

**WORKSHOP 3 “SAFETY IN CONSTRUCTION”****SECTION: SAFETY AND DAMAGE IN CIVIL ENGINEERING****April 25 15:00-18:30**

#	TITLE	SPEAKER	PRESENTATION
80	Propagation of longitudinal Pochhammer – Chree waves in cylindrical piles	Sergey Kuznetsov	Oral
91	The procedural approach to reliability of objects of the raised level of responsibility	Nadegda Sevryugina	Oral
138	Design-experimental assessment of radiological hazards in residential and industrial premises	Daria Buzina	Oral
170	Analysis of Elastic Foundation with Deformation Modulus Continuously Varying across Depth	Nikolaj Atarov	Oral
345	Improvement of The Safety Systems for Working at Heights on Transmission Towers	Nam Thanh Pham	Oral
356	Test and Certification Procedures of Pulleys as a Part of Personal Fall Arrest System	Nam Thanh Pham	Oral
382	Numerical modeling of wave barrier in 2D infinite domain using Explicit/Implicit multi-time step co-simulation	Sijia Li	Oral
385	How to advantageously manage the ellipticity of Rayleigh waves in seismic metamaterials?	Stephane Brule	Oral
387	A Numerical algorithm for solving a two-layered composite beam subjected to vibrational loads	Nikita Ryasny	Oral
420	Pipelines corrosion during water supply process	Mickail Chernosvitov	Oral
469	Spatial seepage mathematical model of earth-fill dam in complicated topographic and engineering-geological conditions	Anton Antonov	Oral
479	Response of RC columns strengthened with composite materials	M. Di Ludovico	Oral

**SECTION: SOLID MECHANICS IN CIVIL ENGINEERING****April 26 9:00-13:30**

#	TITLE	SPEAKER	PRESENTATION
104	Effect of load history on shear strength of reinforced concrete I-Beams	Murat Tamov	Oral
150	Bending of a wavy plate of a periodic profile on an elastic foundation	Alexey Beskopylny	Oral
155	Influence of web openings on bearing capacity of triangularly corrugated web beam	Sergey Kudryavtsev	Oral
214	Investigation of conjugation nodes of a structure's loadbearing elements in the nonlinear formulation	Sergey Bulushev	Oral
224	Application of nonlinear deformation model for the calculation of reinforced concrete elements under transverse bending	Valery Filatov	Oral
274	The edge effects in layered beams	Nikita Tsybin	Oral
286	Plates and beams of asymmetric structures along the thickness	Nelly Rogacheva	Oral
347	A new algorithm for size optimization of the truss structures using finite element method	Vu Thi Bich Quyen	Oral
374	Study of the effect of cement amount on the soil-cement sample strength.	Jacek Pyda	Oral
386	Application of artificial neural networks for agent-based simulation of emergency evacuation from buildings for various purpose	Konstantin Tkachuk	Oral
388	Strutting systems for deep excavations – technical challenges	Hubert Szabowicz	Oral
427	Stress-strain state of earth dams with a clay cement-concrete diaphragm	Alexander Gogin	Oral
441	Numerical and physical modeling of the stability of the workings developing the slope	Genrikh Abramov	Oral
452	Nonlinear evaluation of the long-term critical force	Evgeny Larionov	Oral

**SECTION: ACTUAL PROBLEMS IN GEOTECHNICAL ENGINEERING****April 26 14:30-18:00**

#	TITLE	SPEAKER	PRESENTATION
32	Particle transport in a porous medium with initial deposit	Yuri Osipov	Oral
120	Earth surface subsidence caused by arbitrary underground mining	Vytaly Trofimov	Oral
190	On the influence of modeling the increment of loads from the building frame in the analysis of the stress-strain state of the foundation base	Daria Rasskazova	Oral
243	About the possibility of simulating spatial oscillations of buildings	Avetik Abovyan	Oral
275	Interaction of drilled shafts in rock under the action of lateral load	Mikhail Zertsalov	Oral
313	Tests of piles in melted and frozen soils in creep mode: relaxation conditions	Peter Korolev	Oral
350	Interaction of the augercast micropiles with permafrost	Dmitry Zorin	Oral
367	Calculation of the stress-strain state of soil massifs with karst-suffusion cavities	Airat Latypov	Oral
368	Comparison of analytical solution of the semi-infinite problem of soil freezing with numerical solutions in various simulation software	Svetlana Vinogradova	Oral
461	Bearing capacity of foundations base under combined alternating long-term static and cyclic loading	Ilizar Mirsayapov	Oral

**SECTION: MATHEMATICAL METHODS IN CONSTRUCTION****April 27 9:00-13:00**

#	TITLE	SPEAKER	PRESENTATION
34	Calculation of colloids filtration in a porous medium	Yuri Galaguz	Oral
41	Estimation of the admissibility of the destructive testing method	Nadezhda Chiganova	Oral
45	To the construction of optimal motions of controlled mechanical systems	Rustam Khayrullin	Oral
51	Relaxation properties of organo-mineral composites	Tatiana Matseevich	Oral
84	An effective numerical method for calculating unseparated flows in building aerodynamics	Vadim Akhmetov	Oral
95	Risk management system model for construction projects	Boris Titarenko	Oral
96	The stress intensity factors in the corner cut-out area of the plane domain boundary	Lyudmila Frishter	Oral
115	About the damage to building materials and structures	Olga Vasil'eva	Oral
253	Research of one class of nonlinear differential equations of third order for mathematical modelling the complex structures	Victor Orlov	Oral
395	Mechanical system reliability analysis using reliability matrix method	Olga Burukhina	Oral
401	Calculation of an flexible gently sloping filament using the generalized finite difference method	Maxim Aleksandrovskiy	Oral
409	Application of generalized equations of the method of finite differences to the calculation of continuous orthotropic plates	Maxim Aleksandrovskiy	Oral
448	The averaged model of layered elastic-creeping composite materials	Tatiana Bobyleva	Oral

**POSTERS SESSION**

#	TITLE	SPEAKER	PRESENTATION
5	Interconnection of maximum deflections and frequencies of free vibrations of composite two-layer oval plates on pliable connections	Andrey Turkov	Poster
30	Safety criteria of the historic ruins	Liudmila Cherkasova	Poster
33	Modelling of particles retention in a porous soil	Yulia Zheglova	Poster
35	Asymptotic model of size-exclusion grouting	Yuri Osipov	Poster
38	Model of grout filtration in a porous soil	Tatiana Gorbunova	Poster
53	Refinement of the accounting methodology of bi-moments transfer at the junctions of the I-section bars	Igor Serpik	Poster
56	Autonomous Gas Fuel Supply Systems with Natural Re-Gasification of Liquefied Hydrocarbon Gas: Principles of Providing Gas Fuel to Customers	Nataliya Osipova	Poster
62	On the precision of assembly of complicated structures	Vera Petelina	Poster
85	Mathematical modelling of water exchange in public swimming pools	Vladimir Orlov	Poster
90	Properties of canonical transformations of linear Hamiltonian systems	Tatiana Titova	Poster
100	Pseudorandom number generation for computer modeling of actual shapes of spatial bar structures	Evgeny Lebed	Poster
108	Hydraulic spillways using the effect of interacting circulation currents	Genrikh Orekhov	Poster
123	The study of attenuation of the shear stresses in a straight rod near the point of load application	Sergey Saiyan	Poster
126	Mathematical model of the porous-capillary body in construction materials	Liudmila Kirianova	Poster
133	Settlement prediction for protected buildings nearby deep excavation	Artem Konnov	Poster
145	Generalized finite difference approach verification on circular plates	Alaeldin Mansour	Poster
148	Interaction of thin-walled prismatic shell with elastic foundation	Andrey Leontiev	Poster
153	Research of the temperature relaxation process of tension in steels	Pavel Vorobiev	Poster
164	Experimental research on RC beams strengthened in shear with PBO-FRCM composites	Dorota Marcinczak	Poster



#	TITLE	SPEAKER	PRESENTATION
173	The impact of approach channels on the waves in the port	Alexandr Anshakov	Poster
239	Parameter calculation of accident explosions at outdoor installations of power-intensive facilities	Phan Tuan Anh	Poster
247	Numerical and laboratory methods of tsunami waves modeling	Anton Akulinin	Poster
250	Equivalence of effects for a limiting stress state	Murad Agakhanov	Poster
254	Refined dependences of power-law form for calculation of hydraulic resistance and velocity distribution	Aleksandra Ostyakova	Poster
263	Actions of explosive loads of the protecting designs taking into account vibration combustion	Vyacheslav Gorev	Poster
265	Experimental research of microturbulence and transportability on sliding surfaces	Irina Dezhina	Poster
339	Analysis of systems with nonlinear auxiliary mass dampers by means of a special selection of linear generating functions	Mohammed Zebilila	Poster
373	Bases and foundations of buildings at reconstruction	Alexey Glushkov	Poster
408	Numerical simulation of regular pipe drainage system in peat soil	Andrey Nikitin	Poster
411	The improvement of aseismic horizontal frame's thermal insulations	Ekaterina Ibe	Poster
412	Full-scale dynamic testing of raised floor structures	Adelia Faizova	Poster
429	Analysis of cooling tower's geometry by means of geodetic and thermovision method	Zbigniew Muszynski	Poster
438	Modelling and economic risk estimation for accidents in underground building construction and exploitation	Sergey Vartanov	Poster
450	Calculation of the foundation with allowance for the shear modulus at small deformations	Evgeny Sobolev	Poster
458	Registration of Submicron Particle Emission for Rock Burst Prediction	Alexander Osokin	Poster
468	Temperature regime of massive concrete dams in the zone of contact with the base	Nikolay Aniskin	Poster
472	The settlement speed of the finite width foundation caused by the extrusion of weak soil layer from compressible base	Vitalii Sidorov	Poster