Final Program

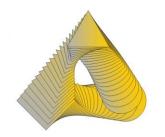




## LOCAL MECHANICAL PROPERTIES LMP2017

November 6-8, 2017, Košice, Slovakia

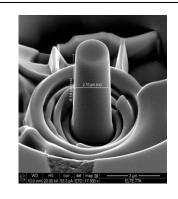
Monday, Nov. 6, 2017



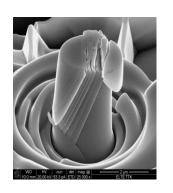
10:00 - 13:00	Registration
	IMR SAS/PROMATECH Bldg., Watsonova 47A, Košice
13:00 - 13:45	Lunch
	IMR SAS cafeteria
14:00 -14:10	Opening ceremony
	Ground floor, IMR SAS/PROMATECH Bldg., Watsonova 47A, Košice
	Section: Between macro and nanoand modeling
14:10-14:45	Ján Dusza
Invited lecture	Low-scale mechanical testing of ceramics
14:45-15:05	Jiří Němeček
	Fracture Properties of Cement studied by Nanoindentation and FIB
15:05-15:25	Stanislav Seitl
	Numerical Stress Analysis of the Biaxial Tension-compression Wedge-
	splitting Test in the Vicinity of the Crack Tip
15:25 - 15:45	František Lofaj
	FEM of nanoindentation and scratch testing in the hard W-C coating/steel
	substrate system
15:45 - 16:05	Coffee break
	Section: Advances in nanomechanical testing
16:05-16:40	Michael Griepentrog
Invited lecture	Dynamic Instrumented Indentation Test - Application and Standardisation
16:40-17:00	Gaurav Mohanty
Company	Pushing the frontiers of nanomechanical testing: In-situ variable temperature
presentation	and high strain rate tests
17:00-17:20	Jaroslav Lukeš
	In situ SEM tensile testing of graphene
17:20-17:40	Tamáš Csanádi
	Nanoindentation derived elastic constants of carbon fibres from a 2D-C/SiC
	composite
17:40-18:00	Hatsuhiko Usami

	Microhardness and residual stress distribution in shot peened surface
18:00-22:00	Poster Section + Welcome Party
	6th floor, IMR SAS/PROMATECH Bldg., Watsonova 47A, Košice
	Tuesday, Nov. 7, 2017
	Section: Thin films and coatings
9:00 - 9:35	Jozef Keckes
Invited lecture	Cross-Sectional Stresses and Microstructure in Thin Films
9:35 - 9:55	Radim Čtvrtlík
	Effect of deposition temperature on physical properties of titanium films
0.55 10.15	on glass
9:55 - 10:15	Jan Tomáštík Machanical and tribalagical proportion of protoctive SiCN continues
10:15 - 10:35	Mechanical and tribological properties of protective SiCN coatings Marek Klich
10.15 - 10.55	Selected properties of the multi-layered carbon-based coating deposited on
	2024 aluminium alloy
10:35 - 10:55	Coffee break
	Section: Nanomechanical testing of different materials
10:55 - 11:30	Gaurav Mohanty
Invited lecture	In-situ microcompression transient plasticity tests for reliable extraction of
	deformation activation parameters: Creep, stress relaxation and strain rate
	jump tests
11:30 - 11:50	Miroslav Šlouf
	Micromechanical properties of UHMWPE's with different molecular
11:50 - 12:10	weights
11:50 - 12:10	Peter Burik Effect of Different Factors on the Indentation Hardness of Interstitial Free
	Steel by Depth Sensing Indentation
12:10 - 12:30	Jakub Chamrad
12.10 12.50	A comparative study of stress – strain states in different size skull fixation
	mini-plates
12:30-12:50	Kamran Saeidi
	Mechanical performance of 316L fabricated by laser melting under high
	temperature and sudden tension
12:50-13:00	Conference photo
13:00 - 13:40	Lunch
10.45.1	Social program
13:45 - 14:15	Transport to US Steel for excursion
14:15 - 16:30	Excursion at US Steel
16:30 - 17:00 17:00-18:30	Transport to Košice city center
	Kosice old town excursion

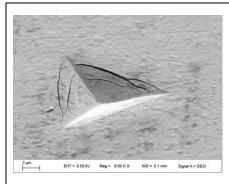
18:30-19:00	Individual transfer to Admiral club (taxi, tram, by foot)
19:00 ->22:00	Social meeting with dinner + Poster evaluation + bowling tournament



Wednesday, Nov. 8, 2017



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	Section: Nanoindentation and fracture
9:00 - 9:20	Vilma Buršíková
	Study of local mechanical properties of aluminide based superalloys
9:20 - 9:40	Jaroslav Pól
Company	Selected applications of indentation, scratch and tribological testing in
presentation	material testing
9:40 - 10:00	Tomáš Svojanovský
Company	Measuring of Local Deformations and Crack Length Using DIC Software
presentation	Mercury RT
10:00 - 10:20	Petr Miarka
	A Comparison of the Fatigue Crack Propagation Rates between S355 J0
	and S355 J2 Steel Grades
10:20 - 10:40	Jacek Karczmar
	The local shear strength of hybrid polymer-metal joints produced during
	injection moulding process
10:40 - 11:00	Coffee Break
	Section: Company presentations
11:00-11:20	Tomáš Kandra
	Embraco company profile
11:20-11:40	Alexander Gába
	HR-STEM Hitachi Regulus
11:40 - 12:50	Excursion at IMR SAS/PROMATECH laboratories
12:50 - 13:00	Closing ceremony
13:00 - 13:45	Lunch & departure



## POSTERS



1.	Ľubomír Ambriško,
	Local mechanical properties of zinc-iron coated steel sheets by depth-sensing
	indentation
2.	Aleš Jáger,
	Microstructure and micromechanical properties of Mg tubes prepared by laser dieless
	drawing
3.	Jaroslav Čech,
	Effect of crystallographic orientation on nanoindentation response of Fe3Si single-
	crystals
4.	Zbyněk Keršner, to be announced
5.	Petr Haušild,
	Nanoindentation characterization of mechanically alloyed Fe-Al-Si powders
6.	Jiří Buršík,
	Local mechanical properties of skutterudites with addition of metallic borides
7.	Jan Maňák,
	Microbending experiments on pure magnesium with non-basal slip orientation
8.	Zdeněk Česánek,
	Degradation of HP/HVOF Sprayed Hastelloy C-276 Local Mechanical Properties after
	Exposure to High Temperature Corrosion
9.	Jan Schubert,
	Mechanical properties of HVOF sprayed CrC-NiCr coating exposed to hot corrosion
	environment
10.	Lucie Malíková,
	Multi-parameter fracture mechanics: Crack approaching a bi-material interface
11.	Radek Šlesinger,
	Simulation of nanoindentations on thin films using the Material Point Method
12.	Anna Charvátová Campbell,
	Analysis of loading curves on thin films using Hertzian models
13.	Zdeněk Majer,
	Simulation model of piezoelectric vibration energy harvesters
14.	Vojtěch Mařák,
	Study of Alumina and Alumina-Silicon Carbide Layered Composites Sintered by SPS
15.	Martina Halasová,
	Effect of pyrolysis temperature on mechanical response in partially pyrolyzed
<u> </u>	polysiloxanes
16.	Jana Gamcová,
	Comparison study of internal stress measured by diffraction mapping and calculation
	using FEM
17.	A. Kovalčíková,

	Tribological properties of B4C/GPLs ceramic composites.
18.	Ján Balko, Tribological and mechanical properties of SiC based cermets
19.	Pavol Zubko, to be announced
20.	Lukáš Václavek,
	Physical characterization of hafnium oxide thin films
21.	Pavel Doležal,
	Characterization of brittle phase in magnesium based materials prepared by powder
	metallurgy
22.	