

CONFERENCE PROCEEDINGS CONTENTS

SECTION RECYCLING

1. CHARACTERIZING THE MEMBRANE CONCENTRATE FROM LEACHATE TREATMENT: HAZARDOUSNESS EVALUATION AND ITS POTENTIAL TO LANDFILL RECIRCULATION, PhD Lidia Kim, Razvan Laurentiu Dinu, PhD Adriana Cuciureanu, Georgiana Cernica, PhD Valeriu Badescu	3
2. CHALLENGES TO THE FOOD WASTE RECYCLING SYSTEM IN LATVIA, Prof. Dr. Aija Eglite, Dr. Dace Kaufmane	13
3. COMPOSTING OF BIODEGRADABLE PLASTIC WASTE - CHANGES IN THE MICROBIAL COMMUNITY, Assoc. Prof. Dr. Bilyana Grigorova-Pesheva, Assoc. Prof. Dr. Boyka Malcheva	21
4. ENHANCING SOIL QUALITY AND NUTRIENT AVAILABILITY WITH ZEOLITES AND DIATOMACEOUS EARTH, Dr. Ana Katsarova	29
5. MUNICIPAL ORGANIC WASTE COMPOSTING IN ROMANIA - RESOURCES AVAILABILITY AND RECENT ADVANCES, PhD Elena Manea, PhD Costel Bumbac, Laurentiu Dinu, PhD Valeriu Badescu, PhD Ioana Ionescu	37
6. RECYCLING IN CONSTRUCTION MATERIALS - ANALYSIS OF THE USE OF AMORPHOUS MATERIALS POLY(ACRYLONITRILE-CO-BUTADIENE-CO-STYRENE) (ABS) IN STRUCTURAL CONCRETE., Assoc. Prof. Dr. Anna Stepien, Prof. Ryszard Dachowski, Assoc. Prof. Dr Agnieszka Molendowska	45
7. OPTIMIZATION MEASURES FOR IMPROVING THE RATIONAL USE OF THE SURFACE LAYER OF ANTHROPOGENIC LANDSCAPES IN THE KRYVYI RIH LANDSCAPE-TECHNICAL SYSTEM., PhD Tetiana Koptieva, Pavlo Lotsman	53
8. RECYCLING IN CONSTRUCTION - CHARACTERISTICS OF COMPOSITE AND RECYCLED MATERIALS USED IN STRUCTURAL ELEMENTS OF BUILDINGS, Assoc. Prof. Dr. Anna Stepien, MSc. Patrycja Wojarska-Gniady	61
9. RESEARCH REGARDING THE USE OF EGGSHELLS POWDER FOR SOILS REHABILITATION CONTAMINATED WITH CD AND PB, PhD Antoanela Cozma, PhD Maria Rada, Assoc. Prof. Ariana Velciov, PhD Casiana Mihut, PhD Anisoara Duma Copcea	71

10. STRATEGIES FOR MINIMIZING PAPER USAGE IN LATVIA MUNICIPALITIES , PhD Lilita Abele, Prof. Dr. Peteris Rivza, Prof. Dr. Baiba Rivza, Prof. Dr. Elita Jermolajeva	79
11. STUDIES ON THE INFLUENCE OF ANIMAL WASTE ON SOIL FERTILITY. CASE STUDY - PIG SLURRY , PhD Liliana Brei, Dr. Adina Berbecea, PhD Doris Floares, PhD Nicoleta Vicar, Prof. Dr. Isidora Radulov	87
12. THE COSTS AND RATE OF RETURN CALCULATION OF THE NEW ESTABLISHED PIG AND POULTRY MANURE FERMENTATION PLANT , Dr. Anita Csiba, Dr. Arpad Ferencz	95
13. THE ROLE OF INVESTMENT AND INNOVATION POLICY IN THE FORMATION OF A CIRCULAR ECONOMY , Dr. oec. Arturas Simanavicius, PhD Lilita Abele, Dr.oec. Borys Samorodov	105
14. VALORIZATION OF COMMON BEAN (PHASEOLUS VULGARIS L.) BY-PRODUCTS TO OBTAIN NEW BAKERY PRODUCTS , Dr. Alina Maier, Assoc. Prof. Dr. Cristina Maria Canja, Assoc. Prof. Dr. Mirabela Ioana Lupu, Vet. Geronimo Raducu Branescu, Prof. Dr. Vasile Padureanu	113

SECTION AIR POLLUTION AND CLIMATE CHANGE

15. ADAPTATION TO CLIMATE CHANGE AND THE INTERPLAY BETWEEN ENERGY EFFICIENCY AND SOBRIETY: LESSONS LEARNED FROM THE ITALIAN EXPERIENCES OF L' AQUILA RUGBY ASSOCIATION AND COMMUNITY COOPERATIVE MELPIGNANO , PhD Gianna Giardini	123
16. ANALYSIS OF METEOROLOGICAL PARAMETERS AND CLIMATE VARIABILITY IN THE WESTERN PART OF ROMANIA IN THE PERIOD 2010-2020 , Assoc. Prof. Dr. Ana-Codruta Chis, PhD Vlad Marazan, Assoc. Prof. Dr. Antoanela Cozma, Assoc. Prof. Dr. Vlad Dragoslav Mircov, Assoc. Prof. Dr. Carmen Claudia Durau	135
17. CLIMATE CHANGE MITIGATION APP FOR SUSTAINABLE CITIES USING URBAN GREEN DATA FOR CO₂ ABSORPTION , Dimitra Papagiannopoulou, Thekla Tsitsoni, Zacharoula Andreopoulou, Vasiliki Xathopoulou-Tsitsoni, Nikolaos Morfopoulos	143
18. CLIMATE CHANGE VULNERABILITY, MITIGATION, AND ADAPTATION FOR A LARGE INFRASTRUCTURE PROJECT IN ROMANIA , PhD Raluca Nicolae, Drd. Petru Nicolae	151

19. CLUB CONVERGENCE IN ENERGY TRANSITION OF EU MEMBER STATES , Prof. PhD Claudia Popescu, Assistant. Prof. PhD Mihaela Covrig.....	159
20. CONSUMER INTENTION TO BUY ELECTRIC CARS: EXPLORING THE INFLUENCE OF FUTURE UNCERTAINTY DUE TO THE WAR IN UKRAINE IN THE FRAMEWORK OF THEORY OF PLANNED BEHAVIOR , PhD Roberta Riverso, Assoc. Prof. Francesco La Barbera, Carmela Altamura	167
21. DATA SET ANALYSIS OF THE COMPOSITE MATERIALS WITH THIN PROFILE USING DESCRIPTIVE STATISTICS , PhD Carmen Mihai, PhD Student Alina - Florentina Vladu, PhD Alexandra Gabriela Ene, PhD Student Laurentiu Dinca.....	175
22. DROSOPHILA MELANOGASTER AS A TEST-SYSTEM FOR ASSESSMENT OF THE AIR POLLUTION BY USING THE CITY OF KAZAN AS AN EXAMPLE , Rustam Sokolov, PhD Viktoria Kostenko, Tansu Gazieva, Prof. DSc. Natalya Stepanova	183
23. EFFECT OF MOISTURE AND ORGANIC MATTER CONTENT ON N₂O EMISSIONS , Mg.sc.ing. Sindija Liepa, Mg.sc.ing. Luize Lepiksone, Mg.sc.ing. Dace Butenaite, Mg.sc.ing. Jovita Pilecka-Ulcugaceva, Assist.prof. Inga Grinfelde.....	191
24. EFFECT OF SOIL GRANULOMETRIC COMPOSITION AND MOISTURE ON THE FORMATION OF N₂O ISOTOPES , Mg.sc.ing. Sindija Liepa, Mg.sc.ing. Dace Butenaite, Mg.sc.ing. Jovita Pilecka-Ulcugaceva, Bc.sc.ing. Kristaps Siltumens, Assist.prof. Inga Grinfelde	199
25. EFFECTIVENESS OF SIMPLE ELECTRIC FANS IN REDUCING THE NUMBER OF HOURS WITH HEAT STRAIN INSIDE BUILDINGS , Atlas Ramezani, Marco Manzan.....	207
26. ENVIRONMENTAL PROBLEMS SOLVING AS A FACTOR IN THE FORMATION OF A SUSTAINABLE AND BALANCED DEVELOPMENT PARADIGM , Professor Valentyna Voronkova, Professor Roman Oleksenko, Professor Vitalina Nikitenko	215
27. EXTERNAL COSTS OF ROAD TRANSPORT IN FRAMES OF THE TRANSITION TO A LOW-CARBON ECONOMY , Prof. Dr. Olga Kudryavtseva, Dr. Anastasiia Baraboshkina	227
28. GHG EMISSION VARIABILITY FROM SOIL IN CONVENTIONAL FARMING SYSTEM , PhD Kristine Valujeva, Mg.sc.env Inga Grinfelde, PhD Candidate Jovita Pilecka-Ulcugaceva	235

29. HOW SUSTAINABLE AND GREEN IS TODAY'S MODERN PRINTING INDUSTRY? MYTHS AND FACTS, Prof. Dr. Csaba Horvath, Prof. Dr. Cem Aydemir, Prof. Dr. Semiha Yenidogan	243
30. HYBRID ENERGY SYSTEM FOR FISHING VESSELS CONSIDERING FUTURE ENVIRONMENTAL REGULATIONS: AN APPLICATION „HENSUS“ FOR FAST PRELIMINARY POWER SYSTEM CONFIGURING, PhD Marija Korican, Assoc. Prof. Dr. Nikola Vladimir, Prof. Dr. Kresimir Vuckovic, Prof. Dr. Tatjana Haramina, Assoc. Prof. Dr. Neven Alujevic	251
31. INFLUENCE OF COATED UREA APPLICATION ON SOIL ORGANIC CARBON SEQUESTRATION, PhD Nicoleta Vicar, Assoc. Prof. Dr. Adina Berbecea, Assoc. Prof. Dr. Alina Lato, PhD Liliana Brei, Prof. Dr. Isidora Radulov	259
32. INTERACTION BETWEEN METHANE AND CARBON DIOXIDE EMISSIONS USING METHANE-REDUCING BIOCOVER, Bc.sc.ing Kristaps Siltumens, Assoc. Prof. Inga Grinfelde, Dr. Juris Burlakovs, Mg.sc.ing. Sindija Liepa, Mg.sc.ing. Jovita Pilecka-Ulcugacev	267
33. INTERACTION BETWEEN METHANE AND NITROUS OXIDE EMISSIONS USING METHANE-REDUCING BIOCOVER, Bc.sc.ing Kristaps Siltumens, Assoc. Prof. Inga Grinfelde, Dr. Juris Burlakovs, Mg.sc.ing. Sindija Liepa, Mg.sc.ing. Jovita Pilecka-Ulcugaceva.....	275
34. INVESTIGATING THE IMPACT OF CLIMATE CHANGE IN MEDITERRANEAN SEMI-ARID REGIONS, PhD Georgios Xekalakis, Assoc. Prof. Christos Anastasiou, Evi Kazamia, Prof. Yannis Tsompanakis, Assoc. Prof. Dr. Petros Christou	283
35. INVESTIGATIONS OF POTENTIALLY HARMFUL LIMONENE PHOTOOXIDATION PRODUCTS UNDER NOX AND NOX-FREE ATMOSPHERIC SIMULATED CONDITIONS, Dr. Alina-Giorgiana Negru, Dr. Claudiu Roman, PhD Student Cornelia Amarandei, Prof. Dr. Cecilia Arsene, Prof. Dr. Romeo Iulian Olariu	291
36. LEVERAGING MODERN LANGUAGES AND TRANSLATIONS FOR SUSTAINABLE ENVIRONMENTAL PRACTICES, Dr. Raul Pascalau , Assoc. Prof. Dr. Laura Smuleac, Prof. Sorin Stanciu, Prof. Dr. Florin Imbrea, Assoc. Prof. Dr. Adrian Smuleac	299
37. MANAGEMENT AND ASSESSMENT OF URBAN GREEN: A DIGITAL DATABASE APPLICATION, Valia Xanthopoulou-Tsitsoni, Zacharoula Andreopoulou, Dimitra Papagiannopoulou, Nikolaos Morfopoulos.....	307

38. PRECIPITATION AND TEMPERATURE CHANGES IN SLOVAKIA DURING THE GROWING SEASON IN 1961-2020 , Ing. Martin Minarik, Assoc. Prof. Jan Cimo, Dr. Vladimir Kiss	315
39. THE DISTRIBUTION OF TUNGSTEN IN JELGAVA CITY AT 2022 AND 2023 , PhD Candidate Jovita Pilecka-Ulcugaceva, PhD Candidate Anda Bakute, PhD Candidate Maris Bertins, Bc. sc. ing Kristaps Siltumens, Assoc. Prof. Inga Grinfelde.....	323
40. THE GOOD, THE BAD AND THE EFFECTIVE? TRENDS IN SUSTAINABILITY REPORTING IN NEW ZEALAND-LISTED COMPANIES , Assoc. Prof. Dr. Michaela Balzarova, Kathryn Bell	329
41. THE IMPACT OF CLIMATE CHANGE ON TEMPERATURES AND PRECIPITATION IN THE REGIONS OF SLOVAKIA IN 1961-2020 , Dr. Vladimir Kiss, Ing. Martin Minarik, Dr. Jakub Pagac, Dr. Andrej Tarnik, Assoc. Prof. Dr. Martin Precik.....	337
42. THE POTENTIAL ROLE OF MODERN TECHNOLOGY IN PROMOTING NATURE-BASED SOLUTIONS ADDRESSING GLOBAL CLIMATE CHANGE , Denis Vasiliev, Lennart Bornmalm, Rodney Stevens, Richard Hazlett.....	345
43. THE RIGHTS OF FUTURE GENERATIONS IN ITALIAN-EUROPEAN ENVIRONMENTAL LAW , PhD Giovanna Di Benedetto	353
44. THE USE OF WEB MAPS IN MANAGING CRISES CAUSED BY CLIMATE CHANGE , Assoc. Prof. Anna Bluszcz, Assoc. Prof. K. Tobór-Osadnik, Assoc. Prof. A. Manowska, Ing. A. Kelíšek, PhD	359
45. TRANSITION TO SUSTAINABLE ECONOMY - REVIEW OF POLICY CHOICES SUGGESTED BY INTERNATIONAL AGENCIES , Livia Bizikova	371
46. UHI ANALYZES FOR AREAS SUSCEPTIBLE TO LANDSLIDES IN THE CITY OF IASI , PhD Paul Gherasim, Professor Dr. Dima Mihai, PhD Pascariu Alexandru Ion, PhD Popa Andreea Silvia	381
47. URTICA DOICA PLANTS: A POSSIBILITY TO EVALUATE CLIMATE CHANGE , PhD Patricia Cristina Tarkanyi, PhD Georgeta Sofia Popescu, PhD Laura Radulescu, Assoc. Prof. Dr. Monica Cristina Dragomirescu, Assoc. Prof. Dr. Despina-Maria Bordean	389
48. WATER CONFLICTS LINKED TO CLIMATE CHANGE AND POPULATION EXPLOSION , Assoc. Prof. Dr. Georgi Bardarov	397

SECTION MODERN ENERGY AND POWER SOURCES

49. A PROPOSAL OF MARINE SHORT RANGE TRANSPORTATION, IN MEDITERRANEAN SCENARIO, TO REDUCE CO₂ EMISSIONS AND IMPACT OF ENVIRONMENT., Prof. Valerio Ruggiero.....	407
50. AN ANALYSIS OF AN INNOVATIVE, ENERGETICALLY INDEPENDENT SALES SYSTEM (VENDING MACHINE) FOR COLD AND HOT PRODUCTS Ioan Mihail Savaniu ,Oana Tonciu, Ancuta Neagu, Magdalena Culcea	415
51. BIOMASS UTILIZATION AS SUSTAINABLE ENERGETIC ROOT, Dr. Simona Gavrilas, Assoc. Prof. Dr. Eugenia Tigan, Assoc. Prof. Dr. Oana Brinzan, Dr. Radu-Lucian Blaga	423
52. ENERGY SECURITY OPPORTUNITIES ARISING FROM SDGS AND THE RECOVERY AND RESILIENCE PLAN, Ing. Lenka Kazimirova, Assoc. Prof. Dr. Denisa Ciderova, Ing. Simona Sakacova, Ing. Jozef Cernak	431
53. GREEN BONDS AS A LONG-TERM SOURCE OF FINANCE FOR RENEWABLE ENERGY INVESTMENTS, Assoc. Prof. Dr. Meltem Gurunlu	447
54. INVESTIGATION OF ORGANIC WASTES CONVERSION INTO USEFUL ENERGY RESOURCES USING PYROLYSIS PROCESS, Assoc. Prof. DSc. Elena David, Prof. Janez Kopac, Dr. Roxana-Maria Marinescu, Drd. Adrian Armeanu	455
55. NEW ASPECTS OF EXPLOSIVE CHARACTERISTICS OF HYBRID MIXTURES OF DUST/GAS DISPERSIONS, Ing. Matous Helegda, Ing. Iris Helegda, PhD Ing. Jan Skrinsky, Ing. Katerina Kubricka, PhD Jiri Pokorny	463
56. SOLAR TRACKER SYSTEM FOR MONITORING THE MAXIMUM SUN POTENTIAL THAT CAN BE PRODUCED IN A SPECIFIC PLACE, Prof. Dr. Razvan Bogdan Itu, Prof. Dr. Alexandra Soica, Prof. Dr. Lorand BOGDANFFY	471
57. THE CARBON BORDER ADJUSTMENT MECHANISM (CBAM): A QUALITATIVE LEAP IN ENVIRONMENTAL TAXATION FOR A WORLD IN ECOLOGICAL TRANSITION., PhD Elisabetta Ceroni.....	479
58. THE ENERGY TRANSITION PATHWAY FOR ALASKA, Assoc. Prof. Arthur Nash	487
59. THE HYDROGEN CONCENTRATION ON NETWORKS FOR GAS SUPPLY, Assoc. Prof. Dr. Martin Boyadjiev	495