

8.12.2021 – 1 day of Conference
Central European Time (CET)

10.30 – 12.15 Plenary session “Green Deal Strategies” [in English]

Marzena Smol, Mineral and Energy Economy Research Institute, Polish Academy of Sciences, Poland
Introduction – Importance of Green Deal Strategies in the 21st century

Magdalena Wdowin, Mineral and Energy Economy Research Institute, Polish Academy of Sciences, Poland
Importance of the Circular Economy in the Green Deal Strategies

Bertrand Vallet, Senior Policy Advisor, EurEau, Belgium
Water in the Green Deal Strategies

Eric Pirard, University of Liège, Belgium
Raw Materials in the Green Deal Strategies

Wojciech Nowak, AGH University of Sciences and Technology, Poland
Energy in the Green Deal Strategies

Maciej Woszczyk, EU Policy Advisor, NCBR Office in Brussels/Business & Science, Poland - Belgium
Financing the Green Deal

8 December 2021

12.30-15.00 Parallel Sessions: Sustainable and Circular Waste Management [in English]

Chairs of the session: Dr. Dariusz Włóka, Research and Development Center, GreenBack Ltd., Poland

Juris Burlakovs, Maris Klavins, University of Latvia, Latvia
Humic Substances and their Role in Waste Management

Md. Zia ul haq, Hemant Sood, NITTTR Chandigarh, India
Sustainable approach towards waste usage in brick development

Ausrine Vitkute, Jolanta Dvarioniene, Kaunas University of Technology, Lithuania
Assessing the contribution of high-density polyethylene recovery from residual household waste for the transformation towards the circular economy and sustainable development

Edyta Strzelec, University of Science and Technology, Poland
Fermentation as a way of glycerin waste management towards the production of lactic acid - PLA mer

Apurva Goel, Independent Researcher, India
India on Circular Economy and E-waste Management

Ayoub Haouas, Anas Tallou, Fatima Ezzahraa El Minaoui, Soumia Amir Université Sultan Moulay, Morocco
Evaluation of the fertilizing capacity of composts produced from bio-waste and phosphate additive in deficient soils

Anas Tallou, Ayoub Haouas, Sultan Moulay Slimane University of Beni Mellal, Morocco; Francisco Pedrero Salcedo, Campus Universitario de Espinardo, Spain; Faissal Aziz, National Centre for Research and Study on Water and Energy (CNEREE) University Cadi Ayyad, Morocco
Application of biofertilizers on tomatoes: targeting Circular economy

Beata Pospiech, Czestochowa University of Technology, Poland
Application of polymer inclusion membranes for the selective removal of copper from model leach liquors of waste printed circuit boards (PCBs)

Adam Nawrocki, Warsaw University of Life Science, Poland
Lawns vs meadows. What is better to accumulation particulate matter in an urbanized area?

8 December 2021
13.00-15.00 **Parallel Sessions** [in English]
PhosV4 Workshop
Our Phosphorus Raw Materials. Our Food. Our Future - V4's resilience in the face of pandemic

Marzena Smol, Mineral and Energy Economy Research Institute, Polish Academy of Sciences, Poland
Phosphorus raw materials in the Visegrad Group (V4) countries – PhosV4 project

Jiří Jaromír Klemeš, Brno University of Technology
Presentation of Partner

Peter Chrabak, Bay Zoltán Nonprofit Ltd. for Applied Research
Presentation of Partner

Zuzana Šimková, Technical University of Kosice
Presentation of Partner

Eugeniusz Koda, Warsaw University of Life Sciences - SGGW
Presentation of Partner

Ludwig Hermann, President of the European Sustainable Phosphorus Platform (ESPP), Proman Management GmbH
Importance of Phosphorus raw materials - current trends and future perspectives

Dominika Szoldrowska, Division of Biogenic Raw Materials Mineral and Energy Economy Research Institute, Polish Academy of Sciences & Anna Podlasek, Warsaw University of Life Sciences - SGGW
Phosphorus raw materials in Poland

Jiří Jaromír Klemeš, Brno University of Technology
Phosphorus raw materials in Czech Republic

Peter Chrabak, Bay Zoltán Nonprofit Ltd. for Applied Research
Phosphorus raw materials in Hungary

Tomáš Bakalár, Technical University of Kosice
Phosphorus raw materials in Slovakia



8 December 2021
15.15-17.00 **Parallel Session: Energy in Green Deal** [in English]

Chair of the session: Dr. Beata Szatkowska, Aquateam COWI, Norway-Poland

Maciej Mróz, Warsaw School of Economics, Poland
The impact of coal prices on wind-power-related metal prices

Katarzyna Daniluk, University of Lodz, Poland
Financing Green Deal and Effectiveness of Investment in Renewable Energy Stocks in Poland

Bartosz Sobik, SGH Warsaw School of Economics, Poland
Investment in the shift towards green energy in Poland - selected aspects of energy security and energy prices

Dagmara Dragan, Adam Mickiewicz University, Poland; Pablo Benalcazar, Mineral and Energy Economy Research Institute of the Polish Academy of Sciences, Poland
Green hydrogen production in Poland: Strategic and legal perspectives

Meryem Taoufik, Ahmed Fekri, Hassan II University of Casablanca, Morocco
Solar-Hydrogen System Site Selection using a GIS-MCDM-based Approach with an Application in Souss Massa Region/Morocco

Hadi Pirasteh-Anosheh, Gholamhassan Ranjbar, National Salinity Research Center, Agricultural Research, Education and Extension Organization, Iran; Piotr Hulisz, Nicolaus Copernicus University, Poland
Seawater greenhouse, a sustainable system for using renewable energy

Przemysław Ogarek, Mariusz Ruszel, Adam Masłoń, Rzeszow University of Technology, Poland
Comparative analysis of support tools for biogas plants development based on the example of selected European countries

Arturas Torkelis, Irina Kliopova, Kaunas University of Technology, Lithuania
Energy efficiency solutions in end-of-life tyres recycling process: case study in Lithuania

8 December 2021

15.15-17.30 Parallel Session: Toxic-free environment [in English]

Chair of the session: Prof. Maris Klavins, University of Latvia, Latvia & Prof. Majeti Narasimha Vara Prasad, University of Hyderabad, India

Dariusz Włóka, Research and Development Center, GreenBack Ltd., Poland
The innovative method for the lakes and ponds remediation

Hemen Deka, Gauhati University, India
Leucas aspera in crude oil polluted soil: enzymatic defense of the herb and changes in soil properties

Edyta Kudlek, Mariusz Dudziak, Silesian University of Technology, Poland
Determination of compounds of emerging concern in surface water from agricultural land

Prasenjit Ghosh, NIT Tiruchirappalli, India; Suparna Mukherji Environmental Science and Engineering Department, IIT Bombay, Mumbai
Development of methods for identification and quantification of fluorene, carbazole, dibenzothiophene and various indigenous PAHs and heterocyclics in petroleum refinery wastewater for monitoring their degradation by Pseudomonas aeruginosa RS1

Katarzyna Zatorska, Kielce University of Technology, Poland
Research and evaluation of the effectiveness of the developed design solution of a hybrid filter limiting the emission of dust from fireplaces and low-power solid fuel heating boilers

Nurul Umairah Mohd Nizam, Marlia M. Hanafiash, Ebrahim Mahmoudi, Abdul Wahammad, University Kebangsaan Malaysia, Malaysia
Removal of Dyes and Cadmium using Graphene Oxide by NaOH and H₂SO₄ Activation: Isotherm and Kinetic Studies

9.12.2021 – II day of Conference
Central European Time (CET)

9.00-11.00 Parallel Session - Cross-H2020-seminar LEX4BIO & FERTIMANURE “Bio-based fertilizers of the Future” [in English]

Chair of the session: Prof. Dr. Marzena Smol, Mineral and Energy Economy Research Institute, Polish Academy of Sciences, Poland

Kari Ylivainio, Natural Research Institute Finland (LUKE), Finland
LEX4BIO project - goals and assumptions



Supta Das, Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, Netherland

Concentrations of organic contaminants in bio-based fertilizer treated soil

Marzena Smol & Katarzyna Kraj, Mineral and Energy Economy Research Institute, Polish Academy of Sciences (MEERI), Poland

Barriers and drivers for usage of bio-based fertilisers - perspective of stakeholders

Laila Llenas Argelaquet, BETA Technological Centre, UVIC-UCC

FERTIMANURE project - goals and assumptions

Nagore Guerra Gorostegi, BETA Technological Centre, UVIC-UCC

FERTIMANURE Spanish on-farm pilot. Recovery of bio-based fertilisers from pig slurry

Oscar Schoumans, Wageningen University & Research

FERTIMANURE Dutch on-farm pilot. Recovery of bio-based fertilisers from cattle manure



9 December 2021

9.00-11.15 Parallel Session: Water Resources Management [in English]

Chairs of the session: Prof. Alexandros Stefanakis, School of Environmental Engineering, Technical University of Crete, Greece

Rimene Dhahri, University of Gafsa, Tunisia; Younes Moussaoui, University of Sfax, Tunisia

Adsorption kinetics, isotherm and reusability studies for the removal of cationic dye from aqueous medium using activated carbon

Anna Podlasek, Eugeniusz Koda, Aleksandra Jakimiuk, Warsaw University of Life Sciences, Poland; Magdalena Daria Vaverková, Warsaw University of Life Sciences, Poland; Mendel University in Brno, Czech Republic

Study on Temporal and Areal Variability of Pollution Indicators in Groundwater nearby the Landfill

Dominika Piwowarska, UNESCO Chair on Ecohydrology and Applied Ecology, University of Lodz, Poland; Edyta Kiedrzyńska, European Regional Centre for Ecohydrology of the Polish Academy of Sciences, UNESCO Chair on Ecohydrology and Applied Ecology, University of Lodz, Poland

The use of ecohydrological biotechnologies and NBS for the elimination of xenobiotics from the aquatic environment

Yuliia Trach, Warsaw University Life Sciences – SGGW, Poland, National University of Water and Environmental Engineering, Ukraine; Victor Melnychuk, National University of Water and Environmental Engineering, Ukraine; Roman Trach, Warsaw University of Life Sciences, Poland

The Removal of Cationic and Anionic Pollutions from Water Solutions Using Ukrainian Limestones: Comparative Analysis

Kinga Rybak-Niedziółka, Agnieszka Starzyk, Warsaw University of Life Sciences, Poland; Magdalena Grochulska-Salak, Warsaw University of Technology; Janusz Marchwiński, University of Ecology and Management

Sponge City – the rainwater management concept in Polish cities / Sponge City

Michał Preisner, Mineral and Energy Economy Research Institute, Polish Academy of Sciences, Poland

Eutrophication mitigation strategies – environmental effects of taken measures in terms of water resources protection

Magdalena Grochulska-Salak, Warsaw University of Technology, Poland; Kinga Rybak-Niedziółka, Warsaw University of Life Sciences, Poland

Water Retention in the Process of Re-urbanization - planning for urban resilience and sustainable urban landscape

Ayla Novruzova, University of Maria-curie Sklodowska in Lublin, Poland

Climate Change Impacts on Water Resources

9 December 2021

11.30-13.45 Parallel Sessions: Wastewater and Sludge Management [in English]

Chairs of the session: Prof. Mika Horttanainen, Lappeenranta-Lahti University of Technology, Finland

Jolita Kruopienė, Miglė Žiukaitė, Kaunas University of Technology, Lithuania
Circularity of wastewater sector in Lithuania

Małgorzata Cimochowicz-Rybicka, Stanisław Rybicki, Tadeusz Żaba, Cracow University of Technology, Poland
Characteristics of sewage sludge thermal processing - Kraków WWTP case study

Dominika Poproch, Bartosz Łuszczek, Krakow Water JSC, Poland; Justyna Górka, Małgorzata Cimochowicz-Rybicka, Cracow University of Technology, Poland
Sludge management in the wastewater treatment plant – Kraków-Płaszów case study

Khalisah Khairina Razman, M. M. Hanafiah, A. W. Mohammad, A. W. Lun, Universiti Kebangsaan Malaysia, Malaysia
Evaluating environmental performance of membrane-based wastewater treatment system

Rupak Kumar, CDSCO, India; Eyal Kurzbaum, University of Haifa, Israel
Olive Mill Wastewater Isolate for its Bioprospect to the Production of Laccase and the Removal of Phenolic Compound

EIMoll Ahmad, Lebanese University, Lebanon
Sustainable and Circular Management of Wastewater in Eastern Mediterranean Region under the Current Climate Changes

Mohammad-Hosein Mozaffari, Montana State University, Montana, USA; Alexandros Stefanakis, Laboratory of Environmental Engineering and Technology, School of Chemical and Environmental Engineering, Technical University of Crete, Greece
A novel aerobic constructed wetland for oil refinery wastewater treatment and reuse

Agnieszka Solińska, Tomasz Bajda, AGH University of Science and Technology in Cracow, Poland
Application of low-cost materials as the sorbent for removal of pharmaceuticals from contaminated water

9 December 2021

11.30-13.30 Parallel Sessions: Environmental Sustainability [in English]

Chairs of the session: Prof. Idiano D'Adamo, Sapienza University of Rome, Italy & Dr. Anna Avdiushenko, Jagiellonian University, Poland

Ewelina Lopata, Krzysztof Rogatka, Aleksandra Lewandowska, Tomasz Starczewski, Mateusz Kowalski, Nicolaus Copernicus University in Toruń, Poland
Perception of sustainable development by generation Z. Experience from Poland

Ewelina Antonowicz, Sustainable Fashion Institute, Fashion Revolution, Poland; Małgorzata Roge-Wiśniewska, University Centre for Environmental Studies and Sustainable Development, University of Warsaw, Poland
Sustainability indicators - water, raw materials and energy in the fashion industry based on practices of global fashion brands

Pınar Kocabey Çiftçi, Gaziantep University, Turkey; Emrah Çiftçi, Taha Chemistry & Cosmetics, Gaziantep, Turkey
A Framework for Sustainability of Personal and Home Care Products Manufacturers with Circular Economy and Green Deal Perspectives

Karol Langie, Kinga Rybak-Niedziółka, Warsaw University of Life Sciences – SGGW, Poland
Principles of designing water elements locations in public space composition

Anna Gierek-Ożóg, Małgorzata Cimochoicz-Rybicka, Tadeusz Żaba, Cracow University Of Technology, Polska; Marek Przytulski, Veolia Energia Polska S.A.

The role of risk assessment and water safety plans in environmental management

Rambabu Lavuri, Institute of Public Enterprise, India

Factors influencing millennial purchase intention of green products: Using theory of planed behavior

Kinga Kimic, Martyna Otręba, Warsaw University of Life Sciences – SGGW, Warsaw, Poland

Assessment of blue and green infrastructure solutions in shaping residential areas – spatial and functional aspects

Dimitrios Dimitriou, Aristi Karagkounia, Democritus University of Thrace, Greece

Airport's Sustainability Strategy: A Circular Economy Comprehensiveness Evaluation Framework

Weronika Muszyńska, Doctoral School of the Warsaw School of Economics, Poland

Green human resource management - the importance of the concept in the light of own research

9 December 2021

14.00-16.00 Parallel Sessions: MonGOS Seminar "Water in Circular Economy" [in English]

Chair of the session: Prof. Dr. Marzena Smol, Mineral and Energy Economy Research Institute, Polish Academy of Sciences (MEERI), Poland

Marzena Smol, Mineral and Energy Economy Research Institute, Polish Academy of Sciences (MEERI), Poland
Management of water and wastewater in the circular economy – basic inf on MonGOS

Michał Bodzek, Institute of Fundamentals of Environmental Engineering of the Polish Academy of Sciences, Poland

The use of nanoparticles in water and wastewater technology



Karolina Kmak, Schwander Polska, Poland

Reuse of water - production of artificial snow in the winter season and irrigation of green areas in the summer season

Marco de La feld & Giuseppe Salvio from ENCO S.R.L.

A circular economy approach to turn wastewater into added-value products in agriculture

Arek Stachurski, Nijhuis Industries Central Europe Engineering Support & Services Sp. z o.o.

Water reuse from industrial wastewater in practice

Bartosz Łuszczek, Cracow Waterworks, Poland

Recovery of phosphorus from waste generated in municipal wastewater treatment plant – INTOPHOS project

Arabel Amann, TU Wien, Austria

Sustainable strategies towards phosphorus management in Austria

Klara Ramm, EurEau

Importance of education and key competences for the implementation of CE in the water and wastewater sector

9 December 2021

14.00-16.00 Parallel Sessions: Research and Implementation of Innovation [in English]

Chair of the session: Dr. Edyta Kudlek, Silesia University of Technology, Poland

Iolanda-Veronica Ganea, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania, "Babeş-Bolyai" University, Romania; Alexandrina Nan, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania; Călin Baci, "Babeş-Bolyai" University, Romania

New Crosslinked Eco-Friendly Polymer for Environmental Applications

Ahmed El Moukhtari, Sultan Moulay Slimane University, Sorbonne Université, Morocco; Institut d'Ecologie et Sciences de l'Environnement de Paris, France; Arnould Savoure, Sorbonne Université, Institut d'Ecologie et Sciences de l'Environnement de Paris, France; Mohamed Farissi, Laboratory of Biotechnology & Sustainable Development of Natural Resources, Sultan Moulay Slimane University, Morocco
How does exogenous silicon attenuate salinity-induced oxidative stress in Medicago sativa-rhizobia symbiosis?

Izabela Kielb-Sotkiewicz, Doctoral School of Engineering and Technical Sciences at the Rzeszow University of Technology, Poland
Application of Flow Cytometry in environmental tests

Mariana S. T. Amandio, CIEPQPF, University of Coimbra & CICECO - Aveiro Institute of Materials, University of Aveiro, Portugal; Ana M.R.B. Xavier, CICECO - Aveiro Institute of Aveiro, Portugal; Jorge M.S. Rocha, CIEPQPF, University of Coimbra, Portugal
Valorization of eucalyptus bark for cellulosic ethanol production

Oskars Purmalis, Linards Klavins, Maris Klavins, University of Latvia, Latvia
Utilization approaches of invasive plants species

Konstantin Born, University of Oxford - Smith School of Enterprise and the Environment, UK
Innovating with nature in mining: Why is adoption of nature-based technologies in the mining sector so limited?

Sailaja V. Elchuri, Lakshmi Badrinarayanan, Vision Research Foundation, Sankara Nethralaya, India; Dhanashree Ratra, Sankara Nethralaya, India
COVID 19 Pandemic and Eye diseases

10.12.2021 - III day of Conference
Central European Time (ECT)

9.00-11.30 Parallel Sessions: Ochrona Środowiska [in Polish]

Chairs of the session: Dr. Renata Tomczak-Wandzel, Aquateam COWI, Norway-Polska & Prof. Agnieszka Sobczak-Kupiec, Cracow University of Technology, Poland

Agnieszka Piotrowska-Kirschling, Joanna Brzeska, Uniwersytet Morski w Gdyni, Polska
Zwięzłe wprowadzenie do wykorzystania środowiskowej oceny cyklu życia w ekoprojektowaniu nowych materiałów poliuretanowych

Natalia Rudnicka, Uniwersytet w Białymstoku, Polska
Oszczędzanie wody i używanie naturalnych detergentów jako forma współpracy na rzecz klimatu

Monika Czop, Małgorzata Kajda-Szcześniak, Politechnika Śląska, Polska
Ocena wymywalności substancji szkodliwych i metali ciężkich z żużla powstającego w procesie spalania odpadów komunalnych jako dodatku do betonu

Sylwia Gubernat, Politechnika Rzeszowska, Inżynieria Rzeszów S.A., Polska; Adam Masłoń, Joanna Czarnota, Piotr Koszelnik, Politechnika Rzeszowska, Polska
Usuwanie i odzysk fosforu ze ścieków z wykorzystaniem margla i trawertynu jako element gospodarki o obiegu zamkniętym

Paulina Marcinek, Marzena Smol, Instytut Gospodarki Surowcami Mineralnymi i Energią, Polska Akademia Nauk, Polska
Perspektywy rozwoju biogospodarki w Polsce

Edyta Gawrysiak, Klaudia Pawlus, Tomasz Jarosz, Politechnika Śląska, Polska
Zielone alternatywy dla przemysłowo stosowanych inicjujących materiałów wybuchowych w kontekście możliwości redukcji zanieczyszczenia środowiska metalami ciężkimi

Anna Wiktor-Sułkowska, Sylwia Lorenc, Arkadiusz Kustra, Natalia Kowalska, AGH Akademia Górniczo-Hutnicza w Krakowie, Polska
Projekt RaVeN – przykład edukacji uniwersyteckiej dla wdrażania Zielonego Ładu

10 December 2021

9.00-11.30 Parallel Sessions: Woda-Surowce-Energia [in Polish]

Chair of the session: Dr. Dariusz Włóka, Research and Development Center, GreenBack Ltd., Poland

Krzysztof Szuter, Ewa Puszczało, Ewa Łobos-Moysa, Politechnika Śląska, Polska
Porównanie technologii zmiękczenia wody wodociągowej

Jagoda Worek, Katarzyna Styszko, Anna Białas, AGH Akademia Górniczo-Hutnicza w Krakowie, Polska
Fotoliza zanieczyszczeń pochodzenia farmaceutycznego

Janusz Marchwiński, Wyższa Szkoła Ekologii i Zarządzania w Warszawie, Polska; Karolina Kurtz-Orecka, Zachodniopomorski Uniwersytet Technologiczny w Szczecinie, Polska; Agnieszka Starzyk, Szkoła Główna Gospodarstwa Wiejskiego w Warszawie, Polska
Wpływ przeszklenia atrium na bilans energetyczny budynków - studium przypadku

Marcin M. Rychlak, Mateusz L. Rychlak, Uniwersytet Jagielloński, Polska
Studium krytyczne koncepcji prawnej funkcjonowania spółdzielni energetycznych w Polsce

Bartłomiej Igliński, Uniwersytet Mikołaja Kopernika w Toruniu, Polska
Sektor polskiej energetyki wiatrowej na tle światowej energetyki wiatrowej

Anna Beczak, Szkoła Główna Gospodarstwa Wiejskiego w Warszawie, Polska
Elektrownie fotowoltaiczne mogą pozytywnie wpływać na zmiany różnorodności biologicznej na terenach przez nie zajęte

Justyna Durak, AGH Akademia Górniczo-Hutnicza w Krakowie, Polska; Politechnika Krakowska, Polska; Katarzyna Styszko, AGH Akademia Górniczo-Hutnicza w Krakowie, Polska
Hydrosy pochodne wielopierścieniowych węglowodorów aromatycznych jako nowoidentyfikowane zanieczyszczenia środowiska

Robert Kasperek, Uniwersytet przyrodniczy we Wrocławiu, Polska
Znaczenie małej energetyki wodnej w transformacji klimatyczno-energetycznej Polski

10 December 2021

12.00-13.30 Summary session "Green Deal for the Future"
Award Ceremony & Closing [in English]

Chair of the session: Prof. Dr. Marzena Smol, mineral and Energy economy Research institute, Polish Academy of Sciences (MEERI), Poland

Majeti Narasimha Vara Prasad
Treasure from toxins - Role of Plants in Environmental Decontamination

Alexandros Stefanakis, Technical University of Crete, Greece
Summary - Water

Krzysztof Szamałek, University of Warsaw, Poland
Summary - Raw Materials

Jolita Kroupiene, Kaunas University of Technology, Lithuania
Summary - Energy

Marzena Smol, Mineral and Energy Economy Research Institute, Polish Academy of Sciences (MEERI), Poland
Closing

Posters presented during the Conference

English

Iwona Zawieja, Kinga Brzeska, Czestochowa University of Technology, Poland

Influence of Fenton's Reagent on the Intensification of the Hydrolysis Phase of the Methane Fermentation of Excess Sludge and Microbiological Indicators

Ewa Wiśniowska, Czestochowa University of Technology, Poland

Potassium recovery as K-struvite – challenges and potential applications

Sergei Levchenko, International Institute of Applied Research and Technology, Germany;
Andrei Orlov, NEST Association, Bulgaria

Intelligent energy efficiency as the main trend in the construction and operation of "green" buildings

Ario Fahimi, Elza Bontempi, INSTM and Chemistry for Technologies Laboratory, Italy; Bruno Valentim, University of Porto, Portugal

Environmental assessment based on embodied energy and carbon footprint on phosphorus recovery from incinerated waste streams

Anas Driouich, University Hassan II, Morocco; Anas Tallou, Sultan Moulay Slimane University of Beni Mellal, Morocco

Optimization of eco materials synthesis by the alkaine activation of natural Moroccan metakaolin and blast furnace slag waste using mixture design

Taiana She Mir Mui, Nazem Nascimento, UNESP, Brazil

The importance of reusing water in offshore platforms

Laura Fiameni, Ario Fahimi, Claudio Marchesi, Giampiero Pasquale Sorrentino, Elza Bontempi, University of Brescia, Italy

The sustainability analysis of a zero-waste process combined with a statistical optimization: the case of rice husk poultry litter ash for phosphorous and silica recovery

Elena Neverova-Dziopak, AGH University of science and Technology, Poland; Olena Dan, MDPI Branch Office, Poland

Assessment of Metallurgical Plant Impact on the Sea of Azov

Nadia Lamsaadi, Saad Elaassali, Ahmed Ek Moukhtari, Mohamed Farissi, Sultan Moulay Slimane University, Morocco; Cherki Ghoulam, Cadi Ayyad University, Morocco

*Exogenous silicon application improves fenugreek (*Trigonella foenum-graecum* L.) tolerance to low phosphorus availability*

Inna Pitak, Arūnas Baltušnikas, Jūratė Čėsniėnė, Lithuanian Energy Institute, Lithuania; Gintaras Denafas, Lithuanian Energy Institute, Kaunas University of Technology, Lithuania

Opportunity production solid recovery fuel from refuse derived fuel and use it as an alternative fuel for the cement industry of Lithuania

Antonella Cornelio, Alessandra Zanoletti, Elza Bontempi, University of Brescia, National Interuniversity Consortium of Materials Science and Technology (INSTM), Italy; Roberto Braga, Università di Bologna, Italy

Synthesis of sustainable porous materials to improve air quality entrapping particulate matter

Justyna Cader, Renata Koneczna, Magdalena Wdowin, Piotr Olczak, Mineral and Energy Economy Research Institute of the Polish Academy of Sciences, Poland

Transition towards a circular economy: A case study of Wielkopolska region, Poland

Małgorzata Worwağ, Iwona Zawieja, Czestochowa University of Technology, Faculty of Infrastructure and Environment, Czestochowa, Poland

Influence of ultrasonic field parameters on the biochemical activity of leachates from the composting process

Dorota Babilas, Piotr Dydo, Silesian University of Technology, Poland

The application of electrodialysis in [Emim]Cl and [Omim]Cl ionic liquid recovery from wastewaters

Viesturs Ozols, Linda Ansone-Bertina, Lauris Arbidans, Maris Klavins, University of Latvia, Latvia

Metal-organic framework composite sorbents on clays for carbon capture

Jakub Copik, Edyta Kudlek, Mariusz Dudziak, Martyna Kaczmarek, Silesian University of Technology, Poland

The use of ultrasound to removal of 4-tert octylphenol by hydrogen peroxide assistance

Jamal Khmiyas, Mohammed V University in Rabat, Morocco; Douae El Khachine, Ibn Tofail University, Morocco
Characterization, physico-chemical study of municipal sewage sludge and its potential use as fertilizers: case of Tetouan city in Morocco

Wioleta Bolesta, Katarzyna Styszko, AGH Univeristy of Science and Technology, Poland; Marcin Głodniok, GIG Research Insitute Katowice, Poland

From sewage sludge to soil – sorption of pharmaceuticals

Agnieszka Bus, Agnieszka Karczmarczyk, Anna Baryła, Institute of Environmental Engineering, Warsaw University of Life Sciences, Poland

Enhanced nature-based solutions by reactive materials for protection of urban water bodies

Agnieszka Karczmarczyk, Agnieszka Bus, Anna Baryła, Institute of Environmental Engineering, Warsaw University of Life Sciences, Poland

Environmental and economic effect of upgrading of on-site wastewater treatment plant

Katarzyna Gabryś, Water Centre WULS, Warsaw University of Life Sciences, Poland

Experimental research on compressibility characteristics of recycled concrete aggregate – recycled tire waste mixtures

Anna Lempart-Rapacewicz, Edyta Kudlek, Mariusz Dudziak, Silesian University of Technology, Poland

Studies on the caffeine occurrence in swimming pool water

Krzysztof Słota, Zbigniew Słota, Silesian University of Technology, Poland

Reduction of energy costs associated with ventilation at the Queen Luisa Adit – case study

Zbigniew Słota, Krzysztof Słota, Silesian University of Technology, Poland

Impact of the revision of the legislation on limit values for nitrogen oxides on the design of ventilation in excavated tunnels – case study

Izabela Puchyrska, Robert Pacan, Piotr Sacha, Dawid Cegłowski, Cerrad Sp. z o.o., Poland

Development of an innovative, environment-friendly production technology of large-format, deeply structured ceramic tiles using a pioneering method of recycling green scraps generated at the product forming stage

Małgorzata Widłak, Robert Kowalik, Paulina Bąk-Patyna, Kielce University of Technology, Poland

LumiMARA as an indicator of water quality in the Świętokrzyskie voivodeship

Wioleta Mikucka, Magdalena Zielinska, Katarzyna Bulkowska, University of Warmia and Mazury in Olsztyn, Poland

Recovery of bioactive compounds from distillery stillage using acetone with conventional solid-liquid extraction

Marta Styś-Maniara, Edyta Nartowska, Kielce University of Technology, Poland

Management of salt hydrates from photovoltaic installations in the light of existing environmental legislation in the light of existing environmental legislation

Anna Kowalik-Klimczak, Maciej Życki, Monika Łożyńska, Bogusław Woźniak, Łukasiewicz Research Network – Institute for Sustainable Technologies, Poland; Christian Schadewell, Thomas Fiehn, Prof- und Forschungsinstitut Pirmasens e.V., Germany; Monika Flisek, Polish Chamber of Leather Industry, Poland
Towards the circular economy – An integrated system of thermal hydrolysis/membrane processes for recovery of chromium from wastes to reuse in tannery practise

Wiktoria Piątek, Monika Osińska Jaroszuk, Justyna Sulej, Maria Curie-Skłodowska University, Poland
Biotechnological perspectives of food packaging production based on biodegradable polymers

Aleksandra Kozłowska-Woszczycka, Katarzyna Pactwa, Wrocław University of Science and Technology, Poland
Social license for closure – consequences of closing mining enterprises

Justyna Dzieciół, Wojciech Sas, Andrzej Głuchowski, Water Centre, Warsaw University of Life Sciences-SGGW, Poland
Machine Learning Algorithms as a Modern Tool for Geotechnical Parameters Determination of Combustion Slag in the Context of Sustainable Development Policy for the Civil Engineering Sector

Joanna Wyczarska-Kokot, Mariusz Dudziak, Silesian University of Technology, Poland
Reuse – Reduce – Recycle: Responsible water and wastewater management in swimming pool facilities

Anita Zapałowska, Justyna Koc-Jurczyk, Łukasz Jurczyk, University of Rzeszów, Poland; Andrzej Skwiercz, The National Institute of Horticultural Research, Poland
Nematodes inhabiting recultivated municipal sludge and its biological microbiome activity

Gabriela Kamińska, Anna Marszałek, Ewa Puszczalo, Silesian University of Technology, Poland; Noura Fathy, Cairo University, Egypt
Removal of heavy metals in ultrafiltration with clay based mixed matrix nanocomposite membranes – mechanism and performance

Maria del Mar Cerrillo-Gonzalez, Maria Villen-Guzman, Brahim Arhoun, J.M. Paz-Garcia, José M. Rodriguez-Maroto, University of Málaga, Spain
EU's Policies for Lithium Ion Batteries – An Overview

Rafał Jasiński, Czestochowa University of Technology, Poland
PM10 And PM2.5 Concentrations In Winter Periods Of Smog Episodes In Poland

Paulina Szulc, Poznan University of Technology, Poland
Contribution of GHG emissions from bioreactors to the total carbon footprint (CF) of municipal wastewater treatment plants (WWTP)

Wojciech Derej, University of Economics in Katowice, Poland
Green jobs as a factor supporting of the European Green Deal Implementation

Anirban Sil, Neethu Narayanan, Suman Gupta, ICAR-Indian Agricultural Research Institute, India
Pesticide Remediation behaviour of Magnetite-Clay Composites from Water

Krzysztof Chyła, Krzysztof Gaska, Silesian University of Technology, Poland
Application of the FSW method in joining metal components of car seats

Edyta Łaskawiec, Silesian University of Technology, Poland
The environmental risk of using filter waste from the seasonal bathing area

Paweł Kut, Katarzyna Pietrucha-Urbanik, Rzeszow University of Technology, Poland
Numerical Simulation Based Design of Photovoltaic Installations

Brahim Arhoun, Maria del Mar Cerrillo-Gonzalez, Maria Villen-Guzman, José M. Rodriguez-Maroto, University of Malaga, Spain; José Miguel Artacho, Antequera Municipal Wastewater Treatment Company, Spain
Phosphorous removal from Antequera WWTP using ferric chloride: A pilot-scale study

Kristine Blumfelde-Rutka, Santa Klinedere, Riga Stradins University, Latvia
Climate Change Narrative in Latvia: Marketing Communication Evaluation in Retail Sector

Łukasz Jurczyk, Justyna Koc-Jurczyk, University of Rzeszow, Poland
Toxicity of products of two-stage biological and chemical municipal landfill leachate treatment towards selected model organisms

Justyna Sułowska, Magdalena Szumera, AGH University of Science and Technology, Poland
Sulfur bearing glasses as potential sulfur glassy carriers for soil environment

Ahmad Mohammad Nafea Masoud, Sabrina Sorlini, University of Brescia, Italy
Integrating NBS – Constructed Wetland in sustainable sanitation

Robert Kowalik, Jolanta Latosińska, Jarosław Gawdzik, Kielce University of Technology, Poland
Municipal sewage sludge in a circular economy

Martyna Janek, Lublin University of Technology, Poland
Repair of Cement Mortars by Applying a Microbial Healing Agent

Barbara Breza-Boruta, Bydgoszcz University of Science and Technology, Poland
Emission of bioaerosol from a composting facilities and the microbiological composition of the air in its surroundings

Sylvia Sady, Bogdan Pacholek, Leszek Matuszak, Poznań University of Economics and Business, Poland
Impact of sonication on the extraction process of bioactive compounds contained in by-products of chokeberry processing

Joanna Fronczyk, Lublin University of Technology, Poland, Warsaw University of Life Sciences – SGGW, Poland; Adam Pyzik, Nadella Marchelina, Lublin University of Technology, Poland; Katarzyna Otłowska, Małgorzata Wdowska, Warsaw University of Life Sciences – SGGW, Poland
Assessment of the influence of MICP process conditions on the sandy soil hydraulic conductivity

Elina Dace, Raimonda Soloha, Liva Kristina Lukasa, University of Latvia, Latvia
Enabling Circular Bioeconomy via Estimating Biowaste and Food Loss Valorisation Potential in Latvia

Łukasz Mazur, Aleksandra Nowysz, Warsaw University of Life Sciences, Poland
The impact of negative effects of urbanization on Park Dolina Służewiecka in Warsaw: a regeneration project

Karolina Kurtz-Orecka, The West Pomeranian University of Technology in Szczecin, Poland; Tomasz Furmańczyk, The University of Szczecin, Poland, The Regional Office for Spatial Planning of the Westpomeranian Voivodeship in Szczecin, Poland; Leszek Jastrzębski, Justyna Strzyżewska, The Regional Office for Spatial Planning of the Westpomeranian Voivodeship in Szczecin, Poland
Spatial and Strategic Planning in the Cross-Border Area to Support Green Transformation

Piotr Nikończuk, Wojciech Tuchowski, Jacek Mazur, The West Pomeranian University of Technology in Szczecin, Poland; Andrzej Skwierawski, University of Warmia and Mazury in Olsztyn, Poland
Preliminary Analysis of The Potential of Using Surface Water For Cooling Purposes – Case Study

Waheed A. Rasaq, Wrocław University of Environmental and Life Sciences, Poland
Opportunities and Challenges of Methodology of Pyrolysis of Biomass

Lidia Wolny, Czestochowa University of Technology, Poland
Acrylamide as by-product of wastewater and sewage sludge treatment

Bartłomiej Macherzyński, Dorota Andrzejewska-Górecka, Małgorzata Wszelaka-Rylik, Cardinal Stefan Wyszyński University in Warsaw, Poland; Maria Włodarczyk-Makuła, Czestochowa University of Technology, Poland
Determination of the toxic concentration of PAHs for mesophilic biocenosis



Wojciech Tuchowski, Karolina Kurtz – Orecka, Aleksandra Pych, Laura Wojnicz, The West Pomeranian University of Technology in Szczecin, Poland
The Use Of Renewable Energy Sources In Refrigeration And Air Conditioning

Katarzyna Jeleniewicz, Norbert Dąbkowski, Gabriela Rutkowska, Krzysztof Wiśniewski, Jarosław Wójt, Warsaw University of Life Sciences – SGGW
The impact of fly ashes from thermal conversion of sewage sludge on properties of natural building materials on the example of clay

Maciej Miturski, Warsaw University of Life Sciences—SGGW, Poland
Reduction of cement in road sub-bases as a result of dispersed reinforcement

Robert Popek, Arkadiusz Przybysz, Warsaw University of Life Sciences – SGGW, Poland
The importance of precipitation in the process of air purification by plants

José M. Rodriguez-Maroto, Álvaro Rivas Bascón, Brahim Arhoun, Maria del Mar Cerrillo-Gonzalez, University of Malaga, Spain; Oscar López Artacho, Antequera Municipal Wastewater Treatment Company, Spain
Modeling chemical precipitation removal in Antequera's WWTP by STOAT Software

Brahim Arhoun, Álvaro Rivas Bascón, Maria del Mar Cerrillo-Gonzalez, José M. Rodriguez-Maroto, University of Malaga, Spain; Rosario León Muñoz, Antequera Municipal Wastewater Treatment Company, Spain
Implementation in STOAT's simulator and Biological removal of phosphorus of Antequera's WWTP

Aleksander Czapla, Jakub Drewnowski, Gdansk University of Technology, Poland; Bartosz Szelaż, Kielce University of Technology, Poland
Sustainable way of managing rainwater with composite systems in Green Deal Implementation

Aleksandra Nowysz, Warsaw University of Life Sciences, Poland
Urban farms in residential areas – water and food in cities

Noura Fathy Abdel Salam, Cairo University, Egypt; Gabriela Kamińska, Anna Marszałek, Silesian University of Technology, Poland
Adsorbent based on bentonite and carbon nanotubes for removing bisphenol A from water

Magdalena Zabochnicka-Świątek, , Czestochowa University of Technology, Poland
Industrial wastewater treatment using simultaneous sorption by microalgae and zeolite

Dagmara Słota, Wioletta Florkiewicz, Karina Piętek, Agnieszka Tomala, Agnieszka Sobczak-Kupiec, Cracow University of Technology, Poland
Polymeric hydrogel materials as a sustainable platform for advanced biomedical and environmental applications

Jakub Drewnowski, Przemysław Kowal, Gdansk University of Technology, Poland
Strategies of AOB-NOB activity control with free ammonia and free nitrous acid under short-cut nitrogen removal for energy-neutrality in WWTPs towards Green Deal Implementation

Polish

Paweł Wolski, Politechnika Częstochowska, Polska
Ocena zagęszczania i odwadniania osadów prefermentowanych wstępnie kondycjonowanych polem ultradźwiękowym

Damian Zarzecki, Uniwersytet w Białymstoku, Polska
Fitoremediacja – rośliny jako "zielony" sposób na środowisko wolne od toksyn

Weronika Urbańska, Politechnika Wrocławska, Polska
Metody odzyskiwania metali ze zużytych baterii Li-ion – stan obecny i perspektywy

Szymon Stocki, Rafał Hübner, Uniwersytet Ekonomiczny w Poznaniu, Polska
Zielony wodór jako przyszłość odnawialnych źródeł energii i energetyki



Zuzanna Kościukiewicz, Ewa Zaraś-Januszkiewicz, Szkoła Główna Gospodarstwa Wiejskiego w Warszawie, Polska

Świadomość i znaczenie nauk technicznych wśród społeczeństwa w kontekście kryzysu klimatycznego

Ewa Hołota, Politechnika Lubelska, Polska

Propozycja lokalizacji ujęcia wody na terenie wiejskim – studium przypadku

Monika Metryka-Telka, Jarosław Gawdzik, Politechnika Świętokrzyska, Polska; Agnieszka Dołhańczuk-Śródka, Uniwersytet Opolski, Polska

Aktywność 222Rn w wodach wodociągowych w powiecie kieleckim

Witold Nocoń, Politechnika Śląska, Polska; Karolina Skorb, Muzeum Górnośląskie w Bytomiu, Polska

Ważki Aglomeracji Górnośląskiej jako wskaźnik bioróżnorodności i zmian klimatu

Michał Fiłonowicz, Politechnika Białostocka, Polska

Budownictwo ekologiczne jako element wdrażania idei zrównoważonego rozwoju na przykładzie osiedla Beddington Zero Energy Development w Londynie

Izabela Płonka, Monika Adamkowska, Politechnika Śląska, Polska

Wpływ dezintegracji ultradźwiękowej na zmianę właściwości osadów pochodzących z uzdatniania wody

Monika Partyka, i2 Analytical Ltd Sp. z o.o. Oddział w Polsce

Dyrektywa UE w sprawie jakości wody pitnej – nowe wymagania badań i analiz

Yurii Delikhovskiy, Łukasz Wójcik, Akademia Górniczo-Hutnicza w Krakowie, Polska

Uszczelniające spoiwa iłowo-cementowe dla wałów przeciwpowodziowych

Barbara Pieczykolan, Politechnika Śląska, Polska

Adsorpcja błękitu helaktynowego F2R na sorbencie odpadowym wytworzonym z osadu pokoagulacyjnego

Katarzyna Moraczewska-Majkut, Witold K. Nocoń, Politechnika Śląska, Polska

Mikroplastik w wodzie wodociągowej – badania wstępne

Anna Marszałek, Politechnika Śląska, Polska

Absorpcja miedzi i ołowiu z wody opadowej za pomocą absorbentów na bazie diatomitu i alginianu sodu

Ewa Puszcząło, Gabriela Kamińska, Anna Marszałek, Politechnika Śląska, Polska

Ocena wpływu nanorurek węglowych na kiełkowanie roślin jedno i dwuliściennych w glebie skażonej przerepracowanym olejem silnikowym

Martyna Grzegorzek, Politechnika Wroclawska, Polska

Odnowa wody jako alternatywne źródło wody

Magdalena Głąb, Sonia Kudłacik-Kramarczyk, Anna Drabczyk, Dagmara Słota, Wioletta Florkiewicz, Agnieszka Tomala, Bożena Tyliczszak, Agnieszka Sobczak-Kupiec, Politechnika Krakowska, Polska

Fotopolimeryzacja jako ekonomiczna i bezodpadowa metoda otrzymywania materiałów kompozytowych przeznaczonych do regeneracji tkanki kostnej

Radosław Piech, Anna Drabczyk, Politechnika Krakowska, Polska

Nanocząstki magnetycznych w diagnostyce i leczeniu chorób nowotworowych

Maksymilian Skrzypiec, Magdalena Głąb Politechnika Krakowska, Polska

Charakterystyka nanocząstek magnetycznych jako innowacyjnych materiałów XXI wieku

Michał Salwa, Sonia Kudłacik-Kramarczyk, Politechnika Krakowska, Polska

Superabsorbenty polimerowe – właściwości i zastosowanie

Joanna Witkowska-Dobrev, Marek Dohojda, Olga Szlachetka, Maciej Malarski, Szkoła Główna Gospodarstwa Wiejskiego, Polska

Wpływ ścieków na elementy betonowe oczyszczalni ścieków