

PERSONAL INFORMATION

LAURA SBÂRCEA



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POSITION

Full Professor of Drug Analysis, Faculty of Pharmacy, "Victor Babes" University of Medicine and Pharmacy Timișoara

WORK EXPERIENCE

Oct 2022 – present

Full Professor of Drug Analysis

Drug Analysis Discipline, Faculty of Pharmacy, "Victor Babes" University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- teaching and research activities in the field of pharmaceutical analysis
- coordination and supervision of the students to accomplish the Bachelor thesis

Business or sector Education and research activities

Oct 2022 – present

PhD Adviser

Victor Babes" University of Medicine and Pharmacy Timișoara, Faculty of Pharmacy, Drug Analysis Discipline, " (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- based on UMFVBT HS no 11/1871/26.01.2022
- Research field: Cyclodextrin inclusion complexes of pharmaceutical compounds; analytical and stability studies

Business or sector Education and research activities

Dec 2019 – Dec 2023

Head of Department I

Faculty of Pharmacy, "Victor Babes" University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- responsibilities related to management and executive leadership of the department
- evaluation and quality assurance of the educational and research process at the department level
- work closely with Department Council to define the mission, objectives, strategy of the department in accordance with the mission, objective and strategy of the Faculty and University

Business or sector Education and research activities

2015 - present

Head of Drug Analysis Discipline

Drug Analysis Discipline, Faculty of Pharmacy, "Victor Babes" University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- responsible for harmonisation, updating and implementation of the curriculum of the discipline
- implements an ongoing program for student evaluation
- plans and supervises the development staff activities in order to increase staff competencies
- evaluates annually the activity of the discipline staff

Business or sector Education and research activities

Sept 2013 – oct 2022

Associate Professor (2018), Lecturer (2013)

Drug Analysis Discipline, Faculty of Pharmacy, "Victor Babes" University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- teaching and research activities in the field of pharmaceutical analysis
- coordination and supervision of the students to accomplish the Bachelor thesis

Business or sector Education and research activities

Oct. 1999 – Sept. 2013

Assistant Professor (2002), Junior Assistant Professor (1999)

Pharmaceutical Chemistry Discipline, Faculty of Pharmacy, ‘Victor Babes’ University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- teaching activities (laboratory practical work) in Pharmaceutical Chemistry
- research activities in the field of pharmaceutical analysis

Business or sector Education and research activities

Dec 2003 – Jun 2010

Pharmacist Manager

S.C. Help Net S.A. Timișoara (www.helpnet.ro)

- coordinating of the pharmacy activity
- overseeing all day-to-day operation of the pharmacy
- ensuring the supply of the pharmacy with needed medicine and products according to company procedures
- ensuring proper stock levels
- training personnel in order to provide high standard of services (counselling) to patients

- assisting in the onboarding process of new hires
- training staff to interact professionally and courteously to customers
- ensuring the collaboration with prescribers
- counselling patients
- monitoring the fulfilment of responsibilities of the subordinate staff

Business or sector Community Pharmacy

Oct 1998 - Dec 2003

Pharmacist, Resident Pharmacist (2000-2002), Specialist Pharmacist (2002)

S.C. Help Net S.A. Timișoara (www.helpnet.ro)

- counselling patients (monitoring patients’ drug therapies, instructing patients on how and when to take the prescribed medication, informing patients of any potential side effect of the prescribed drug)
- communicating with prescribers
- ensuring patients’ safety
- maintaining records of controlled substances and removing expired and/or damaged drugs from the pharmacy’s inventory
- overseeing the work of and mentoring pharmacy technicians and student interns
- preparation of recipes
- getting familiar with and adhering to company procedures, regulations and procedures governing pharmaceutical practice

Business or sector Community Pharmacy

EDUCATION AND TRAINING

2021

Habil

‘Victor Babes’ University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- based on the Ministry of Education Order 5966/28.12.2021
- Habilitation thesis: “Modulation of physicochemical and biopharmaceutical characteristics of drugs and uncovering new pharmacological properties”
- Pharmaceutical Analysis, Supramolecular adducts of active pharmaceutical substances, Compatibility studies, Drug repositioning

2019 – 2022

Specialist Pharmacist in Clinical Pharmacy

‘Victor Babes’ University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- based on the Ministry of Health no. 1684 from 23.06.2022
- Clinical Pharmacy, Pharmacotherapy, Pharmacoepidemiology, Pathology, Drug Toxicology

2004 - 2011

PhD

Faculty of Pharmacy, ‘Iuliu Hațieganu’ University of Medicine and Pharmacy Cluj-Napoca (4-6, Louis Pasteur St, Cluj-Napoca, 400336, Romania, www.umfcluj.ro)

- based on the Ministry of Education Order 5743/12.09.2012
- PhD thesis: "Analytical and stability studies of some angiotensin-converting enzyme inhibitors"; Scientific Supervisor: Prof Marius Bojiță, PhD
- Graduated with honors: *Summa cum Laude*
- Pharmaceutical Analysis, Liquid chromatography, UV-Vis Spectrophotometry, Stability and compatibility studies, Cyclodextrin inclusion complexes

2003 - 2004 **MSc in Pharmaceutical Analysis**

Faculty of Pharmacy, "Iuliu Hațieganu" University of Medicine and Pharmacy Cluj-Napoca (4-6, Louis Pasteur St, Cluj-Napoca, 400336, Romania, www.umfcluj.ro)

- Pharmaceutical Analysis, Pharmaceutical technology, Toxicology, Research Methodology

2000 – 2002 **Specialist Pharmacist in General Pharmacy**

"Victor Babeș" University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- based on the Order of the Minister of Health and Family no. 256 of 2002
- Pharmacology, Pharmaceutical Technology, Clinical Pharmacy, Pharmaceutical Legislation

1993 - 1998 **BSc in Pharmacy**

"Victor Babeș" University of Medicine and Pharmacy Timișoara (2, Eftimie Murgu Square, Timișoara, 300041, Romania; www.umft.ro)

- Inorganic and General Chemistry, Analytical Chemistry, Organic Chemistry, Pharmaceutical Chemistry, Botany, Pharmaceutical Technology, Pharmacology, Drug Analysis, Toxicology

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
French	B1	B1	B1	B1	B1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- good communication skills gained through my experience as manager
- good teaching skills acquired through my experience as assistant professor, lecturer, associate professor

Organisational / managerial skills

- leadership; ability to make, implement and supervise decisions acquired through my experience as pharmacist manager, head of Drug Analysis Discipline (2015-present) and head of Department I

Job-related skills

- skills to work in a team and motivate the team gained through my scientific research activities and my activity in community pharmacy
- ability to create and maintain a productive and non-conflictual work climate
- good command of specialized laboratory instruments (UV-Vis spectrometers, HPLC/UV-Vis)

Computer skills

- good command of Microsoft Office™ tools, Microcal Origin, ChemWin, ChemBioOffice, Vision 32

Driving licence

- B

ADDITIONAL INFORMATION

Publications

<https://scholar.google.ro/citations?user=ozmN0POAAAAJ&hl=en>

- Projects**
- PN-III-P2-2.1-PED2019-2842 “Complexity science for precision pharmacy: predicting relevant drug interactions using complex network analysis” – HYPERION, 2020-2022, Member
 - PIII-C1-PCFI-2014/2015 “Synthesis of compounds with potential antitumor activity by derivatization reactions and their characterisation by means of hyphenated techniques. Evaluation of antiangiogenic, antineoplastic and anti-inflammatory activity” – SYNTANTITUM, 2014-2015, Member
- h-Index**
- 10 (ISI Web of Science), 10 (Scopus); 11 (Google Scholar)
- Peer Reviewer**
- Pharmaceutics
 - Molecules
 - Biomolecules
 - Scientia Pharmaceutica
 - Food
 - LWT- Food Science and Technology
 - Heliyon
 - Carbohydrate Polymers
 - Journal of Thermal Analysis and Calorimetry
 - Journal of Porous Materials
- Guest editor**
- Special Issue "Pharmaceutical Analysis and Drug Stability Evaluation" in Molecules
 - Special Issue "Pharmaceutical Dosage Forms: Drug Release, Solubility and Stability Evaluation" in Pharmaceutics
 - Special Issue "Pharmaceutical Excipients: Impact on Efficiency, Stability, and Solubility in Formulation" in Pharmaceutics
- Memberships**
- Romanian Society of Pharmaceutical Sciences (2011-2016 – vice-president of RSPS, Timiș branch)
 - Romanian College of Pharmacist
 - Member of the Romanian Chemical Society (SChR)

ANNEXES

- List of publications

LIST OF REPRESENTATIVE PUBLICATIONS

- Man, DE, Nițu, E-T, Temereancă, C, **Sbârcea, L***, Ledetj, A, Ivan, D, Ridichie, A, Andor M, Jijie, A-R, Barvinschi P, et al. Host–Guest Complexation of Olmesartan Medoxomil by Heptakis(2,6-di-O-methyl)- β -cyclodextrin: Compatibility Study with Excipients. *Pharmaceutics*. 2024; 16(12):1557. <https://doi.org/10.3390/pharmaceutics1612155>; [IF: 4,9, Q1]
- Ridichie, A, Ledetj, A, **Sbârcea, L***, Rusu G, Muntean, C, Cîrcioban, D, Peter, F, Ledetj I. Preformulation studies of levonorgestrel. *Journal of Thermal Analysis and Calorimetry* 2024; <https://doi.org/10.1007/s10973-024-13149-w> ; [IF: 3,0, Q2]
- Andor, M.; Temereancă, C.; **Sbârcea, L.**; Ledetj, A.; Man, D.E.; Momoș, C.; Ridichie, A.; Cîrcioban, D.; Vlase, G.; Barvinschi, P.; Caunii, A., Văruț, R-M, Trandafirescu, C., Buda, V., Ledetj, I., Rădulescu, M. Host–Guest Interaction Study of Olmesartan Medoxomil with β -Cyclodextrin Derivatives. *Molecules* 2024, 29, 2209. <https://doi.org/10.3390/molecules29102209>, [IF: 4,2, Q2]
- Cîrcioban, D., Ledetj, A., Ridichie, A., Vlase T., Ledetj, I., Bradu, I.A., Pahomi, A., **Sbârcea, L**, Vlase, G.; Compatibility study of mirtazapine with several excipients used in pharmaceutical dosage forms employing thermal and non-thermal methods. *Journal of Thermal Analysis and Calorimetry*; 2024; <https://doi.org/10.1007/s10973-024-13181-w> [IF: 3,0, Q2]
- **Sbârcea, L.**; Tănase, I-M; Ledetj, A; Cîrcioban, D; Vlase, G; Barvinschi, P; Miclău, M; Văruț, R-M; Suciu, O; Ledetj, I. Risperidone/Randomly Methylated β -cyclodextrin Inclusion Complex-Compatibility Study with Pharmaceutical Excipients, *Molecules* 2021; 26 (6): 1690, doi 10.3390/molecules26061690; [IF: 4,412, Q2]
- **Sbârcea, L.**; Tănase, I-M; Ledetj, A; Cîrcioban, D; Vlase, G; Barvinschi, P; Miclău, M; Văruț, R-M; Trandafirescu, C; Ledetj, I. Encapsulation of Risperidone by Methylated β -Cyclodextrins: Physicochemical and Molecular Modeling Studies. *Molecules* 2020; 25 (23): 5694. doi 10.3390/molecules25235694; [IF: 4,412, Q2]

- Tănase, I-M; **Sbârcea, L**; Ledetj, A; Barvinschi, P; Cîrcioban, D; Vlase, G; Văruț, R-M; Ledetj, I. Compatibility studies with pharmaceutical excipients for aripiprazole–heptakis (2,6-di-O-methyl)-β-cyclodextrin supramolecular adduct. *Journal of Thermal Analysis and Calorimetry* 2020; 142: 1963–1976; doi 10.1007/s10973-020-09901-7 [IF 4.626, Q1]
- Tănase, I-M; **Sbârcea, L**; Ledetj, A; Vlase, G; Barvinschi, P; Văruț, R-M; Dragomirescu, A; Axente, C; Ledetj, I. Physicochemical characterization and molecular modeling study of host– guest systems of aripiprazole. *Journal of Thermal Analysis and Calorimetry* 2020; 141:1027– 1039; doi 10.1007/s10973-020-09549-3; [IF 4.626, Q1]
- Cîrcioban, D; Ledetj, I; Șuta L-M; Vlase, G; Ledetj, A; Vlase T; Văruț, R-M; **Sbârcea, L**;; Trandafirescu, C; Dehelean, C. Instrumental analysis and molecular modelling of inclusion complexes containing artesunate. *Journal of Thermal Analysis and Calorimetry* 2020; 142:1951–1961; 10.1007/s10973-020-09975-3; [IF 4.626, Q1]
- **L Sbârcea**, A Ledetj, L Udrescu, R-M Văruț, P Barvinschi, G Vlase, I Ledetj. Betulonic acid-cyclodextrins inclusion complexes. *Journal of Thermal Analysis and Calorimetry* 2019;138:2787–2797; [IF 2.731, Q2]
- Udrescu, L., **Sbârcea, L.**, Topîrceanu, A., Iovanovici, A., Kurunczi, L., Bogdan, P., Udrescu, M. Clustering drug-drug interaction networks with energy model layouts: community analysis and drug repurposing. *Scientific Reports* 6, 32745, 2016; doi 10.1038/srep32745; [IF 4.259, Q1]
- **Sbârcea, L.**, Udrescu, L., Ledetj, I., Szabadai, Z., Fuliș, A., Sbârcea, C. β-cyclodextrin inclusion complexes of lisinopril and zofenopril. *Journal of Thermal Analysis and Calorimetry*, 2016; 123(3):2377-2390; doi 10.1007/s10973-015-5045-7; [IF 1.953, Q2]
- **Sbârcea, L.**, Ledetj, I., Drăgan, L., Kurunczi, L., Fuliș, A., Udrescu, L. Fosinopril sodium–hydroxypropyl-β-cyclodextrin inclusion complex. Thermal decomposition kinetics and compatibility studies. *Journal of Thermal Analysis and Calorimetry*, 2015; 120 (1): 981-990; doi 10.1007/s10973-015-4450-2; [IF 1.781, Q2]

BOOKS

- Udrescu, L., **Sbârcea, L.** Caunii, A., Oprean, C. *Analiza medicamentului. Lucrări practice pentru Asistență de Farmacie*. Editura Victor Babeș, Timișoara, ISBN 978-606-786-400-7, ebook
- Caunii, A., Oprean, C., Udrescu, L., **Sbârcea, L.** *Chimia apei și a alimentului: metode de analiză și elemente de dietoterapie*, Editura Victor Babeș, Timișoara 2024, ISBN 978-606-786-384-0
- Caunii, A., Oprean, C., Udrescu, L., **Sbârcea, L.** *Water and Food Chemistry. Methods of analysis and elements of diet therapy*, Ed. Victor Babeș, Timișoara, 2023, ISBN: 978-606-786-312-3, cod CNCS 324
- Trandafirescu, C., **Sbârcea, L.**, *Pharmaceutical Chemistry. Antiinfective agents*, Ed. Victor Babeș, Timișoara, 2023, ISBN: 978-606-786-313-0, cod CNCS 324
- Szabadai, Z., **Sbârcea, L.**, Udrescu, L., *Analiza fizică și chimică a medicamentului, vol 2*, Ed. Victor Babeș, Timișoara, 2021, 545 pag, ISBN 978-606-786-239-3, cod CNCS 324
- Szabadai, Z., **Sbârcea, L.**, Udrescu, L., *Analiza fizică și chimică a medicamentului, vol 1*, Ed. Victor Babeș, Timișoara, 2016, 503 pag, ISBN 978-606-786-020-7, cod CNCS 324
- Trandafirescu, C., **Sbârcea, L.**, *Chimie Farmaceutică. Chimioterapice antiinfecțioase*, Ed. Mirton Timișoara, 2011, 208 pag, ISBN 978-973-52-0978-0, cod CNCS 185
- Drăgan, L., **Sbârcea, L.**, *Ambalajul farmaceutic-instrument de marketing*, Editura Solness Timișoara, 2011, 175 pag, ISBN 978-973-729-274-2, cod CNCS 188
- **Sbârcea, L.**, Drăgan, L., *Chimie Farmaceutică lucrări practice, partea a II-a*, Ed. Mirton Timișoara, 2010, 133 pag, ISBN 987-973-52-0799-1, cod CNCS 185
- Drăgan, L., **Sbârcea, L.**, *Chimia Medicamentului - îndrumător de lucrări practice*, Editura EUROBIT Timișoara, 2010, 146 pag, ISBN 978-973-620-727-3 cod CNCS 187
- Drăgan, L., **Sbârcea, L.**, *Chimie Farmaceutică lucrări practice, partea I*, Ed. Mirton Timișoara, 2007, 111 pag, ISBN 978-973-52-0190-6, cod CNCS 185

Timișoara,
November 20, 2024

Professor Laura Sbârcea, PhD, Habil