



International Conference on MODERN ELECTRICAL AND ENERGY SYSTEMS

CONFERENCE PROGRAM



Kremenchuk Mykhailo Ostrohradskyi National University, Ukraine, September 23-25, 2019

Date/time

September 22

Arrival of participants

September 23

9 ⁰⁰ -11 ⁰⁰	Registration
11^{00} -13 ⁰⁰	Plenary Session
	(Opening Ceremony)
13^{00} - 13^{30}	Conference Photo
13^{30} - 14^{30}	Lunch
14^{30} -16 ³⁰	Oral Session
	1121
17^{00}	Welcome Party

September 24

9 ⁰⁰ -11 ⁰⁰	Oral Session
	1121/1211
11^{00} - 11^{30}	Coffee break
11^{30} -13 ⁰⁰	Poster Session
13^{00} - 14^{00}	Lunch
14^{00} -16 ³⁰	Excursion
18^{00}	Farewell Dinner

September 25

10^{00} - 11^{30}	Poster Session
11^{30} -12 ⁰⁰	Coffee break
12^{00} - 13^{00}	Plenary Session
	(Closing Ceremony)

SCHEDULE OF CONFERENCE

Time	22.09.2019, Sunday	23.09.2019, Monday	24.09.2019, Tuesday	25.09.2019, Wednesday
09:00				
09:30				
10:00		Registration	Oral Sessions	
10:30				Poster Session
11:00			Coffee break	
11:30		Plenary Session Opening		Coffee break
12:00		Ceremony	Poster Session	Plenary Session Closing
12:30				Ceremony
13:00		Conference Photo		
13:30	Arrival of participants	Lunch	Lunch	
14:00				
14:30				
15:00		Oral Sessions		
15:30			Excursion	
16:00				
16:30				
17:00				
17:30				
18:00		Welcome Part		
18:30			Farewell Dinner	
21:00				
22:00				

REGISTRATION

Academic Building #1,

(9:00 - 11:00)

PLENARY SESSION

Academic Building #1, Hall #1121 of «Auditorium named after Academician Vernadsky» (11:00 – 13:00) CHAIRMAN: Ewa Korzeniewska, Mykhaylo Zagirnyak

1	Mykhaylo Zagirnyak	Greeting to the conference participants
2	Ievgen Pichkalov	Greeting to the conference participants
3	Andrzej Krawczyk	5G technology as the successive stage in the history of wireless telecommunication
4	Oleksandr Beshta	Challenges of Electric Mobility
5	Andrii Gladyr	dComFra: Erasmus+ KA2 project. KrNU's experience

CONFERENCE PHOTO

Academic Building #1, Hall of Kremenchuk Mykhailo Ostrohradskyi National University (13:00 – 13:30)

LUNCH

13:30 - 14:30

ORAL SESSION

Hall #1121 (14:30 - 16:30)

CHAIRMAN: Andrzej Krawczyk, Viacheslav Prus

Track 1: Electromechanics

1	Roman Voliansky, Oleksandr Sadovoi, Yuliia Sokhina and Nina Volianska	Active Suspension Control System
2	Aleksandr Yavtushenko, Ganna Yavtushenko, Victor Protsenko, Yulia Bondarenko and Tatyana Vasilchenko	Dynamics of Mechanical Press Drive
3		Investigation of leakage inductance influence on torque characteristic of different types of induction machines
4	Sorbiy Buryakovskiy Artom	Searching of The Optimum Configuration of The Traction Electric Transmission of The Shunting Locomotive

Track 2: Electrical and power systems engineering

	, 3	Administrative buildings heating automatic control based on maximum efficiency criterion
6	Serhii Liashenko, Viktor Sakalo, Olha Minkova and Antonina Kalinichenko	Justification of Construction Parameters of the Screen in the Small-Sized Household Biomass Chopper

WELCOME PART

Hall Academic Building #5 (17:00)

ORAL SESSION

Hall #1121 (9:00 - 11:00)

CHAIRMAN: Bojan Štumberger, Dmytro Mamchur

Track 1: Electromechanics		
1	Victor Busher and Vasily Goroshko	Dual Electromagnetic Retarder Control System for Tuning Internal Combustion Engines
2	Mykola Moroz, Serhii O. Korol, Viacheslav Yelistratov, Serhii S Korol and Olena Moroz	Development of a moderator of the pump controlled drive for the engine
3	Dmytro Mamchur, Serhii Husach and Rostyslav Yatsiuk	Induction Motors Condition Monitoring and Lifetime Estimation System

	Track 3: Industrial electronics		
4	Denis Mospan, Vladyslav Mospan, Olena Fomovskaya, Felix Fomovskii, Alexey Yurko and Viktoriia Nevliudova	Possibility of the Optimal Control Method Application in Energy-Consuming Technological Processes of RED Production	
5	Roman Yershov, Volodymyr Voytenko, Volodymyr Bychko and Yevhenii Kuts	FPGA-based Frequency and Phase Comparators for Closed-Loop Motor Position Control	
6	Oleksandr Plakhtii, Vladislav Tsybulnyk and Volodymyr Nerubatskyi	The Analysis Of Modulation Algorithms and Electromagnetic Processes in a Five-Level Voltage Source Inverter with Clamping Diodes	

ORAL SESSION

Hall #1211 (9:00 - 11:00)

CHAIRMAN: Tibor Vince, Andrii Gladyr

Track 4: Simulation in electrical engineering	
Igor PetukhovComplex permeability hysteresis modelImplementation in harmonic balance finiImplementation in harmonic balance finiImplementation in harmonic balance fini	

Track 5: Electrical Engineering Education and Education Technologies

2	Svitlana Symonenko and Viacheslav Osadchyi	Peculiarities of English language training for electrical engineering students at Ukrainian universities
3	Iryna Trunina and Inna Khovrak	Harmonization of the interests of employers and institutions of higher education as a basis for the sustainable regional development

Track 6: Industrial application & Industry 4.0		
4		Investigation of factors affecting on the forms of pulsed dielectrical barrier discharge on the surface of water in atmospheric air
		Caching and Archiving in Distributed System for Effective Information Collection and Analysis

COFFEE BREAK

Academic Building #1 (11:00 – 11:30)

POSTER SESSION

Hall Academic Building #1 (11:30 – 13:00)

Track 1: Electromechanics

CHAIRMAN: Andrii Kalinov, Mariia Maliakova, Alexei Bialobrzeski, Viacheslav Melnykov

1.	Borys Kuznetsov, Tatyana Nikitina, Ihor Bovdui and Borys Kobilyanskiy	Robust Anisotropic Control by Cable Winding Machine
2.		Improving of Accuracy of Electromechanical Servo Systems with Distributed Parameter of Plant Mechanical Part
3.	V. Kukhar, I. Karmazina, A. Prysiazhnyi, A. Elchaninov, V. Zubrytskyi, V. St'opin, M. Korenko and S. Hurkovska	Operation Modes of Electric Motors of Reversing Cold Rolling Mill 1680 during Rolling with Emulsions
4.	Olena Nazarova, Volodymyr Osadchiy and Serhiy Shulzhenko	Accuracy improving of the two-speed elevator positioning by the identification of loading degree
5.	Oleksandr Hubachov, Volodimir Kolosiuk and Andriy Kolosiuk	The torque of undulated-current traction motors
6.	Ihor Serhiienko, Serhii Serhiienko, Oleksii Chornyi and Valerii Tytiuk	The Analysis of the Relationship between the Parameters of the Nonlinear Object of Control and its Transfer Function of the Fractional Order
7.		The influence of the phase angle between the rotor magnetic axis and the stator winding current vector on the synchronous reluctance motor efficiency
8.	Roman Manko, Oleksii Kravets, Tetyana Korenkova and Mohamed Zaidan Qawaqzeh	Wavelet Transform Capabilities for Localization of Leaks in the Pipeline Network Pump Complex
9.	Skydanenko, Mykola Kononenko and	Improving of the Electronic Intellectual Cleaning System of Holes in Perforated Shells of the Priller
10.		Design and Implementation of an Intelligent Air Quality Sensor

11.	Victor Busher and Vasily Goroshko	Dual Electromagnetic Retarder Control System for Tuning Internal Combustion Engines
12.	Olga Tolochko, Oleksii Burmelov and Daniil Danilov	Observer-based Sensorless Control of PMSM
13.	Maryna Antonova and Evgenia Vasilieva	Concept of anti-surge protection of gas pumping units
14.	Volodmyr Zinovkin, Mykola Antonov and Yrii Krysan	Simulation of static stability of synchronous electric drive at hardly variable load
15.	Gennadii Martynenko and Yuriy Ulianov	Combined Rotor Suspension in Passive and Active Magnetic Bearings as a Prototype of Bearing Systems of Energy Rotary Turbomachines
16.	Grygoriy Diachenko, Oleksandr Aziukovskiy, Mykhailo Rogoza and Serhiy Yakimets	Optimal Field-Oriented Control of an Induction Motor for Loss Minimization in Dynamic Operation using GRAMPC
17.	Mykola Ostroverkhov and Mykola Buryk	Control of Permanent Magnet Synchronous Motor under Conditions of Parametric Uncertainty
18.	Andrey Stavinskii, Vyacheslav Shebanin, Elena Avdieieva, Aleksandr Tsyganov, Rostislav Stavinskiy and Aleksey Sadovoy	Dependence of the indicators of three-phase transformers with planar plate magnetic wires from variants of rod configurations
19.	Andrey Stavinskii, Vyacheslav Shebanin, Elena Avdieieva, Aleksey Sadovoy, Larisa Vakhonina and Aleksandr Tsyganov	Axial asynchronous motor with a rotor's two- section cone-cylindrical magnetic circuit
20.	A. P. Oksanich, S.E. Pritchin, M. G. Kohdas and M.G. Dernova	Pd/Porous GaAs in the manufacture of Schottky diodes
21.	Ivan Biluk, Dmitro Shareyko, Andrii Fomenko, Serhii Havrylov, Oleg Savchenko and Rostislav Stavinskiy	Construction and adjustment of a vibration machine based on a complete electric drive
22.	Dmytro Yarymbash, Mikhaylo Kotsur, Yevheniia Kulanina and Tetyana Divchuk	Simulation of Idling Mode of Single-Phase Transformer
23.	Dmytro Yarymbash, Mikhaylo Kotsur, Tetyana Divchuk, Serhiy Yarymbash, Iryna Kylymnyk and Yevheniia Kulanina	Calculation of No-load Currents Using Hysteresis Loop
24.	Viktor Grebtnikov and Rostislav Gamaliia	Comparative analysis of two types of generators with permanent magnets for wind turbine

25.	Igor Atamanyuk	Predictive Control of Electrical Equipment Reliability on the Basis of the Non-linear Canonical Model of a Vector Random Sequence
26.	Viktoriya Kovalchuk and Tetyana Korenkova	The Assessment of the Efficiency of a Pumping Plant with a Variable-Frequency Electric Drive at the Change of the Hydraulic System Parameters
27.	Konstantyn Kuchynskyi and Viacheslav Prus	Numerical evaluation of the maximum heatings of solid rotor of the synchronous machine in transient mode
28.	Oleksandr Popovych and Ivan Golovan	Currents System for Efficient Mathematical Modeling of an Induction Motor Using the Field Analysis
29.	Viktoriia Nozhenko, Dmytro Rodkin and Kostyantin Bohatyrov	Control of passing the resonance zone during start-up of above resonance vibration machines
30.	Olga Chorna, Valerii Tutiuk and Oleksii Chornyi	Identification Of Changes In The Parameters Of Induction Motors During Monitoring By Measuring The Induction Of A Magnetic Field On The Stator Surface
31.	Oleksandr Derets and Oleksandr Sadovoi	Synthesis of a quasi-optimal in speed relay- modal position control system, based on the N-i switching method
32.	Nataliia Zachepa, Olga Chorna and Dmytro Rieznik	Research levels and zones spatial propagation magnetic field asynchronous machine
33.	Vasyl Shynkarenko, Ali Makki, Viktoriia Kotliarova and Anna Shymanska	Modular Principle in the Structural Organization and Evolution of Electromechanical Objects
34.	Vasyl Shynkarenko, Ali Makki, Viktoriia Kotliarova and Anna Shymanska	Genetic Synthesis of Electromechanical Objects of the Modular Type
35.	Volodymyr Chenchevoi, Iurii Zachepa and Vita Ogar	Research on Harmonic Composition of Voltage and Current of Induction Generator with High Saturation Magnetic
36.	Mariia Maliakova, Oleg Zaichenko, Vitalii Stiazhkin, Serhii Kushnyriev and Atef Saleh Al-Mashakbeh	Increase of electromagnetic compatibility of the rotary type electromagnetic separator with semiconductor current regulators
37.	Oleksii Chornyi, Sergii Buryakovskyy, Leonid Mazurenko, Iurii Zachepa, Volodymyr Chenchevoi and Nataliia Zachepa	Development of Theory and Practice of the Local Autonomous Power Supply Sources Creation
38.	Evgeniia Burdilna and Volodymyr Hrabko	Transporter Control for Grain Handling in Granaries and Loading on Vehicles

39.	Irena Kováčová and Viacheslav Melnykov	Magnetic Fields of DC PM Motor and its EMC
40.	Oleg Sinchuk and Ihor Kozakevych	Analysis of Direct Torque Control System of Five-phase Induction Motor
41.	and Oleksandr Somka	The methods for accounting the degree of electric machines aging in the assessment of their reliability
42.	, , , , , , , , , , , , , , , , , , , ,	The Method of Protective Screen Selection Against the Excessive Influence of the Electromagnetic Field of an Induction Motor

Track 4: Simulation in electrical engineering

CHAIRMAN: Tatjana Korenkova, Valerii Sydorenko

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52.	Zinovkin Volodymyr, Blyzniakov Olexander and Vasilieva Jevgeniia	Non-stationary electromagnetic processes in power-intensive electrical facilities with highly varying loads
53.	Gennadii Slavko	Modeling Of A Non-Contact Sustainable Suspension Of A Free Superconducting Rotor On Magnetic Bearings
54.	Branislav Fecko and Andrii Kalinov	Matlab Model and PI Controler of DC Permanent Magnet Motor
55.	Peter Hrabovský and Oleksii Kravets	The Design and Simulation of Spiral Planar Coil in COMSOL Multiphysics
56.	Darina Špaldonová and Dmitro Mamchur	The Capacitor Field Modelling by Comsol
57.	Sergii Shlyk and Tetiana Haikova	Development of a Mathematical Model for Power Engineering Parts Deep Drawing from Two-layer Materials
58.	Ihor Kozakevych and Roman Siyanko	Simulation of processes in the modular multilevel converter
59.	Andrii Golovan, Igor Grytsuk, Sergey Rudenko, Viktoriya Saravas, Anatoliy Shakhov and Oleksandr Shumylo	Aspects of Forming the Information V2I Model of the Transport Vessel

LUNCH

(13:00 – 14:00)

EXCURSION	
(14:00 – 16:30)	
FAREWELL DINNER	

(18:00)

POSTER SESSION

Hall Academic Building #1 (10:00 – 11:30)

Track 2: Electrical and power systems engineering

CHAIRMAN: Andriy Perekrest, Serhii Yakimets

	1	
1.	Borys Kuznetsov, Tatyana Nikitina and Ihor Bovdui	Feed Forward Robust Active Shielding System by Magnetic Field with Single Compensating Coil
2.	Matej Beres and Olena Slavko	Four Leg Interleaved DC-DC Buck-Boost Converter with Modifiable Topology Using Proposed Windows Application
3.	Vladyslav Mykhailenko, Sergiy Buryan, Galyna Mikhnenko, Julia Chunyk, Olga Tcharniak and Iryna Bashyrova	Study of AC pulse converters with active and active-inductive load
4.	Ruslan Vlasenko, Oleksii Bialobrzheskyi and Andrii Gladyr	Four-wire three-phase active power filter with fuzzy controller for compensation of distortion of currents unbalance in the conditions of fluctuated load
5.	Mykhaylo Tkach and Borys Tymoshevskyy	Energetic Complex for the Plastic's Waste Processing and Electricity Production
6.	Tetiana Skibina and Tetiana Kurbatova	Methodical Approach to Evaluate Management Efficiency of Energy Supply Companies
7.	Tetiana Kurbatova and Tetiana Skibina	Renewable energy policy in Ukraine's household sector: measures, outcomes and challenges
8.	Agnieszka Joanna Drzymała and Ewa Korzeniewska	Economic efficiency of a photovoltaic power plants
9.	Yuriy Sayenko and Andrii Molchan	Analysis of wind turbine impacts on power quality taking into account the variable nature of wind flow
10.	Valerii Havrysh, Vasyl Hruban, Aleksey Sadovoy, Antonina Kalinichenko and Katerina Taikhrib	Sustainable Energy Supply Based on Sunflower Seed Husk for Oil mills
11.	Oksana Dovgalyuk, Sherali Saidov and Ivan Yakovenko	Application of Energy Storage Systems at the Traders Work on the Ukraine Energy Market
12.	Serhii Bondarenko, Oleksii Bialobrzheskyi and Ruslan Vlasenko	The frequency response research of power part elements a one-phase series active power filter

13.	Leonid Mazurenko, Oleksandr Dzhura, Mykola Kramar and Maksym Shykhnenko	Wind energy conversion system with induction generators connected to a single static compensator
14.	Kateryna Kryvonos, Dmytro Pyrogov and Yurii Shevchuk	Modern aspects of alternative energy in Ukraine
15.	Yuan Li	Power grid scheduling strategy considering wind power reporting power confidence coefficient
16.		Introduction to the Formation of the Basic Structure of the Algorithm for the Control of Electric Energy Flows in Iron Ore Mines
17.	Yevgeniy Trotsenko, Volodymyr Brzhezitsky, Olexandr Protsenko and Yaroslav Haran	Experimental Laboratory Equipped with Voltage Dividers for Power Quality Monitoring
18.	Viacheslav Prus and Alyona Nikitina	Accounting of electric energy consumption and quality as a part of automatic systems of technical accounting of energy
19.	Oleg Sinchuk, Ihor Kozakevych and Denis Vornikov	Research of PMSM Wind Generator Under Assymetry Grid Conditions
20.	Berdai Abdelmajid, Gourma Anass, Moussa Reddak and Titjuk Valerii	Overviewing of the Impact of wind farm integration on power grid

Track 3: Industrial electronics

CHAIRMAN: Valerii Tytiuk, Iurii Zachepa

21.	Svetlana Podnebennaya, Vladimir Burlaka and Sergey Gulakov	Development of Power Supply for Resistance Welding Machine
22.	Dávid Schweiner and Mariia Maliakova	Transient Analysis of Buck DC-DC Converter Switching
23.		Partially feedback linearizing DC-link voltage controller for three-phase shunt active power filters
24.	Oleksandr Nikolaienko and Mykola Antonov	Asynchronous electric drive based on cascade multi-level frequency converter
25.	Dobroslav Kováč and Andrii Gladyr	Half Bridge Driver for MOSFET and IGBT Transistors

Three-phase Grid Inverter for Combined Electric Power System with a Photovoltaic Solar Battery

COFFEE BREAK

Track 5: Electrical Engineering Education and Education Technologies

CHAIRMAN: Tamara Poyasok, Vita Ogar

		Modelling of electromagnetic processes and phenomena in quantum-sized systems in the
27.	Natalya Sosnickaya, Larysa Khalanchuk, Mykola Morozov and Halyna Onyshchenko	course of physical and mathematical support of master's programs of the specialty "Electric power engineering, electrical engineering and electromechanics"
28.	Volodymyr Nykyforov, Oleksandr Hubachov, Alona Pasenko, Serhii Sukach, Elena Antonova and Yuliya Bredun	Psychological and Pedagogical Aspects of Identifying the Professional Abilities in Electrical Engineering of Listeners of the Pre- University Training Course
29.	Anfisa Shmeleva, Ksenia Sizova and Svitlana Soshenko	Implementation of Dual Education Elements into Electrical Engineers Training
30.	Gennadii Slavko, Serhii Serhiienko and Larisa Herasimenko	Digitalization Electrical Engineering Education and Automatic Assessment of Study Results
31.	Mykhaylo Zagirnyak, Serhii Serhiienko and Viktor Kostin	The Standardization of the Higher Engineering Education in Ukraine in the Light of American Experience
32.	Denys Zagirniak, Viktoriia Perevozniuk and Oleg Kratt	Rationalization of professional orientation of a person according to the needs of the business
33.	Iryna Trunina, Olena Sushchenko, Dariya Basyuk and Mariia Pokolodna	Coaching as Education Technology on Electrical Engineering Education
34.	Viktoria Perevozniuk and Ruslana Kantemyrova	Accreditation of higher engineering education in the usa: american scientists' estimation
35.	Yevheniia Chebotarova, Andrii Perekrest and Vita Ogar	Comparative analysis of efficiency energy saving solutions implemented in the buildings
36.	Iveta Tomčíková and Andrii Gladyr	Tool for Automatic Formulation of State Equations in the MATLAB Environment
37.	Dmytro Babenko, Ilona Batsurovska, Nataliia Dotsenko, Olena Gorbenko, Iana Andriushchenko and Nataliia Kim	Application of monitoring of the informational and educational environment in the engineering education system

38.	Volodymyr Lugovyi and Zhanneta Talanova	Reproduction and development of personnel potential of electrical and power engineering in Ukraine
39.	Tamara Poyasok, Olena Bespartochna and Tanya Dniprovska	FORMATION OF SCIENTIFIC AND RESEARCH COMPETENCY OF FUTURE ELECTRICAL ENGINEERS
40.	Andrey Pochtovyuk and Kateryna Pryakhina	Increase in Use Values of Future Engineers through the Education Technology Trends Implementation
41.	Iryna Shvedchykova, Iryna Soloshych and Svitlana Pochtovyuk	Creation of educational and research software for integrated assessment of energy consumption and sustainable development of regions

Track 6: Industrial application & Industry 4.0

CHAIRMAN: Olena Slavko, Viacheslav Prus

Andrzej Krawczyk and Ewa Korzeniewska	5G technology as the successive stage in the history of wireless telecommunication
Tibor Vince and Olena Slavko	Enhanced Centralized Access Control System
Olga Zalunina, Vita Ogar, Andrii Perekrest and Oksana Zbyrannyk	Formation of informational support in construction for the implementation of energy saving measures
Ivan Laktionov, Oleksandr Vovna, Oksana Zolotarova, Serhii Sukach and Vladyslav Lebediev	Results of researches of metrological characteristics of analog temperature sensors
Oleksandr Anishchenko, Volodymyr Kukhar, Andrii Prysiazhnyi, Elena Balalayeva, Viktor Agarkov and Leila Aliieva	Ensuring the Required Electrotechnical Properties During Recycling of Worn Trolley Wire
Ivan Laktionov, Oleksandr Vovna, Oksana Zolotarova, Serhii Sukach and Vladyslav Lebediev	Results of researches of metrological characteristics of analog temperature sensors
Olga Maslak, Natalya Grishko, Svitlana Ishchenko and Mariya Maslak	Export-oriented enterprise development of the electrotechnical industry: strategic guidelines
Mykola Pechenik, Serhii Burian, Mykola Pushkar and Hanna Zemlianukhina	Analysis of the Energy Efficiency of Pressure Stabilization Cascade Pump System
Alla Kasych, Zuzana Rowland and Oksana Onyshchenko	Evaluating effectiveness of the business models of electrical and electronic engineering companies: monitoring methods, experience and
	Tibor Vince and Olena Slavko Olga Zalunina, Vita Ogar, Andrii Perekrest and Oksana Zbyrannyk Ivan Laktionov, Oleksandr Vovna, Oksana Zolotarova, Serhii Sukach and Vladyslav Lebediev Oleksandr Anishchenko, Volodymyr Kukhar, Andrii Prysiazhnyi, Elena Balalayeva, Viktor Agarkov and Leila Aliieva Ivan Laktionov, Oleksandr Vovna, Oksana Zolotarova, Serhii Sukach and Vladyslav Lebediev Olga Maslak, Natalya Grishko, Svitlana Ishchenko and Mariya Maslak Mykola Pechenik, Serhii Burian, Mykola Pushkar and Hanna Zemlianukhina

		characteristics
51.	Sergei Peresada, Victor Reshetnyk, Yevhen Nikonenko and Dmytro Rodkin	Adaptive position control and self-commissioning of the interior permanent magnet synchronous motors
52.	Leonid Fylypchuk and Viktor Fylypchuk	Automatic regulation of parameters to render harmless chromium containing waste water a mixer-reactor of periodical action
53.	Volodymyr Dragobetskii, Alexander Shapoval, Dmytro Moloshtan, Elena Naumova and Sergii Shlyk	Improving The Operational Reliability Of Stamped Parts Of Electrical Engineering Machines And Electrical Products
54.	Oleksandr Cherednichenko, Mykhaylo Tkach and Serhii Dotsenko	The Usage of a Waste Heat Recovery Metal- Hydride Unit of Continuous Operation in the Maritime Energy
55.	Volodymyr Nykyforov, Oksana Sakun, Mykhaylo Yelizarov, Alona Pasenko and Oksana Maznytska	Test-object activity and mortality depending on electromagnetic radiation intensity and duration
56.	Viktor Pisminetsky, Igor Nevliudov, Iryna Botsman, Viktoriia Bortnikova, Vladyslav Yevsieiev and Denis Mospan	Degradation and Regeneration in Silicon Concentrator Solar Panels
57.	Alla Kasych, Yaroslava Yakovenko and Iryna Tarasenko	Optimization of business processes with the use of industrial digitalization

COFFEE BREAK

Academic Building #1 (11:30 – 12:00)

PLENARY SESSION CLOSING CEREMONY

Academic Building #1, Hall #1121

of «Auditorium named after Academician Vernadsky»

(12:00 - 13:00)

CHAIRMAN: Oleksii Chornyi, Serhii Serhiienko