

## Listă lucrări (toată activitatea didactică)

### 1. Articole indexate ISI

1. A. Căta; I.M.C. Ienașcu; A. Frum; D. Ursu; P. Svera; C. Orha; G. Rusu; A.A. Chiș; C.M. Dobrea; C. Morgovan; **R. Pop**. Preparation and Characterization of a Novel Salicin–Cyclodextrin Complex. *Pharmaceutics* **2024**, 16, 369.
2. **R. Pop**, A. Căta, I.M.C. Ienașcu. Theoretical Evaluation of the Properties of Nitrogen-Doped C24 Fullerenes and Their Interactions with Two Adamantane-Derived Antivirals. *Chemistry* **2023**, 5(4), 2376-2391.
3. A. Căta, I.M.C. Ienașcu, M. Ștefănuț, D. Roșu, **R. Pop**. Properties and Bioapplications of Amphiphilic Janus Dendrimers: A Review. *Pharmaceutics* **2023**, 15(2), 589.
4. **R. Pop**, J. van Staden. Theoretical Evaluation of the Interactions between Metal-Phthalocyanines and Various Fullerenes as Delivery Systems. *Chemistry-Switzerland* **2022**, 4(3), 1016-1027.
5. I.M.C. Ienașcu, A. Căta, M.Ștefănuț, I. Popescu, G. Rusu, P. Sfârloagă, D. Ursu, C. Moșoarcă, A. Dabici, C. Danciu, D. Muntean, **R. Pop**. Novel Chloro-Substituted Salicylanilide Derivatives and Their  $\beta$ -Cyclodextrin Complexes: Synthesis, Characterization, and Antibacterial Activity. *Biomedicines* **2022**, 10(7), 1740.
6. D. Muntean, M.N. Ștefănuț, A. Căta, V. Buda, C. Danciu, R. Bănică, **R. Pop**, M. Licker, I.M.C. Ienașcu. Symmetrical Antioxidant and Antibacterial Properties of Four Romanian Cruciferous Extracts. *Symmetry* **2021**, 13(5), 893.
7. **R. Pop**, A. Cata, M. Ștefănuț, I. M. C. Ienașcu. A computational study of the interactions between anthocyanins and cyclodextrins. *Z. Naturforsch. C Biosci.* **2020**, 75(11-12):433-441.
8. **R. Pop**, M. Medeleanu. Docking Studies of Porphyrin-based Photosensitizers on Rhombellanes. *Croat. Chem. Acta* **2020**, 93(4), 329-337.
9. **R. Pop**, D. Janezic. Interactions of Indomethacin with Functionalized Rhombellanes - a Molecular Docking Study. *Croat. Chem. Acta* **2019**, 92(4), 1-7.
10. **R. Pop**. Evaluation of the Radical-Scavenging Properties of Various Flavonols in Ethanol Environment: an ab initio Study. *Croat. Chem. Acta* **2019**, 92(3), 1-10.
11. I. M. C. Ienașcu, M. N. Ștefănuț, M. C. Pascariu, I. M. Popescu, A. Căta, **R. Pop**. Complexation of [2-(2-bromophenylcarbonyl)phenoxy]acetic acid ethyl ester with  $\beta$ -cyclodextrin. *Rev. Roum. Chim.* **2019**, 64(10), 849-857.

12. M. V. Diudea, A. Pirvan-Moldovan, **R. Pop**, M. Medeleanu. Energy of Graphs and Remote Graphs in Hypercubes, Rhombellanes and Fullerenes. *MATCH* **2018**, 80(3), 835-852.
13. I. M. C. Ienascu, T. Balaes, C. V. Petre, **R. Pop**, A. Cata, M. N. Stefanut, P. Albu, M. Poenaru. Novel N-(2-bromo-phenyl)-2-hydroxy-benzamide Derivatives with Antifungal Activity. *Revista de Chimie* **2018**, 69(7): 1876-1880.
14. M. Medeleanu, **R. Pop\***, M. Andoni, M. Diudea. The influence of aza-substitution on the aromaticity of sumanene. *Studia Universitatis Babes-Bolyai, Chemia* **2017**, 62(4): 105-119.
15. I. Ienascu, **R. Pop**, A. Cata, M. N. Stefanut, I. Popescu. Synthesis and characterization of some new 5-chloro-2-hydroxy-N-phenylbenzamide derivatives. *Rev. Roum. Chim.* **2017**, 62(6-7): 475-479.
16. **R. Pop**, M. Medeleanu, J. van Staden, M. Diudea. Theoretical Studies Regarding the Aromaticity of Some Non-Planar Circulenes. *Zeitschrift für Physikalische Chemie* **2016**, 230(2), 285-296.
17. M. Andoni, M. Medeleanu, M. Ștefănuț, A. Căta, I. Ienașcu, C. Tanasie, **R. Pop\***. Theoretical determination of the redox electrode potential of cyanidin, *J. Serb. Chem. Soc.* **2016**; 81(2), 177–186.
18. I. Păușescu, M. Medeleanu, **R. Pop**, Z. Simon, O. Costișor. A DFT study on 2-(hydroxy-2-benzylidene)-cyclohexanone. *Rev. Roum. Chim.* 2016, 61 (8-9), 711-719.
19. A. Pirvan Moldovan, S. Ersali, **R. Pop**. QSAR study of phenotyazines. *Studia UBB Chemia* **2016**, 61(1), 305-310.
20. A. Căta, M.N. Ștefănuț, R. Pop, C. Tănasie, C. Moșoarcă, A.D. Zamfir. Evaluation of Antioxidant Activities of Some Small Fruits Containing Anthocyanins Using Electrochemical and Chemical Methods, *Croat. Chem. Acta* **2016**, 89(1), 37-48.
21. M. Andoni, J. M. Pătrașcu, C. A. Dehelean, G. M. Simu, C. Șoica, D. Antal, **R. Pop\***. Comparisons Between Tridentate Bis(benzazoles)-pyridine and Bis(benzazoles)triazine Ligands: a Theoretical Study. *Croat. Chem. Acta* 2015, 88, 3, 241-246.
22. **R. Pop**, M. Diudea, M. Medeleanu, M. Andoni. Theoretical evaluation of the aromatic character of aza-phospha-coronenes (**2015**). *Studia UBB Chemia* 2015; 60(1), 195-202.
23. **R. Pop**, M. Ilici, M. Andoni, V. N. Bercean, C. Muntean, M. M. Venter, I. Julean. Theoretical considerations regarding the thione-thiol tautomerism in 2-(5-mercapto-1,3,4-thiadiazol-2-ylthio)acetic acid, *Acta Chim. Slov.* **2015**, 62(1), 8-14.

24. **R. Pop**, J. Van Staden, M. Diudea. Nitrogen-containing coronenes: theoretical evaluation of the influence of aza-substitution on their aromaticity, *Z. Naturforschung A* **2015**, 70(3):171-175.
25. M. Andoni, **R. Pop\***, C. A. Dehelean, C. Șoica, G. M. Simu, M. Ilici, S. Ardelean. Theoretical study regarding the reactivity of 5-nitrofur-2-carboxaldehyde thiosemicarbazone, *Rev. Chim.* **2015**, **66** (5), 637-639.
26. I. Păușescu, M. Medeleanu, M. Ștefănescu, F. Peter, **R. Pop**. A DFT study on the stability and aromaticity of heterobenzenes containing 15-group elements, *Heteroatom Chem.* **2015**, 26(3), 206–214.
27. **R. Pop**, M. Medeleanu, M. V. Diudea, B. Szeffler, J. Cioslowski. Fullerenes Patched by Flowers with Octagonal Core, *Cent. Eur. J. Chem.* **2014**, 12(1), 90-97.
28. L. Mocanu, M. Mracec, M. Medeleanu, M. Mracec, **R. Pop**. Aromatic  $\lambda^3$ -heterocycles. 19. Thermodynamic stability of alternant conjugated heterocycles  $(\lambda^3\text{-X-}\lambda^3\text{-Y})_3$  (X,Y = CH, N, P, As, Sb, Bi) calculated by semiempirical MO, ab initio and DFT methods (**2014**). *Rev. Roum. Chim.* 59 (11-12), 1077-1087.
29. **R. Pop**, M. Andoni, J. Van Staden, I. Păușescu, M. Medeleanu. Theoretical considerations regarding the aromaticity of  $\lambda^3$ -heterobenzenes containing 15-group elements, *Dig. J. Nanomater. Bios.* 2013, 8(4), 1739-1750.
30. **R. Pop**, M. Andoni, Iulia Pausescu, Mihai Medeleanu. Comparisons between the aromatic character of 1,2,4- $(\lambda^3\text{-CH-}\lambda^3\text{-X})_3$  and 1,3,5- $(\lambda^3\text{-CH-}\lambda^3\text{-X})_3$  heterobenzenes, *Rev. Chim.* **2013**, 64(9), 942-945.
31. M. Stefanut, A. Căta, **R. Pop**, C. Tănasie, D. Boc, I. Ienașcu, V. Ordodi. Anti-Hyperglycemic Effect of Bilberry, Blackberry and Mulberry Ultrasonic Extracts on Diabetic Rats, *Plant Foods Hum Nutr* **2013**, 68(4), 378-384.
32. **R. Pop**, M. Medeleanu, M. V. Diudea, B. Szeffler, J. Cioslowski. Fullerenes Patched by Flowers, *Cent. Eur. J. Chem.*, **2013**, 11(4), 527-534.
33. **R. Pop**, M. N. Ștefănuț, A. Căta, C. Tănasie, M. Medeleanu. *Ab initio* study regarding the evaluation of the antioxidant character of cyanidin, delphinidin and malvidin, *Cent. Eur. J. Chem.* **2012**, 10(1), 180-186.
34. **R. Pop**, M. Medeleanu, C. Csunderlik. Theoretical Considerations on the Hydrolysis of 2-Dichloromethylbenzimidazole, *Int. J. Quant. Chem.*, **2011**, 111(12), 2868-2873.
35. M. N. Ștefănuț, A. Căta, **R. Pop**, C. Moșoarcă, A. D. Zamfir. Anthocyanins HPLC-DAD and MS characterization, total phenolics and antioxidant activity of some berries extracts, *Analytical Letters* **2011**, 44(18), 2843-2855.

36. C. M. Moldovan, O. Oniga, A. Pârvu, B. Tiperciuc, P. Verite, A. Pîrnău, O. Crișan, M. Bojiță, **R. Pop**. Synthesis and anti-inflammatory evaluation of some new acyl-hydrazones bearing 2-aryl-thiazole, *Eur. J. Med. Chem.*, **2011**, 46, 526-534.
37. **R. Pop**, M. Medeleanu, C. Csunderlik. Theoretical study about the reactivity of formyl groups in heterocyclic derivatives, *Rev. Chim.* **2010**, 61(9), 853.
38. **R. Pop**, M. Medeleanu, C. Csunderlik, M. Mracec. Aromaticity Evaluation of  $\Lambda^3$ -Heterobenzenes using the Magnetic Criterion and Reactivity Based Descriptors, *Rev. Chim.* **2010**, 61(5), 483.
39. **R. Pop**, M. Medeleanu, M. Mracec. Evaluation of the Aromatic Character of  $\Lambda^3$ -Heterobenzenes Using the Magnetic Criterion, *Studia UBB Chemia*, **2010**, LV, 4, 147-152.
40. M. Saheli, **R. Pop**, M. L. Pop, M. V. Diudea. Omega Polynomial in Oct-P4Trs Network, *Studia UBB Chemia*, **2010**, LV, 4, 215-218.
41. A. E. Segneanu, **R. Pop**, I. Balcu, C. Macarie, M. Milea, R. Martagiu, C. G. Vaszilcsin. Green synthesis of symmetrical carbonate-FT-IR study, *Environ. Eng. and Manag. J.* **2010**, 9(8), 1139-1144.
42. C. G. Vaszilcsin, A. Segneanu, I. Balcu, **R. Pop**, F. Fitigau, M. C. Mirica. Eco-friendly extraction and separation methods of capsaicines, *Environ. Eng. and Manag. J.* **2010**, 9(7), 971-976.
43. M. N. Ștefănuț, A. Căta, I. Ienașcu, C. Tănăsie, **R. Pop**. The Electrochemical Behavior of some Berries Extracts, *Studia UBB Chemia*, **2009**, Special Issue 1, 7.
44. C. A. Macarie, A.E. Segneanu, I. Balcu, **R. Pop**, G. Burtica, M. Ungurean, I. Grozescu. Use of alkaline lyophilization process for lignocellulosic biomass pretreatment, *Dig. J. Nanomater. Bios.* **2012**, 7(4), 1577-1586.
45. M. N. Ștefănuț, Z. Ūrmösi, F. Fițigau, A. Căta, P. Sfîrloagă, **R. Pop**, C. Tănăsie, D. Boc. Recovery of precious metals from waste electronic equipment, *Envir. Eng. Manag. J.* **2013**, 12(5), 1023-1029.
46. C. A. Macarie, A.-E. Segneanu, I. Balcu, **R. Pop**, G. Burtica, V.-D. Gherman. Comparative study on microorganisms used for the bioethanol production, *Low Carbon Economy*, **2011**, 2, 193-238.

## 2. Articole indexate BDI

1. B. Szeffler, **R. Pop**. Aromaticity of fullerenes, the way to their functionalization. *Iran. J. Math. Chem.* **2019**, 10(1), 71-91.
2. A. Căta, M. N. Ștefănuț, C. Tănasie, **R. Pop**. Comparative analysis of bilberries alcoholic extracts regarding to anthocyanins content, total phenolics and antioxidant activity, *Ovidius University Annals of Chemistry*, **2010**, 21(1), 15-19.
3. M. N. Ștefănuț, A. Căta, **R. Pop**, C. Tănasie, B. Pinteș, I. David. Thermal stability of anthocyanins from *Vaccinium myrtillus* L. methanolic extract. *Journal of Agroalimentary Processes and Technologies*, **2010**, 16(1), 36-40.
4. I. David, M. N. Ștefănuț, A. Căta, I. Ienașcu, **R. Pop**, C. Tănasie, I. Balcu. *Study of anthocyanins from Vaccinium Myrtillus L. frozen fruits*, *Journal of Agroalimentary Processes and Technologies*, **2009**, 15(3), 348-352.

## 3. Cărți și capitole de cărți

1. M. Motoc (coord.), D. Pușcașiu, M. Vaida, A. Jianu, **R. Pop**, A. Alexa, L. Stana. Biologie. Teste pentru concursul de admitere tip II. Ed. V. Babeș Timișoara, **2024**, ISBN 978-606-786-375-8.
2. **R. Pop**, M. Andoni. Practical laboratory for general and inorganic chemistry. Ed. V. Babeș Timișoara, **2023**, ISBN 978-606-786-311-6.
3. **R. Pop**, M. Andoni. General chemistry course for pharmacy students. Ed. V. Babeș Timișoara, **2023**, ISBN 978-606-786-310-9.
4. M. Motoc (coord.), A. Jianu, M. Vaida, **R. Pop**, D. Pușcașiu, A. Alexa. Biologie. Teste pentru concursul de admitere la Facultatea de farmacie. Ed. V. Babeș Timișoara, **2023**, ISBN 978-606-786-306-2.
5. M. Motoc (coord.), A. Jianu, M. Vaida, **R. Pop**, D. Pușcașiu, A. Alexa. Biologie. Teste pentru concursul de admitere la Facultatea de farmacie. Ed. V. Babeș Timișoara, **2022**, ISBN 978-606-786-270-6.
6. M. Andoni, **R. Pop**. Chimie inorganique. Notes de cours. Ed. V. Babeș Timișoara, **2022**, ISBN 978-606-786-278-2.
7. **R. Pop**, M. Andoni. Curs de chimie generală pentru studenții farmaciști. Ed. V. Babeș Timișoara, **2021**, ISBN 978-606-786-231-7.

8. **R. Pop**. Chimie anorganică. Note de curs. Ed. V. Babeş Timișoara, **2019**, ISBN 978-606-786-134-1.

9. M.V. Putz, O. Ori, M.V. Diudea, B. Szeffler, **R. Pop**. Bondonic Chemistry: Spontaneous Symmetry Breaking of the Topo-reactivity on Graphene. Distance, Symmetry, and Topology in Carbon Nanomaterials, pp.345-389, Editors: Ashrafi, Ali Reza, Diudea, Mircea V., ISBN 978-3-319-31584-3, Springer, **2016**.

10. **R. Pop**, M. Andoni, Lucrări practice de chimie generală și anorganică, Ed. Victor Babeş Timișoara, **2015**, ISBN 978-606-8456-56-0.

11. M.I. Iorga, **R. Pop**, M.C. Mirica, D. Buzatu. Methods for the Enhancement of Mass Transport at the Recovery of Metal Ions from Hydroelectrometallurgical Processes, Recent Researches in Metallurgical Engineering - From Extraction to Forming, Mohammad Nusheh, Horacio Garza Ahuett and Alejandro Arrambide (Ed.), ISBN: 978-953-51-0356-1, InTech, **2012**.

12. I. Neda, P. Vlazan, **R. Pop**, P. Sfarloaga, I. Grozescu, A.E. Segneanu. Peptide and Amino Acids Separation and Identification from Natural Products, Analytical Chemistry, Dr. Ira S. Krull (Ed.), ISBN: 978-953-51-0837-5, InTech, **2012**.

13. I. Balcu, C.A. Macarie, A.E. Segneanu, **R. Pop**. Combined Microwave-Acid Pretreatment of the Biomass, Progress in Biomass and Bioenergy Production, Syed Shahid Shaukat (Ed.), ISBN: 978-953-307-491-7, InTech, **2011**.

14. **Oana-Raluca Pop**. Sinteza și reactivitatea unor combinații carbonilice ale compușilor heterociclici aromatici, Ed. Politehnica, **2010** (teză de doctorat): ISBN: 978-606-554-112-2.

#### 4. Brevete de invenție

1. Peter F., Macarie A.C., Iorga M.I., Balcu I., Segneanu A.E., **Pop R.O.**, Mirica M.C. Procedeu de tratare a unei biomase lignocelulozice (RO 127196 B1) OSIM Bucuresti.

2. Ștefănuț M., Cata A., **Pop R.**, Tănăsie D., Balcu I., Boc I. Supliment nutritiv cu proprietăți hipoglicemizante și antioxidante, și un procedeu pentru obținerea acestuia (RO 128709 A2) OSIM București.

3. Buzatu D., Iorga M., Mirica M., Urmoși Z., **Pop R.**, Balcu I., Mirica N. Sistem de vibrație a elementelor statice/electrozilor cu aplicații în procese chimice și electrochimice (RO 128016 B1) OSIM București.