



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 - "Ion Ionescu de la Brad" 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
- 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
- Maria Jose ORUNA CONCHA - University of Reading, United Kingdom
- Jovan Br. PAPIC - University "Ss. Cyril and Methodius", Faculty of Civil Engineering, Skopje, 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 Zootecnica 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

- Augustina TRONAC
- Ana VIRSTA
- Mirela Alina SANDU
- Alina ORTAN
- Andreea OLTEANU
- Raluca MANEA
- Ovidiu JERCA
- Veronica IVANESCU
- Simona MARCU-SPINU

VENUE

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

Adress: 59 Marasti Blvd, District 1, Zip code 011 464

E-mail: agricultureforlife@usamv.ro

Web: <http://agricultureforlife.usamv.ro>

Phone: +40 788 014 935

DETAILED PROGRAMME

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

Day 1 – Thursday, June 5

14:30–14:45	Official Opening of the Conference Section	FIFIM Building, 2 nd Floor, AII2
Welcome	Assoc. Prof. Ph.D. Augustina TRONAC, <i>Dean - Faculty of Land Reclamation and Environmental Engineering</i>	
14:45-16:00	Paper presentation - Session I	FIFIM Building, 2 nd Floor, AII2
Moderators	<i>Prof. Dr. Habil. Alina ORTAN, USAMVB</i> <i>Prof. Dr. Habil. Lucian COPOLOVICI, “Aurel Vlaicu” University of Arad</i>	
DEVELOPMENT AND APPLICATION OF AN OPTIMIZED TD-GC/MS METHOD FOR MONITORING VOLATILE ORGANIC COMPOUNDS (VOCs) IN AMBIENT AIR <i>Alexandru-Florin SIMION, Angela-Nicoleta GĂMAN, Sorin SIMION, Marius KOVACS</i>		
GROUND AIR MICROFLORA STUDY USING A CASCADE IMPACTOR <i>Bilyana GRIGOROVA-PESHEVA, Asen PESHEV</i>		
PHOTOSYNTHETIC AND BIOCHEMICAL CHARACTERIZATION OF RAPHANUS SATIVUS PLANTS UNDER DROUGHT AND OZONE EXPOSURE <i>Flavia BORTES, Lucian COPOLOVICI, Cristian MOISA, Andreea LUPITU, Dana COPOLOVICI</i>		
CLIMATE CHANGE, A MAJOR CHALLENGE FOR THE BALANCE OF MICROSYSTEMS <i>Ionela Daniela FERȚU, Mihai TUDOR, Claudia Simona ȘTEFAN, Gabi TOPOR, Ciprian GRIGORESCU</i>		
USING RENEWABLE ENERGY SOURCES IN A PUBLIC EDUCATIONAL BUILDING TO ACHIEVE CLIMATE CHANGE MITIGATION AND ADAPTATION <i>Radu Alexandru ENESCU</i>		
16:00-16:30	<i>Coffee break</i>	

16:30-17:30	Poster display and viewing	FIFIM Building, 2 nd Floor
--------------------	-----------------------------------	--

Moderators *Assoc. Prof. Ph.D. Mirela Alina SANDU, USAMVB*
Lect. Ph.D. Simona MARCU-SPINU, USAMVB
Lect. Ph.D. Alexandru ILIESCU, USAMVB

Day 2 – Friday, June 6

08:00-09:00	Arrival and registration of participants	FIFIM Building, 2 nd Floor
--------------------	--	--

09:00-11:00	Opening session and Paper presentation - Session II	FIFIM Building, 2 nd Floor, AII2
--------------------	--	--

Moderators *Lect. Ph.D. Clara-Beatrice VILCEANU, UPT*
Prof. Dr. Habil. Sevastel MIRCEA, USAMVB

STRUCTURAL ANALYSIS OF SLUDGE FROM THE ARAD WASTEWATER TREATMENT PLANT: REDUCING QUANTITY AND ENHANCING ITS POTENTIAL AS FERTILIZER

Denisa BACALU-RUS, Lucian COPOLOVICI, Dana COPOLOVICI, Ioan BOTH, Maria MIHĂILESCU

THERMAL CONDUCTIVITY OF SILTY SOILS IN THE SOUTH-EAST REGION OF ROMANIA

Daniel-Marcel MANOLI, Cristian-Stefan BARBU, Mihaela-Elena STAN, Manole-Stelian ȘERBULEA, Alina TATOMIR, Oana-Cristina CARAȘCA, Ruxandra-Irina ERBASU, Andrei-Dan SABAU

ADVANCED GC-MS/MS AND LC-MS/MS METHODS FOR THE SCREENING OF PESTICIDES AND BROMINATED FLAME RETARDANTS IN COMPOST AND SOIL

Silviu-Laurentiu BADEA, Violeta-Alexandra ION, Oana-Crina BUJOR-NENIȚA, Carmen CONSTANTIN, Liliana BADULESCU

THE IMPACT OF ABIOTIC STRESS ON *GALIUM VERUM* AND *HELICHRYSUM ITALICUM*: PHYSIOLOGICAL AND BIOCHEMICAL RESPONSES

Lucian COPOLOVICI, Andreea LUPITU, Flavia BORTES, Maria COJOCARU-TOMA, Angelica OHINDOVSCI, Mihaela NERTEA, Cristian MOISA, Dana COPOLOVICI

ANALYZING THE INFLUENCE OF TEMPERATURE ON NDVI FOR A POTATO CROP IN BRASOV AREA

Mihai IVANOVICI, Maria ȘTEFAN, Angel CAȚARON, Adrian GHINEA, Gheorghe OLTEANU
Presented by *Ioana PLAJER*

**VEGETATION SURVEYS FOR MONITORING CO₂ GEOLOGICAL STORAGE SITES:
A CASE STUDY FROM TWO ANALOGUE SITES FROM ROMANIA**

*Lia STELEA, Alexandra-Constanța DUDU, Corina AVRAM, Gabriel IORDACHE,
Constantin-Ștefan SAVA*

**RIVER CORRIDOR CHANGE DETECTION USING SATELLITE IMAGERY AND
LIDAR DATA: A CASE STUDY OF THE SIRET RIVER NEAR CORBU VECHI VILLAGE**

*Catalin SABOU, Simion BRUMA, Ioana POP, Florica MATEI, Paul SESTRAS, Jutka DEAK,
Silvia CHIOREAN, Tudor SALAGEAN*

11:00-11:30 *Coffee break; Viewing posters and discussions*

11:30-13:30

Paper presentation - Session III

FIFIM Building,
2nd Floor, AII2

Moderators

*Assoc. Prof. Dr. Habil. Iolanda-Gabriela CRAIFALEANU, UTCB
Assoc. Prof. Ph.D. Iulia DANA NEGULA, USAMVB*

**INTEGRATION OF UAV-BASED LIDAR, PHOTOGRAMMETRY, AND SLAM
TECHNOLOGIES FOR THE COMPLETE ABOVE AND BELOW GROUND MAPPING
OF MOUNTAINOUS HYDRO-TECHNICAL INFRASTRUCTURE**

*Simion BRUMA, Catalin Stefanel SABOU, Ioana POP, Florica MATEI, Paul SESTRAS,
Mircea NAP, Elemer-Emanuel SUBA, Tudor SALAGEAN*

**MONITORING DIFFERENT GRASS VARIETIES USING MULTISPECTRAL IMAGERY
BASED ON DIFFERENT IRRIGATION REGIMES**

*Elemer-Emanuel SUBA, Tudor SALAGEAN, Ioana Delia POP, Florica MATEI,
Silvia CHIOREAN, Mircea-Emil NAP, Paul SESTRAS, Simion BRUMA, Catalin Stefanel
SABOU, Vlad PAUNESCU, Valentin-Sebastian DAN, Ferencz VAKAR*

**A GIS-BASED MULTICRITERIA APPROACH FOR IDENTIFYING OPTIMAL REFUGE
LOCATIONS FOR SEVERE STORMS: A CASE STUDY IN CLUJ COUNTY, ROMANIA**

*Paul SESTRAS, Ioana POP, Florica MATEI, Catalin Stefanel SABOU, Simion BRUMA,
Silvia CHIOREAN, Elemer Emanuel SUBA, Mircea NAP, Iulia COROIAN, Jutka DEAK,
Tudor SALAGEAN*

**ADVANCING CADASTRAL UPDATES AND GIS SPATIAL ANALYSIS FOR
FORESTED AREAS**

*Iulia COROIAN, Silvia CHIOREAN, Rodica SOBOLU, Diana FICIOR, Paul SESTRAS,
Luca-Pavel RUS, Catalin Stefanel SABOU, Luisa ANDRONIE*

**ENGINEERING AN INTERACTIVE MAP OF STATUES AND MONUMENTS FROM
CLUJ-NAPOCA**

*Florica MATEI, Tudor SALAGEAN, Ioana POP, Elemer-Emanuel SUBA, Mircea-Emil NAP,
Silvia CHIOREAN, Paul SESTRAS, Simion BRUMA, Ștefan BORCAN-CONTEVICI,
Cristian MALINAS, Lucia-Adina TRUTA*

STRUCTURAL INTEGRITY IN EARTHEN ARCHITECTURE WITH NDT METHODS

Bogdan BOLBOREA, Cornelia BAERĂ, Aurelian GRUIN, Sorin DAN, Ana-Cristina VASILE

INCREASING THE SAFETY LEVEL CONSIDERING SOIL-STRUCTURE INTERACTION IN HIGH SEISMIC HAZARD-PRONE AREAS

Stefan Florin BALAN, Bogdan Felix APOSTOL

STUDIES AND MEASUREMENTS FOR THE IDENTIFICATION OF NOISE AND VIBRATION LEVELS IN A SITE IN BUCHAREST - CASE STUDY

Marta Cristina ZAHARIA, Daniela DOBRE, Claudiu Sorin DRAGOMIR

Final Discussions and Conclusions

13:30-14:30 *Lunch*

POSTER

ENVIRONMENTAL SCIENCE AND ENGINEERING

- 1 THE SHEAR STRENGTH PARAMETERS OF SOIL-ROOT SYSTEMS
Tatiana OLINIC

 - 2 BIOMOLECULE PRODUCTION BY MICROORGANISMS ISOLATED FROM SALINE ENVIRONMENTS
Simona NEAGU, Mihaela Marilena STANCU

 - 3 ASSESSMENT OF SOIL CONTAMINATION BY POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN BUCHAREST: SOURCES AND DISTRIBUTION
Mihaela PREDA, Veronica TĂNASE, Nicoleta Olimpia VRÎNCEANU, Florența JAFRI, Mihaela COSTEA, Bogdan-Ștefan OPREA

 - 4 SUSTAINABLE GEOPOLYMER BINDERS: MECHANICAL AND DURABILITY INSIGHTS INTO FLY ASH-BASED COMPOSITES
Adrian-Victor LAZARESCU, Brăduț-Alexandru IONESCU, Mihail CHIRA, Tudor-Panfil TOADER, Alexandra CSAPAI, Andreea HEGYI, Carmen-Teodora FLOREAN

 - 5 POSSIBILITIES OF SURFACE TREATMENT OF PLASTERS BASED ON CLAY
Andreea HEGYI, Cristian PETCU, Claudiu Sorin DRAGOMIR, Gabriela CĂLĂȚAN, Alexandra CSAPAI

 - 6 EVALUATION OF THE POSSIBILITIES OF USING CLAY SOILS FOR THE REALIZATION OF VERNACULAR CONSTRUCTIONS
Andreea HEGYI, Gabriela CĂLĂȚAN, Cristian PETCU, Ștefan BAKOS, Alexandra CSAPAI

 - 7 POSSIBILITIES FOR THE RECOVERY OF AGRICULTURAL VEGETABLE WASTE
Timea GABOR, Andreea HEGYI, Stelian COSTE, Alina Iuliana CADAR, Cristian PETCU, Carmen FLOREAN, Ioana Monica SUR
-

8	INDICATORS OF THE STRUCTURAL AND COMPOSITIONAL DIVERSITY OF STANDS ON DEGRADED LANDS IN THE VRANCEA AREA <i>Cristinel CONSTANDACHE, Ciprian TUDOR, Laurențiu POPOVICI</i>
10	BEHAVIOR OF ASPHALT MIXTURES MANUFACTURED WITH RECYCLED MATERIALS AND THEIR <i>IN SITU</i> PERFORMANCE LEVEL <i>Nicoleta-Adaciza IONESCU, Daniela DOBRE</i>
11	EVALUATION OF CHEMICAL COMPOSITION OF ESSENTIAL OIL AND TOXIC METAL ACCUMULATION OF TARRAGON (<i>ARTEMISIA DRACUNCULUS L.</i>) CULTIVATED ON METAL-CONTAMINATED SOILS <i>Violina ANGELOVA</i>
12	ENERGY-ENVIRONMENT INTERACTIONS FOR AN IMPROVED SUSTAINABILITY OF DAMBOVITA COUNTY – THE ROLE OF INNOVATION AND TECHNOLOGY TRANSFER FROM UNIVERSITIES <i>Otilia NEDELICU, Ioan Corneliu SALISTEANU, Iulian UDROIU, Aurora DIACONEASA, Claudia GILIA, Daniel DUNEA</i>
13	ECOMONITORING STUDIES OF GROUNDWATER AND SOIL FOR POLLUTION WITH OIL AND PETROLEUM PRODUCTS <i>Georgi PATRONOV, Diana KIRIN, Radoslava ZAHARIEVA, Petya ZAHARIEVA, Marian VARBANOV</i>
14	CHEMICAL STATE AND ECOLOGICAL ASSESSMENT OF ATMOSPHERIC AIR QUALITY <i>Georgi PATRONOV, Diana KIRIN, Petya ZAHARIEVA, Radoslava ZAHARIEVA, Dimitrinka KUZMANOVA</i>
15	BIOACCUMULATION OF CADMIUM, LEAD, ZINC AND COPPER IN RED FESCUE (<i>FESTUCA RUBRA L.</i>) GROWN IN POLLUTED MEADOWS IN COPSA MICA <i>Bogdan Ștefan OPREA, Dumitru-Marian MOTELICĂ, Nicoleta Olimpia VRÎNCEANU, Vera CARABULEA, Georgiana Iuliana PLOPEANU, Mihaela COSTEA</i>
16	HYDROTHERMAL ASSESSMENT OF MAIN AGRICULTURAL AREAS IN SOUTHERN ROMANIA AND NORTHERN BULGARIA <i>Nadezhda SHOPOVA, Desislava SLAVCHEVA-SIRAKOVA</i>
17	NUMERICAL STUDY OF THE CYLINDRICAL SHAFT'S BEHAVIOUR USING 3D FINITE ELEMENT METHOD <i>Elena-Mihaela STAN, Horațiu POPA, Daniel MANOLI</i>
18	CLIMATE CHANGES: GLOBAL AND LOCAL CONCERNS <i>Vasilica VASILE, Irina POPA, Aurelia BRADU</i>
19	EVALUATION OF WASTE BIOMASS FROM AROMATIC PLANTS FOR ENERGY PURPOSES <i>Violina ANGELOVA</i>
20	FIRE SAFETY OF ETICS BASED ON EPS TYPE POLYSTYRENE <i>Adrian SIMION, Claudiu-Sorin DRAGOMIR</i>

21	GROUND MOTION DATA QUALITY ASSURANCE: FUNDAMENTAL REQUIREMENTS AND THEIR PRACTICAL IMPLEMENTATION WITHIN THE NATIONAL NETWORK FOR THE SEISMIC MONITORING AND PROTECTION OF BUILDING STOCK, NIRD URBAN-INCERC, ROMANIA <i>Iolanda-Gabriela CRAIFALEANU, Claudiu-Sorin DRAGOMIR, Daniela DOBRE, Emil Sever GEORGESCU, Alexandra-Marina BARBU</i>
22	ANALYSIS OF GROUNDWATER RESOURCES IN STARA ZAGORA DISTRICT, BULGARIA: QUALITY AND ENVIRONMENTAL RISKS <i>Alexander PETROV, Svetla STOYKOVA, Diyana DERMENDZHIEVA, Gergana KOSTADINOVA, Milen STOYANOV, Georgi PETKOV, Stefka BOYANOVA, Georgi BEEV</i>
23	EVALUATING AGGREGATE CONTENT AND ITS EFFECT ON CLAY MORTAR PERFORMANCE <i>Aurelia BRADU, Alexandrina-Elena ANDON, Alexandra-Marina BARBU, Claudiu-Sorin DRAGOMIR</i>
24	PRELIMINARY RESULTS VALIDATION ON THE THEORETICAL AND EXPERIMENTAL APPROACH FOR USING SPENT GARNET RESIDUES OF ROMANIAN LOCAL INDUSTRIES IN CONSTRUCTION MATERIALS <i>Cornelia BAERĂ, Aurelian GRUIN, Ana-Cristina VASILE, Bogdan BOLBOREA, Alexandru ION, Luiza VARGA, Alexandra Marina BARBU</i>
25	MONITORING THE INACTIVE LANDFILL STABILITY IN GORJ COUNTY <i>Silvia Alexandra DREGHICI, Levente DIMEN, Mircea RÎȘTEIU, Tudor BORȘAN, Florin FAUR</i>
26	STUDY ON THE DYNAMICS OF CEREALS CULTIVATED IN TULCEA COUNTY IN THE CONTEXT OF CLIMATE CHANGE <i>Traian Ciprian STROE, Oana MIHAI-FLOREA, Liliana MIRON</i>
27	USING GROUND PENETRATING RADAR AND PHOTOGRAMMETRY FOR HYDROCARBON POLLUTION ASSESSMENT IN CONTAMINATED AREAS: AN INTEGRATED APPROACH FOR ENVIRONMENTAL MONITORING <i>Sorin ANGHEL</i>
28	AFFORESTATION OF SANDY SOILS OF OLTENIA - A REVIEW <i>Paula IANCU, Marin SOARE, Ilie Silvestru NUTĂ, Mariana NICULESCU</i>
29	INNOVATIVE BIOTECHNOLOGICAL STRATEGIES FOR ENHANCING PHOSPHORUS BIOAVAILABILITY AND SUSTAINABLE AGRICULTURAL PRACTICES <i>Carmen CIMPEANU, Mihaela DRĂGOI CUDALBEANU, Constanta MIHAI, Alina ORTAN</i>
30	SOIL FLUX AND SOIL GAS MONITORING OF A NATURAL LABORATORY FOR THE STUDY OF CO ₂ LEAKAGE <i>Alexandra-Constanta DUDU, Corina AVRAM, Gabriel IORDACHE, Constantin-Ștefan SAVA, Lia STELEA, Andrei-Gabriel DRAGOȘ</i>
31	HEAVY METAL ACCUMULATION IN FOOD CROPS CULTIVATED IN CONTAMINATED SOILS IN ALBANIA <i>Selma MYSLIHAKA, Aida BANI, Teuta BUSHI, Dorina XHULAJ, Eugen SKURA</i>

32	SOLUTIONS FOR THE RESTORATION IN THE NATURAL CIRCUIT OF CONTAMINATED SITES FROM THE PETROLEUM INDUSTRY <i>Cristian Mugurel IORGA, Lucian-Gabriel ZAMFIR, Alina Ceoromila CANTARAGIU</i>
33	CLAY APPLICATION IN THE REMEDIATION OF NICKEL RICH SOIL <i>Teuta BUSHI, Aida BANI, Selma MYSILHAKA, Franz OTTNER, Ilaria COLZI, Isabella BETTARINI, Seit SHALLARI</i>
34	AMBIENT AIR POLLUTION: A GLOBAL HEALTH CRISIS <i>Svetla STOYKOVA, Diyana DERMENDZHIEVA, Gergana KOSTADINOVA, Miroslava IVANOVA, Milen STOYANOV, Georgi PETKOV, Lilko DOSPATLIEV, Georgi BEEV</i>
35	VALIDATION OF A UHPLC-HRMS METHOD FOR THE ASSESSMENT OF PER- AND POLY-FLUOROALKYL SUBSTANCES (PFAS) IN BIOTA <i>Andreea-Miruna CODREANU, Ștefania-Adelina MILEA, Valentina Andreea CĂLMUC, Justinian-Andrei TOMESCU, Alin Constantin DÎRȚU, Cătălina ITICESCU, Puiu-Lucian GEORGESCU</i>
36	EXPLORING THE QuEChERS-GAS CHROMATOGRAPHY APPROACH FOR SEDIMENT PESTICIDE ANALYSIS <i>Ștefania-Adelina MILEA, Maria-Daniela MIHAILA (IONICA), Valentina-Andreea CĂLMUC, Cătălina ITICESCU, Puiu-Lucian GEORGESCU, Alin-Constantin DIRTU, Cătălin Eugen PLATON</i>
37	INVESTIGATION OF THE PHARMACEUTICALS PRESENCE IN THE SOMOVA PARCHEȘ AQUATIC COMPLEX <i>Valentina CĂLMUC, Mădălina CĂLMUC, Carmen CHITESCU, Silvia DRĂGAN, Cătălina ITICESCU, Puiu-Lucian GEORGESCU</i>
38	ASSESSMENT OF IRON, COPPER, AND ZINC IN THE MUSCLE OF PONTIC SHAD: INFLUENCE OF YEAR, WEIGHT, AND LENGTH <i>Nina-Nicoleta LAZĂR, Mădălina CĂLMUC, Ira-Adeline SIMIONOV, Maxim ARSENI, Mihaela TIMOFTI, Puiu-Lucian GEORGESCU, Cătălina ITICESCU, Violeta DOMNITEANU</i>
39	A CRITICAL REVIEW OF SUSTAINABLE APPROACHES FOR REDUCING THE ENVIRONMENTAL IMPACT OF PLASTIC PRODUCTION <i>Andreea DOROFTE, Ira-Adeline SIMIONOV, Ștefan-Mihai PETREA, Cătălin PLATON, Puiu Lucian GEORGESCU, Cătălina ITICESCU</i>
40	SWELLING PRESSURE OF ACTIVE CLAYS ACCORDING TO VARIOUS TECHNICAL NORMS <i>Ernest Daniel OLINIC, Alexandru-Catalin ONESCU</i>
41	A PIONEERING STUDY ON THE INVESTIGATION OF MICROPLASTIC POLLUTION IN THE WATER OF THE SOMOVA-PARCHEȘ LACUSTRINE COMPLEX, ROMANIA <i>Mădălina CĂLMUC, Valentina Andreea CĂLMUC, Nina Nicoleta LAZĂR, Marius IVANOV, Puiu Lucian GEORGESCU, Cătălina ITICESCU</i>

-
- 42 INVESTIGATING CURRENTS, FLOW VELOCITIES, AND RIVERBED MORPHOLOGY - AN ADCP-CENTRIC APPROACH TO UNDERSTANDING HYDRODYNAMICS AND EROSION PATTERNS
Maxim ARSENI, Adrian ROȘU, Nina-Nicoleta LAZĂR, Mihail VESTE, Cătălina ITICESCU, Puiu-Lucian GEORGESCU
-
- 42 DISTRIBUTION OF HEAVY METALS IN THE DANUBE RIVER ECOSYSTEM AND THE IMPACT ON THE ENVIRONMENT. A REVIEW
Maria Daniela MIHAILA IONICA, Valentina Andreea CĂLMUC, Cătălin PLATON, Puiu-Lucian GEORGESCU, Cătălina ITICESCU
-
- 43 ADVANCING URBAN AIR POLLUTION MONITORING WITH REMOTE SENSING AND LOW-COST SENSOR TECHNOLOGIES
Adrian ROȘU, Daniel-Eduard CONSTANTIN, Maxim ARSENI, Mirela VOICULESCU, Cătălina ITICESCU, Lucia-Puiu GEORGESCU, Ionut Cornel BEJAN, Silvia DRĂGAN
-
- 44 COMPREHENSIVE ANALYSIS OF PARTICULATE MATTER VARIABILITY IN AN URBAN ENVIRONMENT USING RAPID-E MONITORING
Mădălin CRISTEA, Adrian ROȘU, Bogdan ROȘU, Daniel-Eduard CONSTANTIN, Simona CONDURACHE-BOTA, Mirela VOICULESCU, Cătălina ITICESCU, Lucian -Puiu GEORGESCU, Silvia DRĂGAN
-
- 45 ASSESSMENT OF SUSPENDED SEDIMENT CONCENTRATION AND GRANULOMETRY USING AQUASCAT 1000S ON THE SULINA BRANCH OF THE DANUBE RIVER
Adrian ROȘU, Mădălin CRISTEA, Bogdan ROȘU, Maxim ARSENI, Mihai Ștefan PETREA, Cătălina ITICESCU, Lucian Puiu GEORGESCU, Silvia DRĂGAN
-
- 46 MATHEMATICAL MODEL FOR PREDICTING NO₂ CONCENTRATIONS IN THE SOUTHEASTERN REGION OF EUROPE USING RECURSIVE LEAST SQUARES FILTER METHODS
Gabriel MURARIU, Sorin FRĂȘINĂ, Adrian ROȘU, Cornel DOROFTEI, Iulian RACOVIȚA, Bogdan ROȘU, Cătălin FETECĂU, Mirela VOICULESCU, Cătălin NEGOIȚĂ
-
- 47 HIERARCHY OF ALTERNATIVES FOR THE REHABILITATION OF ASBESTOS WATER SUPPLY NETWORKS BASED ON ENVIRONMENTAL CRITERIA
Iulian IANCU, Sorin PERJU, Ioan BICA, Alexandru-Nicolae DIMACHE
-

DISASTER RESILIENCE AND SUSTAINABLE DEVELOPMENT

-
- 1 THE INTEGRATION OF CERAMIC WASTE AS A PARTIAL SUBSTITUTE OF NATURAL AGGREGATES IN EXPERIMENTAL CONCRETE RECIPES
Mircea SĂLCUDEAN, Maria POPA
-
- 2 DURABILITY AND SUSTAINABILITY OF MOUNTAIN FARMS IN ROMANIA WITH A FOCUS ON AGRICULTURAL DIVERSIFICATION
Daniela-Mihaela BOCA, Tudor Panfil TOADER, Andreea HEGYI, Marius VLADU
-
- 3 RISK OF WINDTHROWS STANDS WITH VARIOUS STRUCTURES USING VERTICAL DIFFERENTIATION INDEX
Lucian Sorin DOROG
-

4	NATURE-BASED SOLUTIONS FOR THE SUSTAINABLE DEVELOPMENT OF GREEN AND BLUE INFRASTRUCTURE IN ROMANIA <i>Andreea Catalina POPA, Teodora UNGUREANU, Claudiu-Sorin DRAGOMIR, Antonio-Valentin TACHE</i>
5	UPGRADING THE TRADITIONAL DATABASE THROUGH BIM-BASED SHM VISION <i>Daniela DOBRE, Claudiu-Sorin DRAGOMIR, Iolanda-Gabriela CRAIFALEANU, Cornelia-Florentina DOBRESCU, Emil-Sever GEORGESCU</i>
6	COMPATIBILITY BETWEEN NATURAL AGRO-INDUSTRIAL BY-PRODUCTS AND SYNTHETIC MATERIALS, A BASIC ELEMENT IN OBTAINING BIOCOMPOSITE MATERIALS WITH POTENTIAL FOR USE IN CONSTRUCTION <i>Irina POPA, Vasilica VASILE, Alexandrina MUREȘANU</i>
7	INSAR TECHNOLOGY FOR RISK MANAGEMENT AND NATURAL DISASTER IMPACT ASSESSMENT IN BUCHAREST <i>Ana-Maria GLOD-LENDVAI, Iuliana ARMAȘ, Răzvan TEODORESCU, Aurora DIACONEASA, Virgil MOISE, Daniel DUNEA</i>
8	THE IMPACT OF EXTREME WEATHER PHENOMENA ON THE MANAGEMENT OF CONIFERS STANDS <i>Ghiță Cristian CRAINIC</i>
9	INTEGRATING VEGETABLE WASTE IN CLAY COMPOSITIONS: A SUSTAINABLE PATH FOR ECO CONSTRUCTION <i>Aurelia BRADU, Alexandrina-Elena ANDON, Alexandra-Marina BARBU, Claudiu-Sorin DRAGOMIR</i>
10	FLOOD IMPACT ASSESSMENT ON RAILWAY INFRASTRUCTURE USING NUMERICAL MODELLING: CASE STUDY OF NĂDAB, ROMANIA <i>Dorian HAUSLER COZMA, Teodor Eugen MAN, Robert Florin BEILICCI, Erika BEILICCI</i>
WATER RESOURCES MANAGEMENT	
1	EVALUATION OF THE DEGREE OF MICROBIOLOGICAL CONTAMINATION OF GROUNDWATER IN GORJ COUNTY <i>Emil Cătălin ȘCHIOPU, Roxana Gabriela POPA, Irina Ramona PECINGINĂ, Ramona Violeta CAZALBAȘU, Marinela Florica BODOG</i>
2	ADAPTING ROMANIA'S IRRIGATION INFRASTRUCTURE TO CLIMATE CHANGE: OPPORTUNITIES AND CHALLENGES <i>Mihai Teopent CORCHEȘ</i>
3	ECOLOGICAL STATUS ASSESSMENT OF MECHKA RIVER WATER (MARITSA RIVER BASIN) <i>Petya ZAHARIEVA, Radoslava ZAHARIEVA, Diana KIRIN</i>
4	ECOLOGICAL ASSESSMENT OF THE KAYALIKA RIVER WITHIN THE MARITSA RIVER WATERSHED USING MACROZOOBENTHOS AS A BIOINDICATOR <i>Radoslava ZAHARIEVA, Petya ZAHARIEVA, Diana KIRIN</i>

5	ECOLOGICAL MONITORING OF THE PARVENETSKA RIVER, PART OF THE MARITSA RIVER WATERSHED <i>Diana KIRIN, Radoslava ZAHARIEVA, Petya ZAHARIEVA, Marian VARBANOV, Georgi PATRONOV, Gergana METODIEVA</i>
6	ECOLOGICAL ASSESSMENT OF THE BOROVITSA RIVER, EAST AEGEAN SEA BASIN <i>Diana KIRIN, Petya ZAHARIEVA, Radoslava ZAHARIEVA, Georgi PATRONOV, Marian VARBANOV, Gergana METODIEVA, Dimitrinka KUZMANOVA</i>
7	CONTAMINATION OF POLLUTANTS IN ABRAMIS BRAMA (LINNAEUS, 1758), BIOINDICATION AND ECOLOGICAL RISK ASSESSMENT OF THE WETLAND MANDRA-PODA, BULGARIA <i>Nikolina ILIEVA, Diana KIRIN</i>
8	METAL CONTAMINATION IN THE SYSTEM WATER - SEDIMENTS – PERCA FLUVIATILIS LINNAEUS, 1758 AND EUSTRONGYLIDES EXCISUS JÄGERSKIÖLD, 1909 LARVAE <i>Nikolina ILIEVA, Diana KIRIN</i>
9	DRIP IRRIGATION'S INFLUENCE ON CHERNOZEM SOIL: ELECTROPHYSICAL AND SALINITY DYNAMICS <i>Yurii DEHTIAROV, Zinaida DEHTIAROVA</i>
10	WATER USE EFFICIENCY IN IRRIGATED AGRICULTURE IN ROMANIA: OPTIMIZATION STRATEGIES IN THE CONTEXT OF CLIMATE CHANGE <i>Oana Alina NIȚU, Ionuț Ovidiu JERCA, Mihaela BĂLAN, Elena Ștefania IVAN</i>
11	ASSESSMENT OF SURFACE WATER QUALITY ACROSS SELECTED DANUBE RIVER SECTORS BASED ON PHYSICO-CHEMICAL PARAMETERS AND HYDROCARBON LEVELS <i>Ana-Bianca PAVEL, Andrei TOMA, Albert SCRIECIU, Catalina GAVRILA, Irina CATIANIS</i>
12	ASSESSMENT OF SURFACE WATER QUALITY IN THE SFÂNTU GHEORGHE BRANCH OF THE DANUBE DELTA <i>Ana Bianca PAVEL, Laura DUTU, Florin DUTU, Irina CATIANIS, Gabriel IORDACHE, Catalina GAVRILA</i>
13	PHYSICO-CHEMICAL CHARACTERISTICS OF SURFACE WATER SAMPLES FROM THE GORGOVA-UZLINA DEPRESSION AND THE IZMAIL AND SF. GHEORGHE CONFLUENCES (SEPTEMBER–OCTOBER 2024) <i>Ana Bianca PAVEL, Irina CATIANIS, Laura DUTU, Gabriel IORDACHE, Catalina GAVRILA</i>
14	SPATIAL DISTRIBUTION OF TOTAL ORGANIC MATTER IN RECENT SEDIMENTS OF DANUBE DELTA LAKES (GORGOVA-UZLINA HYDROGRAPHIC UNIT) <i>Irina CATIANIS, Ion STĂNESCU, Dumitru GROSU, Ana Bianca PAVEL, Albert SCRIECIU, Ovidiu BORZAN, Andrei TOMA, Florin DUȚU, Gabriel IORDACHE</i>

-
- 15 IMPACT OF FLOOD DISCHARGE ON WATER QUALITY IN DANUBE RIVER BIFURCATIONS AND SELECTED LAKES (GORGOVA-UZLINA HYDROGRAPHIC UNIT)
Irina CATIANIS, Dumitru GROSU, Laura DUȚU, Albert SCRIECIU, Andrei TOMA, Ana Bianca PAVEL, Ovidiu BORZAN, Gabriel IORDACHE
-
- 16 WATER RESOURCE MANAGEMENT IN FRUIT AND VEGETABLE PRODUCTION USING ALTERNATIVE MULCHES
Gary L. HAWKINS
-
- 17 ADVANCED HYDRAULIC MODELING OF IRRIGATION CHANNEL
Mihai NEGURA, Robert Florin BEILICCI, Erika Beata Maria BEILICCI, Mirela Laura IEREMCIUC, Dorina Gabriela IONESCU
-
- 18 SEDIMENT TRANSPORT MODELING WITH ADVANCE HYDRAULICS SOFTWARE
Dorina Gabriela IONESCU, Robert Florin BEILICCI, Erika Beata Maria BEILICCI, Mihai NEGURA, Mirela Laura IEREMCIUC
-

REMOTE SENSING AND GEOINFORMATICS

-
- 1 COMPIEGNE FOREST, FRANCE BETWEEN HISTORY AND BIODIVERSITY
Marinela Florica BODOG, Camille ALLAIN, Lucie TOMASINI, Claudia Cleopatra Simona TIMOFTE, Andra Nicoleta LAZĂR
-
- 2 CASE STUDY ON THE USE OF SCANNING EQUIPMENT UAV IN ORDER TO DRAW UP A MULTIFUNCTIONAL DATABASE, IN CÂRȚIȘOARA LOCALITY, SIBIU COUNTY
Jenica CĂLINA, Aurel CĂLINA, Marius MILUȚ
-
- 3 STUDY ON THE IMPACT OF THE APPLICATION OF INFORMATION SYSTEMS ON THE EFFICIENCY AND PRECISION OF TOPO-CADASTRAL WORKS IN THE PREPARATION OF DOCUMENTATION FOR A ROAD IN DOLJ COUNTY
Jenica CĂLINA, Aurel CĂLINA, Alin CROITORU
-
- 4 HYBRID MODELLING APPROACHES FOR LAND USE/LAND COVER CHANGE PREDICTION AND CARBON DYNAMICS IN MAROWIJNE, SURINAME
Tamara MYSLYVA, Christiaan Max HUISDEN, Marek MROZ, Nataliia TSUMAN, Yurii BILYAVSKYI
-
- 5 SPATIAL POSITIONING OF TOPOGRAPHIC DETAILS WITH INTEGRATED MODERN TECHNOLOGIES, IN AREAS WITH FOREST VEGETATION
Călin Ioan IOVAN, Tudor Andrei FLORIȘ, Georgiana Denisa BOJINCĂ, Călin Gheorghe PĂȘCUȚ
-
- 6 ASPECTS RELATING TO THE POSITIONING BY THE SEMI-KINEMATIC METHOD (STOP AND GO) OF DETAIL CHARACTERISTIC POINTS, NECESSARY FOR THE DESIGN OF COMMUNICATION WAYS
Călin Ioan IOVAN, Tudor Andrei FLORIȘ, Georgiana Denisa BOJINCĂ
-
- 7 FLOOD SUSCEPTIBILITY ASSESSMENT IN THE NERA RIVER BASIN USING GIS: IMPACTS ON LAND USE AND LAND COVER
Loredana COPĂCEAN, Luminița COJOCARIU
-

8	SPATIAL POSITIONING WITH COMBINED METHODS OF TOPOGRAPHIC POINTS NECESSARY FOR ACCESSIBILITY OF FORESTS IN MOUNTAIN AREA <i>Flavius IERIMIE</i>
9	ASSESSMENT OF LAND USE CHANGES IN NON-COLLECTIVIZED AREAS USING GEOMATIC APPLICATIONS: A CASE STUDY IN VÎRFURILE, ROMANIA <i>Flavia-Mălina CIOFLAN</i>
10	TECHNICAL METHODOLOGIES FOR CADASTRAL PLAN DEVELOPMENT USING GNSS AND UAV TECHNOLOGIES: A CASE STUDY IN PIETROASA, ROMANIA <i>Flavia Mălina CIOFLAN, Flavius IRIMIE, Nicu Cornel SABĂU</i>
11	ACCURACY IN VERTICAL ASSESSMENT OF TELECOMMUNICATIONS TOWERS THROUGH 3D SCANNING <i>Andreea Diana CLEPE, Sorin HERBAN, Clara-Beatrice VÎLCEANU, George CRISTIAN</i>
12	APPLICATION OF HIGH-RESOLUTION SATELLITE IMAGERY FOR EVAPOTRANSPIRATION ESTIMATION - A SCIENTIFIC REVIEW <i>Vanya IVANOVA, Zhulieta ARNAUDOVA, Rositza MERANZOVA</i>
13	INTEGRATING UAS, LIDAR, AND GROUND-BASED SURVEYING FOR PRECISE DEMOLITION VOLUME ASSESSMENT: A CASE STUDY OF THE DOLJ CHIM INDUSTRIAL COMPLEX <i>George CRISTIAN, Sorin HERBAN, Carmen GRECEA, Clara-Beatrice VILCEANU, Andreea Diana CLEPE</i>
14	INVESTIGATION BETWEEN VEGETATION INDICES, METEOROLOGICAL DATA AND PHENOLOGY OF WINE GRAPE VARIETIES <i>Anelia POPOVA, Zhulieta ARNAUDOVA</i>
15	APPLICATIONS OF HYPERSPECTRAL SPACEBORNE REMOTE SENSING IN AGRICULTURE <i>Iulia DANA NEGULA, Daniele CERRA, Deodato TAPETE, Violeta POENARU, Ioana VLAD ȘANDRU, Florina DEDIU, Alina RĂDUȚU, Daniel-Eugeniu CRUNȚEANU</i>
16	THE EFFECTS OF APPLYING THE LAW IN CADASTRE ACTIVITY – A COMPARATIVE STUDY OF THE RESOLUTIONS THAT CAN BE ADOPTED FOR THE REGISTRATION OF REAL ESTATE PROPERTIES IN THE LAND REGISTRY <i>Andreea BEGOV-UNGUR, Ioana Aurica BERINDEIE, Levente DIMEN</i>
17	DETERMINATION OF LAND VALUATION FACTORS FOR THE PROCESS OF LAND CONSOLIDATION - A CASE STUDY IN SASCHIZ ADMINISTRATIVE UNIT IN ROMANIA <i>Vlad PAUNESCU, Divyani KOHLI, Raluca MANEA, Mariana CIOLACU (CALIN), Alexandru Iulian ILIESCU</i>
18	THE APPLICABILITY OF GIS TECHNOLOGY IN THE STUDY OF RIVERBED DYNAMICS AND MORPHOLOGY <i>Gabriela BIALI, Maria Catalina PASTIA, Paula COJOCARU, Carmen Elena MAFTEI</i>
19	AN EXAMPLE OF LAND CONSOLIDATION IN SASCHIZ ADMINISTRATIVE UNIT FROM ROMANIA <i>Vlad PAUNESCU, Orhan ERCAN, Mariana CIOLACU (CALIN), Alexandru Iulian ILIESCU, Raluca MANEA</i>

MISCELLANEOUS

- 1 VIRTUAL LABS IN ENGINEERING EDUCATION: ENHANCING LEARNING OUTCOMES
Mirela Alina SANDU, Veronica IVANESCU, Constanța MIHAI

- 2 FIBONACCI'S SEQUENCE IN NATURE, SCIENCE AND ARTS. THE GOLDEN RATIO
Cosmin-Constantin NIȚU, Anca ROTMAN

- 3 STUDIES SUPPORTING THE DESIGNATION OF A NEW NATURA 2000 SITE: BAHNELE BANCULUI NORD
Sorin ȘTEFĂNUȚ, Florența-Elena HELEPCIUC, Constantin-Ciprian BÎRSAN, Georgiana-Roxana NICOARĂ, Tiberiu SAHLEAN, Gabriela TAMAS, Gabriel-Mihai MARIA, Viorel-Dumitru GAVRIL, Miruna-Maria ȘTEFĂNUȚ, Larisa-Isabela FLORESCU, Mirela-Mădălina MOLDOVEANU, Constanța-Mihaela ION, Ana-Maria MOROȘANU

- 4 PRELIMINARY BIODIVERSITY SURVEY IN A NEWLY PROPOSED SITE OF COMMUNITY IMPORTANCE: THE AVRIG PEAT BOG
Sorin ȘTEFĂNUȚ, Miruna-Maria ȘTEFĂNUȚ, Tiberiu SAHLEAN, Ana-Maria MOROȘANU, Florența-Elena HELEPCIUC, Georgiana-Roxana NICOARĂ, Constantin-Ciprian BÎRSAN, Gabriel-Mihai MARIA, Mihnea VLADIMIRESCU, Anca MANOLE, Constanța-Mihaela ION

- 5 RESTORATION ACTIVITIES AND BIODIVERSITY SURVEY OF WEST STUPINI MIRE IN THE BÂRSA DEPRESSION: BASELINE FOR NATURA 2000 CONSERVATION
Anca MANOLE, Ana-Maria MOROȘANU, Attila MÁTIS, Anna SZABÓ, Georgiana-Roxana NICOARĂ, Florența-Elena HELEPCIUC, Mihnea VLADIMIRESCU, Ioana Cătălina PAICA, Mihaela CIOBOTĂ, Daniela Elena MOGÎLDEA, Constantin-Ciprian BÎRSAN, Constanța-Mihaela ION, Tiberiu SAHLEAN, Sorin ȘTEFĂNUȚ

- 6 INDOOR IOT SEEDLING NURSERY DEVELOPMENT
Peter UDVARDY, Matyas Csongor KOVACS, Levente DIMEN

- 7 CHANGES OF PLANKTON COMPOSITION IN WINTER CONDITIONS IN AN URBAN LAKE
Larisa FLORESCU, Mirela MOLDOVEANU, Ioana ENACHE, Rodica CATANA

- 8 ANALYSIS OF DIAMETER AND HEIGHT GROWTH OF SCOTS PINE SAPLINGS PLANTED IN 2023 ON THE STERILE DUMPS OF RECEA ȘUNCUIȘ QUARRY, BIHOR COUNTY
Bogdan BODEA, Cristian Mihai ENESCU, Ovidiu Ioan HÂRUȚA, Camelia Elena MOGA, Ruben BUDĂU, Adrian Ioan TIMOFTE

- 9 EUROPEAN UNIVERSITY STUDENTS' ATTITUDES TOWARD THE EUROPEAN GREEN DEAL: A COMPARATIVE STUDY
Mihai Dan CARMIHAI, Nicoleta RADU, Zina PARASCHIV, Francisca BLANQUEZ CANO, Oksana MULESA, Adrián SILVA, Razvan TEODORESCU

- 10 DISRUPTION OF THE GLOBAL WATER CYCLE - AN URGENT CALL FOR ACTION FROM A ONE HEALTH PERSPECTIVE ON HUMANITY'S FIRST HISTORICAL IMPACT
Cătălina - Nicoleta BOÎȚEANU, Laurențiu TUDOR, Nicoleta CIOCÎRLIE

	DIMENSIONING OF UNDERGROUND PIPE NETWORKS OF IRRIGATION PLOTS.
11	CASE STUDY - FANTANELE - SAGU IRRIGATION PLOT, ARAD COUNTY <i>Antonia Mariana PASC, Teodor Eugen MAN, Robert Florin BEILICCI, Erika BEILICCI, Mircea VISESCU</i>
12	THE DEGREE OF THE ROOTING AND ADAPTABILITY OF CORMOFLORE ON THE WASTE DUMPS OF THE BAIA NOUĂ QUARRY (MEHEDINȚI COUNTY) <i>Mariana NICULESCU, Florina GRECU</i>
13	EXPERT PERCEPTIONS ON DIGITAL EDUCATION TOOLS AND ASSESSMENT STRATEGIES UNDER THE EUROPEAN GREEN DEAL FRAMEWORK <i>Nicoleta RADU, Mihai Dan CARAMIHAI, Francisca BLANQUEZ CANO, Montserrat Sarrà ADROGUER, Oksana MULESA, Adrian SILVA, Razvan TEODORESCU</i>
14	ATTITUDES OF EUROPEAN GRADUATE STUDENTS REGARDING THE ROLE OF ADVANCED TECHNOLOGIES IN ENERGY AND INDUSTRY FOR A GREEN ENVIRONMENT IN THE CONTEXT OF CLIMATE CHANGE AND THE EUROPEAN GREEN DEAL <i>Nicoleta RADU, Mihai Dan CARAMIHAI, Francisca BLANQUEZ CANO, Oksana MULESA, Adrian SILVA, Razvan TEODORESCU</i>