



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 **ERRAJI CHAHID** Nouhaila, **BOUCHKARA Mohammed**, **MELAKU CANU Donata**, **EL KHALIDI Khalid**, **BENAZZOUZ Aïssa**, **ZOURARAH Bendahhou** /Chouaib Doukkali University, El Jadida, Morocco - Instituto Nazionale di Oceanografia Edi Geofisica Sperimentale OGS, Trieste, Italy - Institut Supérieur d'Etudes Maritimes, Casablanca, Morocco/
Socio- ecological analysis of the Moulay Bousselham lagoon (Atlantic coast of Morocco): Conditions, environmental impacts and future management scenarios
- 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, Malesia/
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 **BRADECKI TOMASZ**, **OPANIA SZYMONN** /Silesian University of Technology, Gliwice, Poland/
Functional-environmental evaluation of pocket parks in urbanized areas - the case study of Gliwice
- 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 **BAKHSHI MARYAM** /DIW ECON GmbH (IREEMA project), Germany/
Climate outreach in schools across Europe and beyond
- 11⁵⁰-12⁰⁰ **KOWALSKI KRYSZTOF** /Capitol Region of Denmark, Denmark/
Capital Region of Denmark role in protecting aquifers
- 12⁰⁰-12¹⁰ **HAROON SEDDIQE**, **RAHMATULLAH SEDIQI**, **OSMAN YILDIZ** /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)/
Challenges for the Circular Economy
- 12²⁰-12³⁵ **Discussion**

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12⁵⁰-13⁰⁰

Session III, 12⁵⁰-14²⁵

Chairman of the session: prof. Sylwia Myszograj

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

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

CIESIELCZUK TOMASZ /University of Opole, Opole, Poland/

Dynamic of butter and cooking oil-soaked paper decomposition in low inorganic nitrogen mediums

PLONKA LESŁAW /Silesian University of Technology, Gliwice, Poland/

Short-term forecast of oxygen concentration in nitrification chamber using artificial neural network

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

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

SZAREK ŁUKASZ, FALACIŃSKI PAWEŁ /University of Life Sciences, Wrocław, Poland/

Potential application of municipal waste incineration ash in hardening slurries

SZYBA MARTA, MIKULIK JERZY /AGH University of Science and Technology, Cracow, Poland/

Assessment of biogas production potential in large urban agglomerations

Discussion

13⁵⁰-14⁰⁰

14⁰⁰-14¹⁰

14¹⁰-14²⁵

Session IV, 14⁴⁰-16³⁰

Chairman of the session: prof. Izabela Krupińska

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

BLUDNIK IZABELA /University of Szczecin, Szczecin, Poland/

Land grabbing in the shadow of COVID-19 and lockdowns

PAWŁOWSKI BOGUSŁAW /Nicolaus Copernicus University, Toruń, Poland/

Changes in the flood risk in the upstream section of Włocławek Reservoir

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

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

ZARĘBA MATEUSZ /AGH, University of Science and Technology, Cracow, Poland/

Data-driven and geostatistical approach for air pollution monitoring

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 Gdańsk, Gdańsk, Poland/

Identification of factors influencing environmental pollution using artificial neural networks, GIS and avian post-hatching eggshells

TOFILUK ANNA, BRADECKI TOMASZ, UHEREK-BRADECKA BARBARA /Warsaw University of Technology, Warsaw - Silesian University of Technology, Gliwice -University of Technology in Katowice, Katowice, Poland/

Challenges in the design of prefabricated single-family buildings with expanded clay technology - selected architectural and environmental aspects

Discussion

14⁴⁰-14⁵⁰

15⁰⁰-15¹⁰

15¹⁰-15²⁰

15²⁰-15³⁰

15³⁰-15⁴⁰

15⁴⁰-15⁵⁰

15⁵⁰-16⁰⁰

16⁰⁰-16¹⁵

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PROGRAM OF THE CONFERENCE, 14.10.2022

Session I, 9⁰⁰-10³⁵

Chairman of the session: Ewelina Płuciennik-Koropczuk, PhD

9 ⁰⁰ -9 ¹⁰	MAJEWSKI KAMIL /University of Zielona Góra, Zielona Góra, Poland/ <i>Microplastic - a new concept of definition. In search of the missing link.</i>
9 ¹⁰ -9 ³⁰	ORMANIEC PAULINA /Cracow University of Technology, Cracow, Poland/ <i>Occurrence and characteristics of microplastics in leachate from sewage sludge processing in large municipal wastewater treatment plants</i>
9 ²⁰ -9 ³⁰	GOŁĘBIIEWSKA EWELINA, KALINOWSKA MONIKA, ZAWADZKA MAŁGORZATA, CHOIŃSKA RENATA, PIASECKA-JÓZWIAK KATARZYNA, BUJAK MARZENA /Białystok Technical University, Białystok, Poland - Institute of Agricultural and Food Biotechnology - National Research Institute, Warsaw, Poland/ <i>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</i>
9 ³⁰ -9 ⁴⁰	CIEŚLIŃSKI ROMAN, LIPIŃSKA ZUZANNA, PAWŁOWSKA MARLENA /University of Gdańsk, Gdańsk, Poland/ <i>The impact of hydrotechnical treatments on the improved water conditions of Baltic-type peatlands on the example of Ciemińskie Błota</i>
9 ⁴⁰ -9 ⁵⁰	MISEBO AMISALU MILKIAS /Agricultural University of Cracow, Cracow, Poland/ <i>Impact of tree species and substrates on the microbial and physicochemical properties of reclaimed mine soil in the novel ecosystems</i>
9 ⁵⁰ -10 ⁰⁰	KUŚMIERZ SEBASTIAN /University of Life Sciences, Lublin, Poland/ <i>Practical aspects of soil respiration and greenhouse gas emissions experiments using closed chamber methods on the example of multiple gas measurements examination</i>
10 ¹⁰ -10 ¹⁰	SZYMAŃSKA MAGDALENA /University of Life Sciences, Wrocław, Poland/ <i>Application of portable FTIR and XRF spectrometers to identify pollutants in industrial wastewater</i>
10 ¹⁰ -10 ²⁰	MICHAŚ RAFAŁ /University of Łódź, Łódź, Poland/ <i>Eco-revitalization - environmental aspects of revitalization projects on the example of the Łódź City</i>
10 ²⁰ -10 ³⁵	Discussion

Session II, 10⁵⁰-12²⁵

Chairman of the session: Marta Gortych, PhD

10 ⁵⁰ -11 ⁰⁰	KUBIAK JOANNA /Poznań University of Technology, Poznań, Poland/ <i>The evaluation of indoor radon exposure in nurseries</i>
11 ⁰⁰ -11 ¹⁰	KOPERA PAULINA MACIEJ, SECHMAN HENRYK TWARÓG ANNA /AGH, University of Science and Technology, Cracow, Poland/ <i>Variability of molecular composition of soil gas in near-surface layers in the area of the reclaimed part of the Barycz municipal landfill</i>
11 ¹⁰ -11 ²⁰	KAMIŃSKA PATRYCJA, MICHALAK HANNA /Poznan University of Technology, Poznan, Poland/ <i>Innovative, modular building facades - as a tool to counteract the effects and prevent climate change</i>
11 ²⁰ -11 ³⁰	ŁABUZ TOMASZ ARKADIUSZ, MACIĄG ŁUKASZ, MILUCH JAKUB /University of Szczecin, Szczecin, Poland/ <i>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</i>
11 ³⁰ -11 ⁴⁰	KWIATKOWSKA KLAUDIA, SOCHA MAGDALENA /Cracow University of Technology, Cracow, Poland/ <i>Glyphosate as an endangering substance to the biodiversity of aquatic ecosystem</i>
11 ⁴⁰ -11 ⁵⁰	MAREK KINGA /University of Life Sciences in Wrocław, Wrocław, Poland/ <i>Unevenness of water consumption and sewage production in the Motor Rest Areas</i>
11 ⁵⁰ -12 ⁰⁰	DZIEDZIC MICHAŁ /University of Life Sciences in Wrocław, Wrocław, Poland/ <i>Influence of ice phenomena on the operation of SHPs with Archimedes turbines on Polish rivers</i>
12 ⁰⁰ -12 ¹⁰	ROSIK JOANNA /University of Life Sciences, Wrocław, Poland/ <i>Using biocarbon from compost to reduce odor emissions from food waste collection process</i>
12 ¹⁰ -12 ²⁰	IRENA KAZIMYRA /Lviv Polytechnic National University, Lviv, Ukraine/ <i>Data Mining techniques for air pollution investigation</i>
12 ²⁰ -12 ³⁵	Discussion

Poster session, 12⁴⁰-14⁰⁰

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

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