



МІНІСТЕРСТВО
ОСВІТИ І НАУКИ
УКРАЇНИ



ТЕХНО **ВАГИ**

MEI
MACHENTECH

Yarych
Даний природою

The program

2nd International Conference on
Modeling and Computer Engineering in
Mechanical Engineering – 2024

MCEME-2024

DEPARTMENT OF DESIGN MACHINE AND AUTOMOTIVE ENGINEERING


INVITES



18 June 2024 – Arrival and check-in

19 June 2024 – The plenary session

<https://us05web.zoom.us/j/88362077473?pwd=gN9Qwf3QvUlznkbgBbqZPasQAuF8Tk.1>

10⁰⁰ – 12⁰⁰ 

The plenary session

<https://us05web.zoom.us/j/88362077473?pwd=gN9Qwf3QvUlznkbgBbqZPasQAuF8Tk.1>

- ❖ Yurii BOBALO D.Sc.Tech., professor, rector Lviv Polytechnic National University, Ukraine;
- ❖ Ivan DEMYDOV D.Sc.Tech., professor, Vice-Rector for Scientific Research, Lviv Polytechnic National University, Ukraine;
- ❖ Valerii ADAMCHUK D.Sc.Tech., professor, Academician of NAAS of Ukraine, director of Institute of Mechanics and Automation of Agro-Industrial Production of NAAS of Ukraine, Ukraine.
- ❖ Michal BEMBENEK D.Sc.Tech., professor, Department of Manufacturing Systems, AGH University of Science and Technology, Krakow, Poland
- ❖ Oleksii LANETS D.Sc.Tech., professor, Director of Institute of Mechanical Engineering and Transport, Lviv Polytechnic National University, Ukraine
- ❖ Vasyi DMYTRIV D.Sc.Tech., professor, Head of Department Machine Design and Automotive Engineering, Lviv Polytechnic National University, Ukraine;

12⁰⁰ – 13⁰⁰  - Break

13⁰⁰ – 17⁰⁰  - Speeches at the sessions (19.06.2024)

❖ **SECTION I** – MODELING OF TECHNICAL SYSTEMS AND PROCESSES; CAD/CAM/CAE SYSTEMS / МОДЕЛЮВАННЯ ТЕХНІЧНИХ СИСТЕМ І ПРОЦЕСІВ; CAD/CAM/CAE СИСТЕМИ;
(<https://us05web.zoom.us/j/89094767414?pwd=gVb2hVsK63rreKMxY1kiAcdePIVAN1.1>)

❖ **SECTION II** – COMPUTER-INTEGRATED SYSTEMS IN MECHANICAL ENGINEERING // THE LATEST TECHNOLOGIES AND MATERIALS IN MECHANICAL ENGINEERING / КОМП'ЮТЕРНО-ІНТЕГРОВАНІ СИСТЕМИ В МАШИНОБУДУВАННІ; НОВІТНІ ТЕХНОЛОГІЇ І МАТЕРІАЛИ В МАШИНОБУДУВАННІ;
(<https://us05web.zoom.us/j/84800183303?pwd=vzcI21OpnBanLutawGlpUMGHNE3mJv.1>)

❖ **SECTION III** – EXPERIMENTAL MECHANICS; DYNAMICS AND STRENGTH OF MACHINES / ЕКСПЕРИМЕНТАЛЬНА МЕХАНІКА; ДИНАМІКА І МІЦНІСТЬ МАШИН;
(<https://us05web.zoom.us/j/83591563041?pwd=7tG2AcXGi1LNxbfKDjqxhyFqLYez.1>)

**SECTION I - MODELING OF TECHNICAL SYSTEMS AND PROCESSES;
CAD/CAM/CAE SYSTEMS (19.06.2024)**

(<https://us05web.zoom.us/j/89094767414?pwd=gVb2hVsK63rreKMxY1kiAcdePIVAN1.1>)

Chairman of the meeting: **Michał Bembenek**

13 ⁰⁰ – 13 ¹⁰	MODELLING MOVEMENT STABILITY OF MACHINE-TRACTOR UNITS BASED ON MODULAR TYPE TRACTOR Volodymyr NADYKTO¹, V.KYURCHEV², Oleksandr SCLYAR³, Radmila SCLYAR⁴ ^{1,2,3,4} Dmytro Motorny Tavria State Agrotechnological University E-mail: ¹ volodymyr.nadykto@tsatu.edu.ua , ² radnik@tsatu.edu.ua ³ oleksandr.sklyar@tsatu.edu.ua , ⁴ radmila.skliar@tsatu.edu.ua ,
13 ¹⁰ – 13 ²⁰	CFD AND EXPERIMENTAL RESEARCH OF THE HEATING SYSTEM OF THE CITY LOW-FLOOR BUS Yurii VOICHYSHYN ¹ Lviv Polytechnic National University E-mail: Yurii.I.Voichyshyn@lpnu.ua
13 ²⁰ – 13 ³⁰	MODELING OF APPLICATION LIMITATIONS HYDROMOTOR-WHEELS IN TRANSMISSIONS OF MOBILE MACHINES Grigory AVRUNIN¹, Mykhailo PODRIGALO², Nadia PODRIGALO³ and Iryna MOROZ⁴ ^{1,2,3,4} Kharkiv National Automobile and Highway University E-mail: ¹ griavrunin@ukr.net , ² pmikhab@gmail.com , ³ pnm2018@ukr.net , ⁴ irinamoroz1@ukr.net

13 ³⁰ – 13 ⁴⁰	<p>S-MODEL OF THE DISTRIBUTION OF GEAR RATIOS BETWEEN GEAR BOX STAGES OF CAREER CARS</p> <p>Serhii RAKSHA¹, Pavlo ANOFRIEV², Oleksii KUROIPIATNYK³, Vladimir BOHOMAZ⁴, and Alexander POSMITJUKHA⁵ ^{1,2,3,4,5}Ukrainian State University of Science and Technologies E-mail: ¹raksha@ukr.net, ²anofrievp@ukr.net, ³kuropyatnick@gmail.com, ⁴wboqomas@i.ua, ⁵aleksandrp@3q.ua</p>
13 ⁴⁰ – 13 ⁵⁰	<p>MODELING OF THE STRESS-STRAIN STATE OF RAILWAY CAR WHEELS WITH THE PRESENCE OF INCLUSION-TYPE SUBSURFACE STRESS CONCENTRATORS</p> <p>Zenovii STOTSKO¹, Oleg KUZIN² Mykola KUZIN³ ^{1,3}Lviv Polytechnic National University ^{2,3}Lviv Research Institute of Forensic Expertise E-mail: ¹stotsko@lp.edu.ua, ²kuzinolegan@gmail.com, ³mykola.o.kuzin@lpnu.ua</p>
13 ⁵⁰ – 14 ⁰⁰	<p>PECULIARITIES OF USING FUTURE CAM FOR GAS TURBINE ENGINE BLADE MACHINING</p> <p>Povstyanoy OLEKSANDR <i>Lutsk National Technical University</i> E-mail: povstianoj@ukr.net,</p>
14 ⁰⁰ – 14 ¹⁰	<p>STUDY OF THE INFLUENCE OF PARAMETERS OF THE CAR ENGINE COOLING SYSTEM ON THE TEMPERATURE OF THE EXHAUST GASES OF THE EGR SYSTEM USING CFD PROGRAMS</p> <p>Roman KACHMAR¹ Volodymyr MAYSTRUK² Viktor PADLIAK³ ^{1,2,3}Lviv Polytechnic National University E-mail: ¹volodymyr.v.maistruk@lpnu.ua, ²roman.y.kachmar@lpnu.ua, ³Viktor.Padliak.mATSM.2021@lpnu.ua</p>
14 ¹⁰ – 14 ²⁰	<p>MODELLING OF THE STRUCTURE AND PARAMETERS SYNTHESIS PROCESS OF THE TECHNOLOGICAL SYSTEM IN THE AUTOMATION OF SERIAL ENGINEERING PRODUCTION</p> <p>Ihor YAKOVENKO¹, Alexander PERMYAKOV², Dmytro ILIIN³ and Yevheniia BASOVA⁴ ^{1,2,3,4}National Technical University «Kharkiv Polytechnic Institute» E-mail: ¹igor.dych59@gmail.com, ²perm_a@i.ua, ³krieger.1n.da.house@gmail.com, ⁴Yevheniia.Basova@kphi.edu.ua,</p>
14 ²⁰ – 14 ³⁰	<p>MODELLING OF HARDENING AND BURNISHING OF PARTS SURFACES BY IMPACT TOROIDAL INDENTORS</p> <p>Yaroslav LYTVYNIAK¹, Igor YURCHYSHYN² and Oksana LYTVYNIAK³ ^{1,2,3}Lviv Polytechnic National University E-mail: yaroslav.m.lytvyniak@lpnu.ua, ²igor.i.yurchyshyn@lpnu.ua, ³lytvynial.oksana@gmail.com</p>
14 ³⁰ – 14 ⁴⁰	<p>CFD AND EXPERIMENTAL RESEARCH OF THE HEATING SYSTEM OF THE CITY LOW-FLOOR BUS</p> <p>¹Orest HORBAY, ²Kostyantyn HOLENKO, ³Aleksandr DYKHA, ⁴Vitaliy POPOVYCH, ⁵Mykhailo BURIAN ^{1,4,5}Lviv Polytechnic National University ^{2,3}Khmelnysky National University E-mail: ¹orest_60@yahoo.ca, ²kqolenko@gmail.com, ³tribosenator@gmail.com, ⁴Vitalii.V.Popovych@lpnu.ua, ⁵mykhailo.v.burian@lpnu.ua</p>
14 ⁴⁰ – 14 ⁵⁰	<p>MODELING OF THE DESIGN AND STUDY OF THE DYNAMICS OF THE VIBRATING SEPARATOR BY MEANS OF CAD/CAE SYSTEMS</p> <p>¹Volodymyr TOPILNYTSKYI, ²Dariia REBOT, ³Roman KOVALCHUK ^{1,2}Lviv Polytechnic National University ³Hetman Petro Sahaidachnyi National Army Academy</p>

	E-mail: 1Volodymyr.G.Topilnytskyi@lpnu.ua , 2dariya.p.rebot@lpnu.ua , 3roma_kov@meta.ua
14 ⁵⁰ – 15 ⁰⁰	SIMULATION OF HEAT AND MASS EXCHANGE PROCESSES DURING MATERIAL HARDEN Serhii YAKIVCHUK¹, Liudmyla SHVETS² <i>^{1,2}Vinnitsia National Agrarian University</i> E-mail: 1SergiiYakivchuk7@gmail.com 2shlv0505@ukr.net ,
15 ⁰⁰ – 15 ¹⁰	RESEARCH OF THE STRESS-STRAIN PUNCH STATE AND OPTIMAZATION OF ITS GEOMETRIC PARAMETERS Oksana VELYKA¹, Muhailo BOIKO², Nestor-Taras VELYKIY³ <i>^{1,2,3}Lviv Polytechnic National University</i> E-mail: oksana.t.velyka@lpnu.ua
15 ¹⁰ – 15 ²⁰	MATHEMATICAL MODEL OF TRANSPORT TRANSPORTATION Svetlana VOLKOVA <i>Ukrainian State University of Science and Technologies</i> E-mail: svolkovav2017@gmail.com
15 ²⁰ – 15 ³⁰	GRAPH-ANALYTIC MODELING OF THE PROCESS OF FORK GRIPPER OF A LARGE PILE OF STRAW MATERIAL Oleksandr YEREMENKO¹, Olexander VOYNALOVICH², Larysa PISKUNOVA³, Tetyana ZUBOK⁴ <i>^{1,2,3,4}National University of Life and Environmental Sciences of Ukraine</i> E-mail: 1eremolex@nubip.edu.ua , 2voynalovich@nubip.edu.ua , 3piskunova@nubip.edu.ua , 4tanyzubok@gmail.com
15 ³⁰ – 15 ⁴⁰	STUDY OF THE UNEVENNESS OF THE DISPENSING OF LOOSE MATERIALS BY A DISK DISPENSER Vasyl BANHA <i>Lviv Polytechnic National University</i> E-mail: 1Vasyl.I.Banha@lpnu.ua
15 ⁴⁰ – 15 ⁵⁰	Topological optimization of the scissor lift lever Michał BEMBENEK¹, Saltanat NURKUSHEVA², Vasyl MYKHAILIUK³, Ruslan DEINEHA⁴, Orest SLABYI⁵ <i>^{1,2,3,4,5}AGH University of Krakow</i> <i>²S. Seifullin Kazakh Agrotechnical Research University,</i> <i>^{3,4,5}Ivano-Frankivsk National Technical University of Oil and Gas</i> E-mail: 1bembenek@agh.edu.pl , 2saltanat.nurkusheva@kazatu.kz , 3myhajlyukv@ukr.net , 4deynega2004@ukr.net , 5ekazaburewisnyk@gmail.com
15 ⁵⁰ – 16 ⁰⁰	EXPERIMENTAL RESEARCH OF 3D PRINTING VELOCITY CHARACTERISTICS OF USING KLIPPER FIRMWARE Volodymyr NAZARENKO¹, Bohdan OSTROUSHKO² and Semen VOLOSHYN³ <i>National University of life and environmental sciences of Ukraine</i> E-mail: volodnz@nubip.edu.ua , 2b.ostroushko@nubip.edu.ua , 3voloshyn@nubip.edu.ua
16 ⁰⁰ – 16 ¹⁰	DEFORMATION OF AN ISOTROPIC HOLLOW CYLINDER OF CONICAL SHAPE UNDER PRESSURE OSCILLATIONS AT A CALIBRATED FREQUENCY Igor DMYTRIV <i>Lviv Polytechnic National University</i> E-mail: ihor.v.dmytriv@lpnu.ua

SECTION II – COMPUTER-INTEGRATED SYSTEMS IN MECHANICAL ENGINEERING // THE LATEST TECHNOLOGIES AND MATERIALS IN MECHANICAL ENGINEERING (19.06.2024)

(<https://us05web.zoom.us/j/84800183303?pwd=vzcl21QpnBanLutawGlpUMGHNE3mJv.1>)

Chairman of the meeting: **Vadym STUPNYTSKYI**

13 ⁰⁰ – 13 ¹⁰	<p align="center">ECONOMIC MODELING OF THE DEVELOPMENT OF THE MACHINE-BUILDING MARKET IN THE POST-WAR PERIOD</p> <p align="center">Olena BOCHKO¹, Oleksandr BOCHKO², Vasyl KOSTYTSKY³, Ihor DMYTRIV⁴</p> <p align="center"><i>^{1,4}Lviv Polytechnic National University</i> <i>²National Environmental University</i> <i>³International Environmental Academy</i></p> <p align="center">E-mail: olena.y.bochko@lpnu.ua, bochko25@ukr.net, ihor.v.dmytriv@lpnu.ua</p>
13 ¹⁰ – 13 ²⁰	<p align="center">ADVANCEMENT OF METHODOLOGIES FOR THE AUTOMATED COMPUTATION OF WELL JET PUMP CHARACTERISTICS THROUGH UTILIZATION OF THE PYTHON PROGRAMMING LANGUAGE</p> <p align="center">Denys PANEVNYK</p> <p align="center"><i>Ivano-Frankivsk National Technical University of Oil and Gas</i></p> <p align="center">E-mail: d.o.panevnyk@gmail.com, den.panevnik@gmail.com</p>
13 ²⁰ – 13 ³⁰	<p align="center">COMPUTER SIMULATION OF DYNAMIC PROCESSES IN POWER SKIVING GEAR CUTTING</p> <p align="center">Hrytsay IHOR¹, Slipchuk ANDRII² and Kuk ANDRII³,</p> <p align="center"><i>Lviv Polytechnic National University</i></p> <p align="center">E-mail: ihor.y.hrytsai@lpnu.ua, andrii.m.slipchuk@lpnu.ua, andrii.m.kuk@lpnu.ua</p>
13 ³⁰ – 13 ⁴⁰	<p align="center">STUDY OF THE CHARACTERISTICS OF THE SURFACE LAYER OBTAINED BY ELECTROSPARK ALLOYING USING HARD ALLOY ELECTRODES</p> <p align="center">Ihor PRUNKO¹, Sviatoslav KRYSHTOPA², Bohdan DOLISHNIY³, Tetiana VOYTSEHIVSKA⁴, Nataliia KLOCHKO⁵ and Yaroslav DEMIANCHUK⁶</p> <p align="center"><i>^{1,2,3,4,5,6}Ivano-Frankivsk National Technical University of Oil and Gas</i></p> <p align="center">E-mail: ihor.prunko@nung.edu.ua, sviatoslav.kryshtopa@nung.edu.ua, bdolishniy@gmail.com, tanya640302@gmail.com, natalia.klochko@nung.edu, slavdem67@gmail.com</p>
13 ⁴⁰ – 13 ⁵⁰	<p align="center">INCREASE THE PRODUCTIVITY OF HARD-TO-MACHINE MATERIALS BY PREVENTIVE HEATING OF THE WORKPIECE</p> <p align="center">Vadym STUPNYTSKYI</p> <p align="center"><i>Lviv Polytechnic National University</i></p> <p align="center">E-mail: vadym.v.stupnytskyi@lpnu.ua</p>
13 ⁵⁰ – 14 ⁰⁰	<p align="center">TECHNOLOGY OF MANUFACTURING PARTS FROM ALUMINUM ALLOYS BY HOT DEFORMATION</p> <p align="center">Lyudmila SHVETS¹, Kateryna CHMYKH² Olena TRUKHANSKA³,</p> <p align="center"><i>^{1,2,3}Vinnytsia National Agrarian University</i></p> <p align="center">E-mail: schvez@vsau.vin.ua, catherina099@gmail.com, seaswallow@ukr.net</p>
14 ⁰⁰ – 14 ¹⁰	<p align="center">DEVELOPMENT OF SPECIFICATION FOR THE MANUFACTURE OF DIAMOND TOOLS FOR PROCESSING NATURAL AND ARTIFICIAL STONE</p> <p align="center">Yurii BOIKO</p> <p align="center"><i>Lviv Polytechnic National University</i></p> <p align="center">E-mail: yurii.i.boiko@lpnu.ua</p>

14 ¹⁰ – 14 ²⁰	<p>CALCULATION AND ANALYTICAL STUDY OF STABILITY INDICATORS OF FOUNDRY HEAT-RESISTANT NICKEL ALLOY ZhS3DK-VI</p> <p>Valeriy NAUMYK</p> <p><i>National University «AZaporizhzhia Polytechnic»</i> E-mail: vnaumyk@gmail.com</p>
14 ²⁰ – 14 ³⁰	<p>ENVIRONMENTAL CONSCIOUSNESS OF CONSUMERS AS A DETERMINANT OF DEMAND FOR ELECTRIC VEHICLES</p> <p>Nazar HLYNSKYI</p> <p><i>Lviv Polytechnic National University</i> E-mail: nazar.y.hlynskyi@lpnu.ua</p>
14 ³⁰ – 14 ⁴⁰	<p>SYNTHESIS OF A MATHEMATICAL MODEL OF OSCILLATIONS OF A WHEELED VEHICLE UNDER DISTURBANCES OF A STOCHASTIC CHARACTER</p> <p>Stanislav KOSTIUK</p> <p><i>National University of Life and Environmental Sciences of Ukraine</i> E-mail: stanislavkostuk5@gmail.com</p>
14 ⁴⁰ – 14 ⁵⁰	<p>VERIFICATION OF THE AMPLITUDE-FREQUENCY CHARACTERISTICS OF THE ACOUSTIC PROBE</p> <p>Roman SHEREMETA</p> <p><i>Lviv Polytechnic National University</i> E-mail: r1sheremeta@gmail.com</p>
14 ⁵⁰ – 15 ⁰⁰	<p>TESTING AND SELECTION OF LUBRICANT EMULSIONS FOR REDUCTION OF UNWANTED SOOT MARKS DURING ANNEALING OF COLD-ROLLED STEEL COILS</p> <p>Volodymyr KUKHAR¹, Oleksandr SPICHAK², Volodymyr PASHYNSKYI³ and Khrystyna MALII⁴</p> <p><i>^{1,3,4}Technical University «Metinvest Polytechnic» LLC</i> ²PJSC «Zaporizhstal»</p> <p>E-mail: kvv.mariupol@gmail.com, aleksandr.spichak@zaporizhstal.com, volodymyr.pashynskyi@mipolytech.education, kristina.maliy@mipolytech.education</p>
15 ⁰⁰ – 15 ¹⁰	<p>EXTENDING CAPABILITIES OF THE ACOUSTIC MEASUREMENT PROBE</p> <p>Roman HORODNIAK¹, Roman SHEREMETA²</p> <p><i>Lviv Polytechnic National University</i> E-mail: roman.v.horodniak@lpnu.ua ²r1sheremeta@gmail.com,</p>

SECTION III – EXPERIMENTAL MECHANICS; DYNAMICS AND STRENGTH OF MACHINES (19.06.2024)

(<https://us05web.zoom.us/j/83591563041?pwd=7tG2AcXGi1LNxbfKDjgqxyFgLLYez.1>)

Chairman of the meeting: **Vasyl DMYTRIV**

13 ⁰⁰ – 13 ¹⁰	<p>SPACIAL OSCILLATIONS OF THE ELEMENTS OF A MULTI-SECTION TRAM CAUSED BY THE UNEVENNESS OF THE RAILROAD TRACK</p> <p>Yevhen KHARCHENKO <i>Lviv Polytechnic National University</i> E-mail: yevhen.v.kharchenko@lpnu.ua</p>
13 ¹⁰ – 13 ²⁰	<p>ESTABLISHING THE NATURAL FREQUENCY AND FORM OF OSCILLATIONS OF A CONTINUOUS SYSTEM IN THE FORM OF A LONG-DIMENSIONAL BODY, TAKING INTO ACCOUNT THE PRESENCE OF A CONCENTRATED MASS</p> <p>LANETS Oleksii¹, DEREVENKO Iryna² and DMYTRIV Taras³ <i>^{1,2,3}Lviv Polytechnic National University</i> E-mail: 1Oleksii.S.Lanets@lpnu.ua, 2Iryna.A.Derevenko@lpnu.ua, 3taras.v.dmytriv@lpnu.ua</p>
13 ²⁰ – 13 ³⁰	<p>JUSTIFICATION OF THE OPERATING PARAMETERS OF THE DRIVE OF THE VIBRATING MACHINE FOR CLEANING AND CHANGING THE PROPERTIES OF WATER</p> <p>Anatoly HORDIEIEV¹ Andriy HANZYUK², Eugen URBANIUK³ <i>^{1,2,3}Khmelnyskyi National University</i> E-mail: 1aigordeev54@ukr.net, 2alq12@ukr.net, 3urbanjuk@gmail.com</p>
13 ³⁰ – 13 ⁴⁰	<p>A PUSHING MECHANISM DESIGN OF JUMPING ROBOT</p> <p>Roman ZINKO¹, Mykhaylo LOBUR², Andriy ZDOBYTSKYI³ and Tetyana STEFANOBYCH⁴ <i>^{1,2,3,4}Lviv Polytechnic National University</i> E-mail: 1Roman.V.Zinko@lpnu.ua, 2mykhaylo.v.lobur@lpnu.ua, 3andrii.y.zdobytskyi@lpnu.ua, 4tetyana.o.stefanovych@lpnu.ua</p>
13 ⁴⁰ – 13 ⁵⁰	<p>SIMILARITY CRITERIA IN EXPERIMENTAL STUDIES OF MECHANICAL SYSTEMS</p> <p>ROMAN HORODNIAK <i>Lviv Polytechnic National University</i> E-mail: roman.v.horodniak@lpnu.ua</p>
13 ⁵⁰ – 14 ⁰⁰	<p>PECULIARITIES OF REPAIRING SUPPORTS FOR ABOVE-GROUND SECTIONS OF MAIN PIPELINES</p> <p>Andrij DZYUBYK¹, Bohdan KINDRATS'KYI², Ihor Nazar³ Liudmyla DZYUBYK⁴, Oleh SOLOVIOV⁵, <i>^{1,2,3,4,5,6}Lviv Polytechnic National University</i> E-mail: 1andrii.r.dziubyk@lpnu.ua, 2bohdan.i.kindratskyi@lpnu.ua, 3ihor.b.nazar@lpnu.ua, 4liudmyla.v.dziubyk@lpnu.ua, 5Oleh.V.Soloviov@lpnu.ua,</p>
14 ⁰⁰ – 14 ¹⁰	<p>MATHEMATICAL THEORY OF DEFORMATION OF TRANSVERSELY ISOTROPIC MULTILAYER PLATES OF ARBITRARY CONSTANT THICKNESS</p> <p>Anatoly ZELENSKY¹, Sergiy SLOBODYANYUK² <i>^{1,2}Dnieper State Academy of Construction and Architecture</i> E-mail: 1a.zelensky@ukr.net, 2slobodianiuk.sergey@gmail.com</p>

14 ¹⁰ – 14 ²⁰	<p style="text-align: center;">OPTIMIZATION OF DYNAMIC PROCESSES OF THE BELT CONVEYOR HYDRAULIC DRIVE WITH THE CONTROL DEVICE</p> <p style="text-align: center;">Leonid POLISHCHUK¹, Oleh PIONTKEVYCH², Mykola BURDEINYI³, Oksana ADLER⁴, and Dmytro LOZINSKYI⁵</p> <p style="text-align: center;"><i>Vinnitsia National Technical University</i> E-mail: ¹leo.polishchuk@gmail.com, ²piontkevych@vntu.edu.ua, ³burdeinyi@gmail.com, ⁴oksana_adler1983@ukr.net, ⁵lozinskiy_dmitriy@ukr.net</p>
14 ²⁰ – 14 ³⁰	<p style="text-align: center;">SIMULATION OF LOCOMOTION CONDITIONS OF AN ENHANCED IN-PIPE VIBRATION-DRIVEN ROBOT</p> <p style="text-align: center;">Vitaliy KORENDIY¹, Oleksandr KACHUR², Rostyslav PREDKO³, Roman LITVIN⁴ and Oleh HRYTSUN⁵</p> <p style="text-align: center;"><i>Lviv Polytechnic National University</i> E-mail: ¹vitalii.m.korendii@lpnu.ua, ²boleksandr.y.kachur@lpnu.ua, ³rostyslav.y.predko@lpnu.ua, ⁴droman.h.litvin@lpnu.ua, ⁵eoleh.m.hrytsun@lpnu.ua</p>
14 ³⁰ – 14 ⁴⁰	<p style="text-align: center;">DETERMINATION AND ANALYSIS OF FACTORS AFFECTING THE EFFICIENCY COEFFICIENT AS AN INDICATOR OF THE ENERGY EFFICIENCY OF CABLEWAYS</p> <p style="text-align: center;">KUROPIATNYK O.S.¹ KRASNOSHCHOK O.L. ²,</p> <p style="text-align: center;">^{1,2}<i>Ukrainian State University of Science and Technologies</i></p> <p style="text-align: center;">E-mail: ¹kuropyatnick@gmail.com, ²akrasnoshchok1996@gmail.com</p>
14 ⁴⁰ – 14 ⁵⁰	<p style="text-align: center;">THE RESULTS OF EXPERIMENTAL SEARCHING OF THE INFLUENCE OF THE MASS OF TECHNOLOGICAL MODULES ON THE LOAD ON THE AXLES OF THE MEV-115 "AVTOTRACTOR" DURING AGGREGATION</p> <p style="text-align: center;">Valerii MIRNYI</p> <p style="text-align: center;"><i>INSTITUTE OF MECHANICS AND AUTOMATICS OF AGROINDUSTRIAL PRODUCTION OF THE NATIONAL ACADEMY OF AGRARIAN SCIENCES OF UKRAINE</i></p> <p style="text-align: center;">E-mail: mirnyivalera@gmail.com</p>
14 ⁵⁰ – 15 ⁰⁰	<p style="text-align: center;">MODEL OF AIR TRANSPORT IN THE CHANNEL OF THE "ANCHOR-HULL-ELECTROMAGNET" SYSTEM</p> <p style="text-align: center;">Petro YATSUNSKIY</p> <p style="text-align: center;"><i>Lviv Polytechnic National University</i> E-mail: petro.p.yatsunskyi@lpnu.ua</p>
15 ⁰⁰ – 15 ¹⁰	<p style="text-align: center;">SYNTHESIZING DIFFERENT MOTION PATHS OF A BODY FIXED ON A CONNECTING ROD OF A CRANK-SLIDER MECHANISM</p> <p style="text-align: center;">Oleh PARASHCHYN¹, Vitaliy KORENDIY², VasyI LOZYNSKYI³, Roman LITVIN⁴, Yurii YEVCHEUK⁵</p> <p style="text-align: center;"><i>Lviv Polytechnic National University</i> E-mail: ¹oleh.y.parashchyn@lpnu.ua, ²vitalii.m.korendii@lpnu.ua, ³vasyl.i.lozynskyi@lpnu.ua, ⁴roman.h.litvin@lpnu.ua, ⁵yurii.y.yevchuk@lpnu.ua</p>
15 ¹⁰ – 15 ²⁰	<p style="text-align: center;">MEASUREMENT OF AIR VELOCITY USING A THERMOANEMOMETRIC SENSOR IN THE WALL BOUNDARY LAYER ON THE SURFACE OF A STREAMLINED BODY UNDER LAMINAR FLOW CONDITIONS.</p> <p style="text-align: center;">Taras DMYTRIV</p> <p style="text-align: center;"><i>Lviv Polytechnic National University</i> E-mail: taras.v.dmytriv@lpnu.ua</p>

15 ²⁰ – 15 ³⁰	<p>THE METHOD OF DIMENSIONS IN FACTORIAL PLANNED EXPERIMENTS IN THE STUDY OF A BELT-TYPE DISPENSER OF BULK MATERIALS.</p> <p>Vasyl DMYTRIV¹, Michał BEMBENEK², Ivan DEMKIV³</p> <p><i>^{1,3}Lviv Polytechnic National University</i> ²AGH University of Krakow</p> <p>E-mail: 1vasyl.t.dmytriv@lpnu.ua 2bembenek@agh.edu.pl</p>
15 ³⁰ – 15 ⁴⁰	<p>EXPERIMENTAL SETUP FOR RESEARCH IN THE DYNAMICS OF A BELT-TYPE DISPENSER OF DISPERSED MATERIALS</p> <p>Ivan DEMKIV</p> <p><i>Lviv Polytechnic National University</i> E-mail: ivan.b.demkiv@lpnu.ua</p>
15 ⁴⁰ – 15 ⁵⁰	<p>EXPERIMENTAL LABORATORY SETUP FOR STUDYING A DISPENSER-MIXER OF A THREE-COMPONENT DISPERSED MIXTURE</p> <p>Andrzej WILK¹, Oleh SAHAN²</p> <p><i>¹Silesian University of Technology, Poland</i> ²Lviv Polytechnic National University</p> <p>E-mail: oleh.y.sahan@lpnu.ua</p>
15 ⁵⁰ – 16 ⁰⁰	<p>EXPERIMENTAL SETUP FOR CONDUCTING RESEARCH ON A GRAVITY-FED DISPENSER OF BULK MATERIALS.</p> <p>Roman SERPUTKO</p> <p><i>Lviv Polytechnic National University</i> E-mail: roman.s.serputko@lpnu.ua</p>
16 ⁰⁰ – 16 ¹⁰	<p>CRITERION RELATIONSHIPS AS FACTORS IN A PLANNED EXPERIMENT IN THE STUDY OF DAMPING SYSTEMS</p> <p>Vasyl DMYTRIV¹, Stepan BEREHULIAK²</p> <p><i>Lviv Polytechnic National University</i> E-mail: stepan.t.berehuliak@lpnu.ua</p>
16 ¹⁰ – 16 ²⁰	<p>RESULTS OF THE DEVELOPMENT OF TRANSPORT AND TECHNOLOGICAL MACHINES FOR MINERAL FERTILISER APPLICATION</p> <p>¹Valerii ADAMCHUK, Natalia SERGEEVA² and ³Petro VITRUH</p> <p><i>INSTITUTE OF MECHANICS AND AUTOMATICS OF AGROINDUSTRIAL PRODUCTION OF THE NATIONAL ACADEMY OF AGRARIAN SCIENCES OF UKRAINE</i></p> <p>E-mail: 1vadamchuk@gmail.com, 3piterkerw@ukr.net</p>
16 ²⁰ – 16 ³⁰	<p>Research of the aggregation process of technological modules with a mobile energy vehicle MEV-115 "Autotractor"</p> <p>Serhii POGORILYY¹, Viktor PRYSYAZHNYI², Valerii MIRNYI³, Oleksandr KUKHARCHUK⁴ and Yevhenii TROINIKOV⁵</p> <p><i>INSTITUTE OF MECHANICS AND AUTOMATICS OF AGROINDUSTRIAL PRODUCTION OF THE NATIONAL ACADEMY OF AGRARIAN SCIENCES OF UKRAINE</i></p> <p>E-mail: pogorilyy_sergiy@ukr.net¹, viktor-pris@ukr.net², mirnyivalera@gmail.com³, Kukharchuk_O@ukr.net⁴, Troinikov_Y@ukr.net⁵</p>

TOPIC: MCEME-2024 THE PLENARY SESSION

Time: Jun 19, 2024 10:00 AM Kyiv

Join Zoom Meeting

<https://us05web.zoom.us/j/88362077473?pwd=gN9Qwf3QvUIznkbgBbqZPasQAuF8Tk.1>

Meeting ID: 883 6207 7473

Passcode: 5X0hT5

Topic: MODELING OF TECHNICAL SYSTEMS AND PROCESSES; CAD/CAM/CAE SYSTEMS

Time: Jun 19, 2024 01:00 PM Kyiv

Join Zoom Meeting

<https://us05web.zoom.us/j/89094767414?pwd=gVb2hVsK63rreKMxY1kiAcdePIVAN1.1>

Meeting ID: 890 9476 7414

Passcode: 7rZ5nX

Topic: COMPUTER-INTEGRATED SYSTEMS IN MECHANICAL ENGINEERING // THE LATEST TECHNOLOGIES AND MATERIALS IN MECHANICAL ENGINEERING

Time: Jun 19, 2024 01:00 PM Kyiv

Join Zoom Meeting

<https://us05web.zoom.us/j/84800183303?pwd=vzcl21QpnBanLutawGlpUMGHNE3mJv.1>

Meeting ID: 848 0018 3303

Passcode: 5HSUMH

Topic: EXPERIMENTAL MECHANICS; DYNAMICS AND STRENGTH OF MACHINES

Time: Jun 19, 2024 01:00 PM Kyiv

Join Zoom Meeting

<https://us05web.zoom.us/j/83591563041?pwd=7tG2AcXGi1ILNxbfKDjqxhyFglYez.1>

Meeting ID: 835 9156 3041

Passcode: 5uHifi