

## Annex 1: Scientific publications

### 1. PhD thesis:

Title: “**Studies and Research on soil contamination with heavy metals**”, Coordinator: **prof. Dr. Ionel Constantinescu**<sup>†</sup> - Polytechnica University of Bucharest, Romania, Fellowship coordinator: **prof. Dr. Franco-Ajmone Marsan** - University of Turin, 2012

### 2. Books

#### 2.1. Co-author

2.1.1. D. Long, T. Voice, R. Stanescu, I. Bica, I. Stanescu, **I. Popescu**, D. Gaitanaru, **Solving Contaminant Problems for a Sustainable Environment through Application of Environmental Engineering and Sciences Concepts - 2012 Edition**, Conspress, Bucharest, 2012, ISBN: 978-973-100-205-7

2.1.2. Gy. Deak, A.M. Badilita, **I. Popescu**, C.M. Raischi, P.A. Manoliu, G. Dorobanțu, G.S. Tanase, T. M. Danalache, A.G. Antohe, M. Tudor, **Research Tools and Techniques for Sturgeon Spawning Migration Monitoring**, Universitas, Petrosani, 2013, ISBN: 978-973-741-339-0

2.1.3. D. Long, T. Voice, R. Stanescu, I. Bica, I. Stanescu, **I. Popescu**, D. Gaitanaru, **Solving Contaminant Problems for a Sustainable Environment through Application of Environmental Engineering and Sciences Concepts - 2014 Edition**, Conspress, Bucharest, 2014, ISBN: 978-973-100-328-3

2.1.4. F. Swartjes, F., Benedetti, **I. Popescu Boajă, I.**, E. Fabbrizi, M. Falconi, G. Grima, D. Gruza, M. Mallada, L.C. Matei, D. Perșa C. Pisani, A. Plows, R. Riberti, P. Siligardi, A. Valley, **Oxidarea Chimică in-situ (ISCO)**. IMPEL, COMMON FORUM, EIONET, NICOLE report ISCO RO, 277 pages, 2021, Brussels, ISBN: 978-2-931225-05-9

2.1.5. D. Müller-Grabherr, T. Albergaria, F. Benedetti, **I. Popescu Boajă**, S. El Fadili, M. Falconi, F. Fuin, G. Grima, L.C. Matei, D. Perșa, A. Plows, A. Sconocchia, A. Valley, **Extracția vaporilor din sol (SVE)**. IMPEL, COMMON FORUM, EIONET, NICOLE report SVE RO, 299 pages, 2021, Brussels, ISBN: 978-2-931225-16-5

2.1.6. M. Falconi, D. Müller-Grabherr, F. Swartjes, W. Gevaerts, P. Tyrologou, N. Couto, F. Benedetti, **I. Popescu Boajă**, M. Cozzani, F. Fuin, G. Hatipoğlu, A. Laganà, J. Reinikainen, **Multi Phase Extraction (MPE)**. IMPEL, COMMON FORUM, EIONET, NICOLE report MPE, 123 pages, 2022. Brussels, ISBN 978-2-931225-29-5

2.1.7. M. Falconi, D. Müller-Grabherr, F. Swartjes., **I. Popescu Boajă**, M. Confalonieri, N. Couto, M. Falconi, G. Kara, K. Morgan, A. Sconocchia, R. Tietz, **Soil Washing (SW)**. IMPEL, COMMON FORUM, EIONET, NICOLE report SW, 122 pages, 2023. Brussels, ISBN: 978-2-931225-30-1

2.1.8. T. Ambaye, F. Battaglia-Brunet, V. Bert, M. Clemmens, L. Lary de Latour, D. Dubin, M. Falconi, W. Gevaerts, S. Gluhar, A. Kaurin, D. Lestan, M. Mallada, **I. Popescu**, A. Sconocchia, F. Silvestri, F. Swartjes, S. Thijs, H. Thouin, M. Vaccari, G. Voglar, **Phytoremediation monograph**. IMPEL, COMMON FORUM, EIONET, NICOLE report PHYTO, 199 pages, 2025. Brussels, ISBN 978-2-931225-36-3

2.1.9. S.Colombano, N. Couto, P. Tyrologou, E.Gianni, M. Falconi, F. Fuin, G. Kara, A. Laganà, D. Müller-Grabherr, **I. Popescu**, J. Silva, **In Situ Thermal Desorption Monograph**. IMPEL, COMMON FORUM, EIONET, NICOLE report ISTD, 342 pages, 2025. Brussels, ISBN 978-2-931225-35-6

#### 2.2. Co-editor

2.2.1. Gy. Deak, F. Vosniakos, **I. Popescu**, G. Dorobanțu, G. Tănase, M. Tudor, M. Golumbeanu, **Book of Abstracts - International Conference “New tools for sustainable management of aquatic living resources”**, Bucharest, Romania, ISBN: 978-973-741-357-4, 2014, 135 pages

2.2.1. I. Assif, M..I. Bhat, **I. Popescu Boajă**, P.P. Chakravorty, L. D. Devkota, V. Dragicevic, R.K. Enang, K. Ghazaryan, D.Gonfa, N. Jain, D. Lucchesini, S. Mohammadi, F. Mohammed, K. Mushonga, H. Tamba, C. Ogunkunle, J. Pichtel, S. Turab Raza, J. Schneider, S. Siddiqui, S. Tetsopgang, A. Varela, Z. A. Wondimgezahu, **Food and Agriculture Organization of the United Nations - Checklist for soil remediation**, 21 pages, 2025. Rome, Italy, ISBN 978-92-5-139635-3

### 3. ISI Journals papers

- 3.1. I. Popescu, M. Biasioli, F. Ajmone-Marsan, R. Stanescu, **Liability of potentially toxic elements in soils affected by smelting activities** Chemosphere, Vol.90, pp. 820-826, 2013, ISSN 0045-6535, DOI: 10.1016/j.chemosphere.2012.09.091, <https://www.sciencedirect.com/science/article/abs/pii/S0045653512012325>
- 3.2. I. Popescu, R. Nimirciag, G. Vina, F. Ajmone-Marsan, **Spatial distribution of potentially toxic elements in soils polluted by mining activities**, Chemistry Magazine, Vol.5, 2013, ISSN 0034-7752, pp. 477-481, <https://bch.ro/pdfRC/POPESCU%20IUSTINA.pdf%205%2013.pdf>
- 3.3. I. Popescu, R. Stanescu, M. Biasioli, F. Ajmone-Marsan, I. Constantinescu, **Assessing human risks through CSOIL exposure model for a soil contamination associated to heavy metals**, U.P.B. Sci. Bull., Series B, Vol. 75, Iss. 1, 2013, ISSN: 1223-7027, [https://www.scientificbulletin.upb.ro/rev\\_docs\\_arhiva/fulla2c\\_124745.pdf](https://www.scientificbulletin.upb.ro/rev_docs_arhiva/fulla2c_124745.pdf)
- 3.4. Gy. Deak, A.M. Badilita, I. Popescu, M. Tudor, **Research on sturgeon migration behaviour using a new monitoring, control and alarming system**, Journal of Environmental Protection and Ecology, Vol. 15, 2014, ISSN 1311-5065, <https://scibulcom.net/en/article/kXG5JcMnK10dYOa0vhLd>
- 3.5. T. Danalache, A.M. Badilita, Gy. Deak, E. Holban, I. Popescu, A. Daescu, M. Raischi, G. Ghita, C.G. Nicolae, S. Diaconescu, **Assessment of Bastroe channel possible impact on Lower Danube Sturgeon migration**, AACL Bioflux, 2017, ISSN 1311-5065, <http://www.bioflux.com.ro/docs/2017.1011-1018.pdf>
- 3.6. A.-M. Anghel, F. Marinescu, M. Ilie, G. Ghiță, P. Ionescu, I. Mărcuș, C. Tociu, A. Moncea, M. Mițiu, I. Popescu, I. Laslo, D. Dumitru **Advanced processing of environmental data for establishing the ecological status of the lower Danube water in terms of nutrients**, Environmental Protection and Ecology, 2017, ISSN 1311-5065, <https://scibulcom.net/en/article/7r1qRkk7s9iy9gLgYPON>
- 3.7. Tociu C., Anghel A-M, Marinescu F., Ilie M., Holban E., Matei M., Dumitru F.D., I. Popescu, L. Laslo, A. Daescu, **Possibilities for efficient use of valuable materials from aluminum slag to remove specific pollutants in wastewater**, Environmental Protection and Ecology, 2017, ISSN 1311-5065, <https://scibulcom.net/en/article/XJO8GEFzWMtsRbvUBmvi>
- 3.8. G. Ghita, M. Ilie, R. Szep, F. Marinescu, A.-M. Anghel, C. Tociu, I. Popescu, E. Holban, I. Marcus, M. Matei, GY. Deák, **Numerical modelling and simulation of wastewater treatment processes in the sewage system**, Environmental Protection and Ecology, 2017, ISSN 1311-5065, <https://scibulcom.net/en/article/7r1qRkk7s9iy9gLgYPON>
- 3.9. E Holban., M. Matei , S. Fronescu, A. Daescu, M. Raischi, G. I. Petrache, M. Ilie, D. Dumitru, A. Moncea, F. Marinescu, C. Tociu, V. Daescu, I. Popescu, **Assessment of atmospheric pollution in a cement factory area situated in the eastern part of Romania**, Environmental Protection and Ecology, 2017, ISSN 1311-5065, <https://scibulcom.net/en/article/2qoyL1G5nRsggsm9pUN8>
- 3.10. V.M. Radu, I. Popescu Boajă, A. A. Ivanov, G. Dinca, R. Szabo, **Forthcoming Opportunities for Obtaining Energy from New Renewable Sources in Romania, 2023**, Renewable Energy Systems in Smart Grid , Springer, [https://link.springer.com/chapter/10.1007/978-981-19-4360-7\\_5](https://link.springer.com/chapter/10.1007/978-981-19-4360-7_5)
- 3.11. I. Popescu Boajă, V.M. Radu, G. Dinca, R. Szabo, M.A. Anghel, **Spatial Distribution and Mobility of Potentially Toxic Elements in the Soils of Romania**, Advances in Science, Technology and Innovation, Springer, 2024, pp. 315-318, [https://link.springer.com/chapter/10.1007/978-3-031-43922-3\\_71](https://link.springer.com/chapter/10.1007/978-3-031-43922-3_71)
- 3.12.. R. Balint, I. Popescu Boajă, **Assisted phytoextraction as a nature-based solution for the sustainable remediation of metal(loid)contaminated soils**, 2024, Integrated Environmental Assessment and Management <https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/ieam.4907>
- 3.13. H. Binner, P. Wojda, F. Yunta, T. Breure, A. Schievano, E. Massaro, A. Jones, J. Newell, R. Paradelo Nunez, I. Popescu Boajă, E. Baltreanaite-Gedienė, T. Tuttolomondo, N. Iacuzzi, G. Bondi, V. Zupanc, L. Mamy, L. Pacini, M. De Feudis, V. Cardelli, A. Kicinska, M. Stock, H. Liu, E. Demiraj, C. Schillaci, **Urban soil threats in the European Union, a systematic review**. Water, Air, & Soil Pollution, Springer, 2024, <https://link.springer.com/article/10.1007/s11270-024-07288-x>
- 3.14. A.M. Vijdea, I. Popescu, A.A. Ivanov, V.E. Alexe, N.S. Asimopolos, L.L. Balan, **Geochemical Background Values for the Characterization of Sediment Contamination with Trace Elements in Romania: A Case Study in the Lower Danube Basin**. Applied Sciences, 2025, <https://doi.org/10.3390/app15052458>

- 3.15. **I. Popescu**, A.R. Caramitu, A. Bors, M.A. Diminescu, L.I. Stoian, **Computational Design of Mineral-Based Materials such as Iron Oxide Nanoparticle-Functionalized Polymeric Films for Enhanced Public Water Purification via BIOVIA Pipeline Pilot**, *Polymers*, 2025, *in press*
- 3.16. J. Pump, K. De Schampelaere, P. Stankovics, G. Cioci, S. Bickel, M.J.I. Briones, G. Ferenc, P. Harkes, D.G. Karpouzas, Pia Kotschik, **I. Popescu**, E. Pugliesi, V. Silva, F. Toth, **Outlook on the knowledge gaps to soil pollution and restoration - Scoping Document**, *Soils For Europe*, 2025, *in press*

#### 4. ISI Proceedings and International databases indexed papers

- 4.1. **I. Popescu**, R. Stanescu, **Human Exposure at trace metals from mining activities - Case study: Zlatna, Romania**, Proceedings of the 12th International GeoConference SGEM, ISSN 1314-2704, pp. 99-106, 2012, DOI: 10.5593/sgem2012
- 4.2. **I. Popescu**, R. Nimirciag (Balint), **Environmental impact of closing mining activities - A case study from Bălan, Romania**, Proceedings of the 12th International GeoConference SGEM, ISSN 1314-2704, pp. 73-80, 2012, DOI: 10.5593/sgem2012
- 4.3. **I. Popescu**, M. Biasioli, F. Ajmone-Marsan, R. Stanescu, **Potentially toxic metals contamination in soils. A comparison of tools to assess their lability (EDTA, SBET, soil solution)**, Proceedings of the Third International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2011) & SECOTOX Conference, 2011, ISBN 978-960-6865-43-5
- 4.4. A. Miron, C. Modrogan, O. Orbulet, C. Costache, **I. Popescu**, **Treatment of acid blue 25 solution by electro-coagulation**, U.P.B. Sci. Bull., Series B, Vol. 72, Iss. 1, 2010, ISSN: 1223-7027
- 4.5. **I. Popescu**, Gy. Deak, I., G. Dorobantu, **Assessment of soil texture influence on nitrates leachability in unsaturated soils**, Proceedings of International Conference of Unsaturated soils: Research and Applications, 2014, ISBN 978-1-138-00150-3
- 4.6. R. Nimirciag (Balint), **I. Popescu**, F. Ajmone-Marsan, **Removal of leached metals from flooded /drained contaminated soils using zeolites**, Proceedings of International Conference of Unsaturated soils: Research and Applications, 2014, ISBN 978-1-138-00150-3
- 4.7. V.-M. Radu, A. Ivanov, P. Ionescu, E. Diacu, **I. Popescu**, C. Tociu, **Multivariate statistical analysis of metals in Lower Danube sediments**, Bulletin of Romanian Chemical Engineering Society, Vol 3, Nr 1, 2017, ISSN 2360-4697
- 4.8. M. Ilie, F. Marinescu, G. Ghita, A.-M. Anghel, C. Tociu, **I. Popescu**, M. Matei, E., Holban, Gy. Deák, M. Raischi, C. Cirstinoiu, B. Uritescu, **Spatial distribution of heavy metal contamination and ecological risk assessment in water from the Danube River**, International Journal of Environmental Science, Volume 2, 2017, ISSN: 2367-8941
- 4.9. A.M. Badilita, T. Danalache, M. Raischi, Gy. Deák, A. Cristea, E. Holban, S. Zamfir, G. Badea, I. Gheorghe, M. Boboc, M. Matei, B. Uritescu, C. Cirstinoiu, G. Tudor, **I. Popescu Boajă**, D. Stefan, **Identification of anthropogenic factors and assessment of their possible impact on preservation of sturgeon species from the Lower Danube**, Proceedings of ISB-INMA-TEH' 2017 - Agricultural and Mechanical Engineering, 2017, ISSN: 2537 - 3773
- 4.10. **I. Popescu Boajă**, V.-M. Radu, G. Dinca, R. Szabo, A.M. Anghel, **Spatial distribution and mobility of potentially toxic elements in the soils of Romania**, EMCEI 2021, SCOPUS Proceedings
- 4.11. V.-M. Radu, **I. Popescu Boajă**, G. Dincă, R. Szabo, A.M. Anghel, **The potential recovery of critical elements from secondary raw materials existing in Romania**, EMCEI 2021, SCOPUS Proceedings

#### 5. Presentations at international events

- 5.1. **I. Popescu**, D. Long, T. Voice, R. Balint, R. Stănescu, **The impact of gardening on heavy metals speciation in soils affected by smelters**, 11th European Meeting on Environmental Chemistry, Portoroz - Slovenia, December 8-11, 2010, ISBN: 978-961-6311-66-3
- 5.2. **I. Popescu**, M. Biasioli, F. Ajmone-Marsan and R. Stănescu, **Potentially toxic metals contamination in soils. A comparison of tools to assess their lability (EDTA, SBET, soil solution)**, Proceedings of the Third International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2011) & SECOTOX Conference, Skiathos - Greece, June 19-24, 2011, ISBN: 978-960-6865-43-5

- 5.3. **I. Popescu**, M. Biasioli, F. Ajmone-Marsan, R. Stănescu, I. Constantinescu, Potentially toxic metals contamination in soils. A comparison of tools to assess their lability (selective and sequential procedures), 17th Romanian International Conference on Chemistry and Chemical Engineering - Sinaia, September 7-10, 2011
- 5.4. **I. Popescu**, R. Balint, Environmental pollutants assessment - trace metals contamination of soil, International Conference Environment - Landscape - European Identity, Bucharest, November 4 - 6, 2011
- 5.5. **I. Popescu**, R. Nimirciag (Balint), D. Long, T. Voice, R. Stănescu, Speciation of lead in smelter contaminated pasture and garden soils, 7<sup>th</sup> Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries - EMCC7, Corfu - Greece, April 27 - May 1 2012
- 5.6. **I. Popescu**, R. Nimirciag (Balint), Environmental impact of closing mining activities - A case study from Bălan, Romania, The 12<sup>th</sup> International GeoConference SGEM, Albena - Bulgaria, June 17-23 2012
- 5.7. **I. Popescu**, R. Stănescu, Human Exposure at trace metals from mining activities - Case study: Zlatna, Romania, The 12<sup>th</sup> International GeoConference SGEM, Albena - Bulgaria, June 17-23 2012
- 5.8. **I. Popescu**, Remediation of lead-polluted soil with fish bones, The IV National Congress of Researchers and Inventors 2012 , May 23-26, 2012
- 5.9. **I. Popescu**, M. Biasioli, R. Stănescu, F. Ajmone-Marsan, Biodisponibilità di metalli pesanti in suoli contaminati da attività minerarie e metallurgiche, XXX Convegno Nazionale della Società Italiana di Chimica Agraria, Milano-Italia, September 18-19, 2012
- 5.10. R. Nimirciag (Balint), **I. Popescu**, F. Ajmone-Marsan, Bioaccessibility of metals in flooded soils assessed by in vitro simple bioavailability extraction test, 7<sup>th</sup> European Conference on Pesticides and Related Organic Micropollutants in the Environment, Porto-Portugal, October 7-10, 2012
- 5.11. G. Dorobanțu, Gy. Deak, **I. Popescu**, The impact of land use changes in urban planning, 1st International U.O.C. - B.E.N.A. Conference - The sustainability of pharmaceutical, medical and ecological education and research (SPHAMEER), Constanta, Romania, June 20-23, 2013
- 5.12. **I. Popescu**, Gy. Deak, G. Dorobanțu, G. Tănase, Ecological risk assessment of nutrients discharges from Danube River to Black Sea, Proceedings of the International conference "Marine Research Horizon 2020" (MARES), Varna, Bulgaria, September, 17-20, 2013
- 5.13. A.M. Bădiliță, Gy. Deak, A. Ionașcu, **I. Popescu**, G. Tănase, Improved monitoring of migratory anadromous marine sturgeons using DKTB telemetry station, Proceedings of the International conference "Marine Research Horizon 2020" (MARES), Varna, Bulgaria, September, 17-20, 2013
- 5.14. V.M. Radu, P. Ionescu, Gy. Deak, **I. Popescu**, A. Varduca, E. Diacu, Parametrical intercorrelations algorithms between water quality indicators in the Danube River, Proceedings of the International conference "Marine Research Horizon 2020" (MARES), Varna, Bulgaria, September, 17-20, 2013
- 5.15. P. Ionescu, V.M. Radu, Gy. Deak, A. Varduca, **I. Popescu**, E. Diacu, Lead distribution at aqueous - solid phase interfaces in aquatic environment, Proceedings of the International conference "Marine Research Horizon 2020" (MARES), Varna, Bulgaria, September, 17-20, 2013
- 5.16. **I. Popescu**, T. Voice, D. Long, R. Balint (Nimirciag), R. Stănescu, The influence of lead speciation in soil on human bioaccessibility, One Health Summit, Davos, Switzerland, November 17-20, 2013
- 5.17. M. Cristea, Gy. Deak, **I. Popescu**, M. Chiriac, G. Tănase, M. Raischi, The interactions between biotic and abiotic factors in Lower Danube River, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES, 17-18 January 2014
- 5.18. G. Dorobanțu, Gy. Deak, **I. Popescu**, T. Dănălache, New directions for urban sprawl and the impact on environmental compartments, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES, 17-18 January 2014
- 5.19. **I. Popescu**, G. Dorobantu, Gy. Deak, M., Radu, P. Ionescu, P., Spatio-temporal trends of potentially toxic metals in surface sediments of the Lower Danube River, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES 2014, 17-18 January 2014
- 5.20. I. Zaharia, I. Diaconu, E. Ruse, G. Nechifor, E. Marcu, **I. Popescu**, The removal of organic preservatives through concentration in the

organic phase by using bulk liquid membranes, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES 2014, 17-18 January 2014

5.21. M. Radu, C. Ene, I. Popescu, L. Bodea, Influence of social and environmental issues on humans' health and life quality, International Conference New tools for sustainable management of aquatic living resources - AQUALIRES 2014, 17-18 January 2014

5. 22. Gy. Deak, I. Popescu, M. Olteanu, M. Raischi, G. Tănase, Danube sturgeons' migration monitoring. Case study: Bâstroe channel, International Conference Green infrastructure and sustainable societies/cities, Izmir, Turkey, 5-8 May 2014

5. 23. I. Popescu, Gy. Deak, G. Dorobanțu, G. Tănase, International Conference Green infrastructure and sustainable societies/cities, Izmir, Turkey, 5-8 May 2014

5. 24. I. Popescu, Gy. Deak, I. Zaharia, G. Dorobanțu, G. Tănase, Assessment of soil texture influence on nitrates leachability in unsaturated soils, Proceedings of International Conference of Unsaturated soils: Research and Applications, Sydney, Australia, July 2-4, 2014

5. 25. R. Nimirciag (Balint), I. Popescu, F. Ajmone-Marsan, Removal of leached metals from flooded /drained contaminated soils using zeolites, Proceedings of International Conference of Unsaturated soils: Research and Applications, Sydney, Australia, July 2-4, 2014

5.26. Gy Deak, M. Raischi, A.M. Badilita, T. Danalache, A. Cristea, E. Holban, S. Zamfir, M.G. Boboc, M., Matei, B. Uritescu, I. Popescu Boajă, D. Stefan, G. Tudor, Actual status, pressures and preserving perspectives of sturgeon species from lower Danube River, 8th International Symposium on Sturgeons, Viena, Austria, 2017

5.27. A.M. Badilita, T. Danalache, M. Raischi, Gy. Deák, A. Cristea, E. Holban, S. Zamfir, G. Badea, I. Gheorghe, M. Boboc, M. Matei, B. Uritescu, C. Cirstinoiu, G. Tudor, I. Popescu Boajă, D. Stefan, Identification of anthropogenic factors and assessment of their possible impact on preservation of sturgeon species from the Lower Danube, ISB-INMA-TEH' 2017 Conference- Agricultural and Mechanical Engineering, Bucharest, Romania, 2017

5.28. I. Popescu Boajă, Gy. Deak, N. Raischi, P. Ionescu, V-M. Radu, M. Boboc, E. Holban, A. Daescu, D. Ștefan, Fate and transport of nitrogen species in unsaturated soil, 2nd International Urban and Health Congress, Cappadocia, Turkey, 2018

5.29. I. Popescu Boajă, V-M. Radu, G. Dinca, R. Szabo, A.M. Anghel, Spatial distribution and mobility of potentially toxic elements in the soils of Romania, EMCEI 2021, Tunis, 2021

5.30. V-M. Radu, I. Popescu Boajă, G. Dinca, R. Szabo, A.M. Anghel, The potential recovery of critical elements from secondary raw materials existent in Romania, EMCEI 2021, Tunis, 2021

5.31. R. Szabo, I. Popescu Boajă, A. Tătaru, A.M. Turculet, Comparison of sample preparation methods for characterization of soil geochemistry by handheld X-RAY Fluorescence. REMTECH EUROPE CONFERENCE, FERRARA, ITALY, September 2023

5.32. C. Filipciuc, E. Tudor, I. Stoian, A. Ovidiu, I. Scutelnicu, A. Ulmeanu, A. Tătaru, I. Popescu Boajă, Sustainable soil management using Ground Penetrating Radar technique, REMTECH EUROPE CONFERENCE, FERRARA, ITALY, September 2023

5.33. C. Schillaci, I. Popescu, E. Baltrėnaitė-Gedienė, E. Miglio, S. Sala, F. van Egmond, M. Fantappiè, B. Pereira, L. Flichev, S. Di Lonardo, P. Henning Krogh, M. Hrabalíkova, E. Nadal-Romero, A. Ladenberger, M. van Liedekerke, Soil data sharing in EU, a survey of available soil datasets found in the scientific literature, EGU Conference, Vienna, Austria, 2023

5.34. K. Rosenow, I. Popescu, A. Krzywoszynska, One year into the Mission Soil: achievements, lessons learned, and future opportunities for the Living Lab community, Open Living Labs Days 2024: Driving systemic change through Soci(et)al Engagement, for real impact, Timisoara, Romania, 2024

5.35. I. Popescu, A. Bors, L. Dumitrescu, A.P. Chirita, A.M. Turculet, R. Szabo, Critical raw materials (CRM) recovery from mining waste and the remediation of soils contaminated with potentially toxic elements (PTE) in the context of climate change, KOMTECH International Scientific and Technical Conference, Szczyrk, Poland, November 2024

5.36. A.M. Bors, I. Popescu, L. Dumitrescu, A.P. Chirita, Critical Raw Materials Recovery from Mining Waste and the Remediation of Soils Contaminated with Potentially Toxic Elements in the Context of Climate Change, International Conference on Hydraulics and Pneumatics, HERVEX 2024, Baile Govora, Romania, November 2024

## **Annex 2: Projects**

1. COMPETE - Development of competitive scientific careers through doctoral scholarships - Sectorial Operational Program Human Resources Development 2007-2013, Contract no. POSDRU/88/1.5/S/60203 - **targeted group member**
2. Training and Research in Environmental Health in Balkans - TREHB - grant 2 D43 TW00-641 from the Fogarty International Center, National Institutes of Health, U.S.A. to the Institute of International Health at Michigan State University - **targeted group member**
3. Geological synthesis of natural resources with economic interest, non-metallic minerals (graphite, talc, asbestos, garnet, beryl) of the Southern Carpathians, Contract with Ministry of Economy, Commerce and Business Management no. 259/31.08.2012 - **project team member**
4. Monitoring the environmental impact of the works regarding the improvement of the navigation conditions on the Danube River between Calarasi and Braila, km 375 and km 175 (2011-2017), Contract no. 53/2011 - **project team member**
5. Research regarding nitrates leachability to groundwater in a vulnerable area, PN 09060110 - Contract no. 6N/ Additional note no. 2/2013 - **project co-responsible**
6. Development of evaluation and control procedures for risks associated to accidental pollution of surface waters in Romania - PN 09 06 02 38, Contract no. 6N / Additional note 1/2013 - **project team member**
7. Risk assessment of persistent organic pollutants accidental discharges from wastewater treatment plants. Consequences and effects on biota, PN 09 06 01 Contract no. 6N / Additional note 1/2013 - **project co-responsible**
8. BUILD SEE- Addressing the divide between EU indications and their practical implementation in their green construction and eco-social requalification of residential areas in Southeast Europe Regions - Southeast Europe Transnational Cooperation Program (2012-2014) - **management team member** (monitoring and evaluation referee)
9. Research regarding urban sprawl and the purpose of integrated environmental planning in sustainable spatial management - PN 09060357 - Contract no. 6N/2009 Additional note 2/2013 - **project team member**
10. Research regarding the use of geosynthetics for ecological rehabilitation and economic recovery of industrial waste landfill - PN 09060132 - Contract no. 6N/2009, Additional note no. 1/2013 - **project co-responsible**
11. Research regarding modelling of atmospheric pollutants dispersion through comparison of new generation models - PN 09 06 01 14 - Contract no. 6N/2009, Additional note no. 1/2014 - **project co-responsible**
12. Study regarding the quality monitoring of the physical-chemical and biological components from Danube Delta and the adjacent coastline, considering the transboundary impact of the Bastroe channel, during 2010-present, and the environment consequences analysis in the Danube Delta Biosphere Reservation and the adjacent coastline determined by the Bastroe Project Contract no. 158/2013 - **project team member**
13. Studies for achieving shore-protection of the Divici-Pojejena wetland area - **project team member**
14. Research for developing a GIS model useful for municipal waste management planning at the local or regional level PN 09060353.1 - **project team member**
15. Research for reducing hazardous chemicals from municipal wastewater by using natural materials PN 16 04 03 04.1 - **project team member**
16. Complex project - Innovative technologies for crop irrigation in arid, semiarid, and dry sub-humid climate conditions (SMARTIRRIG), PN-III-P1-1.2-PCCDI-2017-0254, contract 27PCCDI/2018 - **project team member**
17. Study of secondary resources of technogenic silts from Romania for identifying the potential of industrial minerals and critical and high-tech raw materials - PN 19-45-02-02 - **project team member**

18. RoQ-Stone - Romanian construction stones - qualitative characteristics, cultural heritage value, scientific importance, PN 19-45-02-01 - **project team member**
19. An AI/IoT-based system of GEOsensor NETworks for real time monitoring of unStABLE tErrain and artificial structures (GeoNetSee) - **Project Manager, Romanian Side** - Interreg Danube (2023-2025)
20. External consultancy for SIPOCA 859 / MySMIS 134289 project: Establishment of differentiated Emission Limit Values (ELVs) for wastewater from industrial and agro-zootechnical sources in Romania - **Project Manager** - POCA - (2022)
21. Increasing resilience to the impact of climate change on secondary resources through assisted phyto-mining as an eco-technology for the circular economy CHAIN - **Project responsible** - (2023-2025)
22. Waste Management and Circular Economy: Value retention circular processes - **Responsible from Romania** - IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law - (2022-2024)
23. Water and Land: Water and Land Remediation - **Responsible from Romania** - IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law - (2021-2027)
24. Water and Land: Management of Mining Waste - **Responsible from Romania** - IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law - (2022-2025)
25. Cross-cutting tools and approaches: Geospatial Intelligence for Environmental Damage Assessment (GIEDA)- **Responsible from Romania** - IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law - (2022-2025)
26. Water and Land: Soil Health and Ecosystem Services (STATE)- IMPEL - European Union Network for the Implementation and Enforcement of Environmental Law - (2025-2027) - **Project Manager**
27. Integrated monitoring solution for natural and anthropogenic phenomena triggering societal risks, for the safety of the population in the affected area - Slanic City, Prahova County (GEOMONITOR) - **Responsible for IGR** - UEFISCDI - (2025-2026)