

Conference Program

5th International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering

Warsaw University of Life Sciences (WULS-SGGW), Poland

Wednesday, 3 July		Thursday, 4 July			Friday, 5 July			Saturday, 6 July	
08:00	On site registration	08:00	On site registration		08:00	On site registration		08:00	Optional tour (8:00-17:30)
08:30		08:30		Group photo (8:55)	08:30		Session 4 (8:30-10:00)	08:30	
09:00		09:00		Opening Ceremony (9:00-10:30)	09:00		Workshop (10:00-10:20)	09:00	
09:30		09:30			09:30				
10:00		10:00		Coffee Break (10:30-11:00)	10:00		Coffee Break (10:20-10:40)	10:00	
10:30		10:30		10:20		10:30			
11:00		11:00	Main Session (11:00-12:30)	10:40	Thematic Sessions 5 (10:40-12:10)	11:00			
11:30		11:30		11:30		Lunch + Electronic Poster Session (12:10-13:40)	11:30		
12:00		11:45		11:45			12:00		
12:30		12:15		12:10			12:30		
13:00		12:30		Lunch (12:30-14:00)		13:00	Parallel Sessions 6 (13:40-15:20)	13:00	
13:30		13:00	13:40		13:30				
14:00		13:15		14:00		14:00			
14:30		14:00	Thematic Sessions 2 (14:00-15:30)	14:30	Closing Session (15:10-15:30)	14:30			
15:00		14:30		15:20		15:00			
15:30		15:00	Coffee Break (15:30-15:50)	15:30		15:30			
16:00		15:30	Parallel Sessions 3 (15:50-17:40)	16:00	Walk through the Old Town of Warsaw and dinner (16:20-0:00)	16:00			
16:30	15:50	16:20		16:30					
17:00	16:30	17:00		17:00					
17:30	17:00	17:30		17:30					
18:00	17:40	18:00		18:00					
18:30	18:00	18:30	18:30						
19:00	18:30	19:00	19:00						
19:30	19:00	19:30	19:30						
20:00	19:30	20:00	20:00						
20:30	20:00	20:30	20:30						
21:00	21:00	Official dinner (19:30-23:30)	21:00	21:00					
21:30	21:30		21:30	21:30					
22:00	22:00		22:00	22:00					
23:00	23:00		23:00	23:00					
23:30	23:30		23:30	23:30					
0:00		0:00		0:00					

Thursday, 4 July, 2024			
8:00-11:00	On-site registration		
8:55	Group photo		
9:00-10:30	Opening Ceremony Eugeniusz Koda (Chair of the Organizing Committee), <i>Welcome and Conference Overview</i> (5 min) Magdalena D. Vaverková (Chair of the Scientific Committee), <i>Welcome and Conference Overview</i> (5 min) Michał Zasada (Rector of the Warsaw University of Life Sciences), <i>Welcome Remarks</i> (5 min) Krishna R. Reddy (Chair of the EGRWSE Conference), <i>Welcome and Conference Series Overview</i> (5 min) Marc Ballouz <i>"Activities of the ISSMGE and "In Memoriam" of Michele Jamiolkowski dr h.c. SGGW"</i> (30 min) Lyse Laloui <i>"Soil Reinforcement based on Bio-Geo-Chemical Processes"</i> (40 min)		
10:30-11:00	Coffee Break		
11:00-12:30	Main Session Co-chairs: Devendra N. Singh, Arvin Farid Krishna R. Reddy <i>"Sustainable Adaptive Engineered Biochar for Multifaceted Geoenvironmental Applications"</i> (30 min) Andrea Dominijanni <i>"Risk Assessment for Sustainable Waste Disposal to Landfills"</i> (30 min) Katarzyna Zabielska-Adamska <i>"Industry By-products and Waste Materials in Geotechnical Engineering Applications"</i> (30 min)		
12:30-14:00	Lunch		
14:00-15:30	Thematic Sessions 2		
	Geosynthetics for Sustainable Geotechnical Engineering Co-chairs: Jacek Kawalec, Junboun Park Keynote lecture: Jan Retzlaff <i>"Improving the Environmental Performance of Geotechnical Works by using Geosynthetic"</i> (30 min) Oral presentations (60 min, 5 presentations & discussion)	Waste Management and Sustainable Development Co-chairs: Yasuhiro Matsui, Milind V. Khire Keynote lecture: Magdalena D. Vaverková <i>"Will we or will we not be on Track with the Sustainable Development Goals - That is the Question? Focus on Waste Management"</i> (30 min) Oral presentations (60 min, 5 presentations & discussion)	
15:30-15:50	Coffee Break		
15:50-17:40	Parallel Sessions 3		
	Solid Waste and Circular Economy Co-chairs: Hanumantha B. Rao, Anna Podlasek Oral presentations (10 presentations & discussion)	Sustainable Geoinfrastructure Co-chairs: Kasia Ria Zamara, Nuno Dinis Cortiços Oral presentations (10 presentations & discussion)	Geoenvironmental Pollution Control Co-chairs: Claudio Cameselle, Zbigniew Lechowicz Oral presentations (10 presentations & discussion)
19:30-23:30	Official dinner		

Friday, 5 July, 2024			
8:00-11:00	On-site registration		
8:30-10:00	Thematic Session 4 Environmental Geotechnology and Sustainable Engineering in India Co-chairs: Krishna R. Reddy, Chandresh H. Solanki Keynote lectures: Devendra N. Singh "Environmental Geomechanics: The Ecstasy Ahead" (30 min) Hanumantha B. Rao "Conversion of Industrial Solid Wastes into Green Construction Materials for Sustainable Utilization" (30 min) Oral presentations (2 presentations from India & discussion)		
10:00-10:20	Workshop: How to Prepare Quality Publications (Swati Meherishi, Springer Nature)		
10:20-10:40	Coffee Break		
10:40-12:10	Thematic Sessions 5		
	Remediation of Pollution Co-chairs: Magdalena D. Vaverková, Jan Winkler Keynote lecture: Claudio Cameselle "Remediation of Pesticide Contaminated Soil with Biosurfactants Produced from Brewery Waste" (30 min) Guest lecture: Arvin Farid "Remediation Strategies for Mitigating Geotechnical and Geoenvironmental Consequences of Wildfires" (20 min) Oral presentations (3 presentations & discussion)	Geotechnical and Geoenvironmental Challenges Co-chairs: Andrea Dominijanni, Joanna Fronczyk Keynote lecture: Evan K. Paleologos "Geoenvironmental Challenges of Critical Minerals for a Clean Energy Transition" (30 min) Guest lecture: Milind V. Khire "Elevated Temperature Landfills - What do we know and don't know" (20 min) Oral presentations (3 presentations & discussion)	EGRWSE-2024 Last Minute Session (optional) Co-chairs: Bernard Chenevier, Arvindan Sivasuriyan Oral presentations (3-5 presentations & discussion)
12:10-13:40	Lunch + Electronic Poster Session		
13:40-15:10	Parallel Sessions 6		
	Solid Waste and Circular Economy Co-chairs: Evan K. Paleologos, Anna Markiewicz Oral presentations (8 presentations & discussion)	Environmental Geotechnics for Climate Change Co-chairs: Tomasz Godlewski, Irem Z. Yildirim Oral presentations (8 presentations & discussion)	Renewable Energy and Sustainable Geoinfrastructure Co-chairs: Carlos C. Duarte, Yeliz Yukselen-Aksoy Oral presentations (8 presentations & discussion)
15:10-15:30	Closing Session		
16:30-0:00	Bus from hotels to the Old Town (16:20) Walk (17:00-19:00) through the Old Town of Warsaw and dinner (19:00-0:00) including Fountain Illuminations (21:30-22:00) Back to the hotels (ca. 23:00 or 0:00)		

Crystal Hall / Aula Kryształowa		
9:00-10:30, Thursday, 4 July, 2024		
Opening Ceremony		
9:00-9:05	Chair of the Organizing Committee: Eugeniusz Koda	Welcome and Conference Overview
9:05-9:10	Chair of the Scientific Committee: Magdalena D. Vaverková	Welcome and Conference Overview
9:10-9:15	Rector of the Warsaw University of Life Sciences Michał Zasada	Welcome Remarks
9:15-9:20	Chair of the EGRWSE Conference: Krishna R. Reddy	Welcome and Conference Series Overview
9:20-9:50	Marc Ballouz	Activities of the ISSMGE and “In Memoriam” of Michele Jamiolkowski dr h.c. SGGW
9:50-10:30	Lyesse Laloui	Soil Reinforcement based on Bio-Geo-Chemical Processes

Crystal Hall / Aula Kryształowa		
11:00-12:30, Thursday, 4 July, 2024		
Main Session		
Co-chairs: Devendra N. Singh, Arvin Farid		
11:00-11:30	Krishna R. Reddy	Sustainable Adaptive Engineered Biochar for Multifaceted Geoenvironmental Applications
11:30-12:00	Andrea Dominijanni	Risk Assessment for Sustainable Waste Disposal to Landfills
12:00-12:30	Katarzyna Zabielska-Adamska	Industry By-Products and Waste Materials in Geotechnical Engineering Applications

Water Center / Centrum Wodne - Room A		
14:00-15:30, Thursday, 4 July, 2024		
Thematic Sessions 2		
Geosynthetics for Sustainable Geotechnical Engineering		
Co-chairs: Jacek Kawalec, Junboun Park		
14:00-14:30	Keynote lecture: Jan Retzlaff	Improving the Environmental Performance of Geotechnical Works by using Geosynthetic
14:30-14:40	Kasia Ria Zamara, Paul Stowell, Daniel Tomlinson, Jacek Kawalec	Selected Issues on Stabilisation of Unbound Aggregate Layers
14:40-14:50	Anna Markiewicz, Marta Kiraga, Eugeniusz Koda	Behaviour of Geotextile Filters under Artificial Clogging Conditions
14:50-15:00	Khushboo Vishwakarma, Shruti Shukla	Role of a Geofoam in Enhancing the Structural Activity of the Earth Retaining Structure
15:00-15:10	Agnieszka Kiersnowska, Wiktor Sitek, Filip Kozłowski, Eugeniusz Koda	Assessment of the Impact of Applying Geogrids on the Carbon Footprint in Sustainable Industry
15:10-15:20	Burak Bulut, Mustafa Hatipoglu	Short-Term Drainage Performance of Geotextile-Recycled Asphalt Pavement Filter Systems
15:20-15:30	Discussion	

Water Center / Centrum Wodne - Room B		
14:00-15:30, Thursday, 4 July, 2024		
Thematic Sessions 2		
Waste Management and Sustainable Development		
Co-chairs: Yasuhiro Matsui, Milind V. Khire		
14:00-14:30	Keynote lecture: Magdalena D. Vaverková	Will we or will we not be on Track with the Sustainable Development Goals - That is the Question? Focus on Waste Management
14:30-14:40	Katarzyna Gabryś, Wojciech Sas	Shear Modulus and Damping Ratio of Combustion Slag: A Step Towards Sustainable Waste Management
14:40-14:50	Donevska Katerina, Jovan Br. Papic, Igor Peshevski, Verka Palankova	Strategies for Effective Management of Construction and Demolition Waste in the Republic of North Macedonia
14:50-15:00	Joanna Fronczyk, Katarzyna Markowska-Lech	Circular Economy in Construction and Demolition Waste Management - a Literature Review
15:00-15:10	Arvin Farid, Nicole Kelly	Potential of Utilizing Food Processing Waste for Ground Improvement
15:10-15:20	Nuno Dinis Cortiços, Carlos C. Duarte	Circular Economy in Action: Assessing Poland's Construction Sector's Transition and Challenges
15:20-15:30	Discussion	

Water Center / Centrum Wodne - Room A		
15:50-17:40, Thursday, 4 July, 2024		
Parallel Sessions 3		
Solid Waste and Circular Economy		
Co-chairs: Hanumantha B. Rao, Anna Podlasek		
15:50-16:00	Kanish Kapoor	Assessing the Effect of Substituting Recycled Sand and Silica Fume on Strength Properties Fly Ash based Geopolymer mortar.
16:00-16:10	Anusree Nalladiyil, Sahana B. T., G. L. Sivakumar Babu	Enhancing Biogas Production from Municipal Solid Waste: The Role of Garbage Enzyme and Tea Powder Waste
16:10-16:20	Evan Paleologos, Abdel-Mohsen O. Mohamed, Magdalena Daria Vaverková	Recycling of Consumer Electronic Products' Critical Minerals
16:20-16:30	Sabriye Ozkan, Oliver Fiddaman, Andrea Diambra, Dimitris Xirouchakis, Erdin Ibraim	Cemented Sand-Rubber Mixtures Under Cyclic Triaxial Loading
16:30-16:40	Marta Di Sante, Ivo Bellezza, Mattia Del Cane, Evelina Fratilocchi, Muhammad Khizar Khan, Francesco Mazzieri, Renato Maria Cosentini, Marco Rosone	Eggshell Lime for Soil Stabilization
16:40-16:50	Tomasz Wierzbicki, Mariusz Żółtowski, Roman Tracz, Volodymyr Tyvoniuk, Paweł Ogrodnik	Weathering Steel as an Important Instrument in Circular Economy
16:50-17:00	Ritesh Chandel, Navdeep Singh	Carbonation Shrinkage in Dolomite and Recycled Aggregates Concrete
17:00-17:10	Manish Khanna, Senthil Kasilingam	Performance of Agro Waste Cementitious Material in the High Strength Reinforced Concrete Applications: A Review
17:10-17:20	Kaveri S., Raviteja K.V.N.S.	Geotechnical Characterization of Incinerated MSW Ash for Liner Applications
17:20-17:30	Anjani Kumar S. V. Brahmandam	Aided-Phytoremediation as an Effective Tool for Reclamation of Land Affected by Alkaline Slag and Carbon dioxide Sequestration
17:30-17:40	Discussion	

Water Center / Centrum Wodne - Room B		
15:50-17:40, Thursday, 4 July, 2024		
Parallel Sessions 3		
Sustainable Geoinfrastructure		
Co-chairs: Kasia Ria Zamara, Nuno Dinis Cortiços		
15:50-16:00	Francesco Moscato, Marco Rosone, Clara Celauro	A Preliminary Investigation on the use of a Marble Factory By-Product as a Sustainable Soil Stabiliser
16:00-16:10	Atif Hussain, Syed Khaja Karimullah Hussaini	Investigation of Shear Behavior of Tyre Chips Intermixed Steel Slag Ballast under Direct Shear Condition.
16:10-16:20	Divya P.V., Megha Shankar	A Sustainable Binder for Deep Soil Mixing Columns in Loose Sand
16:20-16:30	Shubham Khatri, Priti Maheshwari	Response of Double Line Railway Track Reinforced with Stone Column using Finite Element Method
16:30-16:40	Md Naquib Alam, Syed Khaja Karimullah Hussaini	Behaviour of clay-fouled Geogrid-Reinforced Rubber-Coated Ballast Under Direct Shear Conditions
16:40-16:50	Madhavi Latha Gali, Balaji Lakkimsetti	Use of Natural Coir Fibers for Improving Liquefaction Sustainability
16:50-17:00	Satyajit Patel, Hrushikesh Kedar	Sustainable Enhancement of Flexible Pavements: Integrating Copper Slag and Fly Ash with Hydraulic Binders
17:00-17:10	Marta Kiraga, Anna Markiewicz	Tailwater Reinforcement Length Influence on the Local Scour Depth
17:10-17:20	Maurycy Naliwajko, Marta Kiraga	Laboratory Studies of the Scouring Downstream of the Weir
17:20-17:30	Teresa Bielińska	Circular Economy, Sustainable Engineering, Renewable Energy - the Existing Results in the Contemporary World
17:30-17:40	Discussion	

Water Center / Centrum Wodne - Room C		
15:50-17:40, Thursday, 4 July, 2024		
Parallel Sessions 3		
Geoenvironmental Pollution Control		
Co-chairs: Claudio Cameselle, Zbigniew Lechowicz		
15:50-16:00	Padmavathi Viswanadham, Rao P. N.	Vertical Barriers to Control Nitrate Transport Through Saturated Soils
16:00-16:10	Elnaz Rajaei, Wojciech Goraczko, Maria Elektorowicz	Eco-Friendly Eggshell-Clay Liners as an Efficient Method for Polluted Sites
16:10-16:20	Arghya Ghosh, Suresh A. Kartha	Assessment of pH-Dependent Leaching Characteristics of Heavy Metals from Landfill-Mined-Fine-Fractions
16:20-16:30	Venkata Siva Naga Sai Goli, Davendra N. Singh	Influence of pH Conditions on Leaching of Elements from LandFill-Mined-Soil-like-Fractions
16:30-16:40	Krishna R. Reddy, Jagadeesh Kumar Janga, Banuchandra Nagaraja	Artificial Intelligence (Machine Learning and Deep Learning) for Predicting Electrokinetic Remediation Performance: Initial Study and Challenges
16:40-16:50	Dhritilekha Deka, Deepak Patwa, Ravi K., Archana M. Nair	Evaluating the Effects of Phytoremediation using C. Roseus and Sugarcane Bagasse Biochar Amendment on Heavy Metal Contaminated Soil
16:50-17:00	Emir Okucu, Sukran Gizem Alpaydin, Yeliz Yukselen-Aksoy	Swelling Pressure Of Compacted Bentonite With Additives Under Elevated Temperature
17:00-17:10	Renato Maria Cosentini, Guido Musso, Gabriele Della Vecchia, Vincenzo Sergio Vespo	Long-term Behaviour of Cement-bentonite Barriers for the Containment of Fluid Pollutants: a Laboratory Experience
17:10-17:20	Małgorzata Kurejusz-Gzowska, Anna Stefańska, Grzegorz Pasternak, Eugeniusz Koda	Comprehensive Analysis of Light Pollution in Urbanized Areas: A Case Study in Warsaw
17:20-17:30	Vara Prasad Kasa	Sustainable Method of Extraction of Microplastics from Environmental Matrices
17:30-17:40	Discussion	

Water Center / Centrum Wodne - Room B		
8:30-10:00, Friday, 5 July, 2024		
Thematic Session 4		
Environmental Geotechnology and Sustainable Engineering in India		
Co-chairs: Krishna R. Reddy, Chandresh H. Solanki		
8:30-9:00	Keynote lecture: Devendra N. Singh	Environmental Geomechanics: The Ecstasy Ahead
9:00-9:30	Keynote lecture: Hanumantha B. Rao	Conversion of Industrial Solid Wastes into Green Construction Materials for Sustainable Utilization
9:30-9:40	Venkata Siva Naga Sai Goli, Mrunal Bokade, Devendra Narain Singh	Valorization of LandFill-Mined-Soil-like-Fractions as an Anthropogenic Resource: Challenges and Opportunities
9:40-9:50	N. C. Kothiyal, Sameer Kumar Maurya	Investigation of Mechanical and Microstructural Properties of High Volume Fly-Ash Cement Nanocomposites Using GO and CNT: A Comparative Study
9:50-10:00	Discussion	

Water Center / Centrum Wodne - Room A		
10:40-12:10, Friday, 5 July, 2024		
Thematic Sessions 5		
Remediation of Pollution		
Co-chairs: Magdalena D. Vaverková, Jan Winkler		
10:40-11:10	Keynote lecture: Claudio Cameselle	Remediation of Pesticide Contaminated Soil with Biosurfactants Produced from Brewery Waste
11:10-11:30	Guest lecture: Arvin Farid	Remediation Strategies for Mitigating Geotechnical and Geoenvironmental Consequences of Wildfires
11:30-11:40	Anna Podlasek, Karolina Szewczyk, Aleksandra Jakimiuk, Eugeniusz Koda, Magdalena Daria Vaverková	Environmental Hazards at Municipal Solid Waste Landfill Sites: Case Study of Łubna landfill in Poland
11:40-11:50	Ahmed Benamar, Mohamed-Tahar Ammami, Florence Koltalo	Electrokinetic Remediation of Different Soil Horizons from an Accidental Contamination
11:50-12:00	Katarzyna Mordak-Raczko, Krzysztof Graf, Marcin Biliniak	Remediation of Polluted Soil and Underground Water in the Area of the Former Chemical Plant “ZACHEM” in Bydgoszcz
12:00-12:10	Discussion	

Water Center / Centrum Wodne - Room B		
10:40-12:10, Friday, 5 July, 2024		
Thematic Sessions 5		
Geotechnical and Geoenvironmental Challenges		
Co-chairs: Andrea Dominijanni, Joanna Fronczyk		
10:40-11:10	Keynote lecture: Evan K. Paleologos	Geoenvironmental Challenges of Critical Minerals for a Clean Energy Transition
11:10-11:30	Guest lecture: Milind V. Khire	Elevated Temperature Landfills - What do we know and don't know
11:30-11:40	Irem Zeynep Yildirim	Feasibility of Glass Powder Replacement to Alleviate Swelling of Steel Slag: Long-term Swelling & Microscopic Observations
11:40-11:50	Angela Temelkovska, Jovan Br. Papic, Katerina Donevska, Igor Peshevski, Atanas Strasheski	Conducting Complex Oedometer Tests On Municipal Solid Waste And Implementing The Findings In Numerical Modelling Of Vertical Expansion Of Landfill
11:50-12:00	Parthiban D., Vijayan D.S, Shanmuga Sundar S, Arvindan Sivasuriyan	Engineering behavior Assessment of Weak Soil Stabilized Using Amalgamated Geopolymer with Industrial Waste - An Experimental Study
12:00-12:10	Discussion	

Water Center / Centrum Wodne - Room C
10:40-12:10, Friday, 5 July, 2024
Thematic Sessions 5
EGRWSE-2024 Last Minute Session (optional)
Co-chairs: Bernard Chenevier, Arvindan Sivasuriyan
<i>Oral presentations (3-5 presentations & discussion)</i>

Water Center / Centrum Wodne		
12:10-13:40, Friday, 5 July, 2024		
Electronic Poster Session		
12:10-12:20	Agnieszka Starzyk, Przemysław Łacek	Wood as an Architectural and Construction Material in the Circular Economy
12:20-12:30	Aurelia Blazejczyk, Łukasz Domaszewski, Agata Kocia, Ernesta Liniauskiene, Maja Radziemska	Selective Collection Points (SCPs) for Municipal Waste (MW) as a Key Element of Infrastructure in the Management of Separately Collected Waste
12:30-12:40	Iwona Chmielewska	Effect of Waste Stone Dust on Compaction Characteristics of Non-Cohesive Soils
12:40-12:50	Jan Winkler, Magdalena Daria Vaverkova, Eugeniusz Koda	Vegetation of Anthropogenic Habitats as a Bioindicator of the Consequences of Human Civilization Activities
12:50-13:00	Joanna Witkowska-Dobrev, Olga Szlachetka, Marek Dohojda, Kinga Rzymyska	Chloride Corrosion of Paving Blocks
13:00-13:10	Marek Bajda, Mariusz Lech, Piotr Osiński, Eugeniusz Koda	The CPT Based Investigation of Mechanical Parameters of Waste Disposed on Restored Landfills Adopted for Green Energy Development
13:10-13:20	Anshumali Mishra, Partha Narayan Mishra, Sarat Das, Krishna R. Reddy	Integrated Sustainability Index for M-Sand production using Structural Equation Modelling
13:20-13:30	Maja Sutkowska	Fostering Sustainable Urban Development: Integrating School Areas to Navigate the Climate Crisis in Warsaw
13:30-13:40	Igor Peshevski, Katerina Donevska, Milorad Jovanovski, Jovan Papic	Limitations and Potential of Extractive Waste: Case Study of Extractive Waste Management in R.N. Macedonia

Water Center / Centrum Wodne		
12:10-13:40, Friday, 5 July, 2024		
Electronic Poster Session		
12:10-12:20	Wojciech Tymiński, Tomasz Kielczewski, Hubert Daniluk	The Influence of Fine Fraction Content on the Compressibility Characteristics of Cand-Fines Mixtures
12:20-12:30	Barbara Francke, Eugeniusz Koda, Maciej Żołnierczuk	Durability of Underground Parts of Buildings in Unfavourable Ground and Water Conditions and their Impact on the Water Environment Pollution - a Case Study
12:30-12:40	Edina Koch, Zoltán Major, Cecília Szigeti	Investigation of CO2 Emission Concerning Levee Reinforcement Technologies
12:40-12:50	Katarzyna Pawluk	Possibilities of Using Concrete Waste for Groundwater Remediation – Batch Test
12:50-13:00	Mariola Wasil, Urszula Wydro, Elżbieta Wołejko	Effect of Bio-mineralization on Unconfined Compressive Strength of Fly Ash
13:00-13:10	Angelika Kołacz, Wojciech Fabianowski, Łukasz Brzóska	Composite Foams from Recycled Polymers
13:10-13:20	Jolanta Dąbrowska	Effects of Climate Change on Earth Structures
13:20-13:30	Junboun Park, Rahim Shahrokhi, Yisup Byun	Mechanochemical Degradation of PFOS using Piezoelectric Material
13:30-13:40	Justyna Dziecioł, Wojciech Sas	Machine Learning as a Perspective for Sustainable Geotechnical Parameter Estimation

Water Center / Centrum Wodne - Room A		
13:40-15:10, Friday, 5 July, 2024		
Parallel Sessions 6		
Solid Waste and Circular Economy		
Co-chairs: Evan K. Paleologos, Anna Markiewicz		
13:40-13:50	Mikołaj Donderewicz, Kinga Rybak-Niedziółka	Sustainable Spaces of Multi-Family Housing Estates
13:50-14:00	Susanga Costa, Mithushi Wickramasinghe, Bre-Anne Sainsbury	Compressive Strength of Tyre Rubber Reinforced Cemented Rock Fill
14:00-14:10	Dzmitry Salauyou	The Study of using of Ecologically Friendly Building Materials at Construction of Single-Family Houses - Expanded Clay Concrete for Walls and Slabs made of Flax Waste for the Thermal Insulation Layer of the Roof
14:10-14:20	Yasuhiro Matsui, Aren Tanaka, Magdalena Daria Vaverková, Aleksandra Jakimiuk	Structural Modeling On Ethical Consumption Behavior Using Bayesian Network
14:20-14:30	Manish Khanna, Senthil Kasilingam	Performance of Agro-Waste Sugarcane Bagasse Ash in the Concrete under Durability Tests
14:30-14:40	Przemysław Łacek, Agnieszka Starzyk	Circular Economy of Building Materials
14:40-14:50	Yeudy F. Vargas-Alzate, Jean Vaunat, Alessandra Di Mariano, Ana M. Zapata-Franco	Predicting Water Content in Response to Climatic Variables: Two Approaches based on Spectral Analysis
14:50-15:00	Djihad Bennaceur, Laredj Nadia, Maliki Mustapha, Brahimi Mahi Eddine, Kheira Belhamideche, Missoum Hanifi	Geothermal Exploration: Analysis of Unsaturated Soil Properties for Efficient Design of Sustainable Energy Systems
15:00-15:10	Discussion	

Water Center / Centrum Wodne - Room B		
13:40-15:10, Friday, 5 July, 2024		
Parallel Sessions 6		
Environmental Geotechnics for Climate Change		
Co-chairs: Tomasz Godlewski, Irem Z. Yildirim		
13:40-13:50	Tugba Eskisar, Esma Rahat	A Brief Look at Perlite-Geopolymer Soils
13:50-14:00	Tomasz Godlewski, Łukasz Wodzyński	New Approach for Estimation of Ground Freezing using Probabilistic Analysis
14:00-14:10	Gaurav Verma, Jyoti K. Chetri, Krishna R. Reddy	Spatial Variability of Methane Oxidation in Landfill Soil Cover: Large-Scale Tank Experiment
14:10-14:20	Rajwinder Singh, Mahesh Patel	Predictive Modeling of Flexural Strength of Concrete Manufactured with Recycled Aggregates: A Comparative Analysis
14:20-14:30	Arivazhagan Rengasamy	The Climate Change Impacts and Vulnerability Assessments on the Coastal Environment in Terms of Particle Size and their Distribution
14:30-14:40	Feyza Toyğar, Yeliz Yukselen-Aksoy	Pore Fluid Effect on the Suction Behavior of Sand-Kaolin and Sand-Bentonite Mixtures
14:40-14:50	Ankit Mishra, M.B. Nikila, Yatharth Mittal, Partha Narayan Mishra	Utilisation of Two Industrial Waste Streams as Potential Replacement of Natural Sand for Constructional Purposes
14:50-15:00	Dhanasree Suresh	Optimization of Medium for S.Pasteurii Bacterium and Performance Comparison with Free Urease
15:00-15:10	Discussion	

Water Center / Centrum Wodne - Room C		
13:40-15:10, Friday, 5 July, 2024		
Parallel Sessions 6		
Renewable Energy and Sustainable Geoinfrastructure		
Co-chairs: Carlos C. Duarte, Yeliz Yukselen-Aksoy		
13:40-13:50	Carlos C. Duarte, Nuno D. Cortiços	The Power of Public Spaces: An Overview of Energy Production Potential
13:50-14:00	Esra Güneri	Improvement of Compressibility Properties of Zeolite-Bentonite Mixtures with Zostera Marina Additive
14:00-14:10	Belhamideche Kheira, Nadia Laredj, Mustapha Maliki, Hanifi Missoum, Djihad Bennaceur, Mahi Eddine Brahimi	Performance of a Shallow Geothermal Heat Exchanger in the Northern Region of Algeria
14:10-14:20	Konrad Piechowicz, Sylwia Szymanek	The influence of Additions to Binders on the Compression Strength in the Process of the Stabilization of Low-Frost-Susceptible Soils.
14:20-14:30	Harsh Pipil, Shivani Yadav, Krishna R. Reddy, Anil Kumar Haritash	Estimating the Removal Efficiency of Nitrates from Urban Stormwater Runoff using Bamboo Biochar
14:30-14:40	Sabari Ramesh, Talari Thyagaraj	Investigating the Impact of Saline Intrusions on Desiccation Cracks in Compacted Clay-Sand Mixtures during Wet-Dry Cycles
14:40-14:50	Małgorzata Kurcjuś-Gzowska, Anna Stefańska, Magdalena Daria Vaverková	Exploring the Impact of Artificial Intelligence for Sustainable Engineering: A review of Current Directions
14:50-15:00	Ivanna Voronkova	Ecological Library As A Tool For Sustainable Development Of Modern City
15:00-15:10	Discussion	