



CONFERENCE PROGRAM

November 19

Congress center of Peter the Great St. Petersburg Polytechnic University (29 A-F Build, Polytechnicheskaya str., St.Petersburg, Russia)

Time	Activity
14:00-15:00	Registration – Main hall
15:00-17:00	Excursion on the key centers and laboratories of the Peter the Great Saint-Petersburg Polytechnic University (SPbPU) – start from Main hall
15:00-18:00	Poster session – Main hall (The section of poster presentation is listed at the end of conference program)
17:00-19:00	Reception – Winter garden

November 20

Conference halls of the Ambassador Hotel (5-7 Rimsky-Korsakov str., Saint-Petersburg, Russia)

Time	Activity
09:00-09:45	Registration - Ambassador Hotel
09:45-10:00	Opening, Conference hall «Orion» <i>Vitaly Sergeev, Vice-rector for research, Dr.sc., Professor, corresponding member of Russian Academy of Sciences, Peter the Great Saint-Petersburg Polytechnic University</i> <i>Yuriy Lazarev, Director - Higher School of Industrial and Road Construction, prof., Peter the Great Saint-Petersburg Polytechnic University</i> <i>Evgenii Vdovin, Ph.D., Associate Professor, Vice Rector for Research, Head of the Department “Roads, Bridges and Tunnels”, Kazan State University of Architecture and Engineering</i> <i>Dr. Ricardo Alvarez, University of Chile</i>
10:00-11:30	Keynote Lecture, Conference hall «Orion» <i>Alessandro Bianchini, University of Florence «Trends, Prospects and R&D Directions for</i>

	<p>the Next Generation of Wind Turbines»</p> <p><i>Ricardo Alvarez, University of Chile «The Solar Energy Challenge in Chile»</i></p> <p><i>Anatolijs Borodinecs, Riga Technical University «Long-term space heating consumption projection methodology for residential, public and industrial buildings»</i></p>
11:30-12:00	Coffee break
12:00-14:00	<p><u>Presentations, Conference hall «Orion»</u></p> <p>TOPIC: Energy Efficient and Green Buildings</p> <ol style="list-style-type: none"> 1. <i>Milana Treshcheva, Dmitriy Treshchev and Daria Pozdeeva.</i> Applying heat pump to utilize municipal solid waste at St. Petersburg TPP 2. <i>Yuriy Sychev, Zimin Roman and Maxim Aladin.</i> The assessment of the series active filter efficiency in power supply systems of oil production enterprises 3. <i>Aleksandra Amelina, Olesya Averyanova, Pavel Amelin, Aleksandra Makeeva, Sergej Manovitskij and Ernest Ivanov.</i> Balancing fittings in a water heating system 4. <i>Emiliia Iakovleva and Daniel Guerra.</i> Mathematical modeling of parameters of solar modules for a solar power plant 2.5 MW in the climatic conditions of the Republic of Cuba 5. <i>Daria Batueva and Jaroslav Shklyarskiy.</i> The influence of external climatic factors on the accuracy of the forecast of energy consumption 6. <i>Vladimir Mityakov, Vladimir Seroshtanov, Alexey Vlasov, Vasily Suchok, Pavel Bobylev and Nikita Zhidkov.</i> Heat transfer and air flow near a pair of circular cylinders 7. <i>Emil Mannanov, Sergei Galunin and Alexey Shatunov.</i> Numerical modeling of induction heating systems with load of azimuthal periodicity 8. <i>Qiu Jisheng, Zhou Yunxian, Vatin Nikolay , Guan Xiao, Sultanov.</i> Effect of Physical and Chemical Properties of Coal Gangue on Mechanical Properties of Concrete under Different Geological Conditions 9. <i>Irina Vasileva, Darja Nemova, Evgenij Kotov and Nikolaj Vatin.</i> The use of aerogel in building envelopes 10. <i>Ekaterina Popova, Daria Zaborova, Ksenia Strelets and Roberta Kronka.</i> SWOT analysis for sustainable development of university campus in case study at WC2 University Network Symposium <p><u>Presentations, Conference hall «Sirius»</u></p> <p>TOPIC: Innovative Technologies for Technosphere safety</p> <ol style="list-style-type: none"> 1. <i>Vyacheslav Manokhin, Svetlana Sazonova, Sergey Nikolenko and Alla Zvyagintseva.</i> Flare emissions from asphalt plants 2. <i>Andrei Ustinov, Olga Zybina, Valeria Deineko, Mikhail Vasiliev and Wladimir Suprun.</i> Development of method for comparative assessment of charred intumescent layers adhesion and durability 3. <i>Olga Barysheva, Renat Sadykov, Yuri Khabibullin and Elizaveta Zheltukhina</i> Forecasting of an output of eco toxicants at thermal decomposition of chemical fuel 4. <i>Fedor Gomazov, Ilia Klochihin and Andrey Sherbakov.</i> Elimination of the consequences of an emergency situation at a fire and explosion hazardous facility with the presence of flammable liquids

	<ol style="list-style-type: none"> 5. <i>Maxim Polyukhovich, Vyacheslav Burlov and Victor Mankov.</i> Electric power supply management of the construction site in the interests of electrical safety assistance 6. <i>Tatyana Kaverzneva, Natalia Leonova and Marina Avdeeva.</i> Developing Individuals' Professional Qualities in the course of Technosphere Safety Specialists Training 7. <i>Margarita Antonova, Vyacheslav Yakovlev and Anastasia Scorokhodova.</i> Development of measures to protect the population and prevent pollution based on the study of the radiation background of the object 8. <i>Lialina Olga Aleksandrovna, Penner Yana Andreevna, and Senchenko Vladimir Aleksandrovich.</i> Visualization of the cargo orientation in space under movement by a tower crane in low visibility conditions 9. <i>Anton Byzov, Anastasia Pak and Darya Kuznetsova.</i> Analysis of the statistical correlation between the estimated value of individual risk and the hazard class of a hazardous production facility in the Russian Federation 10. <i>Anton Byzov, Anastasiia Telegina and Ivan Korotkiy.</i> Consequence assessment of explosions for fuel-air mixtures at hazardous production facilities <p><u>Presentations, Conference hall «Vega»</u></p> <p>TOPIC: Economics in Energy Sector</p> <ol style="list-style-type: none"> 1. <i>Seyed Hadi Ghazaie, Khashayar Sadeghi, Ekaterina Sokolova, Evgeniy Fedorovich and Amir Saeed Shirani.</i> Nuclear desalination in Iran, current status and perspectives 2. <i>Khashayar Sadeghi, Seyed Hadi Ghazaie, Ekaterina Sokolova, Evgeniy Fedorovich and Amir Saeed Shirani.</i> Thermo-economic Assessment of the Possible Desalination Processes for the Second Block of Bushehr Nuclear Power Plant 3. <i>Maksim Terekh, Darya Tretyakova, Nadezhda Morozova, and Jurgis Zemitis.</i> Cost and energy assessment of buildings thermal protection level 4. <i>Evgenii Zhukov, Dmitry Taymasov and Konstantin Menyayev.</i> Co-combustion of wood wastes and coal in furnaces with a vortex afterburning 5. <i>Anastasiia Tabakova, Olga Novikova, Natalya Yudina, Nadezhda Karuseva, Semen Livshits and Andrew Kotsubinski.</i> The impact of innovative technologies on consumers in the power supply market 6. <i>Nyemb Bekoume Suzanne and Novikova Valentinovna Olga.</i> The impact of small and medium-sized businesses in cameroon on the development of the energy system 7. <i>Konstantin Molchanov and Natalia Romasheva.</i> Conceptual approaches for building a balanced portfolio of projects in oil and gas companies in exploration and production sector 8. <i>Aleksandr Stoyanov.</i> Energy Complex of Municipality Exemplified by Luleå (Sweden) 9. <i>Aleksandrs Zajacsa, Tatjana Odinecaa, Anatolijs Borodinecsa.</i> Combined heat and power plant energy production under changing eu policy 10. <i>Anastasia Vasilenko, Dmitry Chernogorsky, Dmitry Strakhov and Leonid Sinyakov.</i> High-strength concrete eccentrically compressed elements
14:00-15:00	Lunch
15:00-18:00	<p><u>Presentations, Conference hall «Orion»</u></p> <p>TOPIC: Building Materials and Products</p> <ol style="list-style-type: none"> 1. <i>Vladimir Rybakov.</i> Condition load effect factor of profile steel in lightweight steel concrete structures

2. *Mary Shick Alshabab, Alexander Vysotskiy, Mikhail Petrichenko and Taysir Khalil.* BIM-based Quantity Takeoff in Autodesk Revit and Navisworks Manage
3. *Dmitry Korolkov, Alexander Chernykh, Marina Gravit.* Method for determining the residual resource of building structures by the terms of their operation
4. *Saurav Dixit, Satya N Mandal, Joseph V Thanikal and Kinshuk Saurabh.* Study of significant Factors affecting Construction Productivity using Relative importance index in Indian Construction Industry
5. *Polina Sherstobitova, Yasmin Begich, and Artemiy Cherkashin.* The application of amorphous fiber based on the Fe-B-C molten systems in order to reduce the percentage of floor slab reinforcement
6. *Varvara Kleshchevnikova and Svetlana Belyaeva.* Steel fiber for combined reinforcement of columns of a high-rise building
7. *Artem Sindalovskiy, Nikita Oparov, Oleg Krotov, Shukhrat Sultanov and Igor Pestryakov.* The effect of the plaster layer on the sound-insulating ability of enclosing structures made of hollow concrete stones
8. *Rashit Kayumov, Aivaz Gimazetdinov, Lenar Khaidarov and Anatoly Antonov.* Crack resistance criteria of massive concrete and reinforced concrete structures during the construction period
9. *Yulianna Demidova, Anna Dontsova, Vyacheslav Olshevskiy, Till Quadflieg and Oleg Stolyarov.* Creep life prediction of polyester reinforcing geogrids in the construction of embankments
10. *Artyom Pavlov, Kirill Semenov, Yriy Barabanshikov, Inna Prohorova, Yulia Son and Nikolai Zaichenko.* Pipe cooling of concrete masses
11. *Gravit M.V., Serdjuk D., Yuminova M.O.* SBI-method for determining the fire-technical characteristics of wooden structures with fire protection
12. *Nikita Borisov and Volodymyr Korsun.* High-performance concrete in the supporting structures of high-rise buildings
13. *Arturs Proskurovskis, Anna Tarasova, Levon Nazinyan, Vladimir Bepalov, Svetlana Belyaeva and Aleksandrs Korjakins.* Thermal insulation for fixed formwork from expanded-clay concrete blocks
14. *Tatyana Kaverzneva, Inna Nikolaeva and Jamila Idrisova.* Reliability of Billboards Fixing Constructions in the Operational Period

Presentations, **Conference hall «Sirius»**

TOPIC: Engineering Nets and Equipment, Fluid mechanics Renewable energy, Power Consumption Management, Waste management

1. *Yuri Galerkin, Aleksandr Drozdov and Olga Solovyeva.* Development of mathematical model of Universal modeling method for centrifugal compressors calculation
2. *Aleksandr Nikiforov, Alexei Kuchumov, Sergei Terentev and Evgeniy Petukhov.* Simulation of gas-dynamic characteristics of a centrifugal compressor vane diffuser using neural networks
3. *Aleksey Borovkov, Igor Voinov, Yuri Galerkin, Aleksandr Nikiforov, Maksim Nikitin and Olga Solovyeva.* Issues of gas dynamic characteristics modeling using the example of the centrifugal compressor model stage
4. *Valery Petrushchenkov and Michail Shcheglov.* About possibility of replacement of saturated steam for hot water at circulating heating of fuel oil
5. *Oybek Vokhidov, Lyudmila Lutsenko, Shukhrat Sultanov and Dilshod Bazarov.* Restrictions applied when solving one-dimensional hydrodynamic equations
6. *Evgenia Varsegova, Elena Dresvyannikova, Lilia Osipova and Renat Sadykov.* Damage areas during emergency depressurization of a gas pipeline

7. *Svyatoslav Khorobrov, Vitaly Sergeev, Vladimir Kalaev and Mikhail Petrichenko.* Parametric CFD Analysis of Hydraulic Transient in a Pipe with Air Damper
8. *Ivan Kasatkin, Mikle Egorov and Nikolay Rakov.* Numerical investigation of a moisture wave-type vane separator
9. *Ilkhom Makhsuomov, Irina Kirpichnikova.* Study of the Operation of Solar Modules Using Holographic Thermal Protection
10. *Fyarid Abdrazakov, Andrey Rukavishnikov, Andrey Povarov and Yuri Truschin.* Intensification of reclamation production by reducing the maintenance load on irrigation canals
11. *Aleksandr Skamyin and Oleg Vasilkov.* Static load characteristics in the presence of high harmonics
12. *Aleksandr Lutonin, Andrey Shklyarskiy and Yaroslav Shklyarskiy.* Operation modes and control algorithms of anisotropic permanent magnet synchronous motor (IPMSM)
13. *Olga Barysheva, Yuri Khabibullin and Aida Mukhametzianova.* High-temperature processing of municipal solid waste

Presentations, **Conference hall «Vega»**

TOPIC: FEM and Structural Mechanics, Bridges, Roads and Tunnels

1. *Mikhail Kirsanov, Dmitrijs Serdjuks and Karina Buka-Vaivade.* Analytical dependence of deflection of the lattice truss on the number of panels
2. *Alexander Gogin and Izmail Kantardgi.* Numerical study of the floating gravity base structure mooring
3. *Vladimir Rybakov, Konstantin Deriugin, Marina Pushkarskaya and Karolina Urmanceva.* Facade systems modal analysis in consideration its own dynamic characteristics of the frame
4. *Vladimir Rybakov, Daniil Sovetnikov and Vladislav Jos.* Cross-sectional warping of thin-walled rods at plane frame joints
5. *Alexey Mentishinov, Vladimir Tarasov, Anton Radaev and Vladimir Lalin.* Substantiation of characteristics of the constructive solution of the vibroisolated foundation of the turbogenerator set for protection against seismic influence
6. *Andrei Mutovkin, Elizaveta Zdanchuk, Vladimir Lalin, Alexander Galyamichev and Selcuk Dogru.* DETERMINATION OF WIND LOAD ON THE FACADES OF A COMPLEX OF BUILDINGS
7. *Iana Utimisheva, Vladimir Lalin, Valentin Nenashev and Roman Orlovich.* Buckling of cantilever beam loaded by potential following moment
8. *Gennady Shmelev, Irik Khairullin, Anatoly Antonov and Aivaz Gimazetdinov.* Influence of damping properties of the person on decrement of attenuation of a flooring of spatially-rod grandstands
9. *Semenov K., Kukolev M., Zaichenko N., Popkov S., Makeeva A., Amelina A. and Amelin P.* Unsteady temperature fields in the calculation of crack resistance of massive foundation slab during the building period
10. *Rashit Kayumov, Aivaz Gimazetdinov, Lenar Khaidarov and Anatoly Antonov.* Static analysis of spatial rod structures considering imperfections in the fastening of the floorings
11. *Milena Telegina, Diana Kirillova, Lazarev Yuriy and Vyacheslav Petrov.* Temperature condition of asphalt concrete during road usage
12. *Nikolay Mostovsky, Polina Mostovskaya, Anton Radaev and Anatoliy Yugov.* Procedure for the formation of the optimal transportation route with application of stochastic programming tools

	<p>13. <i>Aytug Artun, Vladimir Badenko and Anton Radaev</i>. Minimizing earthwork volumes by optimizing vertical alignment with linear programming algorithm</p> <p>14. <i>Kirill Popov, Anton Radaev and Anatoliy Yugov</i>. Procedure for determination for the characteristics of the construction machinery park at various stages of building</p> <p>15. <i>Lenar Mavliev and Evgenii Vdovin</i>. Structure of road soil cement compositions modified by complex additive based on organosilicon compounds and electrolytes</p>
18:00-18:30	Coffee break
18:30-20:00	<p>Keynote Lecture, Conference hall «Orion» <i>Alexandr Gorshkov</i>, «Technical and economic comparison of modern facade systems» (rus)</p> <p>Presentations, Conference hall «Orion» TOPIC: BIM (Building Information Modeling), Smart City, Information and Measuring Technologies</p> <ol style="list-style-type: none"> 1. <i>Valentina Samsonova, Aleksandra Lipatova, Vladimir Badenko, Dmitriy Volgin and Sergey Lytkin</i>. Airborne LIDAR data processing for Smart City modelling 2. <i>Boris Kavalerov, Grigory Kilin and Evgeniy Zhdanovskiy</i>. Software-modeling complex for automation tests of low and medium power turbo electric tests 3. <i>Anna Muratova and Irina Ptuhina</i>. BIM as an instrument of a conceptual project cost estimation 4. <i>Gennady Shmelev, Arthur Ippolitov, Ilshat Galimullin and Lenar Khaidarov</i>. Influence of permeability of mesh banners on wind loadings 5. <i>Nikita Belousov, Ekaterina Glebova, Levon Nazinyan, Vladimir Bespalov, Arina Mohireva and Ali Aminimalsharei</i>. Indirect soil parameters for monitoring growth karst formations 6. <i>Alina Karimova, Marina Gravit, Evgenia Fedotova, Ivan Dmitriev and Nikolay Klimin</i>. Fire resistance evaluation of tempered glass in software ELCUT <p>Presentations, Conference hall «Sirius» TOPIC: Development of New Perspective Technological Products</p> <ol style="list-style-type: none"> 1. <i>Olga Tsareva, Nikolai Pshchelko, Vladimir Glazunov and Anatoliy Yugov</i>. Separation of relative deformations of buildings from a general displacement vector of deformation marks 2. <i>Victor Il'inykh</i>. Evaluation of quality parameters of conical profile compounds in nodes of multi-purpose machines 3. <i>Elina Salmanova, Lyasan Araslanova, Iren Tuktarova and Alexey Nazarov</i>. Development of technology of disinfectants based on soda production waste 4. <i>Evgeniy Zhuravlev, Dmitry Chugunkov and Galina Seyfelmyukova</i>. Improving the acoustic efficiency of laminated dissipative noise silencers for boiler gas-air paths 5. <i>Alexsei Maistro, Pavel Greshnikov, Andrey Durnev, Kirill Kiselev, Semyon Maltsev, Mikhail Kadyrov, Alexander Pereverzev, Egor Starobinskii and Pavel Buldakov</i>. Design and construction of the Cadet-M unmanned marine platform using alternative energy 6. <i>Dmitry Chirkov and Eduard Timashev</i>. Efficiency of submersible plunger pump linear motor 7. <i>Yuri Gulkov, Anna Turysheva and Irina Vinogradova</i>. Producing steels with special properties under conditions of using a jet heat treatment system

	<p>Presentations, Conference hall «Vega»</p> <p>TOPIC: Innovative Technologies in Environmental Management</p> <ol style="list-style-type: none"> 1. <i>Andrey Chernov, Dmitry Chupiy and Maria Butakova.</i> Method for measuring locomotive diesels characteristics for environmental monitoring tasks 2. <i>Lyaysan Araslanova, Elena Kuznetsova, Iren Tuktarova and Alexey Nazarov.</i> Development of oil product contaminated wastewater treatment technology using sorbents based on mining waste 3. <i>Shanshan Van, Alexey Cheremisin, Alexey Glinushkin, Victor Krasnoshchekov, Roman Davydov and Victoria Yushkova.</i> Application of new architectural and planning solutions to create an ecological city (on the example of Shanghai, China) 4. <i>Igor Fomenko, Daria Shubina, Denis Gorobtsov and Olga Sirotkina.</i> Modelling of permafrost soils condition at the water intake facility foundation (the Taas-Yurekh river, Yakutia) 5. <i>Alexandra Kopteva, Vladimir Koptev, Vadim Malarev and Taisiya Ushkova.</i> Development of a system for automatic control of oil transportation in the Arctic to prevent paraffin deposits in pipelines 6. <i>Vyacheslav Vishnevetskiy and Vladislav Popruzhniy.</i> Open access system of life quality management on the basis of spatial modelling of pollution in the coastal areas
20:00-20:10	<p>Summing up the conference</p> <p><i>Vitaly Sergeev, Peter the Great Saint-Petersburg Polytechnic University</i></p>
20:10-21:30	<p>Dinner at the Ambassador Hotel</p>

List of poster presentation

November 19

15:00-16:00

1. *Aleksejs Prozuments, Anatolijs Borodinecs, Tatjana Odineca and Darja Nemova.* Long-term buildings' space heating estimation method
2. *Vladimir Bukhartsev and Thu Thao Dang.* A new approach for designing cantilever sheet pile walls in conditions of flooded soils
3. *Minh Tuan Le, Ilkhomzhon Sadrievich Shukurov, Lola Ilkhomovna Shukurova and Aleksandra Dmitrievna Dmitrieva.* A study case of mathematical calculation of urban heat island intensity based on urban geometry
4. *Jarostaw Rajczyk, Marlena Rajczyk, Yuriy Lazarev, Paweł Rajczyk and Diana Kirillova.* A new way of shaping the structure of elastomer bearings used in construction
5. *Kirill Egorov, Bronislav Novitskiy, Nikolay Malastowski, Michail Kolosov and Larisa Stepanova.* Numerical prediction of comfort parameters in an ice rink arena
6. *Tu Quang Trung Le, Vladimir Lalin and Anastasia Vavilova.* A method of accounting for higher vibration modes in structural dynamics problems
7. *Petr Liubin, Andrei Gavrilenko, Lubov Zakrevskaya and Igor Gandelsman.* Fortification of building's foundations with eco-friendly materials as means to safer and more comfortable urban environment
8. *Olesia Averianova and Jelena Tihana.* Method of determining the energy efficiency of Heating Ventilation and Air Conditioning System with HP included in a water loop
9. *Olga Gamayunova and Daria Morozova.* Cost effectiveness of the Smart Home system in civil engineering
10. *Olga Gamayunova, Tatyana Musorina and Mikhail Petrichenko.* Warming of panel houses in various climatic zones
11. *Olga Gamayunova, Anton Radaev and Mikhail Petrichenko.* Predictive model of the dependence of the cost of insulation on thermal characteristics
12. *Aleksey Gribov, Tatyana Glebova and Svetlana Roschina.* Restoration of destructive wood in supporting zones of wooden beams
13. *Svetlana Roschina, Mikhail Lukin and Mikhail Lisyatnikov.* Compressed-bent reinforced wooden elements with long-term load
14. *Marina Gravit and Ivan Dmitriev.* Fire resistance of loaded I-section column from light gauge steel thin-walled profiles
15. *Anton Radaev and Elena Korneeva.* Method for forecasting pollution of urban
16. *Anna Teliatnikova, Sviatoslav Fedorov, Iurii Stolbikhin and Elena Korneeva.* Prediction of hydrogen sulfide emission from an energy dissipation chamber and assessment of its distribution in the ambient air
17. *Vladimir Rybakov, Oksana Zhuvak, Polina Verigo, Faina Sergeeva, Dmitrii Verkhushkin, Aleksandr Riabov and Andre Hoffmann.* Experimental substantiation of thermomechanical characteristics of coupling and welded joints in bent reinforced concrete structures
18. *Svyatoslav Khorobrov, Daria Nemova, Daniil Gorbатов, Vladimir Kalaev and Eugene Kotov.* Free-stream turbine startup under load
19. *Natalia Rydalina, Oleg Stepanov, Boris Aksenov and Elena Antonova.* Heat-exchange units with porous inserts
20. *Victor Belko, Ivan Ivanov, Andrey Plotnikov and Valery Belanov.* Energy characteristics of self-healing process in metallized film capacitors

16:00-17:00

21. *Anzhelika Tcyrulnikova, Larisa Popova, Sergey Vershilov, Julia Bazarnova, Ekaterina Aronova and Ludmila Osetrova.* Allyl type monomers for hard surface coating protection
22. *Maxim Polyukhovich, Vyacheslav Burlov and Victor Mankov.* Electric power supply management of the construction site in the interests of electrical safety assistance
23. *Artem Blinov, Nikolay Malastowski and Leonid Myagkov.* Development of the model for diesel engine catalytic converter

24. *Vladimir Mityakov, Vladimir Seroshtanov, Ksenia Strelets and Elisaveta Reich.* Experimental investigation of the flow around a circular cylinder
25. *Vyacheslav Vishnevetskiy and Vladislav Popruzhniy.* Open access system of life quality management on the basis of spatial modelling of pollution in the coastal areas
26. *Vladimir Markov, Victor Furman, Sergey Plakhov and Bowen Sa.* Optimization of parameters for diesel shaft speed control system
27. *Vladimir Markov, Vyacheslav Kamaltdinov, Larisa Bykovskaya and Bowen Sa.* Performance of a diesel engine running on mixed biofuels with the addition of gasolines
28. *Roman Davydov, Valery Antonov, Sergey Makeev, Yury Batov, Valentin Dudkin and Nikita Myazin.* New high-speed system for controlling the parameters of a nuclear reactor in a nuclear power plant
29. *Yuri Kozhukhov and Vyacheslav Ivanov.* Head Math Model For The Low-Flow Impellers Of The Centrifugal Compressors
30. *Anna Kapranova, Anton Lebedev, Sergey Neklyudov and Alexander Melzer.* The ensemble-averaged characteristics of the bubble system during cavitation in the separator
31. *Phuong Nguyen, Sergey Dudkin and Kong Chenzai.* Automatic diagnostic of transmission lines based on ultraviolet inspection
32. *Ekaterina Gryaznova, Vadim Davydov, Nadya Grebenikova, Valentin Dudkin, Danila Puz'Ko and Vasilii Rud.* Methodology for assessing the environmental characteristics of various methods of generating electricity
33. *Varvara Fadeenko, Illarion Fadeenko, Vadim Davydov, Vladislav Reznik, Vladislav Kruglov, Angelina Moroz, Nikita Popovskiy, Valentin Dudkin, Denis Nikolaev and Vassiliy Rud.* Multifunctional method for remote monitoring of the environment in the area of nuclear facilities
34. *Alexander Aleksandrovich Kulikov, Irena Viktorovna Ivanova and Irina Germanovna Russkova.* The criteria for evaluation of efficiency of heattechnical installations considering general energy costs with the aim of increasing their enviromental friendliness and reducing negative effect on the environment
35. *Anna Petrova, Andrei Brilinskii, Georgiy Evdokunin and Irina Ryndina.* Mathematical Modeling of Arc Faults in Networks with Low Single Phase-to-Ground Fault Currents
36. *Ivan Naletov, Konstantin Kalmykov, Irina Anikina and Vitaliy Sergeev.* Efficiency of using heat pumps with various refrigerants in real steam turbine power units with PT-80 and T-250 turbines
37. *Stanislav Chicherin, Lyazzat Junussova and Timur Junussov.* The hydro-seeding and concrete anchors as a method for preventing damage of local landslides when constructing district heating network
38. *Ivan Kasatkin, Mikle Egorov and Nikolay Rakov.* Numerical investigation of a moisture wave-type vane separator
39. *Egor Zamyatin, Irina Voytyuk and Elena Zamyatina.* Increasing the energy efficiency of an enterprise by point compensating of power quality distortions
40. *Aleksey Yablokov, Ivan Yanin, Nikolay Sadovskyi and Yuri Kozhukhov.* Numerical characteristics of a centrifugal compressor with a low flow coefficient

17:00-18:00

41. *Valeria Antonova, Stanislav Alekseev, Aleksei Tarasov, Natalia Scheglova, Oleg Klyavin, Mikhail Aleshin and Aleksey Borovkov.* Analysis and use of SIMP method in optimization of a car hood desig
42. *Mikhail Sokolov, Nikolay Sadovsky, Anatoly Zuev, Alexey Danilishin and Lyubov Gileva.* Comparative analysis of equations of state of real gas for low-temperature calculations
43. *Elena V. Ptitsyna, Alexandr B. Kuvaldin and Dmitry Ptitsyn.* The effective modes of infrared radiators and heating systems
44. *Vladislav Borisenko, Artem Kiselev, Luis Leoro, Yury Boldyrev and Aleksey Borovkov.* K&C suspension parameters stability by production tolerances
45. *Sergey Gandzha, Dilshod Aminov, Bakhtiyor Kosimov, Rustam Nimatov, Azamdzhon Davlatov and Azamjon Mahmudov.* Development of concept of energy-efficient house for an environmentally friendly settlement in the South Ural

46. *Yana Penner, Vyacheslav Yakovlev, Margarita Antonova and Nikita Popov.* Radiation thermal effect of a fire spilling fuel-air mixtures on a person
47. *Margarita Kovalchuk and Dmitry Poddubniy.* Improving the efficiency of conveyor transport with the use of network technologies
48. *Yury Boldyrev, Ilya Davydov, Oleg Klyavin, Dmitry Bogdanov, Pavel Cvetkov and Anatolii Smetankin.* Parametric optimization of the cross-section and shape of the longitudinal member in frontal impact
49. *Anna Kapranova, Ivan Verloka, Darya Bahaeva and Mikhail Tarshis.* Factors of increasing the performance of the bulk material mixer of the gravity type
50. *Yuriy Sychev, Zimin Roman and Maxim Aladin.* The assessment of the series active filter efficiency in power supply systems of oil production enterprises
51. *Ivan Balabanov, Daria Shtonda, Maria Nikitina.* Research of noise-proof feature of addressable fire indication system with sequential addressing
52. *Aleksey Ignatov and Rustam Subkhankulov.* Eco-friendly technology of manufacturing complex products made of composites
53. *Azat Akhmetshin, Dmitrii Mendeleev and George Marin.* The implementation and use of gas turbines with absorption refrigerating machine in the technological schemes of thermal power plants
54. *Tatiana Kuznetsova, Olga Ivanchenko, Anastasia Kiseleva and Thao Ле Хьюнз.* Study of the influence of disintegrated biomass of chlorella sorokiniana on the state of yeast saccharomyces cerevisiae
55. *Mikhail Egorov.* Energy efficiency of heat-exchange equipment of the system for intermediate separation and superheating
56. *Mikle Egorov, Boris Balunov.* High-temperature service life tests of full-size thermosyphons
57. *Daniil Ivanchenko and Artem Smirnov.* Identification of interturn faults in power transformers by means of generalized symmetrical components analysis
58. *Aleksey Kondrashov, Mikle Egorov, Ivan Kovalenko, Nadezhda Litvinova, Natal'ya Lavrovskaya, Irina Krectunova.* Comparative efficiency of applying the heat pump with the system of disposal of the heat of condensation of heat machines for heating ice arenas
59. *Olga Bolotnikova, Julia Bazarnova, Ekaterina Aronova, Natalia Mikhailova, Tatiana Bolotnikova and Jing Pu* Spent sulphite liquor utilization by xylose-assimilating yeast pachysolen tannophilus, capable of bioethanol producing
60. *Rustem Khabibullin, Olga Ivanchenko, Thao Le Huong and Andrey Petrov.* Energy efficiency of food production waste water anaerobic-aerobic treatment
61. *Alexandr Shehovtsov, Julie Polupanova and Marina Petrochenko.* Using the Digital Twin concept of bioreactor HyClone at various stage of ICP
62. *Pudkova T.V, Bardanov A.I.* Principles of electricity metering in networks with non-linear load
63. *Artem Khomyakov, Elena Neznamova, Vasily Tuev and Natalia Tereshchenko.* The influence of the light spectrum on the growth and development of greenhouse plants on the example of cucumber culture (*Cucumissativus L., Cucurbitaceae* family)