

October 3-4, Portorož, Slovenia

Conference preliminary programme

Day 1

08:00	08:50	Registration
08:50	09:00	Opening
Session 1		
09:00	09:40	Invited talk: M. Moseler , Fraunhofer Institute for Mechanics of Materials IWM, Freiburg, Germany <i>Friction and wear mechanisms of PTFE by atomistic simulations: transfer film formation and the synergy between PTFE and PEEK</i>
09:40	10:00	C. Koplín , Fraunhofer Institute for Mechanics of Materials IWM, Freiburg, Germany <i>The effect of interaction energies on friction and wear of lubricated polymers</i>
10:00	10:20	E. Schwartz , SABIC Specialties Plasticslaan, Bergen op Zoom, The Netherlands <i>Lubricated alloys without PTFE for wear and friction applications</i>
10:20	10:40	Y. Sawae , Faculty of Engineering, Kyushu University, Japan <i>Contaminant emission from PPS-filled PTFE sliding in high purity hydrogen</i>
10:40	11:00	Coffee & poster session
Session 2		
11:00	11:20	G. Theiler , Federal Institute for Materials Research and Testing (BAM), Berlin, Germany <i>On the way to sustainable and hydrogen compatible sealing materials</i>
11:20	11:40	T. Horiuchi , NOK corporation, Fujisawa, Japan <i>In situ observation of grease lubricating film on rubber material for sealing by micro-infrared spectroscopy</i>
11:40	12:00	P. Beau , Beau Engineering Services, Cremlingen, Germany <i>Biobased oligomeric and polymeric thickener systems for lubricating grease - potential applications based on tribotesting data</i>
12:00	12:20	H. Saito , Hitachi, Ltd., Research and development Group, Japan <i>Effect of the copper filler micro-structure on the wear of PTFE Composites</i>
12:20	13:40	Lunch & poster session
Session 3		
13:40	14:20	Invited talk: M. Masen , Imperial College, London, UK <i>In-situ tribometry for assessing ultralow polymer wear</i>
14:20	14:40	H. Shinmori , Faculty of Engineering, Kyushu University, Fukuoka, Japan <i>Friction and wear of PTFE and PEEK composites in high-pressure hydrogen gas</i>
14:40	15:00	H. Tanaka , Faculty of Engineering, Kyushu University, Fukuoka, Japan <i>Friction and wear of several elastomers in hydrogen</i>
15:00	15:20	M. Kröll , Federal Institute for Materials Research and Testing (BAM), Berlin, Germany <i>Harmonised tribological testing of polymers in hydrogen</i>
15:20	15:40	H. Hashimoto , NOK corporation, Fujisawa, Japan <i>Analysis of worn rubber surface after sliding test in hydrogen</i>
15:40	16:00	Coffee & poster session
Session 4		
16:00	16:40	Invited talk: S. Kumar Sinha , IIT Delhi, New Delhi, India <i>High-performance polymer composites for tribology</i>
16:40	17:00	N. Emami , Luleå University of Technology, Luleå, Sweden <i>Tribological behavior of UHMWPE and its composite</i>
17:00	17:20	B. Jakab , AC2T research GmbH, Wiener Neustadt, Austria <i>Correlation between wear and excitation frequencies of composite materials in rolling contact using a 3D vibrometer</i>
17:20	17:40	X. Wang , Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, China <i>VAT photopolymerization 3D printing of self-lubrication polymer composites</i>
17:40	18:00	Ú. Arinbjarnar , Technical University of Denmark & LEGO Group, Denmark <i>Using acoustic emissions to evaluate friction in polymer contacts</i>
20:00	22:00	Gala dinner



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Day 2

Session 5

08:30 09:10

Invited talk: K. Mao, University of Warwick, UK

The performance enhancement of polymer composite gears

09:10 09:30

H. Ronkainen, VTT Technical Research Centre of Finland, Espoo, Finland

Development of abrasive wear resistance of polymers and scratch resistance of elastomers

09:30 09:50

N. Osolnik, Faculty of Mechanical engineering, University of Ljubljana, Slovenia

Parametric study of wear behavior of polymer gears

09:50 10:10

T. Kunishima, JTEKT Corporation, Kashiwara, Japan

Long life durability and tribology of polymer worm reducer for electric power steering

10:10 10:30

D. Drees, Falex Tribology NV, Rotselaar, Belgium

An efficient testing strategy for polymer materials, accelerating data production towards AI?

10:30 10:50

Coffee & poster session

Session 6

10:50 11:30

Invited talk: R. Gnanamoorthy, IIT Madras, Chennai, India

Tribo behaviour of natural fibres for sustainable technical textile applications

11:30 11:50

P. Staudinger, Anton Paar GmbH, Graz, Austria

Asphalt tribology - Influence of polymers on bitumen performance

11:50 12:10

R. Jackowiak, DuPONT, Geneva, Switzerland

The influence of metallic alloys on polymeric tribological properties

12:10 12:30

P. Gangwani, Faculty of Mechanical engineering, University of Ljubljana, Slovenia

Investigating the role of a hard nano-filler on the tribological performance of multi-scale UHMWPE composites under water-lubricated condition

12:30 12:50

M. Tockner, Polymer Competence Center Leoben GmbH, Leoben, Austria

The influence of temperature on fretting wear of elastomers

12:50 14:10

Lunch & poster session

Session 7

14:10 14:50

Invited talk: A. V. Summant, Argonne National Laboratory, Illinois, USA

Title to be announced

14:50 15:10

B. Jakob, AC2T research GmbH, Wiener Neustadt, Austria

Tribological properties of high-performance polymer thin coatings for cleaning-intensive surfaces

15:10 15:30

M. Unterreiter, Polymer Competence Center Leoben GmbH, Leoben, Austria

A study of manufacturing settings: impact on the mechanical and tribological properties of filled nitrile butadiene rubber

15:30 15:50

K. Ormanbekov, Shakarim University, Semey, Kazakhstan

Influence of electron beam irradiation on tribological and mechanical properties of polytetrafluoroethylene

15:50 16:10

M. Kamaraj, IIT Madras, Chennai, India

Enhanced friction reduction using 2D MoO₃-hBN heterostructures as lubricant additives in PAO oil

16:10 16:20

Closure

