

LISTA COMPLETĂ DE LUCRĂRI

Candidat: Conf. dr. VARVARA Simona Camelia

a) Lista celor maxim 10 lucrări reprezentative

1. G. Damian, **Simona Varvara**, Assessment of *Cyprinus carpio* Scales as a low-cost and effective biosorbent for the removal of heavy metals from the acidic mine drainage generated at Rosia Montana Gold Mine (Romania), *Water* 14(22), 2022, Article Number 3734, IF=3 (Q2); <https://doi.org/10.3390/w14223734>
2. **Simona Varvara**, C. Berghian-Grosan, R. Bostan, R. Lucacel Ciceo, Z. Salarvand, M. Talebian, K. Raeissi, J. Izquierdo, R. M. Souto, Experimental characterization, machine learning analysis and computational modelling of the high effective inhibition of copper corrosion by 5-(4-pyridyl)-1,3,4-oxadiazole-2-thiol in saline environment, *Electrochimica Acta* 398, 2021, Article Number 139282, IF =6.6 (Q1); <https://doi.org/10.1016/j.electacta.2021.139282>
3. **Simona Varvara**, S. A. Dorneanu, A. Okos, L. M. Mureșan, R. Bostan, M. Popa, D. Marconi, P. Ilea, Dissolution of metals in different bromide-based systems: electrochemical measurements and spectroscopic investigations, *Materials* 13(16) 2020, Article Number 3630, IF= 3.1 (Q1); <https://doi.org/10.3390/ma13163630>
4. **Simona Varvara**, G. Canigla, J. Izquierdo, R. Bostan, L. Găină, O. Bobiș, R. M. Souto, Multiscale electrochemical analysis of the corrosion control of bronze in simulated acid rain by horse-chestnut (*Aesculus hippocastanum L.*) extract as green inhibitor, *Corrosion Science* 165, 2020, Article Number 108381, IF = 7.4 (Q1); <https://doi.org/10.1016/j.corsci.2019.108381>
5. **Simona Varvara**, Roxana Bostan; O Bobiș, L. Găină, F. Popa, V. Mena, R. M. Souto, Propolis as a green corrosion inhibitor for bronze in weakly acidic solution, *Applied Surface Science*, 426, 2018, pp. 1100-1112, IF = 6.3 (Q1); <https://doi.org/10.1016/j.apsusc.2017.07.230>
6. R. Bostan, **Simona Varvara**, L. Găină, T. Petrișor Jr., L.M. Mureșan, Protective effect of inhibitor-containing nitrocellulose lacquer on artificially patinated bronze, *Progress in Organic Coatings*, 111, 2017, pp. 416-427; IF = 6.5 (Q1); <https://doi.org/10.1016/j.porgcoat.2016.08.004>
7. I. Rotaru, **Simona Varvara**, L. Găină, L.M. Mureșan, Antibacterial drugs as corrosion inhibitors for bronze surfaces in acidic solutions, *Applied Surface Science* 321, 2014, pp. 188-196, IF =6.7 (Q1); <https://doi.org/10.1016/j.apsusc.2014.09.201>
8. **Simona Varvara**, M. Popa, R. Bostan, G. Damian, Preliminary considerations on the adsorption of heavy metals from acidic mine drainage using natural zeolite, *Journal of Environmental Protection and Ecology*, 14 (4) 2013, pp.1506-1514, IF = 0.507 (Q4); WOS:000336189800005
9. I. Zamblau, **Simona Varvara**, L. M. Muresan, Corrosion behavior of Cu-SiO₂ nanocomposite coatings obtained by electrodeposition in the presence of cetyl trimethyl ammonium bromide, *Journal of Materials Science* 46(20), 2011, pp. 6484-6490; IF=3.5 (Q2); <https://doi.org/10.1007/s10853-011-5594-5>
10. L. Mureșan, **Simona Varvara**, E. Stupnišek-Lisac, H. Otmačić, K. Marušić, S. Horvat-Kurbegović, L. Robbiola, K. Rahmouni, H. Takenouti, Protection of bronze covered with patina by innocuous organic substances, *Electrochimica Acta* 57(27), 2007, pp. 7770-7779, IF = 6.6 (Q1); <https://doi.org/10.1016/j.electacta.2007.02.024>

b) teza de doctorat

“Aspecte morfologice și cinetice privind electrodepunerea cuprului din soluții acide pe bază de sulfat în prezență de aditivi organici”, Universitatea „Babeș-Bolyai” din Cluj-Napoca, 2003
Conducător științific: Prof. dr. Ionel Cătălin Popescu

c) brevete de invenție și alte titluri de proprietate industrială – nu este cazul

d) cărți publicate și capitole în cărți

C1. **Simona Camelia Varvara** și Liana Maria Mureșan, “Metode electrochimice de investigare electrodepunerii metalelor. Studiul electrodepunerii cuprului”, Editura Casa Cărții de Știință, Cluj-Napoca, **2008**, 151 pp. (ISBN 978-973-133-290-1)

CC1. Liana Maria Mureșan și **Simona Camelia Varvara**, “Leveling and brightening mechanisms in metal electrodeposition”, în „Metal Electrodeposition”, (Editor: Nunez Magdalena), Nova Science Publishers, USA, **2005**, pp. 1-45 (ISBN 1-59454-456-5)

CC2. B. Ciuta, C. Florescu, M. Gligor, P. Mazare, C. Suteu, **Simona Varvara**, *Arheometria* în “A history lesson: pottery manufacturing 8000 years ago”, Editura Aeternitas, Alba Iulia, **2007**, pp. 127-133 (ISBN 978-973-7942-86-9)

e) articole/studii in extenso publicate în reviste din fluxul științific internațional principal

Articole publicate în reviste cotate ISI cu factor de impact

1. R. Bostan, M. Glevitzky, **Simona Varvara**, G-A. Dumitrel, G.I. Rusu, M. Popa, I. Glevitzky, M.L. Vică, *Utilization of natural adsorbents in the purification of used sunflower and palm cooking oils*, **Applied Sciences-Basel** 14(11), 2024, 4417, IF=2.5, <https://doi.org/10.3390/app14114417>

2. M.S. Kirgiz, J. Mirza, S. Cuc, D. Prodan, C. Sarosi, I. Perhaita, R. Carpa, D. Popa, **Simona Varvara**, M. Popa, *Physico-Antibacterial feature and SEM morphology of bio-hydraulic lime mortars incorporating nano-graphene oxide and binary combination of nano-graphene oxide with nano silver, fly ash, zinc, and titanium powders*, **Buildings** **2023**, 13(1), 172, IF=3.1, <https://doi.org/10.3390/buildings13010172>

3. D. Piciu, S. Bran, M. Moldovan, **Simona Varvara**, A. Piciu, S. Cuc, C. Moisescu-Goia, E. Barbus, A. Mester, F. Onisor, *Radioiodine-131 Therapy used for differentiated thyroid cancer Can impair titanium dental implants: an in vitro analysis*, **Cancers**, **2023**, 15(9), 2558, IF=4.5, <https://doi.org/10.3390/cancers15092558>

4. D. Popa, D. Prodan, Simona Varvara, M. Popa, S.Cuc, C. Sarosi, M. Moldovan, R. Ivan, R. Ene, *Properties evolution of some hydraulic mortars incorporating graphene oxides*, **Buildings**, **2022**, 12(6), 864, IF=3.1, <https://doi.org/10.3390/buildings12060864>

5. G. Damian, **Simona Varvara**, *Assessment of Cyprinus carpio scales as a low-cost and effective biosorbent for the removal of heavy metals from the acidic mine drainage generated at Rosia Montana Gold Mine (Romania)*, **Water**, **2022**, 14(22), 3734, IF=3, <https://doi.org/10.3390/w14223734>

6. **Simona Varvara**, G. Damian, R. Bostan, M. Popa, *Inhibition effect of Tantum Rosa drug on the corrosion of copper in 3.5 wt.% NaCl solution*, **International Journal of Electrochemical Science**, **2022**, 17(9), 220958, IF=1.3, <https://doi.org/10.20964/2022.09.56>

7. **Simona Varvara**, C. Berghian-Grosan, G. Damian, M. Popa, F. Popa, *Combined electrochemical, Raman analysis and machine learning assessments of the inhibitive properties of an 1,3,4-oxadiazole-2-thiol derivative against carbon steel corrosion in HCl solution*, **Materials**, **2022**, 15(6), 2224, IF=3.1, <https://doi.org/10.3390/ma15062224>

8. D. Prodan, M. Moldovan, G. Furtos, C. Saros, M. Filip, I. Perhait, R. Carpa, M. Popa, S. Cuc, **Simona Varvara**, D. Popa, *Synthesis and characterization of some graphene oxide powders used as additives in hydraulic mortars*, **Applied Sciences-Basel**, **2021**, 11(23), 11330, IF=2.5, <https://doi.org/10.3390/app112311330>

9. **Simona Varvara**, C. Berghian-Grosan, R. Bostan, R. Lucacel Ciceo, Z. Salarvand, M. Talebian, K. Raeissi, J. Izquierdo, R. M. Souto, *Experimental characterization, machine learning analysis and computational modelling of the high effective drug*, **Electrochimica Acta**, **2021**, 398, 139282, IF=5.5, <https://doi.org/10.1016/j.electacta.2021.139282>

10. **Simona Varvara**, S. A. Dorneanu, A. Okos, L.M. Muresan, R. Bostan, M. Popa, D. Marconi, P. Ilea, *Dissolution of metals in different bromide based systems: Electrochemical measurements and spectroscopic investigations*, **Materials**, **2020**, 13(6), 3630, IF=3.1, <https://doi.org/10.3390/ma13163630>

11. **Simona Varvara**, R. Bostan, O. Bobis, L. Gaina, F. Popa, V. Mena, R. M. Souto, *Multiscale electrochemical analysis of the corrosion control of bronze in simulated acid rain by horse-chestnut (*Aesculus hippocastanum* L.) extract as green inhibitor*, **Corrosion Science**, **2020**, 165, 108381, IF=7.4, <https://doi.org/10.1016/j.corsci.2019.108381>

12. **Simona Varvara**, S. A. Dorneanu, A. Okos, R. Bostan, M. Popa, G. Damian, P. Ilea, *Dissolution of nickel in bromide-based solutions used as lixivants for waste printed circuit boards*, **Journal of Environmental Protection and Ecology**, **2020**, 21(2), pp. 551-560, IF=0.507, WOS:000566784600019

13. **Simona Varvara**, R. Bostan M. Popa, F. Popa, *Doxepin as corrosion inhibitor for copper in 3.5 wt. % NaCl solution*, **Studia Universitatis Babeş-Bolyai Chemia**, **2020**, 65 (3), pp.215-226, IF=0.5, <https://doi.org/10.24193/subbchem.2020.3.17>

14. D. Popa, R. Carpa, M. Moldovan, D. Prodan, M. Golumbeanu, **Simona Varvara**, M. Popa, *Culturable bacterial communities from the spoiled walls of the heritage buildings*, **Journal of Environmental Protection and Ecology**, **2019**, 20(2) pp. 773-780, IF=0.507, WOS:000473514900026.

15. **Simona Varvara**, L. Gaina, R. Bostan, F. Popa, A. Grozav, *Phenothiazinyl-thiazolyl-hydrazine derivatives as corrosion inhibitors for carbon steel in 1.0 M HCl: Electrochemical, SEM-EDX and DFT investigations*, **International Journal of Electrochemical Science**, **2018**, 13(9) pp. 8338-8364, IF=1.3, <https://doi.org/10.20964/2018.09.32>.

16. D. Popa, R. Carpa, M. Moldovan, D. Prodan, **Simona Varvara**, M. Golumbeanu, M. Popa, *Study on the importance of physicochemical characteristics from the walls in the rehabilitation works of heritage buildings*, **Journal of Environmental Protection and Ecology**, **2018**, 19(3), pp. 1166-1174, IF=0.507, WOS:000456590500023

17. **Simona Varvara**, R. Bostan, O. Bobis, L. Gaina, F. Popa, V. Mena, R. M. Souto, *Propolis as a green corrosion inhibitor for bronze in weakly acidic solution*, **Applied Surface Science**, **2018**, 426, pp.1100-1112, IF=6.3, <https://doi.org/10.1016/j.apsusc.2017.07.230>
18. R. Bostan, **Simona Varvara**, L. Gaina T. Petrisor Jr., L.M. Muresan, *Protective effect of inhibitor-containing nitrocellulose lacquer on artificially patinated bronze*, **Progress in Organic Coatings**, **2017**, 111, pp. 416-427, IF=6.5, <https://doi.org/10.1016/j.porgcoat.2016.08.004>
19. M. Babau, V. Micle, G. E. Damian, **Simona Varvara**, *Health risk assessment analysis in two highly polluted mining areas from Zlatna (Romania)*, **Journal of Environmental Protection and Ecology**, **2017**, 18(4), pp. 1416-1424, IF=0.507, WOS:000423283800014
20. R. Bostan, M. Popa, **Simona Varvara**, *Consideration regarding the removal of ammonium from wastewaters using natural zeolite from Rupea-Brasov (Romania)*, **Journal of Environmental Protection and Ecology**, **2017**, 18(4), pp. 1372-1379, IF=0.507, WOS:000423283800008
21. D. Popa, **Simona Varvara**; R. Bostan, M. Moldovan, D. Prodan, A. Ungur, M. Popa, *Study regarding the influence of soil humidity on foundations and walls of heritage buildings*, **Journal of Environmental Protection and Ecology** **2017**, 18(4), pp. 1560-1566, IF=0.507, WOS:000423283800030
22. N. Cotolan, **Simona Varvara**, E. Albert, G. Szabo, Z. Horvolgyi, L.M. Muresan, *Evaluation of corrosion inhibition performance of silica sol-gel layers deposited on galvanised steel*, **Corrosion Engineering Science and Technology**, **2016**, 51(5), pp. 373-382, IF=1.5, <https://doi.org/10.1080/1478422X.2015.1120404>
23. M. Popa, R. Bostan, **Simona Varvara**, M. Moldovan, C. Rosu, *Removal of Fe, Zn and Mn ions from acidic mine drainage using hydroxyapatite*, **Journal of Environmental Protection and Ecology**, **2016**, 17(4), pp. 1472-1480, IF=0.507, WOS:000393355100024
24. I. Rotaru, **Simona Varvara**, L.M. Muresan, *Inhibition effect of some thiadiazole derivatives on bronze corrosion*, **Studia Universitatis Babes-Bolyai Chemia**, **2015**, 60(3) 2015, pp. 129-140, IF=0.5, WOS:000369162200012
25. M. Popa, Roxana Bostan, N. Ilie, **Simona Varvara**, *Natural sorbents used for the removal of heavy metals from acidic wastewaters generated at 'Valea Sesei' tailing pond from Rosia Poeni mining perimeter (Romania)*, **Journal of Environmental Protection and Ecology**, **2015**, 16(3), 839-848, IF=0.507, WOS:000363091800004
26. I. Rotaru, **Simona Varvara**, L. Găină, L.M. Mureşan, *Antibacterial drugs as corrosion inhibitors for bronze surfaces in acidic solutions*, **Applied Surface Science**, **2014**, 321, pp.188-196, IF=6.3, <https://doi.org/10.1016/j.apsusc.2014.09.201>
27. **Simona Varvara**, R. Bostan, L. Gaină, L. M. Mureşan, *Thiadiazole derivatives as inhibitors for acidic media corrosion of artificially patinated bronze*, **Materials and Corrosion** **2013**, 65(12), pp. 1202-1214, IF=1.6, <https://doi.org/10.1002/maco.201307072>
28. D. Popa, **Simona Varvara**, T. Botezan, M. Popa, *Study of the effect of highways construction on the air quality*, **Journal of Environmental Protection and Ecology**, **2014**, 15(1), pp.7-15, IF=0.507, WOS:000334131100002
29. M. Popa, D. Vintan, R. Bostan, **Simona Varvara**, *Study on the possibilities of treating the wastewater from the porcelain industry*, **Journal of Environmental Protection and Ecology**, **2014**, 15(3), pp.851-859, IF=0.507, WOS:000342876200006

30. R. Bostan, **Simona Varvara**, M. Popa, L. M. Muresan, *Evaluation of phenothiazine as environmentally friendly corrosion inhibitor for bronze in synthetic acid rain*, **Studia Universitatis Babeş-Bolyai Chemia**, **2013**, 58(3), pp.53-62, IF=0.5, WOS:000342728300007
31. I. Milosev, D. Blejan, **Simona Varvara**, L.M. Mureşan, *Effect of anodic oxidation on the corrosion behavior of Ti-based materials in simulated physiological solution*, **Journal of Applied Electrochemistry**, **2013**, 43(7), pp.645-658, IF=2.4, <https://doi.org/10.1007/s10800-013-0552-3>
32. **Simona Varvara**, M. Popa, R. Bostan, G. Damian, *Preliminary considerations on the adsorption of heavy metals from acidic mine drainage using natural zeolite*, **Journal of Environmental Protection and Ecology**, **2013**, 14(4) pp.1506-1514, IF=0.507, WOS:000336189800005
33. R. Bostan, **Simona Varvara**, L. Gaina, L. M. Mureşan, *Evaluation of some phenothiazine derivatives as corrosion inhibitors for bronze in weakly acidic solution*, **Corrosion Science**, **2012**, 63, pp. 275–286, IF=7.4, <https://doi.org/10.1016/j.corsci.2012.06.010>
34. M. Popa, M. Glevitzky, D. Popa, **Simona Varvara**, G.-A. Dumitrel, *Study on soil pollution with heavy metals near the river Ampoi, Alba County*, **Journal of Environmental Protection and Ecology**, **2012**, 13(4), pp. 2123–2129, IF=0.507, WOS:000313926400008
35. I. Zamblau, **Simona Varvara**, L. M. Muresan, *Corrosion behavior of Cu-SiO₂ nanocomposite coatings obtained by electrodeposition in the presence of cetyl trimethyl ammonium bromide*, **Journal of Materials Science**, **2011**, 46(20), pp. 6484-6490, IF=3.5, <https://doi.org/10.1007/s10853-011-5594-5>
36. **Simona Varvara**, I. Rotaru, M. Pop, L. M. Muresan, *Inhibition of bronze corrosion in aerated acidic solution using amino acids as environmentally friendly inhibitors*, **Revue Roumaine de Chimie**, **2011**, 56(8), pp.793-801, IF=0.4, WOS:000298315300005
37. M. Glevitzky, M. Vica, M. Popa, R. Axinte, **Simona Varvara**, *Considerations regarding the quality and chemical stability of near water drinks*, **Journal of Environmental Protection and Ecology**, **2011**, 12(3) pp.1110-1115, IF=0.507, WOS:000296305700038
38. I. Ienciu, M. Popa, C. Grecea, L. Oprea, **Simona Varvara**, *Topographic surveys to re-integrate waste-rock into the natural cycle*, **Journal of Environmental Protection and Ecology**, **2011**, 12(4), pp. 1925-1934, WOS:000303274300040
39. A. Vlasa, **Simona Varvara**, A. Pop, L. M. Mureşan, *Electrodeposited Zn-TiO₂ nanocomposite coatings and their corrosion behavior*, **Journal of Applied Electrochemistry**, **2010**, 40(8), pp. 1519-1527, IF=2.4, <https://doi.org/10.1007/s10800-010-0130-x>
40. M Popa, R. Axinte, **Simona Varvara**, *Considerations regarding the quality of honey on heating and storage-changes in hydroxymethylfurfuraldehyde content of the honey from Transylvania (Romania)*, **Journal of Environmental Protection and Ecology**, **2010**, 11(2), pp. 555-561, IF=0.507, WOS:000279705200018
41. A. Pop, A. Vlasa, **Simona Varvara**, B. David, C. Bulea, L. Muresan, *Structural and electrochemical characterization of Zn-TiO₂ nanocomposite coatings electrodeposited on steel*, **Optoelectronics and Advanced Materials-Rapid Communications**, **2009**, 3, pp. 1290-1294, IF=0.5, WOS:000273207300009
42. I. Zamblau, **Simona Varvara**, C. Bulea, L. M. Mureşan, *Corrosion behavior of composite coatings obtained by electrolytic codeposition of copper with Al₂O₃ nanoparticles*, **Chemical and Biochemical Engineering Quarterly**, **2009**, 23(1), pp. 43-52, IF=1.6, WOS:000265282300005

43. M. Popa, M. Miclea, **Simona Varvara**, *The present demands of food quality and the promotion of food safety*, **Journal of Environmental Protection and Ecology**, **2009**, 10, pp. 999-1005, IF=0.507, WOS:000273955600010
44. M. Popa, M. Vica, R. Axinte, M. Glevizky, **Simona Varvara**, *Correlations on the microbiological and physicochemical characteristics of different types of honey*, **Journal of Environmental Protection and Ecology**, **2009**, 10, pp. 1113-1121, IF=0.507, WOS:000273955600022
45. **Simona Varvara**, M. Popa, G. Rustoiu, R. Axinte, L. M. Muresan, *Evaluation of some amino acids as bronze corrosion inhibitors in aqueous solution*, **Studia Universitatis Babeş-Bolyai Chemia**, **2009**, 54(2), pp. 73-104, IF=0.5, WOS:000271616800008
46. Simona Varvara, M. Popa, L. M. Muresan, *Corrosion inhibition of bronze by amino acids in aqueous acidic solutions*, **Studia Universitatis Babeş-Bolyai Chemia**, **2009**, 54(3), pp. 235-246, IF=0.5, WOS:000274873800025
47. **Simona Varvara**, L. Mureşan, K. Rahmouni, H. Takenouti, *Evaluation of some non-toxic thiadiazole derivatives as bronze corrosion inhibitors in aqueous solution*, **Corrosion Science**, **2008**, 50(9), pp. 2596-2604, IF=7.4, <https://doi.org/10.1016/j.corsci.2008.06.046>
48. M. Popa, D. Popa, **Simona Varvara**, *Aspects of greenhouse gas emissions in the Alba County (Romania)*, **Journal of Environmental Protection and Ecology**, **2008**, 9(4), pp. 37-742, IF=0.507, WOS:000263036700002
49. **Simona Varvara**, B. Fabbri, S. Gualtieri, M. Gligor, *Archaeometric characterisation of the Neolithic pottery discovered at Alba Iulia-Lumea Noua archaeological site (Romania)*, **Studia Universitatis Babeş-Bolyai Chemia**, **2008**, 53(1), pp. 5-13, IF=0.5, WOS:000266403700002.
50. L. Mureşan, **Simona Varvara**, E. Stupnišek-Lisac, H. Otmačić, K. Marušić, S. Horvat-Kurbegović, L. Robbiola, K. Rahmouni, H. Takenouti, *Protection of bronze covered with patina by innocuous organic substances*, **Electrochimica Acta**, **2007**, 52 (27) pp. 7770-7779, <https://doi.org/10.1016/j.electacta.2007.02.024>
51. L. Muresan, M. Gherman, I. Zamblau, **Simona Varvara**, C. Bulea, *Corrosion behavior of electrochemically deposited Zn-TiO₂ nanocomposite coatings*, **Studia Universitatis Babeş-Bolyai Chemia**, **2007**, 52(3), pp. 97-104, IF=0.5, WOS:000257689400008
52. A. Vlăsa, **Simona Varvara**, L. Muresan, *Electrochemical investigation of the influence of two thiadiazole derivatives on the patina of an archaeological bronze artefact using a carbon paste electrode*, **Studia Universitatis Babeş-Bolyai Chemia**, **2007**, 52(2), pp.63-73, IF=0.5, WOS:000257689100009
53. A. Goleanu, A. Marian, C. Florescu, M. Gligor, **Simona Varvara**, *Chemical and structural features of the Neolithic ceramics from Vinca, Lumea Noua and Petresti cultures (Romania)*, **Revue Roumaine de Chimie**, **2005**, 50(11-12), pp. 939-951, IF=0.4, WOS:000238236000011
54. **Simona Varvara**, L. Muresan, I. C. Popescu, G. Maurin, *Comparative study of copper electrodeposition from sulphate acidic electrolytes in the presence of IT-85 and of its components*, **Journal of Applied Electrochemistry**, **2005**, 35(1) (2005) pp. 69-76, IF=2.4, <https://doi.org/10.1007/s10800-004-2398-1>
55. **Simona Varvara**, L. Muresan, I. C. Popescu, G. Maurin, *Copper electrodeposition from sulfate electrolytes in the presence of hydroxyethylated 2-butyne-1, 4-diol*, **Hydrometallurgy**, **2004**, 75(1-4), pp. 147-156, , <https://doi.org/10.1016/j.hydromet.2004.07.006>

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57. M. Cristea, **Simona Varvara**, L. Muresan, I. C. Popescu, *Neural networks approach for simulation of electrochemical impedance diagrams*, **Indian Journal of Chemistry Section A - Inorganic Bio-Inorganic Physical Theoretical & Analytical Chemistry**, 2003, vol. 42(4), pp. 764-768, IF=0.4, WOS:000182588600010

58. **Simona Varvara**, L. Muresan, A. Nicoară, G. Maurin, I. C. Popescu, *Kinetic and morphological investigation of copper electrodeposition from sulfate electrolytes in the presence of an additive based on ethoxyacetic alcohol and triethyl-benzyl-ammonium chloride*, **Materials Chemistry and Physics**, 2001, 72(3) pp. 332-336, IF=4.3, [https://doi.org/10.1016/S0254-0584\(01\)00326-1](https://doi.org/10.1016/S0254-0584(01)00326-1)

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60. L. Muresan, A. Nicoara, **Simona Varvara**, G. Maurin, Influence of Zn²⁺ ions on copper electrowinning from sulphate electrolytes, **Journal of Applied Electrochemistry**, 1999, 29(6), pp. 719-727, WOS:000081034200007

Articole/studii de specialitate indexate în baze de date internaționale

1. D. Popa, D. Prodan, M. Moldovan, S. Cuc, C. Sarosi, **Simona Varvara**, R. Bostan, T. Goronea, *Some aspects regarding the methods and materials used for combating the humidity in heritage buildings*, PANGEEA, 22, 2022, DOI: 10.29302/Pangeea 22.03 (Index Copernicus, CEEOL, Google Academic and ResearchBib, Erih plus, ProQuest).

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3. “*Vârste absolute prin metode nucleare cu aplicații în arheologie, geologie și mediu*”, contract **CEEX-MENER nr. 749/2006-2008** cu Universitatea „Babeș-Bolyai” Cluj-Napoca, valoare finanțare: 110.000 RON (**responsabil științific de proiect**)
4. “*Studiul dinamicii parametrilor antropogenetici prin raportare la elemente bioarheologice descoperite în bazinul Mureșului Mijlociu*”, contract **CEEX-IFA nr. 36/2006-2008** cu INML „Mina Minovici” București, valoare finanțare: 600.000 RON (**responsabil științific de proiect**)

5. “*South-Eastern European Pottery: Archaeology and Scientific Techniques (SEE PAST)*”, în colaborare cu Istituto di Scienza e Tecnologia dei Materiali Ceramici, Faenza, Italia și Institute for Mediterranean Heritage, Piran, Slovenia, proiect no. 2002-PAS-16-2006/**2006**, finanțator **Uniunea Europeană, prin programul „Culture 2000”**, valoare finanțare: 63.000 Euro pentru Universitatea „1 Decembrie 1918” din Alba Iulia, valoare totală finanțare: 272.030 Euro (**responsabil proiect în România**)
6. “*Archaeometric investigations on the provenance and technological aspects of the Neolithic painted pottery (4th Millennium b. c.) from Transylvania (Romania)*”, în colaborare cu Istituto di Scienza e Tecnologia dei Materiali Ceramici, Faenza, Italia, Dr. Bruno Fabbri, finanțator Uniunea Europeană prin programul COST, grant no. G8/01426/2005, 3000 Euro, (**director de proiect**)
7. “*Investigații de natură chimică, fizică, structurală și tehnologică asupra ceramicii preistorice aparținând culturilor Vinca, Lumea Nouă și Petrești*”, **grant CNCSIS tip A**, cod CNCSIS 670/**2004-2006**, valoare finanțare: 340 mil. ROL (**director de proiect**)
8. “*Studiul cronoamperometric al procesului de electrocristalizare a cuprului din soluții acide în prezența aditivilor organici*”, **grant CNCSIS tip AT**, cod CNCSIS 46/2002-2003, valoare finanțare: 58.5 mil ROL (**director de proiect**)

Membru în echipa unor proiecte de cercetare naționale și internaționale

1. “*Elaborarea unor produse inovatoare din materiale avansate (mortare), folosite în reabilitarea clădirilor de patrimoniu (DIPAM)*”, **Proiect experimental demonstrativ (PED)**, cod PN-III-P2-2.1-PED-2019-3739/**2020-2022**, valoare finanțare: 570.050 RON (director de proiect, Conf. dr. ing. D. Popa, Universitatea „1 Decembrie 1918” din Alba Iulia)
2. “*Optimizarea tehnologiilor de execuție privind reabilitarea clădirilor de patrimoniu afectate de umiditate*”, **grant Bridge**, cod PN-III-P2-2.1-BG-2016-0302/**2016-2018**, valoare finanțare: 420.000 RON (director de proiect, Conf. dr. ing. D. Popa, Universitatea „1 Decembrie 1918” din Alba Iulia)
3. “*Tehnologie inovativă de obținere a straturilor din aliaj zinc-nichel cu proprietăți anticorozive excepționale, prin codepuneri compozite cu particule nanometrice*”, **Program INOVARE**, Proiect nr. 1579/**2008-2010**, valoare finanțare: 197.000 RON (responsabil științific proiect, Prof. dr. L. Mureșan, UBB Cluj-Napoca)
4. “*Acoperiri compozite rezistente la coroziune obținute prin codepunerea electrolică a cuprului cu nanoparticule*”, grant **CNCSIS A/7/2007-2008**, valoare finanțare: 90.000 RON (director de proiect, Prof. dr. L. Mureșan, Universitatea „Babeș-Bolyai” din Cluj-Napoca)
5. “*Etude des inhibiteurs organiques non-nocifs à la protection de la patine de bronzes archéologiques*”, colaborare Franța-România-Croația, **proiect ECONET 10279NA/ 2005-2006**, finanțat de Ministerul Afacerilor Externe din Franța, prin programul EGIDE, valoare finanțare: 29.382 Euro (director de proiect, Dr. Hisasi Takenouti, LISE – UPR 15 of the CNRS, „Pierre and Marie Curie” University, Paris, France)
6. “*Utilizarea spectroscopiei de impedanță electrochimică pentru investigarea interfeței metal/electrolit: electrodepunerea cuprului în prezența aditivilor*”, **grant CNCSIS A 43/2001-**

2003, valoare finanțare: 59.2 mil. ROL (director de proiect, Prof. dr. L. Mureșan, Universitatea „Babeș-Bolyai” din Cluj-Napoca)

Proiecte de dezvoltare instituțională, câștigate prin competiție, în calitate de director de proiect

1. “*Îmbunătățirea activității didactice în Universitatea ”1 Decembrie 1918” din Alba Iulia prin perfecționarea cadrelor didactice și implementare de instrumente e-Learning dedicate masteratelor*”, CNFIS-FDI-2018-0012, valoare finanțare: 264.000 RON
2. “*Creșterea capacității instituționale și îmbunătățirea calității activităților didactice din UAB, prin implementarea de soluții informatice pentru învățământ și evaluare continuă instituțională*”, CNFIS-FDI-2019-0327, valoare finanțare: 321.000 RON
3. “*Îmbunătățirea calității activităților didactice și creșterea vizibilității UAB prin implementarea de soluții informatice pentru învățământ, evaluarea programelor de studii și ranking universitar*”, CNFIS-FDI-2020-0256, valoare finanțare: 260.000 RON
4. “*Mecanisme de îmbunătățire a calității procesului de învățământ la Universitatea „1 Decembrie 1918” din Alba Iulia*”, CNFIS-FDI-2022-0219, valoare finanțare: 337.760 RON
5. “*Digitalizarea și promovarea eticii academice ca paradigme fundamentale în spectrul îmbunătățirii calității învățământului la Universitatea „1 Decembrie 1918” din Alba Iulia*”, CNFIS-FDI-2023-F-0253, valoare finanțare: 280.000 RON.
6. “*Mecanisme și instrumente de îmbunătățire a calității activității didactice și consolidare a eticii și integrității academice în Universitatea „1 Decembrie 1918” din Alba Iulia*”, CNFIS-FDI-2024-0240, valoare finanțare: 354.000 RON.

Premierea rezultatelor cercetării

1. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2021, Subprogram “*Premierea rezultatelor cercetării (articole)*”, în valoare de 6000 RON, pentru publicarea articolului “*Experimental characterization, machine learning analysis and computational modelling of the high effective inhibition of copper corrosion by 5-(4-pyridyl)-1,3,4-oxadiazole-2-thiol in saline environment*”, PN-III-P1-1.1-PRECISI-2021-66595.
2. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2020, Subprogram “*Premierea rezultatelor cercetării (articole)*”, în valoare de 2000 RON, pentru publicarea articolului “*Dissolution of Metals in Different Bromide-Based Systems: Electrochemical Measurements and Spectroscopic Investigations*”, PN-III-P1-1.1-PRECISI-2020-49695.
3. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2020, Subprogram “*Premierea rezultatelor cercetării (articole)*”, în valoare de 6000 RON, pentru publicarea articolului “*Multiscale electrochemical analysis of the corrosion control of bronze in simulated acid rain by horse-chestnut (Aesculus hippocastanum L.) extract as green inhibitor*”, PN-III-P1-1.1-PRECISI-2020-45969.
4. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2017, Subprogram “*Premierea rezultatelor cercetării (articole)*”, în valoare de 10.000 RON, pentru publicarea articolului “*Propolis as a green corrosion inhibitor for bronze in weakly acidic solution*”, PN-III-P1-1.1-PRECISI-2017-20739.

5. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2017, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 6.000 RON, pentru publicarea articolului “*Protective effect of inhibitor-containing nitrocellulose lacquer on artificially patinated bronze*”, PN-III-P1-1.1-PRECISI-2017-17105.
6. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2016, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 1.000 RON, pentru publicarea articolului “*Evaluation of corrosion inhibition performance of silica sol-gel layers deposited on galvanised steel*”, PN-III-P1-1.1-PRECISI-2016-12667.
7. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2015, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 4.000 RON, pentru publicarea articolului “*Antibacterial drugs as corrosion inhibitors for bronze surfaces in acidic solutions*”, PN-II-RU-PRECISI-2015-9-9887.
8. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2015, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 4.000 RON, pentru publicarea articolului “*Thiadiazole derivatives as inhibitors for acidic media corrosion of artificially patinated bronze*”, PN-II-RU-PRECISI-2015-9-9505.
9. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2012, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 4.000 RON, pentru publicarea articolului “*Evaluation of some phenothiazine derivatives as corrosion inhibitors for bronze in weakly acidic solution*”, PN-II-RU-PRECISI-2012-6-0973.
10. Premiu acordat de UEFISCU, prin programul RESURSE UMANE/2011, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 2.000 RON, pentru publicarea articolului “*Corrosion behavior of Cu-SiO₂ nanocomposite coatings obtained by electrodeposition in presence of cetyl-trimethyl ammonium bromide*”, PN-II-RU-PRECISI-2011-3-1474.
11. Premiu acordat de CNCSIS, prin programul RESURSE UMANE/2009, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 2.000 RON, pentru publicarea articolului “*Corrosion behavior of composite coatings obtained by electrolytic codeposition of copper with Al₂O₃ nanoparticles*”.
12. Premiu acordat de CNCSIS, prin programul PN II - RESURSE UMANE/2009, Subprogram “Premierea rezultatelor cercetării (articole)”, în valoare de 1.000 RON, pentru publicarea articolului “*Evaluation of some non-toxic thiadiazole derivatives as bronze corrosion inhibitors in aqueous solution*”.
13. Premiu acordat de CNCSIS, prin programul PN II-RESURSE UMANE (cod CNCSIS 224/2007), în valoare de 1.000 RON pentru publicarea articolului “*Protection of bronze covered with patina by innocuous organic substances*”.

Conf. dr. Varvara Simona Camelia