

UNIVERSITATEA TEHNICĂ DIN CLUJ-NAPOCA
Facultatea Ingineria Materialelor și a Mediului
Departamentul Ingineria Mediului și Antreprenoriatul Dezvoltării Durabile

LISTĂ DE LUCRĂRI

Conf. dr. ing. Ioana Monica SUR

I. Teza de doctorat

Cercetări privind extracția metalelor grele prin biolixiviere in situ din solurile poluate, septembrie 2011, Universitatea Tehnică din Cluj-Napoca, coordonator științific prof.dr.ing. MICLE Valer, UTC-N

II. Brevete

Micle Valer, **Sur Ioana Monica**, Mitrea Mihai, *Sistem și procedeu de bioremediere ex-situ a solurilor poluate cu hidrocarburi utilizând micoorganisme Pseudomonas și Bacillus - RO132554/2023*, clasificare internațională B09C1/10

III. Cărți

Micle V., **Sur I.M.**, *Știința solului – Îndrumător de laborator*, Editura UT Pres, Cluj-Napoca, ISBN 978-973-662-724-8, 2012, 93 pagini

IV. Articole publicate în reviste științifice

Articole publicate în reviste cotate/indexate ISI

1. Belbel F., Boukheroufa M., Micle V., **Sur I.M.**, Sakraoui F., Smical I., *Heavy Metal Accumulation (Cd, As, Zn, Cu, Cr) in Hair and Bones of Small Mammal Prey of the Sentinel Species Common Genet (Genetta genetta) in an Anthropogenic Environment of Edough Mountain Forest, Northeastern Algeria*. *Animals* 2025, 15, 114. <https://doi.org/10.3390/ani15010114>
2. Chirilă Băbău A.M., Micle V., Damian G.E., **Sur I.M.**, *Lead and copper removal from sterile dumps by phytoremediation with Robinia pseudoacacia*, *Scientific Reports* 2024, 14:9842, <https://doi.org/10.1038/s41598-024-60412-z>
3. Smical I., Muntean A., Micle V., **Sur I.M.**, *The Influence of Spent Portable Battery Waste on the Aquatic Environment*, *Applied Sciences*, 2023, 13(21), 11658; <https://doi.org/10.3390/app132111658>, FI: 2.838
4. **Sur I.M.**, Hegyi A., Micle V., Gabor T., Lăzărescu A.-V., *Influence of the Extraction Solution on the Removal of Heavy Metals from Polluted Soils*. *Materials* 2023, 16, 6189. <https://doi.org/10.3390/ma16186189>
5. Micle V., Damian G.E., Rogozan G.C., **Sur I.M.**, *Non-Linear Regression Model for Estimating the Efficiency of Heavy Metals Removal by Soil Washing with Chitosan Solution*. *Appl. Sci.*, 2023, 13, 465, <https://doi.org/10.3390/app13010465>

6. Petrean I.A, Micle V., **Sur, I.M.**, Şenilă M., *Characterization of sterile dumps by analytical method ICP-OES: A case study from Baia Mare mining area (Maramures, Romania)*, Sustainability, 2023, 15(2), 1158, <https://doi.org/10.3390/su15021158>
7. Ionescu B.A., Chira M., Vermeşan H., Hegyi A., Lăzărescu A.-V., Thalmaier G., Neamţu B.V., Gabor T., **Sur I.M.**, *Influence of Fe₂O₃, MgO and Molarity of NaOH Solution on the Mechanical Properties of Fly Ash-Based Geopolymers*, Materials, 2022, 15, 6965, <https://doi.org/10.3390/ma15196965>
8. **Sur I.M.**, Moldovan A., Micle V., Polyak E.T., *Assessment of Surface Water Quality in the Baia Mare Area, Romania*, Water, 2022, 14, 3118, <https://doi.org/10.3390/w14193118>
9. **Sur I.M.**; Micle V.; Polyak E.T.; Gabor T., *Assessment of Soil Quality Status and the Ecological Risk in the Baia Mare, Romania Area*, Sustainability 2022, 14, 3739, <https://doi.org/10.3390/su14073739>
10. **Sur I.M.**, Micle V., Hegyi A., Lăzărescu A.V., *Extraction of Metals from Polluted Soils by Bioleaching in Relation to Environmental Risk Assessment*, Materials, 2022, 15, 3973, <https://doi.org/10.3390/ma15113973>
11. Chirilă Băbău A.M., Micle V., Damian G.E., **Sur I.M.**, *Sustainable Ecological Restoration of Sterile Dumps Using Robinia pseudoacacia*. Sustainability, 2021, 13(24), 14021, <https://doi.org/10.3390/su132414021>
12. Micle V., **Sur I.M.**, *Experimental Investigation of a Pilot-Scale Concerning Ex-Situ Bioremediation of Petroleum Hydrocarbons Contaminated Soils*. Sustainability, 2021, 13(15), 8165, <https://doi.org/10.3390/su13158165>
13. Crişan O.A., Pusta M.S., Birleanu C.J., Tiuc E.E., **Sur I.M.**, Crişan H.G., Şerdean F., Flamînd L., Rusu T., *Qualitative analysis of filters for the mechanical nanofiltration of household drinking water*, Studia Universitatis Babes-Bolyai, Chemia, 2020, 65(1), 253–266
14. Damian G.E., Micle V., **Sur, I.M.**, *Removal of heavy metals from contaminated soil using chitosan as washing agent –A preliminary study*, Journal of Environmental Protection and Ecology, Soil pollution, 2020, 21(3), 823–829
15. **Sur I.M.**, Micle V., Damian G.E., *Assessment of Heavy Metal Contamination and Bioremediation Potential of Thiobacillus ferrooxidans in Soils around Copper Quarry*, Journal of Environmental Protection and Ecology, Soil pollution, 2020, 21(1), 56–62
16. Chirila Babau A.M., Micle V., Damian G.E., **Sur I.M.**, *Preliminary Investigations Regarding the Potential of Robinia pseudoacacia L. (Leguminosae) in the Phytoremediation of Sterile Dumps*. Journal of Environmental Protection and Ecology Soil pollution, 2020, 21(1), 46–55
17. Gabor T., Dan V., Tiuc A.E., **Sur I.M.**, Badila I.N., *Experimental setup for analysis of drain water heat recovery system in civil buildings*, Journal of Environmental Protection and Ecology, 2019, 20(4), 1960–1969
18. Micle V., Pop D., **Sur I.M.**, Rogozan G.C., Damian G.E., *Non-linear Model for Estimating the Residual Pollutant Concentration after Thermal Desorption of Crude Oil Polluted Soil*, Journal of Environmental Protection and Ecology, 2019, 20(3), 1120–1131

19. Damian G.E., Micle V., **Sur I.M.**, *Experimental Investigations Concerning the Effectiveness of Humic Substances to Extract Heavy Metals through Soil Washing*, Journal of Environmental Protection and Ecology, 2019, 20(3), 1132–1139
20. Damian G.E., Micle V., **Sur I.M.**, *Mobilization of Cu and Pb from multi-metal contaminated soils by dissolved humic substances extracted from leonardite and factors affecting the process*, Journal of Soils and Sediments, 2019, 19(7), 2869–2881, <https://doi.org/10.1007/s11368-019-02291-w>
21. Damian G.E., Micle V., **Sur I.M.**, Chirila Babau A.M., *From environmental ethics to sustainable decision making: assessment of potential ecological risk in soils around abandoned mining areas-case study “Larga de Sus mine” (Romania)*, Journal of Agricultural and Environmental Ethics, 2019, 32(1), 27–49, <https://doi.org/10.1007/s10806-019-09767-2>
22. Damian G.E., Micle V., **Sur I. M.**, *Lead and copper removal from multi-metal contaminated soils through soil washing technique using humic substances as washing agent: the influence of the washing solution pH*, Studia Universitatis Babes-Bolyai, Seria Chemia, 2019, Vol. LXIV, 41–52
23. Micle V., **Sur I.M.**, Criste A., Senila M., Levei E., Marinescu M., Cristorean C., Rogozan G.C., *Lab-scale experimental investigation concerning ex-situ bioremediation of petroleum hydrocarbons contaminated soils*, Soil and Sediment Contamination: An International Journal, 2018, 27(8), 692–705, <https://doi.org/10.1080/15320383.2018.1503229>, WOS:000450099800004
24. Chirilă Băbău A.M., Micle V., **Sur I.M.**, *Characterization of soils in the Almasu Mare area through the determination of lead concentrations*, Studia Universitatis Babes-Bolyai Chemia, 2018, LXIII, 2, 83–91, DOI:10.24193/subbchem.2018.2.08, WOS:000440849900008
25. Pop D., Micle V., **Sur I.M.**, *Optimizing the process of depollution through thermal absorption of soils contaminated with crude oil*, Environmental Engineering and Management Journal, 2018, 17(11), 2619–2626
26. **Sur I.M.**, Micle V., Gabor T., *Heavy metals removal by bioleaching using Thiobacillus Ferrooxidans*, Romanian Biotechnological Letters, 2018, 23(2), 13409–13416, WOS:000431317900005
27. Gabor T., Dan V., Badila I.N., Tiuc A.E., **Sur I.M.**, *Improving the energy efficiency of residential buildings by using a drain water heat recovery system*, Environmental Engineering And Management Journal, 2017, 16(7), 1631–1636
28. Rogozan G.C., Micle V., **Sur I.M.**, *Maps of heavy metals in cluj county soils developed through regression-kriging method*, Environmental Engineering and Management Journal, 2016, 15(5), 1035–1039
29. Gabor T., Dan V., Tiuc A.E., **Sur I.M.**, Bădilă I.N., *Modeling and simulation of heat transfer processes for heat exchangers with heat pipes used for recovering heat from wastewater*, Environmental Engineering and Management Journal, 2016, 15(5), 1027–1033
30. **Sur I.M.**, Micle V., Gabor T., *The influence of polluted soil aeration in the process of in situ bioleaching*, Studia Universitatis Babes-Bolyai, Chemia, 2016, 61(3), 355–364

31. **Berar (Sur) I.M.**, Micle V., Avram S., Șenilă, M., Oros, V., *Bioleaching of some heavy metals from polluted soils*, Environmental Engineering and Management Journal, 2012, 11(8), 1389 – 1393, http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol11/no8/4_80_Sur_11.pdf

Articole ISI Emerging Sources Citation Index (ESCI)

32. Ognean S.I., Micle V., Todoran D.D., **Sur I.M.**, Tamas-Krumpe O.M., Ognean L., *Water quality monitoring at distribution and discharge in areas with activities of agro-food interest*, Revista Româna de Medicină Veterinară, 2023, 33(3), 89-96,
33. Stoica O.G., Micle V., **Sur I.M.**, *Design and execution of an antimony sensor used for monitoring of soil pH*, Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering, 2018, 7, 67–73
34. Chirila – Babau A.M., Micle V., **Sur I.M.**, *Research on cadmium soil pollution in the former Almasu Mare mining area*, Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering, 2018, 7, 132–135
35. **Sur I.M.**, Cîmpean A., Micle V., Tănăsolia C., *Physical-chemical properties analysis of the soil contaminated with heavy metals from Copsa-Mica area*, Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering, 2017, 6, 51–56
36. Băbău A.M., Micle V., **Sur I.M.**, *Study on physico-chemical properties of soil in the Radeș mine area*, Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering, 2017, 6, 108–113

Articole ISI proceedings

37. **Ioana Monica Sur**, Timea Gabor, Adriana Mihaela Chirila Babau, Ancuta Elena Tiuc, *Research regarding As and Cd extraction from the polluted soils*, 17th International Multidisciplinary Scientific Geoconference SGEM 2017, Conference proceedings, Nano, Bio, Green and Space -Technologies for a Sustainable Future, 17(63), 327 – 334
38. Timea Gabor, Ancuta-Elena Tiuc, Iulian-Nicolae Badila, **Ioana Monica Sur**, *Heat exchanger utilizations in wastewater heat recovery for buildings: a key review*, 17th International Multidisciplinary Scientific Geoconference SGEM 2017, Conference proceedings, Energy and Clean Technologies, 17(43), 683 – 694
39. Ancuța-Elena Tiuc, Timea Gabor, **Ioana Monica Sur**, Daniela-Roxana Tamas-Gavrea, Horațiu Vermeșan, *Recovery of sawdust, recycled rubber particles and textile waste by making sound absorbing materials*, 17th International Multidisciplinary Scientific Geoconference SGEM 2017, Conference proceedings, Energy and Clean Technologies, 17(43), 171 – 178

Articole publicate în reviste indexate BDI

1. Gianina Elena Damian, Valer Micle, **Ioana Monica Sur**, *Study Regarding The Pedological Properties Of The Soil In The “Larga De Sus” Mining Area In Order To Establish The Appropriate Soil Remediation Technology*, Environment 2021, DOI: 10.29302/Pangeea 21.06

2. Damian G.E., Micle V., **Sur I. M.**, *Assessment of heavy metal contamination in the soils nearby "Larga de Sus" mine (Romania)*, ProEnvironment/ProMediu, 2019, 12(38), 136-141
3. **Sur Ioana Monica**, Zoltan Rareș, Micle Valer, Damian Gianina Elena, *Investigations on the Quality of Soil and Air in the Somes Nord Industrial Area of the City of Cluj-Napoca*, ProEnvironment, 2019, 12(38), 150-153
4. Adriana Mihaela Băbău, Valer Micle, **Ioana Monica Sur**, *Study On Pedological Soil Properties In The Haneș Mine Area For Its Remediation*, Studia Universitatis Babeș-Bolyai Ambientum, 2018, 63 (1), 5-14
5. **Ioana Monica Sur**, Ana-Maria Tecsa, Valer Micle, Timea Gabor, *Analyze of the physical-chemical properties of the soil in the area Posta Rat / Turda*, Studia Universitatis Babeș-Bolyai Ambientum, 2018, 63 (1), 31-71
6. Adriana Mihaela Băbău, Valer Micle, **Ioana Monica Sur**, *Proprietăți fizico chimice ale solului din jurul haldei Radeș/județul Alba*, Buletinul AGIR – Știință și Inginerie, 2017, 32, 761-766
7. Timea Gabor, Viorel Dan, Ancuța Elena Tiuc, **Ioana Monica Sur**, *Exploatarea și recuperarea căldurii din surse energetice secundare cu potențial termic coborât*, Buletinul AGIR – Știință și Inginerie, 2017, 32, 751 – 760
8. Adriana Mihaela Băbău, Valer Micle, **Ioana Monica Sur**, *Research on underground water quality from Almasu Mare area*, Aerul și apa – Componente ale Mediului, 2017, vol. XI, 269-274
9. **I.M. Sur**, V Micle, MN Boroș, GC Rogozan, *The conception of an experimental model for ex situ bioremediation of soils contaminated with petroleum hydrocarbons*, AES Bioflux, 2017, 9(1), 72 – 76
10. Melania-Nicoleta Boroș, Valer Micle, Lazăr Flămînd, **Ioana Monica Sur**, *Phytoremediation planning in the case of former industrial sites*, Studia Ubb Ambientum, 2016, LXI (1-2), 5 – 14
11. Cristorean C., Micle V., **Sur I. M.**, *A critical analysis of ex-situ bioremediation technologies of hydrocarbon polluted soils*, Ecoterra – Journal of Environmental Research and Protection, 2016, 13(1), 17 – 29
12. **Ioana Monica Sur**, *Study on the bioleaching influence factors/Studiu asupra factorilor de influență ai biolixivierii*, Acta Technica Napocensis, Series Environmental Engineering and Sustainable Development Entrepreneurship (bilingual edition), 2015, 4(4), 61 – 67
13. Andreea Coste (Bănă), **Ioana Monica Sur**, *Influence of poultry manure and universal peat on the bioremediation of soil contaminated with diesel fuel*, Ecoterra – Journal of Environmental Research and Protection, 2015, 4(12), 26 – 31
14. **Ioana Monica Sur**, *Research on the in situ biological extraction of heavy metals from polluted soils/Phd thesis summary / Cercetări privind extracția metalelor grele prin biolixiviere in situ din solurile poluate, Rezumat teză de doctorat*, Acta Technica Napocensis, Series Environmental Engineering and Sustainable Development Entrepreneurship (bilingual edition), 2015, 4(3), 43 – 48

15. Pop Dorina, Valer Micle, Claudiu Tanaselia, **Sur Ioana Monica**, *Influence of Process Parameters on the Thermal Desorption at Low Temperature Crude Oil-Contaminated Soils*, ProEnvironment, 2015, 8, 463 – 467
16. Andreea (Coste) Bîcă, Valer Micle, **Ioana Monica Sur**, *The Effect of Organic Fertilizer from Farm Animals on the Bioremediation Process of Soil Polluted with Petroleum Hydrocarbons*, ProEnvironment, 2015, 8, 476 – 480
17. Dan-Vlad Jașcău, Melania Boroș, Timea Gabor, **Ioana Monica Sur**, Elena Maria Pică, *Efficient Methods of treating The Leachate generated from Municipal waste landfills/ Metode eficiente de tratare a leigatului generat din depozitele de deșeuri municipale*, Acta Technica Napocensis, Series Environmental Engineering and Sustainable Development Entrepreneurship (bilingual edition), 2015, 4(1), 41-50, http://cpaddd.utcluj.ro/fileadmin/Revista_CPADDD/vol_4_nr_1/05_Jascau_DV_Boros_MN_Gabor_T_Sur_IM_Pica_EM.pdf
18. **Sur, I.M.**, *Methods of in situ bioremediation of contaminated soils: a review/Metode de bioremediere in situ a solurilor contaminate: studiu*, Acta Technica Napocensis, Series Environmental Engineering and Sustainable Development Entrepreneurship (bilingual edition), 2014, 3(4), 53-58
19. Pop Dorina, Micle, V., Fodor, H., **Sur Ioana Monica**, *Determination of soils properties texturally distinguished and their influence on thermal desorption process*, ProEnvironment, 2013, 6(14), 318 – 323, <http://journals.usamvcluj.ro/index.php/promediu/article/view/9900/8268>
20. **Sur Ioana Monica**, Valer Micle, Călin Rogozan, *The Analysis of Pollutes Soils from Romplumb Baia Mare Area for in Situ Bio-Leaching Treatment*, ProEnvironment/ProMediu, 2012, 5(11), 170 – 175, <http://journals.usamvcluj.ro/index.php/promediu/article/viewFile/8262/7011>
21. **Ioana M. Sur**, Valer Micle, Georgiana Plopeanu, *Cercetări asupra stării de calitate a solurilor din zona Romplumb Baia Mare*, Ecoterra – Journal of Environmental Research and Protection, 2012, 31, 105 – 109, <http://www.ecoterra-online.ro/files/1358614704.pdf>, ISSN 1584-7071
22. Micle, V., **Sur Ioana Monica**, *Zinc and copper extraction from polluted soils by in situ bioleaching/Extracția zincului și cuprului din solurile poluate prin biolixiviere in situ*, Acta Technica Napocensis, Series Environmental Engineering and Sustainable Development Entrepreneurship (bilingual edition), 2012, 1(1), 49–56, http://cpaddd.utcluj.ro/fileadmin/Revista_CPADDD/Nr.1/5_-VM.pdf
23. Pop Dorina, Micle, V., **Sur Ioana Monica**, *Analysis Regarding Soils Contamination Impact of Petroleum Oils for Choosing Antipollution Technology*, ProEnvironment/ProMediu, 2012, 5(10), 115 – 119, <http://journals.usamvcluj.ro/index.php/promediu/article/view/8116/6908>
24. Potra A. F., Micle V., **Berar (Sur) I. M.**, Băbuț Cosmina Simona, *Soil Quality Evaluation in Carbochim Cluj-Napoca Area in Order to Remediate*, Annals of the „Constantin Brâncuși” University of Târgu Jiu, Engineering Series, 2011, 3, 379 – 386, http://www.utgjiu.ro/revista/ing/pdf/2011-3/39_POTRA_ADRIAN_FLORIN.pdf

25. Urs (Nedelcu), A., Micle, V., **Berar (Sur), I. M.**, *Study on Mathematical Modelling of the Aeration and Irrigation Processes in Case of Biological Decontamination of Soils through Biopile Method*, ProEnvironment/ProMediu, 2011, 4(8), 212 – 216, <http://journals.usamvcluj.ro/index.php/promediu/article/view/7829/6753>
26. Potra, A.F., Micle, V., **Berar (Sur), I.M.**, Băbuț, S.C., *Study on the Remediation of Polluted Soils through Specific Activities of the Pharmaceutical Industry*, ProEnvironment/ProMediu, 2011, 4(8), 256 – 258, <http://journals.usamvcluj.ro/index.php/promediu/article/view/7860/6777>
27. Cociorhan, C. S., Micle, V., Oros, V., **Berar (Sur) Ioana Monica**, *Biosolubilizarea metalelor grele prezente în solurile poluate din zona Romplumb, Baia Mare*, ProEnvironment/ProMediu, 2011, 4, 179 – 186, <http://proenvironment.ro/promediu/article/viewFile/6214/5647>
28. **Berar (Sur), I.M.**, Micle, V., Urs (Nedelcu), A., *Research on Contaminated Soils from Baia Mare Area and their Remediation by In Situ Bio-Leaching Technique*, ProEnvironment/ProMediu, 2011, 4(8), 208 – 211, <http://journals.usamvcluj.ro/index.php/promediu/article/view/7827/6752>
29. Micle, V., **Berar (Sur) Ioana Monica**, Cociorhan, C. S., Stoica, O., Urs (Nedelcu), A. M., *Innovative solution for biological treatment of soils contaminated by metallurgical industry*, Proceeding of International Conference on Innovative Technologies IN-TECH, Bratislava/Slovakia, 2011, 740 – 743
30. Cociorhan, C. S., Micle, V., Oros, V., **Berar (Sur) Ioana Monica**, *Biosolubilization of Heavy Metals Present in Polluted Soils from Romplumb Area, Baia Mare*, ProEnvironment/ProMediu, 2011, 4(7), 80 – 86, <http://proenvironment.ro/promediu/article/viewFile/6190/5630>
31. **Berar (Sur) Ioana Monica**, Micle, V., Avram, S., Cociorhan, C. S., *Experimental research on the extraction of heavy metals from polluted soils due to the metallurgic industry*, Buletinul Institutului Politehnic din Iași-Seria: Știința și Ingineria Materialelor, Tomul LVII (LXI), Fasc. 2, Editura Politehnum, 2011, 93 – 98, <http://www12.tuiasi.ro/users/112/BIPI-3-2011.pdf>
32. Cociorhan, C. S., Micle, V., **Berar (Sur) Ioana Monica**, *Research On distribution meethod of heavy metals by Soil profile from Romplumb, Baia Mare*, Buletinul Institutului Politehnic din Iași-Seria: Știința și Ingineria Materialelor, Tomul LVII (LXI), Fasc. 3, Editura Politehnum, 2011, 41 – 48, <http://www12.tuiasi.ro/users/112/BIPI-4-2011%20final.pdf>
33. Micle, V., **Berar, I.M.**, Cociorhan, C.S., Stoica, O., Urs, A., *Studiu privind conceperea unui model experimental de tratare biologică a solurilor poluate prin activitățile specifice industriei metalurgice*, Environment&Progress, 2011, 15, 162–169, <http://frmm.ubm.ro/Buletin/Buletin/Vol.%20XXIV%20Nr.%202%20-%202010.pdf>
34. Cociorhan, C.S., Oros, V., Micle, V., **Berar (Sur), I. M.**, Coman, M., Juhasz, J., Taro, G., Pop, R., Fălăuș, Bianca, *Remarks on sampling techniques of contaminated soils in Baia Mare area*, Buletinul Științific al Universității de Nord Baia – Mare, Seria D, Exploatări Miniere, Prepararea SMU, Metalurgie Neferoasă, Geologie și Ingineria Mediului, 2011,

- 25(1), 117 –125,
<http://frmm.ubm.ro/Buletin/Buletin/Vol.%20XXV%20Nr.%201%20-%202011.pdf>
- 35. Berar (Sur) Ioana Monica**, Cociorhan, C.S., Oros, V., Micle, V., Coman, M., Juhasz, J., Taro, G., Falaus, B., Pop, R, *Research regarding metal contents of soil from Romplumb Baia Mare, in order to establish the remedial technique*, Buletinul Științific al Universității de Nord Baia – Mare, Seria D, Exploatări Miniere, Prepararea SMU, Metalurgie Neferoasă, Geologie și Ingineria Mediului, 2010, 24(2), 33 – 38
- 36. Berar (Sur) Ioana Monica**, Micle, V., Cociorhan, C. S., Gamenț, E., *Investigations on nutrients from soils polluted with heavy metals towards soil remediation by bio leaching*, 16th „Building Services, Mechanical and Building Industry Days” International Conference Proceedings, Debrecen (Hungary), 2010, 3, 238 – 244
- 37. Cociorhan, C. S., Micle, V., Berar (Sur) Ioana Monica**, Oros, V., *Experimental research to optimize parameters of the bioleaching extraction method of heavy metals*, 16th „Building Services, Mechanical and Building Industry Days” International Conference Proceedings, Debrecen (Hungary), 2010, 3, 253 – 258
- 38. Berar (Sur) Ioana Monica**, Micle, V., Oros, V., Cociorhan, C. S., Urs (Nedelcu), A. M., *Studies and Research on Soil Quality Evaluation in Romplumb Baia Mare to address remediation of polluted sites*, ProEnvironment/ProMediu, 2010, 3(6), 292–296, <http://proenvironment.ro/promediu/article/viewFile/5493/5126>
- 39. Urs (Nedelcu), A.M., Micle, V., Berar (Sur) Ioana Monica**, *Studies on polluted soil aeration systems to improve efficiency of soil remediation using biopile technology*, ProEnvironment/ProMediu, 2010, 3(6), 437–441, <http://proenvironment.ro/promediu/article/viewFile/5525/5155>
- 40. Urs (Nedelcu), A.M., Micle, V., Berar (Sur) Ioana Monica**, *Studii privind sistemele de aerare a solului poluat în vederea îmbunătățirii randamentului de depoluare în cazul tratării solurilor prin metoda „biopile”*, ProEnvironment/ProMediu, 2010, 3(6), 622 – 626, <http://journals.usamvcluj.ro/index.php/promediu/article/view/5577/5196>
- 41. Berar (Sur) Ioana Monica**, Micle, V., Oros, V., Cociorhan, C. S., Urs (Nedelcu), A. M., *Studii și cercetări privind evaluarea calității solurilor din zona SC. Romplumb SA. Baia Mare în vederea remedierii terenurilor poluate*, ProEnvironment/ProMediu, 2010, 3(6), 472 – 476, <http://proenvironment.ro/promediu/article/viewFile/5541/5166>
- 42. Berar (Sur) Ioana Monica**, Micle, V., *Study on the creation of a model of in situ biological remediation of polluted soils in areas with metallurgical activities*, Buletinul Științific Acta Tehnica Napocensis of Technical University of Cluj-Napoca, Series: Machines Construction Materials, 2009, 52, 125 – 130, http://cpaddd.utcluj.ro/fileadmin/Revista_CPADDD/Nr.1/5_-_VM.pdf

Lucrări științifice – publicate în volumul conferințelor

1. Gabor Timea, Tiuc Ancuta Elena, **Sur Ioana Monica**, Badila, Iulian Nicolae, *Numerical analysis and simulation of the heat recovery from wastewater using heat exchanger*, vol 240, p.1-8, XI International Conference on Computational Heat, Mass And Momentum Transfer – ICCHMT, 21-24 mai 2018, Cracovia, Polonia, <https://doi.org/10.1051/mateconf/201824002005>

2. Adriana Mihaela Chirilă Băbău, Valer Micle, Gianina Elena Damian, **Ioana Monica Sur**, *Studies concerning the phytoremediation of sites degraded by mining activities with Robinia pseudoacacia*, Global and Regional in Environmental Protection" Conference GLOREP 2018, 15-17 November 2018, Timisoara, Romania, Book of accepted abstracts, 11/6/2018, p. 374-375
3. Gianina Elena Damian, Valer Micle, **Ioana Monica Sur**, *Lab scale experimental investigations regarding the efficacy of using humic substances in heavy metals removal by soil washing*, Global and Regional in Environmental Protection" Conference GLOREP 2018, 15-17 November 2018, Timisoara, Romania, Book of Abstracts, 11/6/2018, p. 45-47
4. Valer Micle, Dorina Pop, **Ioana Monica Sur**, George Călin Rogozan, Gianina Elena Damian, *Mathematical modelling of thermal desorption of the crude oil polluted soil*, Global and Regional in Environmental Protection" Conference GLOREP 2018, 15-17 November 2018, Timisoara, Romania, Book of Abstracts, 11/6/2018, p. 176-178
5. **Ioana Monica Sur**, Valer Micle, Adriana Mihaela Chirila - Babau, Timea Gabor, *Extraction of lead from polluted soils*, Book of abstract "12th International Conference on Environmental Legislation, Safety Engineering and Disaster Management, ELSEDIMA 2018, Book of Abstract p. 176
6. Timea Gabor, Viorel Dan, Ancuta-Elena Tiuc, **Ioana Monica Sur**, Iulian Nicolae Badila *Rationalization of energy consumption in shower systems of residential housing*" autori: , Book of abstract "12th International Conference on Environmental Legislation, Safety Engineering and Disaster Management, Elsedima, 2018, p. 71
7. Adriana M. Chirilă Băbău, Valer Micle, **Ioana Monica. Sur**, Gianina E. Damian, *Ethical issues in ecological restoration of sterile dumps and potential of plant species for phytoremediation: seed germination of Robinia Pseudoacacia in various amendments with heavy metals*, Book of abstract "12th International Conference on Environmental Legislation, Safety Engineering and Disaster Management, Elsedima 2018, Book of Abstract, p. 37
8. Gianina E. Damian, Valer Micle, **Ioana Monica Sur**, Adriana M. Chirila Babau, *From environmental ethics to sustainable decisionmaking: assessment of potential ecological risk in soils around abandoned mining areas-case study "Larga de Sus mine" (Romania)*, Book of abstract "12th International Conference on Environmental Legislation, Safety Engineering and Disaster Management, Elsedima 2018, Book of Abstract, p. 43
9. **Ioana Monca Sur**, Adriana Mihaela Chirila Babau, Timea Gabor, Valer Micle, *The Use of Microorganisms in the Bioleaching of Soils Polluted with Heavy Metals*, 20th International Research Conference Proceedings , IRC 2018 ", 21 - 22 iunie, 2018, Venice, Italia, p. 2671-2675
10. **Ioana Monica Sur**, Calin Baciuc, Valer Micle, Timea Gabor, *Modelling the pollutants behaviour in the vadose zone – a case study in Baia Mare area*, Book of Abstracts International U.A.B. – B.E.N.A. Conference, Environmental Engineering & Sustainable Development, Alba Iulia, Romania, 25-27 mai 2017, p. 152

11. Timea. Gabor, Viorel Dan, Ancuța Elena Tiuc, Iulian Nicolae Badila, **Ioana Monica Sur**, *Heat recovery from wastewater: critical review and future perspectives*, Book of Abstracts International U.A.B. – B.E.N.A. Conference, Environmental Engineering & Sustainable Development, Alba Iulia, Romania, 25-27 mai 2017, p. 72
12. Viorel DAN, Timea GABOR, **Ioana Monica SUR**, *Tehnological parameters of the cleaning process of hydrocarbons contaminates soils using thermal microwave denudung (desorption)*, Book of Abstracts International U.A.B. – B.E.N.A. Conference, Environmental Engineering & Sustainable Development, Alba Iulia, Romania, 25-27 mai 2017, p. 61
13. Micle, V., **Sur Ioana Monica**, *Reabilitarea siturilor industriale poluate: stare actuală și perspective*, Conferința Antreprenoriat, Mediu De Afaceri și Dezvoltare Durabilă AMDD, volumul conferinței, 2012, p. 225 – 234, ISSN 2285-7443
14. **Berar (Sur), Ioana Monica**, Micle, V., Cociorhan, C. S., *Investigations for remediation of soils polluted with heavy metal*, Conference Volume of The 7th Environmental Science Conference in the Carpathian Basin, March 24 – 27, 2011, Cluj-Napoca (Romania), vol. 2, p. 578 – 582, Editura Abel Kiado ISBN 1842-9815
15. Cociorhan, C. S., Oros, V., Micle, V., **Berar (Sur) Ioana Monica**, Coman, M., Taro, G., *Technique on research aspect of sampling soil contaminated with heavy metal for bioleaching technologies*, Conference Volume of The 7th Environmental Science Conference in the Carpathian Basin, March 24 – 27, 2011, Cluj-Napoca (Romania), vol. 1, p. 380 – 384, Editura Abel Kiado ISBN 1842-9815
16. **Berar (Sur), I.M.**, Micle, V., *Cercetari privind extractia metalelor grele din solurile poluate prin biolixiviere in situ in contextual dezvoltarii durabile*, Conferința Anteprenoriat Mediu de Afaceri si Dezvoltare Durabila, 2011, Cluj-Napoca, vol 1, p. 231 – 237, ISBN 978-606-17-0010-3.

V. Participare la conferințe naționale și internaționale

1. 33rd International Conference, Ecology & Safety, 12-15 August 2024, Burgas, Bulgaria:
 - ✓ Polyak E.T., Micle V., **Sur I.M.**, *Global Landscape of Soil Pollution From Mining Activities*
2. 5th International Exhibition INVECOR, 4-6 aprilie 2024, Deva, România:
 - ✓ Micle V., **Sur I.M.**, Mitrea M., *Sistem și procedeu de bioremediere ex-situ a solurilor poluate cu hidrocarburi utilizând micoorganisme Pseudomonas și Bacillus*
3. Salonul Internațional de Invenții-Inovații „Traian Vuia” 13-15 iunie 2024, Timișoara:
 - ✓ Micle V., **Sur I.M.**, Mitrea M., *Sistem și procedeu de bioremediere ex-situ a solurilor poluate cu hidrocarburi utilizând micoorganisme Pseudomonas și Bacillus*
4. European Exhibition of Creativity and Inovation EUROINVENT 2024, 6-8 iunie 2024, Iași:
 - ✓ Micle V., **Sur I.M.**, Mitrea M., *Sistem și procedeu de bioremediere ex-situ a solurilor poluate cu hidrocarburi utilizând micoorganisme Pseudomonas și Bacillus*
5. 12th International Conference On Environmental Engineering And Management September 13-16 septembrie 2023, Iași, Romania:
 - ✓ Polyak E.T., Micle V., **Sur I.M.**, *Assessment of the degree of soil pollution in the vicinity of the mining sectors in NW Romania*,

- ✓ **Sur I.M.**, Polyak E.T., Micle V., Phytoremediation: a sustainable method for the removal of heavy metals from polluted soils
- ✓ Ognean S.I., Micle V., **Sur I.M.**, Şenilă M., Tamas-Krumpe O.M., Ognean L., Study on the water quality monitoring at distribution and discharge in areas with agro-industrial activities
- 6. *International Conference on Soils, Sediments and Water - INTERSOIL 2020, 2-3 martie 2020, Bruxelles, Belgia:*
 - ✓ V. Micle, **I. M.Sur**, Experimental investigation of a pilot-scale concerning ex-situ bioremediation of petroleum hydrocarbons contaminated soils
- 7. *9th International Symposium "Soil Minimum Tillage Systems", 8-9 mai 2019, Cluj Napoca:*
 - ✓ Damian G.E., Micle V., **Sur I. M.**, Assessment of heavy metal contamination in the soils nearby "Larga de Sus" mine (Romania)
- 8. *International U.A.B. – B.E.N.A Workshop, Environmental Engineering and Sustainable Development, 20-21 iunie 2019, Alba Iulia, Romania:*
 - ✓ Damian G.E., Micle V., **Sur I. M.**, Removal of heavy metals from contaminated soil using chitosan as washing agent-a preliminary study
 - ✓ **Sur I. M.**, Micle V., Damian G.E., Assessment of heavy metal contamination and bioremediation potential of thiobacillus ferrooxidans in soils around a copper quarry
- 9. *International Conference Contaminated Sites, 8–octombrie 2018, Banska Bystrica, Slovakia:*
 - ✓ Micle V., **Sur I.M.**, Investigation concerning ex-situ bioremediation of petroleum hydrocarbons contaminated soils
 - ✓ Damian G.E., Micle V., **Sur I.M.**, Preliminary investigations regarding the potential of humic substances to extract nickel from contaminated soil
- 10. *The International Conference of the University of Agronomic Sciences and Veterinary Medicine of Bucharest "Agriculture for Life, Life for Agriculture" 7–9 iunie 2018, Bucharest:*
 - ✓ Stoica O.G., Micle V., **Sur I.M.**, Design and execution of an antimony sensor used for monitoring of soil pH
 - ✓ Chirila – Babau A.M., Micle V., **Sur I.M.**, Research on cadmium soil pollution in the former Almasu Mare mining area
- 11. *Global and Regional in Environmental Protection" Conference GLOREP 2018, 15-17 noiembrie 2018, Timisoara, Romania:*
 - ✓ Chirilă Băbău A.M., Micle V., Damian G.E., **Sur I.M.**, Studies concerning the phytoremediation of sites degraded by mining activities with Robinia pseudoacacia
 - ✓ Damian G.E., Micle V., **Sur I.M.**, Lab scale experimental investigations regarding the efficacy of using humic substances in heavy metals removal by soil washing
 - ✓ Micle V., Pop D., **Sur I.M.**, Rogozan G.C., Damian G.E., Mathematical modelling of thermal desorption of the crude oil polluted soil
- 12. *20th International Conference on Environmental Degradation and Technology ICEDT 2018, World Academy Of Science, Engineering And Technology, 21–22 iunie, 2018, Venice, Italia:*

- ✓ **Sur I.M.**, Chirila Babau A.M., Gabor T., Micle V., The Use of Microorganisms in the Bioleaching of Soils Polluted with Heavy Metals
- 13. 12th International Conference on Environmental Legislation, Safety Engineering and Disaster Management, Elsedima 2018, Universitatea Babeș-Bolyai, Facultatea de Știința și Ingineria Mediului 17-19 mai 2018, Cluj Napoca:**
 - ✓ **Sur I.M.**, Micle V., Chirila – Babau A.M., Gabor T., Extraction of lead from polluted soils
 - ✓ Gabor T., Dan V., Tiuc A.E., **Sur I.M.**, Badila I.N., Rationalization of energy consumption in shower systems of residential housing
 - ✓ Chirilă Băbău A.M., Micle V., **Sur I.M.**, Damian G.E., Ethical issues in ecological restoration of sterile dumps and potential of plant species for phytoremediation: seed germination of Robinia Pseudoacacia in various amendments with heavy metals
 - ✓ Damian G.E., Micle V., **Sur I.M.**, Chirila Babau A.M., From environmental ethics to sustainable decisionmaking: assessment of potential ecological risk in soils around abandoned mining areas-case study “Larga de Sus mine” (Romania)
- 14. XI International Conference on Computational Heat, Mass And Momentum Transfer – ICCHMT, 21-24 mai 2018, Cracovia, Polonia:**
 - ✓ Gabor T., Tiuc A.E., **Sur I.M.**, Badila I.N., Numerical analysis and simulation of the heat recovery from wastewater using heat exchanger
- 15. International Conferences on Earth & Geo Sciences - SGEM Vienna Green Sessions 2017, 27-30 noiembrie 2017, Viena, Austria:**
 - ✓ **Sur I.M.**, Gabor T., Chirila Babau A.M., Tiuc A.E., Research regarding as and cd extraction from the polluted soils
 - ✓ Gabor T., Tiuc A.E., Badila I.N., **Sur I.M.**, Heat exchanger utilizations in wastewater heat recovery for buildings: a key review
 - ✓ Tiuc A.E., Gabor T., **Sur I.M.**, Tamas-Gavrea D.R., Vermeșan H., Recovery of sawdust, recycled rubber particles and textile waste by making sound absorbing materials
- 16. Simpozionul national cu participare internationala “Environment & Progress” Universitatea Babeș-Bolyai Facultatea de Știința și Ingineria Mediului, 10 noiembrie 2017, Cluj Napoca:**
 - ✓ **Sur I.M.**, Tecsa A.M., Micle V., Gabor T., *Analyze of the physical-chemical properties of the soil in the area Posta Rat / Turda,*
- 17. 9 th International Conference On Environmental Engineering And Management, Circular Economy and Environmental Sustainability, 6 – 9 septembrie 2017, Bologna, Italy:**
 - ✓ Micle V., **Sur I.M.**, Criste A., Șenilă M., Levei E., Gamenț E., Cristorean C., Rogozan G.C., *Experimental investigation concerning ex-situ bioremediation of petroleum hydrocarbons contaminated soils*
- 18. The International Conferenece of the University of Agronomic Sciences and Veterinary Medicine of Bucharest “Agriculture for life, life for agriculture”, 8-10 iunie 2017, Bucuresti:**

- ✓ **Sur I.M.**, Cîmpean A., Micle V., Tănăsela C., *Physical-chemical properties analysis of the soil contaminated with heavy metals from Copsa-Mica area*
- 19. *International U.A.B. – B.E.N.A. Conference, Environmental Engineering & Sustainable Development, 25-27 mai 2017, Alba Iulia Romania:*
 - ✓ **Sur I.M.**, Baciuc C., Micle V., Gabor T., *Modelling the pollutants behaviour in the vadose zone – a case study in Baia Mare area*
- 20. *Conferinta internationala – multidisciplinara, "Profesorul Dorin Pavel - fondatorul hidroenergeticii romanesti" 2-3 iunie 2017, Sebes, Romania:*
 - ✓ Băbău A.M., Micle V., **Sur I.M.**, *Proprietati fizico chimice ale solului din jurul haldei Rades/judetul Alba*
- 21. *Conferinta stiintifica internationala "Aerul si apa – Componente ale Mediului", 17-19 martie 2017, Cluj- Napoca, Romania:*
 - ✓ Băbău A.M., Micle V., **Sur I.M.**, *Research on underground water quality from Almasu Mare area*
- 22. *ELSEDIMA International Conference, 26 – 28 mai 2016, Cluj-Napoca, Romania:*
 - ✓ **Sur I.M.**, Micle V., Boroș M.N., Rogozan G.C., *The conception of an experimental model for ex-situ bioremediation of soils contaminated with petroleum hydrocarbons*
- 23. *The fifteenth edition of The Multidisciplinary International Conference „Professor Dorin Pavel – Romanian hydropower founder”, 5 – 6 Iunie, 2015, Sebeș, Romania:*
 - ✓ Jașcău D.V., Boroș M.N., Gabor T., **Sur I.M.**, Pică E.M., *Efficient methods of treating the leachate generated from municipal waste landfills*
- 24. *ENVIRONMENT & PROGRESS, 10th National Symposium with international participation, 30 octombrie 2015, Cluj-Napoca, România:*
 - ✓ Cristorean C., Micle V., **Berar (Sur) I.M.**, *A critical analysis of ex-situ bioremediation technologies of hydrocarbon polluted soils*
- 25. *Contaminated Site Management in Europe: Sustainable Remediation and Management of Soil, Sediment and Groundwater – CSME, 19-21 octombrie, 2015, Brussels, Belgium:*
 - ✓ Micle V., **Sur I.M.**, Melania-Nicoleta Boroș, Vasile Oros, Irina Smical, *Innovative remediation technologies applicable to sites polluted by metallurgical activities*
- 26. *Ediția a III-a, Sesiunea de comunicări „R” –Regenerare, Reabilitare și Restaurare a Solului – de la Concept la Realizare dedicat Zilei Pământului, 6 mai 2011, Cluj-Napoca:*
 - ✓ **Berar (Sur) I.M.**, Micle V., Urs (Nedelcu), A., *Research on Contaminated Soils from Baia Mare Area and their Remediation by In Situ Bio-Leaching Technique*
- 27. *Conferința Anteprenariat Mediu de Afaceri si Dezvoltare Durabila, 1-2 iulie 2011, Cluj-Napoca:*
 - ✓ **Berar (Sur) I.M.**, Micle V., *Cercetari privind extractia metalelor grele din solurile poluate prin biolixiviere in situ in contextual dezvoltarii durabile*
- 28. *Conferinta Environment – Research, Protection and Management, 11 - 12 November 2011, Cluj-Napoca, Romania:*
 - ✓ **Sur I.M.**, Micle V., Ploean G., *Cercetări asupra stării de calitate a solurilor din zona Romplumb Baia Mare*

29. *Conference 7th Environmental Science Conference in the Carpathian Basin, 24-27 martie, 2011, Cluj-Napoca, România:*
- ✓ **Berar (Sur) I.M.**, Micle, V., Cociorhan, C. S., Investigations for remediation of soils polluted with heavy metal
30. *The Eighth International Congress In Materials Science And Engineering ISSIM, 26-29 mai 2011, Iași, Romania:*
- ✓ **Berar (Sur) I.M.**, Micle, V., Avram, S., Cociorhan, C. S., *Experimental research on the extraction of heavy metals from polluted soils due to the metallurgic industry*
31. *Ediția a II-a a Conferinței cu tema Relația Mediu & Agricultură & Industrie: Conflict și Sinergie Dedicată Zilei Mondiale a Mediului, 2 iunie 2010, Cluj-Napoca:*
- ✓ **Berar (Sur) I.M.**, Micle, V., Oros, V., Cociorhan, C. S., Urs (Nedelcu), A. M., *Studies and Research on Soil Quality Evaluation in Romplumb Baia Mare to address remediation of polluted sites*
32. *16th „Building Services, Mechanical and Building Industry Days” ,International Conference, 14-15 octombrie 2010, Debrecen, Hungary:*
- ✓ **Berar (Sur) I.M.**, Micle, V., Cociorhan, C. S., Gament, E., Investigations on nutrients from soils polluted with heavy metals towards soil remediation by bio leaching
33. *Editia a II-a, Conferintei internatională “Resurse minerale și mediu, 28 – 30 octombrie 2010, Baia Mare, România:*
- ✓ **Berar (Sur) I.M.**, Cociorhan, C.S., Oros, V., Micle, V., Coman, M., Juhasz, J., Taro, G., Falaus, B., Pop, R, Research regarding metal contents of soil from Romplumb Baia Mare, in order to establish the remedial technique

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