

Date			22.05.2019			Time			11:15-13:00		
Session 1			Session 2			Session 3					
Problems of frost heave and thaw I			Use of geosynthetics in transport construction			Geocoprotective materials, structures and technologies for transportation I					
№	Report	Presenter	№	Report	Presenter	№	Report	Presenter			
004	Experimental Study on the Effect of Stress Release Holes on Decreasing Frost Heaves of Fine Particle Fillers in Seasonal Frost Areas	Yupeng Shen	005	Innovative drainage geocomposite for the control of the frost heave in the road structures	Pietro Pezzano, Leonardo MARTINO, Pietro Rimoldi, Moreno Scotti, Andrei Petriaev	071	Geocoprotective Building Structures for Transport Construction Using Mineral Technogenic Silicates and Their Properties	Maria Shershneva, Ivan Kozlov, Galina Pankratova, Ivan Drobyshev			
035	Study on frost heave of high-speed railway subgrade graded gravel based on X-CT scanning	Yinghui Cui, Yangsheng Ye	081	Modeling Of a Railway Roadbed Reinforcement	Andrei Petriaev	095	Geocoprotective Technologies from Heavy Metal Ions Pollution for Transport Construction in Permafrost Regions	Maria Shershneva, Yuliya Puzanova, Antonina Sakharova			
049	Study on the characteristics and remedial measures of heaving and deviation of ballastless track subgrade in seasonally frozen region	Pengcheng WANG	176	Relevant Properties of PET-Geosynthetics in Cold Regions	Viktor Poberezhnyi	104	High-strength Concrete with Improved Deformation Characteristics for Road Surfaces	Valentina Solovieva, Irina Stepanova, Dmitriy Soloviev			
063	The account of Frost Heave and Thawing Processes when Designing Road Embankments in Cold Regions	Vladimir Paramonov, Sergei Kudriavtsev, Igor Sakharov	1001	Influence of triple axle geogrids on pavement design (Ukrainian experience)	Pavel Kharin	106	Geocoprotective Screens for Road Construction and Operation in Cold Regions	Maria Shershneva, Antonina Sakharova, Ivan Kozlov			
064	A model test study on frost heave of unsaturated soil based on PIV technology	Meng Wang, Xu Li, Zhenya Liu	016	Bearing Capacity Mechanism of Geocell Reinforced Soil Foundations	Shintaro Miyamoto, Yoshihisa Miyata	107	Efficiency Evaluation of the Use of Mineral Technogenic Substances in Geocoprotective Technologies of Transport Construction	Maria Shershneva, Antonina Sakharova, Denis Anpilov, Egor Eremeev			
065	Temperature deformations of soil influencing transportation continuity in the Arctic region	Nicolai Vasiliev, Aleksey Marchenko, Yuri Kondrashov, Alexander Alhimenko	040	The Effect of Sand Composition on Railway Pumping and Deformation in the Winter Period	Andrey Ponomarev, Valerii Shtykov	109	A High-performance Repair Mixture to Restore and Protect Damaged Concrete Structures	Valentina Solovieva, Irina Stepanova, Dmitriy Soloviev, Anna Kasatkina			
056	A GIS Based on Probabilistic Frozen Soil Hazard Analysis of Highway in Cold Region	Aiping Tang		Application experience of geosynthetics materials produced by JSC "STEKLONIT" in cold regions	Radmir Solodkiy	010	The method of estimation of the technical conditions of transport facilities used in cold regions after the accidents caused by temperature anomalies	Alexandr Kucherenko, Nikolay Gusev, Larisa Svatovskaya			
061	Experiments of Autonomous Vehicles Running at a Test Track, and Future Prospects	Naohisa Nakamura, Masaya Sato, Kazunori Munehiro		Accounting for rheological properties (creep) of geomaterials in numerical simulation with PLAXIS	Evgeniy Fedorenko						
Date			22.05.2019			Time			14:00-15:45		
Session 4			Session 5			Session 6					
Problems of frost heave and thaw II			Structure stabilization in transportation			Geocoprotective materials, structures and technologies for transportation II					
090	The destruction of stabilized expansive clays due to frost action	Monika Skorupińska	154	Mechanistic-experimental approach for determination of basic properties of mechanically stabilized layers	Zikmund Rakowski, Jacek Kawalec, Leoš Horníček, Sławomir Kwiecień	116	Multifunctional Nanomodified Concrete of New Generation	Valentina Solovieva, Irina Stepanova, Dmitriy Soloviev, Tatyana Kravchenko			
091	The effect of cement content on the freezing-thawing and compressive strength of cemented sand-gravel (CSG) mixtures	Hamed Farshbaf Aghajani, Hossein Soltani-Jigheh, Mohammad Salimi	193	The technology of mechanically stabilized layers for road structures in cold regions	Zikmund Rakowski, Jacek Kawalec	117	Increasing the Level of Properties of Composite Materials for Civil Engineering Geoconstruction with the Use of New Generation Additives	Valentina Solovieva, Irina Stepanova, Dmitriy Soloviev, Nikolay Yorshikov			
101	Experimental investigation on anisotropy of clay induced by the freeze-thaw cycles	Feng Zhang, Kangwei Tang, Decheng Feng, Bo Lin	169	Stamp Test of Railway Ballast, Stabilized by Geogrids	Andrei Petriaev, Viktor Ganchits, Maria Chetina, Ivan Kozlov, Vladimir Egorov, Svetlana Petrenko	140	Geochemical Basis of Geocoprotective Technologies	Larisa Svatovskaya, Kseniia Mikhailova, Tatyana Sipeliuk, Ivan Drobyshev			

103	Thaw settlement and mechanical properties of stabilized frozen soil	Zhaohui Yang, Feng Zhang, Xinlei Na, Haolin Yu	1002	Quality control for foundation layers construction with mobile dynamic loading machines	Andrey Moshenzhal	141	Information Assessment of Natural Geosystem Preservation in Geoconstruction by Improving the Quality of Concrete	Larisa Svatovskaya, Oleg Urov, Kseniia Mikhailova, Tatyana Sipeliuk
113	Experimental study on shear strength characteristics of silty sand under freezing and thawing conditions	Yali Li, Yahu Tian	047	Experimental Investigation of Railway Maintenance With Stoneblowing Techniques	Alexandr Abrashitov	142	Safing Technologies for Lithosphere Geoprotection	Larisa Svatovskaya, Kseniia Mikhailova, Ivan Drobyshev
147	Measurement for permeability of frozen soil by transient pulse method	Tetsuya Tokoro, Tatsuya Ishikawa				143	Specificities of Soling Processes in Technologies of Geoconstruction	Larisa Svatovskaya, Kseniia Mikhailova, Alexander Kabanov, Nikolay Khamenok
088	Field experimental investigations of freezing and thawing of highway subgrade	Bagdat Teltayev, Askar Zhussupbekov, Zhanbolat Shakhmov, Elena Suppes				152	Criteria of Green Geocoprotective Technologies in Transport Construction	Larisa Svatovskaya, Ivan Drobyshev, Kseniia Mikhailova, Nikolay Khamenok
060	Characteristics of Slope Surfaces Deformed by Frost Heaving	Atsuko Sato						
1004	Analysis of temporal and spatial changes for extreme temperature and precipitation events in Alaska during 1960-2018	Zhilang You						
Date		22.05.2019		Time		16:00-17:45		
Session 7			Session 8			Session 9		
Soil dynamics			IGS Meeting			Geocoprotective materials, structures and technologies for transportation II		
023	New approach of railway roadbed state monitoring using broadband seismometers	Galina Antonovskaya, Natalia Kapustyan, Irina Basakina				153	Modification of Mineral Substance Surfaces for Geosphere Protection	Larisa Svatovskaya, Maksim Sychov, Kseniia Mikhailova, Alexander Kabanov
053	Analysis of Vibration Measurements on Moving Trains	Jonas Majala				156	Main Phase of Industrial Wastes Predict Properties of Building Materials in Transport Construction in	Natalia Babak
062	Response of Seasonal Frozen soil under Traffic Vibration and Isolation Method Based on 2.5D Finite Element	Aiping Tang, aihua wen				159	Silica Sol in Transport Construction	Ivan Kozlov
069	Geoecological Aspects of 27 Tons Axle Load Innovative Cars Influence on the Railway Roadbed	Ivan Kozlov, Ksenia Ivanova, Dmitry Kozlov				168	Nonautoclaved Foam Concrete Based on Polymers for the Construction of Various Road Structures in	Yuriy Kamenev, Larisa Svatovskaya, Alexander Avseenko
078	Estimation of shear strength and shear wave velocity for frozen soils with various silt fractions	Sang Yeob Kim, Jong-Sub Lee				178	Conservation of Mineral Resources in Transport and Civil Construction	Marina Baydarashvili, Antonina Sakharova, Natalia Shrednik
102	Array Observation Methods and Vibration Characteristics of FrozArray Observation Methods and Vibration Characteristics of Frozen Soil due to Track Traffic Loaden Soil due to Track Traffic Load	Aiping Tang, Anping zhao				180	The acceleration of hardening of non-autoclaved foam concrete with the mechanoactivated binder when constructing in the Arctic and cold regions	Andrey Solomahin, Larisa Svatovskaya, Yuriy Kamenev
174	Finite element modeling of responses of high-speed railroad track considering foundation nonlinearity and environmental effects	Liuxin Chen, Meng Wang, Yuqing Zhang, Yuanjie Xiao				181	Effective Building Ceramics for Transport Infrastructure	Ludmila Maslennikova, Natalia Babak, Anna Slavina, Igor Naginskii

						104	High-strength Concrete with Improved Deformation Characteristics for Road Surfaces	Valentina Solovieva, Irina Stepanova, Dmitriy Soloviev
Date		23.05.2019	Time		9:00-10:45			
Session 10			Session 11			Session 12		
Problems of design, construction and operation of transport infrastructure in cold regions I			Modelling, design, construction and exploitation of railway and highway subgrade			Design, construction and exploitation of geotechnical structures		
007	Analytical modeling of the dynamic behavior of the railway track on areas of variable stiffness	Zulfiya Fazilova, Alexay Loktev, Andrey Zaytsev	130	Negative impact of geological conditions on the subgrade construction	Nataliya Kirillova, Maksim Ryumin, Nadezhda Teniriadko	019	Intensive Technology of Construction of Geotechnical Structures in Transport	Taisiya V. Shepitko, Svyatoslav Ya. Lutsky, Igor Artyushenko, Viacheslav Zabolotnyy
009	The Influence of Ballast Characteristics on Lateral Stability of Railway Track	Maxim Mylnikov, Alexander Skutin	032	Numerical Modeling of Railway Embankment Deformations in Permafrost Regions, Central Yakutia	Petr Permyakov, Aleksandr Zhirkov, Stepan Varlamov, Pavel Skryabin, Georgy Popov	127	Research of Ribbed Piles in Permafrost	Artem Naberezhnyi, Georgiy Kuzmin, Aleksandra Savvina
012	Operation problems of the cold condensate pipeline in heaving soils and arctic climate	Evgeniy Markov, Sergey Pulnikov, Yuri Sysoev	041	Calibration of PLAXIS Frozen/Unfrozen Soil Model According to Results of Laboratory Tests and In-situ Monitoring	Alexey Korshunov, Sergey Churkin, Alexander Nevzorov	172	Special Aspects of Railway Roadbed Stability Calculations after its Strengthening by Electrochemical Treatment	Viktor Ganchits, Viktoriia Cherniaeva, Evgenii Cherniaev, Natalia Panchenko
028	Traffic management system for the Northern Latitudinal Railway	Efim Rozenberg, Vladimir Batraev, Mikhail Shmulevich	086	The Frozen Depth and Its Prediction Affected by Shallow phreatic groundwater by Modified Berggren Equation	Xiaoqiang LIU, Jiankun Liu, Yahu Tian, yupeng shen	070	Stress-strain State of Railway Embankment with the Use of Mineral Geococprotective Material	Ivan Kozlov
039	Intelligent onboard train protection system for the Northern territories	Efim Rozenberg, Vladimir Batraev	121	Calculation of soil-transport structure interaction	Alexei Shashkin	026	Identification Of The Emergency Condition Reasons At Railway Lines That Are In Difficult Geocryological Conditions	Denis Gorobtsov, Игорь Фоменко, Vadim Penden, Mariya Nikulina
045	Transport Construction of the Mainland – Sakhalin Island	Ekaterina Shestakova, Anatolii Novikov, Anatoly Antonyuk, Pavel Kurchanov	115	Study on the Effect of HDPE Stress Absorbing Layer in Preventing Reflective Cracks	Zhonghua Hao, Jiankun Liu, Jian Chang	173	Methodical approaches for durability assessment of engineering structures in cold regions	Tamila Titova, Rasul Akhtyamov, Elina Nasyrova, Alexey Elizaryev
099	Requirements for tramway filler block during construction in cold regions	Evgeniy Dudkin, Kirill Gmirya	192	Considering the Variability of Strength of Soils in the Consolidation by Numerical Modeling	Evgeniy Fedorenko	210	Numerical Analysis Using Elastic-plastic Soil Model for A Single Pile in Clay Layer to Examine the Effect Surcharge Loading on the Distribution of Skin Friction	Talal Awwad, Salma Al Kods, Vladimir Ulitsky, Alexey Shashkin, Lana Awwad
			066	Slope Failure Status and Analytical Results of Slope Stability from Fracture Orientations. A Case Study in 3B Highway in Xuathoa Area, Backan Province, Vietnam	Thanh Phi	188	Bearing capacity of high embankment clay soils in terms of heavy axle load operation	Alexey Kolos, Andrei Romanov, Gennadii Akkerman, Evgeniy Shekhtman, Anastasia Konon, Artyom Kiselev
Date		23.05.2019	Time		11:00-12:45			
Session 13			Session 14			Session 15		
Problems of design, construction and operation of transport infrastructure in cold regions II			Permafrost influence on Transport Facilities Behaviour I			Engineering survey & field testing		
030	Rails for Low Operating Temperature and High Speed	Evgeny Shur, Alexey Borts, Sergey Zakharov	044	Impact of pavement types on the thermal conditions of block-stone embankment in warm and ice-rich permafrost region	Qingzhi Wang, Jianhong Fang	058	Experimental Researches in Defining Deformations by Free Station Method and Results Processing by Search Method	Grettel Shevchenko, Mikhail Bryn, Dmitry Afonin, Dmitry Gura

059	Analysis of changes of track upper structure technical condition and its operation costs in regions with long winter period for different types of rail fastenings	Vladimir Beltukov, Andrey Andreev, Anna Sennikova	022	Proposition and Design of A New Type of Permafrost Protective Device-Solar Refrigerating Heat Pipe	Tian-fei HU, Tian-liang Wang, Zurun YUE	073	The use of terrestrial laser scanning for the development and control the design documentation of reconstruction projects	Anzhelika Kuznetsova
114	Analysis of track condition based on application of the Irregularity length Cumulative Distribution Function	Gregory Krug	038	Complex solutions for providing roadbed stability on permafrost	Oksana Neratova, Svetlana Zhdanova	119	Railway subgrade stressed state under the impact of new generation cars with 270 kN axle load	Alexey Kolos, Andrei Romanov, Vadim Govorov, Igor Kiselev, Anastasia Konon
158	Analysis of the experience of operation and scope of application of direct connections to ensure passenger transportation on regional lines	Alexey Kotenko, Tatyana Malakhova, Timofey Shmanev	057	Construction and operation of linear constructions at the polygonal land relief, in the conditions of distribution of permafrost soil	Zulfiya Fazilova, Andrey Zaytsev	160	Bridge leveling network monitoring in construction on highly-heaving soils	Dmitry Afonin, Nikolay Kanashin, Andrey Nikitchin
170	Features of tram traffic organization in permafrost areas	Svetlana Doronicheva, Maksim Malakhov	076	Effects of Permafrost on Earthquake Resistance of Transport Facilities in the Baikal-Amur Mainline Area	Tatiana Belash, Alexander Uzdin	161	Determining the Refraction Coefficient Based on the Differences of the Measured and Known Zenith Distances in Short-Distance Trigonometric Leveling	Yulia Lobanova, Mikhail Bryn, Evgenii Svintsov
186	Features Transport Planning the Network of Municipal Roads in Northern Region	Pavel Pegin, Alexey Ilyin				163	Features of engineering surveys in areas of permafrost prevalence by the example of the project "North-ern latitudinal way"	Natalia Bogomolova, Yuriy Milyushkan, Sergey Shkurnikov, Nikolay Bushuev, Evgeniy Svintsov, Vladimir Anisimov
079	Effective structure for strengthening the road embankments on unstable mountain slopes	Piotrovich Aleksey, Mirzoev Telman, Magdalinsky Aleksandr				164	The study of railway embankment deformations in cold regions	Natalia Bogomolova, Mikhail Bryn, Andrey Nikitchin, Alexey Kolos, Andrei Romanov
171	Analysis of Residual Deformations Accumulation Intensity Factors of the Railway Track Located in the Polar Zone	Evgenii Chernyaev, Viktoriia Cherniaeva, Viktor Ganchits						
024	Automated system for monitoring the upper structure of the railway track for extreme Arctic conditions	Daniil Loktev, Alexey Loktev						
Date		23.05.2019		Time		13:45-15:30		
Session 16			Session 17			Session 18		
Laboratory Soil Testing			Permafrost influence on Transport Facilities Behaviour II			Underground construction in cold regions		
011	Experimental Study on Triaxial Shear Strength and Frost Heave Deformation Properties of Artificially Frozen Silty Clay	Tian-liang Wang, Ya-meng He, Haihang Wang, Yuzhi Zhang, Yuting Lu, Tian-fei HU, Jian-yong Liu	082	Creation of the Massif of Permafrost in Construction Zones of Engineering Structures on Soft Soils	Vladimir Moiseev, Tatyana Komarova, Olga Komarova, Nicolai Vasiliev	162	Ventilation Shafts Freezing Protection Under the Influence of Negative Temperatures	Evgenii Kozin, Dmitrii Burin, Alexander Lediaev, Alexander Konkov, Yuri Filonov, Anatolii Novikov
037	Compression Curves Extrapolation to High Pressures for Soft Clay Soils	Svetlana Kolmogorova, Peter Klemyatsionok, Sergey Kolmogorov	126	Features of Design of Engineering Solutions of Roads in Permafrost	Muminat Magomedgadzhieva	175	Justification Of Engineering Solution On Rebuilding Severomuysky Railway Tunnel Ventilation	Simon Gendler, Mikhail Belov
048	Experimental Study on Pore Water Pressure and Microstructures of Silty Clay under Freeze-thaw Cycles	Dan Wang, Chengsong Yang, Guodong Cheng, Wei Ma, Lianhai Zhang	190	The MonArc project: monitoring programme for foundation settlements and initial results	Anatoly Sinityn, Pavel Kotov, Arne Aalberg	183	Particularity and Prediction Method of Ground Settlement Caused by Subway Tunnel Construction in Permafrost Area	Guangming Yu, Ruixue Ge, Xiankun Zeng, Yingnian Yu, Zhuang Zhang, Xiangui Meng, Yongjun Qin

100	Experimental Study on Induced Anisotropies of Remolded Loess in Cold Region	YongZhen Feng, Lingxiao Liu, Wuyu Zhang, Yanxia Ma	046	Influence of intra-seasonal snowfall deposition, the peculiarities of snow cover accumulation and winter season temperature variation on ground	Denis Frolov	184	The determination of soil cutting force applied with bucketless bottom rotor with account of speed and runout	S. Nurakov, Talal Awwad, A. Kaliyev, A.S. Tulebekova
113	Experimental study on shear strength characteristics of silty sand under freezing and thawing conditions	Yali Li, Yahu Tian		Application of two-phase closed thermosyphons (TPCT) in permafrost embankments	Wansheng Pei	129	Twenty Years' development and Prospects of Artificial Ground Freezing Technology Applied to Urban Tunnel Engineering in China	Xiaomin Zhou, Jiang Guojing, Fangzheng Li, Xiaonan He, Tao Wu, Yan Xu
080	Technical Improvements in Testing Small-strain Deformation Behaviour of Frozen Soil	Jinyuan Wang, Satoshi Nishimura, Bhakta Raj Joshi, Shota Okajima		Experience of degraded permafrost rehabilitation in the territories close to transportation infrastructure	Nagapet Ustyan			