

## Wednesday, January 28, 2026 – Conference Program

P2 - Plenary Session, room 1					
09:00	<b>Biodegradation of Lubricants</b> <i>P. Lohmann, Hermann Bantleon GmbH, Labor, Ulm, GER</i>				
09:30	<b>Supporting Mobility Transition – Tribology of Alternative Energy Carriers</b> <i>M. Frauscher, AC2T research GmbH, Wiener Neustadt, AUT</i>				
10:00	<b>Acoustic Emission Monitoring of tribological Processes in Drivetrains</b> <i>Prof. Dr.-Ing. Florian König, Faculty of Engineering and Architecture (FEA), Ghent University, BEL</i>				
10:30	<i>Coffee Break / Exhibition</i>				
C1 - Lubricants and additives room 1	C2 - Surface engineering, coatings, and tribochemistry room 2	C3 - Tribology in machine elements and engineering applications room 3	C4 - Digital transformation and computational tools in tribology room 4	C5 - Testing and measurement techniques room 5	
11:00	<b>High Expectations of the Food Industry - the Challenge of H1 Lubricants for Food-Safe Production</b> <i>S. Hüttner, Setral Chemie GmbH, Product management, Seeshaupt, GER</i>	<b>Improving Surface Micropitting Performance Using Esters in Gear Oil Formulations</b> <i>A. Al Sheikh Omar, University of Leeds, IFS, Leeds, UK</i>	<b>Investigation of Lubricant Cavitation Effects on tribological Characteristics of Piston-Cylinder Assemblies</b> <i>P. Dellis, National Technical University of Athens, School of Mechanical Engineering, Athens, GRC</i>	<b>Development of a structurally integrated real-time wear monitoring system for plastic slide rails in conveyor systems</b> <i>P. Winkler, Mittweida University of Applied Sciences, Faculty Engineering Sciences, Mittweida, GER</i>	<b>Thermoviscous EHL Traction Behaviour of Lubricating Oils Using an Ultra-high-speed Tribometer</b> <i>K. Nar, PCS Instruments, London, UK</i>
11:30	<b>Using Machine Learning to Improve Performance and Reduce Toxicity of High Temperature Lubricants</b> <i>S. Lucazeau, NYCO, Paris, FRA</i>	<b>Insights into the Lubrication Mechanisms of Novel Alternative Lubricants</b> <i>S. Louartani, IREIS, HEF Groupe, Saint-Etienne, FRA</i>	<b>Why Lambda-Parameter is not Adequate for Prediction of Load-sharing and Mixed Friction and How we can Resolve this Issue</b> <i>A. Fatemi, Bosch Corporate Research, Renningen, GER</i>	<b>AI-based Predictive Maintenance for Plastic Plain Bearings with Structural Sensor Integration</b> <i>N. Katzer, Hochschule Mittweida, Professur Intelligente Maschinensysteme, Mittweida, GER</i>	<b>Development of Small-Scale Multi-degradation Tribo-Testing Machines for Complex Wear Environments</b> <i>W. Wijnarko, Norwegian University of Science and Technology, Mechanical and Industrial Engineering, Trondheim, NOR</i>
12:00	<b>Validation and analytical assessment of chemical, physical, and tribological properties of bio-lubricants and biofuels</b> <i>J. Pichler, AC2T research GmbH, Wiener Neustadt, AUT</i>	<b>Pushing the Performance Limits in Hydraulics through Tribological Optimization of Lubricants and Surfaces</b> <i>B. Zhmud, Tribonex AB, Uppsala, SWE</i>	<b>The Importance of Reliability Methods in Tribology</b> <i>J. Schöfer, Bosch Corporate Research, Renningen, GER</i>	<b>Nano-Robots in a Drop: Tribotronic Lubrication Control Using Ionic Liquids</b> <i>A. B. Reddy, KTH Royal Institute of Technology, Department of Engineering Design, Stockholm, SWE</i>	<b>Effect of Electric Potentials on Surface Damage in Lubricated Rolling-Sliding Contacts</b> <i>A. Yousuf, Imperial College London, Mechanical Engineering, London, UK</i>
12:30	<i>Lunch Break / Exhibition</i>				
D1 - Lubricants and additives room 1	D2 - Surface engineering, coatings, and tribochemistry room 2	D3 - Tribology in machine elements and engineering applications room 3	D4 - Digital transformation and computational tools in tribology room 4	D5 - Testing and measurement techniques room 5	
14:00	<b>Superlubricity in Gears with Aqueous Polyalkylene Glycols – Lubrication mechanisms, Efficiency Potentials, and the Effect of Water Evaporation</b> <i>S. Hofmann, Technical University of Munich, School of engineering and design, Garching, GER</i>	<b>Friction and Wear Behaviour of Lubricant-coated Organic Fibres Under Varying Thermal and Mechanical Conditions</b> <i>I. Velkavrh, V-Research GmbH, Tribo Design, Dornbirn, AUT</i>	<b>Journal Bearings with Textured Shafts Part I: An Experimental Investigation</b> <i>B. Klinghart, MSE, Institute for Machine Elements and Systems Engineering - RWTH Aachen University, Aachen, GER</i>	<b>Capacitance Calculation of Ball Bearings</b> <i>S. Puchler, Technical University of Darmstadt &amp; HCP Sense GmbH, Darmstadt, GER</i>	<b>Enhancing Shear Load Capacity in Bolted Joints, Inline Friction Coefficient Determination during Assembly</b> <i>M. Gleß, ContactEngineering, Founder, Stuttgart, GER</i>
14:30	<b>Synthesis and Oxidation Stability Study of Biolubricants from Rapeseed and Sunflower Oil Using Ca/TEA Alkoxide as a Catalyst</b> <i>D. Karonis, National Technical University of Athens, Chemical Engineering, Athens, GRC</i>	<b>Enhancing Tribological Performance through Tribochemical Mechanisms and Surface Engineering Techniques</b> <i>X. Sui, TU Wien, Institute of Engineering Design and Product Development, Vienna, AUT</i>	<b>Journal Bearings with Textured Shafts - Part II: A Homogenized TEHD Model</b> <i>M. Schultz, RWTH Aachen University, Institute for Geometry and Applied Mathematics, Aachen, GER</i>	<b>Impact of EV Lubricants on Load-Dependent Gear Losses: A TEHL Simulation Analysis</b> <i>F. Zhang, Totalenergies, Solaize, FRA</i>	<b>CO<sub>2</sub>-Reduced Lubricants and Minimal Quantity Lubrication in Punching</b> <i>Ch. Donhauser, Department of Mechanical Engineering, University of Applied Sciences Kempten, GER</i>
15:00	<b>High-performance Lubricants Formulated Using Sustainable Base Oils from Waste Plastic Upcycling</b> <i>JB. Zhmud, KATA Circular Pte Ltd, Singapore, SGP</i>	<b>Amorphous carbon coatings for extending the service life of total knee replacements</b> <i>B. Rothhammer, Friedrich-Alexander-Universität Erlangen-Nürnberg, Department of Mechanical Engineering, Erlangen, GER</i>	<b>Surface Texture Influence on the Rotordynamics of a Misaligned Journal Bearing</b> <i>A. Usman, Cardiff University, School of Engineering, Cardiff, UK</i>	<b>Deriving constitutive laws for slip using molecular dynamics</b> <i>S. Peeters, FMF - University of Freiburg, Freiburg, GER</i>	<b>Influence of Current Types (AC/DC) and Intensity During Reciprocating Test on Tribological Performance</b> <i>F. Zak, Optimal Instruments Prüftechnik GmbH, München, GER</i>
15:30	<i>Coffee Break / Exhibition</i>				
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16:00	<b>Functional Performance of Novel &amp; Sustainable Secondary Polyol Ester® Technology for Hydraulic &amp; Turbine Oils</b> <i>M. Greaves, VBASE Oil Company, Pendleton, USA</i>	<b>From Polymers to Metals: Boosting Tribological Performance with 2D Nanomaterial-Reinforced Composites</b> <i>M. Marian, Leibniz University Hannover, Institute for Machine Design and Tribology (IMKT), Garbsen, GER</i>	<b>Electrical Surface Damage Characteristics of Rolling Contacts under Different Lubrication Regimes</b> <i>D. Powers, University of Southampton, Mechanical Engineering (nCATS), Southampton, UK</i>	<b>Tribological Domain Knowledge as a Source of Scalable AI in R&amp;D</b> <i>N. Garabedian, Datin, Karlsruhe, GER</i>	<b>The future through data: Modern measurement technology in tribology</b> <i>B. Rennhofer, Gantner Instruments Test&amp;Measurement GmbH, Lauf an der Pegnitz, GER</i>
16:30	<b>Squalane Products as a Sustainable Alternative to Polyalphaolefin</b> <i>J. Pichler, AC2T research GmbH, Wiener Neustadt, AUT</i>	<b>Mitigating Substrate-Coating Interactions in MXene-Functionalized Titanium Implants via Controlled Surface Engineering and Sintering Processes</b> <i>H. Göcerler, TU Wien, Institute of Engineering Design and Product Development, Vienna, AUT</i>	<b>Electrically-induced surface and subsurface damages in lubricated contacts</b> <i>B. Vengudusamy, Klüber Lubrication München GmbH &amp; Co. KG, Munich, GER</i>	<b>Using Machine Learning to Analyze Measurement Results in Lubricant Development</b> <i>G. Tidona, Technische Hochschule Mannheim, Kompetenzzentrum Tribologie Mannheim, Mannheim, GER</i>	<b>Surface Roughness in Tribological Testing: A Critical Factor for Reproducibility, Standardization, and Data-Driven Innovation</b> <i>K. Topolovec Miklozic, POWERTRIB Limited, Oxford, UK</i>
17:00	<b>The Miscibility of PAGs and Naph-thenic Base Oils and the Response of the Blends in Emulsions</b> <i>Th. Norrby Nynas AB, Nynäshamn, SWE</i>	<b>Temporary Corrosion Protection of Metallic Blank and Wetted Cavities by VCI-Systems</b> <i>K. Zübert, Hermann Bantleon GmbH, Application Engineering, Ulm, GER</i>	<b>The Effect of Surface Roughness on Scuffing Damage in Rolling-Sliding Contacts</b> <i>O. Fazio, Imperial College London, Tribology Group, Department of Mechanical Engineering, London, UK</i>	<b>Predicting Tribological Behavior of Additives Using Machine Learning - A Machine Learning Approach to Lubricant Optimization</b> <i>W. Wijnarko, Norwegian University of Science and Technology, Mechanical and Industrial Engineering, Trondheim, NOR</i>	<b>Resolving the Bottlenecks to Machine Learning for Realistic Applications: the Need to Change the Standard Paradigm</b> <i>D. Drees, Falex Tribology, Falex Application Center Tribology, Rotselaar, BEL</i>
18:00	<i>Conference Dinner Kubino</i>				