Ministry of Education and Science of Ukraine Lviv Polytechnic National University Lublin University of Technology All-Ukrainian Environmental League







PROGRAMME

VI INTERNATIONAL SCIENTIFIC-TECHNICAL CONFERENCE

WATER SUPPLY AND WASTEWATER DISPOSAL: designing, construction, operation and monitoring

Lviv 15-17 October, 2025

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Prof. PK, dr hab. inż.

J. Królikowska Krakow University of Technology

Prof. AGH dr hab. inż.

E. Szalińska Van Overdijk AGH Krakow

ORGANIZING COMMITTEE SECRETARY

Assoc.Prof., C.Sc. N. Vronska Lviv Polytechnic National University

CONFERENCE ORGANIZING COMMITTEE

Assoc.Prof., D.Sc. I. Tymchuk
C.Sc. V. Sliusar
Mgr. A. Marahovska
Lviv Polytechnic National University
Lviv Polytechnic National University

CONFERENCE WORK SCHEDULE

WEDNESDAY, OCTOBER 15, 2025 (UTC+2 (EET))

UTC+2 (EET)

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Registration of participants Assembly hall of the main building, Bandery Str., 12
Opening of the Conference Assembly hall of the main building, Bandery Str., 12
Official Inauguration of the UNESCO Chair on Sustainable Water and Waste Management at Lviv Polytechnic National University Assembly hall of the main building, Bandery Str., 12
Coffee break 231 room of the main building, Bandery Str., 12
Plenary session Assembly hall of the main building, Bandery Str., 12
Lunch
231 room of the main building, Bandery Str., 12
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231 room of the main building, Bandery Str., 12 Plenary session Assembly hall of the main building, Bandery Str., 12 THURSDAY, OCTOBER 16, 2025 (UTC+2 (EET))
231 room of the main building, Bandery Str., 12 Plenary session Assembly hall of the main building, Bandery Str., 12 THURSDAY, OCTOBER 16, 2025 (UTC+2 (EET)) ET) Section meetings Research and training laboratory of renewable energy sources,
Plenary session Assembly hall of the main building, Bandery Str., 12 THURSDAY, OCTOBER 16, 2025 (UTC+2 (EET)) ET) Section meetings Research and training laboratory of renewable energy sources, Starosolskikh Str., 8, 3 rd floor Coffee break Research and training laboratory of renewable energy sources,
Plenary session Assembly hall of the main building, Bandery Str., 12 THURSDAY, OCTOBER 16, 2025 (UTC+2 (EET)) ET) Section meetings Research and training laboratory of renewable energy sources, Starosolskikh Str., 8, 3 rd floor Coffee break Research and training laboratory of renewable energy sources, Starosolskikh Str., 8, 3 rd floor Section meetings Research and training laboratory of renewable energy sources, Starosolskikh Str., 8, 3 rd floor Section meetings Research and training laboratory of renewable energy sources,

FRIDAY, OCTOBER 17, 2025 (UTC+2 (EET))

UTC+2 (EET)

- 10⁰⁰-11⁰⁰ Summary of the Conference Research and training laboratory of renewable energy sources, Starosolskikh Str., 8, 3rd floor
- 11⁰⁰-11³⁰ Coffee break

 Research and training laboratory of renewable energy sources,

 Starosolskikh Str., 8, 3rd floor
- 11³⁰-12¹⁵ Round Table: "The Role of Water in the Circular Bioeconomy for Sustainable Food and Agriculture" (within the AGRI-BIOCIRCULAR-HUB project)

 Research and training laboratory of renewable energy sources,

 Starosolskikh Str., 8, 3rd floor
- 12¹⁵-13⁰⁰ Round Table: "Water and Wastewater Management in the Context of Climate Change" (within the ClimEd project)

 Research and training laboratory of renewable energy sources,

 Starosolskikh Str., 8, 3rd floor

WEDNESDAY, OCTOBER 15, 2025 PLENARY SESSION

Moderators:

MYROSLAV MALOVANYY, D.T. Sc, prof., Head of the Department of Ecology and Sustainable Environmental Management at Lviv Polytechnic National University

OKSANA LIUTA, Assoc.Prof., C.Sc. Associate professor of the Department of Ecology and Sustainable Environmental Management at Lviv Polytechnic National University

- 12³⁰-13⁰⁰ ZBIGNIEW SUCHORAB, GRZEGORZ ŁAGÓD, JACEK ZABURKO, MICHAŁ STANISZEWSKI, EDYTA WOJTAŚ, ALEKSANDRA KOZŁOWSKA, KONRAD JAMKA, MAGDALENA PIŁAT-ROŻEK THE APPLICATION OF ELECTRONIC SENSES (E-EYE, E-NOSE, AND E-TONGUE) EMPLOYING ARTIFICIAL INTELLIGENCE MODELS IN THE CONTROL OF SEWAGE TREATMENT PLANTS, STORMWATER SYSTEMS, AND SURFACE WATER

 (Zbigniew Suchorab, Grzegorz Łagód, Lublin University of Technology, Lublin, Poland) *on-line*
- 13⁰⁰-13²⁰
 PROSKURNIN O.A., BELOKON K.V., DEMYANOVA O.O.
 "REGULATION OF ANTHROPOGENIC LOAD ON WATER
 OBJECTS IN THE POST-WAR RECONSTRUCTION
 PERIOD"
 (Proskurnin Oleg, Ukrainian Scientific Research Institute of
- 13²⁰-13⁴⁰ MALOVANYY M., <u>ZHUK V.</u>, MYSAK I., TYMCHUK I., BORDUN I., VRONSKA N. LONG-TERM TRENDS IN PRECIPITATION DEPTHS IN SELECTED CLIMATIC REGIONS OF UKRAINE
 (**Zhuk Volodymyr**, Lviv Polytechnic National University, Lviv, Ukraine)

Ecological Problems, Kharkiv, Ukraine) on-line

13⁴⁰-14⁰⁰ ĐUKIĆ A., <u>GOVEDARICA O., IVETIĆ D.</u>, BABIĆ B. INFLUENCE OF INFILTRATION AND INFLOW (I/I) ON WASTEWATER TREATMENT EFFICACY (**Govedarica Ognjen** and **Ivetic Damjan**, University of Belgrade, Belgrade, Republic of Serbia) *on-line*

14⁰⁰-15⁰⁰ Lunch

- 15⁰⁰-15²⁰ GONDHALEKAR D. THE WATER-ENERGY-FOOD-ECOSYSTEMS (WEFE) NEXUS APPROACH AS AN INTEGRATED PLANNING FRAMEWORK TO OPERATIONALISE WATER AND RESOURCE RECLAMATION IN REGENERATIVE METROPOLITAN REGIONS
 (Gondhalekar Daphne, Technical University of Munich, Munich, Germany) on-line
- 15²⁰-15⁴⁰ KOVALCHUK V.A. EFFECTIVE TECHNOLOGY FOR WASTEWATER TREATMENT FROM FOOD INDUSTRY ENTERPRISES
 (Kovalchuk Viktor, National University of Water and Environmental Engineering, Rivne, Ukraine) *on-line*
- 15⁴⁰-16⁰⁰ KULIK E.V., BLYZNUK M.M. COMPETENCIES FOR SUSTAINABLE DEVELOPMENT IN PROFESSIONAL EDUCATION IN UKRAINE
 (Kulik Yevgen, Poltava National Pedagogical University, Poltava, Ukraine)

THURSDAY, OCTOBER 16, 2025

SECTION MEETINGS

Moderators:

MYROSLAV MALOVANYY, D.T. Sc, prof., Head of the Department of Ecology and Sustainable Environmental Management at Lviv Polytechnic National University

OLENA POPOVYCH, Assoc.Prof., C.Sc. Associate professor of the Department of Ecology and Sustainable Environmental Management at Lviv Polytechnic National University

- 10⁰⁰-10¹⁵ <u>KASIYANCHUK D.</u> ASSESSMENT OF WATER AVAILABILITY IN URBAN AREAS FOR WATER RESOURCE PLANNING AND MANAGEMENT USING GEOINFORMATION TECHNOLOGIES TECHNOLOGIES ON THE EXAMPLE OF IVANO-FRANKIVSK (**Kasianchuk Dmytro**, Ivano-Frankivsk National Technical University of Oil and Gas, Ivano-Frankivsk, Ukraine) *on-line*
- 10¹⁵-10³⁰ ANTONOV M., MALOVANYY M. THE RELEVANCE OF THE PROBLEM OF THE IMPACT OF CLIMATE CHANGE ON THE QUANTITATIVE AND QUALITATIVE INDICATORS OF WATER RESOURCES AND RELATED AREAS OF ACTIVITY

 (Antonov Mykyta, Lviv Polytechnic National University, Lviv, Ukraine) on-line
- 10³⁰-10⁴⁵ DRYGULICH S., ORFANOVA M., <u>DRYGULICH P.</u>
 PROBLEMATIC ASPECTS OF WATER USE IN THE OIL
 AND GAS INDUSTRY
 (**Drygulich Petro,** Naftogaz of Ukraine, Kyiv, Ukraine) *on-line*
- 10⁴⁵-11⁰⁰ KRYKHOVETS O., RUBAI O., REPETA V.
 "TECHNOLOGICAL NECESSITY OF WATER
 PREPARATION FOR POLYGRAPHIC ENTERPRISES"
 (Kryhovets Oleksandra, Lviv Polytechnic National University, Lviv, Ukraine)
- 11⁰⁰-11¹⁵ MOKIENKO A. CHEMICAL AND MICROBIOLOGICAL BASES OF THE EFFECTIVENESS OF CHLORINE DIOXIDE AS A WATER DISINFECTION AGENT (Mokienko Andriy, National University of Ostroh Academy, Ostroh, Ukraine) *on-line*

- 11¹⁵-11³⁰ DENISYUK A., BARAN S., <u>MOZGOVOY V.</u> THE POSSIBILITY OF USING GLASS WASTE FOR DRAINAGE SYSTEMS IN WATER DISPOSAL (**Mozgovyi Volodymyr**, National Transport University, Kyiv, Ukraine) *on-line*
- 11³⁰-12⁰⁰ Coffee break
- 12⁰⁰-12¹⁵ RYLSKY O. NEW BIOTECHNOLOGIES FOR TREATMENT OF WASTEWATER AND NATURAL WATER (**Rylsky Oleksandr,** Zaporizhzhia National University, Zaporizhzhia, Ukraine) *on-line*
- 12¹⁵-12³⁰ FASULIAK V., VOVK L., HALYCH O., NOWAK P.,
 BILKOVA E. HYDROLOGICAL MODELLING RESEARCH
 WORLDWIDE: A BIBLIOMETRIC ANALYSIS OF SCOPUS
 PUBLICATIONS
 (Fasulyak Vadym, Lviv Polytechnic National University, Lviv,
 Ukraine)
- 12³⁰-12⁴⁵ DICHKO A., MINAEVA Y. INTELLECTUAL
 MANAGEMENT OF BIOCHEMICAL WASTEWATER
 TREATMENT
 (**Dychko Alina,** National Transport University, Kyiv, Ukraine)
 on-line
- 12⁴⁵-13⁰⁰ MAKOVSKY E., FEMYAK V., VOVK L., ZHUK V. POLLUTION OF RAINWATER RUNOFF WITH HEAVY METALS. LITERATURE REVIEW (Makovsky Yevgeniy, Lviv Polytechnic National University, Lviv, Ukraine)
- 13⁰⁰-13¹⁵ MASIKEVYCH Y., MASIKEVYCH A., BURDENYUK I. INITIATION OF MONITORING OF THE DNISTER RIVER WATER AREA ACCORDING TO THE DATA OF MICROBIOLOGICAL RESEARCH WITHIN THE TERRITORY OF THE PROTECTED AREAS (Masikevych Yuriy, Bukovynian State Medical University, Chernivtsi, Ukraine) on-line
- 13¹⁵-13³⁰ NAGURSKY N., BORDUN I., MALOVANYY M.,
 BORISYUK A. "ADSORPTION PROPERTIES OF Fe3O4/C
 NANOCOMPOSITES SYNTHESIZED FROM WHEAT
 STRAW
 (Nagurskyi Nazar, Lviv Polytechnic National University, Lviv,
 Ukraine) on-line

13 ³⁰ -14 ³⁰	Lunch
14 ³⁰ -14 ⁴⁵	BORDUN M., SOKOLOVSKY Y. FORECASTING THE DYNAMICS OF ORGANIC POLLUTION IN THE DNIPRO RIVER (Bordun Mykhailo, Lviv Polytechnic National University, Lviv, Ukraine) <i>on-line</i>
14 ⁴⁵ -15 ⁰⁰	MATS A., MITRYASOVA O. DYNAMICS OF DISSOLVED OXYGEN AND BIOCHEMICAL OXYGEN DEMAND (BOD ₅) IN SURFACE WATERS (Mats Andriy, Mohyla Petro Black Sea National University, Mykolaiv, Ukraine) <i>on-line</i>
15 ⁰⁰ -15 ¹⁵	MARTINOV S., KLIMOV S. SPECIFIC FEATURES OF IDENTIFYING HAZARDS AND HAZARDOUS EVENTS IN THE DEVELOPMENT OF A WATER SAFETY PLAN FOR WATER SUPPLY SYSTEMS (Martynov Serhiy, National University of Water and Environmental Engineering, Rivne, Ukraine) on-line
15 ¹⁵ -15 ³⁰	<u>DYACHOK V.</u> APPLICATION OF CHLOROPHYLL-SYNTHESIZING MICROALGAE IN ENVIRONMENTAL PROTECTION TECHNOLOGIES (Dyachok Vasyl , Lviv Polytechnic National University, Lviv, Ukraine)
15 ³⁰ -15 ⁴⁵	SABADASH V. STUDY OF THE EFFICIENCY OF MODIFIED ZEOLITE FOR THE PURIFICATION OF DRINKING WATER FROM Cu (II) AND Cr (III) IONS (Sabadash Vira, Lviv Polytechnic National University, Lviv, Ukraine)
15 ⁴⁵ -16 ⁰⁰	TYMCHUK I. SEWAGE SLUDGE AS A RESOURCE FOR RECLAMATION OF DISTURBED AREAS (Tymchuk Ivan, Lviv Polytechnic National University, Lviv, Ukraine)

FRIDAY, OCTOBER 17, 2025

10^{00} - 11^{00}	Summary of the Conference
11^{00} - 11^{30}	Coffee break
11 ³⁰ -12 ¹⁵	Round Table: "The Role of Water in the Circular Bioeconomy for Sustainable Food and Agriculture" (within the AGRI-BIOCIRCULAR-HUB project)
12 ¹⁵ -13 ⁰⁰	Round Table: "Water and Wastewater Management in the Context of Climate Change" (within the ClimEd project)