

INFORMATII PERSONALE

Kovacs Melinda Haydee

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Web of Science:

<https://www.webofscience.com/wos/author/record/ADV-4482-2022>

Research Gate: <https://www.researchgate.net/profile/Kovacs-Melinda-Haydee>

Google Scholar:

https://scholar.google.com/citations?hl=en&user=BDGAbE0AAAAJ&view_op=list_works&sortby=pubdate

Scopus author identifier: 35092571500

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Cercetător științific în domeniul științei mediului, cu interes de studiu asupra modul în care presiunile globale afectează biodiversitatea solului. Folosind tehnici multi-omice avansate, cartografiez amprentele moleculare pe care factorii antropici și schimbările climatice le lasă asupra comunităților microbiene. Aceste date ne ajută să ne pregătim mai eficient pentru provocările generate de schimbările globale.

EXPERIENTA PROFESIONALA

01.01.2020 - PREZENT

Cercetator Stiintific gradul I, CSI

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

01.01.2017 – 01.01.2020

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/>

01.05.2014 - 01.01.2017

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/>

01.10.2011 - 01.05.2014

Cercetator Stiintific, gradul III, CSIII

Institutul National de Cercetare-Dezvoltare pentru Tehnologii Izotopice si Moleculare INCNTIM, Cluj-Napoca, Donath 67-103, www.itim.ro

01.10.2007 – 01.10.2011

Asistent Cercetare Stiintifica, ACS

Facultatea de Stiinta si Ingineria Mediului, Universitatea Babes-Bolyai, Cluj-Napoca, Fantanele 30, <https://enviro.ubbcluj.ro>

EDUCATIE SI FORMARE

01.10.2007 - 14.05.2010

Doctorat (ISCDE 6)

Scoala Doctorala de Fizica

Domeniul: Fizica

Facultatea de Stiinta si Ingineria Mediului, Universitatea Babes-Bolyai, Fantanele 30, Cluj-Napoca <https://enviro.ubbcluj.ro>

Titlul tezei: Contribution to development of the novel extraction and analysis methods to physicochemical and ecotoxicological characterization of the volatile organic compounds (VOC) in surface water

01.10.2005 - 30.09.2006

Masterat (ISCED 5A)

Specializare: Metode atomice si nucleare aplicate in studiul mediului

Facultatea de Stiinta si Ingineria Mediului, Universitatea Babes-Bolyai, Fantanele 30, Cluj-Napoca <https://enviro.ubbcluj.ro>

01.10.2001 -30.09.2005

Licenta (ISCED 5A)

Specializare: Fizica Medicala

Facultatea de Fizica, Universitatea Babes-Bolyai, Kogalniceanu 1, Cluj-Napoca <https://phys.ubbcluj.ro>

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 (28 – articole ISI, 33– articole BDI, 7 – capitole de carte, 3 - brevete)

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

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**
- 5) Nutritional and microbiological properties of cheese with dried elderberry and red grape pomace. Dodan A., Marc RA., Muresan C.C., Pop C.r., Michiu D., Filip M.R., Ratu R.N., Stoica F., Crivei I.C., Postolache A.N., Kovacs M., Sima R., Muntean M.V. Turkish Journal of Agriculture and Forestry, 49(1), **2025**
- 6) 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**
- 7) Chemical analysis of various tea samples concerning volatile compounds, fatty acids, minerals and assessment of their thermal behavior Dippong T., Cadar O., **Kovacs M.H.**, Dan M., Senila L. Foods 12(16), 3063, **2023** DOI: 10.3390/foods12163063
- 8) 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, 11(19), 3146, **2022**
- 9) The influence of unconventional ultrasonic pasteurization on the characteristics of curds obtained from goat milk with the low cholesterol content. Dumuta A., Vosgan Z., Mihali C., Giurgiulescu L., **Kovacs M.**, Sugar R., Mihailescu L., Ultrasonic Sonochemistry, 89, 106155, **2022**
- 10) The impact of insect flour on sourdough fermentation-fatty acids, amino-acids, minerals and volatile profile. Vasilica B.T.B., 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 I., Muste S., Insects, 13(7), 576, **2022**
- 11) Simultaneous removal of heavy metals (Cu, Cd, Cr, Ni, Zn and Pb) from aqueous solutions using thermally treated Romania zeolitic volcanic tuff. Senila M., Neag E., Cadar O., Kovacs E.D., Aschilean I., **Kovacs M.H.**, Molecules, 27(12), 3938, **2022**
- 12) Evaluation of the level of contamination with phthalates in dairy products found on the Romanian market. Fat A.I., Dana S.D., Tabaran A., Vesa G.V., Nikolaou F.G., Kovacs E.D., Roman C., **Kovacs M.H.**, Mihaie R., Mihaie M., Stud. Univ. Babes-

- Bolyai Chem 4, 61-67, **2021**
- 13) 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
 - 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.
 - 15) 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.
 - 16) Determination of changes in the microbial and chemical composition of Taga cheese during maturation. Criste A., Copolovici L., Copolovici D., **Kovacs M.**, Madden R.H., Corcionivoschi N., Gundogdu O., Berchez M., Urcan A.C., Plos One, 15(12), e0242824, **2020**
 - 17) Chemical, nutritional and antioxidant characteristics of different food seeds. Senila L., Neag E., Cadar O., **Kovacs M.H.**, Becze, A., Senila M., Applied Sciences, 10(5), 1589, **2020**
 - 18) 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.
 - 19) Response of antioxidant potential and essential oil components to irrigation and 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.
 - 20) Validation of a method for determination of free glycerol in biodiesel. Senila L., Miclean M., Cadar O., Senila M., **Kovacs M.H.**, Hiaghia A. Studia Universitatis Babes-Bolya. Chemia 345 **2016**
 - 21) Determination of volatile organic compounds and particulate matter levels in an urban area from Romania. Roba C., Stefanie H., Torok Z., **Kovacs M.**, Rosu C., Ozunu A. Environmental Engineering & Management Journal (EEMJ), 13(9), **2014**
 - 22) Assessment of air quality from primary school classrooms and presence of volatile organic compounds (VOCs). **Kovacs M.H.**, Roba C., Rosu C., Neamtii I., Gurzau E. Carpathian Journal of Earth and Environmental Sciences 8(4), 55-61. **2013**
 - 23) Mutagenic contaminants bioaccumulation detection at ultratrace levels from complex biological matrices. **Kovacs M.H.**, Moldovan Z., Ristoiu D. Advanced Topics in Optoelectronics, and Nanotechnologies Vi, 8411, 283-290. **2012**
 - 24) Chlorinated solvents detection in soil and river water in the area along the paper factory in Dej. Town, Romania. Ristoiu D., **Kovacs M.H.**, Ristoiu T. Journal of Environmental Protection and ecology 11(4), 1229-1238, **2010**
 - 25) BTEX determination of Cluj Dej region environment. Ristoiu D, **Kovacs M.H.**, Ristoiu D. Journal of Environmental Protection and Ecology, 11(3), 845-853. **2010**
 - 26) Uptake of persistent organic pollutants by vegetables grown in contaminated soil in Cluj district, Romania. **Kovacs M.H.**, Ristoiu D. Epidemiology, 20(6), S66, **2009**
 - 27) Accumulation of DBPs in human breast milk. **Kovacs M.H.**, Brisan N., Zaharia G., Ristoiu D., Epidemiology 20(6), S65-S66, **2009**
 - 28) Trihalomethane formation during water disinfection in four water supplies in the Somes river basin in Romania. Ristoiu D., von Gunten U., Mocan A., Chira R., Siegfried B., **Kovacs M.H.**, Vancea S., Environmental Science and Pollution Research, 16, 55-65. **2009**
 - 29) Factors affecting THM formation in the distribution system of Cluj, Romania. Ristoiu D., Gunten U., **Kovacs M.H.**, Chira R., GeoEcoMarina 14(1), **2008**
 - 30) Disinfection efficiency-Trihalomethanes (THMs) formation after Chlorination Process. Ristoiu D., **Kovacs M.H.**, Haiduc I., Vancea S., Proceedings of the Second French-Serbian Summer University: Water Quality Control and Health, From Concept to Action.146-152, **2008**

ARTICOLE IN REVISTE STIINTIFICE BDI

- 1) 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.
- 2) 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.
- 3) 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.
- 4) 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.
 - 5) 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.
 - 6) Determination of chemical composition and fatty acids of blackthorn fruits (*Prunus spinosa*) grown near Cluj-Napoca, NW Romania. Babalau-Fuss V., Grebla O.B., Cadar O., Hoaghia M.A., **Kovacs M.H.**, Moldovan A., Tofana M. Agricultura, 105-106(1/2), 90-95, **2018**
 - 7) 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.
 - 8) 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
 - 9) 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.
 - 10) 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.
 - 11) Determination of organochlorine pesticides in Aries River water near an industrial dump using SPE/HS-SPME/GC-ECD method. Miclean M., Senila L., Cadar O., Roman M., **Kovacs M.H.** Agricultura, 93-94, 1/2, 123-127 ref. 11, **2015**
 - 12) Organochlorine pesticides impact on vegetables. **Kovacs M.H.**, Miclean M., Kovacs E.D., Cadar O., Roman M., Senila L., Simedru D., Naghiu A. Agricultura – Revista de Stiinta si Practica Agricola, **2015**, 1:2:5-8.
 - 13) Quality evaluation of well water in rural and industrial areas, Romania Country. Hoaghia M.A., **Kovacs M.**, Levei E., Miclean M., Roman M., Senila M., Tanaselia C., Ristoiu D. Agricultura, 93-94, 1/2., 128-132, **2015**
 - 14) Automatic germination evaluation and qualitative analysis of essential oil of *Mentha x piperita* L. under the influence of high frequency pulsatile electromagnetic and ultrasound pulsatile fields. Singureanu V., Ungur R., **Kovacs M.H.**, Moldovan G., Singureanu V. Notulae Botanicae Horti Agrobotanici, 43(1), 146-152. **2015**
 - 15) Studies on the content of heavy metals in Aries River using ICP-MS. Voica C., **Kovacs M.**, Feher I. AIP Conference Proceedings 1565 (1). 317-321, **2013**
 - 16) Volatile organic compounds and trace metal level in some beers collected from Romanian market. Voica C., **Kovacs M.**, Vadan M. AIP Conference Proceedings 1565 (1), 313-316. **2013**
 - 17) Climate change influence on drinking water quality. **Kovacs M.H.**, Ristoiu D., Coica . Moldovan Z. AIP Conference Proceeding2 1565 (1), 298-303, **2013**
 - 18) Climate change influence on drinking water quality. Conference: Processes in isotopes and molecules, proceedings **Kovacs M.H.**, Ristoiu D., Voica C., Moldovan Z. AIP Publishing, 1656 (1): 298-303, **2013**
 - 19) Optimization of organometallic compounds extraction from aqueous samples in order to improve their gas chromatography-mass spectrometry analysis performance. **Kovacs M.H.**, Ristoiu D., Voic C., Ristoiu T. Romanian Journal of Physics 58(1-2), 204-210, **2013**
 - 20) 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.
 - 21) Photodegradation study of some indoor air pollutants in the presence of UV-VIS irradiation and TiO₂ photocatalyst. Schmutzer G., Feher I., Marincas O., Avram V., **Kovacs M.H.**, David L., Danciu V., Moldovan Z. Studia Universitatis Babes-Bolyai, Chemia, 57(3). **2012**
 - 22) Survey of human's exposure to organic pollutants coming from home produced vegetables and animals. **Kovacs M.H.**, Ristoiu D. Environmental Engineering & Management Journal 11(3) **2012**

- 23) The use of inductively coupled plasma mass spectrometry (ICP-MS) for the determination of toxic and essential elements in different types of food samples. Voica C., Dehelean A., **Kovacs M.H.** AIP Conference Proceeding, 1425 (1), 110-113, **2012**
 - 24) ICP-MS determinations of heavy metals in surface waters from Transylvania. Voica C., **Kovacs M.H.**, Dehelean A., Ristoiu D., Iordache A. Romanian Journal of Physics 57(6-7), 1184-1193, **2012**
 - 25) PAH transfer from soil to selected vegetables grown on industrially contaminated soil. **Kovacs M.H.**, Ristoiu D., Ristoiu T. Journal of Environmental Protection and Ecology, 13(2A), 900-905. **2012**
 - 26) 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.
 - 27) Nanoscale determination of ecotoxicological hallmark in animal hair. **Kovacs M.H.**, Ristoiu D., Ristoiu T. Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies V, 540-545. **2010**
 - 28) Evaluation of presence and occurrence of halogenated organic compounds in bottled and tap water waters-evaluation of differences between water types. Ristoiu D., **Kovacs M.H.**, Voica C., Ristoiu T. Ecoterra, 7(25), 153-160, **2010**
 - 29) Optimization of methods for the determination of disinfection by-products in drinking water. **Kovacs M.H.**, Ristoiu D. Studia Universitatis Babes-Bolyai, Chemia. **2009**
 - 30) Chlorinated solvents detection in soil and river water in the area along the paper factory from Dej town, Romania. Sidonia V., **Kovacs M.H.**, Ristoiu D., Silaghi-Dumitrescu L. Studia Universitatis Babes-Bolyai, Chemia, **2009**
 - 31) Volatile organic disinfection by products determination in distribution system from Cluj-Napoca. **Kovacs M.H.**, Ristoiu D., Vancea S., Silaghi-Dumitrescu L., Studia Universitatis Babes-Bolyai, Chemia, **2009**
 - 32) Application of headspace SPME-GC-MS in estimation of VOCs content from different environmental samples. **Kovacs M.H.**, Ristoiu D., **2009**
 - 33) Role of water on the biodiesel stability and its effect on gaseous emissions. Bitu M.G., Grecu D.R., Dinu M., Popescu A., **Kovacs M.H.**, Ristoiu D., Annals Food Science and Technologies, 10(2) 655-659, **2009**.
-
- 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 volatiles associated to rhizobacteria 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
 - 5) Volatile organic compounds in surface waters: Extraction and analysis methods for ecotoxicological characterization of surface waters. **Kovacs Melinda Haydee**, LAP Lambert Academic Publishing, Germany, ISBN-13: 978-3-659-50496-9, ISBN-10: 3659504963, EAN: 9783659504969, **2017**
 - 6) Surveys of living organisms exposure profile to regional and non-regional organic pollutants. **Kovacs MH**; in Risk Assessment and Management, Editor: Zhiyong Zhang, Editura: Academy Publish, USA, ISBN: 978-0-9835850-0-8, **2012**, pp. 506-519
 - 7) Non-invasive matrices use in pollution evaluation at nanoscale level- A way forward in ecotoxicological studies. **Kovacs M.H.**, Ristoiu D., Voica C. Novel Approaches and Their Applications in Risk Assessment. **2012**

**CAPITOLE DE CARTI
PUBLICATE LA EDITURI
INTERNATIONALE**

BREVETE

- 1) Process for obtaining a material based on natural zeolitic volcanic tuff with fertiliser and pesticide characteristics for use in agriculture. Aschilean I., Chioreanu G., Bolos D., **Kovacs M.H.**, Kovacs E.D., Senila M. **Nr. 137170, 2024**
- 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 M.H.**, Kovacs E.D., 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, M.H.**; Kovacs, E.D.; Roman, C.; Miclean, M.; Hotararea Nr.3/57 din 29.05.2020, OSIM

DIRECTOR/RESPONSABIL /MEMBRU PROIECTE NATIONALE/INTERNATIONALE

- 1) **Director proiect-** Effects of global changes on soil microbial structure and functioning in forest and agricultural ecosystems: patterns, mechanisms and coping techniques (**MICROPROFILE**). Program finantare/Sub-program: PNIII Programul 3 – Cooperare Europeana si Internationala/Cooperare bilaterala Romania-China, Contract no. 26BM/2018, Period: 02.07.2018-31.12.2019
- 2) **Director Proiect-** Estimating the potential risk of wells water in rural areas: current challenges (disinfection) vs. future challenges (climate events) (**ESPAFAN**). Program finantare/Sub-program: PNIII Programul 3 – Cooperare Europeana si Internationala/Cooperare bilaterala Romania-China, Contract no. 54BM/2016, Period: 30.09.2016-31.12.2017
- 3) **Responsabil proiect-** Evaluation of soil biogeochemical functions (C, N, S, P cycling) as a consequence of the impact of global processes on the physiological profile of microbiota communities and identification of solutions for their conservation (NUCLEU). Program finantare/Sub-program: Program NUCLEU, Contract no. 18N/08.02.2019, PN19-18.01.01, Period: 08.02.2019-31.12.2022
- 4) **Responsabil proiect-** Assessing the impact of climate change on soil microbiobiodiversity by optospectral and complementary techniques (NUCLEU). Program finantare/Sub-program: Program NUCLEU, Nr. contract: PN 16.40.02.01, Period: 16.03.2018-10.12.2018
- 5) **Responsabil proiect-** Transfer of anthropogenic contaminants in the food chain determined by optospectral methods. Determination of transfer coefficients (NUCLEU). Program finantare/Sub-program: Program NUCLEU, Nr. contract: 33N/2018, PN 18-28.02.01, Period: 09.03.2016-10.12.2017
- 6) **Responsabil proiect-** Transfer of accumulated knowledge and technologies developed by INCDO-INOE 2000, ICIA Branch in the field of Materials for their implementation in Romanian enterprises (TREND), Program finantare/Sub-program: Programul operational competitivitate 2014-2020, Axa prioritara 1 – cercetare, dezvoltare tehnologica si inovare (CDI) in sprijinul competitivitatii economice si dezvoltarii afacerilor, Actiune 1.2.3, Tip proiect: Parteneriate Pentru Transfer de Cunostinte, Contract no. 7/01.09.2016, SMIS 105654, Subcontract S2, Period: 01.09.2016-31.08.2022
- 7) **Membru echipa-** SENSING, MAPPING, INTERCONNECTING: tools for soil functions and services valuation. PNRR-C9-I8, Contract 760104/23.05.2023, cod CF 245/29.11.2022. Durata: 01.007.2023 – 30.006.2026
- 8) **Membru echipa-** Integrated eco-technology for the selective recovery of base and precious metals from Cu and Pb mining waste, (ERAMIN2). Program finantare/Sub-program: ERAMIN2, Nr. contract: 52/2018, Period: 01.05.2018-30.04.2021,
- 9) **Membru echipa-** Horizon 2020 Support Centre for the Management of European Projects and European Promotion (PREPARE) Program finantare/Sub-program: POC Actiunea - 1.1.3 Crearea de sinergii cu actiunile de CDI ale programului-cadru ORIZONT 2020 al Uniunii Europene si alte programe CDI internationale, Cod SMIS 2014+:107874, Cod proiect: 107874, Period: 27.05.2020-30.06.2023
- 10) **Membru echipa-** Food chains in the dark: diversity and evolutionary processes in fisheries (DARKFOOD) Program finantare/Sub-program: PN III PCCF - Proiecte complexe de cercetare de frontier, Nr. contract: 15PCCF/2018, Period: 10.10.2018-09.10.2022
- 11) **Membru echipa-** Innovative technologies for the advanced recovery of materials from waste IT and telecommunications equipment (TRADE-IT). Program finantare/Sub-program: PN III PCCDI – Proiecte complexe realizate în consorții CDI, Contract no.: 84PCCDI/2018, Period: 06.03.2018-31.03.2021
- 12) **Membru echipa-** Solutions for the valorization by composting of sludge resulting from anaerobic treatment of waste from wastewater treatment plants

(ECOSOL).Program finantare/Sub-program: PN III P2 Cecuri de Inovare, Contract no.: 21CI/2017, Period: 25.07.2017-31.12.2017

- 13) **Membru echipa-** Research on the identification of priorities for bioeconomy development in Romania for the period 2016-2030 (BIOECONOMY).Program finantare/Sub-program: PS Plan Sectorial, Nr. contract: 12S/2015, Period: 08.10.2015-10.06.2017
- 14) **Membru echipa-** Innovative technology for ex-situ bioremediation of hydrocarbon polluted soils (BIORESOL)Program finantare/Sub-program: PNCDI II Programul Parteneriate, PCCA - Proiecte Colaborative de Cercetare Aplicativa, Contract no: 91/2014, Period: 01.07.2014-30.09.2017
- 15) **Membru echipa-** Genetic counseling for severe mental disorders. Integration of innovative services in prophylactic interventions (MENTALICA). Program finantare/Sub-program: PNCDI II Programul Parteneriate, PCCA - Proiecte Colaborative de Cercetare Aplicativa, Contract no.: 121/2014, Period: 01.07.2014-30.09.2017
- 16) **Membru echipa-** Advanced research in the field of physical processes and techniques specific and complementary to systems that emit, modulate, transmit and receive optical radiation OPTRONICA III/Cercetari privind actiunea agentilor distructivi naturali si antropici asupra monumentelor de patrimoniu Program finantare/Sub-program: Program NUCLEU, Contract no: PN 09.27.01.02, Period: 01.07.2009-30.04.2015

PARTICIPARE CONFERINTE

- 36th Annual Conference of the International Society for Environmental Epidemiology „ISEE 2024”, 25-28 august 2024, Santiago, Chile
- 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
- 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)
24 – 27 August 2020 at 32nd Annual Conference of the International Society for Environmental Epidemiology, “ISEE 2020”, Virtual conference, Poster presentation
- 25 – 27 September 2019, at International Conference Processes in Isotopes and Molecules, Cluj – Napoca, Romania
- 18 – 21 September 2019, at 10th International Conference on Environmental Engineering and Management, (ICEEM 10) Iasi, Romania
- 28 June – 7 July 2019 at 19th International Multidisciplinary Scientific GeoConference SGEM, Bulgaria
- 4 – 7 September 2017 at 3rd International Symposium on Profiling ISPROF 2017, Costa de Caparica, Portugal
- 20 – 24 June 2016 at 4th International Conference Agriculture & Food, Elenite, Bulgaria,
- 2 – 4 September 2013 at International Symposium on Profiling ISPROF13, Caparica, Portugal
- 17 – 19 September 2012 at 3rd SETAC CEE Annual Meeting, Krakow, Poland,
- 29 April – 3 May 2012 at 30th Informal Meeting on Mass Spectrometry, Olomouc, Czech Republic

ACTIVITATI EDITORIALE

EDITOR INVITAT

- 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.
- Analytical Letters
- Biochemical Systematics and Ecology
- Fermentation
- International Journal of Molecular Sciences

REFERENT JURNALE

2025.01.01 - PRESENT

- Microorganisms
- Nitrogen
- Land
- Agronomy
- Stresses
- Plants
- Applied Sciences
- Agriculture
- Forests
- Crops

Data

21.06.2025