

Organizing Committee of the Eleventh International Youth Scientific Conference “Physics. Technology. Innovation. PTI-2024”, which was held from May 20 to May 24, 2024 on the basis of the Institute of Physics and Technology of the Ural Federal University named after the first President of Russia B.N. Yeltsin, confirms that the following participants **submitted quoted reports (they took part in person)**.

## Section 1. Nuclear and radiation technologies

### Oral reports

1. *Daria Pyltsova*, COMPUTATIONAL AND EXPERIMENTAL STUDY OF RADIATION-PROTECTIVE PROPERTIES OF NATURAL MINERALS IN VIETNAM.
2. *Sergei Bodulenko*, COMPUTATIONAL AND EXPERIMENTAL STUDY OF THE MODIFICATION OF THE STRUCTURE OF GALLOISITE CLAY WITH FILLER FROM WASTE FROM THE METALLURGICAL INDUSTRY.
3. *Stepan Glukhov*, EXPERIMENTAL STAND OF THE PASSIVE RESIDUAL HEAT DISSIPATION SYSTEM OF THE SFAS STORAGE MINE.
4. *Dmitriy Kaskov*, OPTIMIZATION OF DISMANTLING THE GRAPHITE STACK OF THE RBMK-1000 REACTOR.
5. *Denis Barabanov*, OPTIMIZATION OF INTERNAL RADIATION DOSIMETRY IN NUCLEAR MEDICINE: NEW COMPUTATIONAL APPROACHES.
6. *Uliana Sultanova*, STUDY OF RADIOACTIVITY OF SOILS AND BOTTOM SEDIMENTS OF WATER BODIES ON THE TERRITORY OF YEKATERINBURG CITY.

### Poster Session

1. *Shironina Alexandra*, ASSESSMENT OF THE POTENTIAL USE OF HALLOYSITE AS A MATERIAL FOR RADIATION PROTECTION
2. *Kisel Matvey*, INFLUENCE OF THE ADDITION OF ALKALI METAL FLUORIDES ON THE THERMOPHYSICAL PROPERTIES OF PHOSPHATE GLASSES
3. *Rotman Dmitry*, TECHNICAL IMPLEMENTATION OF THE METHODOLOGY FOR DETERMINING THE KINETICS OF GASEOUS FISSION PRODUCTS RELEASE FROM NUCLEAR FUEL DURING IRRADIATION
4. *Vedernikova Elizaveta*, THE EFFECT OF LITHIUM CHLORIDE ADDITIVE ON THE PHYSICO-CHEMICAL PROPERTIES OF BOROPHOSPHATE GLASS
5. *Kiselyov Sviatoslav*, THE POSSIBILITIES OF USING GAS CENTRIFUGES FOR THE SEPARATION OF MULTICOMPONENT GAS MIXTURES ON THE EXAMPLE OF URANIUM HEXAFLUORIDE

## Section 2. Condensed matter physics

### Oral reports

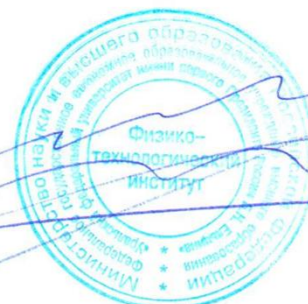
1. *Andrei Petrakovich*, DEVELOPMENT AND DOSIMETRIC PROPERTIES OF DETECTOR MATERIALS BASED ON ANION-DEFICIENT CORUNDUM FOR NEUTRON DOSIMETRY
2. *Ilya Ivanov*, INVESTIGATION OF THE EFFECT OF THE HYDROGEN SUPPLY RATE AT THE HD-STEP AND PRE-GRINDING ON THE MAGNETIC PROPERTIES OF ND-FE-B HDDR-POWDERS

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3. *Anastasia Dyachkova*, ANALYTICAL SOLUTIONS OF THE OBERBECK–BOUSSINESQ EQUATIONS FOR DESCRIBING THERMAL FORCE FIELDS IN STATIONARY CONVECTIVE FLUID FLOW
4. *Artem Popov*, APPLICATION OF MACHINE LEARNING ALGORITHMS IN POLARIZED NEUTRON REFLECTOMETRY
5. *Svetlana Severova*, INFLUENCE DOPING OF THE ANTIFERROMAGNETIC LAYER CR MN WITH W AND CU ELEMENTS ON THE MICROSTRUCTURE AND HYSTERESIS PROPERTIES OF CRMN/FENI TYPE FILMS
6. *Shevelev Vladimir*, OPTICAL PROPERTIES OF POLYURETHANE PLASTIC SCINTILLATOR WITH PPO AND POPOP
7. *Valeriya Komarova*, SPONTANEOUS EXCHANGE BIAS EFFECT IN THE SYSTEM FE<sub>3</sub>-XCRXSE<sub>4</sub>
8. *Maksim Fadeev*, PHASE DIAGRAM OF URANIUM ON MTP POTENTIAL CALCULATED USING THERMODYNAMIC INTEGRATION METHOD
9. *Dmitrii Pastukhov*, OPTICAL PROPERTIES OF YB DOPED TRANSPARENT ALUMINUM OXYNITRIDE CERAMICS
10. *Sergey Platonov*, MANGANESE SUBSTITUTION ALLOYS BASED ON GDMNSI
11. *Kirill Gusev*, MULTICOMPONENT ALLOYS OF NB-NI-TI-ZR-CO SYSTEM AS HYDROGEN SEPARATION MEMBRANES: STRUCTURE, PHASE COMPOSITION AND FUNCTIONAL PROPERTIES
12. *Kristina Trofimova*, TRANSPORT PROPERTIES OF SEMICONDUCTOR COMPOUNDS BASED ON BENZOTHIENOACENE
13. *Titova Ekaterina*, TO THE THEORY OF CURVILINEAR FRONTS SHIFTING IN CRYSTALLIZATION OF UNDERCOOLED MELTS
14. *Ilya Petrenyov*, THERMALLY INDUCED RESISTIVE SWITCHING IN SECOND-ORDER MEMRISTIVE STRUCTURE BASED ON NANOTUBULAR ZIRCONIA
15. *Alfina Gasimova*, THE EFFECT OF REFLUXING ON PARTICLE SIZE AND OPTICAL PROPERTIES OF ZNS NANOPARTICLES
16. *Anastasiya Istomina*, THE DETERMINATION OF PARAMETERS OF GRAINBOUNDARY DIFFUSION OF COBALT-57 IN POLYCRYSTALLINE TITANIUM
17. *Artem Shilov*, TEMPERATURE EFFECT ON THE SPECTRAL PARAMETERS OF PHOTOLUMINESCENCE IN HAFNIUM DIOXIDE NANOTUBES
18. *Maxim Gerasimov*, SIMULATION OF THE ANOMALOUS EFFECT OF THERMOLUMINESCENCE ISOTHERMAL DECAY
19. *Ekaterina Khazieva*, POTENTIALS OF DEEP MACHINE LEARNING FOR ATOMISTIC MODELING OF METALLURGICAL ALLOYS: THE EXAMPLE OF FE-CR-C SYSTEM
20. *Ilya Dedov*, NEW FERHALMN AND MNALFERH QUATERNARY ALLOYS WITH HIGH SPIN POLARIZATION

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## Poster Session

1. *Ilya Kashin*, APPLICATION OF GREEN'S FUNCTIONS WITH SPATIAL RESOLUTION TO CALCULATE THE ENERGY OF SINGLE-ION MAGNETIC ANISOTROPY IN CONDUCTING MATERIALS
2. *Alexander Yakovlev*, RESEARCH OF MAGNETIC ANISOTROPY IN MONOLAYER CrI<sub>3</sub> WITH USING THE FORMALISM OF GREEN'S FUNCTIONS
3. *Alexandra Glebova*, ANALYSIS OF STATIONARY SOLIDIFICATION PROCESS WITH QUASI-EQUILIBRIUM TWO-PHASE REGION
4. *Eugeny Makoveeva*, ANALYSIS OF THE STABILITY OF CRYSTALLIZATION MODES WITH ACCOUNT OF MASS INFLUX AND WITHDRAWAL OF PRODUCT CRYSTALS
5. *Artyom Gubin*, AUTOMATION OF PROCESSING OF EXPERIMENTAL DATA OF A PULSE THERMAL PHYSICS EXPERIMENT
6. *Murzina Mariya*, BRILLOUIN LIGHT SCATTERING IN THIN-FILM METALLIC NANOSTRUCTURES
7. *Elvira Lopatko*, CHIRAL SPIN SHORT-RANGE ORDER AND MAGNETIC CONTRIBUTION TO THERMAL EXPANSION DURING PHASE TRANSITION IN MnSi
8. *Alexey Podshivalov*, DEPENDENCE OF RADIATION-INDUCED EPR SIGNALS IN ARTIFICIAL HYDROXYAPATITE ON SYNTHESIS CONDITIONS EFFECT OF THE THICKNESS OF THE ANTIFERROMAGNETIC Cr<sub>20</sub>Mn<sub>80</sub> LAYER ON THE PROPERTIES OF Cr<sub>80</sub>Mn<sub>20</sub>/Fe<sub>20</sub>Ni<sub>80</sub> FILMS
9. *Bayankina Antonina*, DEVELOPMENT OF METHODS FOR LASER HYPERDOPING OF MATERIALS
10. *Nikolay Martemianov*, DFT-CALCULATED IR-SPECTRA OF GRAPHITIC CARBON NITRIDE WITH DIFFERENT STRUCTURAL FEATURES
11. *Tatiana Rusinova*, DYNAMIC MAGNETIC PROPERTIES OF TOROIDAL SAMPLES PREPARED BY THE SLS METHOD AND A POSSIBLE ANALOGUE OF FLUXTRON
12. *Bogdan Fominykh*, EFFECT OF ARGON ION IRRADIATION ON ELECTRO- AND MAGNETOTRANSPORT PROPERTIES OF TOPOLOGICAL INSULATOR Bi<sub>2</sub>Se<sub>3</sub>
13. *Alexandra Esina*, EFFECT OF NIOBIUM DISELENIDE DOPING ON THE STRUCTURE AND TRANSPORT PROPERTIES OF IRON TELLURIDE
14. *Ilya Kokusov*, ELECTRON EMISSION SPECTROSCOPY OF GAN THIN FILMS SUBJECTED TO ION-BEAM TREATMENT
15. *Savely Chernyshev*, EVALUATION OF THE FLINAK-NDF3-SMF3 MELT STRUCTURAL FEATURES BASED ON DATA FROM ELECTRONIC ABSORPTION SPECTROSCOPY OF NEODYMIUM AND SAMARIUM IONS
16. *Kristina Merencova*, EVOLUTION OF COMPOSITION OF HEMATITE THIN FILMS UNDER THE ACTION OF LASER RADIATION
17. *Azat Nizaev*, EXPERIMENTAL INVESTIGATION OF CO MAGNETISM IN AMORPHOUS Y-CO FILMS

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18. *Alexandra Perevalova*, FEATURES OF MAGNETOTRANSPORT PROPERTIES OF MOXW1-XTE2 (X = 0; 0.7; 1) SINGLE CRYSTALS
19. *Stepanov Anton*, GROWING SINGLE CRYSTALS OF THE TOPOLOGICAL INSULATOR BI2SE3 BY THE BRIDGMAN-STOCKBARGER METHOD
20. *Evgenii Surzhikov*, INVESTIGATION OF THE ELECTRONIC AND CRYSTALLINE STRUCTURE OF LI(7-X)LA3ZR(2-X)NBXO12
21. *Irina Koroznikova*, LINEAR ANALYSIS OF MORPHOLOGICAL AND DYNAMIC INSTABILITY OF SOLIDIFICATION PROCESS CONSIDERING CONVECTION IN LIQUID
22. *Savinov Eldar*, LUMINESCENCE OF THIOSILICATES CSRESIS4 (RE=LA, CE, TB) AS AN EFFICIENT CONVERTERS OF IONIZING RADIATION
23. *Chashchina V.V.*, LUMINESCENCE-OPTICAL CHARACTERISTICS OF IMPLANTED GAN FILMS ON AN AL2O3 SUBSTRATE
24. *Lev Gorbov*, MAGNETIC AND STRUCTURAL PROPERTIES IN SYSTEM CRXTE
25. *Govorina Valeriya*, MAGNETIC ANISOTROPY IN LU2CO7 SINGLE CRYSTALS
26. *Arkady Shalaginov*, MAGNETIC PROPERTIES OF SINTERED AND MELT-SPINNING SM-FE-TI-V ALLOYS
27. *Ilya Kozvonin*, MAGNETOELASTIC MECHANISM OF AFM-FM TRANSITION IN FeRh
28. *Nadezhda Kashchenko*, MECHANISM OF LATERAL GROWTH OF MARTENSITE CRYSTALS IN ALLOYS WITH SHAPE MEMORY EFFECT
29. *Vitaly Patrakov*, NUMERICAL INVESTIGATION OF PARALLEL-PLATE MAGNETIC COMPRESSION LINE
30. *Vsevolod Shchanov*, PHASE ANALYSIS OF HYDROXYAPATITE SAMPLES BARBOTAGED BY CARBON DIOXIDE DURING THE SYNTHESIS PROCESS
31. *Iurii Kachanov*, PHOSPHORS BASED ON GD2O2S DOPED WITH RARE-EARTH IONS
32. *Alexander Koksharov*, PHOTOLUMINESCENCE OF MULTI-PHASE YTTRIUM ALUMINIUM OXIDE DOPED WITH EU3+ IONS FOR LIGHTING APPLICATIONS
33. *Polina Podgorbunskaya*, PHYSICAL AND MECHANICAL PROPERTIES OF MODERATELY DEFORMED ORDERED ALLOY CU-56AT.%AU
34. *Natalia Ofitserova*, RELAXATION OF THE JAHN-TELLER SUBSYSTEM IN BAF2: CU CRYSTAL
35. *Anastasia Rusalina*, STRUCTURE, MAGNETIC AND MAGNETOCALORIC PROPERTIES OF MELT-SPUN RIBBONS OF THE HIGH ENTROPY GDDYERHOTB ALLOY
36. *Teplyakova Anastasia*, STUDY OF THE INFLUENCE OF AN X-RAY SOURCE ON THE NATURE OF CMOS VLSI DEGRADATION
37. *Elizaveta Konstantinova*, SYNTHESIS AND STUDY OF THE PHYSICAL PROPERTIES OF HIGHLY INTERCALATED FE[UNDER]0[UNDER] COMPOUNDS. [UNDER]7[UNDER]5 TIS[UNDER]2
38. *Ivan Ilyashenko*, SYNTHESIS OF THIN FILMS OF GRAPHITIC CARBON NITRIDE BY CHEMICAL VAPOR DEPOSITION

39. *Valentina Kuznetsova*, THE COMPARISON OF EXCHANGE-CORRELATION FUNCTIONALS FOR PREDICTING ELASTIC PROPERTIES OF HIGH-ENTROPY ALLOYS COCRFEMNNI, COCRZRMNNI AND COCRNBMNNI
40. *Ekaterina Didenko*, THE EFFECT OF THE STRUCTURAL FACTOR ON THE ELECTRICAL PROPERTIES OF CRYSTALS OF THE COMPOSITION CIS-MN(Fe)SE
41. *Margarita Nikishina*, THE EVOLUTION OF A POLYDISPERSE ENSEMBLE OF ELLIPSOIDAL PARTICLES IN THE FORM OF PROLATE AND OBLATE ELLIPSOIDS OF REVOLUTION
42. *Alena Gavrilova*, THE INFLUENCE OF COMPRESSIVE OR TENSILE LOAD ON THE FORMATION OF THE ORDERED STRUCTURE OF THE EQUIATOMIC ALLOY CU-50AU(AT.%)
43. *Daniil Baranov*, THEORETICAL STUDY OF ELECTROPHYSICAL PROPERTIES OF MAGNETIC AND NON-MAGNETIC METAL-DIELECTRIC NANOCOMPOSITES
44. *Borodin Kirill* ELECTRICAL RESISTIVITY OF BINARY ANTIFERROMAGNETIC ALLOYS

### Section 3. Instrument making and robotics

#### Oral reports

1. *Ilya Panyavin*, AUTOMATIZATION AND TESTING OF THE IMPEDANCE SPECTROSCOPY SYSTEM FOR MEMRISTIVE STRUCTURE STUDY
2. *Mikhail Shishkin*, NEW METHODS IN THE DESIGN OF WIDEBAND AND ULTRAWIDEBAND SMALL-SIZED DIRECTIONAL ANTENNAS
3. *Egor Katkov*, QUASI-RESONANT HIGH VOLTAGE POWER SUPPLY FOR X-RAY TUBE
4. *Danil Fedorov*, ROLE OF OXYGEN VACANCIES IN PROCESSES OF POTENTIATION AND DEPRESSION FOR MEMRISTORS BASED ON TITANIUM DIOXIDE NANOTUBES
5. *Vyacheslav Ushakov*, SETUP FOR INVESTIGATING OF FREE RADICAL SOLUTIONS BY DYNAMIC NUCLEAR POLARIZATION METHOD

#### Poster Session

1. *Nikita Gordeev*, AUTOMATION OF THE SETUP FOR FATIGUE TESTING OF STEEL SAMPLES DURING BENDING
2. *Alexander Popov*, AUTOMATIZED SYSTEM FOR DYNAMIC REGISTRATION OF SPECTRA IN THE OPTICAL RANGE
3. *Ekaterina Smolnikova*, CHANGES IN THE FIELD OF METROLOGICAL SUPPORT DUE TO THE INTENSIVE DIGITALIZATION OF THE INDUSTRY
4. *Abdelhafiz Mohammed Mamdouh Aboelkassem*, DEVELOPMENT OF A FLEXIBLE MANUFACTURING CELL FOR ROBOTIC LASER PROCESSING
5. *Alecsey Dubrovin*, DEVELOPMENT OF A LOW-PAYLOAD COLLABORATIVE ROBOT
6. *Vyacheslav Pchelnikov*, INVESTIGATION OF METHODS FOR COMBINING FEEDBACKS IN ROYER SELF-OSCILLATING CONVERTERS
7. *Kolomeets Ilya*, POWER SUPPLY OF IMPULSE SOLENOID
8. *Anton Matosyan*, SMALL-SIZE MAGNETOMETRIC APPARATUS FOR ESTIMATION OF MECHANICAL STRESSES IN CARBON STEELS

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9. *Leonid Lobanov*, SUBNANOSECOND ELECTRON BEAMS FOCUSING USING HELMHOLTZ COILS FOR PULSE CATHODOLUMINESCENCE
10. *Andrei Matveev*, TEST BOARD FOR CHARGE CARRIER MOBILITY MEASURING IN ORGANIC SEMICONDUCTORS IN FET CONFIGURATION
11. *Mikhail Medvedev*, CRYOGENIC ULTRAHIGH VACUUM FACILITY FOR OBTAINING INFRARED SPECTRA OF ICE MANTLES ANALOGUES ON INTERSTELLAR DUST GRAINS

#### **Section 4. Chemical technology**

##### **Oral reports**

1. *Polina Pestereva*, SYNTHESIS OF SINGLE CRYSTALS AND OPTICAL CERAMICS BASED ON SOLID SOLUTIONS OF THE AGCL<sub>0.25</sub>BR<sub>0.75</sub> - TLI SYSTEM
2. *Polina Solodovnikova*, INFLUENCE OF RAW MATERIALS COMPOSITION ON THE THERMAL STABILITY AND STABILITY AND SPECIFIC SURFACE AREA OF ALUMINUM OXIDE MODIFIED WITH LANTHANUM OXIDE
3. *Nadezhda Belokonova*, MONITORING OF SR-90 IN THE WATERS OF CONTROL AND OBSERVATION WELLS OF RADIOACTIVE WASTE STORAGE AND DISPOSAL SITES
4. *Mariia Rudakova*, TECHNOLOGY FOR THE PRODUCTION OF CRYSTALLINE AMMONIUM SULFATE IN A CONTINUOUS PROCESS IN A DTB APPARATUS WITH A SETTLING CHAMBER
5. *Maksim Averianov*, STUDY OF SR-90 SORPTION BY MODIFIED CLINOPTILOLITE
6. *Igor Suvorin*, EXPERIMENTAL RESEARCH OF THE TERMINAL VELOCITY OF SAWDUST PARTICLES, PRODUCTS OF ITS PYROLYSIS AND MODEL PARTICLES IN TUBES OF DIFFERENT DIAMETERS
7. *Anna Suetina*, REMOVAL OF ANTIMONY ISOTOPES FROM RADIOACTIVE WASTE OF NUCLEAR POWER PLANTS
8. *Mukhammed Gurbanov*, SEPARATION OF SR, Y AND TH TRACE AMOUNTS USING PAPER CHROMATOGRAPHY
9. *Ibrahim YAMA Almudhhi*, INCREASING PECTINASE ENZYME ACTIVITY BY INCORPORATING A SURFACE ACTIVE MICROGEL
10. *Karina Grubtsova*, FORMULATION OF AN ANALYSIS TECHNIQUE FOR FUEL COMPOSITIONS BASED ON LITHIUM, SODIUM, AND POTASSIUM FLUORIDE
11. *Shatunov Dmitry*, TO STUDY THE POSSIBILITY OF DETERMINING FLUORINE BY THE MS-ISP METHOD USING THE POLYATOMIC ION BAF<sup>+</sup>
12. *Mikhail Ershov*, EXPERIMENTAL STUDY OF HYDRODYNAMICS IN A COLD MODEL OF A CONICAL REACTOR FOR SAWDUST GASIFICATION USING THE THEORY OF STOCHASTIC PROCESSES
13. *Elizaveta Susloparova*, IMPROVEMENT OF ATOMIC EMISSION TECHNIQUES TANTALUM ANALYSIS
14. *Michael Nechkin*, STRIPPING OF URANIUM WITH SODIUM CARBONATE FROM A SATURATED MIXTURE OF HDEHP+TBP

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15. *Daniya Khaydarova*, ANALYSIS OF LIQUIDS FOR ELECTRONICS NICOTINE DELIVERY SYSTEMS BY THE GC-MS METHOD
16. *Victoria Sergeevna*, ELECTROTHERMAL ATOMIC ABSORPTION DETERMINATION OF BORON AND PHOSPHORUS IN IOTA-ST-QUARTZ (UNIMIN)

## Poster Session

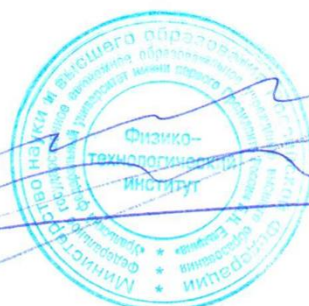
1. *Maria Ugryumova*, INVESTIGATION OF WASHING STAGE EFFECT OF ALUMINUM OXIDE SYNTHESIS ON ITS SPECIFIC SURFACE AND THERMAL STABILITY
2. *Anastasia Belozeroва*, STUDY OF CO-PRECIPIATION OF GALLIUM AND GERMANIUM ON A SEDIMENT OF COMPOSITION  $\text{Na}_3\text{FeF}_6\text{-NaF-NaHF}_2$  UPON SEPARATION FROM MACROCOMPONENTS
3. *Trofim Telegin*, STUDYING THE INFLUENCE OF ALUMINUM HYDROXIDE SYNTHESIS PARAMETERS ON THE PROPERTIES OF ITS OXIDE
4. *Alexey Krinochkin*, SM(III) COMPLEX BASED ON DTTA-SUBSTITUTED 5-PHENYL-2,2'-BIPYRIDINE AS AN ABSORBENT OF ATMOSPHERIC  $\text{CO}_2$  WITH FORMATION OF A 1D-POLYMER STRUCTURE
5. *Gaeva Sofia*, INVESTIGATION OF THE INFLUENCE OF CONDITIONS FOR THE SYNTHESIS OF CERIUM DIOXIDE-BASED POWDER DOPED GADOLINIUM BY CONTROLLED DOUBLE-JET DEPOSITION
6. *Anastasiia Kosykh*, HYBRID PHOSPHOR OF DIFFERENT COMPOSITION BASED ON LAYERED GADOLINIUM-TERBIUM HYDROXIDE
7. *Anastasia Repko*, PORTABLE DEVICE FOR POTENTIOMETRIC DETERMINATION OF ANTIOXIDANT CAPACITY
8. *Lyubov Kleyena*, EFFECT OF PH AND PF VALUES ON THE ZETA POTENTIAL OF CERIUM FLUORIDE PARTICLES IN SOLUTION
9. *Khuzeeva Sabina*, STUDY OF ELECTRICAL CONDUCTIVITY OF  $\text{ZrO}_2$  CERAMICS WITH VARIABLE  $\text{Y}_2\text{O}_3$  CONTENT
10. *Dyomina D.A.*, STUDY OF GAS SENSITIVE PROPERTIES OF CDPBS THIN FILMS OBTAINED BY CHEMICAL DEPOSITION
11. *Vladislav Yoltyshev*, INVESTIGATION OF THE PHOTOCATALYTIC PROPERTIES OF COBALT-DOPED TITANIUM OXIDE OBTAINED BY ANODIZING
12. *Rita Alqubelat*, A STUDY USING ELECTRON PARAMAGNETIC RESONANCE SPECTROSCOPY (EPR) TO ASSESS THE QUALITY OF HYDROPHILIC POLYMER COATINGS BASED ON CARBOXYMETHYL CELLULOS
13. *Vladimir Semenishchev*, BEHAVIOR OF DIFFERENT ISOTOPES OF RADON IN THE PROCESS OF SORPTION OF RA-223, RA-224 AND RA-226 ON FLAT THIN-LAYER SORBENTS BASED ON MANGANESE DIOXIDE
14. *Marina Shikhaleeva*, CREATION AND PREPARATION OF A BATCH OF STANDARD SAMPLES OF LIF-NAF-KF MELT FOR DETERMINING THE CONTENT OF IMPURITIES AND CORROSION PRODUCTS
15. *Maria Stepanova*, REDOX PROPERTIES OF EUROPIUM IN MOLTEN LIF-NAF-KF EUTECTIC MIXTURE

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16. *Eduard Kuantbaev*, RESEARCH OF THE NITROGEN OXIDES CATALYTIC REDUCTION PROCESSES OF IN A CONTACT DEVICE
17. *Mikhail Malykh*, STUDY OF CORROSION OF METALS AND ALLOYS IN THE NaCl-KCl MELT BY ELECTROCHEMICAL METHODS
18. *Marina Sharipova*, STUDY OF THE POSSIBILITY OF REMOVING URANIUM FROM CHLORIDE MELTS BY THE PHOSPHATE PRECIPITATION METHOD
19. *Artem Kosmychev*, URANIUM/THORIUM SEPARATION IN ALPHA SPECTROMETRIC ANALYSIS OF URANIUM ISOTOPE COMPOSITION
20. *Ilya Pechishchev*, X-RAY FLUORESCENCE ANALYSIS OF GEOLOGICAL SAMPLES USING THE METHOD OF FUSION SAMPLE PREPARATION
21. *Elizaveta Vlasova*, THE INFLUENCE OF LIQUID VISCOSITY ON THE FLOWS INSTABILITY BEYOND THE OVERFLOW DISK EDGE OF A HIGH-SPEED CENTRIFUGE
22. *Svetlana Rybakova*, SENSORY PROPERTIES OF THIN FILMS IN A PBS SYSTEM DOPED WITH ORGANIC COMPOUNDS
23. *Yana Baimurzina*, RADIOECOLOGICAL MONITORING IN THE TERRITORIES OF THE CHELYABINSK AND SVERDLOVSK REGIONS
24. *Karina Salikova*, LABORATORY PROTOTYPE OF THE PORTABLE DEVICE FOR CHRONOAMPEROMETRIC DETERMINING ANTIOXIDANT CAPACITY USING IRON COMPLEXES WITH 2,2'-BIPYRIDINE
25. *Grushetskaya Elena*, INVESTIGATION OF THE GEOMETRIC DIMENSIONS INFLUENCE OF THE HEAT EXCHANGE TUBE OF THE FALLING-FILM EVAPORATOR ON THE HYDRODYNAMIC PARAMETER CHANGE
26. *Ekaterina Pyatygina*, INVESTIGATION OF COBALT STATE FORMS IN NaCl SOLUTION BY SORPTION METHOD
27. *Iakushev Iurii*, ELECTRONIC ABSORPTION SPECTRA OF PRASEODYMIUM IONS IN MOLTEN EUTECTIC MIXTURE OF LITHIUM AND BERYLLIUM FLUORIDES (LiF-BE<sub>2</sub>)
28. *Anna Ivshina*, DETERMINATION OF THE PHASE COMPOSITION OF THE MOLTEN SALT SYSTEM KCl – AlCl<sub>3</sub> – ZrCl<sub>4</sub> AS A POSSIBLE WAY FOR THE ESTIMATION OF THE TECHNOLOGICAL PROCESS
29. *Artem Trofimov*, DETERMINATION OF MICROELEMENT COMPOSITION OF MUMIYO BY ICP-MS
30. *Viktoriiia Kirillova*, DEVICE FOR POTENTIOMETRIC DETERMINATION OF ANTIRADICAL CAPACITY USING STABLE RADICAL 2,2'-DIPHENYL-1-PICRYLHYDRAZYL
31. *Maria Kaleeva*, DETERMINATION OF OXYGEN IN ZIRCONIUM DIOXIDE STABILIZED BY YTTRIUM OXIDE
32. *Anna Klykova*, CONCENTRATION OF SILVER BY INORGANIC SORBENTS
33. *Panyak Nikolay*, ANODIC PROCESSES IN THE LiCl-Li[ПОД]2CO[ПОД]3 MELT

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## Section 5. Material science

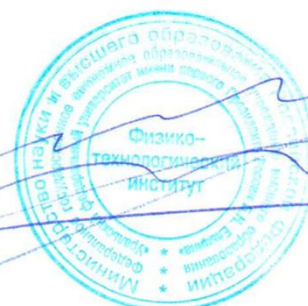
### Oral reports

1. *Kirill Sukhanov*, FUNCTIONAL PROPERTIES OF CATHODE MATERIALS BASED ON LN<sub>2</sub>MO<sub>4</sub> (LN=LA, PR; M=NI, CU)
2. *Anastasia Abdulmenova*, DEVELOPMENT OF LAYERED COMPOSITES FROM TANTALUM FOILS AND PRECERAMIC PAPERS BASED ON Ti<sub>3</sub>Al(Si)C<sub>2</sub> MAX-PHASE
3. *Svetlana Pachina*, ELECTRICAL PROPERTIES OF SOLID SOLUTION LA<sub>2</sub>-XSRXSCZNO<sub>5.5-0.5X</sub>
4. *Roman Mukhachev*, NOVEL MATERIALS GDMN<sub>1</sub>-XRUXSI WITH MAGNETOCALORIC PROPERTIES, PROMISING FOR THE LIQUEFICATION OF NITROGEN AND OTHER GASES
5. *Anastasia Permiakova*, MAGNETIC CHARACTERISTICS OF MATERIALS BASED ON LANTHANUM MANGANITE SYNTHESIZED IN COMBUSTION REACTIONS
6. *Andrey Besprozvanniy*, APPLICATION OF MACHINE LEARNING FOR SOLVING PROBLEMS OF MAGNETIC STRUCTURE ANALISYS
7. *Daniil Vadimovich*, THE STRUCTURE OF KHN63MB ALLOY PRODUCTS MANUFACTURED BY ELECTRON BEAM ADDITIVE MANUFACTURING
8. *Golubiatnikova Aleksandra*, INFILTRATION OF NANO- AND MICROCRYSTALLINE ALLOYS BASED ON ND<sub>2</sub>FE<sub>14</sub>B COMPOUND
9. *Egor Podkin*, DISPERSION-HARDENED ALLOYS OF THE AL-4%CU SYSTEM WITH SMALL ADDITIVES SC, ZR, HF
10. *Ekaterina Ulyanova*, SYNTHESIS OF ANATASE/BROOKITE/CARBON COMPOSITES BY LOW-TEMPERATURE THERMOLYSIS OF TITANIUM GLYCOLATE. STRUCTURE AND PHOTOELECTROCHEMICAL PROPERTIES
11. *Verkhoshanskiy Yanis*, DEVELOPMENT AND RESEARCH OF A MATERIAL FOR STEREO LITHOGRAPHIC 3D PRINTING BASED ON AL[ПОД]2O[ПОД]3
12. *Igor Ezhov*, RESIDUAL STRESS IN AN ORTHOPEDIC CANNULATED SCREW AFTER EXTREME LOAD
13. *Vladimir Matyukhov*, SYNTHESIS OF GRAPHENE COATING ON NANOPARTICLES OF METALS AND DIELECTRICS
14. *Dieter Kokh*, CALCULATION OF GLOBULE FORMATION PROCESS AND RADIUS OF GYRATION OF PMMA BY MOLECULAR DYNAMICS STUDY

### Poster Session

1. *Arina Bushueva*, PARTIAL CONDUCTIVITIES OF SOLID SOLUTIONS BASED ON HEXAGONAL PEROVSKITE BA<sub>7</sub>IN<sub>6</sub>AL<sub>2</sub>O<sub>19</sub>
2. *Natalia Khoroshavtseva*, ELECTRICAL CONDUCTIVITY OF ZRO<sub>2</sub> CERAMICS WITH 1 MOL. % Y<sub>2</sub>O<sub>3</sub> AND VARIABLE CONTENT SC<sub>2</sub>O<sub>3</sub>
3. *Vladislava Gnatyuk*, IONIC CONDUCTIVITY IN STRONTIUM-SUBSTITUTED LAYERED PEROVSKITES BASED ON BALAINO<sub>4</sub>

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4. *Natalya Khoroshavtseva*, THE EFFECT OF THE METHOD FOR OBTAINING POWDERS OF ZRO<sub>2</sub>-4 MOL. % Y<sub>2</sub>O<sub>3</sub>-4 MOL. % SC<sub>2</sub>O<sub>3</sub> ON THE ELECTRICALLY CONDUCTIVE PROPERTIES OF CERAMICS
5. *Daniil Pyankov*, SYNTHESIS, STRUCTURE AND TRANSPORT PROPERTIES OF CA-DOPED LAYERED PEROVSKITES BASED ON BALAINO<sub>4</sub>
6. *Yulia Bepomestnykh*, THE EFFECT OF THE SC<sub>2</sub>O<sub>3</sub> ADDITIVE ON THE ELECTRICALLY CONDUCTIVE PROPERTIES OF ZRO<sub>2</sub>-Y<sub>2</sub>O<sub>3</sub>-SC<sub>2</sub>O<sub>3</sub> CERAMICS
7. *Viktoria Zaviralova*, IONIC TRANSPORT IN DOPING (LA<sup>3+</sup> → BA<sup>2+</sup>) OF LAYERED PEROVSKITES BASED ON BALAINO<sub>4</sub>
8. *Khoroshavtseva Natalya*, ELECTRICAL CONDUCTIVITY OF ZRO<sub>2</sub> CERAMICS WITH 2 MOL. % Y<sub>2</sub>O<sub>3</sub> AND VARIABLE CONTENT SC<sub>2</sub>O<sub>3</sub>
9. *Roman Bastrikov*, INFLUENCE OF CALCINATION OF SULFATED ZIRCONIUM DIOXIDE POWDER ON THE PHASE COMPOSITION AND DENSITY OF BIOCOMPATIBLE CERAMICS
10. *Ivan Chernetskiy*, CREATION OF A COMPUTER MODEL FOR QUANTITATIVE ASSESSMENT OF THE OPTIMAL CONTENT OF NANOPOWDER ADDITIVES IN TECHNICAL CERAMICS
11. *Anastasiya Ivanova*, PREDICTION AND PREPARATION OF MEDIUM-ENTROPY OXIDES BASED ON PRASEODYMIUM NICKELATE
12. *Zakiryanov Petr*, DETERMINATION OF OXYGEN NON-STECHIOMETRY AND MODELLING OF DEFECTIVE STRUCTURE SMBACO[ПОД]<sub>2</sub>[ПОД]-[ПОД]XFE[ПОД]XO[ПОД]<sub>6</sub>[ПОД]-[ПОД]Δ
13. *Maksim Domashenkov*, INVESTIGATION OF THE EFFECT OF THE GRANULOMETRIC COMPOSITION OF YSZ POWDERS ON THE PROCESS OF FORMING INGOTS FOR VACUUM BEAM EVAPORATION
14. *Melnikov Semyon*, INFLUENCE OF FERROELECTRIC DOMAIN WALLS ON THE ANISOTROPY OF CHARGE INJECTION IN MGO:LINBO<sub>3</sub> MONOCRYSTALS
15. *Albert Khasanov*, MECHANOLUMINESCENT HOST-GUEST SYSTEMS BASED ON 9-HEXYL-9H-CARBAZOLE AND 8-HYDROXYQUINOLINE AS INDICATORS FOR ZN, AL AND MG CATIONS
16. *Sofia Yakovleva*, LU<sub>3</sub>AL<sub>5</sub>O<sub>12</sub>:CE<sup>3+</sup> PHOSPHOR IN GLASS-CERAMICS FOR WHITE LIGHT-EMITTING SOURCES
17. *Ekaterina Kabykina*, STUDY OF SINGLE CRYSTALS AND OPTICAL CERAMICS OF AGCL-AGBR-AGI SYSTEM TO ULTRAVIOLET IRRADIATION
18. *Yagovitin Roman*, CRYSTAL AND DEFECT STRUCTURE OF TERBIUM-BARIUM COBALTITE
19. *Ivan Zhidkov*, TOWARDS BETTER PEROVSKITE ABSORBER MATERIALS: CU<sup>+</sup> DOPING IMPROVES RADIATION HARDNESS OF COMPLEX LEAD HALIDES
20. *Abu El-Soad Asmaa*, FUNCTIONALIZATION OF HALLOYSITE NANOTUBES USING TETRAETHYLENEMPENTAMINE IN DIFFERENT SOLVENTS
21. *Nikolashin Maxim*, ELECTRICAL PROPERTIES OF BROWNMILLERITE BASED ON BARIUM, ALUMINUM AND DYSPROSIUM OXIDES
22. *Mariam Akopyan*, THERMAL EXPANSION OF IN-DOPED BARIUM STANNATE

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23. *Ekaterina Guseva*, MODELING AND STRUCTURAL CERTIFICATION OF COMPLEX OXIDE COMPOUNDS BASED ON  $La_{0.6}Sr_{0.4}Fe_{0.8}Co_{0.2}O_3$
24. *Girev Andrey*, THE STUDY OF CORROSION MECHANISMS OF STRUCTURAL MATERIALS IN MELTS BASED ON LITHIUM CHLORIDE
25. *Alexey Vasiliev*, DETERMINATION OF ACOUSTIC PARAMETERS OF R18SH STEEL SAMPLES WITH DIFFERENT TEMPERING TEMPERATURES
26. *Anastasia Trubcheninova*, APPLICABILITY OF THE CRITERION FOR INTERCRYSTALLITE CORROSION DAMAGE IN PRACTICAL CONDITIONS
27. *Roman Matveev*, EVALUATION OF THE PROSPECTS OF COMMERCIAL SORBENTS FOR THE PURIFICATION OF INERT GAS FROM OXYGEN
28. *Karimov Ratmir*, ELECTRICAL PROPERTIES OF A COMPLEX OXIDE WITH A HEXAGONAL STRUCTURE BASED ON BARIUM, ALUMINUM AND LUTETIUM OXIDES
29. *Ekaterina Dobrynenko*, OF THE  $Zn_{2-2x}Ni_{2x}SiO_4$  SOLID SOLUTION: COMPOSITION AND STRUCTURE
30. *Igor Nikonov*, MECHANOSYNTHESIS OF PHENAZINE-CONTAINING POLYMERS AS PROMISING MATERIALS FOR MOLECULAR ELECTRONICS
31. *Razilia Muftakhetdinova*, DYNAMIC AND QUASI-STATIC MECHANICAL PROPERTIES OF IRON-NICKEL ALLOYS OF METEORITIC ORIGIN

## Section 6. Information systems and technologies

### Oral reports

1. *Anton Kutishenko*, MODELING THE PROPAGATION OF STRONG DISTURBANCES IN A GAS OF ARBITRARY RAREFACTION
2. *Ivan Novoselov*, BASIC CONCEPT HIERARCHY FOR THE IISIMS TERM IN THE CHILDREN' MAXILLOFACIAL PATHOLOGY REHABILITATION
3. *Elizaveta Kabakova*, METHODS FOR DETERMINATION OF ACTING FACTORS IMPORTANCE ON THE EXAMPLE OF ASSESSMENT OF METALLURGICAL WORKERS HEALTH STATUS
4. *Ustuzhanin Danil*, AN ADOPTATION OF OBJECT-ORIENTED APPROACH TO MANAGE MATRICES ON A GPU
5. *Anton Lisovenko*, PERSONAL DENTIST'S ACCOUNT TO DETERMINE THE NEED FOR CHILDREN IN EARLY ORTHODONTIC TREATMENT FOR THE PREVENTION OF SEVERE VIOLATIONS
6. *Gleb Kostarev*, MIGRATION OF VACANCIES IN URANIUM DIOXIDE. A MOLECULAR DYNAMIC SIMULATION
7. *Natalia Bushueva*, REAL-TIME MONITORING SYSTEM FOR THE SF6 CIRCUIT BREAKERS LIFE CYCLE
8. *Uliana Zakharchenko*, DESIGNING A DIGITAL PLATFORM FOR ASSESSING THE PHYSICAL DEVELOPMENT OF CHILDREN IN THE EUROPEAN NORTH OF RUSSIA
9. *Revyakina Polina*, INVESTIGATION OF THE PROCESSES OCCURRING IN THE SODIUM EQUIPMENT OF NUCLEAR POWER PLANTS

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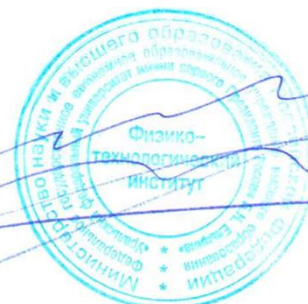


10. *Daniil Zavadskii*, SOLVING ROUTE OPTIMIZATION PROBLEMS FOR RADIATION-  
HAZARDOUS AREAS USING THREE-DIMENSIONAL MODELING

### Poster Session

1. *Nikita Salomatov*, ABOUT SYSTEM INTEGRATION OF MANAGEMENT OF DIGITALIZATION OF MEDICINE IN THE SVERDLOVSK REGION AND IN A SEPARATE MEDICAL INSTITUTION
2. *Viktoriya Petukhova*, ALGORITHM FOR SOLVING DIRECT AND INVERSE HEAT CONDUCTION PROBLEMS FOR AXIALLY SYMMETRICAL MODELS
3. *Ivan Novoselov*, THE STUDY OF THE PEROVSKITE SOLAR CELL PARAMETER INFLUENCE ON THEIR EFFICIENCY BY USING MACHINE LEARNING
4. *Polina Bobrova*, SOLVING THE EEG INVERSE PROBLEM USING DYNAMICS WITH A PRE-DISTRIBUTION
5. *Valeria Terzi*, DEVELOPMENT OF A COMPUTATIONAL METHOD FOR CALCULATING THE EFFECTIVENESS OF END-TO-END ANALYTICS IN MARKETING STRATEGIES
6. *Dmitry Sivert*, OPTIMIZATION PROBLEM SOLVING IN MARKETING WITH THE APPLICATION OF CROSS-CHANNEL ANALYTICS AND SIP TECHNOLOGY
7. *Artem Lezov*, COMPUTATIONAL AND EXPERIMENTAL STUDY OF THE EFFECT OF SUPPLY VENTILATION ON THE COOLING RATE OF A SODIUM COOLANT INSIDE A COLD FILTER TRAP
8. *Makar Pavletsov*, STOCHASTIC DYNAMICS IN A METAPOPOPULATION SYSTEM WITH ALLEE EFFECT
9. *Polina Bessonova*, CREATION OF A HIGH-PERFORMANCE HARDWARE AND SOFTWARE COMPLEX FOR SOLVING PROBLEMS OF MOLECULAR DYNAMIC MODELING
10. *Antonina Ushakova*, CREATION OF A HIGH-PERFORMANCE HARDWARE AND SOFTWARE COMPLEX FOR SOLVING PROBLEMS OF MOLECULAR DYNAMIC MODELING
11. *Gubanov Danil*, PACKAGE APPLICATIONS FOR AUTOMATING THE PROCESS OF CONDUCTING CLASSES ON A VIRTUALIZED LABORATORY COMPLEX OF THE UNIVERSITY
12. *Anastasia Kopytova*, DESIGN AND IMPLEMENTATION OF A SMART FACTORY SYSTEM USING INTERNET OF THINGS AND CLOUD COMPUTING
13. *Dastan Seitov*, HIGH-PERFORMANCE COMPUTATIONAL MODELING OF CATION DIFFUSION IN DEFECT-FREE MIXED URANIUM, PLUTONIUM AND THORIUM DIOXIDES
14. *Natalia Tsizhmovska*, NEURAL NETWORK MODELLING OF SENTENCE LENGTH IN INAUGURAL SPEECHES
15. *Spitsin Savelii*, APPLICATION OF NON-TRADITIONAL AI-LIKE STATISTICAL APPROACHES TO SOLVING PREDICTION METRICS AND RECOGNITION PROBLEMS
16. *Tatyana Kuznetsova*, HIERARCHICAL ONTOLOGY OF THE BASIC CONCEPTS OF HARDWARE, INFORMATION AND MANAGEMENT SUPPORT FOR THE CONDITION OF A CARDIAC SURGICAL SUTURE

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## Section 7. Bioengineering and biotechnology

### Oral reports

1. *Iuliia Savlukova*, ASSESSMENT OF ANTIOXIDANT ACTIVITY OF YOGURT ENRICHED WITH IODINE AND SELENIUM
2. *Vladislav Nikitin*, BIOELECTRIC MEDIUM POWER FACTOR AMPLIFIER FOR PORTABLE NEURAL HEADSET
3. *Eric Osei*, COMPARATIVE STUDY OF THE COMPOSITION AND PREPARATION OF NON-TRADITIONAL PASTA WITH A VEGETABLE ADDITIVES
4. *Natalya Spiridonova*, DIRECT INFLUENCE OF LEAD IONS ON THE MECHANICAL FUNCTION OF MYOSIN
5. *Richard Vincent Asase*, EFFECT OF SELF-HYDROLYZED AND FERMENTED OKARA HYDROLYSATE ON XANTHAN GUM PRODUCTION
6. *Nina Prokopova*, HOW IMMIGRATION CHANGES THE REGULAR AND CHAOTIC MODES OF POPULATION DYNAMICS
7. *Anastasia Stepanova*, INFLUENCE OF ALBUMIN CONCENTRATION ON THE CRYSTALLIZATION OF SPHERICAL VATERITE
8. *Anosike Glory Chinaza*, EFFECTS OF VITAMIN PRODUCING LACTIC ACID BACTERIA STRAINS ON THE NUTRITIONAL AND FUNCTIONAL PROPERTIES OF YOGURT
9. *Emmanuel Danyo*, THE INFLUENCE OF LOW AND HIGH DOSES OF IONIZING RADIATION ON FERMENTATION ACTIVITY OF SACCHAROMYCES CEREVISIAE SAFALE S-33
10. *Anastasia Kulikova*, OBTAINING FERMENTED OAT BEVERAGE ENRICHED WITH PLANT ISOFLAVONES EXTRACT
11. *Julia Danekina*, PRODUCTION OF SEMI-HARD CHEESES WITH NATURAL ANTIOXIDANTS IN NANOEMULSION AND ENCAPSULATED FORMS
12. *Baheig Atef Abdelazim A'laa*, MOLECULAR DETECTION OF INFECTION BY ENTEROBACTER SPP IN SOME PROCESSED AND FRESH MEATS
13. *Albina Nechaeva*, RESEARCH OF NEW NUTRIENT MEDIUM ON CORYNEBACTERIUM GLUTAMICUM
14. *Alyona Tzybina*, INFLUENCE OF CHRONIC INTOXICATION BY COPPER NANOPARTICLES ON THE MECHANICAL FUNCTION OF THE HEART AT THE MOLECULAR LEVEL
15. *Otman Anna Antonovna*, THE INFLUENCE OF RANDOM DISTURBANCES ON A SYSTEM OF INTERACTING POPULATIONS WITH COMPETITION FOR RESOURCES

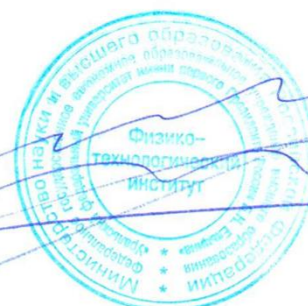
### Poster Session

1. *Vladimir Sholokhov*, A STOCHASTIC NONLINEAR MODEL OF RAB5 AND RAB7 PROTEIN DYNAMICS TO STUDY THE EFFECT OF MULTIPLICATIVE NOISE ON NANOPARTICLE/VIRUS ESCAPE FROM ENDOSOMES
2. *Ekaterina Aristova*, AUTOMATED GENERATION OF THREE-DIMENSIONAL MODEL OF BRONCHUS TREE BASED ON CT IMAGE

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3. *Kirill Salamatov*, EXTRACTION OF FORMANTS AND OTHER FEATURES AND CLASSIFICATION OF VOICE HEALTH STATE BY MACHINE LEARNING METHODS
4. *Yurii Bochkarev*, MOBILE RADIOMETRIC SYSTEM FOR MEDICAL PURPOSES
5. *Valeriya Elfimova*, STATIC MODELING OF THE INFLUENCE OF RISK FACTORS ON THE HEALTH INDICATORS OF METALLURGICAL PRODUCTION WORKERS
6. *Lidia Talankina*, BIOCATALYTIC ACTIVITY OF CERIUM DIOXIDE NANOPARTICLES
7. *Zakhar Puzanov*, REVIEW OF SEQUENCING METHODS FOR MOLECULAR GENETIC MONITORING OF SARS-COV-2 CIRCULATION
8. *Mohamad Darkazanli*, COMPARE THE DRY WHEIGHT AND CHLOROPHYLL BY ADDING BACILLUS SUBTILIS AND METHYLOBACTERIUM SP. IN WHEAT
9. *Maksim Panin*, DEVELOPMENT OF BAKERY PRODUCT WITH THE ADDED FLAX FLOUR
10. *Nadezhda Mogileva*, DEVELOPMENT OF THE FORMULATION, TECHNOLOGY OF PREPARATION AND STUDY OF QUALITY INDICATORS OF THERMOSTATIC YOGURT WITH VEGETABLE ADDITIVES
11. *Daria Dernina*, DIVERSITY OF GIBBERELLIN FORMS PRODUCED BY FUSARIUM VERTICILLOIDES STRAINS
12. *Krylova Darya*, INVESTIGATION OF THE EFFECT OF THE INTERVAL BETWEEN BAROUTREATMENT AND SOWING OF SEEDS ON THEIR SOWING QUALITIES
13. *Natalia Malygina*, MECHANICAL ASPECTS OF ANIMAL BEHAVIOR IN BIOTECHNOLOGICAL RESEARCH
14. *KSENIA Makhaeva*, MODELING OF CFL IN CORONARY VESSELS WITH STENOSIS
15. *Elena Kriukova*, PREPARATION OF HYDROGEL FRAMEWORK FOR FLUORESCENT BIOSENSOR BASED ON AGAR-AGAR WITH SPECIFIED PHYSICAL AND MECHANICAL CHARACTERISTICS
16. *Svetlana Andreeva*, PROBLEMS OF MODELING THE BEHAVIOR OF DEFORMED BRONCHIAL ANASTOMOSIS UNDER THE ACTION OF INTERNAL FORCES
17. *Darya Kuznetsova*, VALIDATION FOR THE RADIATION STERILIZATION PROCESS OF DISPOSABLE MEDICAL GLOVES
18. *Gleb Liberzon*, FEATURES OF CREATING DETECTORS FOR SKIN DOSIMETERS USING CONTINUOUS LASER RADIATION
19. *Yaroslava Menzorova*, FUCOIDAN AS A PROMISING COATING FOR LIPOSOMAL LOADED ANTITUBERCULOSIS COMPOUND
20. *Darya Baratova*, B –GLUCAN ISOLATION FROM BEER PELLETS
21. *Pavel Gilev* EVALUATION OF THE COMPLEXING ABILITY OF COPPER (II) AS A CRITERION FOR THE EFFECTIVENESS OF COPPER (II) DRUGS





## **Section 8. Innovation and social technology**

### **Oral reports**

1. *Alina Aleksandrova*, GAME-THEORETIC APPROACH TO IP RIGHTS MANAGEMENT IN COOPERATION PROJECTS OF UNIVERSITIES WITH INDUSTRIAL PARTNERS
2. *Sergey Pitskhelaury*, REDESIGN OF THE COMPUTATIONAL MODELING OF DISORDER AND TRANSPORT PHENOMENA IN REACTOR MATERIALS COURSE USING DISTANCE LEARNING
3. *Kolmogorova Alice Vyacheslavovna*, THE EXPERIENCE OF PATRIOTIC ASSOCIATIONS IN THE HIGHER EDUCATION SYSTEM
4. *Elena Medvedeva*, MEDIA PROJECT “PRONAS” AS AN INNOVATIVE WAY TO PROMOTE VOLUNTEERING IN MODERN SOCIETY
5. *Anastasia Bondareva*, Interviewing volunteer candidates as a way to retain volunteers

## **Section 9. Young talents**

### **Poster Session**

1. *Olga Linkova*, DRINKING WATER QUALITY ANALYSIS
2. *Maksim Fadeev*, DEVELOPMENT AND CREATION OF A MULTIFUNCTIONAL ALTERNATIVE ENERGY GENERATOR THAT ENSURES THE SAFETY OF LIFE
3. *Elokchin Danil*, THE EFFECT OF THE PRECIPITATION PH VALUE ON ZIRCONIUM HYDROXIDE PARTICLE SIZE FROM TETRACHLORIDE PRECURSOR
4. *Svetlana Bazhenova*, DEVELOPMENT OF AN AUTONOMOUS UAV CHARGING STATION ON A POWER LINE FOR IDGC OF THE URALS
5. *Daria Vostretsova*, SYNTHESIS AND STUDY OF THE PROPERTIES OF ALUMINUM OXIDE FOR USE IN A THREE-ROUTE CATALYST
6. *Lada Malysheva*, AUTOMATION OF THE MONITORING SYSTEM FOR THE NEUTRALIZATION OF QUARRY, MINE AND BASEMENT WATERS
7. *Ivan Vedenov*, INVESTIGATION OF THE EFFECT OF THE CONDITIONS FOR THE SYNTHESIS OF ZIRCONIUM DIOXIDE FROM ZIRCONIUM TETRACHLORIDE ON THE SIZE OF THE RESULTING PARTICLES
8. *Aleksandr Ivanov*, DEMONSTRATION OF NON-CONTACT INTERCEPTION OF AN OBJECT BETWEEN TWO ULTRASONIC MANIPULATORS
9. *Anzhelina Mardanova*, CREATING A VISUAL MODEL OF THE NORTHERN LIGHTS TO STUDY ONE OF THE PHYSICAL PHENOMENA OF NATURE