

## ORGANIZERS

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IRIS ASSOCIATION (INSTITUTE OF RADIO AND INFORMATION SYSTEMS, VIENNA, AUSTRIA)

RUSSIA SECTION TEM/GRS/ITSS JOINT CHAPTER



# 2022 INTERNATIONAL CONFERENCE «ENGINEERING MANAGEMENT OF COMMUNICATION AND TECHNOLOGY» (EMCTECH)

*IEEE Conference Record #55220*

Vienna, Austria, Springer Schloessl

October 20 – 22, 2022

# CONFERENCE PROGRAM



*Planned conference venue – Springer Schloessl Seminarhotel*

*Photo by organizers*

For inclusion in the publication program, an article must be online oral presented  
by one of the co-authors

October 20 (Thursday)

9<sup>30</sup> ... 9<sup>50</sup>

REGISTRATION

9<sup>50</sup> ... 10<sup>00</sup>

WELCOME SPEECH BY PROGRAM COMMITTEE

*“Institute of Radio and Information Systems” (IRIS) Association, Vienna, Austria*

10<sup>00</sup> ... 17<sup>00</sup>

CHAPTER 1-2

**TRANSPORT AND COLLECTIVE SYSTEMS: SMART CONTROL TECHNOLOGY IN  
TRANSPORTATION, BIOMEDICAL, FARMING AND CYBER PHYSICAL SYSTEMS  
(Special Topic: Transport Technologies in the Arctic)**

*Section chair: Marcelo Sampaio de Alencar, Ph.D. (University of Waterloo, Canada, 1993),  
IEEE Senior Member, Chair Professor at the Department of Electrical Engineering,  
Federal University of Campina Grande, Republic of Brazil*

10 <sup>00</sup> ... 10 <sup>20</sup>	<b>Andrey Abalyaev, Lyubov Grunskaya</b> <i>Vladimir State University, Vladimir, Russia</i> <b>DEVELOPMENT OF RECCURENT NEURON NET SYSTEM FOR FORECASTING OF AN ACCIDENT RATE MEAN LEVEL ON GENERAL USE ROADS</b>
10 <sup>20</sup> ... 10 <sup>40</sup>	<b>Alexander Afanasyev, Ruslan Safiullin, Viktoria Vaga, Elena Kuznetsova</b> <i>Saint Petersburg Mining University, Saint Petersburg, Russia</i> <b>Nickolay Podoprigora</b> <i>Saint Petersburg University of Architecture and Civil Engineering, Saint Petersburg, Russia</i> <b>CONCEPTUAL APPROACHES TO TRAFFIC MONITORING DESIGN UNDER VARYING CONDITIONS OF VEHICLE TRAFFIC</b>
10 <sup>40</sup> ... 11 <sup>00</sup>	<b>A. A. Akulov, V. V. Filatov, M. Yu. Karelina, A. V. Podgorny, V. A. Erpulev</b> <i>Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i> <b>ARCTIC CONDITIONS VEHICLE RELIABILITY INCREMENT</b>
11 <sup>00</sup> ... 11 <sup>20</sup>	<b>Ilya Brylev, Igor Vorozheikin, Anatoly Ereemeev</b> <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i> <b>Aleksandr Marusin</b> <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i> <b>Anastasia Shevtsova</b> <i>V.G. Shukhov State University of Technology in Belgorod, Belgorod, Russia</i> <b>EXPERIMENTAL STUDIES OF MEAN FULLY DEVELOPED DECELERATION IN L1 VEHICLES</b>

<b>11<sup>20</sup> ... 11<sup>40</sup></b>	<p><b>Polina Buyvol, Alla Krivonogova, Aleksandr Voroshilov, Eduard Mukhametdinov</b>  <i>Kazan Federal University, Naberezhnye Chelny, Russia</i></p> <p><b>Krzysztof Zabinski</b>  <i>University of Silesia, Katowice, Poland</i></p> <p><b>INTELLIGENT DIAGNOSTICS OF VEHICLE OPERATING IN THE ARCTIC ZONE</b></p>
<b>11<sup>40</sup> ... 12<sup>00</sup></b>	<p><b>Egor Golov, Alexander Novikov, Stanislav Evtjukov, Maxim Alexeevsky</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i></p> <p><b>EVALUATING ROAD PERFORMANCE AND CONDITION AS PART OF ARCTIC ROAD AND TRANSPORT STUDIES</b></p>
<b>12<sup>00</sup> ... 12<sup>20</sup></b>	<p><b>V.S. Ershov, A.V. Vasiliev, D.S. Taldykin, A.O. Volkov</b>  <i>Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i></p> <p><b>E.A. Karelina</b>  <i>SUM, Moscow, Russia</i></p> <p><b>PASSENGER VEHICLE MAIN QUALITY INDICATORS MATHEMATICAL MODEL DEVELOPMENT</b></p>
<b>12<sup>20</sup> ... 12<sup>40</sup></b>	<p><b>Stanislav Evtjukov, Ilya Brylev, Maria Blinder, Anatoly Eremeev</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i></p> <p><b>Aleksandr Marusin</b>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i></p> <p><b>EXPERIMENTAL STUDIES OF BICYCLE DECELERATION ON DRY, MOIST AND WET ASPHALT CONCRETE PAVEMENT</b></p>
<b>12<sup>40</sup> ... 13<sup>00</sup></b>	<p><b>Irina Makarova, Polina Buyvol, Ruslan Shalkin, Larisa Fatikhova</b>  <i>Kazan Federal University, Naberezhnye Chelny, Russia</i></p> <p><b>Krzysztof Zabinski</b>  <i>University of Silesia, Katowice, Poland</i></p> <p><b>PLANNING OF PARKING SPACE DURING DEVELOPMENT OF THE ARCTIC TERRITORIES' TRANSPORT SYSTEM</b></p>
<b>13<sup>00</sup> ... 13<sup>20</sup></b>	<p><b>Viktor Nikolaevich Malchikov, Alexander Vladimirovich Shemyakin, Dmitry Sergeevich Ryabchikov</b>  <i>Ryazan State Agrotechnical University named after P.A. Kostychev, Ryazan, Russia</i></p> <p><b>Alexey Vyacheslavovich Marusin, Alexander Alexandrovich Polyarush</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i></p> <p><b>IMPLEMENTATION OF UNMANNED VEHICLES TO IMPROVE THE QUALITY OF PASSENGER TRANSPORTATION</b></p>

**13<sup>20</sup>... 14<sup>40</sup>**  
**DINNER**

<p><b>14<sup>40</sup> ... 15<sup>00</sup></b></p>	<p><b>Maria Karelina, Tatiana Balabina</b>  <i>Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i>  <b>Alexey Mamaev</b>  <i>Moscow Polytechnic University (Mospolytech), Moscow, Russia</i>  <b>WHEEL ROLLING ON A DEFORMABLE SUPPORT SURFACE</b></p>
<p><b>15<sup>00</sup> ... 15<sup>20</sup></b></p>	<p><b>Alexey Marusin</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia;</i>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i>  <b>Ravil Safiullin</b>  <i>Saint-Petersburg Mining University, Saint-Petersburg, Russia;</i>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>Haotian Tian</b>  <i>Saint-Petersburg Mining University, Saint-Petersburg, Russia</i>  <b>Ruslan Safiullin</b>  <i>Saint-Petersburg Mining University, Saint-Petersburg, Russia</i>  <b>Irina Marusina</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>INTEGRAL EVALUATION OF THE EFFECTIVENESS OF THE IMPLEMENTATION OF AUTOMATED TECHNICAL MEANS OF CONTROLLING THE MOVEMENT OF VEHICLES ON THE ROAD</b></p>
<p><b>15<sup>20</sup> ... 15<sup>40</sup></b></p>	<p><b>Z.G. Melnikov, A.A. Zhukov</b>  <i>State Agricultural Academy of Velikie Luki, Velikiye Luki, Pskov Region, Russia</i>  <b>V.N. Konoplev, Ramzi Hassan Yousse Abu-Nijim</b>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i>  <b>ASSESSMENT OF ENERGY EFFICIENCY OF MOTOR VEHICLES BASED ON THE METHODOLOGY OF PROJECT EFFECTIVENESS</b></p>
<p><b>15<sup>40</sup> ... 16<sup>00</sup></b></p>	<p><b>Artur Petrov</b>  <i>Industrial University of Tyumen, Tyumen, Russia</i>  <b>Sergey Evtyukov, Egor Golov, Stanislav Evtyukov</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>Alexander Tushinskiy</b>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i>  <b>ROAD TRAFFIC ACCIDENTS IN THE ARCTIC ZONE: GENERAL ISSUES, STATISTICS AND PECULIARITIES</b></p>
<p><b>16<sup>00</sup> ... 16<sup>20</sup></b></p>	<p><b>Dmitry Ryabchikov, Alexander Shemyakin, Viktor Malchikov</b>  <i>Ryazan State Agrotechnical University named after P.A. Kostychev, Ryazan, Russia</i>  <b>Irina Marusina</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>Maxim Alexeevsky</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>THE RELEVANCE OF THE USE OF ELECTRIC BUSES AT MOTOR TRANSPORT ENTERPRISES FOR INTRACITY PASSENGER ROUTES</b></p>



<p><b>16<sup>20</sup> ... 16<sup>40</sup></b></p>	<p><b>Anastasia Shevtsova, Alina Loktionova</b>  <i>Belgorod State Technological University. V.G. Shukhov, Belgorod, Russia</i>  <b>Alexander Novikov</b>  <i>Orel State University named after I.S. Turgenev, Orel, Russia</i>  <b>Ivan Vorontsov, Denis Orlov</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering,  Saint Petersburg, Russia</i>  <b>CALCULATION OF THE PARAMETERS OF THE CALIBRATED  VEHICLE TO PERFORM WORK ON THE ORGANIZATION OF  TRAFFIC</b></p>
<p><b>16<sup>40</sup> ... 17<sup>00</sup></b></p>	<p><b>Svetlana Skhanova, Ekaterina Medres</b>  <i>Saint-Petersburg State University of Architecture and Civil Engineering,  Saint-Petersburg, Russia</i>  <b>REDUNDANCY OF TRANSPORT SUBSYSTEM IN PROVIDING  RELIABILITY OF SUPPLY CHAIN</b></p>

**17<sup>00</sup>... 17<sup>20</sup>**  
**COFFEE BREAK**

17<sup>20</sup> ... 19<sup>00</sup>

**CHAPTER 3-4**  
**BROADCAST TECHNOLOGIES ADVANCEMENTS –**  
**RADIO, IP, CELLULAR, ON DEMAND, INTERACTIVE,**  
**WIRE AND OPTICAL COMMUNICATION**

*Section chair: Bayram Ibrahimov, Professor (2007), Doctor of Technical Sciences (2003), Senior Science Researcher Degree in Telecommunication Networks and Teletraffic (1990, Ph.D.), Professor of Azerbaijan Technical University (AzTU)*

<p>17<sup>20</sup> ... 17<sup>40</sup></p> <p><b>INVITED TALK</b></p>	<p><b>G.M. Aristarkhov, O.V. Arinin, V.N. Karavashkina, A.V. Markovskiy, I.N. Kirillov</b> <i>Moscow Technical University of Communications and Informatics, Moscow, Russia</i> <b>TWO-RESONATOR MICROSTRIP FILTERS WITH INCREASED SINGLE-SIDED FREQUENCY SELECTIVITY</b></p>
<p>17<sup>40</sup> ... 18<sup>00</sup></p>	<p><b>V. Fedorov, K. Nezhivleva, A. Potashnikov, A. Uzeev, I. Vlasuyk</b> <i>Moscow Technical University of Communications and Informatics, Moscow, Russia</i> <b>METHODOLOGY FOR QUANTIFYING THE FLICKER EFFECT IN VIDEO COMPRESSION</b></p>
<p>18<sup>00</sup> ... 18<sup>20</sup></p>	<p><b>Vladimir Mikhaylov, Roman Mazepa</b> <i>Moscow Aviation University, Moscow, Russia</i> <b>COMPARATIVE EVALUATION OF NOISE IMMUNITY CHARACTERISTICS OF SPECIAL SUNSETS OF M-SEQUENCES WITH THE JOINT PROCESSING POSSIBILITY</b></p>
<p>18<sup>20</sup> ... 18<sup>40</sup></p>	<p><b>Alexander Pastukh, Evgeniy Devyatkin, Alexandr Savochkin</b> <i>Institute of Radio and Information Systems (IRIS), Vienna, Austria</i> <b>Valery Tikhvinskiy</b> <i>International Information Technology University, Almaty, Kazakhstan</i> <b>SHARING AND ELECTROMAGNETIC COMPATIBILITY STUDIES BETWEEN 5G NR NETWORKS AND FIXED SATELLITE SERVICE TRANSPONDERS IN THE 6425-7125 MHZ BAND</b></p>
<p>18<sup>40</sup> ... 19<sup>00</sup></p>	<p><b>Oleg Varlamov,</b> <i>Institute of Radio and Information Systems (IRIS), Vienna, Austria</i> <b>POSSIBILITY EVALUATION OF THE DRM NVIS BROADCASTING TIME EXTENSION THROUGH EXTRAORDINARY WAVE</b></p>

October 21 (Friday)

10<sup>00</sup> ... 11<sup>30</sup>

CHAPTER 5-6

DIGITAL TRANSFORMATION AND DATA RISK MANAGEMENT  
IN ICT/TELECOMMUNICATION

*Section chair: Vladimir Dokuchaev, Professor (2001), Doctor of Technical Sciences (1999), Senior Science Researcher Degree in Telecommunication Networks and Teletraffic (1992), Ph.D. Degree (1990). GCBI, International Telecommunication Union, Geneva, Switzerland*

10 <sup>00</sup> ... 10 <sup>15</sup>  <b>INVITED TALK</b>	<b>Svetlana Dymkova</b> <i>Institute of Radio and Information Systems (IRIS), Vienna, Austria</i> <b>COLLABORATION ENHANCING BETWEEN INDUSTRY STAFF AND UNIVERSITY RESEARCHERS IN INTERNATIONAL SCIENTIFIC COMMUNICATIONS SYSTEM</b>
10 <sup>15</sup> ... 10 <sup>30</sup>	<b>Alexandr V. Matveev</b> <i>St. Petersburg University of the State Fire Service of EMERCOM of Russia, St.Petersburg, Russia</i> <b>Miodrag Gordić</b> <i>The University "Union - Nikola Tesla", Belgrade, Republic of Serbia</i> <b>SAFETY AND SECURITY IN THE ARCTIC: STRATEGIC RESOURCE PLANNING IN EMERGENCIES MANAGEMENT</b>
10 <sup>30</sup> ... 10 <sup>45</sup>	<b>F. Y. Baykov</b> <i>BEL Development LLC; Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i> <b>E. A. Karelina</b> <i>State University of Management; Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i> <b>DIFFERENTIATION OF TRADITIONAL BUSINESS MODELS AND TRANSNATIONALIZATION MODELS ON GLOBAL DIGITAL PLATFORMS</b>
10 <sup>45</sup> ... 11 <sup>00</sup>	<b>Denis Petukhov</b> <i>Institute of Radio and Information Systems (IRIS), Vienna, Austria</i> <b>V. A. Dokuchaev</b> <i>Information Technology Faculty, GCBI, Geneva, Switzerland</i> <b>A RESEARCH OF OPENSTACK VIRTUAL MACHINE BACKUP SERVICE QUALITY INDICATOR</b>
11 <sup>00</sup> ... 11 <sup>10</sup>	<b>Igor Pugachev</b> <i>Far Eastern State Transport University, Khabarovsk, Russia</i> <b>Denis Kapskiy</b> <i>Belarusian National Technical University, Minsk, Belarus</i> <b>Anna Ostapenko, Alexey Kamenchukov</b> <i>Pacific National University, Khabarovsk, Russia</i> <b>DIGITALIZATION OF THE NORTHERN SEA ROUTE AS A KEY PHASE FOR IMPROVEMENT OF ARCTIC REGIONS ACCESSIBILITY</b>

<b>11<sup>10</sup> ... 11<sup>20</sup></b>	<p><b>E. A. Karelina</b>  <i>State University of Management;  Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i></p> <p><b>F. Y. Baykov</b>  <i>BEL Development LLC;  Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i></p> <p><b>FORMATION OF TRANSNATIONAL COMPETITIVE ADVANTAGES OF GLOBAL DIGITAL PLATFORMS</b></p>
<b>11<sup>20</sup> ... 11<sup>30</sup></b>	<p><b>Denis Chivanov, Svetlana Dymkova</b>  <i>Institute of Radio and Information Systems (IRIS), Vienna, Austria</i></p> <p><b>TECHNICAL FACILITIES IMPLEMENTATION METHODOLOGY DETECTING BORROWINGS IN EDUCATIONAL AND SCIENTIFIC ORGANIZATIONS</b></p>

**11<sup>30</sup>... 11<sup>40</sup>**  
**COFFEE BREAK**

**11<sup>40</sup>... 18<sup>40</sup>**

**CHAPTER 8**  
**ENGINEERING TECHNOLOGY LEADING TO SOCIAL AND ECONOMICAL CHANGE**

*Section chair: Valery Tikhvinskiy, Professor, Doctor of Economics Sciences (2003), Ph.D. Degree in Radio engineering (1988), International Information Technology University, Almaty, Kazakhstan*

<b>11<sup>40</sup> ... 12<sup>00</sup></b>	<p><b>Anton Alpatov</b>  <i>Don State Technical University, Rostov-on-Don, Russia</i></p> <p><b>Qiang Zhang</b>  <i>Shandong Jiaotong University School of Navigation and Shipping, Shandong, China</i></p> <p><b>Ekaterina Alpatova</b>  <i>Rostov Law Institute (branch), The All-Russian State University of Justice (RLA of the Ministry of Justice of Russia) Rostov Institute (branch) of the ASUJ, Rostov-on-Don, Russia</i></p> <p><b>Ludmila Shmeleva</b>  <i>Financial University under the Government of the Russian Federation  Financial University, Moscow, Russia</i></p> <p><b>Victoria Degtyareva</b>  <i>State University of Management, Moscow, Russia</i></p> <p><b>PROSPECTS FOR THE MODIFICATION OF GAS TANKERS IN THE ARCTIC ZONE</b></p>
<b>12<sup>00</sup> ... 12<sup>20</sup></b>	<p><b>Tatiana Balabina, Maria Karelina</b>  <i>Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia</i></p> <p><b>Alexey Mamaev</b>  <i>Moscow Polytechnic University (Mospolytech), Moscow, Russia</i></p> <p><b>ANALYTICAL DETERMINATION OF THE POWER CHARACTERISTICS OF THE WHEEL DURING ITS CURVILINEAR ROLLING</b></p>



<b>12<sup>20</sup> ... 12<sup>40</sup></b>	<p><b>Aleksander Gritsenko, Fedor Grakov, Vladimir Shepelev</b>  <i>South Ural State Agrarian University, Troitsk, Russia</i></p> <p><b>Dmitry Nevolin</b>  <i>Ural State University of Railway Transport, Ekaterinburg, Russia</i></p> <p><b>Beibit Kaliyev</b>  <i>NLC A. Baitursynov Kostanay Regional University, Kostanay, Kazakhstan</i></p> <p><b>JUSTIFICATION OF THE PARAMETERS FOR AN AUTONOMOUS LUBRICATION SYSTEM TO SUPPLY TURBOCHARGER ROTOR BEARINGS IN NEGATIVE TEMPERATURES CONDITIONS</b></p>
<b>12<sup>40</sup> ... 13<sup>00</sup></b>	<p><b>Sergey Evtjukov, Mukhtar Kerimov, Irina Marusina</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i></p> <p><b>Alexander Fomichev, Victor Vetushko</b>  <i>Saint Petersburg State Agrarian University, Saint Petersburg, Russia</i></p> <p><b>ADAPTIVE SYSTEM FOR PREVENTING FAILURES OF FUNCTION-FORMING UNITS OF MACHINES CONSIDERING THEIR OPERATIONAL LOAD AND ECONOMIC EFFICIENCY</b></p>
<b>13<sup>00</sup> ... 13<sup>20</sup></b>	<p><b>Anna Kovaleva, Anastasia Sidorova, Yuriy Pukharenko, Irina Aubakirova</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i></p> <p><b>COMBINED EFFECT OF EXTERNAL AGGRESSIVE FACTORS ON ROAD CONCRETE PROPERTIES</b></p>
<b>13<sup>40</sup> ... 14<sup>00</sup></b>	<p><b>Vladimir Pryadkin, Pavel Kolyadin, Artem Artemov</b>  <i>Voronezh State Forestry Engineering University, Voronezh, Russia</i></p> <p><b>THERMAL LOADING OF ALL-STEEL TIRES FOR TRUCKS DURING WINTER-TIME OPERATION</b></p>

**14<sup>00</sup>... 15<sup>00</sup>**  
**DINNER**

<b>15<sup>00</sup> ... 15<sup>20</sup></b>	<p><b>Aleksander Rudenko</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i></p> <p><b>Sergei Sarkisov</b>  <i>Peter the Great St.Petersburg Polytechnic University, Saint Petersburg, Russia</i></p> <p><b>Olga Kurenkova</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i></p> <p><b>Ahmed Al-Msari</b>  <i>Al Rasheed General Contracting Company, Baghdad, Iraq</i></p> <p><b>Weihao Sui</b>  <i>China Construction Eighth Engineering Bureau Co. Ltd, Shanghai, People's Republic of China</i></p> <p><b>MULTI-CRITERIA SIMULATION MODELING OF THE CONSTRUCTION SUPPLY SCHEMES FOR AREAS WITH CHALLENGING CLIMATE</b></p>
--------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>15<sup>20</sup> ... 15<sup>40</sup></b></p>	<p><b>Ravil Nurulloevich Safiullin</b>  <i>Saint-Petersburg Mining University, Saint-Petersburg, Russia;</i>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint-Petersburg, Russia</i>  <b>Yu.N. Katsuba, V.N. Fedotov, A.A. Ungefuk, V.A. Efremova</b>  <i>Saint-Petersburg Mining University, Saint-Petersburg, Russia,</i>  <b>METHODOLOGICAL APPROACH TO THE FORMATION OF AN OPTIMAL SYSTEM TO FACILITATE THE LAUNCH OF POWER PLANTS OF VEHICLES IN THE ARCTIC</b></p>
<p><b>15<sup>40</sup> ... 16<sup>00</sup></b></p>	<p><b>Vera Ulyasheva, Voldemar Taurit, Nikolai Ponomarev</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>Vasilii Durkin</b>  <i>Ukhta State Technical University, Ukhta, Russia</i>  <b>RESOURCE-SAVING TECHNOLOGIES FOR OIL FIELD DEVELOPMENT IN THE ARCTIC</b></p>
<p><b>16<sup>00</sup> ... 16<sup>20</sup></b></p>	<p><b>Leonid L. Yablonskii</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>INDUSTRIAL AND ECONOMIC DEVELOPMENT OF THE ARCTIC REGION IN THE XXI CENTURY (on the Example of Arkhangelsk Region)</b></p>
<p><b>16<sup>20</sup> ... 16<sup>40</sup></b></p>	<p><b>Timur Ablyazov, Veronika Asaul, Elena Aleksandrova, Ivan Petrov, Sergey Bovteev</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>CONCEPTUAL FRAMEWORK FOR THE INTRODUCTION OF INNOVATIVE TECHNOLOGIES IN CONSTRUCTION IN THE ARCTIC ZONE</b></p>
<p><b>16<sup>40</sup> ... 17<sup>00</sup></b></p>	<p><b>Konstantin Golovin, Anastasia Kovaleva</b>  <i>Tula state University, Tula, Russia</i>  <b>Aleksander Pushkarev</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>DEPENDENCE OF THE WEAR RATE OF JET-FORMING ELEMENTS ON THE DESIGN, OPERATING PARAMETERS, STRENGTH OF THE DESTROYED MATERIAL AND THE TIME OF THEIR OPERATION</b></p>
<p><b>17<sup>00</sup> ... 17<sup>20</sup></b></p>	<p><b>Oleg Zimovets</b>  <i>Togliatti State University, Togliatti, Russia</i>  <b>Aleksander Rudenko</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>Sergei Sarkisov</b>  <i>Peter the Great St.Petersburg Polytechnic University, Saint Petersburg, Russia</i>  <b>Ahmed Al-Msari</b>  <i>Al Rasheed General Contracting Company, Baghdad, Iraq</i>  <b>Weihao Sui</b>  <i>China Construction Eighth Engineering Bureau Co., Ltd, Shanghai, People's Republic of China</i>  <b>ENTROPY CONTENT AND CONSTRUCTION SUPPLY MODELS EFFICIENCY IN CONDITIONS OF DISCRETE TERRITORIAL DEVELOPMENT</b></p>

<p><b>17<sup>20</sup> ... 17<sup>40</sup></b></p>	<p><b>V.N. Konoplev, Ramzi Hassan Yousse Abu-Nijim</b>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i>  <b>Z.G. Melnikov, A.A. Zhukov</b>  <i>State Agricultural Academy of Velikie Luki, Velikiye Luki, Pskov Region, Russia</i>  <b>THE DRAFT CONCEPT OF THE DISTRIBUTED RESEARCH AND DEVELOPMENT LABORATORY "ENERGY EFFICIENCY OF THE MACHINE-AND-TRACTOR FLEET"</b></p>
<p><b>17<sup>40</sup> ... 18<sup>00</sup></b></p>	<p><b>Aleksandr Marusin</b>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i>  <b>Artur Petrov</b>  <i>Industrial University of Tyumen, Tyumen, Russia</i>  <b>Maxim Alexeevsky</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>Timur Shiapov</b>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i>  <b>Irina Talanova</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>TRANSPORT INFRASTRUCTURE OF THE ARCTIC ZONE: THE CALM BEFORE THE BREAKTHROUGH?</b></p>
<p><b>18<sup>00</sup> ... 18<sup>20</sup></b></p>	<p><b>Alexander Novikov</b>  <i>Orel State University named after I.S. Turgenev, Orel, Russia</i>  <b>Anastasia Shevtsova</b>  <i>Belgorod State Technological University. V.G. Shukhov, Belgorod, Russia</i>  <b>Sergey Evtjukov</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <b>Alexey Marusin</b>  <i>Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia</i>  <i>Peoples' Friendship University of Russia (RUDN University), Moscow, Russia</i>  <b>ESTABLISHMENT OF CAUSAL RELATIONSHIPS OF THE OCCURRENCE OF ROAD ACCIDENTS</b></p>
<p><b>18<sup>20</sup> ... 18<sup>40</sup></b></p>	<p><b>Pavel A. Pegin, Alexey A. Ilyin, Eugene V. Runev</b>  <i>Emperor Alexander I St. Petersburg State Transport University, St. Petersburg, Russia</i>  <b>D.V. Kapski, L.V. Khmel'nitskaya</b>  <i>Belarusian National Technical University (BNTU), Minsk, The Republic of Belarus</i>  <b>DEVELOPMENT OF METHODOLOGY FOR ASSESSING THE LEVEL OF DEVELOPMENT OF THE MAIN NETWORK OF MUNICIPAL ROADS</b></p>

**18<sup>40</sup> ... 19<sup>00</sup>**

## **SUMMING UP THE RESULTS OF THE CONFERENCE**

### **Selection of the best reports by nominations**

- The best report in the nomination "YOUNG SCIENTISTS"  
(*undergraduate or graduate students without a supervisor*)
- The best report in the category "TECHNOLOGIES OF THE FUTURE"
- The best report in the category "MANAGEMENT IN ENGINEERING"

**October 22 (Saturday)**

**11<sup>00</sup> ... 17<sup>00</sup>**

### **Workgroup**

**"TECHNICAL FACILITIES IMPLEMENTATION METHODOLOGY DETECTING  
BORROWINGS IN EDUCATIONAL, SCIENTIFIC ORGANIZATIONS,  
MEDIA AND COMMERCIAL COMPANIES"**



*Planned conference venue – Springer Schloessl seminarhotel (inner auditorium)*

*Photo by organizers*