

| POSTER SECTION |

Geometrical properties of asperities on real contact area

Mark Kuzman et al., University of Ljubljana

Elastohydrodynamic lubrication: dependence of friction on energy density and build orientation in SLM-printed AISi10Mg and 18Ni300 materials

Urban Klanjšček et al., University of Ljubljana

Improvement of the wear resistance of Ti6Al4V alloy for medical implants

dr. Marko Polajnar et al., University of Ljubljana

Tribological performance of fibre-reinforced thermoset composites under water lubrication

dr. Lucija Čoga et al., University of Ljubljana

Novel Polymer Gel Lubricant Functionalized with a Phosphate Anion for Friction Reduction and Film Thickness Enhancement in Multiple Lubrication Condition

Yongqiang Wang et al., University of Ljubljana

Properties of anti-wear additives under applied electric conditions

Yuanfei Zhang et al., University of Ljubljana

Laws and models of friction in tribology

Jakob Živalič et al., University of Ljubljana

Three-dimensional EHL film thickness measurement and extraction based on RGB space and its application

Yunbo Hao et al., University of Ljubljana

Optical Method For In-Situ Monitoring Of Wear Progression in Polymer Gears

Nejc Osolnik et al., University of Ljubljana

Influence of Two-Surface Slip on Film Thickness and Friction in Elastohydrodynamic Lubrication Contacts

Rayan Ajeeb et al., University of Ljubljana

Nitrogen-doped graphene quantum dots as additives for high-pressure aqueous superlubrication

Irfan Nadeem et al., University of Ljubljana

Comparison of technical cleanliness of water, new and used oil and gasoline

Nejc Novak et al., University of Ljubljana

Water Irrigation Time Effect on POM-CF Tribology

Ana Trajkovski et al., University of Ljubljana

Effect of Tribological Conditions on Glycerol Oleates Tribofilm

Marjan Homayoonfard et al., University of Leeds

Conference on TRIBOLOGY and GREEN MOBILITY



In cooperation with the Industrial
Forum on Innovation, Development
and Technology



| CONFERENCE PROGRAM |

June 8th, 2026
HOTEL SLOVENIJA, PORTOROŽ



ANSAR-ANALITIKA
ANALYTICAL EQUIPMENT



Tribologija
in površinska
nanotehnologija

PETROL

| REVIEWERS |

prof. dr. Ardian Morina

University of Leeds

prof. dr. Albano Cavaleiro

University of Coimbra

prof. dr. Nazanin Emami

University of Lulea

prof. dr. Mitjan Kalin

University of Ljubljana

doc. dr. Marko Polajnar

University of Ljubljana

doc. dr. Janez Kogovšek

Hella Saturnus Slovenija d.o.o., Ljubljana

Urban Klanjšček

University of Ljubljana

| ORGANISING COMMITTEE |

Nejc Osolnik

University of Ljubljana

dr. Lucija Čoga

University of Ljubljana

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Franci Kopač

University of Ljubljana

Mark Kuzman

University of Ljubljana

Joži Sterle

University of Ljubljana

Jakob Živalič

University of Ljubljana

8:30 - 11:00 SECTION I**8:30 - 9:15 Registration****9:15 - 9:20 Opening remarks - conference opening**

Prof. dr. Mitjan Kalin, University of Ljubljana

9:20 - 9:50 Hydrogen Effects on Friction and Wear in Dry and Boundary-Lubricated ContactsProf. dr. Ardian Morina, University of Leeds - **INVITED LECTURE****9:50 - 10:10 Tribological Behaviour of Marine Bearing Materials Under Sustainable Lubrication**

Rahul Kumar et al., University of Lulea

10:10 - 10:30 Comparative Tribological Performance of Ethylene Glycol–Water and Glycerol-Based hBN Nanolubricants under Constant Load

Sreed Sharma Kanakillam et al., University of Ljubljana

10:30 - 10:50 Integrated simulation of frictional heat transfer and temperature evolution in diamond-like carbon coated pin-on-disc

Khodor Nasser et al., University of Ljubljana

11:00 - 11:30 Break, networking, poster section**11:30 - 13:00 SECTION II****11:30 - 11:50 Hydrogen permeation in transmission system from lubricated tribological contacts**

Ajay Pratap Singh Lodhi et al., University of Leeds

11:50 – 12:10 Evaluation of Coating Performance under High-Pressure Hydrogen Conditions

Alaaeddin Al Sheikh Omar et al., University of Leeds

12:10 – 12:30 Electrification Effects on the Tribological Behavior of PEEK CF30 Composite

Neuma Pereira et al., University of Ljubljana

12:30 – 12:50 The design and deposition of the self-lubricant multilayered coatings for green wide-range temperature tribology applications

Hongbo Ju et al., University of Coimbra

13:00 - 14:30 Lunch, networking, poster section**14:30 - 16:30 SECTION III****14:30 – 15:00 Self-adaption at the interface in sliding mechanical contacts**Prof. dr. Albano Cavaleiro, University of Coimbra - **INVITED LECTURE****15:00 – 15:20 Tribological Performance of DLC Coatings under Electrified Sliding Conditions**

Parveen Kumar et al., University of Ljubljana

15:20 – 15:40 Effects of additive boundary films on friction and film thickness in EHL contacts

Elton De Lima Savi et al., University of Ljubljana

15:40 – 16:00 Interface-Engineered C-alloyed WS₂ Coatings for Enhanced Surface Durability of PEEK Polymer under Dry Sliding

Talha Bin Yaqub et al., University of Ljubljana

16:00 – 16:30 Hybrid HiPIMS–DCMS Deposition of Nanoarchitected Coatings for Maritime ApplicationsSandra Carvalho et al., University of Coimbra - **INVITED LECTURE****16:30 - 17:00 Break, networking, poster section****17:00 - 18:30 SECTION IV****17:00 – 17:30 Processing-Structure-Tribology Relationships in 3D-Printed PEEK-Based Composites**Prof. dr. Nazanin Emami, University of Lulea - **INVITED LECTURE****17:30 – 17:50 Microstructure and High-Temperature Performance of TiN, TiAlN, TiSiN, and TiAlSiN Coatings Deposited by DC Reactive Magnetron Sputtering**

Abbas M.K. AL-Rjoub et al., University of Lulea

17:50 - 18:10 Influence of Nano-Texturing on the Machining Performance of Al₂O₃/SiC Whiskers-Reinforced Ceramic Tools During Dry Turning of Ti-6Al-4V Titanium Alloy

Sateesh Kumar Chigulla et al., University of Coimbra

19:30 Dinner and networking