D, **Ruta LL**, et al., 2008 International Semiconductor Conference, Proceedings, 173-176, 2008
5. 4. Surface functionalization for protein microarray, Simion M, **Ruta LL**, Kleps I et al., Cas 2007 International Semiconductor Conference, Vols 1 and 2, Proceedings, 135-138, 2007

Books

1. 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
2. Separation and purification of organic compounds, Baciu I, Dobrota C, Dumitru I, Matache M, Paraschivescu CC, **Ruta LL**, ISBN 978-973-737-656-5, Ed. Univ. din Bucuresti, 124 pages, 2009
3. 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

Chapters in books

1. Pharmacological Aspects and Health Impact of Sports and Energy Drinks, Oprea E, **Ruta LL**, Farcasanu IC in Sports and Energy Drinks, doi.org/10.1016/B978-0-12-815851-7.00003-6, 2019
2. Calcium and Cell Response to Heavy Metals: Can Yeast Provide an Answer? Farcasanu IC, Popa CV, **Ruta LL** in Calcium and Signal Transduction, DOI: 10.5772/intechopen.78941, 2018
3. Metallothioneins, Saccharomyces cerevisiae, and Heavy Metals: A Biotechnology Triad? Farcasanu IC, **Ruta LL**, in Old Yeasts - New Questions, DOI: 10.5772/intechopen.70340, 2017

Brevets

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Projects

Scientific Researcher

2022-2024 Impedimetric biosensor based on vertical graphene, integrated with a microfluidic system for monitoring the plasma levels of anti-tumoral agents, PTE

2018-2019 Green synthetic chemistry of bioactive peptides against cancer or multi-drug resistance, RO-CN

2014-2017 Yeast, plants and heavy metals: from bioremediation to bioextraction, SEE

2014-2017 Identification of new modulators of calcium-regulated processes using genomic and chemogenomic screens in yeast, PCCA

2014-2017 Multiplexed platform for HPV genotyping, PCCA

Research Assistant

2007-2010 „Molecular mechanisms involved in *Saccharomyces cerevisisae* cellular response to heavy metal and oxidative stress“, PNII/IDEI

2007-2010 “Engineering the heavy metal tolerance in yeast: a primary step to bioremediation by removal and recovery of heavy metals from contaminated environments”, CNCSIS,

2007-2010 ‘’Technologies for achieving miniaturized immnosensors for herbicides detection”, PNII,

2007-2010 ‘’Multi-Allergen Biochip by MicroArray Technology”, PNII,

2005-2008 ‘’Innovative therapies for the treatment of some neoplasia by synergic activity of some bioactive derivatives accelerated electrons and microwaves”, Excellence Research Programme,

2004-2007 ‘’Preparation of biogels for the electrophoretic separation of serum proteins, applied for therapy and diagnosis”, MATNANTECH

Memberships

Romanian Chemical Society
College of Pharmacists in Romania

References

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