

VIII International Scientific Conference



„Environmental Engineering – Through A Young Eye”

Innovations – Sustainability – Modernity – Openness

CONFERENCE PROGRAM

Białystok University of Technology
Wiejska Street 45E, 15-351 Białystok, Poland

WEDNESDAY 22.05.2019

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9.00 - 10.00	REGISTRATION – HALL OF CNK (LIBRARY BUILDING, ZWIERZYŃECKA STREET 16)
10.00 - 12.00	OPENING SESSION AND PLENARY LECTURES <i>Aula CNK, ground floor</i>
1.	Welcome Speech of the Conference Chairwomen Assoc. Prof. Iwona Skoczko, Białystok University of Technology Assoc. Prof. Dorota Krawczyk, Białystok University of Technology
2.	Welcome Speech of the Vice-rector of Development at BUT Assoc. Prof. Roman Kaczyński, Białystok University of Technology
3.	Presentation of Results of VIPSKILLS Erasmus + Project 2016-1-PL01-KA203-026152 Assoc. Prof. Dorota Krawczyk, Białystok University of Technology
4.	VIPSKILLS results through students eyes Agata Witkowska and Bernadetta Wądołowska, Białystok University of Technology
5.	Impact of VIPSKILLS Project on UCO - partner institution, teachers and students Prof. Antonio Rodero Serrano, University of Cordoba,
6.	Benefits of VIPSKILLS project to Developing Practical Skills of VTDK Lina Sakalauskiene, Vilnius College of Technologies and Design
7.	KEYNOTE TALK: Green solutions for environmental protection-constructed wetlands Assoc.Prof. Wojciech Dąbrowski, Białystok University of Technology
8.	KEYNOTE TALK: Challenges of Sustainable Buildings Design Assoc. Prof. Violeta Motuziene, Vilnius Gediminas Technical University
12.00 - 13.00	POSTER SESSION 1, COFFEE BREAK - CNK, HALL ground floor Assoc. Prof. Iwona Skoczko, Assoc. Prof. Dorota A.Krawczyk, Assist. Prof. Anna Siemieniuk
1.	<u>Vilma Baneviciene</u>, Jurgita Malaiskiene, Marija Vaiciene, Renata Boris <i>The possibilities of paper sludge waste (PSw) utilization in cement materials</i>
2.	Rokas Tamasauskas, Jolanta Šadauskienė, Patrikas Mruzgevičius, Dorota A.Krawczyk <i>Evaluation of primary energy factor values of wind turbines</i>
3.	Paulina Roszkowska, Marta Magnuszewska, Dorota Anna Krawczyk <i>VIPSKILLS - Virtual laboratories in engineering analysis</i>
4.	<u>Valdone Suskevici</u> <i>Title Single-Use Paper Cups Circularity Improvement and Environmental Impact Mitigation Measures for Lappeenranta University of Technology Campus</i>
5.	<u>Grzegorz Galko, Danuta Król</u> <i>Experimental research of oily sawdust's air gasification</i>
6.	<u>Ieva Kazulytė</u> <i>Using of recycled materials in packaging to meet the goals of circular economy</i>
7.	<u>Mirosław Żukowski, Paulina Radzajewska</u> <i>A new method to determine the annual energy output of solar collectors</i>

8.	<u>Katarzyna Gladyszewska-Fiedoruk, Vasyl Zhelykh, Andrii Pushchinskyi</u> <i>Analysis of various ventilation systems due to the quality of indoor air in educational buildings</i>
9.	<u>Katarzyna Gladyszewska-Fiedoruk</u> <i>Indoor air quality in the bedroom of the single-family house - a case study</i>
10.	<u>Edyta Kudlek</u> <i>Influence of the UV irradiation spectra on the formation of micropollutant decomposition by-products during heterogeneous photocatalysis</i>
11.	<u>Agata Witkowska, Dorota Anna Krawczyk, Antonio Rodero</u> <i>Investment costs of a heating system in Poland and Spain – a case study</i>
12.	<u>Dorota Anna Krawczyk, Antonio Rodero, Agata Witkowska Bernadetta Wadolowska, .</u> <i>The advisability of employment of renewable energy sources in DHW and HVAC systems in the kindergarten, depending on its location – a case study</i>
13.	<u>Juan Mateo, Antonio Rodero, Maria Carmen Garcia</u> <i>Application of LIBS spectroscopy in the study of chloride penetration in construction materials</i>
14.	<u>Anna Justyna Werner-Juszczuk</u> <i>The analysis of use of radiant floor heating as cooling system</i>
15.	<u>Paulina Dawczak, Mariusz Dudziak</u> <i>Evaluation of the effectiveness of the coagulation process in purifying wastewater from the foundry industry</i>
16.	<u>Andrea Moňoková, Silvia Vilčeková and Iveta Selecká</u> <i>Life cycle analysis of single family houses and effects of green technologies on environment</i>
17.	<u>Anna Kwarciak-Kozłowska</u> <i>Use of modified biochar to remove pollutants from coke wastewater</i>
18.	<u>Karolina Matej-Łukowicz, Ewa Wojciechowska, Nicole Nawrot, Lidia Dzierzbicka-Głowacka</u> <i>Contribution of nutrients from urban and agricultural watersheds – evaluation of seasonal changes using multivariate statistics approach</i>
19.	<u>Frida Banzzocci, Cecilia Ciacci, Vincenzo Di Naso</u> <i>Optimization of solar shading for Nzeb kindergarten in Florence</i>
20.	<u>Ewa Puszczało, Anna Marszałek</u> <i>Treatment of wastewater from the confectionery industry using pressure membrane processes</i>
21.	<u>Alicja Siuta-Olcha, Tomasz Cholewa, Kinga Dopieralska-Howoruszko</u> <i>Experimental investigations of energy and exergy efficiencies of a evacuated tube solar collector</i>
22.	<u>Joanna Struk-Sokolowska, Sławomir Miodoński, Mateusz Muszyński-Huhajło, Kamil Janiak</u> <i>Analysis of chemically assisted primary sedimentation process effects based on COD fractions in wastewater in large WWTPs</i>
23.	<u>Urszula Kępa</u> <i>Analysis of the structure of water demand with the example of selected buildings</i>
24.	<u>Piotr Ofman, Joanna Struk-Sokolowska</u> <i>Artificial neural networks approach to modelling of selected nitrogen forms removal from oily wastewater in anaerobic and aerobic GSBP process phases</i>
25.	<u>Piotr Ofman, Iwona Skoczko</u> <i>Comparison of SLMW utilization rate from saline wastewater in SBR reactors with granular and flocculated activated sludge</i>
26.	<u>Zdenka Kovacova, Stefan Dencak, Magdalena Balintova</u> <i>Removal of copper from water solutions by adsorption on spruce sawdust</i>
27.	<u>Ewa Szatyłowicz, Iwona Skoczko</u> <i>Magnetic field usage for removal iron by filtration assisted different filter materials</i>
28.	<u>Iwona Skoczko Ewa Szatyłowicz</u> <i>Experiments on water stabilization</i>
29.	<u>Łukasz Kolendo, Dorota Anna Krawczyk, Andrzej Kobryń</u> <i>The method of special suitability assessment for the photovoltaics development at municipality scale</i>
30.	<u>Jose Ribeiro, Licinio Ribeiro, Wilson Silva</u> <i>Project: home Air Conditioning system VIPskills</i>
31.	<u>Ane Viana, Antonio Alves, Jose Costa, Rui Marques</u> <i>Nothing is lost, nothing is created, everything is changed with the air conditioning</i>
32.	<u>Joanna Borowska, Natalia Taraszkiewicz</u> <i>Window's structure and its energetic parameters</i>

32.	<u>Natalia Taraszkiwicz</u> <i>Agricultural biogas plant location selection using MCDA methods</i>
33.	<u>Jorge M. Llamas, David Bullejos, Manuel Ruiz de Adana</u> <i>Operation comparison for Parabolic Trough plants with thermal storage. HTF Buffering vs double tank molten salts</i>
34.	<u>Magdalena Łój-Pilch, Anita Zakrzewska, Ewa Zielewicz</u> <i>Analysis of risk assessment in municipal wastewater treatment plant</i>
35.	<u>Lilia Szaripowa, Kerimzhanova Aishuak, Mehmet Akif Tanriasiqi, Maiya Zhanaidarova</u> <i>Heating system of a cottage in Warsaw</i>
36.	<u>Kerimzhanova Aishuak, Sharipova Lilia, Mehmet Akif Tanriasiqi, Maiya Zhanaidarova</u> <i>Ventilation System of the house located in Warsaw</i>
13:00 - 14:15	PLENARY SESSION 1 - Aula CNK, ground floor Session Chairs: Prof. Antonio Rodero Serrano, Prof. Mirosław Żukowski, Assoc. Prof. Jolanta Sakalauskiene
1.	<u>Jakub Frankowski</u> <i>Assessment methods of hemp biomass to solid biofuels production</i>
2.	<u>Ana Tejero-González, Dorota A. Krawczyk, F. Javier Rey Martinez, Eloy Velasco Gomez</u> <i>Improved performance of a PV integrated ventilated façade at an existing nZEB</i>
3.	<u>Andrzej Gajewski</u> <i>Energetic efficiency of groundwater source heat pump and ground one in Białystok</i>
4.	<u>Tomasz Cholewa, Alicja Siuta-Olcha</u> <i>On the use of residential thermal stations in different types of buildings</i>
5.	<u>Vilūnė Lapinskienė, Violeta Motuziene, Artur Rogoza</u> <i>The assessment of building energy functionality in the integrated building design</i>
13.00 – 14:15	PLENARY SESSION 2 - Conference room 2/37 CNK, 2nd floor Session Chairs: Assoc. Prof. Valdone Suskevici, Assoc. Prof. Wojciech Dąbrowski, Assis. Prof. Ewa Puszczalo
1.	<u>Marta Wiśniewska</u> <i>Using the Multi Rae Pro gas detector to monitor odour emissions from biogas plants processing municipal waste.</i>
2.	<u>Rasa Tumaševičiūtė</u> <i>Valorisation of anaerobic digestate from biowaste to high value bioproducts</i>
3.	<u>Bartosz Stanisław Bednarz</u> <i>Numerical verification of the thickness of GRP panels for modernization of large-diameter sewage collectors with non-circular cross-sections</i>
4.	<u>Nicole Nawrot, Ksenia Pazdro, Jolanta Walkusz-Miotk, Karolina Madej-Lukowicz, Ewa Wojciechowska</u> <i>Spatial and vertical distribution analysis of heavy metals with potential sources analysis in urban retention tanks sediments: case study of Strzyża Stream</i>
5.	<u>Dominik Terefinko, Anna Patrycka Dzimitrowicz, Paweł Pohl, Piotr Cyganowski, Piotr Jamroz</u> <i>Application of polymeric nanocomposite for catalytic degradation of methylene blue from the wastewaters</i>
14:15 - 14:30	SUMMARY OF A FIRST DAY Aula CNK, ground floor
14:30 - 16:00	LUNCH - RESTAURANT POD HERBEM (WIEJSKA STREET 49)
16:00 - 19:30	BIAŁYSTOK SIGHTSEEING GUIDED TOUR (START POINT- RESTAURANT)
19:30	DINNER - RESTAURANT IN A CITY CENTER (KAWELIN, LEGIONOWA STREET 10)
THUERSDAY 23.05.2019	
9.00 - 10.00	PZiTS GALA MEETING – results of a competition for the best bachelor and master thesis Aula CNK (LIBRARY BUILDING)
10:00 - 10.30	KEYNOTE TALK Active solar space heating and cooling - innovative solutions Assoc. Prof. Dorota Chwieduk, Warsaw University of Technology

POSTER SESSION 2 COFFEE BREAK PRESENTATION OF VIPSKILLS INTELLECTUAL OUTPUTS <i>Aula CNK, HALL ground floor</i> Assoc. Prof. Iwona Skoczko, Assoc. Prof. Dorota Krawczyk, Assist. Prof. Anna Siemieniuk	
1.	<u>Dominik Mroczko, Izabela Zimoch</u> <i>The use of zeta potential measurement in surface water coagulation process optimization</i>
2.	<u>Nataliia Olha Kozydra, Mariusz Adamski, Vasyl Zhelykh</u> <i>Methods of calculating the individual heating costs in multi-family buildings in selected countries</i>
3.	<u>Weronika Rogowska</u> <i>Main sources of microplastics pollutants in the water environment</i>
4.	<u>Paweł Kondzior, Damian Tyniecki, Andrzej Butarewicz</u> <i>Influence of color temperature of white LED diodes and illumination intensity on the content of photosynthetic pigments in <i>Chlorella vulgaris</i> algae cells</i>
5.	<u>Piotr Bara, Mariusz Adamski</u> <i>Test results of horizontal axis wind turbine</i>
6.	<u>Anna Lempart, Edyta Kudlek, Mariusz Dudziak</u> <i>Identification of micropollutants occurring in swimming pools</i>
7.	<u>Eliza Hawrylik</u> <i>The use of ultrasounds in improving the sanitary quality of sewage sludge</i>
8.	<u>Kamil Świetochoowski</u> <i>Water losses and failure rate in the urban-rural water supply system</i>
9.	<u>Marzena Jedrys-Wolska, Irena Korus</u> <i>Purification of colored aqueous solutions in the adsorption process on magnetite modified with polymers</i>
10.	<u>Aneta Szymajda, Grażyna Łaska</u> <i>The effect of moisture and ash on the caloric value of cow dung biomass</i>
11.	<u>Iwona Barszczewska</u> <i>Methods of calculations of water systems.</i>
12.	<u>Magdalena Dolżyńska, Sławomir Obidziński, Małgorzata Kowczyk-Sadowy, Małgorzata Krasowska, Krzysztof Karczewski, Dorota Józwiak, Radosław Buczyński</u> <i>Pressure agglomeration process of bakery industry waste</i>
13.	<u>Paweł Puzowski, Iwona Skoczko</u> <i>Water treatment systems in small cities</i>
14.	<u>Maciej Mrowiec, Emil Kuliński, Tomasz Herczyk</u> <i>The effects of pressure control and meteorological parameters on the failure rate of a water - pipe network</i>
15.	<u>Michał Adameczak, Gabriela Kamińska, Jolanta Bohdziewicz</u> <i>Application of waste polymers as raw material for ultrafiltration membranes preparation</i>
16.	<u>Aleksandra Świetlicka, Agnieszka Środa, Violetta Kozik, Andrzej Bąk, Krzysztof Barbusiński, Adam Smoliński</u> <i>Electrochemical corrosion monitoring in low conductive fluid: Pilot-scale study on sulfolane corrosion potential</i>
17.	<u>Paulina Zielinko, Dorota Anna Krawczyk</u> <i>Indoor Air Quality in the antenatal classes – a case study</i>
18.	<u>Agnieszka Środa</u> <i>The use of advanced and innovative methods of removing pharmaceuticals from wastewater in order to effectively protect aquatic ecosystems</i>
19.	<u>Monika Wysocka</u> <i>Examination of particulate matter concentration in an apartment in a multi-family building</i>
20.	<u>Patrycja Parnicka, Adrianna Zaleska-Medyńska</u> <i>The effect of the metal type on luminescence and photocatalytic properties of lanthanide-organic frameworks-modified titania</i>
21.	<u>Dawid Łapiński, Józefa Wiater</u> <i>Comparison of chemical composition of natural fertilizers and organic waste</i>
22.	<u>Wioleta Saczko, Małgorzata Krasowska</u> <i>The concept of garden management with backyard hydrophyte sewage treatment plant</i>

23.	<u>Kacper Jermacz, Andrzej Gajewski</u> <i>Indoor air quality in an auto repair shop-case study</i>
24.	<u>Joanna Oksiuta</u> <i>Systems of waste water treatment on rural areas.</i>
25.	<u>Patrycja Sobczak, Agata Rosińska</u> <i>Simultaneous quantification of chosen organic micropollutants in drinking water</i>
27	<u>VIPSKILLS project students</u> <i>PRESENTATION OF RESULTS OF SUMMER SCHOOL -TEAM 1, TEAM 2, TEAM 3, TEAM 4, TEAM 5, TEAM 6, TEAM 7, TEAM 8</i>
11.30 - 13.00	PLENARY SESSION 3 - Aula CNK, ground floor Session Chairs: Assoc. Prof. Siuta-Oлча, Assoc. Prof. Violeta Motuziene, Assoc.Prof. Elżbieta Wolejko
1.	<u>Jolanta Kozak, Maria Włodarczyk-Makula</u> <i>The use of sodium percarbonate in the modified Fenton reaction</i>
2.	<u>Kamil Rawski</u> <i>Greenery planning for improvement of urban air quality – a review</i>
3.	<u>Emilia Stańkowska, Agnieszka Włodyka-Bergier, Dominika Gajewska</u> <i>Quality of swimming pool water in the context of hygienic behaviour of swimming pool users</i>
4.	<u>Sara Sewastianik, Andrzej Gajewski</u> <i>Carbon dioxide emissions of ground heat pump for a detached house</i>
5.	<u>Magdalena Stolarska</u> <i>Problems with indoor air quality in multifamily buildings</i>
11.30 - 13.00	PLENARY SESSION 4 - Conference room 2/37 CNK, 2nd floor Session Chairs: Prof. Rafal Milaszewski, Prof. Assos. Edyta Kudlek, Assoc.Prof. Dariusz Andraka
1.	<u>Gracja Fijałkowska, Malgorzata Wiśniewska, Katarzyna Szewczuk-Karpisz</u> <i>Studies of the cationic polyacrylamide adsorption on the montmorillonite surface in the presence of lead(II) ions</i>
2.	<u>Grzegorz Jarnuszewski</u> <i>Assessment of the water environment quality in a small agricultural catchment (Gowienica Miedwiańska)</i>
3.	<u>El Khalil Cherif, Farida Salmoun, Nordine Nouayti</u> <i>Sources of Bathing Water Pollution in the West Coast of Tangier, Morocco: Effects of Industrial Zones</i>
4.	<u>Marek Król, Mariusz Dudziak</u> <i>Determination of organic micropollutants in water using gas chromatography-mass spectrometry</i>
5.	<u>Kamil Suder, Karol Plesiński, Artur Radecki-Pawlik</u> <i>Three-dimensional velocity measurements of water flow along the large-pool pass on Trzebuńka stream</i>
6.	<u>Patrycja Wilczewska, Aleksandra Bielock-Gieldoń, Agnieszka Fiszka-Borzyszkowska, Aleksandra Pieczyńska, Ewa Maria Siedlecka</u> <i>Influence of ionic liquids assisted synthesis on morphology and photocatalytic properties of Bi4O5Br2</i>
13.00 - 13.30	CLOSING CEREMONY
13.45	LUNCH



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