

VIII International Conference
«In-service Damage of Materials, its Diagnostics and Prediction»

EUROPEAN STRUCTURAL INTEGRITY SOCIETY

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
TERNOPIL IVAN PULUJ NATIONAL TECHNICAL UNIVERSITY**

UKRAINIAN SOCIETY ON FRACTURE MECHANICS

**KARPENKO PHYSICO-MECHANICAL INSTITUTE
OF THE NATIONAL ACADEMY OF SCIENCES OF UKRAINE**

**G.S. PISARENKO INSTITUTE FOR PROBLEMS OF STRENGTH THE NATIONAL
ACADEMY OF SCIENCES OF UKRAINE**

VIII INTERNATIONAL CONFERENCE

**“IN-SERVICE DAMAGE OF MATERIALS, ITS DIAGNOSTICS AND
PREDICTION”
"DMDP"**



INTERNATIONAL CONFERENCE
**IN-SERVICE DAMAGE
OF MATERIALS:
DIAGNOSTICS AND
PREDICTION**

2025 | October
15-17

**October 15-17, 2025
Ternopil, Ukraine**

October 15-17, 2025, Ternopil, Ukraine

VIII International Conference
«In-service Damage of Materials, its Diagnostics and Prediction»

International Scientific Committee

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Halyna	Krechkovska	Karpenko Physico-Mechanical Institute of the NAS of Ukraine	Ukraine

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CONFERENCE SCHEDULE

Date	Time	Event	Link
15 / 10 / 2025, Wednesday (by Kyiv, GMT+3)	13.30-13.50	Opening ceremony	<u>Room A</u>
	13.50-14.50	Session 1	
	15.30-15.50	Coffee break	
	15.50-17.10	Session 1	<u>Room A</u>
16 / 10 / 2025, Thursday (by Kyiv, GMT+3)	10.00-11.30	Session 2A	<u>Room A</u>
		Session 2B	<u>Room B</u>
		Session 2C	<u>Room C</u>
	11.30-11.50	Coffee break	
	11.50-13.20	Session 2A	<u>Room A</u>
		Session 2B	<u>Room B</u>
		Session 2C	<u>Room C</u>
	13.20-14.20	Lunch	
	14.20-15.50	Session 2A	<u>Room A</u>
		Session 2B	<u>Room B</u>
		Session 2C	<u>Room C</u>
	15.50-16.10	Coffee break	
	16.10-17.55	Session 2A	<u>Room A</u>
		Session 2B	<u>Room B</u>
		Session 2C	<u>Room C</u>
17 / 10 / 2025, Friday (by Kyiv, GMT+3)	10.00-11.30	Session 3A	<u>Room A</u>
		Session 3B	<u>Room B</u>
	11.30-11.50	Coffee break	
	11.50-13.20	Session 3A	<u>Room A</u>
		Session 3B	<u>Room B</u>
	13.20	Closing of the Conference	<u>Room A</u>

**VIII DMDP 2025 is held online using the ZOOM platform.
Participants will be able to join rooms 10 minutes before the scheduled start time**

October 15-17, 2025, Ternopil, Ukraine



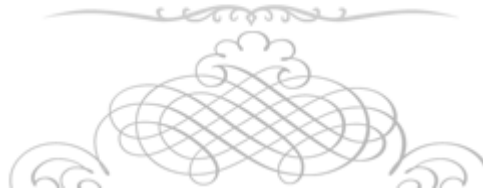
SESSION 1 (ROOM A)

15 / 10 / 2025, Wednesday

Session 1: 13.50-16.50

Chairs: Prof. O. Yasniy and Prof. O. Zvirko

13.50	J. Toribio ANISOTROPY OF MICROSTRUCTURE IN COLD DRAWN PEARLITIC STEEL WIRES: A PHILOSOPHICAL APPROACH BASED ON THE CONCEPT OF PALIMPSESTUS & A TRIBUTE TO THE JAPANESE CITIES OF HIROSHIMA AND NAGASAKI
14.10	O. Zvirko, A. Bohdan, Y. Dubyk, O. Venhryniuk, D. Demianchuk SERVICEABILITY CRITERION FOR HYDROGEN PIPELINE TRANSMISSION
14.30	D. Tymoshchuk, O. Yasniy, I. Didych, I. Pasternak, V. Nykytyuk MODELING THE HYSTERESIS BEHAVIOR OF SMA BY AN ENSEMBLE VOTING MACHINE LEARNING MODEL
14.50	J. Gerlici, A. Lovska RESEARCH OF THE FEASIBILITY OF USING SHEETS WITH RECTANGULAR CORRUGATIONS AS A WALL COVERING AN OPEN WAGON BODY
15.10	N. Loboda, A. Kravchuk, O. Maslo, E. Kondryakov EXPERIMENTAL AND COMPUTATIONAL STUDIES OF ADHESIVE JOINT STRENGTH
15.30-15.50	 Coffee Break
15.50	D. Rudavskiy, V. Sylovanyuk, V. Marukha ASSESSMENT OF THE EFFECTIVENESS OF STRENGTHENING A CRACK-DAMAGED CONCRETE ARCH BRIDGE USING INJECTION TECHNOLOGIES
16.10	S. Dziuba, A. Krolicka, G. Lesiuk, D. Rozumek, M. Smolnicki, R. Kuziak, K. Radwanski, F. Caballero FATIGUE CRACK GROWTH BEHAVIOR OF ULTRAFINE CARBIDE-FREE BAINITIC RAIL STEEL UNDER MIXED-MODE LOADING CONDITIONS
16.30	V. Mocharskyi, V. Iasnii, A. Soroachak, U. Behn, H. Mistry, C. Rödel EFFECT OF NANOSECOND LASER PROCESSING ON THE STRUCTURE AND MECHANICAL PROPERTIES OF SUPERELASTIC SHAPE MEMORY ALLOYS
16.50	Ahsan Anugrah Elbar, Aditya Rio Prabowo, M. Jurkovič, O. Melynk STRUCTURAL ASSESSMENT OF A RAMP PLATE DESIGN FOR A WATER HYACINTH COLLECTOR USING FINITE ELEMENT APPROACH



SESSION 2A (ROOM A)

16 / 10 / 2025, Thursday

Chairs: Prof. M. Karpash and Dr. I. Pidgurskyi

10.00	I. Protokovilov, V. Porokhonko, V. Shapovalov CAST STRUCTURE EVOLUTION IN PULSED MODE ELECTROSLAG REMELTING
10.15	V. Uchanin, O. Karpash, S. Voytenko, I. Rybitskiy, M. Karpash EDDY CURRENT AND ULTRASONIC NONDESTRUCTIVE TECHNIQUES FOR STRUCTURAL INTEGRITY MONITORING
10.30	J. Toribio, F.-J. Ayaso, A. Fernández-Viña, M. Hredil LOCAL ANISOTROPY OF HYDROGEN EMBRITTLEMENT IN COLD DRAWN PEARLITIC STEELS IN THE FORM OF PRESTRESSING WIRES: A PICASSIAN APPROACH
10.45	T. Dubyniak, I. Lutsiv, M. Stashkiv, R. Komar, V. Buhovets, A. Senyk LOAD RESEARCH IN THE ELEMENTS OF A TOOTHED SAFETY CLUTCH
11.00	D. Voloshyn, L. Voloshyna, O. Pleskach, I. Pleskach RELIABILITY ASSURANCE FEATURES OF MODERN RAILWAY AXLEBOX ASSEMBLIES
11.15	O. Romashko-Maistruk, V. Romashko DEPENDENCE OF THE ELASTOPLASTIC PROPERTIES OF COMPRESSED CONCRETE ON ITS STRAIN RATE
11.30-11.50	
11.50	M. Pidgurskyi, D. Bykiv, I. Pidgurskyi INVESTIGATION OF THE STRESS-STRAIN STATE OF DOUBLE-PITCHED AND ARCHED PERFORATED BEAMS
12.05	D. Voloshyn, L. Voloshyna, O. Pleskach, I. Pleskach FORECASTING RISK IN WAGON REPAIR PRODUCTION SYSTEMS
12.20	O. Bordiuzhenko, L. Dvorkin, R. Makarenko, O. Stepanets, M. Skrypnyk PERFORMANCE OF PRESSED MATERIALS CONTAINING RECYCLED CONCRETE POWDER

12.35	A. Klymenko, M. Byk, A. Shapiro, O. Buket, S. Kovalenko, Y. Kovalenko CORROSION DEGRADATION OF INCONEL 601 IN A STATIC LEAD MELT AT A TEMPERATURE OF 450 AND 650 °C
12.50	Dhanies Wahyu Ardyrizky, Arifin Nurcholis, Muhammad Affan Satriatama, Aditya Rio Prabowo, Quang Thang Do, B. Ganendra, T. Muttaqie, Siti Nurlita Fitri MESH SENSITIVITY STUDY OF SANDWICH PANEL UNDER COMBINED MECHANICAL AND FIRE LOADING
13.05	O. Chapiuk, S. Filipchuk, O. Suvorov, O. Pakholiuk, D. Kusliuk, I. Zadorozhnikova, O. Uzhegova, A. Shevchuk ADHESION OF METAL REINFORCEMENT OF CLASS A500C WITH CONCRETE OF VARIOUS STRENGTHS
13.20-14.20	 Lunch

Chairs: Prof. S. Homon and Prof. L. Kulakovskiy

14.20	M. Polishchuk, S. Gomon, S. Homon, P. Gomon, D. Husachuk, I. Parfentyeva, M. Smal, O. Dziubynska STUDY OF CHANGES IN THE MODULUS OF ELASTICITY AND SECTION MODULUS OF DEFORMATION OF MOISTENED PINE WOOD
14.35	L. Voitovych, O. Dejneka, Z. Sasiuk, L. Serilko, M. Koziar, V. Lipianin, I. Mudryy, A. Pelekh STUDY OF THE STRESS-STRAIN STATE OF A CIRCULAR PLATE WITH ECCENTRIC CIRCULAR HOLES
14.50	S. Gomon, P. Gomon, S. Homon, V. Aleksiiyevets, N. Riabcheniuk, D. Kaynts, O. Mykaylo, Y. Golyk MODELING THE BEHAVIOR OF A METAL-WOOD TRUSS WITH LOCAL DAMAGE TO INDIVIDUAL ELEMENTS
15.05	S. Filipchuk, V. Karavan, O. Sobishchanskyi, Y. Kovalchuk STRESS-STRAIN STATE OF DOUBLE-HINGED REINFORCED CONCRETE FRAMES WITH ARTIFICIAL FORCE REGULATION UNDER REPEATED LOW-CYCLE LOADS
15.20	A. Pavluk, S. Gomon, P. Gomon, S. Homon, R. Pasichnyk, S. Drobyshynets, P. Sunak, I. Mudryy RESEARCH OF DEFECTS AND DAMAGE IN TIMBER STRUCTURES OF OPERATED ROOFS
15.35	A. Bilyk OPTIMAL SELECTION OF WELDED STEEL I-BEAMS CONSIDERING TECHNOLOGICAL AND PRODUCTION CONSTRAINTS



15.50-16.10	
16.10	Y. Panchuk, I. Stetsko, B. Karavan, O. Kukhniuk, A. Pelekh, O. Parneta, I. Mudryy, V. Sysiak <i>RESULTS OF EXPERIMENTAL STUDIES OF FLEXURAL REINFORCED CONCRETE ELEMENTS WITH MIXED REINFORCEMENT</i>
16.25	P. Gomon, V. Dovbenko, S. Gomon, O. Savytska, S. Homon, B. Karavan, I. Mudryy, R. Pasichnyk <i>RESEARCH ON THE BEHAVIOR OF REINFORCED CONCRETE T-SHAPED FLEXURAL MEMBERS SUBJECTED TO LOW-CYCLE LOADING</i>
16.40	S. Bilyk, L. Dzhanov, A. Bilyk <i>OPTIMAL TOPOLOGY OF I-BEAM STEEL MEMBERS WITH VARIABLE WEB DEPTH, WEB THICKNESS, AND FLANGE WIDTH</i>
16.55	B. Karavan, S. Filipchuk, V. Karavan <i>STUDY OF DEFLECTIONS IN REINFORCED CONCRETE DOUBLE-HINGED ARCHES MADE OF HIGH-STRENGTH CONCRETE UNDER STATIC LOADS</i>
17.10	P. Prysyazhnyuk, I. Paliichuk, A. Prysiashniuk, S. Marynenko, O. Huryk, N. Khomyk, I. Koval <i>MICROSTRUCTURE AND HARDNESS OF HIGH-MANGANESE STEEL COATINGS REINFORCED WITH MOLYBDENUM CARBIDE (MO₂C)</i>
17.25	D. Mykhailovskiy, P. Gomon, I. Mudryy, A. Pelekh, O. Pakholiuk, V. Karbovskiy, O. Soroka, A. Oksentiuk <i>OPTIMIZATION OF REINFORCEMENT SPACING IN CLT PANELS USING THE FINITE ELEMENT METHOD</i>
17.40	P. Prysyazhnyuk, I. Hnylytsia, L. Shlapak, S. Marynenko, H. Kramar, L. Bodrova, I. Koval <i>MICROSTRUCTURE AND PHASE COMPOSITION OF FE-NBC COMPOSITE FCAW COATINGS</i>
17.55	V. Volchuk, D. Hlushkova, I. Koval, S. Marynenko, V. Porokhonko, D. Kazarian <i>MONITORING OF MECHANICAL PROPERTIES OF CARBON STEEL USING MULTIFRACTAL ANALYSIS</i>



SESSION 2B (ROOM B)

16 / 10 / 2025, Thursday

Session 2B		Chairs: Prof. V. Sidychenko and Dr. I. Didych
10.00	<i>V. Kravets, N. Ivantyshyn, V. Marukha, M. Filipov</i> LIMITING EQUILIBRIUM STATE OF ANISOTROPIC BODY WITH PARTIALLY FILLED CRACK UNDER ANTIPLANE DEFORMATION	
10.15	<i>V. Kovalev, Y. Vasylchenko, G. Klymenko, M. Shapovalov, M. Shapovalova, Y. Zaharov</i> STUDY OF THE STABILITY AND PERFORMANCE OF CUTTING PLATES, MODIFIED BY PULSED MAGNETIC FIELD TREATMENT TAKING INTO ACCOUNT THE PRODUCTION CONDITIONS OF A HEAVY MACHINERY MANUFACTURING ENTERPRISE	
10.30	<i>B. Shelestovskyi, H. Habrusiev, I. Habrusieva</i> ASSESSMENT AND PREDICTION OF RESIDUAL STRESSES IN A PLATE SUBJECTED TO LOCALIZED HEATING DURING WELDING	
10.45	<i>A. Babinets, T. Maydanchuk, M. Voron</i> EFFECT OF CORE PARTICLE SIZE DISTRIBUTION AND BORON CARBIDE ADDITIVES IN METAL-CORED WIRES ON THE STRUCTURE AND PROPERTIES OF THE 50CR2NI2MOVSI-TYPE DEPOSITED METAL	
11.00	<i>T. Maydanchuk, A. Ganchuk, E. Lukianchenko, A. Babinets, S. Marynenko</i> STUDY OF THE STRUCTURE AND PROPERTIES OF BIMETALLIC COMPOUNDS COPPER ALLOY–STEEL GRADE X20CR13 OBTAINED BY PLASMA-ARC SURFACING	
11.15	<i>I. Zvizlo, N. Stankevych</i> STRENGTH OF A BIMATERIAL WITH SLIP AT THE INTERFACE AND A SINGLE-PERIODIC CRACK ARRAY	
11.30-11.50		
11.50	<i>M. Stechyshyn, O. Dykha, V. Lyuhovets</i> STRENGTHENING OF THE SURFACE LAYER OF VT22 TITANIUM BY HYDROGEN-FREE NITRIDING IN A GLOWING DISCHARGE	

12.05	O. Yasniy, I. Didych, D. Tymoshchuk, I. Pasternak, D. Radyk <i>FATIGUE LIFE MODELING OF AUTOMOTIVE STEELS USING ENSEMBLE-BASED MACHINE LEARNING METHODS</i>
12.20	V. Sidiyachenko, A. Zhovtobriukh <i>FRACTURE ASSESSMENT OF A CRUCIFORM BENDING SPECIMEN USING A TWO-PARAMETER FRACTURE CRITERION BASED ON CRACK TIP OPENING DISPLACEMENT</i>
12.35	M. Hud <i>PHYSICAL AND MECHANICAL CHARACTERISTICS EVALUATION OF CONCRETE WITH EPOXY MODIFIERS</i>
12.50	M. Riabchykov, L. Nazarchuk, D. Melnyk, N. Korolyova <i>THE INFLUENCE OF MAGNETIC NANOCOMPONENTS ON THE STRENGTH OF TEXTILE FIBERS</i>
13.05	M. Hud, N. Chornomaz, O. Meshcheryakova <i>FINITE ELEMENT SIMULATION OF THE DYNAMIC CHARACTERISTICS OF A HIGH-RISE FRAME BUILDING CONSIDERING VARIATIONS IN STOREY MATERIALS</i>
13.20-14.20	 Lunch

Chairs: Prof. G. Lesiuk and Dr. V. Mocharskyi

14.20	U. Marushchak, N. Sydor, S. Braichenko, I. Margal <i>RESEARCH OF LONG-TERM PROPERTIES OF HIGH STRENGTH FIBER-REINFORCED CONCRETE</i>
14.35	M. Hud, Y. Shved <i>ASSESSMENT OF STEEL TRUSS DEFLECTIONS UTILIZING ARTIFICIAL INTELLIGENCE</i>
14.50	V. Melnyk <i>HEALING OF A DISC-SHAPED CRACK IN A TRANSVERSELY ISOTROPIC BODY UNDER RADIAL SHEAR</i>
15.05	M. Hud, T. Pyndus, Vitaliy Senchyshyn <i>ESTIMATION OF EIGENFREQUENCIES OF OSCILLATIONS OF A ONE-STOREY INDUSTRIAL BUILDING ON THE BASIS OF NUMERICAL MODELLING</i>
15.20	V. Kovalev, Y. Vasylychenko, G. Klymenko, M. Shapovalov, A. Senyk, Y. Reva <i>RESEARCH ON THE RELIABILITY OF ASSEMBLED CUTTERS FOR HEAVY MACHINERY</i>

15.35	<i>O. Andriichuk, I. Yasiuk, O. Uzhegova, S. Uzhehov</i> THE INFLUENCE OF REPEATED LOW-CYCLE LOADS ON THE STRESS-STRAIN STATE STEEL-REINFORCED CONCRETE DRAINAGE GUTTERS
15.50-16.10	
16.10	<i>I. Shatskyi, V. Petrashchuk</i> A PERIODIC SET OF COLLINEAR CLOSABLE CRACKS IN A BENDING MULTILAYER PLATE
16.25	<i>M. Hud</i> FINITE ELEMENT MODELLING OF NATURAL VIBRATIONS OF A FRAME BUILDING WITH AN ASYMMETRIC PLAN
16.40	<i>I. Shatskyi, M. Makoviicuk, R. Bondarenko, Y. Doroshenko</i> ON THE ESTIMATES OF THE STRENGTH OF A DAMAGED PIPELINE RESTORED BY PATCHING
16.55	<i>I. Stadnyk, V. Piddubnyi, I. Okipnyi, V. Hidzhelitskyi, A. Chahaida, V. Mihailik</i> THE INFLUENCE OF AGGRESSIVE ENVIRONMENTS ON THE MECHANICAL PROPERTIES AND DURABILITY OF STEEL PRODUCTS FOR FOOD EQUIPMENT
17.10	<i>M. Hud, D. Baran, V. Kaspruk</i> DETERMINATION OF THE NATURAL OSCILLATION FREQUENCIES OF THE POOL TANK WITH TAKING INTO ACCOUNT THE HYDROSTATIC PRESSURE
17.25	<i>M. Stashkiv, M. Pidgurskyi, A. Babii, I. Pidgurskyi, Y. Humen</i> MODELING OF THE STRESS-STRAIN STATE OF A FIELD SPRAYER BOOM WITH A CRACK
17.40	<i>A. Senyk, V. Kobelnyk</i> SYNTHESIS OF SCREWED-ON BUSHES WITH OPEN BUTT-JOINED SEAM FOR THE DRIVING ROLL AND BUSH CHAINS
17.55	<i>V. Volchuk, D. Hlushkova, S. Marynenko, I. Koval, T. Maydanchuk, I. Tymchenko</i> FRACTAL EXPRESS ANALYSIS OF THE PROPERTIES OF CAST IRON ROLLS



SESSION 2C

16 / 10 / 2025, Thursday

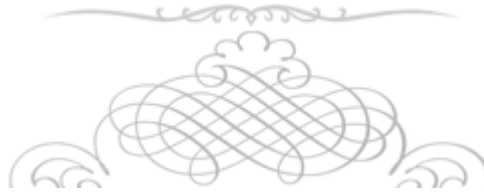
Session 2C		Chairs: Prof. D. Rudavskyi and Dr. A. Sorochak
10.00	I. Pasternak, O. Yasniy, D. Tymoshchuk, I. Didych, O. Malyshevska BOUNDARY ELEMENT MODELING OF THERMO-FATIGUE PROCESSES UNDER CYCLIC QUASI-STATIC THERMAL LOADING	
10.15	O. Mikulich, T. Furs, V. Shemet, O. Bondarskii THE EFFECT OF POWDER MODIFIER ON THE MECHANICAL BEHAVIOR OF POLYURETHANE FOAMS UNDER MULTI-CYCLE LOADING	
10.30	R. Rybak, V. Kovalchuk, B. Parneta, M. Parneta EXPERIMENTAL STUDIES OF THE INFLUENCE OF REINFORCEMENT ON THE DEFORMABILITY OF STRENGTHENED REINFORCED CONCRETE CULVERT PIPES	
10.45	B. Parneta, R. Rybak, S. Homon, T. Postransky, M. Afonin ASSESSMENT OF THE LONG-TERM EFFECTIVENESS OF HORIZONTAL INJECTION WATERPROOFING OF CONCRETE	
11.00	A. Schifino, G. Lesiuk, G. Ziolkowski, R. Roszak, A. Mrozek-Czajkowska X-RAY COMPUTED TOMOGRAPHY ANALYSIS OF FATIGUE PERFORMANCE AND DEFECT CHARACTERIZATION IN ADDITIVELY MANUFACTURED ALSi7MG0.6 ALLOY	
11.15	V. Makarenko, S. Maksymov, V. Gots, Yu. Makarenko, Y. Vynnikov EXPERIMENTAL STUDIES OF THE RESISTANCE OF WELDED JOINTS OF PIPE STEEL OF GAS PIPELINES TO THE INITIATION OF FAILURES UNDER DYNAMIC LOADING	
11.30-11.50		
11.50	S. Bezhenov PREDICTION OF MATERIAL DAMAGES BASED ON A HIGH-CYCLE FATIGUE MODEL AND NON-DESTRUCTIVE TESTING DATA	
12.05	S. Fedak, O. Yasniy, S. Fedak, L. Tsymbaliuk DEFORMATION PATTERNS OF AMG6 ALLOY UNDER CONDITIONS OF UNIAXIAL TENSION IN THE AREAS OF JUMP STRAIN HARDENING	

12.20	A. Kovalovs, O. Derkach, V. Kobzar NON-DESTRUCTIVE IDENTIFICATION OF EFFECTIVE ELASTIC PROPERTIES OF CARBON FIBER REINFORCED POLYMER LAMINATES USING MODAL PARAMETERS
12.35	A. Gypka, R. Leshchuk, V. Buhovets, M. Bey, S. Ostapchuk, A. Tson, T. Pyndus, O. Tson, O. Lyashuk TRIBOLOGICAL ASPECTS OF MATERIAL DAMAGE IN MACHINE AND MECHANISM COMPONENTS DURING OPERATION
12.50	J. Toribio ANISOTROPY OF STRESS-CORROSION CRACKING IN COLD DRAWN PEARLITIC STEEL SUPPLIED IN THE FORM OF PRESTRESSING WIRES: TOWARDS THE WEAKEST CRACK PATH
13.05	O. Petrenko, S. Vikhot, S. Homon, R. Shchupakivskyi STUDY OF CHANGES THE HARDNESS OF WOOD IN PRODUCTION PALLETS DURING EXPLOATATION
13.20-14.20	 Lunch

Chairs: Prof. V. Iasnii and Prof. A. Lovska	
14.20	S. Bilyk, S. Maksymov, A. Bilyk, L. Lavrinenko, O. Matyash STUDY OF METAL DEGRADATION OF LONG-TERM SHIPBUILDING STRUCTURES UNDER THE INFLUENCE OF MINUS TEMPERATURES
14.35	O. Romashko-Maistruka, V. Romashko PREDICTING THE LOAD-BEARING CAPACITY OF FLEXURAL REINFORCED CONCRETE ELEMENTS UNDER DYNAMIC LOADS
14.50	V. Lazaryuk, V. Shanaida, R. Skliarov, L. Danylchenko INFLUENCE OF CO ₂ LASER PROCESSING PARAMETERS ON THE FORMATION AND MORPHOLOGY OF SURFACE DAMAGE IN SILICATE GLASS
15.05	V. Piddubnyi, I. Stadnyk, S. Okipnyi, A. Chahaida, O. Pylypets, N. Zalutska HEAT EXCHANGER FAILURE PREDICTION BASED ON HYDRODYNAMICS AND STRESS-STRAIN STATE MODELING USING A HYBRID EMPIRICAL-PHYSICAL MODEL
15.20	Y. Kovalchuk, G. Kramar, L. Bodrova, N. Shynhera, M. Shynhera DEFORMATION OF A 8000x580 WELDED TRUSS UNDER LOADING OF THE UPPER CHORD
15.35	I. Stadnyk, V. Piddubnyi, I. Okipnyi, N. Zvarych, H. Sabodash, A. Chahaida THE INFLUENCE OF WORKING ENVIRONMENT CHARACTERISTICS ON CORROSIVE WEAR OF ROLLS OF FORMING MACHINES IN THE FOOD INDUSTRY



15.50-16.10	
16.10	Aprianur Fajri, Nurul Muhayat, Ristiyanto Adiputra, Aditya Rio Prabowo, Ben Ganendra, Sören Ehlerse, Moritz Braun EFFECT OF GEOMETRIC IMPERFECTIONS ON CO ₂ TRANSPORT PIPELINES UNDER FATIGUE LOADING
16.25	J. Toribio, F.-J. Ayaso ANISOTROPY OF NOTCH-INDUCED FRACTURE BEHAVIOUR IN COLD DRAWN PEARLITIC STEELS IN THE FORM OF PRESTRESSING WIRES: A TRIBUTE TO JOHN FORD
16.40	I. Stoyko, O. Liashuk, I. Tkachenko, A. Diachun, D. Mironov, A. Hupka, O. Lakh TECHNOLOGY OF CURVILINEAR SHAFT MACHINING: UNCERTAINTY IN POSITIONING AND ACCURACY PROBLEMS
16.55	I. Pidgurskyi A STATISTICAL MODEL FOR EVALUATING STRESS INTENSITY FACTOR K_I UNDER INTERACTION OF IDENTICAL SURFACE CRACKS
17.10	R. Samchuk, R. Khmil CURRENT STATE OF RESEARCH ON FATIGUE STRENGTH OF THE WEB-FLANGE CONNECTION OF STEEL RUNWAY BEAMS
17.25	M. Pidgurskyi, D. Bykiv, I. Pidgurskyi, M. Stashkiv, Viktor Senchyshyn, O. Pidlyzhnyi ASSESSMENT OF THE STRESS-STRAIN STATE AROUND CIRCULAR OPENINGS IN DOUBLE-PITCHED AND ARCHED PERFORATED BEAMS
17.40	S. Artemova, T. Bevz, V. Kassov, Ya. Vasylchenko, O. Berezshnaya, D. Turchanin TECHNOLOGICAL FEASIBILITY OF RESTORATION OF TURBINE BLADES FROM TITANIUM ALLOY Ti-6Al-4V
17.55	R. Dzhala, B. Verbenets, V. Dzhala, M. Melnyk, O. Senyuk NON-DESTRUCTIVE TESTING OF UNDERGROUND PIPELINES CORROSION PROTECTION
18.10	O. Mikulich, O. Sad, N. Semenyshyn INVESTIGATION OF DEFECT INTERACTION IN STRUCTURALLY INHOMOGENEOUS MEDIA



SESSION 3A (ROOM A)

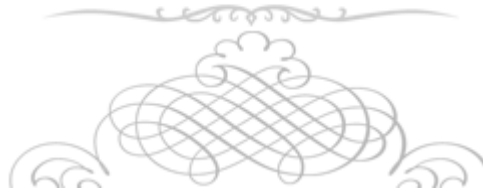
17 / 10 / 2025, Friday

- Session 3A

Chair: Prof. Homon S. and Prof. Kulakovskiy L.

10.00	<i>O. Svyrydiuk, S. Synii, S. Homon, P. Gomon, S. Gomon, O. Krantovska, L. Ksonshkevych, L. Kulakovskiy</i> STUDY OF MECHANICAL PROPERTIES OF WOOD VENEER SAMPLES IN THE SUBCRITICAL AND POSTCRITICAL STAGES: AN EXPERIMENTAL STUDY
10.15	<i>V. Datsiuk, S. Homon, O. Lukianenko, S. Gomon, Y. Puhach, P. Gomon, N. Kisc, I. Kutsyna</i> WORK OF WOODEN BEAMS AFTER LONG-TERM EXPLOITATION: AN EXPERIMENTAL STUDY
10.30	<i>S. Drobyshynets, P. Sunak, I. Mudryy, A. Pelekh, V. Rizak, A. Subota, M. Nesukh, B. Karavan</i> STUDY OF DEFLECTIONS OF STEEL FIBER CONCRETE AND STEEL FIBER-REINFORCED CONCRETE BEAMS UNDER LOW-CYCLE LOADINGS: AN EXPERIMENTAL STUDY
10.45	<i>O. Matviiuk, S. Homon, P. Gomon, S. Gomon, N. Ilchuk, S. Synii, O. Krantovska, L. Ksonshkevych</i> IMPROVING THE MECHANICAL PROPERTIES OF STRUCTURAL WOOD BY MODIFICATION DURING OPERATION IN A WATER ENVIRONMENT
11.00	<i>O. Polishchuk, Y. Ziatiuk, M. Fursovych, V. Suprunyuk, A. Pavluk, V. Romaniuk, A. Pelekh</i> COMBINED FIBER-CONCRETE CORROSION RESISTANCE TO COMPRESSION UNDER THE ACTION OF AGGRESSIVE ENVIRONMENT
11.15	<i>M. Roshchuk, S. Homon, P. Gomon, S. Gomon, N. Ilchuk, D. Husachuk, D. Kysliuk, I. Parfentyeva</i> WORK OF SOLID WOODEN BEAMS UNDER PROLONGED MOISTURE
11.30	

11.50	<i>S. Homon, P. Gomon, S. Gomon, P. Sunak, M. Smal, O. Dziubynska, S. Drobyshynets, O. Peredriy</i> <i>STUDY OF THE DEFORMATION PROPERTIES OF 40-YEAR-OLD HARDWOOD</i>
12.05	<i>O. Vereshko, I. Boyarska, O. Uzhegova, P. Shevchuk, S. Uzhehov, S. Homon, S. Gomon, P. Gomon, Yu. Melnyk</i> <i>STUDY OF WOOD DEFORMATION INDICATORS AFTER EXPOSURE TO ACIDIC ENVIRONMENTS</i>
12.20	<i>V. Aleksiiievets, S. Gomon, I. Aleksiiievets, A. Ivaniuk, S. Homon, V. Savitskiy, S. Litnitskyi, O. Rechun</i> <i>PERFORMANCE OF NAIL JOINTS OF WOODEN STRUCTURAL ELEMENTS UNDER LOW-CYCLE LOADS</i>
12.35	<i>V. Romaniuk, L. Bezniuk, V. Supruniuk, Y. Zatiuk, O. Kononchuk, A. Soroachak</i> <i>PERFORMANCE OF THE RAFTER ARCH CONSIDERING VERTICAL DISPLACEMENT OF THE TIE</i>
12.50	<i>D. Kysliuk, O. Homon, O. Chapiuk, P. Gomon, S. Homon, S. Gomon, P. Sokil, L. Kulakovskiy</i> <i>MECHANICAL CHARACTERISTICS OF EPOXY-MODIFIED WOOD: AN EXPERIMENTAL STUDY</i>
13.05	<i>V. Romaniuk, V. Supruniuk, L. Bezniuk, Y. Romaniuk, Y. Zatiuk, A. Soroachak</i> <i>PERFORMANCE OF A RAFTER ARCH CONSIDERING RESTRESSING</i>
13.20	<i>Closing of the Conference</i>



SESSION 3B (ROOM B)

17 / 10 / 2025, Friday

- Session 3B Chairs: Prof. J. Toribio and Prof. Aditya Rio Prabowo	
10.00	<i>J. Toribio</i> <i>ANISOTROPY OF HYDROGEN EMBRITTLEMENT INDUCED BY CRACKS IN COLD DRAWN PEARLITIC STEELS IN THE FORM OF PRESTRESSING WIRES: A TRIBUTE TO ANDREA MANTEGNA</i>
10.15	<i>Paskah Ridho Tumanggor, Aditya Rio Prabowo, Sören Ehlers, Moritz Braun, Quang Thang Do, Haris Nubli, Hermes Carvalho</i> <i>MECHANICAL BEHAVIOR ASSESSMENT OF DYNAMIC ICE FORCES USING FE METHOD: INTERACTION WITH AN IDEALIZED OFFSHORE STRUCTURE</i>
10.30	<i>J. Toribio, B. González, J.-C. Matos</i> <i>RELATIONSHIP BETWEEN ANISOTROPIC MICROSTRUCTURE AND STRENGTH IN COLD DRAWN PEARLITIC STEEL WIRES WITH ORIENTED PEARLITE: ON THE VALIDITY OF THE HALL-PETCH EQUATION</i>
10.45	<i>Sulthan Raffi Hadyansyah, Brilliant Aditya Fhandy, Reza Kurniawan Saputra, Aditya Rio Prabowo, Ben Ganendra, Sören Ehlers, Moritz Braun, Quang Thang Do</i> <i>GROUNDING DAMAGE OF STIFFENED HULL PANELS: A NUMERICAL STUDY ON ORIENTATION EFFECTS AND SEABED-SHAPE-DRIVEN ENERGY DISSIPATION</i>
11.00	<i>J. Toribio, B. González, J.-C. Matos</i> <i>LOCAL ANISOTROPY OF FATIGUE BEHAVIOUR IN COLD DRAWN PEARLITIC STEELS SUPPLIED IN THE FORM OF PRESTRESSING WIRES: A TRIBUTE TO ANTONIO MACHADO</i>
11.15	<i>Anandito Adam Pratama, Teguh Muttaqie, Aditya Rio Prabowo, Quang Thang Do, Haris Nubli, Hermes Carvalho</i> <i>NUMERICAL INVESTIGATION OF CELLULAR CORE SANDWICH PANELS SUBJECTED TO UNDEX: EFFECTS OF THE CONSTANT SHOCK FACTOR</i>



11.30	
11.50	<i>J. Toribio, B. González, J.-C. Matos, V. Kharin</i> <i>ANISOTROPY OF PLASTIC BEHAVIOUR IN COLD DRAWN PEARLITIC STEEL WIRES AS A CONSEQUENCE OF THEIR ORIENTED MICROSTRUCTURE: A DALINIAN APPROACH</i>
12.05	<i>Mohammad Daffa Noorsyahputra, Aditya Rio Prabowo, Ristiyanto Adiputra, Haris Nubli, Martin Jurkovič</i> <i>NUMERICAL ANALYSIS OF THE EFFECT OF OPERATING LOAD VARIATIONS ON THE STRUCTURAL RESPONSE OF WATER HYACINTH COLLECTION VESSEL TRASH BOX</i>
12.20	<i>J. Toribio</i> <i>LOCAL ANISOTROPY OF FRACTURE BEHAVIOUR IN COLD DRAWN PEARLITIC STEELS IN THE FORM OF PRESTRESSING WIRES: A PICASSIAN APPROACH</i>
12.35	<i>J. Dižo, A. Lovska, J. Gerlici, M. Blatnický</i> <i>STUDY OF THE HATCH COVER STRENGTH OF A CONTAINER FOR BULK CARGO TRANSPORTATION</i>
12.50	<i>J. Toribio</i> <i>ANISOTROPY OF CRACK-INDUCED FRACTURE BEHAVIOUR IN COLD DRAWN PEARLITIC STEELS IN THE FORM OF PRESTRESSING WIRES: A TRIBUTE TO ANDREA MANTEGNA</i>
13.05	<i>O. Chapiuk, O. Homon, O. Pakholiuk, S. Rotko, V. Volyansky, V. Samchuk, O. Andriichuk, A. Martyniuk</i> <i>STUDY OF LOW-CYCLE FATIGUE OF CONCRETE BONDING TO SICKLE-SHAPED REINFORCEMENT</i>
13.20	<i>Closing of the Conference</i>