PERSONAL INFORMATION

Laura Gabriela SÂRBU

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WORK EXPERIENCE

February 2020-Present Day

Associate Professor, Ph.D.

Faculty of Chemistry, “Al. I. Cuza” University of Iasi, no. 11 ”Carol I” Blvd., Iasi, Romania.

October 2015-February 2020

Lecturer, Ph.D.

Faculty of Chemistry, “Al. I. Cuza” University of Iasi, no. 11 ”Carol I” Blvd., Iasi, Romania.

October 2009-September 2015

Assistant

Faculty of Chemistry, “Al. I. Cuza” University of Iasi, no. 11 ”Carol I” Blvd., Iasi, Romania.

EDUCATION AND TRAINING

June18.2019 - June 25.2019

Staff mobility for Teaching

Technical University Braunschweig, Institute for Organic Chemistry, Germany

The chemistry of hybrid systems flavonoids-cyclophanes

June 01.2018 - June08.2018

Staff mobility for Teaching

Technical University Braunschweig, Institute for Organic Chemistry, Germany

- The chemistry of cyclophanes-flavonoids hybrid systems

July 28.2015 - August 07.2015

Staff mobility for Teaching

Technical University Braunschweig, Institute for Organic Chemistry, Germany

- The chemistry of [2.2]paracyclophane

October 2011 - September 2014

Ph.D. thesis entitled “New [2.2]paracyclophane derivatives”

Faculty of Chemistry, “Al. I. Cuza” University of Iasi, Romania

Scientific coordinator Prof. dr. Elena Bîcu

April 2013 - August 2013

Study mobility

Technical University Braunschweig, Institute for Organic Chemistry, Germany

- Chemistry of [2.2]paracyclophane

June 2012 - September 2012

Practice mobility

Technical University Braunschweig, Institute for Organic Chemistry, Germany

- Chemistry of [2.2]paracyclophane

October 2007 - June 2009

Master’s Degree

Faculty of Chemistry, “Al. I. Cuza” University of Iasi, Romania

Specialization Chemistry and biochemistry of heterocyclic compounds

October 2003 - June 2007

Bachelor’s Degree

Faculty of Chemistry, “Al. I. Cuza” University of Iasi, Romania

- Organic chemistry

PERSONAL SKILLS

Mother tongue(s): Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
	Replace with name of language certificate. Enter level if known.				
German	A1	A1	A1	A1	A1
	Replace with name of language certificate. Enter level if known.				

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

Communication skills

- good communication skills gained through my experience as a teacher

Organisational / managerial skills

Replace with your organisational / managerial skills. Specify in what context they were acquired. Example:

- sociable person
- leadership, coordinator of work laboratory
- capable of working as a team member

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

Replace with name of ICT-certificates

- good command of office suite (word processor, spread sheet, presentation software)
- good command of ChemDraw programme and MestRec programme used for editing chemical structures and reactions, interpretation of NMR data respectively

List of publications and scientific contributions

I. Articles

1. Moldovan, C.V.; Mantea, L.E.; Savu, M.; **Sarbu, L.G.**; Birsa, M.L.; Stefan, M. Novel tricyclic flavonoids as promising antimicrobial agents. *FEBS OPEN BIO* **2025**, *15*, 415-416. https://doi.org/10.1002%2F2211-5463.70071
2. Birsa, M.L.; **Sarbu, L.G.*** Iodine-Substituted Dithiocarbamic Flavanones—A Structure–Activity Relationship Study of Their Antioxidant Properties. *Molecules* **2025**, *30*, 2280. https://doi.org/10.3390/molecules30112280
3. **Sarbu, L.G.***; Rosca, I.; Birsa, M.L. Antibacterial and Antifungal Properties of New Synthetic Tricyclic Flavonoids. *Antibiotics* **2025**, *14*, 307. https://doi.org/10.3390/antibiotics14030307
4. Birsa, M.L.; **Sarbu, L.G.*** Novel Dithiocarbamic Flavanones with Antioxidant Properties—A Structure–Activity Relationship Study. *Int. J. Mol. Sci.* **2024**, *25*, 13698. https://doi.org/10.3390/ijms252413698
5. Moldovan, C.-V.; Mantea, L.-E.; Savu, M.; Jones, P.G.; **Sarbu, L.G.**; Stefan, M.; Birsa, M.L. Novel Tricyclic Flavonoids as Promising Anti-MRSA Agents. *Pharmaceuticals* **2024**, *17*, 1276. https://doi.org/10.3390/ph17101276
6. Birsa, M.L.; **Sarbu, L.G.** A Structure–Activity Relationship Study on the Antioxidant Properties of Dithiocarbamic Flavanones. *Antioxidants* **2024**, *13*, 963. https://doi.org/10.3390/antiox13080963
7. Mantea, L.-E.; Moldovan, C.-V.; Savu, M.; **Sarbu, L.G.**; Stefan, M.; Birsa, M.L. An Eco-Friendly Method to Synthesize Potent Antimicrobial Tricyclic Flavonoids. *Antibiotics* **2024**, *13*, 798. https://doi.org/10.3390/antibiotics13090798
8. **Sarbu, L.G.**, Synthesis of 1,3-Dithiolium Salts Containing *N*-Methylpiperazine, *Acta Chem. Iasi*, **2023**, *31 (2)*, 119-128. DOI: 10.47743/achi-2023-2-0008. https://www.chem.uaic.ro/ro/acta-chemica/aci_vol_31_2_2023.html
9. Birsa, M.L.; **Sarbu, L.G.*** Health Benefits of Key Constituents in *Cichorium intybus* L. *Nutrients* **2023**, *15*, 1322. https://doi.org/10.3390/nu15061322
10. Birsa, M.L.; Hopf, H.; Jones, P.G.; **Sarbu, L.G.***; Bahrin, L.G. [2.2]Paracyclophane Derivatives as Building Blocks for Coordination Polymers. *Materials* **2023**, *16*, 4051. https://doi.org/10.3390/ma16114051
11. Birsa, M.L.; **Sarbu, L.G.*** Hydroxy Chalcones and Analogs with Chemopreventive Properties. *Int. J. Mol. Sci.* **2023**, *24*, 10667. https://doi.org/10.3390/ijms241310667
12. Birsa, M.L.; **Sarbu, L.G.** An Improved Synthetic Method for Sensitive Iodine Containing Tricyclic Flavonoids. *Molecules* **2022**, *27*, 8430. https://doi.org/10.3390/molecules27238430
13. Moldovan, C.-V.; Savu, M.; Dussert, E.; Aboubacar, H.; **Sarbu, L.G.**; Matiut, S.; Cudennec, B.; Krier, F.; Ravallec, R.; Birsa, L.M.; et al. Synthetic Flavonoid BrCl-Flav—An Alternative Solution to Combat ESKAPE Pathogens. *Antibiotics* **2022**, *11*, 1389. https://doi.org/10.3390/antibiotics11101389
14. Babii, C.; Savu, M.; Motrescu, I.; Birsa, L.M.; **Sarbu, L.G.**; Stefan, M. The Antibacterial Synthetic Flavonoid BrCl-Flav Exhibits Important Anti-*Candida* Activity by Damaging Cell Membrane Integrity. *Pharmaceuticals* **2021**, *14*, 1130. https://doi.org/10.3390/ph14111130
15. Bahrin, L.G.; Nicolescu, A.; Shova, S.; Marangoci, N.L.; Birsa, L.M.; **Sarbu, L.G.*** Nitrogen-Based Linkers with a Mesitylene Core: Synthesis and Characterization. *Molecules* **2021**, *26*, 5952. https://doi.org/10.3390/molecules26195952
16. Bahrin, L.G.; Hopf, H.; Jones, P.G.; Birsa, M.L.; **Sarbu, L.G.*** An Approach to Paracyclophane-Based Tetrathiafulvalenes: Synthesis and Characterization of a *Pseudo-Geminal*

[2.2]Paracyclophane 1,3-Dithia-2-Thione. *Molecules* **2020**, *25*, 5262. https://doi.org/10.3390/molecules25225262

17. Chiriţă, P.; Duinea, M.I.; **Sarbu, L.G.**; Birsa, L.M.; Baibarac, M.; Sava, F.; Matei, E. Oxidation of chalcopyrite in air-equilibrated acidic solution: Inhibition with phenacyl derivatives. *Trans. Nonferrous Met. Soc. China* **2020**, *30*, 1928-1942. https://doi.org/10.1016/S1003-6326(20)65351-1.
18. **Sarbu, L.G.**, Hopf, H., Jones, P.G., Bahrin, L.G., Birsa, L.M, Methylamine-induced ring opening of 1,3-dithiolium cations. *Arkivoc* **2019**, 174-179. https://doi.org/10.24820/ark.5550190.p011.064
19. **Sarbu, L.G.**, Bahrin, L.G., Hopf, H., Birsa, L.M., *Studia Chem.* **2019**, *64 (3)*, 7-16. doi: 10.24193/subbchem.2019.3.01. http://www.chem.ubbcluj.ro/~studiachemia/issues/chemia2019_3/01Sarbu_etal_7_16.pdf
20. Duinea. M.I., Carac, G., Dabuleanu, I.D., Petcu, M.A., **Sarbu, L.G.**, Birsa, M.L., Reiss, A., Chirita, P., Troilite (FeS) Oxidation in the Presence of a Newly Synthesized TRIS-based Base. *Rev. Chim. (Bucharest)* **2019**, *70 (7)*, 2639-2642.
21. **Sarbu, L.G.**; Shova, S.; Peptanariu, D.; Sandu, I.A.; Birsa, L.M.; Bahrin, L.G. The Cytotoxic Properties of Some Tricyclic 1,3-Dithiolium Flavonoids. *Molecules* **2019**, *24*, 2459. https://doi.org/10.3390/molecules24132459
22. **Sarbu, L.G.**, Bahrin, L.G., Babii, C., Stefan, M., Birsa, M.L. Synthetic flavonoids with antimicrobial activity: a review. *J. App. Microbiol.* **2019**, *127*, 1282-1290. https://doi.org/10.1111/jam.14271
23. **Sarbu, L.G.**, Lungu, N.C., Sandu, I., Chirita, P., Bahrin, L.G. Synthesis of 2-Pyrrolydinyl-1,3-Dithiolium Derivatives from Propiophenones. *Rev. Chim. (Bucharest)* **2019**, *70 (4)*, 1311-1314.
24. **Sarbu, L.G.**, Lungu, N.C., Sandu, I. 2-Alkylimino-4-(2-Hydroxyaryl)-1,3-Dithiols Derivatives. *Rev. Chim. (Bucharest)* **2019**, *70 (3)*, 745-748.
25. Lungu, C.N., Sandu, I., **Sarbu, L.G.*** 5-Methyl-4-(5-Bromo-2-hydroxyphenyl)-1,3-Dithiolium Derivatives. *Rev. Chim. (Bucharest)* **2018**, *69 (12)*, 3549-3552.
26. Chirita, P., Duinea, M.I., Sandu, A.M., Birsa, L.M., **Sarbu, L.G.**, Baibarac, M., Sava, F., Popescu, M., Matei, E., Inhibitory effect of three phenacyl derivatives on the oxidation of sphalerite (ZnS) in air-equilibrated acidic solution. *Corrosion Science* **2018**, *138*, 154-162. https://doi.org/10.1016/j.corsci.2018.04.017
27. Meziere, C., Allain, M., Oliveras-Gonzalez, C., Cauchy, T., Vanthuyne, N., **Sarbu, L.G.**, Birsa, L.M., Pop, F., Avarvari, N. Tetrathiafulvalene-[2.2]paracyclophanes: Synthesis, crystal structures, and chiroptical properties. *Chirality* **2018**, *30 (5)*, 568-575. https://doi.org/10.1002/chir.22831
28. Babii, C., Mihalache, G., Bahrin, L.G., Neagu, A.N., Gostin, I., Mihai, C.T., **Sarbu, L.G.**, Birsa, L.M., Stefan, M. A novel synthetic flavonoid with potent antibacterial properties: In vitro activity and proposed mode of action. *PLoS One* **2018**, *13 (4)*, 1-15. https://doi.org/10.1371/journal.pone.0194898
29. Bahrin, L.G., **Sarbu, L.G.**, Jones, P.G., Birsa, L.M., Hopf, H. [2.2]Paracyclophane-Bis(triazole) Systems: Synthesis and Photochemical Behavior. *Chem. Eur. J.* **2017**, *23 (50)*, 12338-12345. https://doi.org/10.1002/chem.201701593
30. Gorodea, I.A., Sandu, I., **Sarbu, L.G.** Novel 4-(3-Bromo-2-hydroxy-5-methylphenyl)-1,3-Dithiol-2-ylidene Derivatives. *Rev. Chim. (Bucharest)* **2017**, *68 (9)*, 1988-1991.
31. Chirita, P., Asaftei, I.V., Sandu, I., **Sarbu, L.G.**, Lupu, V.V. Mesoionic 4-(2-Dialkylamino-1,3-dithiol-2-ylium-4-yl)phenolates. *Rev. Chim. (Bucharest)* **2017**, *68 (1)*, 147-150.
32. Asaftei, I.V., Lungu, N.C., Birsa, L.M., Sandu, I.G., **Sarbu, L.G.**, Ignat, M. Performance of Ag-HZSM-5 Zeolite Catalysts in n-heptane Conversion. *Rev. Chim. (Bucharest)* **2017**, *68 (1)*, 116-120.

33. Matei, M., Sandu, I., Birsa, M.L., **Sarbu, L.G.**, Simion, L. New 4-(4-Hydroxyaryl)-5-Methyl-1,3-Dithiol-2-ylidene Derivatives. *Rev. Chim. (Bucharest)* **2017**, *68 (1)*, 81-84.

34. Asaftei, I.V., Lungu, N.C., Birsa, M.L., **Sarbu, L.G.**, Ignat, M., Sandu, I.G. Conversion of Light Hydrocarbons from Petroleum Refining Processes Over Zn-HZSM-5 (Nitrate) and Zn-HZSM-5 (Acetate) Catalyst A comparative study. *Rev. Chim. (Bucharest)* **2016**, *67 (8)*, 1523-1528.

35. Pavel, S., Hopf, H., Jones, P.G., Asaftei, I.V., **Sarbu, L.G.,** Birsa, L.M. Click reactions with *pseudo-geminal* bis(azido-methylene)[2.2]paracyclophane. *Monatsh. Chem.* **2016**, *147 (12)*, 2179-2183. http://dx.doi.org/10.1007/s00706-016-1842-3

36. Toader, E., Bahrin, L.G., Jones, P.G., Hopf, H., **Sarbu, L.G.**, Stoleriu, G. Synthesis of New Morpholine Containing Flavonoids with Potential Biological Applications. *Rev. Chim. (Bucharest)* **2016**, *67 (8)*, 1520-1522.

37. Bahrin, L.G., **Sarbu, L.G.**, Hopf, H., Jones, P.G., Babii, C., Stefan, M., Birsa, M.L. The influence of halogen substituents on the biological properties of sulfur-containing flavonoids. *Bioorg. Med. Chem.* **2016**, *24 (14)*, 3166-3173. http://dx.doi.org/10.1016/j.bmc.2016.05.044

38. Bahrin, L.G., Hopf, H., Jones, P.G., **Sarbu, L.G.**, Babii, C., Mihai, A.C., Stefan, M., Birsa, M.L. Antibacterial structure–activity relationship studies of several tricyclic sulfur-containing flavonoids *Beilstein J. Org. Chem.* **2016**, *12*, 1065-1071. https://doi.org/10.3762/bjoc.12.100

39. Asaftei, I.V., Sandu, I.G., Lungu, N.C., Birsa, M.L., **Sarbu, L.G.**, Ignat, M. Conversion of Butane-Butylene Mixtures over B(Al)-HZSM-5 Catalyst Prepared by Impregnation and over ZnO/HZSM-5 co-Catalyst Prepared by Mechanical Mixing. *Rev. Chim. (Bucharest)* **2016**, *67 (5)*, 847-853.

40. Dirtu, D.; Lungu, N.C.; Chirita, P.; Sandu, I.G.; Birsa, M.L.; Earar, K.; **Sarbu, L.G.*** Synthesis of Novel 4-(3,5-Dibromo-2-hydroxyphenyl)-5-Methyl-1,3-Dithiol-2-ylidene Derivatives *Rev. Chim. (Bucharest)* **2016**, *67 (3)*, 534-537.

41. **Sarbu, L.G.**; Bahrin, L.G.; Jones, P.G.; Birsa, M.L.; Hopf, H. [2.2]Paracyclophane derivatives containing tetrathiafulvalene moieties. *Beilstein J. Org. Chem.* **2015**, *11*, 1917-1921. https://doi.org/10.3762/bjoc.11.207

42. **Sarbu, L.G.**; Hopf, H.; Grunenberg, J.; Birsa, M.L. Reduction of Pseudo-geminal Bis(ethynyl)-Substituted [2.2]Paracyclophanes. *Synlett* **2015**, *26*, 87-90. doi: 10.1055/s-0034-1378935. http://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0034-1378935

43. Dirtu, D.; Asaftei,. I.V.; Chirita, P.; Sandu, I.G.; Birsa, M.L.; Earar, K.; **Sarbu, L.G.*** Synthesis of 1,3-Dithiol-2-ylium Salts by Functionalization of Some Toluenols. *Rev. Chim. (Bucharest)* **2015**, *66 (12)*, 2028-2030.

44. Chirita, P.; Hrib, C.G.; Sandu, I.; Lungu, N.C.; **Sarbu, L.G.***; Earar, K. A New Class of 4-(Hydroxyaryl)-1,3-Dithiolium Chlorides; *Rev. Chim. (Bucharest)* **2015**, *66 (8)*, 1151-1154.

45. Hrib, C.G.; Chirita, P.; Sandu, I.G.; Asaftei,. I.V.; **Sarbu, L.G.***; Earar, K. The Synthesis and X-Ray Structural Characterization of New 4-(5-Bromo-2-hydroxyphenyl)-1,3-Dithiol-2-ylium Perchlorates. *Rev. Chim. (Bucharest)* **2015**, *66 (7)*, 983-986.

46. **Sarbu, L.G.**; Sandu, I.; Bahrin, L.G.; Balan, A.; Apostu, M.O. New Bromo Substituted 1,3-Dithiol-2-ylium Salts. *Rev. Chim. (Bucharest)* **2015**, *66 (1)*, 55-59.

47. **Sarbu, L.G.**; Hopf, H.; Jones, P.G.; Birsa, M.L. Selenium halide-induced bridge formation in [2.2]paracyclophanes. *Beilstein J. Org. Chem.* **2014**, *10*, 2550-2555. http://dx.doi.org/10.3762%2Fbjoc.10.266

48. **Sarbu, L.G.**; Apostu, M.O.; Sandu, I.; Bahrin L.G.; Manea. L.R. 1,3-Dithiol-2-ylium Compounds Derived from Substituted Butyrophenone. *Rev. Chim. (Bucharest)* **2014**, *65 (11)*, 1327-1331.

49. **Sarbu, L.G.**; Lungu, C.N.; Balan, A.; Bahrin, L.G. Synthesis of Sulfur Containing Piperazine Derivatives with Potential Biological Activities. *Rev. Chim. (Bucharest)* **2014**, *65 (10)*, 1135-1137.

50. Bahrin, L.G.; Asaftei, I.V.; Sandu, I.; **Sarbu, L.G.** Synthesis of (4-Methylpiperazin-1-yl)carbodithioates and of their 1,3-Dithiolium Derivatives. *Rev. Chim. (Bucharest)* **2014**, *65 (9)*, 1046-1048.

51. **Sarbu, L.G.**; Bicu, E.; Hopf, H.; Birsa, M.L. [2.2]Paracyclophane Substituted Indolizines. *Rev. Chim. (Bucharest)* **2014**, *65 (4)*, 398-400.

52. **Sarbu, L.G.**; Lungu, C.N.; Asaftei, I.V.; Sandu, I.; Birsa, L.M. New Evidence for the Mesoionic Character of 2-(1,3-dithiol-2-ylium)phenolates. *Rev. Chim. (Bucharest)* **2014**, *65 (3)*, 325-327.

53. **Sarbu, L.G.**; Bîcu, E.; Belei, D. Synthesis of Mesoionic [2-(10*H*-phenothiazinyl)-1,3-dithiolium]phenolates. *Rev. Chim. (Bucharest)* **2014**, *65 (2)*, 249-252.

54. **Sarbu, L.G.**; Lungu, N.C.; Forna, N.C.; Birsa, M.L. Synthesis of 4-(2-hydroxyphenyl)-2-dialkylamino-1,3-dithiolium Salts and Corresponding Mesoionic Derivatives. *Rev. Chim. (Bucharest)* **2013**, *64 (12)*, 1404-1407.

55. **Sarbu, L.G.**; Bahrin, L.G. 3-Methylpiperidinyl Carbodithioates as Building Blocks for 1,3-Dithiolium Derivatives. *Acta Chem. Iasi* **2013**, *21*, 47-56. doi:10.2478/achi-2013-0005. https://www.chem.uaic.ro/ro/acta-chemica/ac_vol_21_no1_2013.html

56. **Sarbu, L.G.**; Hrib, C.G.; Birsa, M.L. rac-1-(5-Bromo-2-hydroxyphenyl)-1-oxopropan-2-yl morpholine-4-carbodithioate. *Acta Cryst.*, **2013**, *E69*, o1169. doi:10.1107/s1600536813017509.

57. **Sarbu, L.G.**; Birsa, A.; Hopf, H.; Birsa, M.L. New Bridges In [2.2]Paracyclophanes: The Interaction Of Chalcogenide Halides With *Pseudo-Geminal* Triple Bonds. *Phosphorus, Sulfur, and Silicon, and the Related Elements* **2011**, *186 (5)*, 1246-1250. http://dx.doi.org/10.1080/10426507.2010.524177

58. **Sarbu, L.G.**; Birsa, M.L. Synthesis of Iodine Containing Mesoionic 2-(1,3-Dithiolium)phenolates. *Acta Chem. Iasi* **2011**, *19 (2)*, 125-135.

59. **Sarbu, L.G.***; Birsa, A.; Hopf, H.; Birsa, M. L. Heteroatom Bridged [2.2]Paracyclophanes as Enediyne Analogs. *Acta Chem. Iasi* **2010**, *18*, 186-187.

60. **Sarbu, L.G.**; Birsa, A.; Ignat, L.; Hopf, H.; Birsa, M.L. [2.2]Paracyclophanes: The Interaction of *Pseudo-Geminal* Bisacetylene with Water and Electrophiles. *Acta Chem. Iasi* **2010**, *18*, 71-78.

II. Books

1. Sarbu, L. G., Birsa, M. L., *Introducere în chimia organică*, Ed. Stef, Iași, 2016, 263 pag, ISBN 978-606-575-647-2

2. Sarbu, L. G., Birsa, M. L., *Metode de investigare a mecanismelor de reacție*, Ed. Stef, Iași, 2021, 324 pag, ISBN 978-606-028-707-0

3. Sarbu, L. G., Birsa, M. L., *Medicamente de sinteză*, Ed. Stef, Iași, 2021, 245 pag, ISBN 978-606-028-708-7

4. Sarbu, L. G., *Produși organic bioactivi*, Ed. Stef, Iași, 2021, 177 pag, ISBN 978-606-028-709-4

Date,
December 2025

Assoc. Prof. Laura Gabriela SÂRBU