

VIBSYS'14 & TRECOP'14 Program

SUNDAY, May 4	
18:00	Registration
20:30	Supper

MONDAY, May 5	
8:00 - 9:00	Breakfast
9:00 - 9:20	Opening Ceremony
Session VIBSYS-1	
Chairman: C. Cempel	
9:20 - 10:00	Plenary Lecture: Batko W. <i>Uncertainty in vibroacoustic investigations – Research challenges</i>
10:00 - 10:20	Łasecka-Plura M., Lewandowski R. <i>Design sensitivity analysis of frequency response functions and steady-state response for structures with viscoelastic dampers</i>
10:20 - 10:40	Domagalski Ł., Jędrzyak J. <i>Nonlinear vibrations of periodic beams</i>
10:40 - 11:00	A. Chudzikiewicz, Myśliński A. <i>Thermoelastic wheel-rail contact problem for a multi-layer structure</i>
11:00 - 11:20	Coffee Break
Session VIBSYS-2	
Chairman: J. Jędrzyak	
11:20 - 11:40	Mączak J. <i>Model based local fault detection in helical gears</i>
11:40 - 12:00	Nienartowicz M., Stręk T. <i>Finite element analysis of dynamic properties of thermally optimal two-phase composite structure</i>
12:00 - 12:20	Noga S. <i>Transverse vibration analysis of a compound plate with using cyclic symmetry modeling</i>
12:20 - 12:40	Noga S., Markowski T. <i>Vibration analysis of a thick ring interacting with the disk treated as an elastic foundation</i>
12:40 - 13:00	Krowiak A. <i>Free vibration of structures by radial basis function - pseudospectral method</i>
13:00 - 14:00	Lunch
Sessions VIBSYS-3 & TRECOP-1	
Chairman: B.T. Maruszewski	
14:00 - 15:20	Poster Session
Session TRECOP-2	
Chairman: V. Cao Long	
15:20 - 16:00	Plenary Lecture: Guz A., Rushchitsky J. <i>On features of continuum description of nanocomposite materials</i>

16:00 - 16:20	Nienartowicz M., Stręk T. <i>Finite element analysis of sandwich two-phase composite</i>
16:20 - 16:40	Maruszewski B.T., Sypniewska-Kamińska G., Walczak T. <i>Three-dimensional elastic torsion of auxetic elliptic rods using the method of fundamental solutions</i>
16:40 - 17:20	Plenary Lecture: Uściłowska A. <i>The influence of material characteristics on the soliton wave propagation parameters – numerical experiment</i>
17:20 - 17:40	Uściłowska A., Fraska A. <i>Implementation of HAM and meshless method for torsion of functionally graded orthotropic bars</i>
17:40 - 18:00	Hein R. <i>The method of modeling for discrete-continuous systems</i>
18:30	Bonfire

TUESDAY, May 6	
8:00 - 9:00	Breakfast
Session VIBSYS-4	
Chairman: M.W. Dobry	
9:00 - 9:20	Niełaczny M., Grabski J., Strzałko J. <i>3D dynamic model of the unicycle-unicyclist system</i>
9:20 - 9:40	Sponsor Presentation: ENVIBRA
Session TRECOP-3	
Chairman: M. Dudek	
9:40 - 10:20	Plenary Lecture: Cao Long V., Leoński W., Bui Dinh T. <i>Analytical and numerical methods for finding solitary waves</i>
10:20 - 10:40	Piǳowski P.M., Wojciechowski K.W. <i>A short introduction into shockwave physics</i>
10:40 - 11:00	Coffee Break
Session TRECOP-4	
Chairman: B.T. Maruszewski	
11:00 - 11:40	Plenary Lecture: Wojciechowski K.W., Poźniak A.A. <i>Computer simulations of planar auxetic foams</i>
11:40 - 12:00	Poźniak A.A., Wojciechowski K.W. <i>Poisson's ratio of randomly disordered anti-chiral structures with variable anisotropy</i>
12:00 - 12:40	Plenary Lecture: Tretiakov K.V., Wojciechowski K.W. <i>An influence of size polydispersity on elastic properties of model systems</i>
12:40 - 13:00	Narojczyk J.W., Wojciechowski K.W., Kowalik M. <i>Elastic properties of static solids with n-inverse-power interactions: negative Poisson's ratio in presence of polydispersity</i>
13:00 - 14:00	Lunch

Session TRECOP-5	
Chairman: K.W. Wojciechowski	
14:00 - 14:40	Plenary Lecture: Dudek M.R., Wojciechowski K.W., Grima J.N., Caruana-Gauci R., Dudek K., Pigłowski P., Zapotoczny B. <i>A mean-field model of magnetic domains growth in a magnetic-mechanical auxetic system</i>
14:40 - 15:00	Winczewski S., Rybicki J. <i>Highly efficient calculation method of bond order parameters</i>
15:00 - 18:30	Excursion
19:30	Banquet

WEDNESDAY, May 7	
8:00 - 9:00	Breakfast
Session TRECOP-6:	
Chairman: A. Radowicz	
9:00 - 9:40	Plenary Lecture: Langner M. <i>Molecular machines – new dimension of biological sciences</i>
9:40 - 10:00	Drabik D., Langner M., Przybyło M., Walczak T. <i>Algorithm development of vesicle fluctuations spectroscopy technique</i>
10:00 - 10:40	Plenary Lecture: Alshits V.I., Darinskaya E.V., Koldaeva M.V., Minyukov S.A., Petrzhik E.A., Belov A.Yu., Morozov V.A., Kats V.M., Lukin A.A., Naimi E.K., Radowicz A. <i>Resonance magnetoplasticity in the ESR scheme under super low magnetic fields</i>
10:40 - 11:00	Alshits V.I., Bessonov D., Lyubimov V., Radowicz A. <i>Conversion excitation of intense sound fields in crystals</i>
11:00 - 11:20	Coffee Break
Session VIBSYS-5	
Chairman: T. Stręk	
11:20 - 11:40	Hein R. <i>The modelling method of discrete-continuous systems</i>
11:40 - 12:00	Morzyński M., Nowak M., Stankiewicz W. <i>Novel method of physical modes generation for reduced order flow control-oriented models</i>
12:00 - 12:20	Nowak M., Stankiewicz W., Morzyński M. <i>Modal analysis of viscous flow and reduced order models</i>
12:20 - 12:40	Sponsor Presentation: EC TEST SYSTEMS
12:40 - 13:00	Sponsor Presentation: BRÜEL & KJAER Polska
13:00 - 14:00	Lunch
Session TRECOP-7:	
Chairman: R. Starosta	
14:00 - 14:20	Maruszewski B.T., Drzewiecki A., Starosta R. <i>The effective material coefficients and thermoelastic damping in a rectangular auxetic plate during forced vibrations</i>

14:20 - 14:40	Grabski J.K., Kołodziej J.A. <i>Laminar flow of power-law fluid between corrugated plates</i>
14:40 - 15:00	Jankowska M.A., Kołodziej J.A. <i>Application of the method of fundamental solutions for the study of the stress state of the plate subjected to uniaxial tension</i>
15:00 - 15:20	Kamiński H., Fritzkowski P. <i>Auxetic quarter-space under concentrated force</i>
15:20 - 15:40	Sponsor Presentation: GAMBIT
15:40 - 16:00	Sponsor Presentation: VOL
16:00 - 16:20	TRECOP – Closing
16:20 - 16:40	Coffee Break
Session VIBSYS-6	
Chairman: T. Szolc	
16:40 - 17:00	Morzuch W. <i>Influence of the damping in the sandwich bar on the dynamic stability</i>
17:00 - 17:20	Morzuch W. <i>Dynamics of cellular rotor of asynchronous motor with deformable stator</i>
17:20 - 17:40	Dobry M.W., Hermann T. <i>A comparison of human physical models used in the ISO 10068:2012 standard based on power distribution - PART 1</i>
17:40 - 18:00	Dobry M.W., Hermann T. <i>A comparison of human physical models used in the ISO 10068:2012 standard based on power distribution - PART 2</i>
18:00 - 18:20	Sponsor Presentation: KISTLER Eastern Europe
18:30	Supper

THURSDAY, May 8	
8:00 - 9:00	Breakfast
Session VIBSYS-7	
Chairman: S. Radkowski	
9:00 - 9:40	Plenary Lecture: Rushchitsky J. <i>Nonlinear surface elastic waves in materials</i>
9:40 - 10:00	Szolc T., Kowalewski Z.L. <i>An application of longitudinal elastic waves for investigation of materials under high strain rates using the Hopkinson bar</i>
10:00 - 10:20	Strzelecki S., Krajewski M., Towarek Z., Zakrzewski S. <i>Effect of pad offset on the stability of Jeffcott rotor operating in tilting 4-pad journal bearings</i>
10:20 - 10:40	Łapka W. <i>Transmission loss and pressure drop of selected range of helicoidal resonators</i>
10:40 - 11:00	Zakrzewsky A.E. <i>Deployment of long-measured flexible structure in orbit</i>
11:00 - 11:30	VIBSYS – Closing
12:00 - 13:00	Lunch