11th International Conference on Tribology – SERBIATRIB '09

Programme

WEDNESDAY 13 May 2009		
Time	Activity	
08:30 – 10:00	Registration of the participants	
10:00 – 10:30	Opening of the Conference Dr Branko Ivković President of the Serbian Tribology Society Dr Miloš Nedeljković State Secretary of the Republic of Serbia Ministry of Science and Technological Development Dr Milorad Milovančević Dean of the Faculty of Mechanical Engineering in Belgrade Anđelko Kovačević Vice president of the Serbian Chamber of Commerce Dr Aleksandar Vencl President of the Conference Organising Committee Dr Aleksandar Marinković President of the Conference Organising Committee	
10:30 – 11:00	Welcome Cocktail	
11:00 – 13:00	Plenary Section Michael D. Bryant, The University of Texas at Austin (USA) ASME Journal of Tribology Editor in Chief "Entropy of Friction and Wear" Konstantinos-Dionysios Bouzakis, Aristotle University of Thessaloniki (Greece) Director of the Laboratory for Machine Tools & Manufacturing Engineering "The Effect of Micro-Blasting Procedures on the Cutting Performance of Coated Tools" Friedrich Franek, Vienna University of Technology (Austria) General Manager of the Austrian Center of Competence for Tribology "Advanced Methods for Characterisation of Abrasion/Erosion Resistance of Wear Protection Materials" Miroslav Babić, University of Kragujevac (Serbia) Dean of the Mechanical Engineering Faculty "The Tribological Potential of ZnAl Alloys"	
13:00 – 15:30	Break	
15:30 – 17:00	Section **A**	Section **B**
17:00 – 18:30	Free time	
18:30 – 20:00	Belgrade sightseeing – bus tour	
20:00 – 22:00	Boat trip with Conference diner	

THURSDAY 14 May 2009		
Time	Activity	
09:00 – 10:30	Section **C**	Section **D**
10:30 – 11:00	Break	
11:00 – 12:30	Section **E**	Section **F**
12:30 – 14:00	Visit to the Nikola Tesla Museum	
14:00 – 16:30	Break	
16:30 – 18:00	Section **G**	Section **H**

FRIDAY 15 May 2009	
Time	Activity
11:00 – 13:00	Round Table “Waste oils in the Republic of Serbia – current state and perspective” (**in Serbian**) Detailed programme is available on the Conference web page
13:00	End of Conference

WEDNESDAY, 13 May 2009, 15:30 – 17:00

SECTION A	SECTION B
A.E. Yousif The Effect of Temperature and Strain Rate on the Abrasive Wear of Metals	**D. Jovanović** Tribološki procesi mehanizma slobodnog hoda impulsnih frikcionih varijatora
V.I. Semenov, L.Sh. Shuster, S.-J. Huang, P.-C. Lin Influence of the Structure on the Tribological Properties of Low-Carbon Steel	**B. Stojanović** Promena geometrijskih veličina zupčastih kaiševa u periodu eksploatacije
E. Dağaşan, D. Odabaş, E. Gerçekcioğlu Effect of Microstructure on the Erosive Wear Rate of AISI 1020 and AISI 8620 Steels	**Ž. Pletikosić, R. Pletikosić** Modeliranje habanja tribosistema točak-šina
E. Gercekcioglu, E. Dagasan, M.B. Karamiş The Comparision of Wear Behaviour of Plasma Nitrided of AISI H13 and 722M24 Steels under Different Tribological Conditions	**J. Tepić** Metode smanjenja habanja šina lakih šinskih vozila
A.G. Kostornov, O.I. Fushchich, T.M. Chevichelova, Y.M. Simeonova, G.S. Sotirov Self-Lubricating Composite Materials for Dry Friction	**J. Baralić, B. Nedić** Erozija kao osnovni mehanizam obrade abrazivnim vodenim mlazom
A. Marinković, A. Vencl Influence of the Solid Lubricant Particles Reinforcement on Composites Tribological Properties	**M. Stefanović, S. Aleksandrović, D. Adamović, M. Samardžić** Uticaj kontaktnih uslova na oblikovanje dvostranim zatezanjem tankih limova
I.G. Bîrsan, A. Cîrciumaru, V. Bria, V. Ungureanu Tribological and Electrical Properties of Filled Epoxy Reinforced Composites	**D. Adamović, M. Stefanović, M. Živković, S. Rakić** Uticaj brzine dubokog izvlačenja sa stanjenjem debljine zida na promenu koeficijenata trenja
E. Kozhoukharova Tribological Processes and Products in the Earth's Crust	**V.J. Marinković, T.R. Marinković** Određivanje koeficijenta trenja u procesima obrade istiskivanjem

THURSDAY, 14 May 2009, 09:00 – 10:30

SECTION C	SECTION D
D. Petrescu, N.N. Antonescu Theoretical and Experimental Researches Concerning the Adhesion of the Superficial Layers Obtained from Amorphous Alloys by Thermal Spraying with Plasma Jet	**A.E. Yousif** Liquid-Solid Lubricants in Conditions Pertinent to Isothermal Elastohydrodynamic Line Contact Lubrication
A. Koutsomichalis, N. Vaxevanidis, G. Petropoulos, E. Xatzaki, A. Mourlas, S. Antoniou Tribological Coatings for Aerospace Applications and the Case of WC-CO Plasma Spray Coatings	**L. Yüksek, H. Kaleli, O. Özener, B. Özoğuz** The Effect and Comparison of Biodiesel-Diesel Fuel on Crankcase Oil, Diesel Engine Performance and Emissions
N. Gitis, V. Khosla, P. Bariani Characterization of Nano Crystalline Lubricant Coating to Study the Effect of Grain Size and Phase Structure on the Coating Behavior	**R. Gligorijevic, J. Jevtic, Dj. Borak** Diesel Engine Oil Quality and Exhaust Emission
D. Kakaš, B. Škorić, M. Babić, S. Mitrović, A. Miletić, M. Vilotić, P. Terek, L. Kovačević Surface Roughness and Friction Coefficient at IBAD Deposited Tin Hard Coating	**O. Florea, M. Luca** Lubricating Greases for Nuclear Power Plants Equipment
D. Kakaš, M. Vilotić, M. Popović Research of Corelation between Friction Coefficient and Nanomorphology of Ion Implanted Dies for Cold Forming Process	**N. Diaconu, L. Deleanu, I.G. Birsan** The Behaviour of Steel Triboelements under Various Testing Conditions
M. Pustan, O. Belcin Aplication of Atomic Force Microscope for Mechanical and Tribological Characterization of Teeth and Biomaterials	**M. Kandeva, V. Požidajeva, D. Živković, Z. Sajfert** Lubrication of Manure Spreaders as an Element of Preventive Maintenance
D. Kakaš, B. Škorić, A. Miletić, M. Vilotić, P. Terek, L. Kovačević Investigation of Micro and Nano Tribological Phenomenon by EDX	**C. Schmied, B. Simmerer, F. Novotny-Farkas, D. Kaltenböck** Importance of Oil Condition Monitoring in Stationary Gas Engine Applications
F. Davin Micro- and Nanotribological Investigation of Lubricant Films and Surface Coatings	**N. Stevanovic, S. Milicev** Inertia Effect in Microbearing Gas Flow

THURSDAY, 14 May 2009, 11:00 – 12:30

SECTION E	SECTION F
E. Badisch, H. Winkelmann, M. Kirchgaßner, N. Gostovic High Temperature Wear Behaviour of Fe-Based Materials	**G. Di Benedetto, M. Organisciak, G. Popovici, A. Stijepić** Film Thickness Prediction of Radial Lip Seal
M.B. Đurđanović, M.M. Mijajlović, D.S. Milčić, D.S. Stamenković Heat Generation During Friction Stir Welding Process	**D. Stamenković, M. Milošević** Friction at Rubber-Metal Springs
L. Deleanu, S. Ciortan, G. Andrei, L. Maftei Study on the Profilomtry of Composites with PA Matrix and Micro Glass Spheres after Dry Sliding	**V.G. Marian, B. Scheichl, N. Tungkunagorn, G. Vorlaufer, F. Franek** Evaluation of Mass-Conservative Models for the Tribological Analysis of Porous Bearings
N.G. Kostova, B. Kunev, M. Achimovichova, E. Dutkova, P. Balaz Tribochemical Synthesis of Alumina-Titania Mixed Oxides as Supports for Hydrodesulfurization Catalysts	**I. Zidaru, R.G. Ripeanu, I. Tudor, A.C. Drumeanu** Research Regarding the Improvements of Tribological Behavior at Three Cone Bits Bearings
Z. Cherkezova-Zheleva, J. Krstić, D. Paneva, B. Kunev, D. Jovanović, I. Mitov Role of Tribochemical Activation in Synthesis of Nano-Sized Ferrite Materials	**I. Musca** Ball-Ring Friction at Low Rotating Speed
G. Globočki Lakić, S. Borojević, Đ. Čiča, B. Sredanović Development of Aplication for Analysis of Machinability Index	**T. Lazovic, A. Marinkovic, D. Skoko** Influence of Abrasive Wear on Ball Bearing Internal Geometry
A.C. Drumeanu, S.T. Paraschivoiu, I. Tudor, R.G. Ripeanu Some Considerations about Non-Isothermal Fatigue Wear of the Forging Die Steel	**A. Ilić, D. Josifović** Selection of the Gear Materials Based on Tribological Aspects
S. Paraschivoiu, A. Pupăzescu, C. Drumeanu, I. Tudor, R. Ripeanu The Thermal Stresses of Forging Die Evaluation Using FEM	**M. Nemčeková, M. Vereš, A. Marinković** Tooth Flanks Scoring Resistance of Noninvolute Teeth Profiles in Plane Toothed Cylindrical Gears

THURSDAY, 14 May 2009, 16:30 – 18:00

SECTION G	SECTION H
C. Spanu, I. Birsan, S. Ciortan Plastic Deformation Initiation in Sliding Identation Case	**B. Sovilj, M. Brezočnik, I. Sovilj-Nikić, V. Đokić, S. Radonjić, P. Kovač** Identifikacija triboloških procesa pri profilnoj obradi primenom genetskog algoritma
T. Prevenslik Electrostatic Gecko Mechanism	**M. Stojilković** Specifikacije motornih ulja
M.M. Mijajlović, D.S. Milčić, M.B. Đurđanović Tribology as one Parameter Necessary for Reliability Engineering and Technical System's Reliability Improvement	**S. Perić, B. Nedić** Monitoring stanja kroz testove analize ulja
A. Neacşa, D.B. Stoica, N.N. Antonescu Modern Solutions for Selecting the Corresponding Machinery Dedicated to Technological Applications	**P. Petrović, Z. Timotijević, S. Manojlović, Z. Ivljanin** Istraživanje mazivih masti za podmazivanje ležaja železničkih vozila za konvencionalne brzine
E. Assenova, M. Kandeva Trends in the Self-Organization of Tribological Contact Systems	**M. Dugić, P. Dugić** Ponašanje emulzija za obradu metala u eksploatacionim uslovima
B. Ivkovic, N. Marjanovic, M. Ravlic A New Concept of the Universal Tribometer	**V. Jovičić, S.Lj. Marković, D. Veličković** Podmazivanje i popravka reduktora zaokretne trake BKH–320
M. Ravlic, M. Matijevic, B. Ivkovic Design of Automatic Computer Control System for the New Universal Tribometer UT-07	**Z. Živković, S.Lj. Marković, D. Veličković** Frikcioni ustavljač kao pomoć u radu hidrodinamičke spojnice na trakastom transporteru
M. Yildirim, Z. Dursunkaya, T. Okutucu Experimental Investigation of Micron Level Clearances by Fibre Optic Interferometry	**H. Avdić, A. Demirović, M. Hasanović** Prilog dijagnozi tehničkog stanja triboloških sistema hidrauličkog bagera RH-120-E
F. Zivic, S. Mitrovic, M. Babic, I. Cvijovic-Alagic Application of Tribometry in Investigations of Biomaterials	