

Technical University of Cluj-Napoca
Faculty of Materials and Environmental Engineering
Department Environmental Engineering and Sustainable Development Entrepreneurship

LIST OF PUBLICATIONS

Lecturer Dr. Eng. Ioana Monica SUR

I. Relevant work

1. 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>
2. 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>
3. **Ioana Monica Sur**, Ana Moldovan, Valer Micle, Evelyn Terez Polyak, *Assessment of Surface Water Quality in the Baia Mare Area, Romania,* Water, 2022, 14, 3118. <https://doi.org/10.3390/w14193118>
4. **Ioana Monica Sur**, Valer Micle, Evelyn Terez Polyak, Timea Gabor, *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>
5. **Ioana Monica Sur**, Valer Micle, Andreea Hegyi, Adrian-Victor Lazarescu, *Extraction of Metals from Polluted Soils by Bioleaching in Relation to Environmental Risk Assessment,* Materials, 2022, 15, 3973. <https://doi.org/10.3390/ma15113973>
6. 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>
7. **I.M. Sur**, V. Micle, G. E. Damian. *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
8. **Ioana Monica Sur**, Valer Micle, Timea Gabor, *Heavy metals removal by bioleaching using Thiobacillus Ferrooxidans,* Romanian Biotechnological Letters, 2018, 23(2), 13409–13416, WOS:000431317900005
9. **Sur, Ioana Monica**; Micle, Valer; Gabor, Timea, *The influence of polluted soil aeration in the process of in situ bioleaching,* Studia Universitatis Babeş-Bolyai, Chemia, 2016, 61(3), 355–364
10. Micle V., **Sur I.M.**, *Ştiinţa solului – Îndrumător de laborator,* Editura UT Pres, Cluj-Napoca, ISBN 978-973-662-724-8, 2012, 93 pagini

II. PhD Thesis

Research on the extraction of heavy metals by in situ bioleaching from polluted soils, September 2011, Technical University of Cluj-Napoca, scientific coordinator Prof. Dr. Eng. MICLE Valer, UTC-N

III. Patents

Micle Valer, **Sur Ioana Monica**, Mitrea Mihai, *Process of ex-situ bioremediation of soils polluted with hydrocarbons using Pseudomas and Bacillus microorganisms*, RO132554/2023, international classification B09C1/10

IV. Books

Micle V., **Sur I.M.**, *Soil Science – Laboratory Guide*, UT Pres Publishing House, Cluj-Napoca, ISBN 978-973-662-724-8, 2012, 93 pages

V. Publications in scientific journals

Publications in ISI journal

1. 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>
2. 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>
3. Brăduț Alexandru Ionescu, Mihail Chira, Horatiu Vermesan, Andreea Hegyi, Adrian-Victor Lăzărescu, Gyorgy Thalmaier, Bogdan Viorel Neamtu, Timea Gabor, **Ioana Monica Sur**, *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>
4. **Ioana Monica Sur**, Ana Moldovan, Valer Micle, Evelyn Terez Polyak, *Assessment of Surface Water Quality in the Baia Mare Area, Romania*, Water, 2022, 14, 3118, <https://doi.org/10.3390/w14193118>
5. **Ioana Monica Sur**, Valer Micle, Evelyn Terez Polyak, Timea Gabor, *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>
6. **Ioana Monica Sur**, Valer Micle, Andreea Hegyi, Adrian-Victor Lazarescu, *Extraction of Metals from Polluted Soils by Bioleaching in Relation to Environmental Risk Assessment*, Materials, 2022, 15, 3973, <https://doi.org/10.3390/ma15113973>
7. Adriana Mihaela. Chirilă Băbău, Valer Micle, Gianina Elena Damian, **Ioana Monica Sur**, *Sustainable Ecological Restoration of Sterile Dumps Using Robinia pseudoacacia*. Sustainability, 2021, 13(24), 14021, <https://doi.org/10.3390/su132414021>

8. 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>
9. Oana-Adriana Crișan, Marius Sorin Pustan, Corina Julieta Birleanu, Anuța Elena Tiuc, **Ioana Sur**, Horea-George Crișan, Florina Șerdean, Lazăr Flamînd, Tiberiu Rusu, *Qualitative analysis of filters for the mechanical nanofiltration of household drinking water*, *Studia Universitatis Babeș-Bolyai, Chemia*, 2020, 65(1), 253–266
10. G. E. Damian, V. Micle, **I. M. Sur**, *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
11. **I.M. Sur**, V. Micle, G. E. Damian. *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
12. A. M. Chirila Babau, V. Micle, G. E. Damian, **I. M. Sur**. *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
13. 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
14. Micle V., Pop Dorina, **Sur Ioana-Monica**, Rogozan G.C., Damian Gianina-Elena, *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
15. Damian Gianina-Elena, Micle V., **Sur Ioana-Monica**, *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
16. Gianina Elena Damian, Valer Micle, **Ioana Monica Sur**, *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>
17. Gianina E. Damian, Valer Micle, **Ioana M. Sur**, Adriana M. Chirila Babau, *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>
18. 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 Babeș-Bolyai, Seria Chemia*, 2019, Vol. LXIV, 41–52
19. Micle V., **Sur Ioana Monica**, Criste Adriana, Senila M., Levei Erika, Marinescu Mariana, Cristorean Carmen, 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
20. Chirilă Băbău Adriana-Mihaela, Micle V., **Sur Ioana Monica**, *Characterization of soils in the Almasu Mare area through the determination of lead concentrations*, Studia Universitatis Babeş-Bolyai Chemia, 2018, LXIII, 2, 83–91, DOI:10.24193/subbchem.2018.2.08, WOS:000440849900008
21. Dorina Pop, Valer Micle, **Ioana Monica Sur**, *Optimizing the process of depollution through thermal absorption of soils contaminated with crude oil*, Environmental Engineering and Management Journal, 2018, 17(11), 2619–2626
22. **Ioana Monica Sur**, Valer Micle, Timea Gabor, *Heavy metals removal by bioleaching using Thiobacillus Ferrooxidans*, Romanian Biotechnological Letters, 2018, 23(2), 13409–13416, WOS:000431317900005
23. Octavian Grigore Stoica, Valer Micle, **Ioana Monica Sur**, *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
24. Adriana Mihaela Chirila - Babau, Valer Micle, **Ioana Monica Sur**, *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
25. Timea Gabor, Viorel Dan, Iulian-Nicolae Badila, Ancuta-Elena Tiuc, **Ioana Monica Sur**, *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
26. **Ioana Monica Sur**, Alexandra Cîmpean, Valer Micle, Claudiu Tănăsolia, *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
27. Adriana Mihaela Băbău, Valer Micle, **Ioana Monica Sur**, *Study on physico-chemical properties of soil in the Radeş mine area*, Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering, 2017, 6, 108–113
28. George-Călin Rogozan, Valer Micle, **Ioana-Monica Sur**, *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, Ioana Monica**; Micle, Valer; Gabor, Timea, *The influence of polluted soil aeration in the process of in situ bioleaching*, Studia Universitatis Babeş-Bolyai, Chemia, 2016, 61(3), 355–364
31. **Berar (Sur) Ioana Monica**, Micle, V., Avram, S., Şenilă, 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

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32. **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
33. 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
34. 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

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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, vol. 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) Bînă, 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://cpadd.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://cpadd.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 Politehnicum, 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 Politehnicum, 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., Falauș, 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>
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Publicattion in the volume of the conferences

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, ELSEDIMIA 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 M. 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 Bioremediation 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 Baciu, 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, Anuța 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 bioremediation 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.**, Micle, V., *Cercetari privind extractia metalelor grele din solurile poluate prin biolixiviere in situ in contextual dezvoltarii durabile*, Conferința Antreprenoriat Mediu de Afaceri si Dezvoltare Durabila, 2011, Cluj-Napoca, vol 1, p. 231 – 237, ISBN 978-606-17-0010-3.

VI. Participation in national and international conferences

1. *International Conference on Soils, Sediments and Water - INTERSOIL 2020, 2-3 March 2020, Bruxelles, Belgia:*
 - ✓ V. Micle, **I. M. Sur**, Experimental investigation of a pilot-scale concerning ex-situ bioremediation of petroleum hydrocarbons contaminated soils
2. *9th International Symposium "Soil Minimum Tillage Systems", 8-9 May 2019, Cluj Napoca, Romania:*
 - ✓ Damian G.E., Micle V., **Sur I. M.**, Assessment of heavy metal contamination in the soils nearby "Larga de Sus" mine (Romania)

3. *International U.A.B. – B.E.N.A Workshop, Environmental Engineering and Sustainable Development, 20-21 June 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
4. *International Conference Contaminated Sites, 8 – 9 October 2018, Banska Bystrica, Slovakia:*
 - ✓ Valer Micle, **Ioana Monica Sur**, Investigation concerning ex-situ bioremediation of petroleum hydrocarbons contaminated soils
 - ✓ Gianina E. Damian, Valer Micle, **Ioana Monica Sur**, Preliminary investigations regarding the potential of humic substances to extract nickel from contaminated soil
5. *The International Conference of the University of Agronomic Sciences and Veterinary Medicine of Bucharest "Agriculture for Life, Life for Agriculture" 7 – 9 June, 2018, Bucharest, Romania:*
 - ✓ Octavian Grigore Stoica, Valer Micle, **Ioana Monica Sur**, Design and execution of an antimony sensor used for monitoring of soil pH
 - ✓ Adriana Mihaela Chirila - Babau, Valer Micle, **Ioana Monica Sur**, Research on cadmium soil pollution in the former Almasu Mare mining area
6. *Global and Regional in Environmental Protection" Conference GLOREP 2018, 15-17 November 2018, Timisoara, Romania:*
 - ✓ 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
 - ✓ 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
 - ✓ Valer Micle, Dorina Pop, **Ioana Monica Sur**, George Călin Rogozan, Gianina Elena Damian, Mathematical modelling of thermal desorption of the crude oil polluted soil
7. *20th International Conference on Environmental Degradation and Technology ICEDT 2018, World Academy Of Science, Engineering And Technology, 21 – 22 June, 2018, Venice, Italy*
 - ✓ **Ioana Monca Sur**, Adriana Mihaela Chirila Babau, Timea Gabor, Valer Micle, The Use of Microorganisms in the Bioleaching of Soils Polluted with Heavy Metals
8. *12th International Conference on Environmental Legislation, Safety Engineering and Disaster Management, Elsedima 2018, Universitatea Babes-Bolyai, Facultatea de Stiința și Ingineria Mediului 17-19 May 2018, Cluj Napoca:*
 - ✓ **Ioana Monica Sur**, Valer Micle, Adriana Mihaela Chirila - Babau, Timea Gabor, Extraction of lead from polluted soils
 - ✓ Timea Gabor, Viorel Dan, Ancuta-Elena Tiuc, **Ioana Monica Sur**, Iulian Nicolae Badila, Rationalization of energy consumption in shower systems of residential housing

- ✓ Adriana M. Chirilă Băbău, Valer Micle, **Ioana M. 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
 - ✓ Gianina E. Damian, Valer Micle, **Ioana M. 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)
9. *XI International Conference on Computational Heat, Mass And Momentum Transfer – ICCHMT, 21-24 mai 2018, Cracovia, Polonia:*
- ✓ Gabor Timea, Tiuc Ancuta Elena, **Sur Ioana Monica**, Badila, Iulian Nicolae, Numerical analysis and simulation of the heat recovery from wastewater using heat exchanger
10. *International Conferences on Earth & Geo Sciences - SGEM Vienna Green Sessions 2017, 27-30 November 2017, Viena, Austria:*
- ✓ **Ioana Monica Sur**, Timea Gabor, Adriana Mihaela Chirila Babau, Ancuta Elena Tiuc, Research regarding as and cd extraction from the polluted soils
 - ✓ Timea Gabor, Ancuta-Elena Tiuc, Iulian-Nicolae Badila, **Ioana Monica Sur**, Heat exchanger utilizations in wastewater heat recovery for buildings: a key review
 - ✓ 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
11. *Simpozionul national cu participare internationala “Environment & Progress” Universitatea Babeș-Bolyai Facultatea de Știința Și Ingineria Mediului, 10 November 2017, Cluj Napoca, Romania:*
- ✓ **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,*
12. *9 th International Conference On Environmental Engineering And Management, Circular Economy and Environmental Sustainability, 6 - 9 September 2017, Bologna, Italy:*
- ✓ Valer Micle, **Ioana Monica Sur**, Adriana Criste, Marin Șenilă, Erika Levei, Eugenia Gament, Carmen Cristorean, George Călin Rogozan, *Experimental investigation concerning ex-situ bioremediation of petroleum hydrocarbons contaminated soils*
13. *The International Conferenece of the University of Agronomic Sciences and Veterinary Medicine of Bucharest “Agriculture for life, life for agriculture”, 8-10 June 2017, Bucuresti, Romania:*
- ✓ **Ioana Monica Sur**, Alexandra Cîmpean, Valer Micle, Claudiu Tănăselia, *Physical-chemical properties analysis of the soil contaminated with heavy metals from Copsa-Mica area*
14. *International U.A.B. – B.E.N.A. Conference, Environmental Engineering & Sustainable Development, 25-27 May 2017, Alba Iulia Romania:*
- ✓ **Ioana Monica Sur**, Calin Baci, Valer Micle, Timea Gabor, *Modelling the pollutants behaviour in the vadose zone – a case study in Baia Mare area*

15. Conferinta internationala – multidisciplinara, "Profesorul Dorin Pavel - fondatorul hidroenergeticii romanesti" 2–3 June 2017, Sebes, Romania:
 - ✓ Adriana Mihaela Băbău, Valer Micle, **Ioana Monica Sur**, *Proprietati fizico chimice ale solului din jurul haldei Rades/judetul Alba*
16. Conferinta stiintifica internationala "Aerul si apa – Componente ale Mediului", 17-19 March 2017, Cluj- Napoca, Romania:
 - ✓ Adriana Mihaela Băbău, Valer Micle, **Ioana Monica Sur**, *Research on underground water quality from Almasu Mare are*
17. ELSEDIMA International Conference, 26 – 28 May 2016, Cluj-Napoca, Romania:
 - ✓ **Ioana Monica Sur**, Valer Micle, Melania-Nicoleta Boroş, George Călin Rogozan, *The conception of an experimental model for ex situ bioremediation of soils contaminated with petroleum hydrocarbons*
18. The fifteenth edition of The Multidisciplinary International Conference „Professor Dorin Pavel – Romanian hydropower founder”, 5 – 6 June, 2015, Sebeş, Romania:
 - ✓ Dan-Vlad Jaşcău, Melania-Nicoleta Boroş, Timea Gabor, **Ioana Monica Sur**, Elena Maria Pică, *Efficient methods of treating the leachate generated from municipal waste landfills*
19. ENVIRONMENT & ROGRESS, 10th National Symposium with international participation, 30 October 2015, Cluj-Napoca, România:
 - ✓ Carmen Cristorean, Valer Micle, **Ioana Monica Berar (Sur)**, *A critical analysis of ex-situ bioremediation technologies of hydrocarbon polluted soils*
20. Contaminated Site Management in Europe: Sustainable Remediation and Management of Soil, Sediment and Groundwater – CSME, 19-21 October, 2015, Brussels, Belgium:
 - ✓ Valer MICLE, **Ioana Monica Sur**, Melania-Nicoleta Boroş, Vasile Oros, Irina Smical, *Innovative remediation technologies applicable to sites polluted by metallurgical activities*
21. Ediția a III-a, Sesiunea de comunicări „R” –Regenerare, Reabilitare și Restaurare a Solului – de la Concept la Realizare dedicat Zilei Pământului, 6 May 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*
22. Conferința Anteprenoriat Mediu de Afaceri si Dezvoltare Durabila, 1-2 July 2011, Cluj-Napoca:
 - ✓ **Berar (Sur), I.**, Micle, V., *Cercetari privind extractia metalelor grele din solurile poluate prin biolixiviere in situ in contextual dezvoltarii durabile*
23. Conferinta Environment – Research, Protection and Management, 11 - 12 November 2011, Cluj-Napoca, Romania:
 - ✓ **Sur Ioana Monica**, Micle Valer, Plopean Georgeta, *Cercetări asupra stării de calitate a solurilor din zona Romplumb Baia Mare*
24. Conference 7th Environmental Science Conference in the Carpathian Basin, 24-27 March, 2011, Cluj-Napoca, România:
 - ✓ **Berar (Sur), Ioana Monica**, Micle, V., Cociorhan, C. S., *Investigations for remediation of soils polluted with heavy metal*

25. *The Eighth International Congress In Materials Science And Engineering ISSIM, 26–29 May 2011, Iași, Romania:*
- ✓ **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*
26. *The II edition of the Conference with the theme Environment & Agriculture & Industry Relationship: Conflict and Synergy Dedicated to the World Environment Day, 2 June 2010, Cluj-Napoca:*
- ✓ **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*
27. *16th „Building Services, Mechanical and Building Industry Days” ,International Conference, 14-15 October 2010, Debrecen, Hungary:*
- ✓ **Berar (Sur) Ioana Monica**, Micle, V., Cociorhan, C. S., Gament, E., *Investigations on nutrients from soils polluted with heavy metals towards soil remediation by bio leaching*
28. *Second Edition, International Conference "Mineral Resources and Environment, October 28 - 30, 2010, Baia Mare, Romania:*
- ✓ **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*

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