



Institute of Environmental Engineering

University of Zielona Góra

5th International Conference
Environmental Engineering and Design



Zielona Góra, 13-14.10.2022 r.

Institute of Environmental Engineering

65-516 Zielona Góra, 15 Prof. Z. Szafrana St. / Tel.: (68) 328 26 37 / www.iis.uz.zgora.pl

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PROGRAM OF THE CONFERENCE, 13.10.2022

9⁰⁰-9¹⁰ CONFERENCE OPENING

Session I, 9¹⁰-10⁴⁵

Chairman of the session: prof. Andrzej Greinert

- 9¹⁰-9²⁰ **ZHANG Xi** /KU Leuven, Leuven, Belgium/
Kinetics and mechanisms of the carbamazepine degradation in aqueous media using novel iodate-assisted photochemical and photocatalytic systems
- 9²⁰-9³⁰ **DURAIKANNU SHANTHANA LAKSHMI** /Ariviya Technologies Private Limited, Thanjavur, India/
Role of marine resources as alternatives to fossil fuel based plastics
- 9³⁰-9⁴⁰ **GIANNAKIS STEFANOS** /Polytechnic University of Madrid, Madrid, Spain/
Solar-assisted advanced oxidation process: can they stop the spread of antibiotic resistance
- 9⁴⁰-9⁵⁰ **GRIGOROV BORISLAV** /Sofia University "St. Kliment Ohridski", Sofia, Bulgaria/
An investigation of the forests of Pernik Province (Western Bulgaria) by the use of the Perpendicular Vegetation Index (PVI)
- 9⁵⁰-10⁰⁰ **DE RIJDT RENAUD, AZIZ IQRA, NECULAU CLAUDIA** /ATRASOL Chastre, Belgium & SPAQE, Liège, Belgium/
NWE-Regeneratis: a new methodology to set up business cases evaluation for past metallurgical sites and deposits materials valorisation
- 10⁰⁰-10¹⁰ **DABWAN Ahmed** /University College Tati, Terengganu, Malaysia/
Bioaccumulation Of Heavy Metals In Mackerel And Red Hybrid Tilapia Collected From Kijal And Paka, Terengganu, Malaysia
- 10¹⁰-10²⁰ **SRIVASTAVA Prachi, GARG Prekshi** /Amity University, Uttar Pradesh, India/
Omics Approach Integration to Deal with abiotic stress
- 10⁰⁰-10³⁰ **SAMUEL Guéret** /International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria/
Impact assessment of shipping emissions on marine and atmospheric environments: trade-offs and challenges
- 10³⁰-10⁴⁵ **Discussion**

Session II, 11⁰⁰-12³⁵

Chairman of the session: Jakub KostECKI, PhD

- 11⁰⁰-11¹⁰ **ALMEIDA José Carlos** /CISE - Polytechnic Institute Of Guarda, Guarda, Portugal/
Asset management. The point of view of the users' costs
- 11¹⁰-11²⁰ **MOHAMMED Bouchkara** /Chouaib Doukkali University, El Jadida, Morocco/
Study of morphodynamic and sedimentological changes in the Oualidia Lagoon (Morocco) using bathymetric data: first investigations after the sediment trap dredging
- 11²⁰-11³⁰ **SAIED Mohammed** /Chouaib Doukkali University, El Jadida, Morocco/
Lithological compositions and hydrocarbon potential evaluation of Lower Cretaceous reservoir, Say'un-Masilah basin, using an integrated wells logging, Yemen
- 11³⁰-11⁴⁰ **KAUR Perminder Jit** /Centre for Policy Research, Indian Institute of Science (IISc), Bangalore, India/
Global policies and strategies for achieving carbon neutrality
- 11⁴⁰-11⁵⁰ **BAKHSI Maryam** /DIW ECON GmbH (IREEMA project), Germany/
Climate outreach in schools across Europe and beyond
- 11⁵⁰-12⁰⁰ **KOWALSKI Krzysztof** /Capitol Region of Denmark, Denmark/
Capital Region of Denmark role in protecting aquifers
- 12⁰⁰-12¹⁰ **Haroon Seddiqe, Rahmatullah Sediqi, Osman Yıldız** /Eskisehir Technical University, Eskisehir, Turkey/
Hydrological Modelling to predict streamflow under changing climate condition in the Körfez subbasin (Marmara Basin - Türkiye) using HBV-Light and SWAT Models
- 12¹⁰-12²⁰ **Jan Slavik** /University of Jan Evangelista in Ústí nad Labem (UJEP)/
Circular economy and its local application
- 12²⁰-12³⁵ **Discussion**



Session III, 12⁵⁰-14²⁵

Chairman of the session: prof. Sylwia Myszograj

- 12⁵⁰-13⁰⁰ **JAROMIN-GLEŃ KATARZYNA, POLAKOWSKI CEZARY, GRYGORCZUK-PŁANETA KATARZYNA, BIEGANOWSKI ANDRZEJ** /Institute of Agrophysics of the Polish Academy of Sciences, Lublin, Poland/
Isotope-ratio mass spectrometry - method of the future in WWTPs
- 13⁰⁰-13¹⁰ **KAYZER DARIUSZ** /Poznan University of Life Sciences, Poznan, Poland/
Changes of water quality parameters including heavy metals in watercourse flowing through the chain of ponds during winter period
- 13¹⁰-13²⁰ **CIESIELCZUK TOMASZ** /University of Opole, Opole, Poland/
Dynamic of butter and cooking oil-soaked paper decomposition in low inorganic nitrogen mediums
- 13²⁰-13³⁰ **PLONKA LESŁAW** /Silesian University of Technology, Gliwice, Poland/
Short-term forecast of oxygen concentration in nitrification chamber using artificial neural network
- 13³⁰-13⁴⁰ **KILIAN SZYMON, PAWĘSKA KATARZYNA** /University of Environmental and Life Sciences, Wrocław, Poland/
Seasonal changes of biogenic compounds concentrations in two-stage waste stabilization pond system
- 13⁴⁰-13⁵⁰ **PARSZUTO KATARZYNA, TANDYRAK RENATA** /University of Warmia and Mazury, Olsztyn, Poland/
The use of UV- absorption spectra in the describing of the self-purification processes in the river powered by hypolimnion water from recultivated lake
- 13⁵⁰-14⁰⁰ **SZAREK ŁUKASZ, FALACIŃSKI PAWEŁ** /University of Life Sciences, Wrocław, Poland/
Potential application of municipal waste incineration ash in hardening slurries
- 14⁰⁰-14¹⁰ **SZYBA MARTA, MIKULIK JERZY** /AGH University of Science and Technology, Cracow, Poland/
Assessment of biogas production potential in large urban agglomerations
- 14¹⁰-14²⁵ **Discussion**

Session IV, 14⁴⁰-16³⁰

Chairman of the session: prof. Izabela Krupińska

- 14⁴⁰-14⁵⁰ **PLAK ANDRZEJ, HANAKA AGNIESZKA** /Maria Curie-Skłodowska University, Lublin, Poland/
Assessment of contamination of soils on urban areas of different functions of Lublin (Poland) and Varna (Bulgaria) by selected rare earth elements
- 14⁵⁰-15⁰⁰ **BLUDNIK IZABELA** /University of Szczecin, Szczecin, Poland/
Land grabbing in the shadow of COVID-19 and lockdowns
- 15⁰⁰-15¹⁰ **PAWŁOWSKI BOGUSŁAW** /Nicolaus Copernicus University, Toruń, Poland/
Changes in the flood risk in the upstream section of Włocławek Reservoir
- 15¹⁰-15²⁰ **KARCZEWSKA ANNA** /Wrocław University of Environmental & Life Sciences, Wrocław, Poland/
The most important issues of soil degradation, protection and reclamation in Poland – the challenges and tasks for the Commission 3.3 of the Soil Science Society of Poland
- 15²⁰-15⁴⁰ **KUJAWSKA JUSTYNA** /Lublin University of Technology, Lublin, Poland/
Analysis of the energy parameters of selected biomass and biochar types and the environmental impact of their ashes
- 15³⁰-15⁵⁰ **PLAK ANDRZEJ, HANAKA AGNIESZKA** /Maria Curie-Skłodowska University, Lublin, Poland/
Assessment of contamination of soils on urban areas of different functions of Lublin (Poland) and Varna (Bulgaria) by selected rare earth elements
- 15⁴⁰-15⁵⁰ **ZARĘBA MATEUSZ** /AGH, University of Science and Technology, Cracow, Poland/
Data-driven and geostatistical approach for air pollution monitoring
- 15⁵⁰-16⁰⁰ **KITOWSKI IGNACY, JAKUBAS DARIUSZ, ORLIK JAN, BONIECKI PIOTR, SUJAK AGNIESZKA** /University of Life Sciences in Lublin, Lublin, Poland - Poznań University of Life Sciences, Poznań, Poland - University of Gdansk, Gdansk, Poland/
Identification of factors influencing environmental pollution using artificial neural networks, GIS and avian post-hatching eggshells
- 16⁰⁰-16¹⁵ **Discussion**



PROGRAM OF THE CONFERENCE, 14.10.2022

Session I, 9⁰⁰-10³⁵

Chairman of the session: Ewelina Płuciennik-Koropczuk, PhD

- 9⁰⁰-9¹⁰ **MAJEWSKI KAMIL** /University of Zielona Góra, Zielona Góra, Poland/
Microplastic - a new concept of definition. In search of the missing link.
- 9¹⁰-9³⁰ **ORMANIEC PAULINA** /Cracow University of Technology, Cracow, Poland/
Occurrence and characteristics of microplastics in leachate from sewage sludge processing in large municipal wastewater treatment plants
- 9²⁰-9³⁰ **GOŁĘBIEWSKA EWELINA, KALINOWSKA MONIKA, ZAWADZKA MAŁGORZATA, CHOIŃSKA RENATA, PIASECKA-JÓZWIĄK KATARZYNA, BUJAK MARZENA** /Białystok Technical University, Białystok, Poland - Institute of Agricultural and Food Biotechnology - National Research Institute, Warsaw, Poland/
Optimization of the apple pomace fermentation process in order to obtain bioactive substances from agri-food industry waste in accordance with the idea of sustainable development
- 9³⁰-9⁴⁰ **CIEŚLIŃSKI ROMAN, LIPIŃSKA ZUZANNA, PAWŁOWSKA MARLENA** /University of Gdańsk, Gdańsk, Poland/
The impact of hydrotechnical treatments on the improved water conditions of baltic-type peatlands on the example of Ciemińskie Błota
- 9⁴⁰-9⁵⁰ **MISEBO AMISALU MILKIAS** /Agricultural University of Cracow, Cracow, Poland/
Impact of tree species and substrates on the microbial and physicochemical properties of reclaimed mine soil in the novel ecosystems
- 9⁵⁰-10⁰⁰ **KUŚMIERZ SEBASTIAN** /University of Life Sciences, Lublin, Poland/
Practical aspects of soil respiration and greenhouse gas emissions experiments using closed chamber methods on the example of multiple gas measurements examination
- 10¹⁰-10¹⁰ **SZYMAŃSKA MAGDALENA** /University of Life Sciences, Wrocław, Poland/
Application of portable FTIR and XRF spectrometers to identify pollutants in industrial wastewater
- 10¹⁰-10²⁰ **MICHAŚ RAFAŁ** /University of Lodz, Lodz, Poland/
Eco-revitalization - environmental aspects of revitalization projects on the example of the Łódź City
- 10²⁰-10³⁵ **Discussion**

Session II, 10⁵⁰-12²⁵

Chairman of the session: Marta Gortych, PhD

- 10⁵⁰-11⁰⁰ **KUBIAK JOANNA** /AGH, University of Science and Technology, Cracow, Poland - Poznań University of Technology, Poznań, Poland/
The evaluation of indoor radon exposure in nurseries
- 11⁰⁰-11¹⁰ **KOPERA PAULINAMACIEJ, SECHMAN HENRYK TWARÓG ANNA** /AGH, University of Science and Technology, Cracow, Poland/
Variability of molecular composition of soil gas in near-surface layers in the area of the reclaimed part of the Barycz municipal landfill
- 11¹⁰-11²⁰ **KAMIŃSKA PATRYCJA, MICHALAK HANNA** /Poznan University of Technology, Poznan, Poland/
Innovative, modular building facades - as a tool to counteract the effects and prevent climate change
- 11²⁰-11³⁰ **ŁABUZ TOMASZ ARKADIUSZ, MACIĄG ŁUKASZ, MILUCH JAKUB** /University of Szczecin, Szczecin, Poland/
Ground Penetrating Radar (GPR) survey of coastal sand barriers as a valuable sediment identification method as well as indicator of various geological hazards affected by enhanced urban development of coastal zones, Poland, Baltic Sea
- 11³⁰-11⁴⁰ **KWIATKOWSKA KLAUDIA, SOCHA MAGDALENA** /Cracow University of Technology, Cracow, Poland/
Glyphosate as an endangering substance to the biodiversity of aquatic ecosystem
- 11⁴⁰-11⁵⁰ **MAREK KINGA** /University of Life Sciences in Wrocław, Wrocław, Poland/
Unevenness of water consumption and sewage production in the Motor Rest Areas
- 11⁵⁰-12⁰⁰ **DZIEDZIC MICHAŁ** /University of Life Sciences in Wrocław, Wrocław, Poland/
Influence of ice phenomena on the operation of SHPs with Archimedes turbines on Polish rivers
- 12⁰⁰-12¹⁰ **ROSIK JOANNA** /University of Life Sciences, Wrocław, Poland/
Using biocarbon from compost to reduce odor emissions from food waste collection process
- 12¹⁰-12²⁵ **Discussion**

Poster session, 12⁴⁰-14⁰⁰

Chairman of the session: Piotr Ziembicki, PhD / Ireneusz Nowogoński, PhD

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