Conference programme

19 November 2026

Venue: 4th Building of VMU, Universiteto g. 8A, Akademija, Kaunas distr.

07:30	Registration	4th Building of VMU, lobby
09:00	**Opening Session**	Conference Hall (Room 214)
09:30	**Plenary Session**	Conference Hall (Room 214)
12:00	*Coffee break*	
12:30	**Scientific sections**	
	Section 1 Lubricants and lubrication	Conference Hall (Room 214)
	Section 2 New directions and applications	Room 211
13:30	*Lunch*	
15:00	**Plenary Session**	Conference Hall (Room 214)
16:30	*Coffee break*	
17:00	**Plenary Session**	Conference Hall (Room 214)
18:00	*Get-together*	(Lobby, 2st floor)

20 November 2026

Venue: 4th Building of VMU, Universiteto g. 8A, Akademija, Kaunas distr.

8:30	**Plenary Session**	Conference Hall (Room 214)
11:00	*Coffee break*	
11:30	Poster presentation	Conference Hall (Room 214)
13:00	*Lunch*	
14:00	**Scientific sections**	
	Section 3 Tribology of Composites	Conference Hall (Room 214)
	Section 4 Tribology of Titanium Alloys	Ground floor lobby room
	Section 5 Tribology in the production process	Room 211
15:30	*Coffee break*	
16:00	**Scientific sections**	
	Section 6 Surface science and coatings engineering	Conference Hall (Room 214)
	Section 7 Bio tribology	Ground floor lobby room
	Section 8 Friction and wear in tribosystems	Room 211
17:30	**Discussions; Closing remarks**	Conference Hall (Room 214)
18:00	**Tour to Tribology, Surface science and Composite Materials laboratories** at the Department of Mechanical, Energy and Biotechnology Engineering	
19:00	Free time in Kaunas downtown.	

Cultural programme

21 November 2026

08:30	Departure for **Cultural programme in the Kėdainiai Region, Lithuania** (from Central Building VMU AA)
19:00	Return to VMU AA.

REMARK: Participation in cultural programme is charged separately from conference fee. Content of cultural programme is presented at the end of the conference programme.

19 November 2026

PLENARY SESSION

09:00–12:30 Conference Hall of 4th building of VMU (Room 214)

Chairmen: ***Raimundas Rukuiža***, Co-chairman ***Mitjan Kalin***

UNDERSTANDING FRICTION LAWS OF AMONTONS AND COULOMB IN VIEW OF THE REAL CONTACT AREA

Mitjan Kalin /University of Ljubljana, Slovenia/

MECHANISMS OF TRIBOELECTRO-INDUCED FAILURE

Hong Liang /Texas A&M University, USA/

CRITICAL REVIEW ON THE TEXTURED SURFACE EFFECTS OF SLIDING BEARING PERFORMANCE IMPROVEMENT

Fillon Michel /University of Poitiers, CNRS, Pprime Institute, France/

POSSIBILITIES OF USING WASTE OIL IN FORESTRY OPERATIONS BY EVALUATING TRIBOLOGICAL PROPERTIES

Raimundas Rukuiža /Vytautas Magnus University, Lithuania/, Darius Volskis, Juozas Padgurskas, Anastasia Storozuk

12:30–12:30 *Coffee break*

SCIENTIFIC SECTIONS

Section 1
Lubricants and lubrication

12:30–13:30 Conference Hall (Room 214)

Chairmen: ***Hong Liang***, Co-chairman ***Tadas Matijošius***

STRUCTURE–TRIBOLOGY RELATIONSHIPS OF BIO-BASED ESTERS FOR ENVIRONMENTALLY FRIENDLY HYDRAULIC FLUIDS

Tadas Matijošius /State Research Institute Center for Physical Sciences and Technology, Lithuania/, Dalia Bražinskienė, Linas Labanauskas

STUDY ON THE EFFECT OF ARTIFICIAL TEXTURING ON THE LUBRICANT FLOW UNDER HYDRODYNAMIC LUBRICATION

Dimitrios Bompos /University of Patras, Greece/, Pantelis G. Nikolakopoulos

THE METHODOLOGY AND CUSTOMISED EQUIPMENT FOR ASSESSING THE LUBRICITY OF ILS ON CHARGED SURFACES

Raimondas Kreivaitis /Vytautas Magnus University, Lithuania/, Nerijus Petrikas, Albinas Andriušis

Section 2
New directions and applications

12:30–13:30 Room 211

Chairmen: ***Justas Listauskas***, Co-chairman ***Oleh Tkachuk***

ENERGY DISSIPATION METHODS TO UNDERSTAND TRIBO-INTERACTIONS

Satish Vasu Kailas /Indian Institute of Science, India/, Nath Sidh Kishan, Sanjay Wavare Sahil, A. N. Ardra

XPS COMPARISON OF SURFACE COMPOSITION AND CANDIDATE CARBON–OXYGEN BONDING IN SIX CARBON POWDERS

Yuri Dekhtyar /Riga Technical University, Faculty of Civil and Mechanical Engineering, Latvia/, Juozas Padgurskas, Hermanis Sorokins, Cagla Gizem Acar, Audrius Žunda

ECO-FRIENDLY CHITIN PURIFICATION FROM SHRIMP SHELL WASTE COLLECTED IN MOROCCO

Zineb Chiki /Sidi Mohamed Ben Abdellah University, Morocco/, Juozas Padgurskas, Noureddine Idrissi Kandri

PHOTOLUMINESCENCE RESPONSE OF DACT-II TADF THIN FILMS UNDER REPEATED TRIBOLOGICAL CONTACT

Sohrab Nasiri /Vytautas Magnus University, Lithuania/, Juozas Padgurskas, Raimundas Rukuiža

13:30–15:00 *Lunch*

PLENARY SESSION

15:00–18:30 Conference Hall of 4th building of VMU (Room 214)

Chairmen: ***Audrius Žunda***, Co-chairman ***Auezhan Amanov***

ADVANCES IN LUBRICATION AND TRIBOLOGICAL COATINGS FOR ELECTRIC VEHICLE APPLICATIONS

Ali Erdemir /Texas A&M University, USA/

ELECTRON SPECTROSCOPY FOR TRIBOLOGY RESEARCH

Yuri Dekhtyar /Riga Technical University, Latvia/

16:30–17:00 *Coffee break*

MECHANISMS OF TRIBOELECTRO-INDUCED FAILURE LESSONS FROM NATURE: BIOINSPIRED MECHANICALLY DURABLE AND SELF-HEALING SUPERLIQUIPHILIC/PHOBIC SURFACES FOR GREEN TRIBOLOGY

Bharat Bhushan /The Ohio State University (San Jose, CA), USA/

18:30 *GET-TOGETHER* (Lobby, 2st floor)

20 November 2026

PLENARY SESSION

8:30–11:00 Conference Hall of 4th building of VMU (Room 214)

Chairmen: ***Adolfo Senatore***, Co-chairman ***Gnanamoorthy Rajappa***

SOLID LUBRICANTS BEYOND FRICTION AND WEAR: MULTIFUNCTIONAL EFFECTS IN DENTAL MATERIALS

Magdalena Lepicka /Bialystok University of Technology, Poland/

FRICTION INDUCED VIBRATIONS IN CONVENTIONAL, HYBRID AND ELECTRIC VEHICLES: CONTEMPORARY TRAJECTORIES OF NVH INVESTIGATION AND NEW CHALLENGES

Adolfo Senatore /University of Salerno, Italia/

SURFACE TREATMENT FOR FRICTION AND WEAR REDUCTION IN ELECTRIC VEHICLE BEARINGS AND GEARS

Auezhan Amanov /Tampere University, Finland/

FROM AGRO-WASTE TO EV INTERIORS: TRIBOLOGY OF SUSTAINABLE POLYMER COMPOSITES

Gnanamoorthy Rajappa /Indian Institute of Technology Madras, India/, Dange Darshan, N. B. Keerthika

11:00–11:30 *Coffee break*

POSTER PRESENTATIONS

11:30–13:00 Conference Hall of 4th building of VMU (Room 214)

Chairmen: ***Audrius Žunda***, Co-chairman ***Michel Fillon***

PPR-1 IMPACT ELASTOHYDRODYNAMIC LUBRICATION ANALYSIS OF VISCOELASTIC MATERIAL WITH MAXWELL MODEL

Wong-Long Li /National Cheng Kung University, Taiwan/, Hung-Yi Lin, Li-Ming Chu, Chen-You Liu

PPR-2 NUMERICAL MODELING OF ZDDP-INDUCED RHEOLOGICAL CHANGES IN POLYMOLECULAR ADSORPTION LAYERS OF THIN LUBRICATING FILMS

Oleksandr Dykha /Khmelnytskyi National University, Ukraine/, Ilona Drach, Serhii Matiukh

PPR-3 QUANTITATIVE ASSESSMENT OF THE SYNERGISTIC COMPONENT OF METAL TRIBOCORROSION IN HYDROGEN SULFIDE-CONTAINING ENVIRONMENTS

Chrystyna Vasyliv /Karpenko Physico-Mechanical Institute NAS of Ukraine/, M. Khoma, V. Vynar, N. Ratska, B. Datsko, O. Vasyliv

PPR-4 REDUCING WEAR OF SLIDING BEARINGS BY STATIC BALANCING OF THE CRANKSHAFT DURING ITS DESIGN

Anatoliy Hordieiev /Khmelnytskyi National University, Ukraine/, Nazar Kostyuk

PPR-5 EXPANDING THE FUNCTIONAL CHARACTERISTICS OF COMPOSITE PEO COATINGS ON TITANIUM AND ITS ALLOYS BY INTRODUCING NANOPARTICLES INTO THE ELECTROLYTE

Halyna Chumalo /Karpenko Physico-Mechanical Institute NAS of Ukraine/, V. Posuvailo, M. Student, J. Padgurskas, H. Chumalo, Kh. Makukh, I. Kovalchuk, I. Pohrelyuk

PPR-6 MECHANICAL WEAR OF THE CONTACT SURFACES OF THE STEAM TURBINE ROTOR DISK WITH RIVETS HOLDING THE BLADES AS A PREREQUISITE FOR THE OCCURRENCE OF FRETTING FATIGUE CRACKS

Petro Solovey /Karpenko Physico-Mechanical Institute NAS of Ukraine/, Halyna Krechkovska, Oleksandra Student

PPR-7 CRITERIA FOR EVALUATING PROCESSES IN THE FRICTIONAL CONTACT ZONE OF COMPOSITE MATERIALS (TRIBOLOGICAL PROBLEMS AND DIRECTIONS OF SOLUTIONS)

Andriy Gypka /Ternopil Ivan Puluj National Technical University, Ukraine/, Oleg Lyashuk, O. Liashuk, Oleg Tson, Roman Khoroshun, Dmitry Mironov, V. Teslia

PPR-8 NUMERICAL STUDY OF RADIAL-AXIAL VIBRATIONS DUE TO LUBRICATION FILM FLUID FLOW OF THE BUFFER UNLOADING DEVICE

Andriy Zahorulko /Sumy State University, Ukraine/, G. Peczkis /Silesian University of Technology, Gliwice, Poland/, A. Vanzhula /Sumy State University, Ukraine/

PPR-9 EFFECT OF SLIDING DIRECTION AND ENVIRONMENTAL CONDITIONS ON ICE FRICTION OF DLIP-TEXTURED STEEL

Igors Klemenoks /Riga Technical University, Latvia/, E. Jansons, J. Lungevics, E. H. Petrova, J. Kaupuzs, A. Leitans, R. Sirants and P. Onufrijevs

PPR-10 TRIBOLOGICAL PROPERTIES OF IRON-NICKEL-BASED POWDER MATERIALS ALLOYED WITH TI, CR, MO ADDITIVES

Iaroslav Sytnyk /Frantsevich Institute for Problems of Materials Science NAS of Ukraine, Kyiv/, Gennadii Bagliuk, Yevheniia Kyryliuk, Myroslav Marych

PPR-11 IMPROVING THE TRIBOLOGICAL CHARACTERISTICS OF FUEL EQUIPMENT ELEMENTS BY OPTIMIZING THE MICROGEOMETRY OF FRICTION SURFACES

Serhii Shymchuk /Lutsk National Technical University, Ukraine/, Jacek Szczot, Ruslan Kostiunik, Natalia Zaichuk, Oksana Mikosianchyk, Serhii Pylypchuk, Dmytro Barabaniuk

PPR-12 STRENGTHENING OF INTERNAL SURFACES OF LONG BOREHOLES BY NITRIDING IN A GLOW DISCHARGE

Andrii Martyniuk /Khmelnytskyi National University, Ukraine/, M. Stechyshyn, V. Fedoriv, M. Lukianiuk

PPR-13 PREPARATION OF A MULTIFUNCTIONAL LUBRICATING GREASE BASED ON USED SYNTHETIC OIL USING A NEW NANOCOMPOSITE THICKENER WITH A MODIFYING ADDITIVE

Giorgi Abramishvili /Georgian Technical University, Georgia/, E. Kutelia, J. Iosebidze, D. Gventsadze, G. Mirotadze

PPR-14 EFFECT OF THE STRUCTURAL STATE OF TI–13NB–13ZR AND MICRO-ARC OXIDATION PARAMETERS ON THE PROPERTIES OF CALCIUM PHOSPHATE COATINGS

Aidar Kengesbekov /D. Serikbayev East Kazakhstan Technical University, Kazakhstan/, Kengesbekov Aidar, Akhmetova Elvira, Kakimzhanov Dauir, A. N., Askhatov, N. Arnur

PPR-15 INFLUENCE OF HIGH-VELOCITY OXY-FUEL SPRAYING PARAMETERS ON THE MICROSTRUCTURE, PHASE COMPOSITION, TRIBOLOGICAL, AND CORROSION BEHAVIOR OF CARBIDE-BASED CERMET COATINGS

Merkhat Dautbekov /D. Serikbayev East Kazakhstan Technical University, Kazakhstan/

PPR-16 POLYOXYMETHYLENE TRIBOLOGICAL PERFORMANCE WITH LIPSS ON STAINLESS STEEL

Armands Leitans /Riga Technical University, Latvia/, Ernests Jansons, Janis Lungevics, Raimonds Sirants, Jevgenijs Kaupuzs, Eva Helena Petrova, Pavels Onufrijevs

PPR-17 INVESTIGATION OF THE PROPERTIES OF LUBRICANT BASE STOCKS PRODUCED USING RECYCLING TECHNOLOGIES

Kateryna Prysiazhna /Khmelnytskyi National University, Ukraine/

PPR-18 SENSITIVITY OF ISO 25178 AREAL ROUGHNESS PARAMETERS TO FILTERING, FORM REMOVAL AND RESAMPLING: RELEVANCE FOR MICRO-VICKERS HARDNESS

Raimonds Sirants /Riga Technical University, Latvia/, Ernests Jansons, Janis Lungevics, Irina Boiko

PPR-19 EFFECT OF STRONTIUM AND CHITOSAN ON THE STRUCTURAL-PHASE STATE, MECHANICAL PROPERTIES, AND FRETTING RESISTANCE OF A BIOACTIVE COATING ON TI6AL4V ALLOY

Roman Proskurnyak /Karpenko Physico-Mechanical Institute of the NAS of Ukraine/, Serhii Lavrys, Juozas Padgurskas, Lina Ragelienė, Iryna Pohrelyuk

PPR-20 THE INFLUENCE OF HIGH-TEMPERATURE DEFORMATION OF TWO-PHASE 3M TITANIUM ALLOY ON ITS TRIBOLOGICAL PROPERTIES

A. Strelnikova, J. Padgurskas, A. Žunda /Vytautas Magnus University, Lithuania/

13:00–14:00 *Lunch*

SCIENTIFIC SECTIONS

Section 3
Tribology of Composites

14:00–15:30 Conference Hall (Room 214)

Chairmen: ***Remo Merijs-Meri***, Co-chairman ***Jolanta Krupa***

RELATIONSHIP BETWEEN MECHANICAL PROPERTIES AND WEAR BEHAVIOR OF ADDITIVELY MANUFACTURED POLYMERS

Jolanta Krupa /AGH University of Krakow, Poland/, Jędrzej Blaut, Łukasz Breńkacz

THERMOPLASTIC STARCH COMPOSITES FOR OPEN CELL FOAMS OF TRIBOLOGICAL APPLICATIONS

Remo Merijs-Meri /Riga Technical University, Latvia/, J. Zicans, A. Bernava, R. Berzina, R. Berzins, G. Eida, R. Rutkaite, S.-K. Yeh

EFFECT OF PINECONE SCALE POWDER PARTICLE SIZE ON THE SURFACE, MECHANICAL, AND THERMAL PROPERTIES OF EPOXY COMPOSITES FOR POTENTIAL MARINE APPLICATIONS

Muhammad Akhsin Muflikhun /Vytautas Magnus University, Lithuania; Gadjah Mada University, Indonesia/, Alvin Dio Nugroho, Edi Purnomo, Ardi Jati Nugroho Putro, Juozas Padgurskas

INFLUENCE OF TEXTILE WASTE AND HEMP FIBER FILLERS ON THE DRY SLIDING FRICTION BEHAVIOR OF PLA-BASED THERMOPLASTIC COMPOSITES

Alvin Dio Nugroho /Vytautas Magnus University, Lithuania/, Cagla Gizem Acar, Juozas Padgurskas, Remo Merijs-Meri, Dmitrij Goljandin

EVALUATION OF TRIBOLOGICAL PROPERTIES OF EPOXY RESIN COMPOSITES WITH PINECONE PARTICLE FILLER

Aistis Majauskas /Vytautas Magnus University, Lithuania/, Alvin Dio Nugroho, Muhammad Akhsin Muflikhun, Aušra Selskienė, Laurūnas Staišiūnas, Juozas Padgurskas

Section 4
Tribology of Titanium Alloys

14:00–15:30 Ground floor lobby room

Chairmen: ***Viktoriya Podhurska***, Co-chairman ***Serhii Lavrys***

TRIBOLOGICAL CHARACTERISTICS OF SUPERSONIC ELECTRIC ARC COATINGS OF THE FE-TI-V-B-C ALLOYING SYSTEM

Volodymyr Hvozdets'kyi /Karpenko Physico-Mechanical Institute of the NAS of Ukraine/, M. M. Student, I. M. Pohreluk, Juozas Padgurskas, Raimundas Rukuiža, N. Ostapchuk, N. Mozola, K. R. Zadorozhna, H. H. Veselivska, Ya. Sirak

TRIBOLOGICAL CHARACTERISTICS OF LAYERS ON VT6 TITANIUM ALLOY HARDENED BY DIFFUSION SATURATION WITH NITROGEN AND OXYGEN

Alexander Luk'yanenko /Karpenko Physico-Mechanical Institute of the NAS of Ukraine/, Mykhailo Student, Juozas Padgurskas, Raimundas Rukuiža, Iryna Pohrelyuk, Vasyl Trush

TRIBOLOGICAL CHARACTERISTICS OF PEO LAYERS SYNTHESIZED ON THERMAL SPRAY (PLASMA) COATINGS OF THE TI-AL-CU ALLOYING SYSTEM

Volodymyr Posuvailo /Karpenko Physico-Mechanical Institute of the NAS of Ukraine/, M. M. Student, J. Padgurskas, V. M. Hvozdetskyi, I. M. Pohreliuk, V. M. Posuvailo, Kh. R. Zadorozhna, Ya. Ya. Sirak, R. V. Proskurniak

TRIBOLOGICAL BEHAVIOR AND OXIDATION RESISTANCE OF CATHODIC ARC-DEPOSITED TIALGDN AND MULTILAYER CRN/TIALGDN COATINGS

Viktoriya Podhurska /Karpenko Physico-Mechanical Institute of the NAS of Ukraine/, M. Shved, O. Ostash, V. Vynar, O. Kuprin, O. Reshetnyak, H. Tolmachova, V. Bilous, M. Bortnytska, V. Goltvyanytsya

WEAR AND CORROSION RESISTANCE OF 3D-PRINTED TI-6AL-4V ALLOY AFTER HEAT TREATMENT

Oleh Tkachuk /Karpenko Physico-Mechanical Institute of the NAS of Ukraine/, Serhii Lavrys, Iryna Pohrelyuk

IMPROVEMENT OF FRETTING PERFORMANCE IN TI6AL4V TITANIUM ALLOY VIA NON-ISOTHERMAL GAS NITRIDING

Serhii Lavrys /Vytautas Magnus University, Lithuania/, Juozas Padgurskas, Iryna Pohrelyuk, Tadas Matijošius, Audrius Zunda

Section 5
Tribology in the production process

14:00–15:30 Room 211

Chairmen: ***Rima Mickevičienė***, Co-chairman ***Almontas Vilutis***

SELECTION OF THE MOST SUITABLE ADDITIVE MANUFACTURING PROCESS FOR PRODUCING BRONZE SHIP PROPELLERS

Rima Mickevičienė /Klaipėda University, Lithuania/

FROM SURFACE TOPOGRAPHY TO WEAR PREDICTION: NEW OPPORTUNITIES FOR TRIBOLOGY IN THE ERA OF FUNCTIONAL SURFACES

Irīna Boiko /Riga Technical University, Latvia/

WEAR BEHAVIOUR OF PVD-STRENGTHENED WC-CO CUTTER DURING MILLING OF WOOD-PLASTIC COMPOSITES

Almontas Vilutis /Vytautas Magnus University, Lithuania/, Vytenis Jankauskas

15:30–16:00 *Coffee break*

Section 6
Surface science and coatings engineering

16:00–17:30 Conference Hall (Room 214)

Chairmen: ***Henrikas Cesiulis***, Co-chairman ***Piotr Osada***

INVESTIGATION OF TRIBOLOGICAL PROPERTIES OF CHROMIA AND CHROMIA COMPOSITE COATINGS DEPOSITED BY PLASMA SPRAYING

Liutauras Marcinauskas /Lithuanian Energy Institute, Plasma Processing Laboratory, Lithuania/, Lukas Bastakys, Romualdas Kėželis, Mindaugas Milieška, Mindaugas Aikas

TRIBOLOGICAL BEHAVIOUR OF ELECTROSPARK-DEPOSITED AG-BASED COATINGS ON COPPER FOR ELECTRICAL CONTACT APPLICATIONS

Natalia Tintaru (Tsyntsaru) /Moldova State University, Institute of Applied Physics, Moldova/, V. Mihailov, S. Ivașcu, M. V. Lungu, D. Croitoru, N. Kazak, N. Tsyntsaru, D. Tălpeanu, D. Pătroi, V. E. Marinescu, I. Ion, S. Iațco, A. R. Caramitu, A. Ianachevici

ELECTROCHEMICAL SURFACE RESPONSE OF PALLADIUM IN COMPLEXING MEDIA: CORROSION, PASSIVATION AND PGM-CONTAINING COATING FORMATION

Henrikas Cesiulis /Vilnius University, Lithuania/, N. Tsyntsaru, G. Eidukas, D. Bernotas

IMPACT OF AIR PRESSURE ON THE FRICTION RESPONSE OF DLC-MOS2 COATINGS

Piotr Osada /AGH University of Krakow, Poland/, Marcin Kot, Renata Wojnarowska-Nowak, Maciej Łuszcz, Edyta Osuch-Słomka, Remigiusz Michalczewski, Sławomir Kąc, Jürgen M. Lackner

Section 7
Bio Tribology

16:00–17:30 Ground Floor Lobby Room

Chairmen: ***Alfredas Smailys***, Co-chairman ***Lina Ragelienė***

CURRENT DEVELOPMENTS IN ORTHOPEDIC IMPLANT CREATION: NEW MATERIALS, SURFACE SHAPING AND STRENGTHENING

Alfredas Smailys /Lithuanian University of Health Sciences, Lithuania/, Lina Ragelienė, Serhii Lavrys, Pranciškus Bakutis, Tadas Matijošius, Juozas Padgurskas

GRAPHENE COATINGS FOR WEAR-RESISTANCE, THERMAL MANAGEMENT AND ANTIBIOFILM APPLICATIONS

Jiantong Li /KTH Royal Institute of Technology, Sweden/

BIOMECHANICAL CHARACTERISTICS OF NANOSTRUCTURED SIO2-COATED TAV ALLOY FOR ORTHOPAEDIC APPLICATIONS

Babra Abbas /Indian Institute of Technology Delhi, India/

ARCHITECTED POROUS POLYMER ORTHOTICS FOR FRICTION CONTROL AT THE SKIN-POLYMER INTERFACE

Gnanamoorthy Rajappa /Indian Institute of Technology Madras, India/, Dange Darshan, N. B. Keerthika

SURFACE - MICROORGANISMS INTERACTION: IMPLICATIONS FOR ANTIMICROBIAL ACTIVITY AND BIOFILM FORMATION

Lina Ragelienė /Vytautas Magnus University, Lithuania/, Serhii Lavrys, Alfredas Smailys, Pranciškus Bakutis, Tadas Matijošius, Juozas Padgurskas, Dominika Adamovič

THE SPECIALTY OF SURFACE DESIGN FOR BIOMEDICAL IMPLANTS: WHY DOES A BETTER PROPERTIES NOT NECESSARILY MEAN A BETTER IMPLANT?

Pranciškus Bakutis /Vytautas Magnus University, Lithuania/, Serhii Lavrys, Alfredas Smailys, Lina Ragelienė, Tadas Matijošius, Juozas Padgurskas

Section 8
Friction and Wear in Tribosystems

16:00–17:30 Room 211

Chairmen: ***Martyna Zemlik***, Co-chairman ***Artūras Katinas***

DRY SLIDING FRICTION OF HVOF WC-12CO COATINGS AFTER ULTRASONIC NANOCRYSTAL SURFACE MODIFICATION

Nurtoleu Magazov /D. Serikbayev East Kazakhstan Technical University, Kazakhstan/, B. Rakhadilov, A. Kussainov, D. Kakimzhanov, Ye. Molbossynov, M. Kaliaskarova

SLURRY EROSION AND CORROSION OF FE-CR-BONDED TI(C,N) CERMETS: ROLES OF CHROMIUM PARTITIONING AND BINDER CONTINUITY

Tabeen H. Pampori /Tallinn University of Technology, Estonia/, Märt Kolnes, Kristjan Juhani, Marek Tarraste, and Jakob Kübarsepp

MECHANISMS OF ABRASIVE WEAR REDUCTION BY HARDFACING WELD-BEAD CONFIGURATION IN CULTIVATOR COULTER POINTS

Justas Listauskas /Vytautas Magnus University, Lithuania/, Vytenis Jankauskas, Egidijus Katinas

EFFECT OF MOLYBDENUM AND BORON ON THE ABRASIVE WEAR RESISTANCE OF MEDIUM-CARBON HIGH-SILICON STEELS

Martyna Zemlik /Vytautas Magnus University, Lithuania; Wrocław University of Science and Technology, Poland/, Konrad Chrzan, Vytenis Jankauskas

DEM AND EXPERIMENTAL STUDY OF ABRASIVE WEAR ON BULBOUS BOW-INSPIRED ELEMENTS

Egidijus Katinas /Vytautas Magnus University, Lithuania; Czech University of Life Sciences Prague, Czech Republik/, Regita Bendikienė, Artūras Katinas, Rostislav Chotěborský, Vytenis Jankauskas

17:30 Discussions. Closing remarks Conference Hall (Room 214)
18:00 **Tour to Tribology, Surface science and Composite Materials laboratories** at the Department of Mechanical, Energy and Biotechnology Engineering
19:00 Free time in Kaunas downtown

LANGUAGE

The conference language is English.

INFORMATION FOR SPEAKERS

Duration of oral reports:

Plenary sessions – 30–40 min. (including discussion)
Scientific sessions – 15–20 min. (including discussion)
Sections' rooms will be equipped for **Multimedia presentations.**

Presentation of posters will be carried out online, on the MicrosiftTeams platform, a link will be sent. The volume of the poster is 1–2 slides. The content and editorial of the online poster is the same as that of the traditional poster. Posters will be displayed based on the order specified in the program. The authors briefly present the purpose and results of the work and answer questions from the audience.

Please send the posters in PDF format to the organizing committee no later than November 20 at 12 noon Eastern European Time (EET).

ARRIVAL

There are two means of most popular regular public transport in Lithuanian cities – buses and trolleybuses. It is possible to buy the ticket with payment card in inside but touching the card at the ticket machine. Bus No. 18 arrives from city centre to conference venue at Vytautas Magnus University. Bolt (*https://bolt.eu/en/drive/*) taxi mobile application for taxi services is most popular in Lithuania.

Arriving from airports:

After arrival to **Kaunas airport** you may transfer to Kaunas railway and bus stations by bus No. 29 or go with taxi (price ca 20 EUR) to Kaunas downtown or directly to VMU campus. Timetables of public transport in Kaunas are available at

*https://www.stops.lt/kaunas/#kaunas/e*n

After arrival to Vilnius airport to Vilnius railway and bus stations (same place) is possible by buses No. 1, 2 and 4. Timetables of public transport in Vilnius are available at:

https://www.stops.lt/vilnius/#vilnius/en

Timetable of buses from Vilnius to Kaunas (buses every 20–30 min.) at:

https://www.autobusubilietai.lt/en/

Timetable of trains from Vilnius to Kaunas at: *https://bilietas.ltglink.lt/*

Other information:

University's campus map at: *https://www.vdu.lt/en/contacts/vmu-map/*

Touristic information of Kaunas: *https://kaunasin.lt/en/*

Touristic information of Lithuania: *https://www.lithuania.travel/en/*

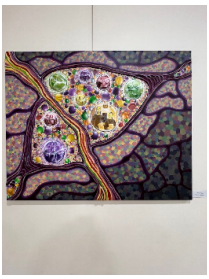
21 November 2026

Cultural program

TOUR IN THE KĖDAINIAI REGION

1. Guided tour around Kėdainiai old-town



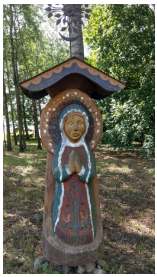
Kėdainiai is a historical city shaped by a rich mosaic of cultures and faiths. Over the centuries, Lithuanians, Poles, Jews, Germans, Scots, and Russians all left their enduring mark here, creating a community where Catholic, Evangelical Reformed, Jewish, and Orthodox places of worship stood side by side.

In the late 19th century, the city's economy flourished as local market gardeners—predominantly from the Jewish community—began cultivating cucumbers. Ever since, Kėdainiai has been famous as Lithuania's cucumber-growing capital.

Today, the Old Town of Kėdainiai is a protected urban monument of national significance and a popular destination for visitors. It is one of only seven surviving historic old towns in Lithuania. Proudly named the Lithuanian Capital of Culture 2026, Kėdainiai is located in central Lithuania, just 51 km north of Kaunas.

2. Czesław Milosz's homeland






Šeteniai is the birthplace of Česław Miłosz—poet, writer, translator, essayist, and Nobel laureate. Throughout his life, Miłosz carried fond memories of his native

Šeteniai and Lithuania in his heart, weaving them into his poetry and his famous novel, The Issa Valley. In 1999, the Česław Miłosz Cultural Centre was established in a restored barn along the banks of the Nevėžis River as a hub for culture and science. Today, it hosts literary evenings, gatherings, conferences, and an exhibition dedicated to the author. The center is surrounded by a picturesque park featuring traditional chapel pillars and sculptures honoring both Šeteniai and Česław Miłosz.

3. Lunch at the Gray House restaurant





The building in Kėdainiai, where the hotel and restaurant is located, belonged from the beginning of the 18th century to the middle of the 18th century to the Scottish bencher Jacob Gray, a member of the Kėdainiai magistrate's court. As early as 1765, the building was still called Gray's brick house–kamienica grejowska.

4. Museum of the 1863 Uprising and the Paberžė Sacred Heritage Complex





The 1863 Uprising Museum was founded in 1993 in the former manor house of Baron Stanislovas Šilings, whose noble family originated in Germany in the 18th century. It was here that Father Antanas Mackevičius assembled a band of rebels to launch an open struggle against the Tsarist regime. Today, the museum displays the rebels' weapons, personal belongings, and historical documents, alongside works by renowned Lithuanian graphic artists and painters depicting the uprising and honoring its memory.

Adjacent to the museum stands the wooden Paberžė Church, built by local master craftsmen. It houses original crosses and an altar carved by Vincas Svirskis, one of Lithuania's most famous traditional woodcarvers. Inside the church, the historic rectory, and the granary, visitors can explore the unique collections gathered by Father Stanislovas, featuring sacred art, folk sculptures, paintings, and decorative metalwork.

5. The educational program at Urban Food





URBANFOOD is a family-run business based in the small town of Dotnuva, near Kėdainiai, specializing in drying and fine-grinding locally grown Lithuanian berries, vegetables, and herbs. The facility sits on land that once belonged to the owner's grandparents, where building first began 40 years ago—now thoughtfully transformed into a cozy, small-scale production factory.

During the educational program, you will learn about native Lithuanian plants valued in traditional folk medicine and discover historic preservation crafts: drying, grinding, and distillation. Through a sensory experience, you'll smell, taste, and compare fresh, dried, and powdered ingredients, discovering how nutrient-dense foods can bring vibrant natural colours, vitamins, and minerals to your daily life.

THE CULTURAL PROGRAM IS NOT INCLUDED IN THE CONFERENCE FEE AND SHOULD BE PAID SEPARATELY AT THE REGISTRATION.