



6th International Conference
Environmental Engineering and Design



Zielona Góra, 19-20.10.2023

• **PROGRAM OF THE POSTER SESSION, 19.10.2023**

Poster session, 14⁰⁰-16⁰⁰

Chairman of the session: Piotr Ziembicki, PhD

1.	Elżbieta Antczak, Agnieszka Rzeńca, Agnieszka Sobol	"green cities" in Poland - comparative analysis based on the composite measure of development
2.	Leszek Bargłowski, Mariusz Adamski	Central heating control charts the basis for the economic use of energy in residential buildings
3.	Rafał Buczyński	Comparison of the Effectiveness of Artificial Neural Networks and Elastic Net Regression in Surface Runoff Modeling
4.	Wojciech Dronia, Jakub Kostecki, Jacek Połomka, Andrzej Jędrzcak	Urban and rural areas as a source of bio-waste
5.	Barbara Futa, Magdalena Myszcza-Dymek, Grażyna Żukowska, Katarzyna Wasilewska	Changes in biochemical properties of sediments formed in the process of rainwater treatment
6.	Joanna Gmitrowicz-Iwan	Improving acidic sandy soil properties for plant growth with dam reservoir sediments in the face of soaring fertiliser prices
7.	Karolina Godzisz	Financing of low emission reduction measures in local government units in 2019-2020 in Poland - a case study
8.	Marta Gortych, Piotr Grabas	PCM development and their impact on the environment
9.	Julia Graczyk, Barbara Ksit	Analysis of chimney systems and their environmental impact based on polish standards
10.	Agnieszka Grdulska	Comparison of the efficiency of selected processes for the removal of estrogens from wastewater
11.	Andrzej Greinert, Jakub Kostecki	New approach to urban green areas as an important element of rational water management in the city in the context of climate change
12.	Oliwia Jakubaszek, Anita Jakubaszek	The influence of the type of filter partition on the quality of beer after the filtration process
13.	Anita Jakubaszek, Izabela Krupińska	Forms of heavy metals occurrence in surface waters
14.	Agata Jaroń, Anna Borucka, Paulina Deliś	Assessment of the possibility of using unmanned aerial products for emissions and mapping of residues from road infrastructure exhaust emissions
15.	Jasiewicz Marzena, Paterek Justyna, Jasiewicz Klaudia Gabriela	Carrying out detailed and confirmed calculations concerning the proposed thermomodernization projects for a single - family building located in a selected locality - Energy Audit
16.	Anna Kaczmarek, Magdalena Nakielska	The use of phase change materials to improve the external walls' thermal parameters of heated buildings
17.	Barbara Kiełczawa, Karolina Szostak, Iwona Sieniawska	Thermal waters of the Zielona Gora region
18.	Jakub Kostecki, Andrzej Greinert	Environmental impact assessment as part of environmental engineering and design
19.	Izabela Krupińska	Application of active dolomite beds to mixture of groundwater and surface water treatment
20.	Izabela Krupińska	Removal of natural organic matter from groundwater using Fenton's process
21.	Izabela Krupińska, Anita Jakubaszek	Application of the SUVA ₂₅₄ indicator for the qualitative assessment of organic substances present in water from the Odra River
22.	Katarzyna Kubiszyn, Dorota Łochańska	The stone market in the context of rapid construction development and protection areas of Major Groundwater Reservoirs (GZWP)
23.	Justyna Kujawska	The effect of biochar-enriched digestate on soil CO ₂ fluxes
24.	Katarzyna Kuśmierz, Antoni Grzywina	Flow interrupted: dams and water quality shifts
25.	Joanna Lupa, Agnieszka Kierys, Magdalena Greluk, Andrzej Sienkiewicz, Marek Rotko, Grzegorz Słowik	Cerium oxide-supported nickel and cobalt catalysts for hydrogen production via steam reforming of ethanol
26.	Katarzyna Łuszczynska,	Occurrence of Chaetomium globosum on building partitions and in

	Aleksandra Bagan	the air of public buildings – a case study
27.	Katarzyna Łuszczynska, Aleksandra Bartnicka	Indoor air quality in humid utility rooms of a public building
28.	Marta Magnucka, Joanna Świetlik	Pipes renovated by polyurea resin as a potential source of microplastic in drinking water
29.	Maria Włodarczyk - Makuła, Sylwia Myszograj, Maciej Włodarczyk	Supporting the organic compounds oxidation with electric power
30.	Martyna Myszograj	Environmental risks from the medical sector
31.	Sylwia Myszograj, Izabela Krupińska, Ewelina Płuciennik-Koropczuk, Jakub Kostecki, Krzysztof Wołk, Marcin Słomiński	Potential of hyperspectral imaging for surface water quality monitoring
32.	Magdalena Myszcza-Dymek, Grażyna Żukowska, Barbara Futa, Klaudia Różowicz	The Influence of Sewage Sludge Compost on the Soil Carbon Management Indicators in Reclaimed Post-Mining Soil
33.	Katarzyna Myślińska, Marek Bogacki	Site selection of photovoltaics and energy storage systems based on multi-criteria spatial analyzes – a case study from Nieporęt municipality
34.	Edyta Nartowska, Parveen Sihag	Predictive modeling of unfrozen water content in copper-contaminated bentonites using Machine learning techniques and physicochemical parameters
35.	Ireneusz Nowogoński, Ewa Ogiółda, Arkadiusz Kotek	Retention capability of a rain collector laid with a high slope
36.	Ewa Ogiółda, Ireneusz Nowogoński, Tomasz Strojny	Characteristics of water consumption in Zielona Góra
37.	Dorota Olejnik, Marcin Krupa	Analysis of the operation of selected thermal waste treatment plants
38.	Maja Owczarek, Izabela Michalak	Soil bioremediation: selected biosorbents
39.	Miłosz Pastuszczak	Effect of ash fertilization on selected micro-biological and physico-chemical properties of the podzolic and chernozem soil
40.	Ewelina Płuciennik-Koropczuk, Sylwia Myszograj	Wastewater as a source of public health information
41.	Ewelina Pochodyła-Ducka, Agnieszka Jaszczak	The issue of urban space sealing and the potential of blue-green infrastructure
42.	RDLP	Leśne gospodarstwa węglowe
43.	Anna Rychła, Barbara Amon, Joanna Frątczak-Müller, Marek Kierończyk, Sylwia Myszograj, Monika Suchowska-Kisielewicz, Wilfried Winiwarter	DairyMix: Multi-criteria assessment, decision support and management tools for sustainable circular mixed farming systems for dairy production
44.	Krzysztof Słota, Zbigniew Słota, Anna Morcinek-Słota	Interlevel connections as a way to increase the ventilation efficiency of a mine ventilation network - a case study
45.	Adam Starowicz, Paulina Rusanowska, Marcin Zieliński	Simultaneous wastewater treatment and electricity production in microbial fuel cells (mfc)
46.	Grzegorz Stozik	Expectations of residents of a post-mining and post-industrial commune regarding the restoration of utility value to brown fields, limiting the impact of mining legacies and directions of post-mine reclamation activities on the example of the city of Piekary Śląskie
47.	Anna Szymczak-Graczyk	Technology of well sinking
48.	Tomasz Śmietanka	The condition of climate change adaptation in Polish municipalities before and after the pandemic on the basis of CSO environmental indicators - management implications
49.	Róża Wasylewicz, Oskar Grzelak, Martyna Paruszkiewicz, Alicja Małaszewska, Dominik Podyma, Oskar Kostrzyński	Cities and climate change
50.	Aleksandra Wiśniewska, Barbara Bębenek, Anita Jakubaszek, Ewelina Płuciennik - Koropczuk	Water quality in the Pustelnik stream
51.	Marcin Zajac, Joanna Kotyńska,	The toxicity of microplastics towards living organisms – current

	Monika Naumowicz	reports
52.	Grażyna Żukowska, Magdalena Myszura-Dymek, Szymon Roszkowski	Properties and yield potential of soil-like substrates made from Carboniferous mining waste
53.	Kacper Żuraw, Jakub Wyka, Wiktor Dudziak, Jakub Kostecki	Photovoltaic farm on agricultural land - problem or solution?
54.	Joanna Fajfer, Michał Rolka	The application of a machine learning algorithms for prediction of raw materials potential from mining and industrial waste facilities
55.	Ewa Wiśniowska, Agnieszka Popena	New directions of European Union legislation concerning wastewater treatment
56.	Agnieszka Popena, Ewa Wiśniowska, Andrzej Popena	Co-fermentation as effective tool for energy recovery in wastewater treatment plants – state of the art and challenges
57.	Piotr Ziembicki, Grzegorz Bartnicki	Increase the efficiency of the energy source by using energy batteries with rational capacity