

Tuesday, January 27, 2026 – Conference Program

P1 - Plenary Session, room 1						
11:00	Welcome and opening of the conference CEO Michael Walz, TAE, GER Prof. Dr.-Ing. Max Marian, Institute of Machine Design and Tribology, Leibniz University Hannover, GER Rolf Luther, Chairman of the Society for Tribology (GfT), GER					
11:30	Slippery When Mixed: Molecular Dynamics Insights into Hydrophilic–Hydrophobic Friction from Soft Matter to Ice M. Müser, Saarland University, Saarbrücken, GER					
12:00	Modern Tribology Screening: Evolving Methods, Reliable Data, and Future-Ready Insights K. Topolovec Miklozic, POWERTRIB Limited, Oxford, UK					
12:30	Lunch Break / Exhibition					
A1 - Lubricants and additives room 1		A2 -Lubricants and additives room 2		A3 - Tribology in machine elements and engineering applications room 3	A4 - Digital transformation and computational tools in tribology room 4	A5 - Testing and measurement techniques room 5
14:00	Improvement of Polymer Friction Performance in Terms of Molecular Structure and Adsorption Behavior of Lubricant Additives: Analysis Using Computational Simulations R. Ogata, ENEOS Corporation, Lubricants R&D Dept., Yokohama, JPN	Rheo - Logical Insights: The Truth Beneath the Surface R. Westbroek, Axel Christiernsson International AB, Nol, SWE	Lubricant Oil Properties on the Transmission Efficiency and Gear Friction loss in Electric Transaxle K. Narita, Idemitsu Kosan Co. Ltd., Lubricants Research Laboratory, Ichihara, JPN	Machine Learning for EHL Film Thickness Prediction with Non-Newtonian Effects: Modular vs. Non-Modular Approach T. Lohner, Technical University Munich, Gear Research Center (FZG), Garching b. München, GER	Ageing Tests of Lubricating Greases under Inert Gas – Limits of Standardised Laboratory Methods for the Service Life Evaluation of Components S. Beyer-Faiß, Dr. Tillwisch GmbH Werner Stehr, Horb, GER	
14:30	Novel Polymeric Organic Friction Modifiers: Tailored Molecular Design to Optimize both Lubricity and Synergy with Inorganic Friction Modifiers P. Struelens, Oleon nv, R&D, Evergem, BEL	PFAS Challenge – A Tribological and Rheological Exploration Toward Total Replacement Solutions L. Wei, Novitas Chem Solutions, LLC, Tomball, USA	Improving Electric Vehicle Efficiency Through the Use of Water-Based Lubricants in Transmissions R. Larsson, Luleå University of Technology, Division of Machine Elements Luleå, SWE	Faster EHL FEM Simulations with AI-Driven Initial Guesses: A Hybrid Approach J. Kelley, Leibniz University Hannover, Institute of Machine Design and Tribology, Garbsen, GER	Biohydraulic Oils in Stress Test – Can the „Wet“ TOST Test Provide Additional Insights? C. Heine, OELCHECK GmbH, Tribologie, Brannenburg, GER	
15:00	AI-Driven Design of Safer and Greener Lubricants: Case Studies in Antiwear and Antioxidant Technologies A. Stab, NYCO, Paris, FRA	The Development of a New Brake Parts Grease R. Saito, KYODO YUSHI Co.,LTD., Grease Technology Dept., Tsujido Kandai, Fujisawa-shi, Kanagawa, JPN	Investigating the Performance of Water-Based Lubricants under Conditions Pertinent to EV Applications H. Yao, Imperial College London, Mechanical Engineering Department Tribology Group, London, UK	Optimizing Grease Lubrication in Tribological Systems: A Multiscale Approach Integrating EHL Calculations and Machine Learning Models C. Pastor, Robert Bosch GmbH, Corporate Research, Renningen, GER	Sequential Quantification and Evaluation of Particulate Wear and Contaminants through In-Service Grease Analysis R. Wurzbach, MRG Labs, York, USA	
15:30	Coffee Break / Exhibition					
B1 - Lubricants and additives room 1		B2 - Lubricants and additives room 2		B3 - Tribology in machine elements and engineering applications room 3	B4 - Digital transformation and computational tools in tribology room 4	B5 - Testing and measurement techniques room 5
16:00	Developing Next-Generation Metalworking Fluids with an Innovative Aminoamyl Alcohol Platform D. Buffière, Advancion Corporation, Paris CAC, Argenteuil, FRA	Traction in High-Speed Lubricated Contacts N. Vanisri, Imperial College London, Tribology Group, Department of Mechanical Engineering, London, UK	Water-Containing Low-Viscous Lubricants: Influence on the Frictional Characteristics of Radial Lip Seals M. Amro, Institute of Machine Design and Tribology, Leibniz University Hannover, Hannover, GER	Advanced Multiphysics Computational Methods for High-Performance Computing of Tribosystems V. Gravemeier, AdCo Engineering GW GmbH, Ismaning, GER	Challenges in the Analysis and Evaluation of Hydraulic, Gear, and Engine Oils from the Perspective of a Lubricant Laboratory S. Mitterer, OELCHECK GmbH, Director Technical Service & Sales, Brannenburg, GER	
16:30	Value Enhancing Components for Metal Cutting and Forming Formulations P. Pastorelli, Sasol Italy S.p.A., Research and Technology, Milan, ITA	The Promise of Solid Lubricants for a Sustainable Future C. Gachot, TU Wien, Institute of Engineering Design and Product Development, Vienna, AUT	Improving Self-Contained Lubrication of Horizontal Bearings: Which Factors Affect the Performance of Oil Ring Lubricators? A. McLane, University of Leeds, Department of Mechanical Engineering, Leeds, UK	Performance Analysis of Hydrodynamic Journal Bearings using a Physics-Informed Neural Network Approach A. K. Tomar, Pontificia Universidad Católica de Chile, Department of Mechanical and Metallurgical Engineering, Santiago, CHL	Multistep Analysis of Lubricants – High Analytical Performance, Low Environmental Impact A. Uhl, LUM GmbH, Berlin, GER	
17:00	Impact of Additive Selection on the Sustainable Performance of Metalworking Applications S. Wohlfahrt, Kao Chemicals GmbH, Emmerich, GER	Investigation of the Effect of Innovative Friction Reducers on the Tribological Performance of Finished Lubricants S. Verga, Eni S.p.A., San Donato Milanese, ITA	Performance of a Graphite - Phenolic Resin Solid Lubrication System: Investigation at System Level with High-load Axial Bearings M. Schmitt, Karlsruhe Institute of Technology, Institute of Product Engineering, Karlsruhe, GER	The Uncertainty Quantification in Simulation of Mixed-EHL Friction P. Sharma, Otto von Guericke University, Magdeburg, GER	Early Detection of Deposit Formation in Hot Running High-speed Journal Bearings by Infrared Spectroscopy R. Krethe, OilDoc GmbH, Brannenburg, GER	
17:30	Evening Reception TAE-Foyer					