Program
of the International Scientific Conference "EECE-2018"

November, 19

14:00-15:00	Excursion on the key centers and laboratories of the Peter the Great Saint-Petersburg Polytechnic University (SPbPU)	Hall of Research and Development building
15:30-16:00	Coffee-break	Winter garden

November, 20

09:00-10:00	Registration	Hall of Research and Development building
10:00-10:20	Opening	Big conference hall
10:20-11:00	Keynote speakers	Big conference hall
11:00-11:30	Coffee-break	Winter garden
11:30-14:30	Topics Building Materials and Products FEM and Structural Mechanics Bridges, Roads and Tunnels	Conference room 2
11:30-14:30	Topics Development of New Perspective Technological Products Economics in Energy Sector Power Consumption Management Information and Measuring Technologies	Conference room 1
14:30-15:00	Lunch	Dining room
15:00-17:00	Topics Renewable energy Energy Efficient and Green Buildings Smart City	Conference room 2
15:00-17:00	Topics Fluid mechanics	Conference room 1
17:00-17:30	Coffee-break, Excursion on the key centers and laboratories of the Peter the Great Saint-Petersburg Polytechnic University (SPbPU)	Winter garden
17:30-19:00	Topics BIM (Building Information Modeling) Innovative Technologies in Environmental Management Sustainable Development of Arctic Region Waste management	Conference room 2
17:30-19:00	Topics Innovative Technologies for Technosphere safety Engineering Nets and Equipment ITER Technology	Conference room 1
19:00-21:00	Summing up the conference. Dinner	Winter garden

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November, 20

09:00-10:00	**Registration**	Hall of Research and Development building
10:00-10:20	**Opening**	Big conference hall
10:20-10:40	**Keynote speaker** Pietro Zunino, Professor, Director of Department, University of Genoa, Italy. Feasibility of mini combined cycles for naval applications	Big conference hall
10:40-11:00	**Keynote speaker** Anatolijs Borodinecs, Professor, Dr.sc.ing., Department of Heat and Gas technology, Institute of Heat, Gas and Water technology, Riga Technical University, Latvia. 3D scanning data use for modular building renovation	Big conference hall
11:00-11:30	**Coffee-break**	Winter garden
11:30-14:30	**Topics** **Building Materials and Products** **FEM and Structural Mechanics** **Bridges, Roads and Tunnels**	Conference room 2

1. Temperature action in analysis of thermal stressed state of massive concrete and reinforced concrete structures - *Aleksandra Makeeva, Aleksandra Amelina, Kirill Semenov and Yuriy Barabanshchikov*
2. Investigation of the properties of water absorption of the Crimean limestone treated stone-strengthening composition Oxal NK100 - *Elena Korneeva, Sabri Mohanad Muayad Sabri*
3. Soil-concrete for use in the 3D printers in the construction of buildings and structures - *Petr Iubin and Lubov Zakrevskaya*
4. The effect of Modification of Binders on Technological and Operational Properties of Composite Construction Materials - *Igor Handelsman, Lyubov Zakrevskaya, Galina Provatorova*
5. The temperature - insulative material that can work as the insulation and siding and decorative material - *Boris Aksenov, Oleg Stepanov, and ludmila Stefurak*
6. Amorphous fiber based on the Fe-B-C molten system for bulk reinforcement of concrete - *Artemiy Cherkashin, Yasmin Begich, Polina Sherstobitova and Oleg Tolochko*
7. The Estimation of Formaldehyde Concentration in Indoor Air - *M N Meshalkina, V A Sushnikov, and N S Kryzhova*
8. The fire resistant ceiling construction in a hydrocarbon fire - *Marina Gravit, Leonids Pakrastins, and Elena Golub*
9. Increase of fire resistance of reinforced concrete structures with polypropylene microfiber - *Marina Gravit, Leonids Pakrastins, and Elena Golub*
10. Fine-grained concrete with combined reinforcement by different types of fibers - *Sergey Klyuev, Alexander Klyuev, and Nikolai Vatin*
11. Research of professional suitability in construc-tion by the noise factor - *Lilia Kireeva, Tatiana Kaverzneva, Dmitriy Tarkhov, Natalia Belina*

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12. On the issue of personnel management in high-latitude construction - I.*S. Inzhutov, S. P. Amelchugov, O.S. Nikitina, M.L. Berseneva*
13. Building security in the artic region of eastern Siberia - *S.P. Amelchugov, O.V. Gofman, O.S. Mitskevich, E.V. Danilovich*
14. Thermal - insulation material for frame panels with an internal non-metallic layer - *Boris Aksenov, Oleg Stepanov, and Ludmila Stefurak*
15. The strength of welded structures at low climatic temperatures - *Sergey Sokolov, Ivan Vasilyev, and Konstantin Manzhula*
16. Analysis of marking criteria for mesh adaptation in Cosserat elasticity - *Maria Churilova*
17. Thermal cracking resistance of stacking concrete blocks - *Albina Shaibakova, Kirill Semenov and Yurij Barabanshchikov*
18. Accounting for the flexibility of nodes in the design of steel mesh dome - *Egor Kanaev, Daria Demidova, Sergey Zimin*
19. Finite elements apparatus in thin-walled rods dynamics problems - *Vladimir Rybakov, Stanislav Dyakov, Daniil Sovetnikov, Artur Azarov and Sergey Ivanov*
20. Lightweight steel concrete structures slab panels load-bearing capacity - *Vladimir Rybakov, Anatoly Seliverstov, Denis Petrov, Andrei Smirnov and Anna Volkova*
21. Influence of masonry adhesion on mechanical performance of arches-walls - *Vladimir Bespalov and Marina Semenova*

11:30-14:30	**Topics** **Development of New Perspective Technological Products** **Economics in Energy Sector** **Power Consumption Management** **Information and Measuring Technologies**	Conference room 1

1. Development of technology for production of fire-resistant nanocomposite constructional rebar and structural elements based on it - *Andrey Ponomarev, Daria Steshenko, Aleksandr Rassokhin*
2. Estimation of absolute deformations by changes in distances between the reference points and deformation marks - *Olga Tsareva, Ivan Dmitriev, Yuriy Kornilov*
3. Analysis of the velocity diagrams of impellers of centrifugal compressor stages after the preliminary design - *Aleksandr Drozdov and Alexey Rekstin*
4. Modeling the gas-dynamic characteristics of the low-flow and mid-flow model stages for an industrial centrifugal compressor - *Aleksey Borovkov, Igor Voynov, Aleksandr Kirillov and Aleksandr Drozdov*
5. Investigation of the influence of the number of vanes on the performance of a rotary vane compressor - *Andrey Kotlov, Leonid Kuznetsov and Boris Hrustalev*
6. Influence of compressible medium on the operation of a reciprocating compressor - *Andrey Kotlov, Leonid Kuznetsov and Boris Hrustalev*
7. Thermodynamic analysis of design and part-load operation of a novel waste heat recovery unit - *Aleksandr Sebelev, Aleksandr Kirillov, Gennadii Porshnev, Kirill Lapshin, and Aleksandr Laskin*
8. Effect of introduction of fullerene soot on mechanical properties of unidirectional thermoplastic tape - *Ilya Kobykhno, Dmytro Honcharenko, Vladimir Yadykin, Oleg Stolyarov, and Oleg Tolochko*
9. On accuracy estimation of ultrasonic thermometry technique with heated wire method - *Evgeny Smirnov, Andrey Yukhnev, Yakov Gataulin, Daria Sinitsyna, Alexander Berkovich and Dmitriy Tarkhov*
10. Reduction of power consumption during arc welding operation - *Liudmila Sakhno , Olga Sakhno, Vitaliy Boronin, Elena Kochetkova, Chen Hao*

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11. The state of modern heat power engineering and increasing the economic efficiency of heat supply - *Tatiana Kharlamova and Ksenia Osipova*
12. Gradient heat flux measurement as monitoring tool for the diesel engine - *Vladimir Mityakov, Andrey Mityakov, Artem Vintsarevich, and Daniil Gerasimov*
13. Determination of the beginning the Steady-State for controlled processes in monitoring systems with limited resources - *Leontiev Vladimir, Sorokin Alexander, Saradzhishvili Sergey*
14. Analog-to-digital conversion that allows to increase the dynamic range a standard ADC using the properties of electrical signals - *Stanislav Gritsutenko*
15. Applicability of a Fast Fourier Transform for a harmonic analysis - *Stanislav Gritsutenko, and Nikolay Korovkin*
16. Analysis of crystallographic orientation influence on thermal fatigue with delay of the single-crystal corset sample by means of thermo-elasto-visco-plastic finite-element modeling - *Savikovskii Artem, Semenov Artem, Getsov Leonid*

14:30-15:00	Lunch	Dining room
15:00-17:00	**Topics** **Renewable energy** **Energy Efficient and Green Buildings** **Smart City**	Conference room 2

1. Cooling of a battery pack of a car, working on renewable energy - Ivan Kasatkin and Mikle Egorov
2. Influence of heat pumps inclusion in deaeration scheme of heating network make-up water on the operating modes of the TPP - Irina Anikina
3. Methodical approaches to energy supply with usage of renewable energy sources on objects of transport infrastructure of federal importance - V.M. Shestakov, O.V. Novikova, A.S. Melnichenko, A.D. Luchnikova
4. Investigation of flow and heat transfer at the circular fins - V. Yu. Mityakov, A. A. Gusakov, V. V. Seroshtanov, M. A. Grekov
5. Evaluation of the effectiveness of heat pumps for the formation of microclimate in the greenhouse - Tretyakova Polina
6. Simulation of the joint effect of rotor-stator interaction and circumferential temperature unevenness on losses in the turbine stage - Nicolay Kortikov
7. The overstory of existing buildings with energy efficiency light-weight walls - Mikhail Petrichenko, Vitaly Sergeev, Darya Nemova, Evgeny Kotov, Darya Tarasova1, Anna Nefedova, Anatolijs Borodinecs
8. Study of condensation at the surfaces of tube with gradient heat flux measurement - S. Z. Sapozhnikov, V. Yu. Mityakov, A. Yu. Babich, and E. R. Zainullina
9. Assessment of rainwater harvesting for domestic water supply in palestinian rural areas - Nidal Mahmoud, William Hogland, Michael Sokolov, Vasily Rud, and Nikita Myazin
10. Economical aspects of water-mist assisted air-cooled chillers usage in the temperate climate - Arturs Brahmanis, Anatolijs Borodinecs, Jelena Tihana, Jurgis Zemitis and Daria Monastyreva
11. Energy-saving irrigation management - Sergey Andreev, Vladimir Zaginaylov, Andris Matveev
12. Hardware base and experimental potential of a smart building prototype - *Arina Mokhireva, Polina Loginova, Ekaterina Glebova and Vladimir Bespalov*
13. Graphic-analytical method in architectural assessment urban visual environment - *Daria Glukhova, Julia Katilova, and Anastasia Krupina*

15:00-17:00	**Topics** **Fluid mechanics**	Conference room 1

1. Computational study of influence of inflow port channel design on spark-ignition natural gas engine parameters - *Pavel Patsey and YUriy Galyshev*
2. Ansys cfx numerical study of stages centrifugal compressor with low-flow rate coefficient - *Aleksey Yablokov, Ivan Yanin, Aleksey Danilishin, and Anatoliy Zuev*

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3. Some problem of upgrading of centrifugal compressors - *A.V. Zuev, N.I. Sadovskiy, L. Ya. Strizhak* 4. Implementation of the mechanistic wall boiling model in IC engine cooling gallery simulation - *Oleg Abyzov, Yuri Galyshev, Andrey Metelev* 5. The choice of key geometric parametrs in the numerical optimization of centrifugal compressor Impellers - *Vladimir Neverov, Yuri Kozhukhov, Sergey Kartashov, and Vyacheslav Ivanov* 6. Fluid mechanics tests of separator-reheater turbines - *Mikle Egorov* 7. Surge protection system development in centrifugal compressor with and indicative method using numerical simulation of unsteady processes and analysis of pressure fluctuation signals - *Alexandr Lebedev, Lyubov Gileva, Alexey Danilishin and Mikhail Sokolov* 8. Verification of the CFD calculation for the centrifugal Ccompressor medium flow model stages with the help of supercomputer - *Lyubov Gileva, Sergey Kartashov, Anatoliy Zuev and Vyacheslav Ivanov* 9. Design criteria for novel supersonic nozzles with high pitch-chord ratio - *Maksim Smirnov, Aleksandr Kirillov, Kirill Lapshin, Gennadii Porshnev, and Aleksandr Laskin* 10. Numerical simulation of electohydraulic processes - *Viatcheslav S. Mamutov, Alexander V. Mamutov*		
17:00-17:30	**Coffee-break, Excursion on the key centers and laboratories of the Peter the Great Saint-Petersburg Polytechnic University (SPbPU)**	Winter garden
17:30-19:00	**Topics** **BIM (Building Information Modeling)** **Innovative Technologies in Environmental Management** **Sustainable Development of Arctic Region** **Waste management**	Conference room 2
1. Strengthening the historical constructions made of limestones by treating them with the composition material Oxal NK100 - *Mohanad Sabri, Elena Korneeva* 2. Ground improvement using an expandable polyurethane resin - *Mohanad Sabri* 3. Deformation monitoring using laser scanned point clouds and BIM - *Vladimir Badenko, Dmitry Volgin, and Sergey Lytkin* 4. To Calculation of Rectangular Plates on Periodic Oscillations - *Rustamkhan Abdikarimov, Dadakhan Khodzhaev D.A. and Nikolay Vatin* 5. Nonlinear Oscillations of a viscoelastic cylindrical panel with concentrated masses - *Dadakhan Khodzhaev, Rustamkhan Abdikarimov, and Nikolay Vatin* 6. Analysis of tools for assessing the terms of working environment of foreigners - *Anna Svetlakova, Tatiana Kaverzneva, Dmitriy Tarkhov, Natalia Belina* 7. Optimal triple configurations of stationary shocks - *M.V. Chernyshov , A.G. Tyapko* 8. Performance improvement of Arctic tracked vehicles - *R.Yu. Dobretsov, G.P. Porshnev, D.V. Uvakina* 9. Adsorption of rare earth elements using bio-based sorbents - *Arina Kosheleva, Iryna Atamaniuk, Natalia Politaeva, Kerstin Kuchta* 10. Influence of extraction conditions on the recovery lipids extracted from the dry biomass of duckweed, Lemna minor - *Yulia Smyatskaya, Natalia Politaeva, Amira Toumi, Lubov Olshanskaya* 11. Organization of Organic Waste Samples Tests for Biogas Potential Assessment - *Vladimir Maslikov, Vadim Korablev, Dmitry Molodtsov, Maria Ryzhakova, Alexander Chusov and Vladimir Badenko*		
17:30-19:00	**Topics** **Innovative Technologies for Technosphere safety**	Conference room 1

	Engineering Nets and Equipment **ITER Technology**	
1. Structural heterogeneities of tube steels taken into account in the development of contactless magnetometry of pipeline systems - *Boris Ermakov, Sergey Ermakov, Oksana Nikiforova and Nikita Shaposhnikov* 2. Nuclear qualification process for systems, structures and components - *Vladislav Gvozdev and Galina Kozinetc* 3. Phased evacuation algorithm for high-rise buildings - *Marina Gravit, Ivan Dmitriev and Kirill Kuzenkov* 4. Validation & Verification context for NPP design and construction - *Vladislav Gvozdev and Galina Kozinetc* 5. Securuty of construction sites: risk-management - *S.V. Deordiev, M.A. Plyasunova, V.G. Kudrin* 6. Experimental study of heat transfer intensity - *Natalya Vladimirovna Rydalina, Elena Olegovna Antonova, and Vladimir Anfisovich Davletbaev* 7. Systems of management of the water-conducting economy of cities (based on the example of Donbass) - *Viktor Maslak, Nadiya Nasonkina, Svetlana Antonenko, Marina Gutarova, Alyona Tryakina and Pavel Bereza* 8. Thermodynamic analysis of a condensing evaporator in an evaporative gas turbine cycle - *Aleksi Mankonen, Juha Kaikko, Esa Vakkilainen, Vitaliy Sergeev* 9. Feasibility of mini combined cycles for naval applications - *Dario Barsi, Carlo Costa, Francesca Satta, Pietro Zunino, Vitaly Sergeev* 10. Reconstruction of the transformer theory - *Mansur Shakirov* 11. Operation experience of solar power plants connected to the Russian distributed grid - *Lev Koshcheev, Andrei Lisitsyn, Evgeniy Popkov* 12. Influence of the soil electrical conductivity in the area of the underground pipeline on energy efficiency of the cathodic protection - *V.G. Kiselev, A.A. Kalyutik, E Rouzich* 13. Testing of the SOLPS-ITER code at Globus-M2 spherical tokamak with detached divertor - *Daria Sorokina, Ilya Senichenkov, Elena Vekshina, Vladimir Rozhansky* 14. SOLPS-ITER modeling of beryllium trace impurity in ITER - *Sergei Olegovich Makarov, Elizaveta Gennad'evna Kaveeva*	
19:00-21:00	**Summing up the conference** **Dinner**	Winter garden

List of poster presentation of the International Scientific Conference "EECE-2018"
(Main hall of the Research and Development Building. Time: 14:00-19:00)

November, 20

Article	Authors	Topic
Wastewaters of meat-processing enterprise: assessment of genotoxic potential	O.B. Ivanchenko, R.E. Khabibullin, R. Bhat	Waste management
Optimization of the process of anaerobic-aerobic purification of waste waters of food production using the spatial separation of stages	Rustem Khabibullin , Olga Ivanchenko, Andrey Petrov, R. Bhat	Waste management
Sorption properties of materials based on residual biomass	Yulia Smyatskaya, Natalia Politaeva, Arina Kosheleva, Elena Taranovskaya	Waste management
Optimization of parameters of alcohol fermentation of xylose-containing inedible substrates using the yeast Pachysolen Tannophilus	Yu.G. Bazarnova, O.I. Bolotnikova, N.P. Michailova, Jing Pu	Waste management
Smart Concept expansion from local to city scale	Anatolijs Borodinecs, Aleksandrs Korjakins, Aleksandrs Zajacs, and Anna Iufereva	Smart City
Investigation of the wind generator blades material resistance to the lightning current action	Yuri Adamyan, Sergey Krivosheev and Tatyana Minevich	Renewable energy
The simulation model for a flood management by flood control facilities	Roman Davydov, Valery Antonov, Dmitry Molodtsov, Alexey Cheremisin and Vadim Korablev	Renewable energy
Modes of operation and design features of pulse cables for the ITER project	M. Doronin, G. Greshnyakov, N. Korovkin	ITER Technology
Control of air pollution caused by vehicular emissions	Eliza Gumerova, Olga Gamayunova	Innovative Technologies in Environmental Management
The development of a new method for making justified decisions by municipal authorities in the management of territories on the basis of the results of the environmental express-control of the state of various media	Egor Rukin, Angelina Moroz, Konstantin Smirnov, Vadim Davydov, and Victoria Yushkova	Innovative Technologies in Environmental Management
Fourth industrial revolution and the paradigm change in engineering education	Rustem Sakhapov, Svetlana Absalyamova	Innovative Technologies in Environmental Management
Optimal regular reflection of shock and blast waves	M.V. Chernyshov , A.G. Tyapko	Innovative Technologies in Environmental Management
Low pressure water-mist nozzle with a swirl worm screw inserts	Nadezhda Kropotova, Alexander Arakcheev, Leonid Tanklevskiy, Anton Tanklevskiy	Innovative Technologies for Technosphere safety

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Comparison of technical-economic performance of traditional and innovational sprinkler extinguishing units	Kseniia Zorina, Maria Vasilieva, Igor Babikov, and Anton Tanklevskiy	Innovative Technologies for Technosphere safety
The application of pesticides and mineral fertilizers in agriculture	Roman Davydov, Michael Sokolov, William Hogland, Alexey Glinushkin and Artem Markaryan4	Innovative Technologies for Technosphere safety
New fire retardant compositions for fire-resistant automatic curtains	Maria Nikitina, Andrey Ustinov, Viktoria Kiseleva and Igor Babikov	Innovative Technologies for Technosphere safety
Methods of instrumental health check smoke detectors	Zemlyansky D.S., Babikov I.A., Dubov S.O., Tanklevsky L.T.	Innovative Technologies for Technosphere safety
Some Aspects of the phytopathogenic fungi that cause root rot grain crops on Cereals of Russia	Nadezhda Grebenikova, Alexander Korshunov, Vasily Rud', Ivan Savchenko and Marcia Marques	Innovative Technologies for Technosphere safety
The enhancement of operating properties of intumescent fire-protective compositions	Andrey Ustinov1, Olga Zybina, Anastasia Tomakhova and Sergey Pavlov	Innovative Technologies for Technosphere safety
Permissible parameters for the circulation rate of the sludge mixture in airlift reactor-clarifier with suspended layer	Viktor Nezdoiminov, Dmitrii Zavorotnyi, Vitalii Rozhkov and Pavel Deminov	Innovative Technologies for Technosphere safety
Estimation of evacuation time with elevator application in high-rise buildings	Marina Gravit, Ivan Dmitriev, and Kirill Kuzenkov	Innovative Technologies for Technosphere safety
Environmental express monitoring of territory and water bodies at various stages of construction and improvement	Nikita Myazin, Yuri Neronov, Valentin Dudkin, Vadim Davydov, and Victoria Yushkova	Innovative Technologies for Technosphere safety
Information system for seamless positioning inside of objects under construction	Vladimir Badenko, Alexandr Fedotov, and Marina Bolsunovskaya	Information and Measuring Technologies
Study of the aerodynamic regime of the cooling system of the foundations of buildings on the filling soil in the conditions of the Far North	Victor Ivanov , Anastasiya Ivanova	Information and Measuring Technologies
Analysis of gas dynamics in a single-phase two-channel plasma torch at cold blowing and considering the interaction with the electric arc	Nikita Obraztsov, Vladimir Frolov, Mikhail Korotkikh and Ludmila Ushomirskaya	Fluid mechanics
Analysis and modernization of real gas thermodynamic calculation for turbocompressors and detander units	Aleksey Aksenov, Yury Kozhukhov, Mihail Sokolov, and Anatolei Simonov	Fluid mechanics
A one-dimensional three-fluid model of two-phase steady-state dispersed-annular flow	Evgeniy Avdeev, Sergei Bulovich, Alexander Pletnev and Victor Talalov	Fluid mechanics
Vortex methods in CFD problems	Boris Grigor'ev, Artem Eliseev, Uwe Iben, and Sergey Lupuleac	Fluid mechanics
Development, research and metrological analysis of the measuring channel of a fiber-optic sensor	Elena Badeeva, Elena Shachneva, Alexandr Udalov and Tatiana Murashkina	Fluid mechanics

for fluid flow parameters used in information-measuring systems		
Experimental studies and numerical simulation of coolant hydrodynamics in the inlet area of nuclear reactor fuel assembly	Sergei Dmitriev, Alexander Khrobostov, Maksim Legchanov, Alexander Dobrov	Fluid mechanics
Studies of turbulent coolant mixing flows in the new generation reactors	Sergei Dmitriev, Alexander Khrobostov, Maksim Legchanov, Anton Ryazanov	Fluid mechanics
Dynamics of diffusion jet combustion in an ejection burner	Oleg Evdokimov, Alexander Guryanov, Sergey Veretennikov, Marina Guryanova	Fluid mechanics
Numeric modeling and estimating the performance characteristics of a pneumatic driven high pressure pump	Nikita Zhurkin, Anatolij Donskoj and Aleksandr Zharkovskij	Fluid mechanics
Advantages of modeling ABL properties to determine wind loads on structures	Evgenii Khrapunov and Sergei Solovev	Fluid mechanics
Determination of non-uniform settlements caused by decompression of soil in the excavation	Viktor Yarkin, Anna Kukhar	FEM and Structural Mechanics
Experimental moment resistance of rectangular hollow section T joints	Marsel Garifullin	FEM and Structural Mechanics
Experimental study of alternating magnetic field in laminated ferromagnetic core	Yuriy Adamyan, Sergey Krivosheev and Sergey Magazinov	Engineering Nets and Equipment
Mathematical simulation of operation of multi-chamber arrester for lightning protection of power lines: calculation of thermophysical properties of nonequilibrium plasma	Dmitriy Ivanov, Vladimir Skornyakov, Irina Savelieva, Mikhail Korotkikh, Vyacheslav Shestakov, Dirk Uhrlandt, and Georgy Podporkin	Engineering Nets and Equipment
Centralized hot tap water systems calculation's specifics	Karina Tumanova, Anatolijs Borodinecs, and Ivan Dmitriev	Engineering Nets and Equipment
Adaptive control of housing and utilities infrastructure objects	Alexander Grimitlin, and Roman Krumer	Engineering Nets and Equipment
Operation experience of solar power plants connected to the Russian distributed grid	Lev Koshcheev, Evgeniy Popkov, Ruslan Seit	Engineering Nets and Equipment
The flywheel energy storage for cargo bic	Sergey Hoodorozhkov	Engineering Nets and Equipment
Admissibility assessment of external network based on experimental data equivalence method	Elena Nikolaeva, Alexej Jurgano	Engineering Nets and Equipment
Improving the efficiency of power boilers by cooling the flue gases to the lowest possible temperature under the conditions of safe operation of reinforced concrete and brick chimneys of power plants	Evgeny Ibragimov, Sergei Cherkasov	Engineering Nets and Equipment
Investigation of the characteristics of the container for storage of radioactive waste of nuclear power plants with uranium-graphite reactors	A.V. Ivshin , A.A. Kalyutik	Engineering Nets and Equipment

Optimization of the technological solutions for recharge and boron control system at the NPP for the project AES-2006	A.S. Ulasen , A.A. Kalyutik	Engineering Nets and Equipment
Obtaining the frequency characteristics of a generator, operating in a power system for tuning channels of stabilization of an automatic excitation controller	Nikita Filimonov , Alexey Yurganov	Engineering Nets and Equipment
Optimization of the level of thermal insulation of enclosing structures of civil buildings	Jurgis Zemitis, Maxim Terekh	Energy Efficient and Green Buildings
Management of energy efficient measures by buildings' thermorenovation	Jurgis Zemitis1, Maxim Terekh2	Energy Efficient and Green Buildings
SOFC power plant with circulating fluidized bed gasifier	Julia V. Volkova, Vladimir A. Munts, Dmitry B. Choynzonov, and Nikita S. Plotnikov	Energy Efficient and Green Buildings
Thermal properties of conventional and high-strength concrete	Tatiana Musorina, Alexsander Katcay, Mikhail Petrichenko and Anna Selezneva	Energy Efficient and Green Buildings
Feasibility study of the insulation of the enclosing walls of high-rise buildings	Olga Gamayunova, Mikhail Petrichenko, Tatyana Musorina, Eliza Gumerova	Energy Efficient and Green Buildings
Measurement of currents and voltages non-sinusoidal parameters in power supply systems with rectifier load	Valery Kuzmich Vanin, Alexandr Vitalyevich Bulychov, Maxim Georgievitch Popov, Olga Alekseevna Vasilyeva and Maria Alekseevna Shakhova	Energy Efficient and Green Buildings
About influence of non-sinusoidal current and voltage on the amount of the electric energy	Valery Kuzmich Vanin, Alexandr Vitalyevich Bulychov, Maxim Georgievitch Popov, Olga Alekseevna Vasilyeva, and Maria Alekseevna Shakhova	Energy Efficient and Green Buildings
The implementation of energy-service contracts in the Republic of Sakha (Yakutia) as a tool to reduce government spending: experience and prospects	Egor Slobodchikov, Lidiya Baisheva, Vladimir Syromyatnikov	Energy Efficient and Green Buildings
Simulation of induction heating technology for the production of seamless large diameter tees	Lilia Kireeva, Tatiana Kaverzneva, Dmitriy Tarkhov, and Natalia Belina	Development of New Perspective Technological Products
Numerical simulation of DC air plasma torch modes and plasma jet instability for thermal spraying technology	Iurii Murashov, Vladimir Frolov, Mikhail Korotkikh, and Ludmila Ushomirskaya	Development of New Perspective Technological Products
Non-stationary volume-adsorption model for pumping of vacuum chambers	Leonid Rozanov, Aleksandr Kirillov	Development of New Perspective Technological Products
Technological possibilities of plasma hardening	Mikhail Korotkikh, Ludmila Ushomirskaya, Vyacheslav Shestakov, and Dmitriy Ivanov	Development of New Perspective Technological Products
The phenomenon for the wood creep in the reinforced glued wooden structures	Svetlana Roshchina, Mikhail Lukin, Mikhail Lisyatnikov and Artem Koscheev	Building Materials and Products

Strength characteristics of foam concrete samples with various additives	Vladimir Rybakov, Anatoly Seliverstov, Denis Petrov, Andrei Smirnov	Building Materials and Products
Composite material based on the polyethylene terephthalate polymer and modified fly ash filler	Nikolai Zaichenko, and Vladislav Nefedov	Building Materials and Products
Eventological modeling of housing and communal services system	Sergey Amelchugov, Alexey Klimov, Oksana Mickevich, Olesya Nikitina	Building Materials and Products
Mathematical modeling of temperature fields and concrete strength during winter concreting of building structures	Alexey Mestnikov, Gavril Turantaev, Valeriy Fedorov	Building Materials and Products
Wall and partition products for low-rise buildings on the basis of gypsum with environmentally friendly natural filler	M.N. Safonova, A.S. Syromyatnikova, N.E. Ammosova, K.E. Filippova	Building Materials and Products
The effect of absorption process parametrs on its efficiency	Valeri Kiss, Aleksandr Evdokimov, Tatiana Kaverzneva, Dmitriy Tarkhov	Building Materials and Products
Asphalt granulate coating for roadsides	R.L. Sakhapov1, M.M. Makhmutov, R.V. Nikolaeva, M.H. Gatiatullin	Bridges, Roads and Tunnels
Ensuring the aerodynamic stability of the long-span bridges through studies in the wind tunnel	Evgenii Khrapunov and Sergei Solovev	Bridges, Roads and Tunnels