



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

9 ¹⁰ -9 ²⁰	ZHANG Xi /KU Leuven, Leuven, Belgium/ <i>Kinetics and mechanisms of the carbamazepine degradation in aqueous media using novel iodate-assisted photochemical and photocatalytic systems</i>
9 ²⁰ -9 ³⁰	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/ <i>Socio- ecological analysis of the Moulay Bousselham lagoon (Atlantic coast of Morocco): Conditions, environmental impacts and future management scenarios</i>
9 ³⁰ -9 ⁴⁰	GIANNAKIS STEFANOS /Polytechnic University of Madrid, Madrid, Spain/ <i>Solar-assisted advanced oxidation process: can they stop the spread of antibiotic resistance</i>
9 ⁴⁰ -9 ⁵⁰	GRIGOROV BORISLAV /Sofia University "St. Kliment Ohridski", Sofia, Bulgaria/ <i>An investigation of the forests of Pernik Province (Western Bulgaria) by the use of the Perpendicular Vegetation Index (PVI)</i>
9 ⁵⁰ -10 ⁰⁰	DE RIJDT RENAUD, AZIZ IQRA, NECULAU CLAUDIA /ATRASOL Chastre, Belgium & SPAQE, Liège, Belgium/ <i>NWE-Regeneratis: a new methodology to set up business cases evaluation for past metallurgical sites and deposits materials valorisation</i>
10 ⁰⁰ -10 ¹⁰	DABWAN AHMED /University College Tati, Terengganu, Malesia/ <i>Bioaccumulation Of Heavy Metals In Mackerel And Red Hybrid Tilapia Collected From Kijal And Paka, Terengganu, Malaysia</i>
10 ¹⁰ -10 ²⁰	SRIVASTAVA PRACHI, GARG PREKSHI /Amity University, Uttar Pradesh, India/ <i>Omics Approach Integration to Deal with abiotic stress</i>
10 ⁰⁰ -10 ³⁰	SAMUEL GUÉRET /International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria/ <i>Impact assessment of shipping emissions on marine and atmospheric environments: trade-offs and challenges</i>
10 ³⁰ -10 ⁴⁵	Discussion

Session II, 11⁰⁰-12⁵⁰

Chairman of the session: Jakub Kostecki, PhD

11 ⁰⁰ -11 ¹⁰	ALMEIDA JOSÉ CARLOS /CISE - Polytechnic Institute Of Guarda, Guarda, Portugal/ <i>Asset management. The point of view of the users' costs</i>
11 ¹⁰ -11 ²⁰	MOHAMMED BOUCHKARA /Chouaib Doukkali University, El Jadida, Morocco/ <i>Study of morphodynamic and sedimentological changes in the Oualidia Lagoon (Morocco) using bathymetric data: first investigations after the sediment trap dredging</i>
11 ²⁰ -11 ³⁰	BRADECKI TOMASZ, OPANIA SZYMONN /Silesian University of Technology, Gliwice, Poland/ <i>Functional-environmental evaluation of pocket parks in urbanized areas - the case study of Gliwice</i>
11 ³⁰ -11 ⁴⁰	KAUR PERMINDER JIT /Centre for Policy Research, Indian Institute of Science (IISc), Bangalore, India/ <i>Global policies and strategies for achieving carbon neutrality</i>
11 ⁴⁰ -11 ⁵⁰	BAKHSHI MARYAM /DIW ECON GmbH (IREEMA project), Germany/ <i>Climate outreach in schools across Europe and beyond</i>
11 ⁵⁰ -12 ⁰⁰	KOWALSKI KRZYSZTOF /Capitol Region of Denmark, Denmark/ <i>Capital Region of Denmark role in protecting aquifers</i>
12 ⁰⁰ -12 ¹⁰	HAROON SEDIQE, RAHMATULLAH SEDIQI, OSMAN YILDIZ /Eskisehir Technical University, Eskisehir, Turkey/ <i>Hydrological Modelling to predict streamflow under changing climate condition in the Körfez subbasin (Marmara Basin - Türkiye) using HBV-Light and SWAT Models</i>
12 ¹⁰ -12 ²⁰	SLAVIK JAN /University of Jan Evangelista in Ústí nad Labem (UJEP)/ <i>Challenges for the Circular Economy</i>
12 ²⁰ -12 ³⁵	ANDRIJCZUK Oleksandr, VERESZKO Oleg /Lutsk National Technical University, Lutsk, Ukraine/ <i>Organization of road traffic in the city of Lutsk of the Volyn region</i>
12 ³⁵ -12 ⁵⁰	Discussion

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Session III, 12⁵⁰-14²⁵

Chairman of the session: Ewelina Płuciennik-Koropczuk, PhD

- 12⁵⁰-13⁰⁰ **JAROMIN-GŁĘN 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** /Poznań University of Life Sciences, Poznań, 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, PAWEŁSKA 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, 14⁴⁰-16¹⁵

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
- 15²⁰-15³⁰ **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
- 15³⁰-15⁴⁰ **ZARĘBA MATEUSZ** /AGH, University of Science and Technology, Cracow, Poland/
Data-driven and geostatistical approach for air pollution monitoring
- 15⁴⁰-15⁵⁰ **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
- 15⁵⁰-16⁰⁰ **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
- 16⁰⁰-16¹⁵ **Discussion**



PROGRAM OF THE CONFERENCE, 14.10.2022

Session I, 9⁰⁰-10³⁵

Chairman of the session: prof. Sylwia Myszograj

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	GOŁĘBIEWSKA EWELENA, KALINOWSKA MONIKA, ZAWADZKA MAŁGORZATA, CHOIŃSKA RENATA, PIASECKA-JÓZWIAK KATARZYNA, BUJAK MARZENA /Bialystok Technical University, Bialystok, 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 Lodz, Lodz, 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 Wroclaw, Wroclaw, 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 Wroclaw, Wroclaw, 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, Wroclaw, Poland/ <i>Using biocarbon from compost to reduce odor emissions from food waste collection process</i>
12 ¹⁰ -12 ²⁰	IRENA KAZYMYRA /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 Nowogoński, PhD

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