


Schedule of the XI International Scientific Conference Environmental Engineering -Through A Young Eye Innovations –Sustainability –Modernity –Openness

Program Thursday 26 May 2022

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| | <p>Lecture Hall C Inno-Eko-Tech <i>Aula C Inno-Eko-Tech</i></p> |
| 9.00 | <p>PZITS Award Ceremony for the Best Diploma Thesis in the discipline of Environmental Engineering, Mining, and Energetics</p> <p><i>Ceremonia Nagród w konkursie PZITS na najlepszą pracę dyplomową z dyscypliny Inżynieria Środowiska, Górnictwo i Energetyka</i></p> <p>Dr Ewa Szatyłowicz</p> |
| 9.45 | <p>Opening of the Conference <i>Otwarcie konferencji ISMO XI</i></p> <p>Prof. Iwona Skoczko, Prof. Dorota Anna Krawczyk <i>Conference Chairwomen</i></p> |
| 10.00 | <p>Keynote Lecture Cooper-based redox mediators – from the living matter to the man-made materials Dr Paulina Walencik</p> |
| 10.30 | <p>Coffee break and poster session <i>Sesja posterowa i przerwa kawowa</i></p> |
| 11.30 | <p>Polish-Spanish-Lithuanian strategic partnership of 3 European Universities and results of its project “GLOCAL – innovative training of future engineers responding to problems of contemporary cities” (Erasmus+ 2019-1-KA203-065654) realised in Białystok, Madrid and Klaipeda</p> <p>Dr Dorota Gawryluk, Mgr Kamil Rawski <i>Białystok University of Technology, Poland</i></p> <p>1st Glocal summer school through of the students eays Master student Aleksandra Jankowska, Master student Małgorzata Kiryłowicz <i>Białystok University of Technology, Poland</i></p> <div style="text-align: center;">  <p>GLOCAL - innowacyjne kształcenie przyszłych inżynierów odpowiadające na problemy współczesnych miast</p> <p>GLOCAL - innovative training of future engineers responding to problems of contemporary cities</p> <p>GLOCAL Erasmus+ 2019-1-PL01-KA203-065654</p> </div> |



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| | Lecture Hall C Inno-Eko-Tech <i>Aula C Inno-Eko-Tech</i> | Room WB34 <i>Sala WB34</i> |
| 12.15 | The dilemma of emerging pollutants in water Mohamed Ibrahim Garalalm Rashed Alkalla <i>Mansoura University, Egypt</i> | Hydropower in Bhutan Yeshe Seldon <i>Jigme Namgyel Engineering College, Royal University of Bhutan, Bhutan</i> |
| 12.45 | Fundamentals of Biohydrogen Production and Advances in Technology Serkan Eker <i>Dokuz Eylul University, Türkiye</i> | People participation developing countries in enhancing the environmental quality of a city Bambang Soemardiono <i>Institut Teknologi Sepuluh Nopember (ITS), Indonesia</i> |
| 13.15 | The Potential of Renewable Energy Sources in Turkey and The Production of Hydrogen Energy from Waste Ebru Çokay <i>Dokuz Eylul University, Türkiye</i> | The olive oil extraction process <i>Muço Marinela</i> University of Vlora 'Ismail Qemali' Albania |
| 13.45 | Discussion and summary | Discussion and summary |
| 14.15 | GLOCAL round table discussion, project networking | |

Poster session

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| 1 | Investigation of Thermal Bridges of a New High-Performance Windows Installation Using 2-D and 3-D methodology <u>Jolanta Šadauskienė</u> , Juožas Ramanauskas, Dorota Anna Krawczyk, Eglė Klumbytė, Paris A. Fokaides |
| 2 | Water and wastewater management in small tanning facility <u>Maciej Dziadel</u> , Katarzyna Ignatowicz |
| 3 | Antioxidant studies of rosmarinic acid and its complexes with zinc and copper in experimental and theoretical approach <u>Monika Parcheta</u> , Renata Świśtocka, Włodmierz Lewandowski |
| 4 | Estimation of sulfur dioxide emissions in an automatic boiler with a retort burner in a single-family house for coal and biomass based on the measurement of the heat consumed <u>Anna Aleksiejczuk</u> , Tomasz Teleszewski |
| 5 | Calibration of the hydraulic model based on hydrant tests <u>Martyna Świętochowska</u> , Izabela Bartkowska |
| 6 | Energy balances for nZEB modular buildings Vasyl Zhelykh, Yurii Furdas, <u>Mariusz Adamski</u> , Maksym Rebman |
| 7 | Study of antioxidant properties of zinc and manganese complexes with phenolic acids <u>Natalia Kowalczyk</u> , Grzegorz Świdorski |
| 8 | Analysis of the potential of effective microorganisms in plant production <u>Anna Piotrowska</u> , Dariusz Boruszko |
| 9 | Analysis of the state of air pollution with the particulate matter in the town of Supraśl <u>Marta Iwona Bolińska</u> , Anna Siemieniuk |
| 10 | Application of multi-criteria analysis in the EIA <u>Natalia Taraszkiewicz</u> |





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| 11 | Management of waste from the dairy industry for energy purposes <u>Paweł Cwalina</u> , Sławomir Obidziński, Małgorzata Kowczyk-Sadowy, Magdalena Joka-Yildiz, Gabriel Siegień |
| 12 | Heat pump market in Poland in recent years <u>Agata Ottarzewska</u> , Dorota Anna Krawczyk |
| 13 | Derivatives of tannic acid as effective antioxidants <u>Monika Borkowska</u> , Monika Kalinowska |
| 14 | Operating costs of air and ground source heat pumps <u>Robert Aleksander Sakowicz</u> , Anna Justyna Werner-Juszczuk |
| 15 | Toxicity assessment of sewage sludge from municipal sewage treatment plants <u>Eliza Hawrylik</u> , Andrzej Butarewicz, Marzanna Andraka |
| 16 | Air monitoring system based on unmanned aerial vehicle powered from the ground Wojciech Walendziuk, <u>Maciej Słowik</u> , Małgorzata Gulewicz |
| 17 | Bio-applications of metal phenolic networks as functional coatings for drug delivery: a short review <u>Ewelina Gołębiewska</u> , Monika Kalinowska |
| 18 | Assessment and analysis of PM10 and PM2.5 dust concentration on the campus of the Białystok University of Technology <u>Gökçe Edizsoy</u> |
| 19 | The influence of the magnetic field on water treatment in various filter beds <u>İclal Yanasik</u> |
| 20 | Comparison of the quality of filtered water in a filter jug for household water purification <u>Oyanur Ozturk</u> |
| 21 | Agricultural biogas plant - an important element of the circular economy <u>Sławomir Łazarski</u> , Andrzej Butarewicz, Marzanna Andraka, Eliza Hawrylik |
| 22 | GLOCAL poster session: <ol style="list-style-type: none">GLOCAL: Designs of green bus stops. Current advancement of student project Alina DzidenkaGLOCAL: Cooperation process of students teams Lizaveta BelahryvayaGLOCAL: Teaching process: lectures, laboratories, design classes, workshops with producers Natalia RzepniewskaGLOCAL: Excurions in Poland to Warsaw, Łyse and Supraśl Paweł KizlingGLOCAL: Cultural and integrational events Julia ŁuczajGLOCAL: Dissemination events in Poland Kalina RolnikGlocal: Students and teachers scientific collaboration <u>Kalina Rolnik</u>, Paweł KizlingGLOCAL: Intellectual outputs of the project (books) Kalina Rolnik |



GLOCAL - innowacyjne kształcenie przyszłych inżynierów odpowiadające na problemy współczesnych miast

GLOCAL - innovative training of future engineers responding to problems of contemporary cities

GLOCAL
Erasmus+ 2019-1-PL01-KA203-065654





Program Friday 27 May 2022

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| 9.00 | Opening of the Online part of the Conference Prof. Iwona Skoczko <i>Conference Chairwoman</i> |
| 9.15 | Keynote Lecture The climate change migration challenge – difficulties and options Prof. Tobias Pröll <i>University of Natural Resources and Life Sciences, Austria</i> |
| | Oral presentation |
| 9.45 | Session 1 Renewable Energy Sources and Sustainable Development Chair: Prof. Monika Kalinowska, Dr Magdalena Joka Yildiz |
| | Application of the chemical leaching method for the recovery of Li and Co contained in spent Li-ion batteries <i>Weronika Urbańska, Magdalena Osial, Sławomir Wilczewski</i> |
| | Analysis of heat and smoke release of selected glass/polyester laminates for shipbuilding industry <i>Adriana Dowbysz, Mariola Samsonowicz, Bożena Kukfisz, Piotr Jankowski</i> |
| | Catalytic pyrolysis of low-density polyethylene <i>Fatma Defne Çalık, Güray Yildiz</i> |
| | Investigation of the effect of waste polypropylene (PP) originated metal contaminants on the pyrolysis of PP <i>Gülsün Gizem Taylan, Güray Yildiz</i> |
| | Determination of optimal pyrolysis process parameters to maximize gasoline-like renewable fuel production from polypropylene <i>Ecrin Ekici, Güray Yildiz</i> |
| | Properties of lightweight aggregates for use in construction <i>Kevin Bujnarowski, Robert Grygo</i> |
| 11.15 | Keynote Lecture Production of Diatom Based High Quality Chitin Nanofibers Dr Altan Ozkan <i>Izmir Institute of Technology, Turkey</i> |
| 11.45 | Session 2 Environmental Protection Chair: Prof. Iwona Skoczko, Dr Edyta Kudlek |
| | Pesticide industry wastewater treatment with photo-fenton process <i>Ebru Cokay, Serkan Eker</i> |
| | Growth of plant biomass in the presence of washings from swimming pool facilities: selected indicators in the context of the possibility of wastewater recycling <i>Edyta Łaskawiec</i> |
| | Prioritization of Specific Pollutants in the scope of EU Water Framework Directive in Turkey <i>Serkan Eker, Ebru Cokay</i> |
| | Comparison of MTT and Cell-TiterGlo tests applied for cytotoxicity evaluation of compounds from the group of polyphenols <i>Piotr Malinowski, Klaudia Skała, Agata Jabłońska-Trypuć, Agata Koronkiewicz, Elżbieta Wołejko, Urszula Wydro, Grzegorz Świdorski, Włodzimierz Lewandowski</i> |





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| | The application of nanoadsorbents in wastewater treatment <u>Kamila Gryko</u> , <u>Monika Kalinowska</u> , <u>Grzegorz Świderski</u> |
| 13.00 | Session 3 Heating, Ventilation and Air Conditioning Chair: Prof. Dorota Krawczyk, Prof. Antonio Rodero Serrano |
| | Evaluating buildings green retrofitting to improve urban environment at district level <u>Cecilia Ciacci</u> , <u>Neri Banti</u> , <u>Vincenzo Di Naso</u> , <u>Frida Bazzocchi</u> |
| | Comparison of global water consumption in adiabatic and air-cooled condensers <u>Jaime Illera-Riesgo</u> , <u>Ana Tejero González</u> , <u>Manuel Andrés-Chicote</u> |
| | Test bench for complete characterization of evaporative cooling pads <u>Ana Tejero-González</u> , <u>Asmae Boubkari</u> , <u>Mercedes Simón-Caicoya</u> , <u>Eric A. Sánchez-Noriega</u> |
| | Environmental and water-use efficiency for indirect evaporative coolers in Southern Europe <u>María Jesús Romero-Lara</u> , <u>Francisco Comino</u> and <u>Manuel Ruiz de Adana</u> |
| | Ecodesing strategies for reducing environmental impact on solar HVAC systems <u>Jesús Castillo-González</u> , <u>Francisco Comino</u> , <u>Francisco J. Navas-Martos</u> , <u>Manuel Ruiz de Adana</u> |
| | Optimization of selected parameters of the elements of a single-family house with estimation of their contribution to energy saving <u>Walery Jezierski</u> , <u>Beata Sadowska</u> |
| 14.15 | Summary and closing of the Conference |

