

Day 1. - 8.07.2014

8:00-8:30	Opening ceremony	
8:30-10:30	Session 1 (I. Sevostianov)	
8:30-9:30	Kachanov M. and Sevostianov I.	On quantitative characterization of microstructures and effective properties: Some controversial issues
9:30-9:50	Kushch V., Chernobay V., Shmegeera S., Shmegeera, R. Podoba Y.	Generalized Maxwell and Rayleigh models of composite with imperfect elliptic interfaces
9:50-10:10	Sadowski P., Stupkiewicz S.	Estimation of the effective thermoelastic properties of multiphase composites with inclusions of diverse shapes and properties
10:10-10:30	Kovacik J., Emmer S. Bielek J.	Cu/graphite composite material: cross properties
10:30-11:00	Coffee break	
11:00-13:00	Session 2 (M. Kachanov)	
11:00-11:20	Kushch V., Sevostianov I.	Dipole moments, property contribution tensors and effective properties of anisotropic particulate composites
11:20-11:40	Nasedkin A., Nasedkina A., Remizov V.	Influence of the representative volume structure on the effective properties of anisotropic thermoelastic mixture composites
11:40-12:00	Ogierman W., Kokot G.	Multi-scale modeling of composite structure subjected to dynamic load
12:00-12:20	Sevostianov I.	Maxwell homogenization scheme for anisotropic elastic composites
12:20-12:40	Ryvkin M., Aboudi J., Istrin N.	Bridging scales by the discrete Fourier transform
12:40-13:00	Kryukova O., Knyzaeva A.	Influence of particles dissolution dynamics on the structure and properties formation of surface layer at the electron-beam treatment
13:00-15:00	Lunch	
15:00-17:00	Session 3 (V. Kushch)	
15:00-15:20	Lurie S., Volkov-Bogorodskii D. Tuchkova N.	Exact solution of Eshelby-Christensen problem in gradient elasticity for composites with multi-layer fiber and spherical inclusions
15:20-15:40	Shahidi M., Pichler B., Hellmich C.	Kelvin-Voigt units viscoelasticity as result of interacting viscous interfaces at the microscale
15:40-16:00	Zahedi A., Roy A., Silberschmidt V.	Micro-machining of single-crystalline material
16:00-16:20	Rieger F., Bohlke T.	Two-scale modeling of the mechanical behavior of dual-phase steel
16:20-16:40	Vilchevskaya E., Freidin A.	Stress-assist chemical reactions front propagation in deformable solids
16:40-17:00	Nekouie V., Puri S., Roy A. Silberschmidt V.	Deformation of multi-crystalline thin films in mesoscale
18.00	TAMER meeting	

Day 2. - 9.07.2014

8:00-10:00	Session 4 (T. Michelich)	
8:00-9:00	Boehm H.	Simple numerical models of inhomogeneities in elastic matrices with grain structure
9:00-10:00	Bohlke T., Muller V., Othomani Y., Rieger F.	Homogenization based on 2D and 3D microstructure data: Applications to ceramics, metals and fiber reinforced plastics
10:00-10:30	Coffee break	
10:30-12:50	Session 5 (A. Linkov)	
10:30-10:50	Petrov Y.	Dynamics of fracture and structural transformations in solids
10:50-11:10	Shubin S., Freidin A.	Functional fillers with negative thermal expansion coefficient in elastomer composite
11:10-11:30	Schiavone A., Phadnis V. Silberschmidt V	Modelling crack initiation and propagation in perforated plate: effect of vibration-induced loading
11:30-11:50	Vellender A., Mishuris G., Piccolroaz A.	The effect of defects' presence upon crack propagation along a soft imperfect interface
11:50-12:10	Jaworski D., Linkov A. Rybarska-Rusinek L.	On efficient evaluation of influence coefficients for triangular, rectangular and trapezoid Ordinary and edge elements
12:10-12:30	Ptaszny J.	Modeling of 3D porous structures by using the fast multipole boundary element method
12:30-12:50	Smirnov I., Petrov Y.	Effect of fillers on dynamic strength of solids
12:50-14:30	Lunch	
14:30-16:30	Session 6 (T. Bohlke)	
14:30-14:50	Gao X., Abdel-Wahab A., Liu C., Yang G., Silberschmidt V.	Mechanical testing of bacterial cellulose hydrogel: strain rate effect
14:50-15:10	Wang M., Gao X., Abdel-Wahab A. Zimmermann A., Riedel C., Busse B. Silberschmidt V.	Effect of micromorphology of cortical bone tissue on crack propagation: XFEM analysis
15:10-15:30	Nasedkin A., Eremeyev V.	Some models for nanosized magnetoelectric bodies with surface effects
15:30-15:50	Schiavone A., Phadnis V. Silberschmidt V	Impact interaction of granular particles with perforated plate: FE studies
15:50-16:10	Nekouie V. Abeyguawardane-Arachchige G. Roy A., Silberschmidt	Elastic-plastic properties of BMG: indentation and numerical studies
16:10-16:30	Michelitsch T., Collet B.	A matrix function approach to generate nonlocal constitutive laws: lattice models and their continuum limits
19.00 -	Banquet	

Day 3. - 10.07.2014

9:00-14:00	Excursion	
14:00-15:30	Lunch	
15:30-17:30	Poster sessions	
5 minutes presentations	Session 7 (G. Mishuris)	
	Erofeenko V., Kuts A., Shushkevich G.	Penetration of the low-frequency magnetic field through the a multilayer finite cylindrical shell
	Stachowicz F.	On the mechanical and geometric inhomogeneity and formability of brass sheets
	Aizikovich S., Vasiliev A., Volkov S.	Semi-analytical solution of a contact problems for functionally graded transversely-isotropic half-space
	Mishuris G., Rogosin S.	An asymptotic method of factorization of a class of matrix-functions
	Kazarinov N., Smirnov I., Valiev R.	Severe plastic deformation as a way to improve mechanical properties of metals
	Mucha J.	The mechanics of self-piercing riveting joint failure
	Peck D., Mishuris G., Wrobel M., Petrov Y.	An improved estimate for threshold fracture energy in solid particle erosion
	Pomytkin S., Kadashevich Y	Generalized variant of plastic theory in Sanders's form
16:10-16:30	Coffee break	
5 minutes presentations	Session 8 (S. Lurie)	
	Shanin S., Knyazeva A.	Coating phase composition formation at the deposition from plasma
	Kut S.	Comparative study of three different dental implant shapes influence on stress distribution: a 3Dfinite element analysis
	Tran N.-C., Le-Pape Y., Sanahuja J.	Vi(CA) ₂ T - virtual cement & concrete aging analysis toolbox
	Szwajka K.	Analysis of particle board delamination in the drilling process
	Trusov P., Kondratev N.	Elastoviscoplastic modeling of hot deformation duplex steels
	Trzepiecincki T., Stachowicz F.	Anisotropic approach for sliding frictional contact in a pin-on-disk tribometer
	Shushkevich G., Shushkevich S.	Penetration of the sound field of spherical radiator through the a plane elastic layer
	Yanz A., Trusov P., Teplyakova L.	Single crystal specimen loading of crystal plasticity
Maruschak P., Panin S., Stachowicz F. Danyliuk I., Vlasov I., R. Bishchak	Structural levels of fatigue failure and damage estimation in 17Mn1Si steel on the basis of multilevel approach of physical mesomechanics	
17:15	Discussion at posters	

Day 4 - 11.07.2014

8:00-10:00	Session 9 (H. Boehm)	
8:00-9:00	Eremeyev V.	On effective properties of materials at the nano- and microscales considering surface effects
9:00-9:20	Dziatkiewicz G.	Complex variable method for sensitivity analysis of effective properties in multi-field micromechanics
9:20-9:40	Nobili A., Radi E., Lanzoni L.	Stress intensity factors for a cracked infinite Kirchhoff plate supported by a two-parameter elastic foundation
9:40-10:00	Podolskaya E., Panchenko A., Freidin A. Krivtsov A.	Loss of ellipticity and structural transformations in crystal lattices
10:00-10:30	Coffee break	
10:30-12:30	Session 10 (Y. Petrov)	
10:30-10:50	Panchenko A., Kuzkin V., Krivtsov A.	Analytical and numerical investigation of thermal expansion in crystal lattices
10:50-11:10	Romanowicz M.	Plastic microbuckling of unidirectional long fiber composites with non-uniform fiber waviness
11:10-11:30	Solyaev Y., Lurie S., Volkov A.	Multiscale modeling of thermal stresses in ceramic thin walled structures in framework of gradient thermoelasticity
11:30-11:50	Springhetti R., Gei M., Bortot E.	Soft dielectric composites: performance of actuators and energy harvesters
11:50-12:10	Rejwer E.	Limit statistics of the stress intensity factor in antiplane problems involving multiple cracks
12:10-12:30	Volegov P., Trusov P., Gribov D. Shveykin A.	Hardening laws in multilevel crystal plasticity models and macro effects of complex cyclic loading
12:30-14:30	Lunch	
14:30-16:00	Session 11 (V. Eremeev)	
14:30-14:50	Bosiakov S., Shpileuski I.	The assessment of the damage and risk of fracture in femora after sectoral resection of the tumor-like and metastatic lesions
14:50-15:10	Makowski P., Kuś W.	Optimization of bone scaffold structures using experimental and numerical data
15:10-15:30	Mirzazadeh R., Mariani S.	Statistics of the overall elastic and strength properties of thin polysilicon films
15:30-15:50	Zielecki K., Witek L.	Influence of Young modulus of connected materials on ultimate strength of beveled adhesive joints.
16:00	Closure Ceremony	