

INFORMATII PERSONALE

Kovacs Eموke Dalma

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Web of Science: <https://www.webofscience.com/wos/author/record/GXF-8453-2022>

Google Scholar:

https://scholar.google.com/citations?hl=en&user=PWMEPFMAAAAJ&view_op=list_works&sortby=pubdate

Scopus author identifier: 35361800700; Kovacs, Eموke Dalma,
<https://www.scopus.com/authid/detail.uri?authorId=35361800700>

Cercetător științific, cu interes de studiu pentru microbiota solului și a funcțiilor pe care acesta le îndeplinește în susținerea serviciilor ecosistemice ale solului. În cadrul activității mele de cercetare, investighez funcționarea complexă a comunităților microbiene din sol cu ajutorul unor tehnici avansate, precum spectrometria de masă cu imagistică, cromatografia de gaze, spectroscopia și microscopia. Rezultatele experimentale și analitice sunt convertite în formă numerică prin dezvoltarea de noi relații matematice. Această abordare ne permite să înțelegem mai bine microbiota solului expusă provocărilor antropice și să generăm predicții care să ne ajute să ne pregătim pentru presiunile schimbărilor globale.

EXPERIENTA PROFESIONALA

01.01.2023 - PREZENT

Cercetator Stiintific gradul II, CSII

INCDO-INOE 2000 Filiala Institutul de Cercetari pentru Instrumentatie Analitica, ICIA, Cluj-Napoca, Strada Donath, nr. 67, <https://icia.ro/>

01.02.2021 – 31.12.2022

Cercetator Stiintific gradul III, CSIII

INCDO-INOE 2000 Filiala Institutul de Cercetari pentru Instrumentatie Analitica, ICIA, Cluj-Napoca, Strada Donath, nr. 67, <https://icia.ro/>

01.03.2018 - 31.01.2021

Cercetator Stiintific, CS

INCDO-INOE 2000 Filiala Institutul de Cercetari pentru Instrumentatie Analitica, ICIA, Cluj-Napoca, Strada Donath, nr. 67, <https://icia.ro/>

05.10.2015 - 01.03.2018

Asistent Cercetare Stiintifica, ACS

INCDO-INOE 2000 Filiala Institutul de Cercetari pentru Instrumentatie Analitica, ICIA, Cluj-Napoca, Strada Donath, nr. 67, <https://icia.ro/>

01.07.2014 – 05.10.2015

Voluntar

INCDO-INOE 2000 Filiala Institutul de Cercetari pentru Instrumentatie Analitica, ICIA, Cluj-Napoca, Strada Donath, nr. 67, <https://icia.ro/>

EDUCATIE SI FORMARE

01.10.2015 - 29.09.2022

Doctorat (ISCDE 6)

Scoala Doctorala de Chimie

Domeniul: Chimie

Universitatea Babes-Bolyai, Facultatea de Chimie si Inginerie Chimica, Cluj-Napoca, Romania, Specializarea: Chimie, <http://chem.ubbcluj.ro/>

Titlul tezei: Assessing of organic compounds path in living systems by experimental and numerical modelling

01.10.2016 - 16.06.2020

Doctorat (ISCDE 6)

Scoala Doctorala de Stiinte Agricole Ingineresti

Domeniul: Agronomie/ Agrotehnica

Facultatea de Agricultură, Universitatea de Stiințe Agricole și Medicină Veterinară, Cluj-Napoca, România, www.usamvcluj.ro

Polish Academy of Sciences, Institute for Agricultural and Forest Environment, Poznan, Poland, www.isrl.poznan.pl

Titlul tezei: Global change impact on soil property, functioning and provided ecosystem services

01.10.2013 - 30.09.2015

Masterat (ISCED 5A)

Specializare: Advanced Chemical Process Engineering

Universitatea Babes-Bolyai, Facultatea de Chimie si Inginerie Chimica, Cluj-Napoca, Romania, <http://chem.ubbcluj.ro/>

01.10.2009 -30.09.2013

Licenta (ISCED 5A)
Specializare: Ingineria și Informatica Proceselor Chimice și Biochimice

Universitatea Babes-Bolyai, Facultatea de Chimie si Inginerie Chimica, Cluj-Napoca, Romania, <http://chem.ubbcluj.ro/>

STAGII DE FORMARE

07.11.2024 – 03.12.2024	Institutie:	College of Agriculture, Faculty of Soil Science, Can Tho University, Can Tho, Vietnam
	•	Specializare: Isolation of S and K solubilizing bacteria from agricultural soils of the Vietnamese Mekong Delta to enrich soil functions and services in disturbed regions
10.07.2019 -25.07.2019	Institutie:	College of Life Sciences, Capital Normal University, Beijing, R.P. China
	•	Specializare: Forest and agricultural ecosystems microbiology
30.11.2018 - 18.12.2018	Institutie:	Nagoya University, Associate School of Bioagricultural Sciences, Nagoya, Japan
	Institution:	Institute for Rural Engineering National Agriculture and Food Research Organization, Tsukuba, Ibaraki Japan
	•	Specializare: Fluorescence microscopy application in soil science
03.02.2018 – 18.02.2018	Institutie:	Institute for Agricultural and Forest Environment, Polish Academy of Sciences, Poznan, Poland
	•	Specializare: Soil extracellular enzymatic activity assessment
15.11.2017 – 28.11.2017	Institutie:	Sun Yat-Sen University, Department of Environmental Science, Guangzhou, R.P. China
	•	Specializare: Climate change impact on ecosystem
10.06.2016 – 15.06.2016	Institutie:	Spanish Council for Scientific Research, Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Barcelona, Spain
	•	Specializare: Methods for detecting and quantifying antibiotic resistant bacteria and antibiotic resistances genes in the environment

CURSURI DE FORMARE

06.02.2019 - 08.02.2019

- Tranzitia la SR. EN ISO/CEI 17025-2018 pentru acreditarea laboratorului de incercari, Cluj-Napoca, Naposigal Quality S.R.L., Cluj-Napoca;

COMPETENTE PERSONALE
COMPETENTE TEHNICE

- **Spectrometrie de masa (MALDI TOF/TOF MS IMS):** operare și întreținere
- **Cromatografie de gaze (GC-ECD-FID, GC-FID/TCD-TCD):** operare și întreținere
- **Cromatografie de gaze cuplat cu spectrometru de masă (GC-MS; Gc-MS/MS):** operare și întreținere
- **Microscop epi-fluorescenta:** operare și întreținere
- **Cititor multimodal microplaci:** operare și întreținere
- Operare și întreținere **echipamente automate de extracție HS, SPME, și HS-SPME**
- Operare alte echipamente uzuale din laboratoarele de chimie;

INFORMATII SUPLIMENTARE

Publicatii (16 – articole ISI, 14 – articole BDI, 3 – capitole de carte, 1 - brevet)

Proiecte castigate prin competitie nationala/internationala (2 – director de proiect, 1 – responsabil proiect; 19 – membru in echipa)

Activitati editoriale (Guest editor: 2 special issues in 2025, reviewer: > 60 papers in 2025)

PUBLICATII
ARTICOLE IN REVISTE STIINTIFICE COTATE ISI

- 1) Tree species overcome edaphic heterogeneity in shaping the urban orchard soil microbiome and metabolome **Kovacs E.D.**, Kovacs M.H. Horticulturae, 11(10), 1163, **2025**
- 2) Urban Forest Fragmentation Reshapes Soil microbiome-Carbon Dynamic Kovacs M.H., Nghia N.K., **Kovacs E.D.** Diversity, 17(8), 545, **2025**
- 3) Bacterial diversity in longan orchard alluvial soil influenced by cultivation time and

- soil properties Nghia N.K, **Kovacs E.D.**, Kovacs M.H., Xa L.T., Morton L.W., Tecimen H.B., Robatjazi J., Sekar J., Lasar H.G.W., Nguyen T.T., Phuong N.M., Thy C.T.A., Luan D.T., Oanh N.T.K., *Front. Soil Sci.*, 5, **2025**
- 4) Sustainable soil Volatilome: Discrimination of land uses through GC-MS-identified volatile organic compounds. **Kovacs E.D.** Rusu T., Kovacs M.H. *Separation*, 12(4), 92, **2025** <https://doi.org/10.3390/separations12040092>
 - 5) Nonsteroidal anti-inflammatory drugs impact the microbial community in three different soil types - a laboratory experiment. **Kovacs E.D.**, Kovacs M.H., Barcelo D., Pereira P. *Case Studies in Chemical and Environmental Engineering*, 10, 100833, **2024** <https://doi.org/10.1016/j.cscee.2024.100833>
 - 6) Yellow mealworm (*Tenebrio molitor*) powder promotes a high bioaccessible protein fraction and low glycemic index in biscuits. Mihaly Cozmata, A; Uivarasan, A; Peter, A; Nicula, C; **Kovacs, D.E**; Mihaly Cozmata, L. *Nutrients*, **2023**, 15, 997. DOI: 10.3390/nu15040997 (IF: 6,706) <https://doi.org/10.3390/nu15040997>
 - 7) Analysis of volatile compounds, composition, and thermal behavior of coffee beans according to variety and roasting intensity. Dippong, T; Dan, M; Kovacs, M.H; **Kovacs, E.D**; Levei, E.A; Cadar, O. *Foods* **2022**, 11, 3146. DOI: 10.3390/foods11193146 (IF: 5,561) <https://doi.org/10.3390/foods11193146>
 - 8) The impact of insect flour on sourdough fermentation-fatty acids, amino-acids, minerals and volatile profile. Beldean Tatar, B.V; Chis, M.S; Alexa, E; Pop, C; Paucean, A; Man, S; Igual, M; Kovacs, M.H; **Kovacs, E.D**; Stanila, S; Socaci, S; Farcas, A; Berbecea, A; Popescu, A; Muste, S. *Insects* **2022**, 13, 576. DOI: 10.3390/insects13070576 (IF: 3,141) <https://doi.org/10.3390/insects13070576>
 - 9) Simultaneous removal of heavy metals (Cu, Cd, Cr, Ni, Zn and Pb) from aqueous solutions using thermally treated Romanian zeolitic volcanic tuff. Senila, M; Neag, E; Cadar, O; **Kovacs, E.D**; Aschilean, I; Kovacs, M.H. *Molecules* **2022**, 27, 3938. DOI: 10.3390/molecules27123938 (IF: 4.927) <https://doi.org/10.3390/molecules27123938>
 - 10) Characteristics of volcanic tuff from Macicasu (Romania) and its capacity to remove ammonia from contaminated air. Senila, M; Neag, E; Cadar, O; Hoaghia, M.A; Roman, M; Moldovan, A; Hosu, A; Lupas, A; **Kovacs, E.D**. *Molecules* **2022**, 27, 3503. DOI: 10.3390/molecules27113503 (IF: 4.927) <https://doi.org/10.3390/molecules27113503>
 - 11) The potential application of natural clinoptilolite-rich zeolite as support for bacterial community formation for wastewater treatment. Senila, L; Hoaghia, A; Moldovan, A; Török, I.A; **Kovacs, E.D**; Simedru, D; Tomoiag, C.H; Senila, M. *Materials* **2022**, 15, 3685. DOI: 10.3390/ma15103685 (IF: 3.478) <https://doi.org/10.3390/ma15103685>
 - 12) Structural and metabolic profiling of *Lycopodium obscurum* rhizosphere microbiota artificially exposed at commonly used non-steroidal anti-inflammatory drugs. Kovacs, E.D; Silaghi-Dumitrescu, L.; Roman, C.; Tian, D. *Microorganisms* **2022**, 10, 254. DOI: 10.3390/microorganisms10020254 (IF: 4,926) <https://doi.org/10.3390/microorganisms10020254>
 - 13) Evaluation of the level of contamination with phthalates in dairy products found on the Romanian market. Fat, A.I; Dan, S.D; Tabaran, A; Vesa, V.G; Nicolau, F.G; **Kovacs, E.D**; Roman, C; Kovacs, M.H; Mihaiu, R; Mihaiu, M. *Studia UBB Chemia*, LXVI, 4, **2021**, 61-76. DOI:10.24193/subbchem.2021.4.05 (IF: 0.558)
 - 14) Revitalization of pesticide-polluted agricultural soil functions by microbiome transplantation. **Kovacs, E.D**; Rusu, T; Szajdak, L; Tian, D; Roman, C; Senila, L; Kovacs, M.H. *Environmental Engineering and Management Journal*, **2021**, 20:4, 531-545. <http://www.eemj.icpm.tuiasi.ro/>; <http://www.eemj.eu> (IF: 0.94)
 - 15) GC-MS analysis of some plastic components from 1997-2003 computer main boards. **Kovacs, E.D**; Simedru, D; Kovacs, M.H; *Studia UBB Chemia*, LXVI, 2, **2021**, 163-170 DOI:10.24193/subbchem.2021.2.14 (IF: 0.558)
 - 16) Determination of the Uptake of Ibuprofen, Ketoprofen, and Diclofenac by Tomatoes, Radishes, and Lettuce by Gas Chromatography–Mass Spectrometry (GC–MS). **Kovacs, E.D**; Silaghi-Dumitrescu, L; Kovacs, M.H; Roman, C. *Analytical Letters*, **2021**, 54, 1:2, 324-330. DOI: 10.1080/00032719.2020.1779278 (IF: 2.267)
 - 17) Bioethanol production from *Abies alba* wood using adaptive neural fuzzy interference system mathematical modeling. Senila, L; Costiug, S; Becze, A; **Kovacs, ED**; Kovacs, E; Scurtu, DA; Todor-Boer, O; Senila, M. *Cellulose Chemistry and Technology*, **2020**, 54:53-64. (IF: 1.467)
 - 18) Family-level leaf nitrogen and phosphorus stoichiometry of global terrestrial plants. Tian, D; Yan, Z; Ma, S; Ding, Y; Luo, Y; Chen, Y; Du, E; Han, W; **Kovacs, ED**; Shen, H; Hu, H; Kattge, J; Schimd, B; Fang, J. *Science China Life Sciences*, **2019**, 62(8):1047-1057. DOI: 10.1007/s11427-019-9584-1 (IF:4.611)
 - 19) Response of antioxidant potential and essential oil components to irrigation and

ARTICOLE IN REVISTE
STIINTIFICE BDI

- fertilization on three mint species (*Mentha* spp. L.). Budiu, L; Luca, E; Ona, A; Muntean, L; Becze, A; Simedru, D; Kovacs, M.H; **Kovacs, E.D**; Romanian Agricultural Research, **2019**, 36:165-171. (IF: 0.24)
- 20) Infant supplement quality evaluation by inductively coupled plasma-mass spectrometry, gas chromatography, and isotope ratio mass spectrometry. Dehelean, A; **Kovacs, ED**; Magdas, D.A; Cristea, G; Voica, C; Feher, I; Kovacs, MH; Marincas, O; Zhang, Z; Li, P; Zang, Q. Analytical Letters, **2019**, 52(1):127-138. (IF:1.531)
 - 21) The evaluation of the metal contamination of drinking water sources from Medias town, Romania using the metal pollution indices. Hoaghia, M.A; Roman, C; **Kovacs, ED**; Tanaselia, C; Ristoiu, D. Studia UBB Chemia, **2016**, 61(3). (IF: 0.244)
- 1) Effects of pharmaceuticals presence in agroecosystem on volatile aroma content in tomato fruit. **Kovacs, ED**; Silaghi-Dumitrescu, L; Kovacs, MH; Szajdak, LW; Roman, C. Agricultura, **2020**, 115(3-4):134-143.
 - 2) Changing weather pattern impact on soil microbial efficiency in commonly used pharmaceutical contaminants breakdown from soil environment. Kovacs, MH; **Kovacs, ED**; Silaghi-Dumitrescu, L; Roman, C. Agricultura, **2020**, 115(3-4):253-270.
 - 3) Cypermethrin non-target impact on soil microbial communities: laboratory artificial incubation experiment. **Kovacs, ED**; Rusu, T; Szajdak, WL; Kovacs, MH; Roman, C; Tian, D; Agriculture – Science and Practice, **2019**, 1-2(109-110):132-139.
 - 4) Rhizosphere microbiota profile changes with different genetic types of tomato species. **Kovacs, ED**; Rusu, T; Szajdak, WL; Kovacs, MH; Tian, D; Roman, C; Agriculture – Science and Practice, **2019**, 1-2(109-110):140-150.
 - 5) Past used emergent pesticide removal efficiency from water environment by zeolites with different granule sizes. **Kovacs, ED**; Kovacs, MH; Senila, M; Bolos, I; Aschilean, I; 19th International Multidisciplinary Scientific GeoConference SGEM, Section Ecology and Environmental Protection, **2019**, 587-593.
 - 6) Levels of PCDDs/PCDFs in several cheese and butter samples collected from Cluj-Napoca market, Romania. Miclean, M; Kovacs, MH; **Kovacs, ED**; Paizs, C. Advances in Environmental Sciences, 2017, 9(1):1.5.
 - 7) Assessment of degradation kinetics and transformation products formation of diuron in soil under simulated and drought-flood stress conditions considering challenges. **Kovacs, ED**; Rusu, T; Szajdak, WL; Kovacs, MH; 17th International Multidisciplinary Scientific Geoconference SGEM, **2017**, volume 17, 357-364. doi:10.5593/sgem2017/32, ISSN:1314-2704
 - 8) Climate change associated meteorological anomalies impact on soil nutrient cycle and dynamics. **Kovacs, ED**; Rusu, T; Szajdak, LW; 17th International Multidisciplinary Scientific Geoconference SGEM, **2017**, volume 17, 69-76. doi:10.5593/sgem2017/32, ISSN:1314-2704
 - 9) Dynamic modeling of pesticides uptake by *Triticum* spp. anatomical compartments. **Kovacs, ED**; Kovacs, MH; Trimbilas, R; Journal of International Scientific Publications, Agriculture & Food, **2016**, 4:215-228.
 - 10) Mother diet impact on breast milk quality: estimation of breast feed infant intakes. Kovacs, MH; Kovacs, ED; Ristoiu, D. Journal of International Scientific Publications, **2016**, 4:192-214.
 - 11) Organochlorine pesticide impact on vegetables. Kovacs, MH; Miclean, M; **Kovacs, DE**; Cadar, O; Roman, M; Senila, L; Simedru, D; Naghiu, A. Agricultura – Revista de Stiinta si Practica Agricola, **2015**, 1:2:5-8.
 - 12) Interplay between experimental and numerical approaches in botanical studies: development of a hybrid REC inverse method with application in mycology. **Kovacs, ED**; Trambilas, R; Lukacs-Imre, A; Kovacs, MH; Ristoiu, D. Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies VI, **2012**, 8411:564-571.
 - 13) SIM-GC-MS analysis of biochemical evolution in *amanita* genus. Ristoiu, D; **Kovacs, ED**; Cobzac, C; Parvu, M; Ristoiu, T; Kovacs, MH; Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies V, Proceedings Volume 7821, **2010**, 782120.
 - 14) Chemical contents identification on GC-MS from selected species of Macromycetes. Ristoiu, D; **Kovacs, E.D**; Părvu, M; Silaghi-Dumitrescu, L. Studia Universitatis Babes-Bolyai Chemia, **2009**, 4, 63-67.

CAPITOLE DE CARTI
PUBLICATE LA EDITURI
INTERNATIONALE

- 1) Global Change Drivers Impact on Soil Microbiota: Challenges for Maintaining Soil Ecosystem Services. Kovacs E.D., Kovacs M.H; in Vegetation Dynamics, Changing Ecosystems and Human Responsibility, Editors Levente Hufnagel and Mohamed A.

El-Esawi, Editura: InTech, Croatia, ISBN: 978-1-80356-138-7, eBook (PDF) ISBN: 978-1-80356-139-4, **2023**

- 2) Gas chromatographic: Mass spectrometric mining the volatilomes associated to rhizobiota exposed to commonly used pharmaceuticals. **Kovacs ED**; Kovacs MH; in Biodegradation Technology of Organic and Inorganic Pollutants, Editors Kassio Ferreira Mendes, Rodrigo Nogueira de Sousa, Kamila Cabral Mielke, Editura: InTech, Croatia, ISBN: 978-1-83968-896-6, eBook (PDF) ISBN: 978-1-83968-897-3, **2022**, 1-15.
- 3) Numerical modelling of chemical compounds fate and kinetics in living organisms: inverse numerical method for rate estimation from concentration. **Kovacs ED**; Kovacs MH; in Numerical Simulations in Engineering and Science, Editor Srinivasa Rao, Editura: InTech, Croatia, ISBN: 978-1-78923-451-0, Print ISBN: 978-1-78923-450-3, eBook (PDF) ISBN: 978-1-83881-283-6, **2018**, pp. 197-214
- 4) Concerning Organometallic Compounds in Environment: Occurrence, Fate, and Impact. Kovacs MH; **Kovacs ED**; in Recent Progress in Organometallic Chemistry, Editor Mohammed Muzibur Rahman, Abdullah Mohammed Asiri, Editura: InTech, Croatia, ISBN: 978-953-51-3318-6, Print ISBN: 978-953-51-3317-9, eBook (PDF) ISBN: 978-953-51-4760-2, **2017**, pp. 47-68

BREVETE

- 1) Rapid method for the determination of organometallic compounds in soil samples by ultrasonic extractive-headspace-solid-phase extractive-microextraction and gas chromatography coupled with mass spectrometry (USE-HS-SPME-GC-MS). Kovacs, MH; **Kovacs, ED**; Roman, C; Miclean, M; Hotararea Nr.3/57 din 29.05.2020, OSIM
- 2) Process for obtaining a filter material based on natural zeolite in the form of clinoptilolite, intended for the retention of Cs, Sr, Cd, Zn, Cu, Cr and Ni from municipal wastewater Aschilean I., Chioreanu G., Bolos D., **Kovacs MH.**, Kovacs ED., Senila M., **Nr. 137152, 2024**
- 3) Rapid method for the determination of organometallic compounds in soil samples by ultrasonic extractive-headspace-solid-phase extractive-microextraction and gas chromatography coupled with mass spectrometry (USE-HS-SPME-GC-MS). Kovacs, MH; **Kovacs, ED**; Roman, C; Miclean, M; Hotararea Nr.3/57 din 29.05.2020, OSIM

DIRECTOR/RESPONSABIL PROIECTE NATIONALE/INTERNATIONALE

- 1) **Director proiect** – Contract no. 325/04.12.2024. Mobility grant for young researchers: PN IV-P2-2.2.MC-2024-0291, Titlu Proiect: Isolation of S and K solubilizing bacteria from agricultural soils of the Vietnamese Mekong Delta to enrich soil functions and services in disturbed regions. Period: 07.11.2024 – 03.12.2024
- 2) **Responsabil partener proiect national** – Contract S9/18.03.2021. Obținere supliment nutritive si adaos pentru hrana pentru animale pe baza de material zeolitic, din cadrul Contract de finantare nr.7/01.09.2016. Realizarea transferului de cunostinte acumulate si tehnologii dezvoltate de INCDO-INOE 2000, Filiala ICIA in domeniul Materiale pentru implementarea lor la intreprinderi in Romania, nr. P40_236, cod SMIS2014+ 105654. Valoare Contract S9/18.03.2021: 827 300 Lei – Echivalent euro: 169 265 (Valoare euro arhiva BNR din data de 18.03.2021 = 4.8876) Durata: 18.03.2021 – 31.08.2022 (21 luni)/Proiect national
- 3) **Director proiect** – Contract no. 741/22.10.2018. Mobility grant for young researchers/phd. students: PN III-P1-1.1.MC-2018-2826, Titlu Proiect: Global change impact on soil microbiota community and structures in agricultural and forest ecosystems: effects on ecosystem services. Period: 30.11.2018 – 16.12.2018
- 4) **Director proiect** – Contract no. 651/18.12.2017. Mobility grant for young researchers/phd. students: PN III-P1-1.1.MC-2017-2334, Project title: Global change impact on soil extracellular enzymatic activities. Period: 03.02.2017 – 18.02.2017
- 5) **Lider Grup - Proiect PNRR-C9-I8** – Contract 760104/23.05.2023, cod CF 245/29.11.2022. SENSING, MAPPING, INTERCONNECTING: tools for soil functions and services valuation. Period: 01.07.2023 – 30.06.2026
- 6) **PN-III-P3-3.1-PM-RO-FR-2019-0090, Contract no. 16BM/2019**. Improving lignocellulosic biomass pretreatment to increase biogas yields (LIGNOBIOGAS) Durata: 15.06.2019 – 31.12.2020 (18.5 luni)/Proiect international
- 7) **EEA-RO-NO-2018-0138, Contract no. 4/2019**. Monitoring and risk assessment for groundwater sources in rural communities of Romania (GROUNDWATERISK) Durata: 01.06.2019 – prezent (47 luni)/Proiect international
- 8) **PN-III-P3-3.1-PM-RO-CN-2018-0128, Contract no. 26BM/2018**. Effects of global changes on soil microbial structure and functioning in forest and agricultural

- ecosystems: patterns, mechanisms and coping techniques (MICROPROFILE)
Durata: 01.04.2018 – 31.12.2019 (21 luni) /Proiect international
- 9) **PN-III-P3-3.1-PM-RO-FR-2016-0026, Contract no.91BM.** Assessment of the impact of anthropogenic activities (mine, traffic, urban, land use changes) on river contamination in France and Romania (IMPAACT) Durata: 29.03.2017-31.12.2018 (21 luni)/Proiect international
 - 10) **PN-III-P3-3.1-PM-RO-MD-2016-0140, Contract no. 20BM/2016.** Improving surface water quality assessment by semiquantitative and multielemental spectrometric methods (ICPAA). Durata: 01.07.2016-30.06.2018 (24 luni)/Proiect international
 - 11) **PN-III-P3-3.1-PM-RO-MD-2016-0056, Contract no. 19BM/2016.** Change in redox status and expression of stress related genes in spirulina (arthropsia) under oxidative stress condition (REGESPI). Durata: 01.07.2016-30.06.2018 (24 luni)/Proiect international
 - 12) **PN III Cooperare Bilaterală Romania-China, Contract no. BM54/2016.** Estimation of the potential risk of rural wells-water: current challenges (disinfection) vs. future challenges (climate events), (ESPAFAN) Durata: 30.09.2016-31.12.2017 (15 luni)/Proiect international
 - 13) **Program Nucleu PN 23 05, Contract 11N/03.01.2023.** Consolidarea excelenței științifice în optoelectronică și domeniul conexe prin sinergia politicilor de cercetare și inovare naționale, regionale și ale Uniunii Europene, conform viziunii SNCISI 2022-2027 (OPTRONICA VIII). Durata: 03.01.2023 – prezent (4 luni)/Proiect național
 - 14) **PN-III-P1-1.1-TE-2021, Contract nr: TE37/2022.** Tehnologii inovative de valorificare a deșeurilor lignocelulozice cu producerea de bioplastice (LIGNOBIOPLAST) Durata: 15.05.2022 – prezent (12.5 luni) /Proiect național
 - 15) **PN-III-P4-ID-PCCF-2016-0016-P, Contract no. 15/2018.** Lanțuri trofice în întuneric: diversitate și procese evolutive în peșteri (DARKFOOD). Durata: 10.10.2018 – prezent (54.5 luni)/Proiect național
 - 16) **Program Nucleu PN 19-18.01.01, Contract 18N/08.02.2019.** Evaluarea funcțiilor biogeochimice ale solului (ciclul C, N, S, P) ca urmare a impactului proceselor globale asupra profilului fiziologic al comunităților microbiotei și identificarea de soluții pentru conservarea acestora (NUCLEU). Durata: 18.01.2019 – 31.12.2022 (48 luni)/Proiect național
 - 17) **Contract de finanțare nr.7/01.09.2016.** Realizarea transferului de cunoștințe acumulate și tehnologii dezvoltate de INCDO-INOE 2000, Filiala ICIA în domeniul Materiale pentru implementarea lor la întreprinderi în România, nr. P40_236, cod SMIS2014+ 105654. Durata: 01.09.2016 – 31.08.2022 (72 luni)/Proiect național
 - 18) **PN-III-P1-1.2-PCCDI-2017-0251, Contract no. 4PCCDI/2018.** Sistem complex, integrat pentru optimizarea tehnologică și valorificarea superioară a subproduselor vitivinicole (VINIVITIS) Durata: 01.03.2018 – 30.04.2021 (38 luni)/Proiect național
 - 19) **PN-III-P1-1.2-PCCDI-2017-0652, Contract no. 84PCCDI/2018.** Cod Proiect Tehnologii inovative pentru recuperarea avansată a materialelor din deșeuri de echipamente informatice și de telecomunicații (TRADE-IT) Durata: 01.03.2018 – 30.04.2021 (38 luni)/Proiect național
 - 20) **Program Nucleu PN 18-28.02.01, Contract 33N/16.03.2018.** Evaluarea impactului schimbărilor climatice asupra biodiversității solului prin tehnici optospectrale și complementare. Durata: 16.03.2018 – 10.12.2018 (9.5 luni)/Proiect național
 - 21) **Program Nucleu Contract PN 16.40.02.01.** Transferul contaminanților antropici în lanțul trofic, determinați prin metode optospectrale. Determinarea coeficienților de transfer Durata: 01.10.2015-10.12.2017 (27 luni)/Proiect național

CONFERINTE

- 36th Annual Conference of the International Society for Environmental Epidemiology „ISEE 2024”, 25-28 august 2024, Santiago, Chile, Oral presentation: Land use impact on soil microbial community in Continental Transylvania (Romania)
- 9th International Symposium of Interactions of Soil Minerals with Organic Components and Microorganisms Commission 2.5 Soil Interfacial Reactions „ISMOM 2024”, 15 – 18 october 2024, Tsukuba, Japan, Poster presentation: Seasonal pattern of soil microorganisms abundance and activities in a landslides affected zone under restoration
- Food and Agriculture Organisation of the United Nations “FAO”, Global Symposium on Soil Biodiversity, 19-22 april 2021 (online)
- 32nd Annual Conference of the International Society for Environmental Epidemiology “ISEE”, 24-27 august 2020 (virtual conference – poster travel award)
24 – 27 August 2020 at 32nd Annual Conference of the International Society for Environmental Epidemiology, “ISEE 2020”, Virtual conference, Poster presentation *Non-*

steroidal anti inflammatory drugs (NSAIDs) impact on soil microbiota: consequences on soil functioning

- 25 – 27 September 2019, at International Conference Processes in Isotopes and Molecules, Cluj – Napoca, Romania, Poster presentation *Simultaneous GC-MS analysis of pharmaceutical active compounds from environmental and biota samples: uptake potentials determination for common vegetables*
- 18 – 21 September 2019, at 10th International Conference on Environmental Engineering and Management, (ICEEM 10) Iasi, Romania, Poster presentation *Revitalisation of pesticide – polluted agricultural soil functions by microbiom transplantation*
- 28 June – 7 July 2019 at 19th International Multidisciplinary Scientific GeoConference SGEM, Bulgaria, *Past used emergent pesticide removal efficiency from water environment by zeolites with different granule sizes*
- 4 – 7 September 2017 at 3rd International Symposium on Profiling ISPROF 2017, Costa de Caparica, Portugal, Shotgun presentation *GC – MS profiling of pharmaceutical products uptake by edible plants: challenges of wastewater reuse in agriculture*
- 20 – 24 June 2016 at 4th International Conference Agriculture & Food, Elenite, Bulgaria, Poster presentation *Dynamic modelling of pesticides uptake by Triticum sp. Anatomical compartments*
- 2 – 4 September 2013 at International Symposium on Profiling ISPROF13, Caparica, Portugal, Poster presentation *Aroma and fatty acid content profiling from edible and non-edible mushroom species through gas chromatography-mass spectrometry*
- 17 – 19 September 2012 at 3rd SETAC CEE Annual Meeting, Krakow, Poland, Poster presentation *Banned and un-banned organochlorine pesticides fingerprint on cultivated wheat (Triticum sp.)*
- 29 April – 3 May 2012 at 30th Informal Meeting on Mass Spectrometry, Olomouc, Czech Republic, Poster presentation *Ecotoxicological assessment of home grown foodstuffs with GC-qMS for inhabitants dietary exposure estimation, and Poster Presentation Mass spectrometric characterization of aroma value behaviour in Cantharellus cibarius. at different evolution stage*

ACTIVITATI EDITORIALE

EDITOR INVITAT

REFERENT JURNALE

2025.01.01 - PRESENT

- Special Issue: Ecology and Diversity of Soil Microbial Communities in an Era of Global Change, in Diversity journal, IF 2.1
- Special Issue: Chromatographic Methods for Environment, Biota and Food Contaminants Analysis, in Separations journal, IF 2.7.
- Environmental Geochemistry and Health
- Microorganisms
- Soil Systems
- Diversity
- Sustainability
- Life
- Plants
- Applied Sciences
- Processes
- Toxics
- Forests
- Journal of Xenobiotics
- Agronomy
- Agriculture
- International Journal of Plant & Soil Science
- Journal in Advances in Microbiology

Data

01.06.2025

Semnatura

