



Section 5

**LAND RECLAMATION, EARTH
OBSERVATION & SURVEYING,
ENVIRONMENTAL ENGINEERING**

**SCIENTIFIC COMMITTEE OF
LAND RECLAMATION, EARTH OBSERVATION & SURVEYING,
ENVIRONMENTAL ENGINEERING SECTION**

- Alexandru BADEA - University of Agronomic Sciences and Veterinary Medicine of Bucharest / Romanian Space Agency, Romania
- Ioan BICA - Technical University of Civil Engineering of Bucharest, Romania
- Daniel BUCUR - Iasi University of Life Sciences (IULS), Romania
- Stefano CASADEI - University of Perugia, Italy
- Fulvio CELICO - University of Molise, Italy
- Carmen CIMPEANU - University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
- Sorin Mihai CIMPEANU - University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
- Maria Jose ORUNA CONCHA - University of Reading, United Kingdom
- Marcel DARJA - University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Romania
- Andrea DOMINIJANNI - Politecnico di Torino, Dipartimento di Ingegneria Strutturale, Edile e Geotecnica (DISEG), Torino, Italy
- Claudiu DRAGOMIR - University of Agronomic Sciences and Veterinary Medicine of Bucharest/National Institute for Research and Development - URBAN-INCERC, Bucharest, Romania
- Eric DUCLOS-GENDREU - Spot Image, GEO-Information Services, France
- Radu Claudiu FIERASCU - National Institute for Research & Development in Chemistry and Petrochemistry - ICECHIM Bucharest/National University of Science and Technology POLITEHNICA Bucharest, Romania
- Jean-Luc HORNICK - Université de Liège, Belgium
- Catalina ITICESCU - "Dunarea de Jos" University of Galati, Romania
- Bela KOVACS - University of Debrecen, Hungary
- Hossein KAZEMi - Gorgan University of Agricultural Sciences and Natural Resources (GUASNR), Gorgan, Iran
- Raluca MANEA - University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
- Alina ORTAN - University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
- Jovan Br. PAPIĆ - University "Ss. Cyril and Methodius", Faculty of Civil Engineering, Skopje, Republic of North Macedonia
- Nelson PÉREZ-GUERRA - University of Vigo, Spain
- Nicolae PETRESCU - Valahia University Targoviste, Romania
- Dorin Dumitru PRUNARIU - Romanian Space Agency, Romania
- Andrei Victor SANDU - "Gheorghe Asachi" Technical University of Iasi, Romania
- Umut Gunes SEFERCIK - Gebze Technical University, Turkey
- Ando SHIN - Tokyo University of Science, Japan
- Jesus SIMAL-GANDARA - University of Vigo, Spain
- Marisanna SPERONI - Centro di Ricerca Zootecnia e Acquacoltura, Consiglio per la Ricerca in Agricoltura e L'analisi Dell'economia Agraria (CREA), Italy

- Razvan TEODORESCU - University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
- Augustina Sandina TRONAC - University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
- Ana VIRSTA - University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
- Neven VOĆA - University of Zagreb, Croatia

ORGANIZING COMMITTEE

- Ana VIRSTA
- Mirela Alina SANDU
- Augustina TRONAC
- Veronica IVANESCU
- Mihaela DRAGOI
- Andreea OLTEANU
- Tatiana OLINIC
- Constanta MIHAI
- Florin NEACSU

VENUE

**University of Agronomic Sciences and Veterinary Medicine of Bucharest
Faculty of Land Reclamation and Environmental Engineering**

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DETAILED PROGRAMME

SECTION 5–LAND RECLAMATION, EARTH OBSERVATION & SURVEYING, ENVIRONMENTAL ENGINEERING

Official Opening of the Conference Section

Thursday, 6 June 2024

FIFIM Building,
2nd Floor, Amphitheatre AIII1

14:00–14:15

Opening Remarks:

**Assoc. Prof. Ph.D. Augustina Tronac, Dean -
Faculty of Land Reclamation and Environmental
Engineering**

Plenary Conference Section 5 Session

Thursday, 6 June 2024

14:15-15:15

Moderators:

Assoc. Prof. Ph.D. Augustina Tronac,
USAMVB
Assoc. Prof. Ph.D. Ernest Olinic, UTCB

Plenary Conference Section 5 Presentations



14:15-14:35 A view of the Future Education.
Octavian Laurentiu Balotă

14:35-14:55 Research trends in using water resources in Central and Eastern Europe. A Corpus-Based Analysis.
Alina-Cerasela Aluculesei (Avram)

14:55-15:15 Irrigation - Past, Present and Future. Case study: Numerical modelling MIKE+ RIVERS (MIKE 11) program for calculating the volume of water available from drainage for irrigation.
Teodor Eugen Man

ONLINE SESSION

Thursday, 6 June 2024

15:15-16:00

TEAMS link

Mirela Sandu: SECTION 5–LAND
RECLAMATION, EARTH
OBSERVATION&SURVEYING, ENVIRON...

Transformation model towards energy positive public building.

Petar Kisyyov

Analysis of GHG emissions by sectors in city of Vidin.

Daniela Kostova-Ivanova

Application of machine learning approaches for land use change modelling in Suriname.

Tamara Myslyva, Marciano Dasai, Christiaan Max Huisden, Petro Nadtochiy, Yurii Bilyavskyi

16:00–16:30 *Coffee break*

SESSION I

Thursday, 6 June 2024

16:30-17:30

Moderators:

Lect. Ph.D. Ira-Adeline Simionov, UGAL
Prof. Ph.D. Sevastel Mircea, USAMVB

Consistency index of soils, corresponding to the state of saturation: an important parameter in anticipating the behavior of cohesive soils.

Ernest Daniel Olinic, Tatiana Olinic

Determination of hardening soil model (HSM) parameters from field and laboratory testing.

Ioan Boti, Vasile Farcas, Adrian Andronic, Ernest Olinic

Improving productivity on degraded lands using a novel technology of cultivating crops in biodegradable multilayered structures.

Florin Nenciu, Eugen Popescu, Lorena-Diana Popa, Gabriel Nae, Andreea Matache

Determining greenhouse gas emissions resulting from energy and water consumption for the decarbonization of corn production and developing strategies to reduce the carbon footprint.

Hasan Hüseyin Öztürk, Bülent Ayhan, Serdar Aygün, Ali Gül, Serkan Karabağlı

19:00-21:30 *Official Gala Dinner- Cultural Event -*

**CERES Restaurant,
USAMV Campus**

SESSION II

Friday, 7 June 2024

Moderators:

09:00-11:00

Lect. Ph.D. Clara – Beatrice Vîlceanu, UPT
Lect. Ph.D. Octavian Balotă, USAMVB

Integrated approach for landfill monitoring using geospatial and earth observation data.

Iulia Dana Negula, Cristian Moise, Mihaela Violeta Gheorghe, George Boldeanu

3D Modeling of the campus of the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca using ARCGIS PRO.

Iulia Coroian, Diana Ficior, Tudor Sălăgean, Silvia Chiorean, Ioana Delia Pop, Mircea-Emil Nap, Elemer-Emanuel Şuba

Some aspects regarding the use of remote sensing in the study of soil erosion in agriculture.

Gabriel Badescu, Mihail Susinski, Gabriel Tanasie, Cristian Popescu, Emilia Constantinescu, Marin Osiceanu

Environmental assessment of the area with natural CO₂ emissions in Băile Lăzăreşti.

Alexandra-Constanţa Dudu, Ana Bianca Pavel, Corina Avram, Irina Catianis, Gabriel Iordache, Florina Rădulescu, Naliana Lupaşcu, Andrei-Gabriel Dragoş, Oana Dobre, Constantin-Ştefan Sava

Principal component analysis: an appropriate tool for trophic parameters interaction – application in largest Lake in Balkan.

Erdona Demiraj, Irena Duka, Ferdi Brahushi, Seit Shallari

The influence of the lake hypolimnion discharge on the physico-chemical parameters of the river.

Lavinia Tataru, Florian Stătescu, Nicolae Marcoie

Phytoremediation of chromium by Bad Birnbach roses in urban areas.

Aysen Akay

11:00-11:30 *Coffee break*

SESSION III

Friday, 7 June 2024

Moderators:

11:30-13:30

Lect. Ph.D. Vereonica Ivănescu, USAMVB

Lect. Ph.D. Ștefan-Mihai Petrea, UGAL

New possibilities of using the ash resulting from the energy recovery of poultry litter within the circular economy concept.

Luminita Georgeta Popescu, Roxana Gabriela Popa, Lucica Anghelescu, Ramona Cazalbașu, Georgeta Predeanu, Bogdan Stefan Vasile

Recycling of steel furnace slags (SFS) by efficient integration in construction materials as aggregate partial replacement.

Cornelia Baeră, Aurelian Gruin, Ana-Cristina Vasile, Bogdan Bolborea, Alexandru Ion, Gabriela Bănăduc

Using expired drugs as environmentally friendly corrosion inhibitors.

Claudia Crisan, Horatiu Vermesan

Smart-Eco-Innovative composite materials with self-cleaning capability and enhanced resistance to microorganisms.

Adrian-Victor Lazarescu, Andreea Hegyi, Carmen Florean

Efficacy of the seismic isolating systems for historical buildings under moderate seismic forces.

Stefan Florin Balan, Bogdan Felix Apostol, Anton Danet

Acoustic absorption characteristics that are used in the acoustic design of interiors - comparisons between some classical materials and natural, ecological materials.

Marta Cristina Zaharia, Daniela Dobre, Claudiu Sorin Dragomir

Sir Joseph William Bazalgette - the ingenious civil engineer who has changed London.

Elena Nistor

Romania towards a green transition: Carbon Border Adjustment Mechanism (CBAM) regulations.

Cristiana Sîrbu

13:30-14:30

Lunch

POSTER PRESENTATIONS SESSION

Friday, 7 June 2024

Moderators:

14:30-16:30

Ph.D. Marta Cristina Zaharia, URBAN-INCERC
Lect. Ph.D. Tatiana Olinic, USAMVB

ENVIRONMENTAL SCIENCE AND ENGINEERING

- 1. Evaluation of chemical composition of essential oil and toxic metal accumulation of Lemongrass (*Cymbopogon flexuosus* Stapf.) cultivated on metal-contaminated soils**
Violina Angelova
- 2. Detection and monitoring of hydrocarbon pollution sources in the Petromidia refinery area**
Sorin Anghel
- 3. Research on the use of sludge from the Pitești wastewater treatment plant as fertilizer**
Gabriela Biali, Esmeralda Chiorescu, Maria Cătălina Pastia, Denis Țopa, Iuliana Motrescu, Irina Gabriela Cara
- 4. Obtaining alkali activated inorganic materials by recovery of wastes**
Mihaela Caftanachi, Ramona-Elena Tataru Farmus, Maria Harja
- 5. Testing the influence of erosion on soil chemical indicators**
Cosmina Candrea, Marcel Dîrja, Vasile Dodea
- 6. Composite materials for eco-sustainable constructions**
Adrian Alexandru Ciobanu, Aurelia Bradu, Andreea Hegyi
- 7. Ecological restoration of norway spruce stands affected by drying from outside the natural range**
Cristinel Constandache, Ciprian Tudor, Valentina Aga, Laurențiu Popovici
- 8. An integrative approach for the development of environmental strategy in the climate change context. The perspective of local public authorities' action**
Anca Draghici

9. **The influence of temperature on sound waves**
Bogdan Erghelegiu, Mirela Alina Sandu, Daniela Iordan
10. **Studies regarding the use of poured earth in buildings**
Aurelian Gruin, Cornelia Baeră, Sorin Dan, Bogdan Bolborea, Ana Cristina Vasile
11. **Comparison of methods for antibiotic compounds removal from aqueous solutions**
Diana Hanganu, Lidia Favier, Maria Harja
12. **Advanced recovery of valuable materials from e-waste**
Ștefan-Leontin Martinaș-Ioniță, Gabriela Antoaneta Apostolescu, Maria Harja
13. **Carbon footprint - important driver of climate change generated by the food industry**
Adelina Moja, Vasile Padureanu, Mirabela Lupu, Alina Maier, Cristina Canja
14. **Microflora of the ground air from "hot points" and park areas**
Asen Peshev, Bilyana Grigorova-Pesheva, Boyka Malcheva, Georgi Kadinov
15. **Analytical framework oriented towards environmental triggers in European great cities**
Ștefan-Mihai Petrea, Ira-Adeline Simionov, Alina Antache, Aurelia Nica, Maxim Arseni, Adrian Rosu, Dragos Cristea, Catalin Platon, Catalina Iticescu
16. **A deep-learning based method for waste detection**
Dan-Constantin Puchianu
17. **Waste classification using efficient neural networks and web application**
Dan-Constantin Puchianu
18. **Predicting the future trends of european and national bench-marks in the management of biodegradable municipal waste using artificial neural networks**
Eda Puntarić, Lato Pezo, Željka Zgorelec, Jerko Gunjača, Dajana Kučić Grgić, Neven Voća

19. **Assessing accuracy of low-cost compact system vs. standard air quality systems**
Adrian Rosu, Daniel-Eduard Constantin, Mirela Voiculescu, Silvia Drăgan, Maxim Arseni, Stefan-Mihai Petrea, Catalina Iticescu, Lucian Puiu Georgescu
20. **Studies on the current context of air quality inside earthen buildings**
Vasilica Vasile, Cornelia Baeră, Aurelian Gruin, Adrian-Alexandru Ciobanu, Bogdan Bolborea
21. **Assessing the efficiency of transport infrastructure investments in Romania: a multidimensional approach**
Petru Nicolae
22. **Decarbonizing irrigation systems: innovative technologies for energy efficiency and sustainable water resource management**
Petru Nicolae
23. **Building sustainability: integrating agricultural and industrial sub-products in the building sector**
Cristian Petcu, Claudiu Sorin Dragomir, Andreea Hegyi

SUSTAINABLE DEVELOPMENT OF RURAL AREA

1. **Urban paradox: an analytical perspective rethinking sustainable land areas**
Gabriela Banaduc, Cornelia Baera, Anca Draghici
2. **Study on the soils of the gorj county and the limiting factors of their quality, in order to improve them**
Mihaela Bălan, Cristian Popescu
3. **Technologies for reducing carbon dioxide emissions in agriculture**
Ioan Gaica, Madalina Iordache, Narcis Baghina, Daniel Dorin Dicu, Lucretiu Dancea
4. **Modernization/rehabilitation of the secondary drainage infrastructure by repositioning existing channels and by assigning the dual role of drainage-irrigation**
Marin-Vasile Ilca, Teodor Eugen Man, Robert Beilicci, Anisoara Ienciu, Daniela-Cristina Untaru, Mariana Antonia Pasc

5. **Experimental research of the innovative atmospheric humidity collection system for use in crop irrigation**
Dragoș Manea, Eugen Marin
6. **Zootechnical waste as raw material for biogas production and as fertilizer for agriculture**
Roxana Mitroi, Cristina Ileana Covaliu - Mierlă, Cristina -Emanuela Enășcuță, Grigore Psenovschi
7. **Researches for the physico-chemical characterization of some granular fertilizers obtained from native wool waste, in order to use them in agriculture**
Elena Mihaela Nagy, Teodor Gabriel Fodorean, Dragos Nica, Evelin Anda Laza
8. **Sustainable development of an rural area in protected territory - a case study from Bulgaria**
Slaveya Petrova, Bogdan Nikolov, Dimitar Tokmakov, Slavi Lyubomirov, Rumen Popov, Stanislav Asenov, Iliana Velcheva, Vesela Yancheva, Elenka Georgieva, Stela Stoyanova
9. **Superior capitalization of vegetable waste and natural agro-industrial by-products by creating innovative products for construction. Socio-economic predictive analyses**
Irina Popa, Vasilica Vasile, Silviu Lambrache
10. **Rice husks and their potential for use in construction**
Irina Popa, Cristian Petcu, Adrian Simion, Daniela Stoica, Alina Dima
11. **Water erosion of soils in the hilly area of Dolj County – assessment, control and mitigation methods**
Cristian Popescu, Mihaela Bălan, Marius-Nicolae Cioboată
12. **Forest debris-based biochar application in composting process to reduce greenhouse gas emissions: a nature based sustainable solution**
Rupesh Singh, Henrique Trindade, João Ricardo Sousa
13. **Evaluating green and blue infrastructure in urban areas in Romania: a methodological approach**
Teodora Ungureanu, Andreea Cătălina Popa, Claudiu-Sorin Dragomir

14. **Industrial wastes used as additives in building materials to reduce environmental pollution**

Mihai Vrabie, Nicolae Apostolescu, Maria Harja

DISASTER MANAGEMENT

1. **Influence of extreme weather phenomena on the management of deciduous forests**

Ghita Cristian Crainic, Flavius Irimie, Flavia Irimie (Cioflan), Sorin Lucian Dorog, Călin Ioan Iovan, Eugenia Șerban

2. **The evolution of the dynamic characteristics of the soil-structure system in case of a university building seismic monitoring**

Daniela Dobre, Claudiu-Sorin Dragomir, Cornelia-Florentina Dobrescu, Iolanda-Gabriela Craifaleanu, Emil-Sever Georgescu, Marta-Cristina Zaharia

3. **The effect of urbanization on climate change, the vulnerability of urban areas to climate change and their cumulative impact on stormwater**

Madalina Ene, Ioan Bica

4. **Modeling the structural behavior of a CNC bearing member subjected to static and dynamic loads**

Nicoleta-Adaciza Ionescu, Daniela Dobre, Claudiu-Sorin Dragomir

5. **Conceptual analysis on disaster resilience in the climate vulnerable community context**

Aurelia Nica, Ira-Adeline Simionov, Alina Antache, Catalina Iticescu, Stefan-Mihai Petrea, Catalin Platon, Victor Cristea

6. **The challenges of implementing the green-blue infrastructure in the metropolitan areas of the big cities in Romania**

Valentin Tache, Adrian Simion, Oana-Catalina Popescu

WATER RESOURCES MANAGEMENT

- 1. Temporal variation and relationship between hydrological parameters and water pollutants on the lower Danube, Romania**
Maxim Arseni, Valentina-Andreea Calmuc, Madalina Calmuc, Stefan-Mihai Petrea, Adrian Rosu, Eugen Busila, Catalina Iticescu, Puiu Lucian Georgescu
- 2. Evaluation of microbial and chemical indicators as a measure of the degree of potability of water**
Aurica Breica Borozan, Sorina Popescu, Delia Gabriela Dumbravă, Diana-Nicoleta Raba, Mirela Viorica Popa, Corina Dana Mișcă, Carmen Daniela Petcu, Despina Maria Bordean, Camelia Moldovan
- 3. Physiological and biochemical responses of two varieties of durum wheat under water stress combined with waste sludge amendment**
Sonia Boudjabi, Haroun Chenchouni, Aya Debab, Amna Brahimi, Asma Metrouh
- 4. Assessment of the surface water quality data collected seasonally at the Danube river bifurcations (Ceatal Izmail and Ceatal Sf. Gheorghe)**
Irina Catianis, Adriana Maria Constantinescu, Dumitru Grosu, Gabriel Iordache, Florin Duțu, Ana-Bianca Pavel
- 5. Stimulation of riverbank soil erosion rate, a case study**
Mihai Teopent Corcheș
- 6. Principal component analysis: an appropriate tool for trophic parameters interaction — application in largest lake in Balkan**
Erđona Demiraj, Irena Duka, Ferdi Brahushi, Seit Shallari
- 7. Assessment of physico chemical and bacteriological quality of well water used for drinking and domestic purposes in an industrial area of Elbasan district, Albania**
Ariola Devolli, Edlira Shahinasi, Enkeleida Sallaku, Marilda Osmani, Belinda Hoxha, Frederik Dara
- 8. Using hydrographic surveys in the study of water bodies depths**
Levente Dimen, Silvia Alexandra Dregħici, Tudor Borșan

9. **Assessment of the sediment (dis)connectivity in a deltaic system, Danube Delta, Romania**
Florin Duțu, Bogdan-Adrian Ispas, Irina Catianis, Ana-Bianca Pavel, Laura Duțu
10. **Impact of physico chemical parameters on zooplankton and biocoenological analyzes on zooplankton of mandra reservoir, in southeastern Bulgaria**
Eleonora Fikovska, Dimitar Kozuharov
11. **Modern protection solutions against coastal erosion**
Iulian Iancu, Alexandru Dimache, Oana-Stefania Bucur, Daniel Cornea
12. **Analysis of some parameters of the hydrographic basins in the forest fund**
Calin Ioan Iovan, Nicu Cornel Sabău, Lucian Sorin Dorog, Florin Covaci, Agneta Rodica Iovan, Ghiță Cristian Crainic
13. **Irrigation changes in the Maritsa River basin: a case study from the Plovdiv region**
Krasya Kolcheva
14. **Total reflection X-ray spectrometry (TXRF) for chemical elements assessment in mussels**
Nina-Nicoleta Lazar, Madalina Calmuc, Ira-Adeline Simionov, Mihaela Timofti, Puiu Lucian Georgescu, Catalina Iticescu, Catalin Platon
15. **Sustainable management of water resources**
Aurelia Nica, Stefan-Mihai Petrea, Ira-Adeline Simionov, Alina Antache, Catalina Iticescu, Catalin Platon, Victor Cristea
16. **Drip irrigation efficiency in soybean cultivation in southeast Romania, a sustainable approach to water management**
Oana Alina Nițu, Ionuț Ovidiu Jerca, Mihaela Bălan
17. **Biodiversity and ecological assessment of the Chepelarska River, Bulgaria**
Georgi Patronov, Diana Kirin
18. **Variations of physico-chemical parameters in Sulina Branch and adjacent meanders during two seasons in 2023**
Ana Bianca Pavel, Florin Dutu, Gabriel Iordache, Catalina Gavrila, Irina Catianis, Laura Dutu

19. **Enabling soft sensors for water quality monitoring in multi-trophic aquaculture systems**
Stefan-Mihai Petrea, Ira-Adeline Simionov, Alina Antache, Aurelia Nica, Madalina Calmuc, Valentina Calmuc, Dragos Cristea, Catalin Platon, Puiu Lucian Georgescu
20. **Virtual sensor for ammonia estimation in aquaculture technological water from Cambodia**
Ira-Adeline Simionov, Lin Kong, Samnang Pel, Catalin Planton, Domenico Caruso, Jacques Slembrouck, Stefan-Mihai Petrea
21. **Aspects related to the estimation of the flood limits with the use of a UAV in order to hydraulically design the water management works**
Alexandru Sintu-Lăsat
22. **Sustainable approach of nutrient film technology based on efficient water and energy use - intermediate results**
Augustina Tronac, Dragoș Drăcea, Sebastian Mustață, Oana Alina Nițu
23. **Advance hydraulic modelling for irrigation systems, case study SPP15 irrigation plot Hotărani - Romania**
Daniela-Cristina Untaru, Teodor-Eugen Man, Robert Beilicci, Mircea Visescu, Erika Beilicci, Antonia-Mariana Pasc
24. **Drought monitoring in southeastern Romania based on the comparison and correlation of SPEI and SPI indices**
Sara Venturi, Elena Mateescu, Ana Virsta, Nicolae Petrescu, Daniel Dunea, Stefano Casadei

POLLUTION CONTROL, LAND PLANNING

1. **Silphium Perfoliatum a promising energy crop for phytoremediation of heavy metal contaminated soils**
Violina Angelova
2. **Green-synthesized ZnO NPs as sustainable photocatalysts for the degradation of Acetaminophen**
Alexandra Corina Costandache, Leon Dumitru Covaliu, Anca Andreea Șăulean, Cristina Ileana Covaliu-Mierla, Ecaterina Matei, Razvan Teodorescu, Valerica Tudor

3. **Ecological treatment of wastewater containing a cationic surfactant pollutant**
Leon Dumitru Covaliu, Iuliana Paun, Vasile Ion Iancu, Ecaterina Matei, Razvan Teodorescu, Valerica Tudor, Gigel Paraschiv, Cristina Ileana Covaliu-Mierla
4. **Environment contamination with petroleum hydrocarbons**
Cristian Mugurel Iorga, Puiu Lucian Georgescu, Mihaela Marilena Stancu
5. **Soil and sludge samples chemical properties and vegetation mineral composition monitorization on the Iași sewage treatment-plant ponds precinct (Tomești)**
Mihaela Lungu, Radu Lăcătușu, Andrei Vrînceanu, Rodica Lazăr, Ilie Calciu
6. **Waste classification using vision transformers**
Dan-Constantin Puchianu
7. **Impact assessment regarding pollution with nutrients of water resources due to the use of fertilizers with microbial biomass**
Nicoleta Radu, Iuliana Raut, Mariana Constantin, Mihaela Begea, Anca Daniela Raiciu
8. **Good practices for reducing land pollution in the area of swine farms with liquid manure**
Mihaela Alexandra Rotaru, Loredana Văduva, Olimpia Alina Iordănescu, Ioan Petroman
9. **Comparative analysis on air pollution level of Bucharest urban area during the Covid-19 pandemic**
Vasilica Vasile, Cristian Petcu, Alina Dima, Mihaela Ion
10. **Soil heavy metals content variation depending on the distance from pollution source and uptake by the *Trifolium pratense* L. species harvested from Copșa Mică area, central Romania.**
Bogdan Ștefan Oprea, Nicoleta Olimpia Vrînceanu, Vera Carabulea, Dumitru-Marian Motelică, Mihaela Costea, Georgiana Iuliana Plopeanu

**EARTH OBSERVATION AND GEOGRAPHIC INFORMATION SYSTEMS
&
TOPOGRAPHY AND CADASTRE**

1. **Relationships between Spectral Vegetation Indices (SVIS) and growth stages in a table grape vineyard**
Zhulieta Arnaudova, Boyan Stalev
2. **Determination of lai at different growth stages of pepper plants grown in field**
Zhulieta Arnaudova, Dimka Haytova
3. **Past and future - a perspective of the evolution of Ineu`s forests**
Marinela Bodog, Alexandru Racz, Nicu Cornel Sabău
4. **GIS methods for estimating soil erosion and its impact on the environment. Case study: Crişul Alb hydrographic basin**
Loredana Copăcean, Eugen Teodor Man, Sorin Herban, Luminiţa Cojocariu, Cosmin Popescu
5. **Analysis of Landsat and Sentinel satellite images for Roşia Poieni quarry and Valea Şesii decantation pond**
Sorin Herban, Clara-Beatrice Vilceanu, Andrei Crişan, Livia Nistor-Lopatenco
6. **Exploring the Cosmos: a Web-Based Application for pollution, constellation and moon phase recognition**
Mihai Maftai, Iuliana Marin
7. **Remote assessment of the fraction of absorbed photosynthetically active radiation (fAPAR) for mountain grasslands**
Margareta Magureanu, Loredana Copăcean, Despina-Maria Bordean, Luminita Cojocariu
8. **The effect of the altitude gradient on the vegetation of the grasslands in the Poiana Ruscă mountains, based on NDVI**
Monica Sfircoeci, Loredana Copăcean, Luminiţa Cojocariu

9. **Aspects regarding the use of GNSS methods, in the cadastre of pasture and forestry Lands in Bistrita-Nasaud county**
Gabriel Badescu, Mihail Susinski, Emilia Constantinescu, Cristian Vasile, Petre Savescu, Gabriel Tanasie
10. **Exploring the top 5 drones for land measurements: a review**
Alexandru Călin
11. **Issues related to the implementation of geomatic applications in the national forestry fund**
Ghiță Cristian Crainic
12. **The use of geomatics techniques in the improvement of a sports complex**
Cornel Cristian Teresneu

MISCELLANEOUS

1. **Reducing the environmental impact by using a sustainable protein source in fish diet - insect meal. A review**
Alina Antache, Ira-Adeline Simionov, Stefan-Mihai Petrea, Aurelia Nica, Catalina Iticescu, Puiu-Lucian Georgescu, Cătălin Platon, Alin-Stelian Ciobîcă
2. **Trends in "Fetească Regală" grapes yield and sugar content in site specific climate**
Octav Cismașu, Ioan Oroian, Marcel Dîrja, Cristian Iederan, Antonia Odagiu
3. **Traditional Romanian culinary practices and their historical and cultural significance**
Carlo Marius Dragomir, Simona-Maria Ilie, Mariana-Atena Poiana, Corina Dana Misca, Ileana Cocan, Delia-Gabriela Dumbravă, Camelia Moldovan, Viorica-Mirela Popa, Carmen Daniela Petcu, Claudia Roman, Diana-Nicoleta Raba
4. **A refinement of the second criteria of comparison for the convergence of series or improper integrals**
Cosmin-Constantin Nițu
5. **The influence of technology on culture in the production of lettuce in the nutrient film technique system: a review**

Oana Alina Nițu, Emanuela Jerca, Elena Ștefania Ivan, Marinela Gheorghe

6. Exploring the use of web applications and neural networks for car parking services

Dan-Constantin Puchianu

7. Phytochemical profile of Lemon Basil grown in aquaponic culture

Irina Tomasu, Simona Marcu Spinu, Mihaela Dragoi Cudalbeanu, Constanta Mihai, Petronela Rosu, Raluca Pascu, Alina Ortan

8. Optimisation of culture media factors for active wine yeast biomass production

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Final Discussions and Conclusions