



AGENDA

XXVII INTERNATIONAL SCIENTIFIC-PRACTICAL ONLINE CONFERENCE

"RENEWABLE ENERGY AND ENERGY EFFICIENCY OF THE XXIST CENTURY"

20–22 MAY 2026



PAN | Kyiv
Representative Office
Polish Academy of Sciences



Politechnika
Warszawska



ДЕРЖАВНЕ АГЕНТСТВО З ЕНЕРГОЕФЕКТИВНОСТІ
ТА ЕНЕРГОЗБЕРЕЖЕННЯ УКРАЇНИ

KYIV – 2026

ORGANIZERS

- Institute of Renewable Energy of the National Academy of Sciences of Ukraine
- National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
- Representative Office of the Polish Academy of Sciences in Kyiv
- Warsaw Polytechnic
- Junior Academy of Sciences of Ukraine
- Energy Association UKRAINIAN HYDROGEN COUNCIL
- UNESCO Chair of Igor Sikorsky Kyiv Polytechnic Institute "Higher Technical Education, Applied Systems Analysis and Informatics"
- Institute of General Energy of the National Academy of Sciences of Ukraine
- Institute of Engineering Thermophysics of the National Academy of Sciences of Ukraine
- Ukrainian National Committee on Heat and Mass Transfer

UNDER SUPPORT OF:

- National Academy of Sciences of Ukraine
- Energy Association UKRAINIAN HYDROGEN COUNCIL
- Hydrogen Europe
- Representative Office of the Polish Academy of Sciences in Kyiv
- Scientific Council "Scientific Bases of Electric Power Industry", NAS of Ukraine
- State Agency on Energy Efficiency and Energy Saving of Ukraine
- Faculty of Electrical Engineering and Automation, Department of Renewable Energy Sources, Igor Sikorsky Kyiv Polytechnic Institute
- Andijan State University named after Z.M.Babur
- EUROSOLAR-Ukraine
- Ukrainian-Polish Center of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
- Association of Engineering and Wind Power of Ukraine
- Scientific and Technical Union of Power Engineers and Electrical Engineers of Ukraine
- UNIDO/GEF Global Cleantech Innovation Programme for SMEs in Ukraine

SPONSORS:

- Energy Association UKRAINIAN HYDROGEN COUNCIL

INFORMATION SUPPORT:

- Scientific and applied journal "Vidnovlyuvana enerhetyka"
- Conference webpage of Igor Sikorsky Kyiv Polytechnic Institute: www.konf.ive.kpi.ua
- Webpage of the Institute of Renewable Energy, NAS of Ukraine: www.ive.org.ua
- Department for Renewable Energy at Igor Sikorsky Kyiv Polytechnic Institute:
• www.vde.kpi.ua;
- Newspaper "Kyiv Polytechnic": <https://kpi.ua/kp>
- Information resource: www.geonews.com.ua

Draft Agenda 2026 as of 24 April 2026

XXVII INTERNATIONAL SCIENTIFIC-PRACTICAL ONLINE CONFERENCE "RENEWABLE ENERGY AND ENERGY EFFICIENCY OF THE XXI CENTURY"

20.05.2026 WEDNESDAY	
Start 10⁰⁰	GREETINGS IN THE ZOOM (up to 5 min per person)
	<ul style="list-style-type: none">• Stepan Kudria, Director, IRE, National Academy of Sciences of Ukraine• Anatolii Melnychenko, Rector, Igor Sikorsky Kyiv Polytechnic Institute• Mykhailo Zgurovsky, Academician, National Academy of Sciences of Ukraine (1992 -2024)• Stanislav Dovgy, President, Junior Academy of Sciences of Ukraine• Andrii Shiyan, Head of the Department for Energy Efficiency Development, State Agency on Energy Efficiency and Energy Saving of Ukraine• Yuriy Bondarenko, Chairman of the Board of the NGO "Scientific and Technical Union of Power Engineers and Electrical Engineers of Ukraine"• Mateusz Bialas, Director of the Representative Office of the Polish Academy of Sciences in Kyiv• Oleksandr Riepkín, President of the Energy Association "Ukrainian Hydrogen Council"• Vasyl Budko, Dean of the Faculty of Electrical Engineering and Automation, Igor Sikorsky Kyiv Polytechnic Institute
10⁴⁵	SPEECHES IN THE PROGRAM ZOOM (10 minute per person) PLENARY SESSION OBJECTIVES. CHALLENGES. INTERNATIONAL REVIEW.
10⁴⁵ – 11¹⁵	MODERATORS: MYKOLA KUZNIETSOV, PETRO VASKO
	<p>RENEWABLE ENERGY SOURCES AND GREEN HYDROGEN IN THE STRUCTURE OF THE POST-WAR ENERGY ARCHITECTURE OF UKRAINE <i>S.O.Kudria, O.V. Zurian, Institute of Renewable Energy of the National Academy of Sciences of Ukraine</i></p> <p>THE GROWTH OF RES CAPACITY IN THE POLISH ENERGY SECTOR <i>Artur Rusowicz, Warsaw University of Technology</i></p> <p>CONCEPT OF THE ENERGY HUB "KOBLEVE" AS A MODEL OF DECENTRALIZED GENERATION AND HYDROGEN TRANSFORMATION IN THE BLACK SEA REGION OF UKRAINE TAKING INTO ACCOUNT THE DANISH EXPERIENCE <i>¹Yu. V. Maslov, ¹V. P. Kylyvnyk, ¹Yu. L. Borzunov, ²O. V. Zurian, ¹Kobleve Territorial Community, Mykolaiv Region, Ukraine, ²Institute of Renewable Energy, NAS of Ukraine</i></p>
SECTION 11¹⁵	FINAL EVENT OF THE GERUCCHY PROJECT RECOMMENDATIONS ON GREEN HYDROGEN CERTIFICATION IN UKRAINE
11¹⁵ – 12³⁵	MODERATORS: BENMENNI MOUHOUB, MYKOLA KUZNIETSOV
	<p>GERMAN-UKRAINIAN RESEARCH COOPERATION ON THE CERTIFICATION OF GREEN HYDROGEN <i>Jakob Schlandt, Head of Policy and Markets, Hamburg Institut</i></p> <p>REGULATORY FRAMEWORK CONDITIONS FOR GREEN HYDROGEN CERTIFICATION IN THE EU <i>Dr. Alexandra Styles, Hamburg Institut</i></p> <p>FRAMEWORK CONDITIONS FOR GREEN HYDROGEN PRODUCTION AND TRADE IN UKRAINE <i>Timo Hoelzmann, Hamburg Institut</i></p> <p>RECOMMENDATIONS FOR DESIGNING A CERTIFICATION SYSTEM FOR RENEWABLE HYDROGEN IN UKRAINE <i>Dr. Alexandra Styles, Hamburg Institut</i></p> <p>EXTENDED SUSTAINABILITY CRITERIA FOR RENEWABLE HYDROGEN IN UKRAINE <i>Timo Hoelzmann, Hamburg Institut</i></p>

	<p>RELEVANCE OF FINDINGS IN THE CONTEXT OF THE IMPLEMENTATION OF A HYDROGEN STRATEGY OF UKRAINE <i>Mykola Kuznietsov, Institute of Renewable Energy</i></p> <p>QUESTIONS AND DISCUSSION WITH PARTICIPANTS [20 MINUTES]</p>
SECTION 12³⁵	ENERGY SOURCES OF THE FUTURE. HYDROGEN ENERGY (presentation time limit: 10 minutes)
12³⁵ – 15¹⁵	MODERATOR: MYKOLA KUZNIETSOV
	<p>FORMATION OF GREEN CORRIDORS IN THE BLACK SEA AS A TOOL FOR UKRAINE’S RECOVERY AND DECARBONIZATION OF THE REGION <i>O.O. Riepink, Energy Association "Ukrainian Hydrogen Council"</i></p> <p>PROSPECTS FOR THE DEVELOPMENT OF THE HYDROGEN ECONOMY IN GERMANY AND THE APPLICATION OF ENERGY SYSTEM OPTIMIZATION MODELS <i>Yurii Tashcheiev, Christian-Albrechts-Universität zu Kiel, Institute for Statistics & Econometrics, Germany</i></p> <p>OPTIMIZATION OF ELECTRICAL AND ENERGY CHARACTERISTICS OF A SINGLE CELL OF A HYDROGEN-OXYGEN ELECTROLYZER <i>Yu. K. Pirsky, Ya. V. Kolosovsky, A. V. Kutsyi, Vernadsky Institute of General and Inorganic Chemistry, NAS of Ukraine</i></p> <p>HYDROGEN EMBRITTLEMENT OF STEELS: CHALLENGES IN THE DEVELOPMENT OF THE HYDROGEN INFRASTRUCTURE IN UKRAINE <i>O. Zvirko, D. Demianchuk, O. Venhryniuk, O. Tsyrylnyk, H. Nykyforchyn, H. V. Karpenko Physico-Mechanical Institute of the National Academy of Sciences of Ukraine, Lviv</i></p> <p>ELECTRONIC MODEL OF A HYDROGEN FUEL CELL <i>S. V. Boichenko, L. K. Listovshchyyk, V. P. Studenets, I. O. Shkilniuk, V. O. Korovushkin, Igor Sikorsky Kyiv Polytechnic Institute</i></p> <p>ANALYSIS OF ENERGY OPERATING CONDITIONS IN PEM FUEL CELL MODELLING <i>S. V. Boichenko, V. O. Korovushkin, I. O. Shkilniuk, L. K. Listovshchyyk, V. P. Studenets, E. M. Brodnikovskyyi Igor Sikorsky Kyiv Polytechnic Institute</i></p> <p>SG IN HYDROGEN ENERGY: PERSPECTIVES OR UTOPIA? <i>M.R. Lopushanska, N.V. Revutska, L.V. Tsyhanok, K.V. Yatsyshyna, Eco-Optima LLC / Professional Association of Environmentalists of the World (PAEW)</i></p> <p>THERMODYNAMIC MODELLING AND STOCHASTIC DEMAND ANALYSIS OF HIGH-PRESSURE HYDROGEN REFUELLING FOR FCEVS BASED ON REAL GAS EFFECTS <i>Linfei Chen, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"</i></p> <p>ANALYSIS OF THE PROSPECTS TO ADAPT THE GAS TRANSPORTATION SYSTEM OF UKRAINE TO HYDROGEN TRANSPORTATION <i>O.O. Mishyn, Igor Sikorsky Kyiv Polytechnic Institute</i></p> <p>ASSESSMENT OF SUITABILITY OF TERRITORIES FOR LOCATING WIND AND HYDROGEN POWER PLANTS <i>S.O. Kudria, M.A. Tkalenko, L.V. Yatsenko, Institute of Renewable Energy of the National Academy of Sciences of Ukraine</i></p>
SECTION 15¹⁵	ENERGY EFFICIENCY SIMULATION OF COMPLEX ENERGY SYSTEMS (presentation time limit: up to 10 minutes)
15¹⁵ – 16⁴⁵	MODERATORS: MYKOLA KUZNIETSOV, OLEKSII ZURIAN
	<p>SYSTEMIC APPROACH TO ENERGY AUDIT OF HEATING UTILITIES OF UKRAINE IN THE ENERGY CRISIS <i>O.V. Borychenko, A.V. Cherniavskyyi, Igor Sikorsky Kyiv Polytechnic Institute</i></p> <p>ECONOMIC TOOLS FOR DEVELOPING ENERGY-EFFICIENT MICROGRIDS IN THE REGION <i>N.L. Korzhenivska, E.O. Ponomarenko, Podillia State University, Kamianets-Podilskyi</i></p>

	<p>ENERGY AUDIT OF ENERGY CONSUMPTION IN AN EDUCATIONAL INSTITUTION <i>V.A. Nalyvaiko, I.P. Radko, O.V. Okushko, National University of Life and Environmental Sciences of Ukraine</i></p> <p>ANALYSIS OF ENERGY CONSUMPTION AND PROSPECTS FOR IMPLEMENTING ENERGY-EFFICIENT TECHNOLOGIES IN THE MUNICIPAL INSTITUTION "VINNYTSIA PIROGOV HUMANITARIAN LYCEUM NO.1" <i>O.V. Koval, Municipal Institution "Vinnytsia Pirogov Humanitarian Lyceum No.1"</i></p> <p>FORECASTING MODERN FUEL CHOICES IN INDUSTRY AND THE ENERGY SECTOR USING ARTIFICIAL INTELLIGENCE UNDER HYBRID DECARBONIZATION <i>B. S. Soroka, D. I. Fedorov, A. V. Lyba, Institute of Gas of the NAS of Ukraine</i></p> <p>ASSESSMENT OF THE ENERGY EFFICIENCY OF ACTIVE COOLING SYSTEMS FOR MINIMISING HEAT STRESS IN LIVESTOCK <i>Y.I. Dziuban, Institute of General Energy, NAS of Ukraine</i></p> <p>ANALYSIS OF THE CURRENT STATUS AND SCIENTIFIC PREREQUISITES FOR THE DEVELOPMENT OF ENERGY MANAGEMENT SYSTEMS OF A LOCAL FACILITY <i>R.Yu. Cherednychenko, National University of Life Resources and Environmental Sciences of Ukraine</i></p> <p>USE OF SOLAR PV AND BUFFER ENERGY STORAGE TO IMPROVE ENERGY EFFICIENCY OF ELECTRIC VEHICLE CHARGING STATIONS <i>A.M. Tereshenko, Institute of Renewable Energy of the NAS of Ukraine</i></p> <p>THEORETICAL ASPECTS OF DIAGNOSING THE ENERGY EFFICIENCY STATE OF PRODUCTION SYSTEMS <i>P.V. Rozen, V.P. Rozen, Institute of General Energy of the National Academy of Sciences of Ukraine</i></p>
SECTION 16⁴⁵	EDUCATIONAL ACTIVITIES
16⁴⁵ – 17¹⁵	MODERATOR - OLEKSII ZURIAN (time limit: up to 10 minutes)
	<p>METHODOLOGY FOR DEVELOPING STUDENTS' SYSTEMATIC ANALYSIS SKILLS IN STUDYING MAXWELL–LORENTZ EQUATIONS <i>Sevarakhon Bakirova, Andijan State University, Uzbekistan</i></p> <p>APPLICATION OF THE "LEARNING BY DESIGN" METHOD FOR DEVELOPING A COURSE ON DESIGNING NEARLY ZERO-ENERGY BUILDINGS (NZEB) <i>O.V. Lysak, Institute of Renewable Energy of the NAS of Ukraine</i></p> <p>ON ORGANIZING OPERATIONS OF THE ENERGY EFFICIENCY CENTER OF IVE NAES OF UKRAINE <i>V.B. Baidulin, Institute of Vocational Education, NAES of Ukraine</i></p>

21.05.2026 THURSDAY	
	SCIENTIFIC REPORTS
Start 10⁰⁰	REPORTS IN ZOOM (up to 10 min per person)
SECTION	SOLAR ENERGY
10⁰⁰ – 13³⁰	MODERATORS: SERHII MATIAH, TAMILA SURZHYK
	<p>SEARCHING FOR WAYS TO IMPLEMENT QUANTUM-SIZE EFFECTS IN VARIOUS STRUCTURES OF SILICON SOLAR CELLS <i>Rayimjon Aliev, Andijan State University, Uzbekistan</i></p> <p>SYNERGISTIC FORMATION OF OUTPUT PHOTOVOLTAIC CHARACTERISTICS OF POLYCRYSTALLINE SILICON STRUCTURES UNDER CONDITIONS OF HIGH SOLAR RADIATION <i>Rayimjon Aliev, M. Alinazarova, D. Khonbutaeva, Andijan State University, Uzbekistan</i></p>

STATISTICS OF INSOLATION TIME SERIES IN KYIV: CORRELATION ANALYSIS RELEVANT TO PHOTOVOLTAICS
O.Y. Gaievskiy, Igor Sikorsky Kyiv Polytechnic Institute

ARTIFICIAL NEURAL NETWORK BASED PREDICTIVE PERFORMANCE ANALYSIS OF PHOTOVOLTAIC OUTPUT UNDER VARIOUS SOLAR RADIATION RANGES
Ravshanbek Raxmatullayev, UCSI University, Malaysia

INVESTIGATION OF THE PHOTOELECTRIC PARAMETERS OF A MONOCRYSTALLINE SILICON SOLAR CELL UNDER DIFFERENT COLORED BACKGROUNDS USING THE SINTON SUNS-VOC MEASUREMENT SYSTEM
Xojixon Xolmatova, Andijan State University, Uzbekistan

IMPROVEMENT OF OPTICAL PROPERTIES OF SILICON-BASED SOLAR CELLS USING VARIOUS SURFACE GEOMETRIC STRUCTURES
Temirov Sodiqjon, Andijan State University

SIMULATION MODELING OF I-V CHARACTERISTICS OF SOLAR CELLS BASED ON THE SUPERELLIPSE MODEL IN PYTHON ENVIRONMENT
Sharifaxon Tadjibayeva, Andijan State University

PREPARATION AND MORPHOLOGICAL STUDIES OF SOLID SOLUTIONS OF (GE₂)_{1-x}(ZNSE)_x
Durdona Koshchanova, Urgench State University

GROWING A GRADED-BAND SOLID SOLUTION OF Si_{1-x}Ge_x (0<x<1) FROM A TIN SOLUTION-MELT
Abdullayeva Sevara, Urgench State University

OPTIMIZING ANTI-REFLECTION LAYERS FOR PEROVSKITE LATERAL HETEROJUNCTION SOLAR CELLS
Irodakhon Gulomova, Andijan State University

STUDY OF THE DEPENDENCE OF SOLAR CELL POWER ON ITS SURFACE AREA USING THE LEXSO-LAR LABORATORY EQUIPMENT KIT
Avazbek Mirzaalimov, Andijan State Pedagogical Institute

SHORT-TERM FORECASTING OF DEMAND FOR ENERGY STORAGE FOR THE ENERGY COMPLEX – SOLAR POWER PLANT, ENERGY STORAGE
V.O. Derij, A. O. Zaporozhets, T.P. Nechaieva, Ya. V. Havrylenko, Institute of General Energy of the NAS of Ukraine

SELECTION OF PARAMETERS OF ELEMENTS OF PROTECTION OF SOLAR BATTERIES FROM NEGATIVE OPERATIONAL INFLUENCES
L.V. Nakashidze, Oles Honchar Dnipro National University

ONNECTION OF PHOTOELECTRIC ELEMENTS IN AN INTELLECTUALLY CONTROLLED ENERGY SOURCE
D.V. Bondarenko, Institute of Renewable Energy, NAS of Ukraine

RESEARCH ON THE INFLUENCE OF SNOW COVER ON THE SURFACE OF PHOTOELECTRIC MODULES ON THE GENERATION OF SES
O.M. Moroz, A.O. Pavlov, O.O. Myroshnyk, State Biotechnological University, Kharkiv

ENHANCED MATHEMATICAL MODEL OF TEMPERATURE FIELD DISTRIBUTION IN PHOTOVOLTAIC PANEL
Karuna Serhii, Knysh Liudmyla, Oles Honchar Dnipro National University

MATHEMATICAL MODELING OF THE DUST CONTAMINATION OF PV PANELS SURFACE
E.V. Iliashenko, L.I. Knysh, Oles Honchar Dnipro National University

ANALYSIS OF SOLAR DRYING METHODS AND DESIGN SCHEMES OF SOLAR DRYERS
V. M. Holovko, D. S. Yaruta, Igor Sikorsky Kyiv Polytechnic Institute

ANALYTICAL ASSESSMENT OF ENERGY EFFICIENCY OF V-SHAPED BIFACIAL PHOTOELECTRIC SYSTEMS UNDER CONDITIONS OF DIFFERENTIATED ALBEDO
B.P. Pashkevych, Igor Sikorsky Kyiv Polytechnic Institute

IMPROVING THE EFFICIENCY OF GRID-CONNECTED SOLAR POWER PLANTS WHEN WORKING WITH A GENERATOR IN AUTONOMOUS MODE

	<p><i>V.S. Stepenko, Institute of Renewable Energy, NAS of Ukraine</i></p> <p>ANALYSIS OF THE IMPACT OF WEATHER PHENOMENA ON THE EFFICIENCY OF SOLAR GENERATION SYSTEMS IN UKRAINIAN CONDITIONS</p> <p><i>O. V. Ostapchuk, O.V. Yurash, Igor Sikorsky Kyiv Polytechnic Institute</i></p>
SECTION 13³⁰	HYDRO ENERGY, WIND ENERGY AND GEOTHERMAL ENERGY
13³⁰ – 14³⁰	MODERATORS: PETRO VASKO, KATERYNA PETRENKO, VOLODYMYR KOKHANIEVYCH
	<p>INFLUENCE OF THE LIMIT VALUE OF THE NOMINAL POWER UTILIZATION COEFFICIENT ON THE RESULTS OF THE ASSESSMENT OF THE TECHNICAL POTENTIAL OF WIND POWER PLANTS IN UKRAINE</p> <p><i>K.V. Petrenko, I.V. Ivanchenko, Institute of Renewable Energy of the NAS of Ukraine</i></p> <p>SOME FEATURES OF THE MODULAR NEURAL SYSTEM FOR VIBRODIAGNOSTICS OF WIND TURBINE GENERATORS</p> <p><i>O.V. Kulesh, Institute of Electrodynamics, NAS of Ukraine</i></p> <p>THE RISE OF GEOTHERMAL RESEARCH IN SPAIN</p> <p><i>Hanna Liventseva, Geosciences Barcelona GEO3BCN-CSIC, Spain</i></p> <p>ANALYSIS OF TECHNICAL AND ECONOMIC CHARACTERISTICS OF GEOTHERMAL HEAT AND COOLING SYSTEMS WITH UNDERGROUND THERMAL ENERGY STORAGE</p> <p><i>O.V. Lysak, Institute of Renewable Energy of the National Academy of Sciences of Ukraine</i></p> <p>PROSPECTIVE GEOTHERMAL SYSTEMS</p> <p><i>V.Yu.Skosar, Institute of Transport Systems and Technologies of the National Academy of Sciences of Ukraine</i></p> <p>HIGH-TEMPERATURE TWO-STAGE AIR-TO-WATER HEAT PUMP ON R744 (CO₂) FOR BUILDING HEATING</p> <p><i>E.P.Pastushenko, Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine</i></p>
SECTION 14³⁰	BIOENERGY (time limit: up to 10 minutes)
14³⁰ – 16⁰⁰	MODERATOR - HENNADIY CHETVERYK
	<p>ANALYSIS OF THE POTENTIAL OF OBTAINING ALTERNATIVE MOTOR FUEL FROM WASTE PLASTIC MATERIALS AND WORN TIRES IN UKRAINE</p> <p><i>Serhii Boichenko, Iryna Shkilniuk, Ihor Kuberskyi, Ihor Levandovskyi, Kostiantyn Futa, Igor Sikorsky Kyiv Polytechnic Institute</i></p> <p>COMPREHENSIVE THERMOCHEMICAL PROCESSING OF RUBBER WASTE FROM AUTOMOTIVE TIRES</p> <p><i>S.O. Kipko, K.E. Pianykh, Institute of Gas of the National Academy of Sciences of Ukraine</i></p> <p>METHANOL PRODUCTION BY GASIFICATION OF CARBON-CONTAINING RAW MATERIALS OF VARIOUS ORIGIN</p> <p><i>K.E.Pianykh, D.M.Nevchas, A.I.Trypolskyi, P.E.Stryzhak, Institute of Gas, NAS of Ukraine</i></p> <p>EXERGETIC OPTIMIZATION OF CONTROL OF A BREWERY COGENERATION SYSTEM USING VARIATIONAL INEQUALITIES</p> <p><i>K.O. Volchanska, Zaporizhzhia National University</i></p> <p>ANALYSIS OF THE HEAT POTENTIAL OF AN AIR-GROUND HEAT EXCHANGER IN CLIMATIC CONDITIONS OF THE CITY OF KYIV</p> <p><i>O.M. Nedbaylo, K.D. Slyzhevskyi, O.V. Vlasenko, Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, Igor Sikorsky Kyiv Polytechnic Institute</i></p> <p>CONCEPTUAL APPROACH TO CREATION AND APPLICATION OF SAFE HEAT ACCUMULATING MATERIALS A.V. Konyk, <i>O.O. Berezovchuk, Institute of Technical Thermophysics of the NAS of Ukraine</i></p> <p>RESEARCH ON COMBUSTION OF PELLETS FROM CONIFEROUS WOOD WASTE</p>

	<p>O. M. Dudnyk, I. S. Sokolovska, Institute of Heat and Power Technologies of the National Academy of Sciences of Ukraine</p> <p>THERMOPHYSICAL PROPERTIES OF FUELS AND COMBUSTION PRODUCTS AS A CRITERIA FOR SELECTING EFFICIENT FUELS, ENVIRONMENTAL DECARBONIZATION UNDER THE CONDITIONS OF DIGITALIZATION OF CALCULATIONS B. S. Soroka, A. V. Lyba, D. I. Fedorov, Institute of Gas of the NAS of Ukraine</p> <p>ALTERNATIVE FUEL BASED ON PLANT BIOMASS WASTE</p> <p>T. V. Korincheska, V. A. Mykhailyk, Institute of Engineering Thermophysics of the NAS of Ukraine</p>
<p>22.05.2026 FRIDAY</p>	
	<p>SCIENTIFIC REPORTS</p>
Start 10 ⁰⁰	<p>REPORTS IN ZOOM (time limit: up to 10 minutes)</p>
10 ⁰⁰ – 15 ⁵⁰	<p>GENERAL</p>
	<p>MODERATOR - MYKOLA KUZNIETSOV</p>
	<p>REDUCTION IN THE USAGE OF F-GASES IN THE EUROPEAN UNION OVER THE LAST DECADE <i>Andrzej Grzebielec, Warsaw University of Technology</i></p> <p>MINE HYDRO-PNEUMATIC POWER PLANTS BASED ON THE FOUNTAIN OF HERON <i>D. Cherevatskyi, Institute of Industrial Economics of the National Academy of Sciences of Ukraine</i></p> <p>USE OF ELEMENTS FROM FUNCTIONAL ALLOY CAMITAL FOR CONVERSION OF THERMAL ENERGY FROM LOW-POWER SOURCES INTO ELECTRICITY <i>V. V. Kozyrskyi, V. Ya. Bunko, Separate Division of the National University of Life Resources and Environmental Management of Ukraine "Berezhany Agrotechnical Institute"</i></p> <p>RENEWABLE ENERGY STORAGE FROM SECOND-LIFE BATTERIES FOR POWER SYSTEM FLEXIBILITY <i>Ganna Kostenko, Artur Zaporozhets, Institute of General Power Engineering, NAS of Ukraine</i></p> <p>STRUCTURAL MODEL OF FORMATION OF THE ENERGY BALANCE OF THE COMMUNITY BASED ON RENEWABLE SOURCES AND LOCAL TPPs <i>V. V. Kaplun, E. O. Kulybaba, National University of Life Resources and Environmental Sciences of Ukraine</i></p> <p>ANALYSIS OF THE PAYBACK PERIOD OF THE NETWORK ENERGY SAVING SYSTEM IN DIFFERENT SEGMENTS OF THE ELECTRICITY MARKET OF UKRAINE <i>John Smith, Ann Johnson, Institute of General Energy, National Academy of Sciences of Ukraine</i></p> <p>SOME SYSTEMS OF CONTROL AND DIAGNOSTICS OF ELECTRICAL ENERGY STORAGE <i>V.M. Zvarych, Y.I. Gyzhko, L.B. Ostapchuk, G.A. Kuzik, Institute of Renewable Energy of the National Academy of Sciences of Ukraine, Institute of Electrodynamics of the National Academy of Sciences of Ukraine</i></p> <p>INTELLIGENT MONITORING AND FORECASTING OF ELECTRICITY CONSUMPTION IN MICROGRID USING SMART GRID AND IOT TECHNOLOGIES <i>O.V. Okushko, I.P. Radko, V.A. Nalyvaiko, National University of Bioresources and Environmental Sciences of Ukraine</i></p> <p>CHARGE LIMITS FOR HYDROCARBON REFRIGERANTS IN HVACR SYSTEMS IN ACCORDANCE WITH REVISED EN 378:2026 STANDARD <i>Katarzyna Katana, Warsaw University of Technology</i></p> <p>USE OF RENEWABLE ENERGY SOURCES IN A DOUBLE FORM IN THE SPHERE OF TOURISM AND PROVIDING ELECTRICITY TO REMOTE AREAS <i>Kiryigitov Bakhrudin Abdusattarovich, Andijan branch of Kokand University, Andijan, Uzbekistan</i></p> <p>MODELING OF FLOW DISTRIBUTION IN AN ENERGY ISLAND UNDER CONDITIONS OF POWER DEFICIT TAKING</p>

INTO ACCOUNT THE CRITICALITY OF CONSUMERS

V.V. Voitenko, National University of Life Resources and Environmental Sciences (NUBIP of Ukraine)

CONCEPTUAL PRINCIPLES OF MODERNIZATION OF THE UKRAINIAN POWER SYSTEM BASED ON SMART GRID TECHNOLOGIES

O.A. Melnyk, M.P. Zurnadzi, Igor Sikorsky Kyiv Polytechnic Institute

METHODS AND SOFTWARE FOR PRIMARY DATA PROCESSING IN AIR POLLUTION MONITORING TASKS

S.I. Kovtun, Y.V. Kuts, B.B. Mlynko, M.E. Friz, Ternopil Ivan Puluj National Technical University

APPLICATION OF THE EUROPEAN METHODOLOGY FOR DETERMINING THE COST OF NEW CAPACITY INTRODUCED IN THE ELECTRICITY MARKET IN UKRAINE

I.M. Buratynsky, Institute of General Energy, NAS of Ukraine

USE OF LINEAR ARIMA MODELS FOR FORECASTING PARAMETERS OF THE TECHNICAL CONDITION OF POWER EQUIPMENT NODES

Ovdiy Danylo, Zvarych Valeriy, National University of Kyiv-Mohyla Academy

FEATURES OF CURRENT PROTECTION OPERATION IN ELECTRICAL DISTRIBUTION NETWORKS WITH DISTRIBUTED GENERATION

Yu.V. Khlystov, Igor Sikorsky Kyiv Polytechnic Institute

ANALYSIS OF REGULATORY REQUIREMENTS AND EUROPEAN EXPERIENCE IN AIR MONITORING IN THE VICINITY OF ENERGY FACILITIES

Kulykivskiy O. V., Ponomarenko O. V., Institute of General Energy, NAS of Ukraine

ANALYSIS OF SPECIFIC WEIGHT-DIMENSIONAL INDICATORS OF HIGH-SPEED SYNCHRONOUS MOTORS WITH PERMANENT MAGNETS AND AN EXTERNAL ROTOR

M.A. Kovalenko, I.Ya. Kovalenko, E.O. Titov, O.O. Bazarov, Igor Sikorsky Kyiv Polytechnic Institute

RESEARCH OF RELIABILITY MANAGEMENT SYSTEMS OF ISOLATED MICROGRIDS WITH ENERGY STORAGE SYSTEMS

A.V. Davydkov, National University of Life Resources and Environmental Sciences of Ukraine

SYSTEM ANALYSIS TOOLS AND THEIR USE IN RENEWABLE ENERGY APPLICATIONS

S.V. Zaichenko, A.R. Trachuk, A. Burima, A. Pachev, Igor Sikorsky Kyiv Polytechnic Institute

ESTIMATION OF THE FUNDAMENTAL FREQUENCY OF THE POWER SUPPLY VOLTAGE BY THE PHASE METHOD BASED ON THE GILBERT TRANSFORM WITH MOVING AVERAGING OF THE VOLTAGE PHASE RUN

V. P. Malko, S. I. Kovtun, Yu. V. Kuts, V. Yu. Kuts, Institute of General Energy, NAS of Ukraine

ANALYSIS OF OPERATING MODES OF A CONTACTLESS DC MOTOR WITH PERMANENT MAGNETS

O.V. Trukhanov, M.A. Kovalenko, Igor Sikorsky Kyiv Polytechnic Institute

USE OF LOW-VOLTAGE POWER SUPPLY SOURCE FOR RENEWABLE ENERGY SOURCES SYSTEMS

M.A. Kovalenko, I.Ya. Kovalenko, E.O. Titov, O.O. Bazarov, Igor Sikorsky Kyiv Polytechnic Institute

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RESEARCH OF THE OPERATION OF ADAPTIVE RELAY PROTECTION OF ELECTRICAL DISTRIBUTION NETWORKS WITH RENEWABLE ENERGY SOURCES

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FLEXIBILITY OF THE ELECTRIC POWER SYSTEM IN MODERN CONDITIONS

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LEAD-CARBON ACCUMULATORY BATTERIES

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RAILWAY MAGNETOLEVITATION TRANSPORT

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USE OF ALGORITHMS FOR SOLVING THE TRANSPORT PROBLEM WITH INTERMEDIATE TRANSPORTATION FOR OPTIMIZATION OF THE DEVELOPMENT OF ELECTRICITY NETWORKS OF RENEWABLE ENERGY SYSTEMS

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