

**Fișa de îndeplinire a standardelor IOSUD-UAIC pe domeniul Chimie ale Universității  
„Alexandru Ioan Cuza” din Iași în vederea obținerii atestatului de abilitare**

**Candidat**

**Conf. dr. Laura Gabriela SÂRBU**

**I. Îndeplinirea standardelor minime obligatorii stabilite de comisia de Chimie din cadrul CNATDCU**

| <b>Criterii Habilitare</b> | <b>N<sub>max</sub> (*)</b> | <b>FIC (**)</b> | <b>FIC<sub>D</sub> (***)</b> | <b>FIC<sub>AP</sub> (****)</b> | <b>FIC<sub>AC</sub> (*****)</b> | <b>h index</b> |
|----------------------------|----------------------------|-----------------|------------------------------|--------------------------------|---------------------------------|----------------|
| <b>Cerințe</b>             | 50                         | 100             | 70                           | 50                             | 25                              | 13             |
| <b>Realizate</b>           | 36                         | 106.783         | 106.783                      | 73.219                         | 60.369                          | WOS-16         |

(\*) N<sub>max</sub> - primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate;

(\*\*) FIC - factorul de impact cumulat minimal al revistelor în care s-au publicat lucrările în cauză;

(\*\*\*) FIC<sub>D</sub> - factorul de impact cumulat minimal din publicații în domeniile de cercetare declarate;

(\*\*\*\*) FIC<sub>AP</sub> - factorul de impact cumulat minimal din publicații în calitate de autor principal (prim-autor și autor de corespondență);

(\*\*\*\*\* FIC<sub>AC</sub> - factorul de impact cumulat minimal din publicații în calitate de autor de corespondență.

### Listă articole în ordinea descrescătoare a factorului de impact\*

\* Factorul de impact din anul publicării

| Nr. Crt. | Articol                                                                                                                                                                                                                                                                                                                                                                                                                 | FIC   | FIC <sub>D</sub> | FIC <sub>AP</sub> | FIC <sub>AC</sub> |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------|-------------------|-------------------|
| 1.       | Chirita, P.; Duinea, M.I.; Sandu, A.M.; Birsa, L.M.; <b>Sarbu, L.G.</b> ; 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. <i>Corrosion Science</i> <b>2018</b> , <i>138</i> , 154-162. <a href="https://doi.org/10.1016/j.corsci.2018.04.017">https://doi.org/10.1016/j.corsci.2018.04.017</a> | 6.355 | 6.355            |                   |                   |
| 2.       | Birsa, M.L.; <b>Sarbu, L.G.</b> A Structure–Activity Relationship Study on the Antioxidant Properties of Dithiocarbamic Flavanones. <i>Antioxidants</i> <b>2024</b> , <i>13</i> , 963. <a href="https://doi.org/10.3390/antiox13080963">https://doi.org/10.3390/antiox13080963</a>                                                                                                                                      | 6     | 6                | 6                 | 6                 |
| 3.       | Babii, C.; Savu, M.; Motrescu, I.; Birsa, L.M.; <b>Sarbu, L.G.</b> ; Stefan, M. The Antibacterial Synthetic Flavonoid BrCl-Flav Exhibits Important Anti- <i>Candida</i> Activity by Damaging Cell Membrane Integrity. <i>Pharmaceuticals</i> <b>2021</b> , <i>14</i> , 1130. <a href="https://doi.org/10.3390/ph14111130">https://doi.org/10.3390/ph14111130</a>                                                        | 5.215 | 5.215            | 5.215             | 5.215             |
| 4.       | Bahrin, L.G.; <b>Sarbu, L.G.</b> ; Jones, P.G.; Birsa, L.M.; Hopf, H. [2.2]Paracyclophane-Bis(triazole) Systems: Synthesis and Photochemical Behavior. <i>Chem. Eur. J.</i> <b>2017</b> , <i>23</i> (50), 12338-12345. <a href="https://doi.org/10.1002/chem.201701593">https://doi.org/10.1002/chem.201701593</a>                                                                                                      | 5.16  | 5.16             |                   |                   |
| 5.       | Bahrin, L.G.; Nicolescu, A.; Shova, S.; Marangoci, N.L.; Birsa, L.M.; <b>Sarbu, L.G.</b> Nitrogen-Based Linkers with a Mesitylene Core: Synthesis and Characterization. <i>Molecules</i> <b>2021</b> , <i>26</i> , 5952. <a href="https://doi.org/10.3390/molecules26195952">https://doi.org/10.3390/molecules26195952</a>                                                                                              | 4.927 | 4.927            | 4.927             | 4.927             |
| 6.       | Birsa, M.L.; <b>Sarbu, L.G.</b> Hydroxy Chalcones and Analogs with Chemopreventive Properties. <i>Int. J. Mol. Sci.</i> <b>2023</b> , <i>24</i> , 10667. <a href="https://doi.org/10.3390/ijms241310667">https://doi.org/10.3390/ijms241310667</a>                                                                                                                                                                      | 4.9   | 4.9              | 4.9               | 4.9               |
| 7.       | Birsa, M.L.; <b>Sarbu, L.G.</b> Novel Dithiocarbamic Flavanones with Antioxidant Properties—A Structure–Activity Relationship Study. <i>Int. J. Mol. Sci.</i> <b>2024</b> , <i>25</i> , 13698. <a href="https://doi.org/10.3390/ijms252413698">https://doi.org/10.3390/ijms252413698</a>                                                                                                                                | 4.9   | 4.9              | 4.9               | 4.9               |
| 8.       | Birsa, M.L.; <b>Sarbu, L.G.</b> Health Benefits of Key Constituents in <i>Cichorium intybus</i> L. <i>Nutrients</i> <b>2023</b> , <i>15</i> , 1322. <a href="https://doi.org/10.3390/nu15061322">https://doi.org/10.3390/nu15061322</a>                                                                                                                                                                                 | 4.8   | 4.8              | 4.8               | 4.8               |
| 9.       | Moldovan, C.-V.; Savu, M.; Dussert, E.; Aboubacar, H.; <b>Sarbu, L.G.</b> ; Matiut, S.; Cudennec, B.; Krier, F.; Ravallec, R.; Birsa, L.M.; et al. Synthetic Flavonoid BrCl-Flav—An Alternative Solution to Combat ESKAPE Pathogens. <i>Antibiotics</i> <b>2022</b> , <i>11</i> , 1389. <a href="https://doi.org/10.3390/antibiotics11101389">https://doi.org/10.3390/antibiotics11101389</a>                           | 4.8   | 4.8              | 4.8               | 4.8               |
| 10.      | Birsa, M.L.; <b>Sarbu, L.G.</b> An Improved Synthetic Method for Sensitive Iodine Containing Tricyclic Flavonoids. <i>Molecules</i> <b>2022</b> , <i>27</i> , 8430. <a href="https://doi.org/10.3390/molecules27238430">https://doi.org/10.3390/molecules27238430</a>                                                                                                                                                   | 4.6   | 4.6              | 4.6               | 4.6               |
| 11.      | Bahrin, L.G.; Hopf, H.; Jones, P.G.; Birsa, M.L.; <b>Sarbu, L.G.</b> An Approach to Paracyclophane-Based Tetrathiafulvalenes: Synthesis and Characterization of a Pseudo-Geminal [2.2]Paracyclophane 1,3-Dithia-2-Thione. <i>Molecules</i> <b>2020</b> , <i>25</i> , 5262. <a href="https://doi.org/10.3390/molecules25225262">https://doi.org/10.3390/molecules25225262</a>                                            | 4.412 | 4.412            | 4.412             | 4.412             |
| 12.      | Mantea, L.-E.; Moldovan, C.-V.; Savu, M.; <b>Sarbu, L.G.</b> ; Stefan, M.; Birsa, M.L. An Eco-Friendly Method to Synthesize Potent Antimicrobial Tricyclic Flavonoids. <i>Antibiotics</i> <b>2024</b> , <i>13</i> , 798. <a href="https://doi.org/10.3390/antibiotics13090798">https://doi.org/10.3390/antibiotics13090798</a>                                                                                          | 4.3   | 4.3              |                   |                   |
| 13.      | Moldovan, C.-V.; Mantea, L.-E.; Savu, M.; Jones, P.G.; <b>Sarbu, L.G.</b> ; Stefan, M.; Birsa, M.L. Novel Tricyclic Flavonoids as Promising Anti-MRSA Agents. <i>Pharmaceuticals</i> <b>2024</b> , <i>17</i> , 1276. <a href="https://doi.org/10.3390/ph17101276">https://doi.org/10.3390/ph17101276</a>                                                                                                                | 4.3   | 4.3              |                   |                   |

|     |                                                                                                                                                                                                                                                                                                                                                                                                           |       |       |       |       |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|
| 14. | <b>Sarbu, L.G.</b> ; Shova, S.; Peptanariu, D.; Sandu, I.A.; Birsă, L.M.; Bahrin, L.G. The Cytotoxic Properties of Some Tricyclic 1,3-Dithiolium Flavonoids. <i>Molecules</i> <b>2019</b> , <i>24</i> , 2459. <a href="https://doi.org/10.3390/molecules24132459">https://doi.org/10.3390/molecules24132459</a>                                                                                           | 3.267 | 3.267 | 3.267 |       |
| 15. | Birsă, M.L.; Hopf, H.; Jones, P.G.; <b>Sarbu, L.G.</b> ; Bahrin, L.G. [2.2]Paracyclophane Derivatives as Building Blocks for Coordination Polymers. <i>Materials</i> <b>2023</b> , <i>16</i> , 4051. <a href="https://doi.org/10.3390/ma16114051">https://doi.org/10.3390/ma16114051</a>                                                                                                                  | 3.1   | 3.1   | 3.1   | 3.1   |
| 16. | <b>Sarbu, L.G.</b> ; Bahrin, L.G.; Babii, C.; Stefan, M.; Birsă, M.L. Synthetic flavonoids with antimicrobial activity: a review. <i>J. App. Microbiol.</i> <b>2019</b> , <i>127</i> (5), 1282-1290. <a href="https://doi.org/10.1111/jam.14271">https://doi.org/10.1111/jam.14271</a>                                                                                                                    | 3.066 | 3.066 | 3.066 |       |
| 17. | Bahrin, L.G.; <b>Sarbu, L.G.</b> ; Hopf, H.; Jones, P.G.; Babii, C.; Stefan, M.; Birsă, M.L. The influence of halogen substituents on the biological properties of sulfur-containing flavonoids. <i>Bioorg. Med. Chem.</i> <b>2016</b> , <i>24</i> (14), 3166-3173. <a href="http://dx.doi.org/10.1016/j.bmc.2016.05.044">http://dx.doi.org/10.1016/j.bmc.2016.05.044</a>                                 | 2.93  | 2.93  |       |       |
| 18. | Babii, C.; Mihalache, G.; Bahrin, L.G.; Neagu, A.N.; Gostin, I.; Mihai, C. T.; <b>Sarbu, L.G.</b> ; Birsă, L.M.; Stefan, M. A novel synthetic flavonoid with potent antibacterial properties: In vitro activity and proposed mode of action. <i>PLoS One</i> , <b>2018</b> , <i>13</i> (4), 1-15. <a href="https://doi.org/10.1371/journal.pone.0194898">https://doi.org/10.1371/journal.pone.0194898</a> | 2.776 | 2.776 |       |       |
| 19. | <b>Sarbu, L.G.</b> ; Bahrin, L.G.; Jones, P.G.; Birsă, L.M.; Hopf, H. [2.2]Paracyclophane derivatives containing tetrathiafulvalene moieties. <i>Beilstein J. Org. Chem.</i> <b>2015</b> , <i>11</i> , 1917–1921. <a href="https://doi.org/10.3762/bjoc.11.207">https://doi.org/10.3762/bjoc.11.207</a>                                                                                                   | 2.697 | 2.697 | 2.697 |       |
| 20. | Bahrin, L.G.; Hopf, H.; Jones, P.G.; <b>Sarbu, L.G.</b> ; Babii, C.; Mihai, A.C.; Stefan, M.; Birsă, L.M. Antibacterial structure–activity relationship studies of several tricyclic sulfur-containing flavonoids. <i>Beilstein J. Org. Chem.</i> <b>2016</b> , <i>12</i> , 1065–1071. <a href="https://doi.org/10.3762/bjoc.12.100">https://doi.org/10.3762/bjoc.12.100</a>                              | 2.337 | 2.337 |       |       |
| 21. | <b>Sarbu, L.G.</b> ; Hopf, H.; Grunenberg, J.; Birsă, M.L. Reduction of Pseudo-geminal Bis(ethynyl)-Substituted [2.2]Paracyclophanes. <i>Synlett</i> , <b>2015</b> , <i>26</i> , 87-90. DOI: 10.1055/s-0034-1378935. <a href="http://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0034-1378935">http://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0034-1378935</a>        | 2.323 | 2.323 | 2.323 |       |
| 22. | Chirita, P.; Duinea, M.I.; <b>Sarbu, L.G.</b> ; Birsă, M.L.; Baibarac, M.; Sava, F.; Matei, E. Oxidation of chalcopryrite in air-equilibrated acidic solution: inhibition with phenacyl derivatives. <i>Trans. Nonferrous Met. Soc. China</i> <b>2020</b> , <i>30</i> , 1928-1942. <a href="https://doi.org/10.1016/S1003-6326(20)65351-1">https://doi.org/10.1016/S1003-6326(20)65351-1</a>              | 2.197 | 2.197 |       |       |
| 23. | Meziere, C.; Allain, M.; Oliveras-Gonzalez, C.; Cauchy, T.; Vanthuyne, N.; <b>Sarbu, L.G.</b> ; Birsă, L.M.; Pop, F.; Avarvari, N. Tetrathiafulvalene-[2.2]paracyclophanes: Synthesis, crystal structures, and chiroptical properties. <i>Chirality</i> <b>2018</b> , <i>30</i> (5), 568-575. <a href="https://doi.org/10.1002/chir.22831">https://doi.org/10.1002/chir.22831</a>                         | 1.927 | 1.927 |       |       |
| 24. | <b>Sarbu, L.G.</b> ; Lungu, N.C.; Sandu, I. 2-Alkylimino-4-(2-Hydroxyaryl)-1,3-Dithiols Derivatives. <i>Rev. Chim. (Bucharest)</i> <b>2019</b> , <i>70</i> (3), 745-748.                                                                                                                                                                                                                                  | 1.755 | 1.755 | 1.755 | 1.755 |
| 25. | <b>Sarbu, L.G.</b> ; Lungu, N.C.; Sandu, I.; Chirita, P.; Bahrin, L.G. Synthesis of 2-Pyrrolydiny-1,3-Dithiolium Derivatives from Propiophenones. <i>Rev. Chim. (Bucharest)</i> <b>2019</b> , <i>70</i> (4), 1311-1314.                                                                                                                                                                                   | 1.755 | 1.755 | 1.755 | 1.755 |
| 26. | Lungu, C.N.; Sandu, I.; <b>Sarbu, L.G.</b> * 5-Methyl-4-(5-Bromo-2-hydroxyphenyl)-1,3-Dithiolium Derivatives. <i>Rev. Chim. (Bucharest)</i> <b>2018</b> , <i>69</i> (12), 3549-3552.                                                                                                                                                                                                                      | 1.605 | 1.605 | 1.605 | 1.605 |
| 27. | Matei, M.; Sandu, I.; Birsă, M.L.; <b>Sarbu, L.G.</b> ; Simion, L. New 4-(4-Hydroxyaryl)-5-Methyl-1,3-Dithiol-2-ylidene Derivatives. <i>Rev. Chim. (Bucharest)</i> <b>2017</b> , <i>68</i> (1), 81-84.                                                                                                                                                                                                    | 1.412 | 1.412 | 1.412 | 1.412 |
| 28. | Gorodea, I.A.; Sandu, I.; <b>Sarbu, L.G.</b> Novel 4-(3-Bromo-2-hydroxy-5-methylphenyl)-1,3-Dithiol-2-ylidene Derivatives. <i>Rev. Chim. (Bucharest)</i> <b>2017</b> <i>68</i> (9), 1988-1991.                                                                                                                                                                                                            | 1.412 | 1.412 | 1.412 | 1.412 |
| 29. | Pavel, S.; Hopf, H.; Jones, P.G.; Asaftei, I.V.; <b>Sarbu, L.G.</b> ; Birsă, L.M. Click reactions with pseudo-geminal bis(azido-methylene)[2.2]paracyclophane <i>Monatsh. Chem.</i> <b>2016</b> , <i>147</i> (12), 2179-2183. <a href="http://dx.doi.org/10.1007/s00706-016-1842-3">http://dx.doi.org/10.1007/s00706-016-1842-3</a>                                                                       | 1.282 | 1.282 |       |       |

|       |                                                                                                                                                                                                                                                                                                                                                                                                                      |         |         |        |        |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|--------|--------|
| 30.   | Dirtu, D.; Lungu, N.C.; Chirita, P.; Sandu, I.G.; Birsă, M.L.; Earar, K.; <b>Sarbu, L.G.*</b> Synthesis of Novel 4-(3,5-Dibromo-2-hydroxyphenyl)-5-Methyl-1,3-Dithiol-2-ylidene Derivatives. <i>Rev. Chim. (Bucharest)</i> <b>2016</b> , 67 (3), 534-537.                                                                                                                                                            | 1.232   | 1.232   | 1.232  | 1.232  |
| 31.   | Toader, E.; Bahrin, L.G.; Jones, P.G.; Hopf, H.; <b>Sarbu, L.G.</b> ; Stoleriu, G. Synthesis of New Morpholine Containing Flavonoids with Potential Biological Applications. <i>Rev. Chim. (Bucharest)</i> <b>2016</b> , 67 (8), 1520-1522.                                                                                                                                                                          | 1.232   | 1.232   | 1.232  | 1.232  |
| 32.   | <b>Sarbu, L.G.</b> ; Hopf, H.; Jones, P.G.; Bahrin, L.G.; Birsă, M.L. Methylamine-induced ring opening of 1,3-dithiolium cations. <i>Arkivoc</i> <b>2019</b> , 174-179. <a href="https://doi.org/10.24820/ark.5550190.p011.064">https://doi.org/10.24820/ark.5550190.p011.064</a>                                                                                                                                    | 1.003   | 1.003   | 1.003  |        |
| 33.   | Chirita, P.; Hrib, C.G.; Sandu, I.; Lungu, N.C.; <b>Sarbu, L.G.*</b> ; Earar, K. A New Class of 4-(Hydroxyaryl)-1,3-Dithiolium Chlorides; <i>Rev. Chim. (Bucharest)</i> 2015, 66 (8), 1151-1154.                                                                                                                                                                                                                     | 0.956   | 0.956   | 0.956  | 0.956  |
| 34.   | Dirtu, D.; Asaftei, I.V.; Chirita, P.; Sandu, I.G.; Birsă, M.L.; Earar, K.; <b>Sarbu, L.G.*</b> Synthesis of 1,3-Dithiol-2-ylum Salts by Functionalization of Some Toluenols. <i>Rev. Chim. (Bucharest)</i> , <b>2015</b> , 66 (12), 2028.                                                                                                                                                                           | 0.956   | 0.956   | 0.956  | 0.956  |
| 35.   | <b>Sarbu, L.G.</b> ; Bahrin, L.G.; Hopf, H.; Birsă, M.L. Chalcogenide Induced Intramolecular Interactions in [2.2]Paracyclophanes: A Review. <i>Studia UBB Chemia</i> <b>2019</b> , 64, 7-16, doi:10.24193/subbchem.2019.3.01. <a href="http://www.chem.ubbcluj.ro/~studiachemia/issues/chemia2019_3/01Sarbu_et al_7_16.pdf">http://www.chem.ubbcluj.ro/~studiachemia/issues/chemia2019_3/01Sarbu_et al_7_16.pdf</a> | 0.494   | 0.494   | 0.494  |        |
| 36.   | <b>Sarbu, L.G.</b> Synthesis of 1,3-Dithiolium Salts Containing N-Methylpiperazine. <i>Acta Chem. Iasi</i> <b>2023</b> , 31, 119-128. doi:10.47743/achi-2023-2-0008. <a href="https://www.chem.uaic.ro/ro/acta-chemica/aci_vol_31_2_2023.html">https://www.chem.uaic.ro/ro/acta-chemica/aci_vol_31_2_2023.html</a>                                                                                                   | 0.4     | 0.4     | 0.4    | 0.4    |
|       |                                                                                                                                                                                                                                                                                                                                                                                                                      |         |         |        |        |
| Total |                                                                                                                                                                                                                                                                                                                                                                                                                      | 106.783 | 106.783 | 73.219 | 60.369 |

### Îndeplinirea indicelui Hirsch (*h*-index)

| Cerința <i>h</i> -index | Realizat                                        | Status criteriu |
|-------------------------|-------------------------------------------------|-----------------|
| 13                      | Web of Science-16, Scopus-15, Google Scholar-15 | Îndeplinit      |

Data: 29.01.2025

Semnătura

Conf. dr. Laura Gabriela SÂRBU