Scientific Program of the VIth International Symposium-2022



VI.th International Symposium-2022

May 5th – 6th, 2022 Óbuda University Budapest, Hungary

Attention:

- **4** The Symposium-2022 will be held through **Microsoft Teams**.
- **4** To join the Symposium:
 - There is a short guide with useful information about how to use the Microsoft Teams during the Symposium
 - The participants will have the link of the Symposium
 - The time of the Symposium is related to the **Hungarian time**.
- **4** Please check the time with your time at home

Time of Oral Presentations Online (Microsoft Teams)

Presentation Type:

Total Allotted Time:

Plenary speaker
Keynote speaker
Featured speaker
Poster
5 min

Please note that:

- **4** The time is very limited
- The official language of all the presentations including oral or poster speaker is English

5th of May 2022 (Thursday)

09:00 a.m. – 09:30 a.m. Opening Ceremony

Prof. Dr. Hosam BAYOUMI HAMUDA

President, International Council of Environmental Engineering Education Symposium Chair

Dr. Rita BODÁNÉ-KENDROVICS Director, Institute of Environmental Engineering & Natural Sciences

Dr. Koltai László Dean, Rejtő Sándor Faculty of Light Industry & Environmental Engineering

Prof. Dr. László Gulácsi Vice-Rector, Óbuda University

Prof. Dr. Sadhan Kumar Ghosh Honour guest of the Symposium *09:30 – 10:20* **Plenary Session**

Chair of the Session: Rita BODÁNÉ-KENDROVICS

PL1 09:30 - 09:55

1. Sadhan Kumar GHOSH^{1,2}

¹Department of Mechanical Engineering, Jadavpur University, Kolkata India, 2School of Energy Studies, Jadavpur University, Kolkata, India, ²International Society of Waste Management, Air and Water (ISWMAW) **ENVIRONMENTAL & HEALTH SAFETY BY ADOPTING CIRCULAR**

PL2 09:55 – 10:20

ECONOMY

 Borbala BIRÓ
 Department of Soil Environmental Studies, University of Agriculture and Life Sciences, Budapest, Hungary

 Symbiosis as a tool to soil-, plant- and environmental health

10:20 – 10:30 Break

10:30 - 12:30

Keynote Session

Chair of the Session: Borbala BIRÓ

KL1 10:30 - 10:50

3. Léocadie ODOULAMI, Grégoire A. BEWA Laboratoire Pierre PAGNEY, Climat, Eau, Ecosystème et Développement LACEEDE/DGAT/FASHS/¹Université d'Abomey-Calavi (UAC), Cotonou ²DGAT/FLASH/Université de Parakou (UP), République du Bénin (Afrique de l'Ouest): Hygiene and sanitation problematic in primary school of Allada commune in Benin Republic (West Africa)

KL2 10:50 - 11:10

4. Edit CSANÁK

Product Design Institute, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Budapest, Hungary

Arts and nature: the contribution of artists to understanding of the world and the development of natural sciences

KL3 11:10 - 11:30

5. Faissal AZIZ^{1,2}

1Laboratory of Water, Biodiversity, and Climate Change, Faculty of Sciences Semlalia, Cadi Ayyad University, Marrakech, Morocco. 2National Center for Research and Studies on Water and Energy (CNEREE), Cadi Ayyad University, Marrakech, Morocco

Promotion of smart irrigation systems in the Mena region using superabsorbent biopolymers

KL4 11:30 - 11:50

6. Sándor J. ZSARNÓCZAI Institute of Environmental Engineering, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Budapest, Hungary The agricultural production concerning subsidies in Hungary in period of 2008-2020

KL5 11:50 - 12:10

7. Thamer Adnan ABDULLAH1, Tatjána JUZSAKOVA1, Ali Dawood SALMAN1, Viktor SEBESTYÉN1, Domokos ENDRE1 1Sustainability Solutions Research Lab, Bio-, Environmental and Chemical Engineering Research and Development Center, University of Pannonia, Veszprem 8201, Hungary MWCNTs Based Nanocomposites for The Removal of Hydrocarbons from Water

KL6 12:10 - 12:30

- 8. Hosam E.A.F. BAYOUMI HAMUDA Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary Environmental health and biotechnology
- 12:30 13:30 Lunch Break
- *13:30 14:30* **Technical Session 1**

Chair of the Session: Hosam BAYOUMI HAMUDA

9. Ajinkya MAHALE, Vrishaali VYAS, Prakash RAO Symbiosis Institute of International Business, Symbiosis International (Deemed University), Hinjewadi, Pune, Maharashtra, India A review of sustainability reporting practices in selected Indian consumer packaged goods sector

10. Abdelmalek GOUMIH¹, Mariam EL ADNANI², Rachid HAKKOU³, Mostafa BENZAAZOUA⁴, Salah OUHAMDOUCH^{5,6}

¹Laboratoire GéoSciences Semlalia, Département de géologie, Faculté des Sciences Semlalia, Université Cadi Ayyad, Marrakech, Morocco, ²Ecole Nationale Supérieure des Mines de Rabat, Avenue Hadj Ahmed Cherkaoui, Agdal, Rabat, Morocco, ³Laboratoire de Chimie des Matériaux et de l'Environnement, Faculté des Sciences et Techniques, Université Cadi Ayyad, Marrakech, Morocco, ⁴Université du Québec en Abitibi Témiscamingue, Boul. de l'Université, Rouyn-Noranda. QC J9X 5E4, Canada, ⁵Faculté des Sciences Semlalia, Université Cadi Ayyad, Marrakech, Morocco, ⁶Applied Sciences Laboratory, Water and Environment Management Team, National School of Applied Sciences, Abdelmalek Essaadi University, Al Hoceima Morocco

Integrated management of mining rejects: Case of the abandoned mine of Sidi Bou-Othmane mine (Central Morocco)

11. Emőke IMRE¹, Zsombor ILLÉS², Ágnes BÁLINT³, Henry GONZALES³, Levente RÉPÁSSY³, Dang Thi Quynh HUONG³, Lamas Lopez LIZETH³, Daniel BARRETO⁴, Giulia GUIDA⁵, Maria DATCHEVA⁶, Wiebke BAILLE⁷, Vijay P. SHINGH⁸ ¹Óbuda University, Bánki Donát Faculty, and Hydro-Bio-Mechanical Systems Research Center, Budapest, Hungary, ²Department of Engineering Geology and Geotechnics, Budapest University of Technology and Economics, Budapest, Hungary, ³Institute of Environmental Engineering and Natural Sciences, Óbuda University, Budapest, Hungary, ⁴Edinburgh Napier University, U.K, ⁸Università di Roma Tor Vergata, ⁶Institute of Information and Communication Technologies, Bulgarian Academy of Sciences, Bulgaria, ⁷Ruhr University, Bochum, Germany 8Dep. of Biological and Agricultural Engineering, Texas A&M University, USA.

The permeability variables of granular matter

12. Amina HAFSI¹, Ahsene BOUREFIS¹, Farès KESSASRA², Abdellah BOUSHABA³ ¹Affiliation Department of Geology and Environment, University les Fréres Mentouri, Constantine 1, ²Laboratory of Geological Engineering, Team 3 "Geology", University of Jijel, Algeria, Department of Earth and Universe Sciences, University of Jijel, Central Campus, Algeria, ³Department of Geology, Sidi Mohamed Benabdellah University, Fes, Morocco Assessment of soil pollution by heavy metal in industrial area of Skikda city North Algeria

13. Amina BOUSSELIOU¹, I. BOUDRAA^{2,3}, S. CHELLAT¹, H. BELAIDI¹

¹Geology and Environment Laboratory, University of Constantine 1, Road Ain El Bey Zouaghi Slimane Constantine Algeria, ²Constantine 1 University, Department of Chemistry, Pollution and Water Treatment Laboratory, Constantine1, Algeria. ³Environmental Molecular and Structural Chemistry Research University Constantine1, Algeria

Study and evaluation of the pollution in ETM in the valley of Oued Saf-Saf and Oued Zeramna, Skikda, North-East of Algeria

14. Asmaa RHAZOUANI^{1,2,3}, Halima GAMRANI², Khalid AZIZ⁴, Mustapha My BOUYATAS², Lhoucine GEBRATI⁵, Faissal AZIZ^{1,3}

¹Laboratory of Water, Biodiversity & Climate Change, Faculty of Sciences Semlalia, Cadi Ayyad University, Marrakech, Morocco, ²Team of Neurosciences, Pharmacology and Environment, Faculty of Sciences Semlalia, Cadi Ayyad University, Marrakech, Morocco. 3 National Centre for Studies and Research on Water and Energy, Faculty of Technical Sciences, Cadi Ayyad University, Marrakech, Morocco. ⁴Laboratory of Materials, Biotechnology, and Valorization of Natural Resources, Department of Chemistry, Faculty of Sciences, University Ibn Zohr, Agadir, Morocco, ⁵Laboratory of Materials, Processes, Environment and Quality, Cadi Ayyad University, Safi, Morocco

Graphene oxide induces a modification of the peroxidase and MDA levels in male mice

15. Ali Dawood SALMAN^{1,2}, Tatjána JUZSAKOVA¹, Moayyed G. JALHOOM³, Phuoc-Cuong LE^{4,5}, Mohammad A. AL-MAYYAHI², Thamer Adnan ABDULLAH¹, Endre DOMOKOS¹

¹Sustainability Solutions Research Lab, University of Pannonia, Veszprém, Hungary, ²Department of Chemical and Petroleum Refining Engineering /College of Oil and Gas Engineering, Basra University, ³Department of Production Engineering and Minerals, University of Technology Baghdad-Iraq, ⁴Institute of Research and Development, Duy Tan University, Danang, Vietnam, ⁵Faculty of Environmental and Chemical Engineering, Duy Tan University, Danang, Vietnam

Synthesis and surface modification of magnetic $Fe_3O_4/SiO^2/OPCS$ nanoparticles and its application in uptake of scandium (III) ions from acidic media

14:30 - 15:30

Technical Session 2

Chair of the Session: Emőke IMRE

16. Hassni BELAIDI¹, A. BOUSSELIOU¹, S. KITONI², S. CHELLAT¹

¹Geology and Environment Laboratory, University of Constantine 1, Road Ain El Bey Zouaghi Slimane Constantine Algeria, ²Department of Process Engineering, Faculty of Process Engineering. University Salah Boubnider Constantine 3, Algeria

Feldspar's role in providing soil with macronutrients K and Ca (Example: Wadi El-Annab Northeast of Algeria)

17. Halima BOUDRA¹, FBOUAICHA¹, W. MELOUAH², M. BOUKHATEM¹

¹Geology and Environment Laboratory, University of Constantine 1, Road Ain El Bey Zouaghi Slimane Constantine, Algeria, ²Faculty of Hydrocarbons, Renewable Energies and Earth and Universe Sciences Kasdi Merbah University, Ouargla, Algeria

Hydrogeochemical assessment of thermal waters from Souk Ahras geothermal system, North East of Algeria

18. Ghizlane AKHOUY^{1,2}, Lhoucine Gebrati^{1,2}, Khalid AZIZ³, Faissal AZIZ^{2,4}

¹Laboratory of Materials, Processes, Environment and Quality, Cadi Ayyad University Safi, Morocco. ²National Center for Research and Studies on Water and Energy (CNEREE), Cadi Ayyad University, Marrakech, Morocco. ³Laboratory of Materials, Biotechnology, and Valorization of Natural Resources, Department of Chemistry, Faculty of Sciences, University Ibn Zohr, Agadir, Morocco, ⁴Laboratory of Water, Biodiversity, and Climate Change, Faculty of Sciences Semlalia, Cadi Ayyad University, Marrakech, Morocco

Bio-based and biodegradable plastics derived from olive pomace

19. Imane HAYDARI^{1,2}, Laila MANDI^{1,2}, Amina LISSANEDDINE^{1,2}, Khalid AZIZ³, Naaila OUAZZANI^{1,2}, Faissal AZIZ^{1,2}

¹Laboratory of Water, Biodiversity, and Climate Change, Faculty of Sciences Semlalia, Cadi Ayyad University, Marrakech, Morocco, ²National Center for Research and Studies on Water and Energy, Cadi Ayyad University, Marrakech, Morocco, ³Laboratory of Materials, Biotechnology, and Valorization of Natural Resources, Department of Chemistry, Faculty of Sciences, University Ibn Zohr, Agadir, Morocco

Novel low-cost bio-sorbent from olive pomace to adsorption of phenolic compounds from olive oil mill wastewater

20. Selma HADEF, Faouzi ZAHI, Taha Hocine DEBIECHE, Abdelmalek DROUICHE Geological Engineering Laboratory (LGG), University of Mohamed Seddik Benyahia - Jijel, Algeria

Evaluation of surface water quality for drinking purposes: A case of Guenitra Dam (North-East Algeria)

21. Jihane BAGHOR¹, Faissal AZIZ², Jamal MABROUKI¹, Souad EL HAJJAJI¹

¹Laboratory of Spectroscopy, Molecular Modeling, Materials, Nanomaterial, Water and Environment, CERNE2D, Mohammed V University in Rabat, Faculty of Science, Avenue Ibn Battouta, BP1014, Agdal, Rabat, Morocco, ²Laboratory of Water, Biodiversity, and climate change, Faculty of sciences Semlalia, Cadi Ayyad University, Marrakech, Morocco

The toxicological effects of microplastics on the environment and human health

15:30 - 16:30

Technical Session 3

Chair of the Session: Zoltán JUVANCZ

22. Rudolf SZABÓ1, Lóránt SZABÓ2 ¹Rejtő Sándor Fundation, Budapest, Hungary, ²Institute of Environmental Protection Engeneering, Óbuda University, Budapest, Hungary Carbon fiber, the black wonder

23. Jovito L. OPEÑA^{1,2}, Gábor Endre HALASZ², Jószef Tibor ÁRGYELÁN³, Mark Kalman HORVATH²

¹Marinduque State College, ¹Marinduque State College, Boac, Mariduque Philippines, ² Department of Chemistry, Institute of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary, ³Nitrokémia PLC, Balatonfüzfö, Hungary): 3 Nitrokémia PLC, Balatonfüzfö, Hungary

Phytoremediation of potential toxic elements by native tree species in mined- spoiled soils in mátraszentimre, Hungary

24. Khalid AZIZ¹, Rachid MAMOUNI¹, Nabil SAFFAJ¹, Faissal AZIZ²

¹Laboratory of Biotechnology, Materials and Environment, Faculty of Sciences, Ibn Zohr University, Agadir, Morocco, ²Laboratory of Water, Biodiversity & Climate Changes, Faculty of Science Semlalia, Cadi Ayyad University, Marrakech, Morocco

A novel hydrogel beads based copper-doped Cerastoderma edule shells for highly fungicide sorption from groundwater

25. Karim SBIHI^{1,2}, Sara EL HAMJI^{2,3}, Siham LGHOUL⁴, Khalid AZIZ⁵, Noureddine EL BARAKA⁵, Faissal AZIZ^{2,3}

¹Laboratory of Biotechnology, Materials and Environment, Natural Substances and Environment Team, Polydisciplinaire Faculty of Taroudant, University Ibn Zohr, Morocco, ²National Centre for Research and Study on Water and Energy, University Cadi Ayyad, Marrakech, Morocco. ³Laboratory of Water, Biodiversity & Climate Changes, Semlalia Faculty of Sciences, Marrakech, Morocco, ⁴Department of Biology, Faculty of Sciences Semlalia, University of Cadi-Ayyad, Marrakech, Morocco, ⁵Laboratory of Materials and Environment, Faculty of Sciences, Ibn Zohr University, Agadir, Morocco

Potential of local freshwater microalgae Craticula subminuscula for hexavalent chromium removals: Tolerance, optimization, kinetics and isotherm studies

26. Meriem BOUKHATEM, N. CHABOUR, F. BOUAICHA, R. KOURICHE, H. BOUDRA Geology and Environment Laboratory, University des Frères mentouri Constantine 1, Road Ain El Bey Zouaghi Slimane Constantine, Algeria

Environmental impact of barite wastes from the Ain Mimoun mine, Khenchela, North-East Algeria

27. Mohammad MOHAMMAD

Institute of Marketing and Management, Faculty of Economics/ Hungarian University of Agriculture and Life Sciences (MATE) Kaposvár Campus, Kaposvár, Hungary **The role of social media blogs in influencing dairy functional foods and healthy lifestyle in Hungary**

Technical Session 4

Chair of the Session: Sándor J. ZSARNÓCZAI

28. Mohammad MOHAMMAD

Institute of Marketing and Management, Faculty of Economics/ Hungarian University of Agriculture and Life Sciences, Kaposvár Campus, Kaposvár, Hungary)

Impact of healthy behaviour on consumer attitude toward dairy functional foods

29. Nawal HICHAMI¹, Mohamed ZNARI²

¹Laboratory of Biotechnology & Sustainable Development of Natural Resources. Polydisciplinary Faculty of Beni Mellal, Sultan Mulay Slimane University, Mghila, Beni Mellal. Morocco, ²Natural History Museum of Marrakech, Cadi Ayyad University, Ave Allal El Fassi, Marrakech, Morocco

Management plan for a declining population of the Souss valley tortoise in an arid steppe-land of West-Central Mmorocco

30. Sadhan Kumar GHOSH^{1,3}, Somnath PODDAR²

¹Department of Mechanical Engineering, Jadavpur University, Kolkata, India, ²School of Environmental Studies, Jadavpur University, Kolkata, India, ³International Society of Waste Management, Air and Water (ISWMAW), India

Impact of using refuse-derived fuel in co-processing towards the quality of clinker and cement

31. Bitrus Eniyekenimi DAUKERE¹, Olatunde Isaac OLANIYI²

¹Department of Geography, Nigerian Army College of Education, Ilorin, Nigeria, ²Department of Political Science, Nigerian Army College of Education, Ilorin, Nigeria

National security: Interplay of environmental, human and food (in)securities in Nigeria

32. Mythili MADHUSUDHAN¹, N.K.AMBUJAM²

¹School of Architecture, Meenakshi College of Engineering, ²Centre for Water Resources, Tamilnadu, India

An assessment of the present condition of a wetland in a developing city: the case of Pallikaranai marsh, Chennai, India

33. Rima KIFOUCHE, H. BOUSBAA, F. BOUAICHA, H. SHOUT Laboratoire de géologie et environnement, Université Constantine 1, Route Ain El Bey Zouaghi Slimane Constantine, Algeria Prosports and goothormal potential of Mila

Prospects and geothermal potential of Mila

Technical Session 5

Chair of the Session: Lóránt SZABÓ

34. Mythili MADHUSUDHAN¹, N. K. AMBUJAM² ¹School of Architecture, Meenakshi College of Engineering, ²Centre for Water Resources, Tamilnadu, India

The case of the shrinking Palliikaranai marsh, Chennai, India: Environmental economics to the rescue?

35. Sándor J. ZSARNÓCZAI

Institute of Environmental Engineering, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Budapest, Hungary Innovation by subsidies in agricultural production in Hungary in 2010-2020s

36. Nidal Zrikam¹, Lahcen Ouahmane¹ and Faissal Aziz^{2,3}

¹Laboratory of Microbial Biotechnologies, Agro-Sciences and Environment, Labeled Research Unit-CNRST N° 4., Cadi Ayyad University, Marrakesh, Morocco, ²National Centre for Research and Study on Water and Energy, University Cadi Ayyad, Marrakech, Morocco, ³Laboratory of Water, Biodiversity & Climate Changes, Semlalia Faculty of Sciences, Marrakech, Morocco **Mycorrhization of aleppo pine (Pinus halepensis) seedlings by inoculation with three different ectomycorrhizae species**

37. Sara El HAMJI^{1,2}, Karim SBIHI^{2,3}, Jihen ELLEUCH⁴, Naaila OUAZZANI^{1,2}, Imen FENDRI⁴, Slim ABDELKAFI⁴, Brahim OUDRA¹, Faissal AZIZ^{1,2}

¹Laboratory of Water, Biodiversity & Climate Changes, Faculty of Science Semlalia, Cadi Ayyad University, Marrakech, Morocco, ²National Center for Research and Studies on Water and Energy (CNEREE), Cadi Ayyad University, Marrakech, Morocco, ³Laboratory of Biotechnology, Materials and Environment, Natural Substances and Environment Team, Polydisciplinaire Faculty of Taroudant, University Ibn Zohr, Morocco, ⁴Unité de Biotechnologie des Algues, Ecole Nationale d'ingénieurs de Sfax, Université de Sfax, Tunisie **Toxicity and removal of phenolic compounds by the freshwater diatom Craticula subminuscula**

38. Yanina L. ROMERO¹, J. BESSEMBINDER², N.C. van de GIESEN³, F.H.M. van de VEN³

¹Beuningen, the Netherlands, ²Climate Services, Royal Netherlands Meteorological Institute, De Bilt, the Netherlands, ³Water Management, Delft University of Technology, Delft, the Netherlands

A relation between extreme daily precipitation and extreme short term precipitation

39. Smaine CHELLAT¹, L. BOUDRAA¹, R. ZATOUT¹, A. BOUREFIS¹, M. HACINI²

¹Geology and Environment Laboratory, University of Constantine 1, Road Ain El Bey Zouaghi Slimane Constantine, Algeria, ²Geology of Saharan laboratory, Department of earth sciences, Faculty of Hydrocarbon. University Kasdi Merbah Ouargla, Algeria

Superficial pollution of quaternary soils of the city of Ali Mendjeli, Constantine, northeast of Algeria

6th of May 2022 (Friday)

09:00 - 10:00

Technical Session 6

Chair of the Session: Ágnes BÁLINT

40. Viraja BHAT¹, Prakash RAO², Shubham BARJIBHE³ ¹Department, Symbiosis Institute of International Business, Pune, India An analytical study of e-waste awareness and disposal behaviour amongst rural, semi-urban and urban consumers of Maharashtra

41. Zoltán JUVANCZ, Rita BODÁNÉ-KENDROVICS, Zita LACZKÓ Óbuda University, Faculty of Light Industry and Environmental Engineering, Institute of Environmental Engineering and Nature Science, Budapest, Hungary Chiral separations of phyretroic acids using cyclodextrin selectors

42. Eman R. B. OJALEY¹, Hussein B. B. JENJEN¹, Osama R. SHALTAMI², Ahmed M. MUFTAH²

¹Department of Zoology, Faculty of Science, University of Benghazi, Benghazi-Libya, ²Department of Earth Sciences, Faculty of Science, University of Benghazi, Benghazi-Libya **Molluskan tissues as an accumulation sites for heavy metals from Libyan coast in North-East Libya**

43. Dina MALGAZHDAROVA

Management and Organization Sciences/Hungarian University of Agricultures and Life Sciences, Kaposvar, Hungary

Nexus between economic growth, availability of fossil fuels and opportunities for achieving environmental sustainability in countries of CIS: the case of oil and gas exporting countries

44. P. SENTHILVALAVAN¹, M.V. SRIRAMACHANDRASEKHARAN¹, R. MANIVANNAN¹, C. RAVIKUMAR², U. SURENDRAN³, Pritpal SINGH⁴, K. P. RAGUNATH⁵

¹Department of Soil Science and Agricultural Chemistry, Faculty of Agriculture, Annamalai University, Tamilnadu, India, ²Department of Agronomy, Faculty of Agriculture, Annamalai University, Tamilnadu, India, ³Centre for Water Resources Development and Management, Kozhikode, Kerala, India, 4Punjab Agricultural University, Ludhiana, Punjab, India

Carbon accumulation in low land paddy soils moderated by certain management practices

45. Lóránt SZABÓ

Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary **Wind energy application in Hungary**

10:00 – 11:00 **Technical Session 7**

Chair of the Session: Hosam BAYOUMI HAMUDA

46. Csaba ÁGOSTON

Óbuda University, Institute of Environmental Engineering and Natural Sciences, Budapest, Hungary

Odour problem of animal keeping in Hungary

47. Csaba MÉSZÁROS¹, István Róbert NIKOLÉNYI¹, Ágnes BÁLINT²

¹Department of Mathematics and Basic Natural Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary, ²Institute of Environmental and Natural Sciences, Óbuda University, Budapest, Hungary

New methods for applying the symmetry theory of stereoregular polymers for quantum-mechanical modelling of photovoltaic type materials

48. Hadjer BOUSBA¹, Ramdane MARMI¹, Kamel BOUFAA², Fouad BOUAICHA¹, Rima KIFOUCHE¹

¹Geology and Environment Laboratory, University of Constantine 1, Route Ain El Bey Zouaghi Slimane Constantine, Algeria, ²Geological Engineering Laboratory, University of Jijel, Cité Ouled Aissa, Algeria

Soil quality in the Sebkhas environment (South-Eastern Constantine), Algeria

49. Krisztina DEMÉNY

Óbuda University, Faculty of Light Industry and Environmental Engineering, Institute of Environmental Engineering and Nature Science, Budapest, Hungary **Changes in land use and stability survey in Gödöllő Hillside**

50. Ágnes BÁLINT¹, Erika LÁSZLÓ², Csaba MÉSZÁROS³

¹Institute of Environmental Engineering and Natural Sciences, Óbuda University, Budapest, Hungary, ²Doctoral School of Public Administration Sciences, National University of Public Service, Budapest Hungary, ³Institute of Mathematics and Basics of Natural Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary, Gödöllő, Hungary **Heavy metal concentrations in the hair samples** **Poster Session**

Chair of the Session: Hosam Bayoumi Hamuda

- **51.** Amina HAFSI¹, Ahsene BOUREFIS¹, Farès KESSASRA², Abdellah BOUSHABA³ ¹Affiliation Department of Geology and Environment, University les Fréres Mentouri, Constantine 1., ²Laboratory of Geological Engineering, Team 3 "Geology", University of Jijel, Algeria, Department of Earth and Universe Sciences, University of Jijel, Central Campus, Algeria, ³Department of Geology, Sidi Mohamed Benabdellah University, Fes, Morocco Assessment of groundwater pollution by heavy metals in the industrial zone of Skikda
- 52. Ádám FEHÉR¹, Csaba CENTERI², Pari ALKHASOVA², Krisztián KATONA² ¹Independent Researcher, Apc, Hungary, ²Institute for Wildlife Management and Nature Conservation, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary **Comparison of deep rooting of wild boar on soil properties in the Mátra Mountain and the Gödöllő hillside**

53. Ákos MALATINSZKY

Department of Nature Conservation and Landscape Management, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary

Forgotten preservers of protected plants: orchard grasslands in Hungarian hilly areas

54. Reghais AZZEDDINE, Drouiche ABDELMALEK, Zahi FAOUZI, Debeiche TAHA-HOCINE

Geological Engineering Laboratory (LGG), University of Mohamed Seddik Benyahia - Jijel, Algeria

Risk assessment of heavy metals in the complex terminal aquifer data from Biskra, South-est Algeria

55. Csaba CENTERI¹, Viktória VONA², Márton VONA², Zsolt BIRÓ³

¹Department of Nature Conservation and Landscape Management, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary, ²Csernozjom Ltd., Nagykörű, Hungary, ³Department of Wildlife Biology and Management, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary

Impacts of mole activities on soil properties

56. F. HIZIR¹, A. KRIKA², F. KESSASRA¹

¹Geological Engineering Laboratory, University of Mohamed Seddik Benyahia, Jijel, Algeria, ²Laboratory of Biotechnology, Environment and Health, University of Mohamed Seddik Benyahia, Jijel, Algeria

Assessment of surface water quality of the Kebir-Rhumel Wadi (North-East, Algeria)

57. Ildikó TURCSÁNYI-JÁRDI, Eszter S.-FALUSI, Atilla FŰRÉSZ, Gergely PÁPAY, Péter Gergő KOVÁCS, Károly PENKSZA

Institute of Crop Production, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary

Changes in wet and dry habitats in the Ipoly Valley

58. Malihe MASOUDI¹, Csaba CENTERI¹, Gergely JAKAB^{2,3}, Zsolt BIRÓ¹, Lyndre NEL¹, Eszter KOVÁCS¹, Viola PROHASZKA⁴

¹Institute for Wildlife Management and Nature Conservation, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary, ²Geographical Institute, Research Centre for Astronomy and Earth Sciences, Budapest, Hungary, ³Institute of Geography and Earth Sciences, ELTE Eötvös Loránd University, Budapest, Hungary, ⁴Doctoral School of Landscape Architecture and Landscape Ecology, Hungarian University of Agricultural and Life Sciences, Gödöllő, Hungary

The effect of different land-uses on soil organic matter content in the zselic region, Hungary

59. Drakulovic Vesna, Marko Jovanov, Una Marceta, Bogdana Vujic Technical faculty "Mihajlo Pupin", University of Novi Sad, Zrenjanin, Serbia Modelling an atmospheric dispersion of methane and hydrogen sulfide originating from landfills

60. Dina MALGAZHDAROVA

Management and Organization Sciences/Hungarian University of Agricultures and Life Sciences, Kaposvar, Hungary

Nexus between foreign direct investment and economic growth in oil exporting countries of CIS

61. P. SENTHILVALAVAN¹., M.V. SRIRAMACHANDRASEKHARAN¹, R. MANIVANNAN¹, C. RAVIKUMAR²

¹Department of Soil Science and Agricultural Chemistry, ²Department of Agronom, Faculty of Agriculture, Annamalai University, Tamilnadu, India, ²Agricultural Research Station, Bhavanisagar, Tamilnadu Agricultural University, Tamilnadu, India

Life cycle assessment of rice-pulse production system in Cauvery Deltaic region of Tamil Nadu, India 62. Sundoss KABALAN, Katalin JUHOS, Nándor PRETTL, Priyo Adi NUGROHO, Borbála BIRÓ

Doctor's School of Horticulture, Hungarian University of Agriculture and Life Sciences (MATE), Budapest, Hungary

Soil-dependent importance of symbiotic interactions with three cover crops

- 63. Tibor Szili-KOVÁCS, Tünde TAKÁCS Department of Soil Biology, Institute for Soil Sciences, Centre for Agricultural Research, Budapest, Hungary Impact of floods on soil microbial biomass and activity at a floodplain contaminated by former metal mining
- 64. Tünde TAKÁCS, Anna FÜZY Department of Soil Biology, Institute for Soil Sciences, Centre for Agricultural Research, Budapest, Hungary **Promoting phytoremediation by arbuscular mycorrhizal fungi**

12:10 - 13:10

Technical Session 8

Chair of the Session: Hosam Bayoumi Hamuda

65. Sadhan Kumar GHOSH^{1,2}, Abhishek KUMAR¹ ¹Department of Mechanical Engineering, Jadavpur University, Kolkata, India, ²International Society of Waste Management, Air and Water, India **Potential use of ELV Waste Re-circulation in co-processing**

66. Tsend-Ayush ERDENEJARGAL, Hosam E.A.F. BAYOUMI HAMUDA Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary Effects of land application of municipal solid sewage sludge and waste plant compost on wheat growth and soil enzymatic activities

67. Yasmin HAMUDA¹, Hosam E.A.F. BAYOUMI HAMUDA² ¹Tomori Pál College, Budapest, Hungary, ²Institute of Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary

Eco-innovation and environmental and economic management

68. Ariunkhishig MUNKHSUKH, Hosam E.A.F. BAYOUMI HAMUDA

Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary

Frequency distribution of heavy metal contents in natural, urban and mining locations in Mongolia

69. Viktória TÖRÖK, Rebeka SZALÓKI, Ádám MEDVECZKI , Hosam E.A.F. BAYOUMI HAMUDA

Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary

Analysis of lichen biodiversity in different areas of Hungary

70. Hosam E.A.F. BAYOUMI HAMUDA¹, Fatma H. EL-FALLAH², Márta BERECZ¹, András SZEDER¹, András MÉNESI¹, Júlia KASZÁS¹

¹Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary, ²University of Ajdabiya, Benghazi, Libya

Efficacy of the different organic wastes as "clean" fertilizers

71. Ádám GYARMATI, Hosam E.A.F. BAYOUMI HAMUDA Environmental Engineering and Natural Science Department, Rejtő Sándor Faculty of Light Industry and Environmental Engineering, Óbuda University, Hungary Effects of different pesticides on the activity of some enzymes in the rhizosphere of brown forest soil

13:10

Closing the Symposium