19th International Conference on Tribology 14-16 May 2025, Kragujevac, Serbia



#### **Conference PROGRAM**

WEDNESDAY 14 May 2025		
Time	14 May 2025  Activity	
09:00 - 10:00	Registration of t	•
10:00 – 10:30	Opening of th	-
	Plenary	
	MECHANICAL INTERLOCKING ENABLES ADHE ENVIRONMENTAL CONDITIONS	SION CONTROL UNDER UNFAVOURABLE
	Marco Bruno, Luigi Portaluri, Massimo De Vitt	corio, Stanislav Gorb, Michele Scaraggi
	RESEARCH PROGRESS ON KEY TECHNOLOGIE CHINA	S OF HIGH-END LUBRICATING OILS IN
	Jian Xu, Wenjing Hu, Dandan Li, <b>Jiusheng Li</b>	
10:30 - 12:00	FRICTION-INDUCED GROWTH OF THIN SOLID	
	MICRO-MANUFACTURING/RE-MANUFACTURING	RING
	Yang Song, Chenxu Liu, Yonggang Meng	IFC OF PROTICIONIC LIQUIDS AS VERSATILE
	INVESTIGATION OF TRIBOLOGICAL PROPERTION ADDITIVES FOR ENVIRONMENTALLY FRIENDS	·
	Raimondas Kreivaitis, Artūras Kupčinskas, Mi	lda Gumbytė, Jolanta Treinytė
	ANSAR-analitika Instrumenti d.o.o Confere	ence Sponsor
	Krešo Mesarek, Aleksandra Životić	
12:00 – 13:00	Welcome	Cocktail
13:00 – 15:00	Free	Time
15:00 – 16:45	Section A1	Section B1
15.00 - 10.45	(Building A, Room: A-I-13)	(Building A, Room: A-P-23)
16:45 – 17:00	Coffee	
17.00 – 19:00	Section A2	Section B2
	(Building A, Room: A-I-13)	(Building A, Room: A-P-23)
	Conference	ce Dinner
20:00	Restaurant Ho	tel Kragujevac
	Address: Kralja Petra	I no. 18, Kragujevac



THURSDAY	
15 May 2025	
Time	Activity
09:00 - 11:00	Section C
09.00 - 11.00	(Building A, Room: A-I-13)
11:00 – 12:00	Coffee break
	Conference trip
12:00 –	<u>Vrnjacka Banja</u>
	Lunch at the Restaurant "Gocko"
	The price of the Conference trip is 50 €
	12:00 Departure from Faculty of Engineering
	Transport: By bus

FRIDAY 16 May 2025	
9:00 – 11:00	Virtual Section – V1
11:00 – 11:30	Virtual Coffee Break
11:30 – 14:00	Virtual Section – V2
End of conference	

WEDNESDAY, 14 May 2025, 10:00 – FRIDAY, 16 May 2025, 14:00	
POSTER SECTION	



WEDNESDAY 14 May 2025	Section A (Building A, Room: A-I-13)	
	Chairmen: Jiusheng Li, Dusan Arsic	
	MODELLING AND STATISTICAL ANALYSIS OF FLANK WEAR DURING TURNING OF Co-Cr-Mo ALLOY	
	Aleksandar Milosevic, Sanda Simunovic, Mario Sokac, Zeljko Santosi, Vladimir Kocovic, Djordje Vukelic	
	WEAR AND SOLDERING PERFORMANCE OF BARE, NITRIDED AND PVD COATED HOT- WORKING TOOL STEEL IN CONTACT WITH AI-ALLOY CASTING	
	Pal Terek, Lazar Kovacevic, Vladimir Terek, Zoran Bobic, Branko Skoric, Marko Zagoricnik, Aljaz Drnovsek	
	THE IMPORTANCE OF SUBSTRATE MATERIAL IN HIGH TEMPERATURE TRIBOLOGICAL TESTING OF PDV COATINGS – A CASE STUDY	
	Vladimir Terek, Lazar Kovacevic, Aljaz Drnovsek, Miha Cekada, Branko Skoric, Zoran Bobic, Pal Terek	
15:00 – 16:45	DYNAMICS OF Pb EMERGENCE TO THE SURFACE IN SELF-LUBRICATING COMPOSITE MATERIALS AT ELEVATED OPERATING TEMPERATURES	
	Petya Tabakova, Anna Petrova, Snezhana Atanasova, Hristo Kolev, Feyzim Hodjaoglu, Reni Andreeva, Ivan Zahariev, Georgi Avdeev, Korneli Grigorov	
	ANALYSIS OF ROLLING RESISTANCE PARAMETERS IN GRAVITY FLOW RACKS FOR HEAVY- DUTY APPLICATIONS	
	Mirjana Piskulic, Rodoljub Vujanac, Nenad Miloradovic	
	ANALYSIS OF DATASETS GENERATED DURING TRIBOLOGICAL TESTS AT NANOTRIBOMETER BY USING NONLINEAR REGRESSION ANALYSIS	
	Petar Todorovic, Nikola Kotorcevic, Fatima Zivic	
	INFLUENCE OF CONTINUOUSLY VARIABLE LATERAL FORCE ON THICKNESS OF THE MATERIAL DURING STRIP THINNING	
	Slavisa Djacic, Srbislav Aleksandrovic, Dusan Arsic, Marko Delic, Djordje Ivkovic, Milan Djordjevic	
16:45 – 17:00	Coffee break	
17:00 – 19:00	Chairmen: Michele Scaraggi, Pal Terek	
	INFLUENCE OF OPERATING CONDITIONS ON THE POWER LOSSES OF THE WORM GEARBOX Aleksandar Skulic, Sandra Gajevic, Sasa Milojevic, Milan Bukvic, Igor Lavrnic, Blaza Stojanovic	



WEDNESDAY 14 May 2025	Section A (Building A, Room: A-I-13)
	FUNCTIONAL ANALYSIS OF SURFACE ROUGHNESS  Suzana Petrovic Savic, Milos Zivanovic, Marko Pantic, Dragan Dzunic, Vladimir Kocovic, Zivana Jovanovic Pesic, Aleksandar Djordjevic
17:00 – 19:00	TRIBOLOGICAL PROPERTIES OF SURFACING WELDED NI60WC COATING UNDER SIMULATED PLASTICS PROCESSING CONDITIONS Wangping Wu, Sheng Lin, Yang Yang
	THE INFLUENCE OF GRIT SIZE AND FIBER LENGTH ON THE FRICTIONAL PERFORMANCE OF COIR FIBER-REINFORCED POLYMER COMPOSITE  Abdullah Shalwan, Saad Alsubaie, B. F. Yousif
	DESIGN AND TESTING OF PIN ON DISC TRIBOMETER: FINK-POD2025  Andjela Perovic, Mirjana Piskulic, Stefan Cukic, Milos Matejic, Blaza Stojanovic

WEDNESDAY 14 May 2025	Section B (Building A, Room: A-P-23)
	Chairmen: Gencaga Purcek, Milan Banic
	WEAR IN RESTORATIVE DENTISTRY/TEETH AND DENTAL MATERIALS Kıvanc Dulger, Gencaga Purcek
	EFFECTS OF AGING AND SEVERE PLASTIC DEFORMATION ON TRIBOLOGICIAL BEHAVIOR OF AL 7075 ALLOY
	Melih Ustalar, Muhammet Uzun, Harun Yanar, Muhammet Demirtas, Gencaga Purcek
15:00 – 16:45	DESIGN AND SYNERGISTIC INTERACTION OF ETHERAMINE-BASED ASH-FREE ORGANIC FRICTION MODIFIERS WITH ZDDP
	Wenjing Hu, Jiusheng Li
	STEP WAVES IN FLOWING FILMS
	Victor Shkadov, Alexander Beloglazkin, Ignat Shishkin
	NUMERICAL ANALYSIS OF THE IRONING PROCESS UNDER CONDITIONS OF VARIABLE LATERAL FORCE
	Marko Delic, Slavisa Djacic, Srbislav Aleksandrovic, Vesna Mandic, Dusan Arsic, Djordje Ivkovic, Dragan Adamovic
	RESEARCH PROGRESS OF METAL-ORGANIC FRAMEWORKIN TRIBOLOGY
	Hanglin Li, Xudong Sui, Pablo Ayala, Carsten Gachot, Jiusheng Li



WEDNESDAY 14 May 2025	Section B (Building A, Room: A-P-23)
16:45 – 17:00	Coffee break
	Chairmen: Yonggang Meng, Aleksandar Marinkovic
	ANALYSIS OF PRESSURE DISTRIBUTION IN 3D-PRINTED SLIDING BEARINGS USING HERTZIAN CONTACT THEORY
	Ivan Simonovic, Aleksandar Marinkovic
	FINITE ELEMENT ANALYSIS OF STRESS AND CONTACT PRESSURE IN STEEL PLATES UNDER VARYING FRICTION COEFFICIENTS
	Vladimir Milovanovic, Milos Pesic, Snezana Vulovic, Zivana Jovanovic Pesic, Miroslav Zivkovic
	INFLUENCE OF SURFACE TEXTURE ON THE GENERATION INTENSITY OF AIRBORNE WEAR PARTICLES OF POLYMER MATERIALS FOR SLIDING BEARINGS
17:00 – 19:00	Wojciech Tarasiuk, Aleksander Kosarac, Tomasz Węgrzyn, Bożena Szczucka-Lasota, Jan Piwnik
	IMPACT TESTS FOR TWO COMPOSITES FOR MARINE APPLICATIONS
	Ioana Gabriela Chiracu, Constantin Georgescu, George Cătălin Cristea, George Ghiocel Ojoc, Mihail Boțan, Alexandru Viorel Vasiliu, Lorena Deleanu
	ANALYSIS OF THE EFFECTS OF CUTTING SPEED AND FOCUS POSITION ON OXIDATION MARKS IN FIBER REACTIVE LASER CUTTING
	Milos Madic, Dusan Petkovic, Miroslav Mijajlovic, Milan Banic, Milan Trifunovic
	TRIBOLOGICAL ASPECTS OF IDENTIFICATION OF THE KEY CAUSES OF REDUCTION IN THE EFFICIENCY OF AXIAL PISTON WATER HYDRAULIC PUMPS
	Nenad Todic, Slobodan Savic, Zivojin Stamenkovic, Blaza Stojanovic

THURSDAY 15 May 2025	Section C (Building A, Room: A-I-13)
09:00 - 11:00	Chairmen: Sergey V. Fedorov, Suzana Petrovic Savic
	STRUCTURAL-ENERGY CONSTANTS OF THE EVOLUTION OF THE FRICTION CONTACT Sergey Vasiliy Fedorov
	VISCOMETRY ON SYNTHETIC AND FULLERENE BASED OILS AND A CFD INVESTIGATION ON COMPRESSION PISTON RING
	Elias Tsakiridis, Alexandra Anyfanti, Pantelis Nikolakopoulos



THURSDAY 15 May 2025	Section C (Building A, Room: A-I-13)
	FLEXURAL, COMPRESSIVE AND FRACTURE TOUGHNESS OF DELONIX REGIA POD-EGGSHELL PARTICLE REINFORCED VIRGIN LOW-DENSITY POLYETHYLENE NANOCOMPOSITES
	Sefiu Adekunle Bello, Maruf Yinka Kolawole, Adijat Ashifat, Davina Ajetomobi, Jeremiah Ponle, Suleiman Danjuma Daudu, Mohammed Kayode Adebayo, Aisha Mayowa Akintola
	PHYSICS-BASED SIMPLE ANALYTICAL MODEL OF WATER FLOW THROUGH MICRO-POROUS
	FILTER
	Nikola Kotorcevic, Fatima Zivic, Strahinja Milenkovic, Nenad Grujovic, Nikola Milivojevic
	PERFORMANCE CHARACTERISTICS OF ECO-FRIENDLY AGROBIO-WASTES AS MOLD ADDITIVES ON MECHANICAL PROPERTIES OF Alsimg ALLOY
	Maruf Yinka Kolawole, Sefiu Adekunle Bello, Ayodeji Sulaiman Olawore,
	Tunji Adetayo Owoseni
09:00 - 11:00	INVESTIGATION OF SHIELDED METAL ARC WELDING (SMAW)WELD INTEGRITY ON A LOW- CARBON STEEL PIPELINE USING DESTRUCTIVE MECHANICAL TESTING TECHNIQUE
	A. E. Dele, C. V. Ossia, E. O. Diemuodeke
	EFFECT OF ELECTRON BEAM PROCESSING PARAMETERS ON THE SURFACE ROUGHNESS OF TITANIUM SAMPLES
	Zivana Jovanovic Pesic, Aleksandra Vulovic, Strahinja Milenkovic, Djordje Ilic, Dragan Dzunic
	CASTOR OIL BASED TERPOLYMER WITH STYRENE AND A-OLEFIN AS BIODEGRADABLE ADDITIVE IN LUBE OIL
	Sayak P Ghosh, Pranab Ghosh
	A REVIEW OF LINEAR RECIPROCATING TRIBOMETERS: DESIGN AND APPLICATIONS  Jovana Markovic, Marija Matejic, Milos Matejic, Jasmina Skerlic, Bojan Bogdanovic
11:00 – 12:00	Coffee break
	Conference Trip
12:00 -	Departure from Faculty of Engineering



FRIDAY	Virtual Section
16 May 2025	<b>Zoom</b> , Meeting ID: 932 941 6573, Password: 123456
	Chairmen: Dragan Dzunic
	DEVELOPMENT OF VACUUM PLASMA STRENGTHENING HARD AND ULTRA HARD 3D AVINIT COATINGS
	Oleksii Sagalovych, Valentin Popov, Vlad Sagalovych, Stanislav Dudnik
	DESIGN AND TESTING OF A MODULAR TRIBOMETER FOR ANTI-FRICTION COATING ANALYSIS IN OCTG APPLICATIONS
	Igor' Yu. Pyshmintsev, Andrey Golyshev, Alexey Lovyagin
	EFFECT OF ADDITIVE ELEMENTS ON ABRASION WEAR OF AA7075 BASED ZrO2/GNP ADDED HYBRID COMPOSITES
	Şükran Katmer, Muharrem Pul, Ulvi Şeker
	BEHAVIOR OF THE EROSIVE WEAR OF A STEEL PIPELINE SECTION API 5L-X52 BY SOLID PARTICLES OF ALUMINUM OXIDE (AL <sub>2</sub> O <sub>3</sub> )
	Javier Alejandro Frias-Flores, Manuel Vite-Torres, Ezequiel Alberto Gallardo-Hernandez
	MECHANOCHEMICAL/TRIBOCHEMICAL APPROACH TOWARD EFFICIENT AND SUSTAINABLE RECYCLING AND REUSE OF EOL ND-FE-B PERMANENT MAGNETS
9:00 – 11:00	Zara Cherkezova-Zheleva, Daniela Paneva, Radu-Robert Piticescu, Guido Heunen, Olivier Jay
	EFFECT OF W, Ni, AND Co DOPING ON THE MICROSTRUCTURE, CORROSION RESISTANCE, AND WEAR BEHAVIOR OF IRON-BASED ALLOYS PROCESSED BY SOLID-STATE SINTERING
	Mebarki Lahcene, Hammoudi Abderrazak, Guendouz Hassan, Ivana Atanasovska
	HYBRID METAHEURISTIC ALGORITHM: A NOVEL APPROACH FOR INDUSTRIAL OPTIMIZATION CHALLENGES
	Hammoudi Abderazek, Aissa Laouissi, Mourad Nouioua, Ivana Atanasovska
	CONTACT, FRICTION AND SEISMIC WAVES DURING SEISMOTECTONIC PROCESSES IN THE EARTH'S CRUST
	Emilia Assenova, Evgenia Kozhoukharova
	OPTIMIZATION OF WEAR PARTICLE AND DEBRIS CLASSIFICATION
	Jiri Stodola
	PRESSURE DROP ANALYSIS IN SOLENOID-TYPE VALVES: DISCREPANCIES BETWEEN EXPERIMENTAL RESULTS AND MANUFACTURER DATA
	Emanuel Alexander Moreno Aldana, Maurício Nogueira Frota
	MODIFICATION OF GATE VALVE SEALING ELEMENT TO ENHANCE THE WEAR RESISTANCE  Jamaladdin Aslanov, Khalig Mammadov
	Jamaiadan / Giariot, Miang Mariniadot



FRIDAY	Virtual Section
16 May 2025	<b>Zoom</b> , Meeting ID: 932 941 6573, Password: 123456
11:00 – 11:30	Virtual Coffee break
	CASE STUDY ON SUITABILITY OF RAIL GREASE PERFORMANCE FOR LIGHT RAIL TRANSIT (LRT) KELANA JAYA, MALAYSIA  Nadia Nurul Nabihah Ahmad Fuad, Izzatul Hamimi Abdul Razak, Mohamad Ali Ahmad, Wan Ahmad Syahmi Wan Amir Zaki, Mohamad Nasrulhisyam Sobri, Sabrina Karim  THE INFLUENCE OF SOIL ABRASIVE MASS PH ON STEEL WEAR PROCESSES
	Marcin Kowalewski, Jerzy Napiórkowski, Łukasz Konat
	EXPERIMENTAL STUDY ON RUBBER-GRANITE FRICTION IN DRY AND CONTAMINATED CONTACT
	Ionut Marius Nazarie, Ilie Musca, Ionut Cristian Romanu, Irina Besliu-Bancescu
	EFFECT OF CAVITATION EROSION ON MATERIAL MECHANICAL PROPERTIES AND MACHINE ELEMENTS PERFORMANCE
	Pavle Ljubojevic, Tatjana Lazovic, Marina Dojcinovic, Jovana Antic
	THE INFLUENCE OF OXYGEN ON CORROSION AND TRIBOCORROSION OF LOW CARBON STEEL IN HYDROGEN SULFIDE ENVIRONMENT
11:30 – 14:00	Myroslav Khoma, Marian Chuchman, Chrystyna Vasyliv, Vasyl Ivashkiv,
	Nadija Ratska, Oleh Vasyliv
	EFFECT OF ACETABULAR CUP THICKNESS ON THE MAXIMUM CONTACT PRESSURE IN NITRIDED GRADE2 TDN – UHMWPE HIP ENDOPROSTHESES
	Myron Czerniec, Jerzy Czerniec
	THE ROLE OF TRIBOLOGY IN IMPROVING THE PERFORMANCE OF MACHINERY SYSTEMS
	Milica Utvic, Bojan Stojcetovic, Milan Misic, Anja Jovanovic
	FINITE ELEMENT INVESTIGATION OF THE EFFECT OF FRICTION CONDITIONS AND CUTTING ENVIRONMENT IN TURNING OF AISI H13 HARDENED STEEL
	Nikolaos E. Karkalos, Nikolaos A. Fountas, Nikolaos M. Vaxevanidis
	MATERIAL SELECTION FOR TRIBOLOGICALLY LOADED COMPONENTS
	Dragan Adamovic, Dusan Arsic, Vesna Mandic, Djordje Ivkovic,
	Marko Delic, Nada Ratkovic
	POSSIBILITIES OF APPLYING ARTIFICIAL INTELLIGENCE IN THE FIELD OF TRIBOLOGICAL RESEARCH
	Milan Eric, Miladin Stefanovic, Slobodan Mitrovic, Dragan Dzunic, Vladimir Kocovic, Zivana Jovanovic Pesic, Suzana Petrovic Savic, Aleksandar Djordjevic, Marko Pantic



FRIDAY	Virtual Section
16 May 2025	<b>Zoom</b> , Meeting ID: 932 941 6573, Password: 123456
11:30 – 14:00	APPLICABILITY OF WEAR MODELS FOR MATERIAL PARAMETER PREDICTION BASED ON PIN-ON-DISC WEAR DATA Shivasharanappa V. Gubbewad, Amaresh Raichur
	TRIBOCORROSION OF ALUMINUM ALLOY IN A CHLORIDECONTAINING ENVIRONMENT INHIBITED BY A MALTODEXTRIN-BASED COMPOSITION
	Sergiy Korniy, Marjana Tymus, Ivan Zin, Nadiia Rats'ka, Bogdan Datsko
	IMPACT OF GRAPHENE ON THE PROPERTIES OF PHASE CHANGE MATERIAL
	Kapilan Natesan, Sriram Mukunda, Vidhya P, Shivarishika K
	STUDY ON MECHANICAL AND MICROSTRUCTURAL PROPERTIES OF 7075AI/SiC METAL MATRIX COMPOSITES
	Sriram Mukunda, Kapilan Natesan
	Alsi10Mg POWDER CHARACTERISTICS AND WEAR MECHANISM OF PARTS FABRICATED THROUGH LASER POWDER BED FUSION TECHNIQUE
	Ram Krishna Upadhyay
	LIFETIME PREDICTION MODEL OF RECIPROCATING SEAL CONSIDERING VARIABLE SPEED PROFILE
	Yunhao Zhang, Chao Zhang, Shaoping Wang, Rentong Chen, Jiashan Gao
	EFFECT OF HETEROGENEOUS ANISOTROPIC MATERIAL ON THERMAL EHL IN SIMPLE SLIDING LINE CONTACT
	Jing Wang, Huanian Liu, Cornelis Venner
	ELUCIDATION OF CHANGES IN THE MICROSTRUCTURE OF VEGETABLE LUBRICANTS BASED ON ANALYSIS OF RHEOLOGICAL PARAMETERS DETERMINED FROM THE MSD
	CORRELATION FUNCTION CARRIED OUT BY DWS DIFFUSION SPECTROSCOPY AND SPECTRA CARRIED OUT BY RAMAN SPECTROSCOPY
	Rafal Kozdrach, Jolanta Drabik
	METHODOLOGICAL APPROACH TO THE DEVELOPMENT PROCESS OF SINTERED FRICTION MATERIALS
	A.Ph. Ilyushchanka, A.V. Liashok, A.N. Rogovoy

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#### Poster Section (Building A-I)

#### NUMERICAL DETERMINATION OF THE HEATING AND WEAR OF BRAKE PADS ON THE BASIS OF EXPERIMENTAL RESEARCHES

Nadica Stojanovic, Ali Belhocine, Oday I. Abdullah,

Zeljko Djuric, Ivan Grujic

#### THE NUMERICAL INVESTIGATION OF THE WEAR AND HEATING OF ENGINE PISTON AND CYLINDER FOR THE CASE OF TRIBOLOGICAL INSERTS APPLICATION

Ivan Grujic, Zeljko Djuric, Nadica Stojanovic

#### TRIBOLOGICAL EXAMINATION OF ANODIZED AL-356

Alexandra Musza, Tamás Molnár, Sándor Kovács, Nguyen Quang Chinh, Ádám Vida

#### THE INFLUENCE OF THE HARD-FACED LAYERS PATTERN ON THE WEAR RESISTANCE OF THE WHEEL LOADER'S BUCKET TEETH

Djordje Ivkovic, Dusan Arsic, Vukic Lazic, Marko Delic, Andjela Ivkovic, Petra Bunjakova

#### ANALYSIS OF THE INFLUENCE OF HOT FORGING PROCESS PARAMETERS ON TOOL WEAR USING THE FINITE ELEMENT METHOD

Marko Delic, Milos Delic

#### **OVERVIEW OF TRIBOLOGY AS AN INTERDISCIPLINARY SCIENCE**

Gabriela Kotseva, Nikolay Stoimenov

#### THE INFLUENCE OF CUTTING DEPTH ON SURFACE ROUGHNESS OF 3D PRINTED PARTS

Strahinja Djurovic, Milan Ivkovic, Nikolaj Velikinac, Dragan Lazarevic, Milan Misic, Bojan Stojcetovic, Stefan Miletic

#### INFLUENCE OF CUTTING CONDITIONS ON SURFACE ROUGHNESS OF PA AND PA15

Milan Ivkovic, Stefan Mihailovic, Strahinja Djurovic, Stefan Miletic,

Bogdan Zivkovic, Bogdan Nedic, Suzana Petrovic Savic

# INVESTIGATION OF THE TRIBOLOGICAL CHARACTERISTICS OF POLYMER MATERIALS (PLA, PLA+COPPER, AND ABS) UNDER LUBRICATED AND DRY SLIDING CONDITIONS

Stefan Miletic, Slobodan Mitrovic, Dragan Dzunic, Marijana Savkovic,

Zivana Jovanovic Pesic, Milan Ivkovic

#### COMPARATIVE TRIBOLOGICAL ANALYSIS OF NEW AND USED DIESEL ENGINE OILS

Vladimir Kocovic, Sonja Kostic, Ljiljana Brzakovic, Suzana Petrovic Savic, Zivana Jovanovic Pesic, Milos Pesic, Slobodan Mitrovic, Dragan Dzunic

#### TRIBOLOGICAL BEHAVIOR OF ABACA FIBER-REINFORCED EPOXY COMPOSITES: PRELIMINARY INVESTIGATIONS

Dragan Dzunic, Marko Milosevic, Zivana Jovanovic Pesic, Vladimir Kocovic,

Suzana Petrovic Savic, Aleksandar Djordjevic, Slobodan Mitrovic

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#### Poster Section (Building A-I)

# INFLUENCE OF B<sub>4</sub>C CONTENT AND PROCESSING CONDITIONS ON WEAR RESISTANCE OF ALUMINUM

Sandra Gajevic, Slavica Miladinovic, Onur Güler, Serdar Özkaya, Lozica Ivanovic, Jelena Jovanovic, Blaza Stojanovic

# INFLUENCE OF PRESS-FIT DIMENSIONS ON REPEATED ASSEMBLY OF BALL BEARINGS INTO 3D PRINTED HOUSINGS

Strahinja Milenkovic, Zivana Jovanovic Pesic, Nenad Petrovic, Dalibor Nikolic, Nenad Kostic

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#### Conference trip - Vrnjačka Banja

Vrnjačka Banja is the most celebrated and most popular spa town of Serbia and at same time, a very attractive recreative centre. Situated in a great park full of trees with particularly charming houses. Surrounding Vrnjačka Banja are UNESCO protected medieval buildings, which serve as a reminder to early European civilisation.

It owes its reputation to its therapeutic effects known already to the Roman troops in the second century AD. With organized walks along the tree bordered paths, Vrnjačka Banja is an ideal place to come to for one's own salvation. Vrnjačka Banja has seven mineral springs, four of which are used in spa therapies. The Topla Voda spring, which is unique because it is the same temperature as the human body (36.5°C), is of the carbonic acid homeothermic type and is used for drinking and bathing. The cold mineral springs, Snežnik (17°C), Jezero (27°C) and Slatina (14°C), are of the alkaline-earth type.





#### Ljubostinja Monastery





Ljubostinja Monastery, nestled in the heart of Serbia near the town of Trstenik, stands as a true gem of Serbian medieval architecture and spirituality.

Built at the turn of the 14th to the 15th century, it was the endowment of Princess Milica. Constructed in the distinctive Morava architectural style, the monastery radiates beauty and serenity, drawing visitors with its rich history and remarkable frescoes.

Beyond its historical and artistic significance, Ljubostinja remains an active women's monastery to this day. The nuns devote themselves to prayer, icon painting, embroidery, and other traditional crafts, thus preserving the spiritual heritage and customs of this sacred place.