



Ministry of Education and Science of Ukraine
National University of Water and Environmental Engineering
Taras Shevchenko National University of Kyiv
National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»
Lviv Polytechnic National University
Yuriy Fedkovych Chernivtsi National University
Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of NAS of Ukraine
Shevchenko Scientific Society
Lublin University of Technology (Poland)
Wroclaw University of Science and Technology (Poland)
Newcastle University (Great Britain)
Czech Technical University in Prague (Czech Republic)

PROGRAM

VIII International scientific-practical conference «MODELING, CONTROL AND INFORMATION TECHNOLOGY»

*Dedicated to the 25th anniversary of the Educational and Scientific
Institute of Cybernetics, Information Technologies, and Engineering
of NUWEE*



**Rivne, Ukraine
November 6-8, 2025**

INTERNATIONAL PROGRAM COMMITTEE

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- **Bigun Yaroslav** – D.Sc., Professor, Head of the Department of Applied Mathematics and Information Technologies of Yurii Fedkovych Chernivtsi National University, Ukraine;

- **Bílková Eva** – Ph.D., Department of Hydraulic Structures, Faculty of Civil Engineering, Czech Technical University in Prague, Czech Republic;
- **Bedunkova Olha** – D. Sc., Professor, professor at the Department of Ecology, Environmental Protection Technology, and Forestry of the National University of Water and Environmental Engineering, Ukraine;
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- **Gordiichuk Pavlo** – Ph.D., Postdoctoral Research Associate at

Department of Chemical Engineering, Massachusetts Institute of Technology, United States of America;

- **Hrytsiuk Petro** – D. Sc., Professor, Head of the Department of Computer Technologies and Economic Cybernetics of the National University of Water and Environmental Engineering, Ukraine;
- **Didmanidze Ibraim** –D. Sc., (specialty 01.01.09. Applied Mathematics and Mathematical Cybernetics, Exact Sciences), Professor of the Center for Languages and Information Technologies, Faculty of Exact Sciences and Education, Shota Rustaveli Batumi State University, Georgia;
- **Drevetskyi Volodymyr** – D. Sc., Professor, Department of Automation, Computer-Integrated Technologies, and Robotics of the National University of Water and Environmental Engineering, Ukraine;
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- **Komada Paweł** – Ph.D., Assistant Professor, Department of Electronics and Information Technology of Lublin University of Technology, Poland;
- **Krstić Dragana** – Ph.D., Assistant Professor, Faculty of Electronic Engineering, University of Nis, Serbia;
- **Kubik Józef** – D. Sc., Professor, Head of the Department of Mechanics of Porous Materials at the Institute of Mechanics and Applied Informatics of Kazimierz Wielki University in Bydgoszcz, Poland;
- **Lytvynenko Volodymyr** – D. Sc., Professor, Head of the Department of Informatics and Computer Science of the Kherson National Technical University, Ukraine;
- **Lyashko Serhiy** – D. Sc., Professor, Corresponding Member of

NAS of Ukraine, Head of the Department of Computational Mathematics Theory of Taras Shevchenko National University of Kyiv, Ukraine;

- **Mazurek Paweł** – Ph.D., Vice-Dean for Student Experience at Electrical Engineering, Lublin University of Technology, Poland;
- **Nagaraja Shishir** – Professor, Chair of the Cybersecurity, Security and Resilient Systems Group at the School of Computer Science University of Newcastle, Great Britain;
- **Nakonechnyi Oleksandr** – D. Sc., Professor, Head of the Department of System Analysis and Decision Making Theory of Taras Shevchenko National University of Kyiv, Ukraine;
- **Nowak Petr** – D. Sc., Department of Hydraulic Structures, Faculty of Civil Engineering, Czech Technical University in Prague, Czech Republic;
- **Pasichnyk Volodymyr** – D. Sc., Professor, Professor of the Department of Information Systems and Networks of Lviv Polytechnic National University, Ukraine;
- **Patalas-Maliszewska Justyna** – D. Sc., Associate Professor, Faculty of Mechanical Engineering, University of Zielona Góra, Poland;
- **Pryshchepa Alla** – D. Sc., Professor, Director of the of the Educational and Scientific Institute of Agroecology and Land Management of the National University of Water and Environmental Engineering, Ukraine;
- **Rich C. Lee** – Ph.D., Associate Professor, Department of Statistics and Information Science of Fu Jen Catholic University, Taiwan;
- **Rojek Izabela** – D.Sc., Associate Professor, Institute of Mechanics and Applied Computer Science of Kazimierz Wielki University in Bydgoszcz, Poland;

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- **Savina Natalia** – D. Sc., Professor, Vice-rector for Research Work and International Relations of the National University of Water and Environmental Engineering, Ukraine;
- **Sydor Andriy** – Ph.D., Acting Head of the Department of Computer Engineering of the National University of Water and Environmental Engineering, Ukraine;
- **Tadeev Petro** – Ph.D., Doctor of Pedagogical Science, Head of the Department of Higher Mathematics of the National University of Water and Environmental Engineering, Ukraine;
- **Trofimchuk Oleksandr** – D. Sc., Professor, Corresponding Member of the National Academy of Sciences of Ukraine, Director of the Institute of Telecommunications and the Global Information Space of the National Academy of Sciences of Ukraine, Ukraine;
- **Turbal Yurii** – D. Sc., Professor, Head of the Department of Computer Sciences and Applied Mathematics of the National University of Water and Environmental Engineering, Ukraine;
- **Cieszko Mieczysław** – D. Sc., Associate Professor, Head of the Department of Mechanics of Porous Materials at the Institute of Mechanics and Applied Computer Science of Kazimierz Wielki University in Bydgoszcz, Poland;
- **Chachanidze Guram** – D. Sc., Professor of Georgian Technical University, Georgia;

- **Cherniy Dmytro** – D. Sc., Technical Sciences, Professor, Head of the Department of Complex Systems Modeling, Taras Shevchenko National University of Kyiv, Ukraine;
- **Khrystyuk Andriy** – Ph. D., Associate Professor, Acting Head of the Department of Automation, Computer-Integrated Technologies, and Robotics of the National University of Water and Environmental Engineering, Ukraine.

ORGANIZING COMMITTEE

Safonyk Andrii, Martyniuk Petro, Basiuk Tetiana, Halych Oksana, Korbutiak Vasyl, Prysiazhniuk Olena, Pryshchepa Oksana, Sunichuk Sergiy, Khrystyuk Andriy.

CONFERENCE TOPICS

Section 1. Hydroinformatics, Hydraulic Engineering and Water Resources Management

Section 2. Power engineering and Renewable Energy Sources

Section 3. Software Engineering and Information Technology

Section 4. Internet of Things (IoT) and Artificial Intelligence

Section 5. Cyber and Information Security

Section 6. Mathematical, Computer Modeling and Computational Methods

Section 7. Robotics, Automation and Control

Section 8. Digital Solutions for the Environment



CONFERENCE SCHEDULE

Thursday, November 6, 2025

10:00-10:30 Opening Session
10:30-13:00 General Session
13:00-14:00 Break
14:00-17:00 General Session

Friday, November 7, 2025

10:00-10:30 Opening Session
10:30-13:00 General Session
13:00-14:00 Break
14:00-17:00 General Session

Saturday, November 8, 2025

10:00-17:00 Closing Sessions.



INSTRUCTIONS FOR PARTICIPANTS

The conference will be held offline in the conference hall of the National University of the Ukrainian SSR (Rivne, 11 Soborna St.) and online using the online room in the ZOOM software. The software is installed once before use by following the link to the Zoom room. You do not need to create a Zoom account to join the conference.

Plenary presentations – up to 15 minutes. Panel presentations – up to 5 minutes. Questions to the speakers – up to 3 minutes.

Use the link or copy the meeting ID into your Zoom software:

Thursday, November 6, 2025, 10:00 - 17:00

Link: [https://us05web.zoom.us/j/7989483024?](https://us05web.zoom.us/j/7989483024?pwd=SXgySDVoV0hISjFYSU4NFVpWVpFZz09&omn=85025265238)

[pwd=SXgySDVoV0hISjFYSU4NFVpWVpFZz09&omn=85025265238](https://us05web.zoom.us/j/7989483024?pwd=SXgySDVoV0hISjFYSU4NFVpWVpFZz09&omn=85025265238)

Meeting ID: 798 948 3024

Passcode: 638498

Friday, November 7, 2025, 10:00 - 17:00

Link: [https://us05web.zoom.us/j/7989483024?](https://us05web.zoom.us/j/7989483024?pwd=SXgySDVoV0hISjFYSU4NFVpWVpFZz09&omn=85025265238)

[pwd=SXgySDVoV0hISjFYSU4NFVpWVpFZz09&omn=85025265238](https://us05web.zoom.us/j/7989483024?pwd=SXgySDVoV0hISjFYSU4NFVpWVpFZz09&omn=85025265238)

Meeting ID: 798 948 3024

Passcode: 638498

Saturday, November 8, 2025, 10:00 - 17:00

Final meeting (closing conference).

Moderators – Prysiashniuk Olena, Khrystyuk Andriy.

PLENARY SESSION
WELCOMING SPEECH TO THE PARTICIPANTS OF THE
INTERNATIONAL SCIENTIFIC AND PRACTICAL
CONFERENCE

Moshynskiy Viktor, D. Sc., Professor, Rector of the National University of Water and Environmental Engineering;

Safonyk Andrii, D. Sc., Professor, Director of the Institute of Energy, Automation and Water Engineering of the National University of Water and Environmental Engineering;

Bomba Andrii, D. Sc., Professor, Professor of the Department of Computer Science and Applied Mathematics of the National University of Water and Environmental Engineering.

REPORTS OF PARTICIPANTS OF THE CONFERENCE
PLENARY SESSION

Martyniuk Petro, D.Sc., Professor, Director of the Institute of Cybernetics, Information Technologies and Engineering of the National University of Water and Environmental Engineering
FROM DEPARTMENTS TO INSTITUTES: 25 YEARS OF AN INSTITUTE OF CYBERNETICS, INFORMATION TECHNOLOGIES AND ENGINEERING

Halych Oksana, Ph. D., Associate Professor, Associate Professor of Department of the Department of Energy of the of the National University of Water and Environmental Engineering
INTEGRATION OF HYDROPOWER AND EDUCATION IN UKRAINE: WAYS OF SCIENTIFIC PROGRESS THROUGH INTERNATIONAL GRANT MECHANISMS

Moroz Igor, Ph. D., Associate Professor, Associate Professor of the Department of Computer Science and Applied Mathematics of the National University of Water and Environmental Engineering
MATHEMATICAL MODELING OF SEMICONDUCTOR P-I-N STRUCTURES: PROSPECTS OF APPLICATION OF CYBERMATHEMATICAL APPROACH

(authors: Prof. Bomba A.Ya., Assoc. Prof. Moroz I.P., Asst. Prof. Listiev Z.S.).

PARTICIPANTS' REPORTS

Thursday, November 6

Section 1 Hydrainformatics, Hydraulic Engineering, and Water Resources Management	
1.	<i>Klimov Serhii, Martynov Serhii, Kunitskyi Serhii, Kupchuk Larysa</i> Risk and Hazard Analysis of Riverbank Filtration Water Intakes for Water Safety Planning
2.	<i>Prykhodko Nataliia, Rokochinskiy Anatoliy, Volk Pavlo</i> Necessity and ways to improve the systems of irrigation management on a resource basis
3.	<i>Volk Lyubov, Dovbenko Ivanna</i> Improvement of methods for determining the coefficient of hydraulic resistance taking into account the spatial characteristics of pipeline roughness
4.	<i>Melnychuk Viktor, Brovko Halyna, Basyuk Tetyana, Stolyarets Mykhailo, Dasov Yuriy</i> Assessment of the suitability of artesian wells in the Rivne region for fishery use
5.	<i>Melnychuk Inna, Korniyshuk Volodymyr</i> Pool-type fishways as key elements of ecological improvement of watercourses
6.	<i>Omelchak Yuriy, Popadiuk Igor</i> Principles of physical modeling of circulating systems of technical water supply
7.	<i>Romashchenko Yevhen, Onopko Oleksandr, Volk Pavlo, Rokochinsky Anatoliy</i> Improving the calculation of drainage parameters taking into account deep soil loosening

Section 2 Power engineering and renewable energy sources	
8.	<i>Bílková Eva, Nowak Petr</i> Numerical Modelling and Transient Analysis of a Small Hydropower Plant
9.	<i>Vasylets Sviatoslav, Vasylets Kateryna, Ilchuk Volodymyr</i> Estimation of the values of the parameters of the capacitor exciter model of an asynchronous generator
10.	<i>Halych Oksana, Byednyy Maksim</i> Experimental and computer modeling of the operation of a triangular spillway
11.	<i>Halych Oksana, Danylchuk Roman</i> Calibration of a trapezoidal water meter using HEC-RAS
12.	<i>Herba Oleksandr</i> Improvement of laboratory setup for research of screw-type screw turbines in small hydropower
13.	<i>Kostyuk Oleksandr, Stetsyuk Ihor</i> Utilization of waste flue gas heat in a flowing bubbling bed of a contact heat utilizer
14.	<i>Sunichuk Serhiy</i> Research on the technical condition of the quay wall and shore protection
15.	<i>Filipovych Yuriy, Bodnarchuk Andriy, Kahramanyan Carolina</i> Monitoring the vibration condition of hydroelectric power plant units
Section 3 Software engineering and information technologies	
16.	<i>Hladka O., Karpovich I., Tymrakevych A.</i>

	Software module for capturing and tracking moving targets
17.	<i>Huseynov Ashraf, Abdullayeva Aynura</i> Mathematical Approximation and Physical-Technical Aspects of the Operation of an Atmospheric Acousto-Optic Locator with an Electronic Scanner in Military Specialized Systems
18.	<i>Kruk Roman, Zhukovska Nataliia</i> Prompt-Based Automation of Agile Requirements Documentation: Design for Limited-Infrastructure Environment
19.	<i>Safonyk Andrii, Polyukhovych Olena, Kovalchuk Yuriy</i> Information system for identification of impurity components of heavy metals in liquid media
20.	<i>Chaban Vasyl, Matiko Fedor</i> Analysis of regional features of seasonal natural gas consumption in the western and central regions of Ukraine
21.	<i>Shportko Oleksandr, Bomba Andrii</i> Acceleration of the execution of the algorithm for reducing the size of formed DEFLATE blocks using memoization in the process of progressive hierarchical lossless image compression
Section 4 Internet of Things (IoT) and artificial intelligence	
22.	<i>Kovtunets Volodymyr, Kovtunets Oles</i> System of Artificial Intellect as a Model Natural Intellect
23.	<i>Samoidiuk A., Ostapchuk O.</i> The Intelligence of Things: How AI Transforms the IoT Ecosystem
24.	<i>Zhukovskyy Viktor, Povsheniuk Andriy, Zubyk Yaroslav</i> Architecture of an intelligent IoT device for displaying customer call queues

25.	<i>Kardash Oksana, Gladun Lubomyr</i> The EU's educational trajectory in the implementation of artificial intelligence
26.	<i>Podvyshenny Viktor, Safonyk Andrii</i> Predicting trajectories of moving objects as an element of intelligent video surveillance with UAVs
Section 5 Cyber and information security	
27.	<i>Babych Serhiy, Slyvyak Bohdan, Onyshchuk Hlib</i> Educational potential of CTF competitions in the structure of cyber training grounds for higher education institutions
28.	<i>Gerus Volodymyr</i> The Illusion of Safety: Modern Challenges and New Approaches in Corporate Cybersecurity
29.	<i>Zhukovskyy Viktor, Panchuk Oleksandr</i> Architecture of a cross-platform system of personalized city tours with voice navigation
Section 6 Mathematical, computer modeling and computational methods	
30.	<i>Belozerova Olena, Martyniuk Petro</i> Integral conjugation condition for smart geobarriers with assimilation of sensor data
31.	<i>Cherhykalo Denys</i> Exact signal reconstruction from highly incomplete nonlinear system
32.	<i>Savych Dmytro, Pryshchepa Oksana, Naumchuk Oleksandr</i> Application of Machine Learning for Ethical Decision-Making
33.	<i>Bihun Yaroslav, Ukrainets Oleg</i>

	Mathematical modeling of the impact of environmental pollution on the epidemic process
34.	<i>Klepach Mykola, Klepach Marko, Fedorov Yanislav</i> Parametric optimization of inverter vector control regulators
35.	<i>Kushnir Valentyna, Kushnir Oleksandr</i> Uptime of a highly reliable semi-Markov system of two elevators
36.	<i>Listiev Zakhar</i> Application of special neural networks in cybermathematical modeling
37.	<i>Michuta Olga, Martyniuk Petro</i> On the influence of chemical sorption on the process of nonlinear filtration consolidation of a porous medium with a geobarrier
38.	<i>Turbal Yuriy, Turbal Mariana, Kubay Oleksandr, Smirnov Denis, Melnychuk Maksym</i> Forecasting method based on averaging a polynomial extrapolation sequence
39.	<i>Ulyanchuk-Martyniuk O.V.</i> On the influence of integral conjugation conditions on the subsidence of the surface of a porous medium under conditions of its non-isothermal consolidation: a mathematical model and a scheme for its numerical solution
40.	<i>Khodnevich Yaroslav, Trofymchuk Oleksandr, Korbutyak Vasyl</i> On the issue of aggregating predictions of an ensemble of neural networks for calculating the coefficient of hydraulic resistance
Section 7 Robotics, automation and control	
41.	<i>Akhundov Ramil, Hashimov Elshan</i>

	Enhancing the Efficiency of the Military Environmental Security System through the Implementation of Advanced Technical Means
42.	<i>Bayramov Azad, Suleymanov Samir</i> GPRS Radio Communication for AI-Based Measurement And Control Complex
43.	<i>Bondarchuk Viktor, Matsui Anatolii</i> Electromagnetic Testing and Failure Prediction of Antenna Systems Using Intelligent Technologies
44.	<i>Klimov Serhii, Khitrov Igor</i> Analysis of Oxygen Sensor Dynamics for Catalytic Converter Diagnostics Using On-Board Logging Data
45.	<i>Yarmolenko Volodymyr, Serbul Oleksandr, Izovita Oles</i> Analysis of parametric and time-angle methods for determining the distance and positioning of unmanned aerial vehicles
46.	<i>Vyskorko Vitaliy, Lytvynenko Oleksiy, Khrystyuk Andriy</i> Experimental study of the impact of cargo location on the energy efficiency of a quadcopter
47.	<i>Limych Vasyl, Fedoryshyn Roman</i> Determination of the parameters of a moving window for processing the vibroaccelerometer signal
48.	<i>Safonyk A., Polyukhovich O., Antikalo M.</i> Modern methods for identifying heavy metals in the aquatic environment
49.	<i>Semenko Bohdan-Roman, Khrystyuk Andriy, Melnyk Ihor</i> Development of a prototype of a flight controller based on the ESP32 microcontroller
50.	<i>Semenko Bohdan-Roman, Khrystyuk Andriy, Prysiazhniuk Olena</i> Development of an addressable optocoupler as an effective solution for

	scaling control systems
51.	<i>Leonid Filipchuk, Maxim Kotyk</i> Measurement and control of pH and Eh parameters during water purification
Section 8 Digital Solutions for the Environment	
52.	<i>Akhundov Ramil, Islamov Islam</i> Potential Threats to Environmental Security of the Armed Forces under Radiation and Chemical Hazards
53.	<i>Shulgan Roman, Yanchuk Oleksandr, Nikolaichuk Kateryna, Kibysh Anastasiia</i> Geoinformational support for modeling the efficiency of crop cultivation in crop rotations
54.	<i>Voloshchuk V.A., Novikov P.V., Stepanets O.V., Zakharchenko A.S.</i> Intelligent system for building heating using digital twin technology
55.	<i>Korbutyak Vasyl, Statnyk Ihor, Moshinsky Viktor, Franchuk Mykhailo</i> Geoinformation analysis of the influence of the canal network on the formation of surface runoff of the Somyne massif of the Rivne Nature Reserve

Friday, November 7
10:00 - 17:00

Section 1 Hydrainformatics, Hydraulic Engineering, and Water Resources Management	
56.	<i>Chiragov Fuad</i>

	The Weaponization of Water: Environmental Policy as a Tool of Russian Hybrid Warfare in the Caspian Sea
57.	<i>Kozishkurt Svitlana, Turchenyuk Vasyi, Zhylchuk Yuriy</i> Optimization of Sprinkling Parameters for Improved Irrigation Quality
58.	<i>Turchenyuk Vasyi, Kozishkurt Svitlana, Voitsekhovych Nazarii</i> Modeling and Management of Rice Water Consumption in the Danube Delta
59.	<i>Basyuk Tetyana, Onufriychuk Vadym, Sysonyuk Ivanna</i> Ecological assessment of the impact of anthropogenic ecopollutants on hydrobionts of the Sula River
60.	<i>Bohayenko Vsevolod, Romashchenko Mykhailo, Kolomiyets Serhiy, Sardak Anastasia</i> Mathematical assessment of optimal design parameters of double-action drainage systems for different soil conditions in Ukraine
61.	<i>Bogush Oleksandr</i> Design and principle of operation of hydromechanical water level sensors in the APY-200II hydroregulator system
62.	<i>Zhylchuk Vladyslav, Zhukovska Nataliya</i> Comparative analysis of software for modeling soil deformations
63.	<i>Melnichuk Inna</i> Legal and regulatory barriers to investing in the modernization of Ukraine's irrigation infrastructure
64.	<i>Tokar Lyudmila, Panasyuk Ilona</i> Feasibility study of permissible reliability levels for hydromelioration structures
Section 2 Power engineering and renewable energy sources	
65.	<i>Dubovyk Volodymyr, Mitiuk Liudmyla, Shtanheieva Karina , Osadchik Kate, Shecvhuk Bohdan</i> Design Features of Nonisolated DC/DC Converters for Maximum Power Point Tracking in Photovoltaic Systems
66.	<i>Masniak Oleh, Vyshnevskia Solomiia-Anna</i>

	Development of Software for the Design of Differential Pressure Flowmeters in Accordance with the Updated ISO 5167:2022
67.	<i>Vasylets Sviatoslav, Hlushchuk Vladyslav</i> Estimation of phase vectors of voltages and currents of the power grid from discrete instant value samples
68.	<i>Hnatyuk Dmytro</i> Design of an improved LSTM and XGBoost architecture for context-oriented anomaly detection in CPU-based event logs
69.	<i>Chernobyl Oleg, Popruga Pavlo, Poplavsky Dmytro</i> Numerical modeling of hydraulic parameters of the downstream of a hydroelectric power plant
Section 3 Software engineering and information technologies	
70.	<i>Samadova Konul</i> Digitalized urban transport system in small cities
71.	<i>Bilushchak Yuriy, Chernukha Olga, Bilushchak Halyna</i> Statistical modeling and establishment of two-sided critical regions for solutions of parabolic problems with experimental data at the boundary of the body
72.	<i>Veselsky Oleksiy</i> Object-oriented Petri nets and possibilities of their analysis by formal methods
73.	<i>Geriak Yuriy, Berko Andriy</i> Evaluation of semantic and temporal consistency of distributed information resources
74.	<i>Datsyshyn Serhiy, Michuta Olga</i> Cloud technologies and mobile applications in intelligent management of fisheries
75.	<i>Drozd Vasyl, Michuta Olga</i> Data protection in automated land resources management systems of local governments
76.	<i>Krasko Bohdan, Hrytsyuk Petro</i> Integration of PySpark Streaming with AWS EMR and Step

	Functions for real-time processing of big data
Section 4 Internet of Things (IoT) and artificial intelligence	
77.	<i>Azimov Rustam</i> A Comprehensive Methodology for Authorship Attribution of Literary Textual Works
78.	<i>Pashayev Adalat, Sabziev Elkhana, Goyushova Ulviyya</i> Curve Detection from Images in Video-Based Navigation Methods
79.	<i>Pavliuk Vitalii, Drevetskyi Volodymyr</i> Intelligent Modeling of Educational Curricula Based on Labor Market Vacancy Analysis Using Semantic and Generative AI
80.	<i>Klymyuk Yuriy</i> Development of an application for generating images of supplements to certificates of completion of general secondary education and calculating their average score
81.	<i>Ostapovets Petro, Demchuk Olena</i> Adaptive neural network models for assessing and regulating cognitive load in educational games
82.	<i>Petrova Maria, Popova Maria</i> Software intelligent tool of data compression in machine-to-machine communication
83.	<i>Shenderovsky Vyacheslav, Ruvinska Viktoriya</i> Artificial intelligence-based service to assist in formatting academic papers
Section 5 Cyber and information security	
84.	<i>Akhundov Ramil, Ibrahimov Bayram</i> Ensuring Information Security within the Military Environmental Safety System
85.	<i>Koverdiuk V.V., Ostapchuk O.P.</i> Improving Performance and Reliability of Electronic Document Issuance Systems Using Caching and Asynchronous Processing

86.	<i>Dmytro Moroz</i> Markov and Bayesian models in web analytics of user behavior
Section 6 Mathematical, computer modeling and computational methods	
87.	<i>Anikushyn Andrii, Nazarchuk Viktoria</i> Numerical Optimization of a Pseudoparabolic Systems with Memory
88.	<i>Gasanov Arzuman</i> Theoretical Research of Reinforced Concrete Materials and Their Application in the Preparation of Long-Term Support Zones
89.	<i>Gasanov Arzuman, Guliyev Anar, Hasanli Rashad</i> Problems of Effective Applications of Air Defense Means Against Air Target Activating at Low Altitudes
90.	<i>Hasanov Arif, Saidivaliev Shukhrat, Sabziev Elkhan, Khadzhimukhametova Matluba, Pashayev Adalat, Mamedova Esmira</i> Mathematical Modeling of Coupled Wagon Movement on a Railway Hump
91.	<i>Ilnytskyi Ivan</i> Comparative Analysis of Localization Methods for Accurate and Robust Positioning
92.	<i>Kochkarov Vladyslav, Martyniuk Petro</i> Comparative Analysis of Pressure Reconstruction Methods from Simulation Impulse Data
93.	<i>Kolesnykov Valerii, Klyushin Dmytriy</i> Mass Transfer Problem with Saturation Limit on Graph
94.	<i>Komleva Tatyana</i> On the Solution of a Linear Fuzzy Cauchy Problem with Constant Coefficients
95.	<i>Krasilenko Vladimir, Nikitovich Diana, Lazarev Alexander</i> The image processor based on signal ranking, determination of rank differences with their subsequent selection and weighted addition
96.	<i>Pashayev Adalat, Sabziev Elkhan, Malikov Sadig</i> On The Improving Algorithm for Stitching Images
97.	<i>Mamedov Ilgar, Huseynov Ashraf, Abdullayeva Aynura</i>

	Combined Boundary Problem of 2D in the Geometrical Middle -1D in the Middle-1D Multi-Point type in the Non-Classical Treatment for 4D Bianchi Equation with Non-Smooth Coefficients, Arising in the Modeling of Vibration Processes and Integral Representation
98.	<i>Nykonchuk Victoria</i> Forecasting Transport Service Demand under Dynamic Conditions: A Scenario-Based Approach
99.	<i>Onatskyi Roman, Misiura Serhii</i> Improving Predictive Accuracy in Surrogate Modeling of Plate Deflection through Physics-Informed Feature Engineering
100.	<i>Pelypets Roman, Javorskyj Ihor, Yuzefovych Roman, Lychak Oleh</i> Monitoring of rolling bearing with inner race fault using parameters of vibration birhythmic stochastic recurrence
101.	<i>Plotnikov Andrej</i> On the Solution of the Linear Set-valued Homogeneous Cauchy Problem with the Hukuhara Derivative
102.	<i>Pryshchepa Oksana, Komada Paweł</i> Control Strategies for Retrial Queues with a Single Retrial Attempt
103.	<i>Sandrakov Gennadiy</i> Modeling of Two-phase Filtration Processes and Homogenization
104.	<i>Semenov Vladimir, Chernorai Vladislava, Denysov Serhii</i> Self-adaptive proximal algorithms for equilibrium problems in Hadamard space
105.	<i>Smetankina Natalia, Misiura Ievgeniia, Misiura Serhii</i> Analysis of vibrations of the working body of the vibrating separator in the resonant mode
106.	<i>Topylko Petro, Dankanych Artur</i> Mathematical Modeling of Rooftop Solar Energy Potential Using Geospatial and AI-Based Approaches
107.	<i>Tys Mykhailo, Markovych Bohdan, Vyshnevskyi Oleksandr, Korendiy Vitaliy</i> Predictive Simulation of the Human Sit-to-Stand Transition
108.	<i>Bykov Viktor, Zhukovska Natalia</i> Analysis and use of physical models for simulation of the stress-

	strain state of porous media in game engines
109.	<i>Bomba Andrii, Kushnir Oleksa</i> Modeling of hydrodynamic processes in reservoirs with flow replenishment areas
110.	<i>Havrylyuk Maksym, Hrytsyuk Petro</i> Using the law of distribution of trend residuals of yield for modeling grain production risks
111.	<i>Hera Bohdan, Chuchvara Anastasia, Chernukha Olga, Bilushchak Yuriy</i> Determination of the concentration function of impurity particles in the boundary condition of the mass transfer problem from discrete data
112.	<i>Zhykharev Vladislav, Misyura Serhiy, Shapovalova Maria, Vodka Oleksiy</i> Study of the influence of uneven fiber distribution on the mechanical properties of composites based on voxel models
113.	<i>Kashtan Serhiy, Bomba Andrii</i> Mathematical modeling and prediction of controlled surface and groundwater movements
114.	<i>Markovych Bohdan, Gaivas Bohdana, Dmytruk Anatoliy, Dmytruk Veronika</i> Estimation of the resource of pipelines with welded joints in a hydrogen environment
115.	<i>Pryymak Mykola</i> Discrete periodic noises and their use in constructing periodic sequences
116.	<i>Pryymak Mykola</i> Periodic white noise with continuous argument and their use in substantiation of models of stochastic periodic signals
117.	<i>Prykhodko Nazar, Trubaev Oleksandr</i> Prediction of time to failure of pipelines taking into account corrosion, defects and pressure
118.	<i>Prokip Volodymyr</i> On solutions of the matrix polynomial equation $A(\lambda)X A(\lambda)+Y A(\lambda)B A(\lambda)=C A(\lambda)$ over the field

119.	<i>Khmil Roman, Sbrodov Yevgeny, Yuzefovych Roman, Lychak Oleh, Yavorsky Igor</i> First-order indicators for determining the power of harmonics of deterministic components of vibration signals
120.	<i>Chergykalo Denys</i> StEPConFi: an accessible method for obtaining pluripotency
121.	<i>Chernukha Yuriy</i> Modeling of diffusion processes in a multiphase randomly inhomogeneous body using Feynman diagrams
	Section 7 Robotics, automation and control
122.	<i>Huk Oleh, Matiko Fedir, Skibel Pavlo</i> Features of automation of gas meter verification process using bell-provers
123.	<i>Khliebnikov Mykola, Matsui Anatolii, Les Yaroslav</i> Rationale for selecting the type of grinding balls in energy-efficient invariant control of ore comminution
124.	<i>Shepel Oleksandr, Matsui Anatolii</i> Transient Frequency Spectrum Analysis for Single Line-to-Ground Fault Location in Insulated Power Systems
125.	<i>Tsukanov Oleh, Reut Dmytro</i> Remote Control System for a VTOL UAV Stand with Computer Vision Elements
126.	<i>Polkhovsky Ivan, Malanchuk Yevgeny, Stets Serhiy</i> Study of energy efficiency of frequency converters in automated control of an asynchronous electric drive
127.	<i>Polyakov Vladyslav</i> Suppression of oscillations of the mechanical subsystem of a magnetic levitation train
128.	<i>Safonyk Andrii, Targonii Ivan, Kovalchuk Nataliya</i> Development of a current regulation system in an electrocoagulation unit

129.	<i>Targonii Olga, Targonii Ivan</i> Development of a system for local/remote control of a blowing fan of a drying unit
Section 8 Digital Solutions for the Environment	
130.	<i>Akhundov Ramil, Mammadov Elnur</i> Adaptive Operational Adaptive Modes of the Military Environmental Security System
131.	<i>Akhundov Ramil, Islamov Islam</i> Military Environmental Security under Radiation and Chemical Threats
132.	<i>Basyuk Tetyana, Korbutyak Vasyl, Fedorchuk Andriy</i> Geoinformation aspects of planning adaptation measures to climate change in small cities of Ukraine (on the example of the city of Ostroh)
133.	<i>Ivanov Yuriy, Kovalchuk Nataliya, Budnik Zinaida</i> Using GIS technologies and space survey data to analyze the dynamics of forest fund areas (on the example of the State Enterprise "Kostopil Forestry")
134.	<i>Kalko Andriy, Basyuk Tetyana, Yakovyshyna Margarita, Konarivskyi Bohdan</i> Analysis of the dynamics of the Styr River flood using remote sensing methods

Saturday, November 8, 2025, 10:00
Final meeting (closing conference).