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## **XI International conference**



## **BALTTTRIB' 2022**

# **CONFERENCE PROGRAMME**

**Vytautas Magnus University**  
Akademija, Kaunas

**22-24 September 2022**

**Conference venue:**

The Central building of Vytautas Magnus University Agriculture Academy (VMU-AA)  
Studentu str. 11, Akademija  
LT-53361 Kaunas distr.  
LITHUANIA

## CONFERENCE ORGANISED BY:



Vytautas Magnus University



Lithuanian Scientific Society Department „Tribologija“



International Tribology Council

### Conference topics:

- Friction and wear of friction pairs in agricultural, transport and industrial machinery;
- Lubrication;
- Micro- and nano-scale tribology;
- Tribochemistry;
- Bio-tribology;
- Environmental issues in tribology;
- Surface science and coating engineering;
- Tribology in metal processing;
- Simulation of tribological processes;
- Experimental methods in tribology.

### Address:

International Conference “BALTRIB'2022”  
Department of Mechanical, Energy and Biotechnology Engineering  
Faculty of Engineering  
Vytautas Magnus University Agriculture Academy (VMU-AA)  
Studentu str. 15, Akademija  
LT-53362 Kaunas distr.  
LITHUANIA

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**SCIENTIFIC SECTIONS**  
**23 September 2022**

**Section 1**  
**FRICION AND WEAR IN TRIBOSYSTEMS 1**

09:00 – 11:00 Central Building of VMU-AA, (Room 217).

Chairmen: **Satish V. Kailas**, Co-chairman **A. Žunda**

**TRIBOLOGICAL AND SURFACE CHARACTERIZATION OF FRICTION MATERIALS FOR BRAKE PADS.**

**Marco Cavagnero**, *University of Turin, Italy*

**VISCOMETRY, VOLATILITY AND STABILITY OF DEEP EUTECTIC SOLVENTS FROM BETAINE.**

**D. Bražinskienė**, **T. Matijošius**, **S. Asadauskas**, *State Research Institute Center for Physical Sciences & Technology (FTMC), Lithuania*

**CHARACTERIZATION OF AN ANTI-WEAR COATING FOR THE APPLICATION OF HIGHLY LOADED SMART THIN-FILM SENSORS.**

**D. Konopka**, **F. Pape**, **R. Ottermann**, **T. Stepler**, **F. Dencker**, **M.C. Wurz**, **G. Poll**, *Leibniz Universität Hannover, Germany*

**TRIBO-ELECTROCHEMISTRY AS A TOOL FOR SURFACE CHARACTERIZATION**

**H. Cesiulis**, **N. Tsyntsaru**, *Vilnius University, Lithuania*

**EFFECT OF CONTACT FORCE IN THE FRICTION PAIR ON THE DYNAMIC PROPERTIES OF A ROTARY STICK-SLIP PIEZO MOTOR.**

**A. Žunda**, **A. Andriušis**, **J. Padgurskas**, **R. Rukuiža**, *Vytautas Magnus University, Lithuania*

**EVALUATION OF FRICTION CALCULATION METHODS FOR ROLLING BEARINGS**

**M. Zander**, **M. Otto**, **T. Lohner**, **K. Stahl**, *Technical University of Munich, Germany*

**Section 2**  
**FRICION AND WEAR IN TRIBOSYSTEMS 2**

09:00 – 11:00 Central Building of VMU-AA, (Room 324).

Chairmen: **Adolfo Senatore**, Co-chairman **R. Kreivaitis**

**AN EXPERIMENTAL APPROACH OF ELECTORRHEOLOGICAL FLUID DAMPERS DESIGN.**

**P.G. Nikolakopoulos**, *University of Patras, Greece*

**CONTACT TEMPERATURE UNDER DIFFERENT SURFACE ROUGHNESS AND CURVATURE RADIUS OF THE PEAK**

**Shin-Yuh Chern**, **Wei Lun, Liu, Jeng-Haur Horng**, *National Formosa University, Taiwan (R.O.C)*

**NUMERICAL MODELLING OF SINGLE-ASPERITY FRICTIONAL CONTACT WITH ADHESION.**

**A. Palaiologos**, **P.G. Nikolakopoulos**, *University of Patras, Greece*

**FEATURES OF FRICTION AND WEAR BEHAVIOUR OF POROUS TITANIUM**

**S. Lavrys**, **I. Pohrelyuk**, *Karpenko Physico-Mechanical Institute of the NAS of Ukraine, Ukraine*, **J. Padgurskas**, *Vytautas Magnus University, Lithuania*

**VISCOSITY MODELS OF C60 FULLERENE MINERAL OILS AND COMPUTATIONAL FLUID DYNAMICS ON PISTON RING.**

**E. Tsakiridis**, **P. G. Nikolakopoulos**, *University of Patras, Greece*

**RESEARCH ON THE FRICTION OF WOOD-PLASTIC COMPOSITES AND HARD ALLOY**

**A.Vilutis**, **V. Jankauskas**, *Vytautas Magnus University, Lithuania*