

Organizing Committee of the Sixth International Youth Scientific Conference "Physics. Technology. Innovation. FTI-2019", which was held from May 20 to May 24, 2019 on the basis of the Physico-Technical Institute of the Ural Federal University named after the first President of Russia B.N. Yeltsin" confirms that the reports of the following participants are recognized as winners.

Section 1. Condensed matter physics

Oral reports

1. *Kiselev Sviatoslav*, Luminescence of $\text{Li}_6\text{Y}(\text{BO}_3)_3$ doped with Pr^{3+} ions under X-ray, electron beam and ultraviolet excitation.
2. *Germov Alexander*, Results and perspectives of NMR spectroscopy in the study of the electronic structure of uranium mononitride.
3. *Gilfanova Svetlana*, Influence of electret effect on filter and dividing capabilities of polymer nonwoven materials.

Poster Session

1. *Makarova Alina*, Structural features and luminescence of natural spinel with abnormally high chromium content.
2. *Tereshchenko Alexey*, Calculation of lorenogrograms for solutions of the model of double sine-Gordon.
3. *Russkikh Pavel*, Surface modification of steel inductor as an approach to enhance its durability in high pulsed magnetic fields.
4. *Rusalina Anastasia*, Magnetism of Dy-Co system amorphous films.
5. *Toporova Natalia*, Crystal structure and kinetic properties of intercalation compounds $\text{Cr}_{0.33}\text{Nb}(\text{S}_{1-x}\text{Se}_x)_2$.
6. *Bondarevskaya Anna*, Anomalous behavior of elastic properties of calcium fluorite crystal induced by nickel impurity.
7. *Losev Timofey*, Photodegradation of CsSnI_3 investigated by mean of xps..
8. *Tarasova Oksana*, Development of broadband radio-absorbing structures based on frequency elector gratings.
9. *Gimadeeva Lyubov*, Formation of domain structure by electron beam irradiation in PMN-39PT single crystals.

Section 2. Instrument Engineering and Robotics

Oral reports

1. *Merkulov Oleg*, Development and testing of a tubular thermoelectric generator based on oxide materials.
2. *Tarasov Stepan*, Development of a high-performance extruder for 3D printing with engineering plastics and composites.
3. *Petrenyov Ilya*, Bipolar resistive switching in nanotubular zirconia structures.

Poster Session

1. *Briginets Sofya*, The software for figurative the cardiomonitorah.
2. *Mogilnikov Ilya*, Eviot-module..
3. *Patrakov Vitaly*, Comparison of commercial and integrated thyristors triggered in impact-ionization wave mode.
4. *Ostrovsky Vasily*, Development of a control system of hardware and software complex to determine thin films thickness by interferential method.
5. *Ushakov Vjacheslav*, Stand for the analysis of the amplitude-time characteristics of the nuclear precession signal.

Section 3. Chemical Technologies

Oral reports

1. *Rulinskaya Marina*, Improving the efficiency of heat exchange equipment manufacturing «Butadiene».
2. *Naskina Dilyara*, Mixing hydrodynamics research during the ammonium polyuranate deposition.

Poster Session

1. *Tsimmerman Aleksandr*, Analysis of the possibility of obtaining bulk ceramic materials using spark plasma sintering in the $\text{ZnO-Bi}_2\text{O}_3$ system.
2. *Orlov Pavel*, The influence of the solution composition on the course of chemical reactions during the sorption of cesium and strontium by natural and modified clinoptilolite.
3. *Kasyanova Anna*, A method for Sr isotope ratio determination in biogenic apatite by MC-ICP-MS using SR resin.

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4. *Danilenko Irina*, Valence of iron in chromite by the data of electron probe microanalysis.
5. *Sukhorukova Olga*, Phosphogypsum analysis by XRF.
6. *Pronina Maria*, Synthesis and Study Physicochemical Properties of Nanocrystalline Ceria
7. *Vovk Sergey*, The study of sorption kinetics of cobalt.

Section 4. Materials science

Oral reports

1. *Kuznetsova Yulia*, The effect of matrix on luminescence of nanocomposite based on CdS.
2. *Balyakin Ilya*, Radial distribution functions of TiZrNbHfTa high-entropy alloy in a liquid state.
3. *Gibadullina Alfiya*, Modelling of the thermodynamic and kinetic stability of alloys based on "nickel-chromium-molybdenum" system.

Poster Session

1. *Zaytsev Evgeniy*, Experimental registration of tubular parts collision under magnetic pulse acceleration.
2. *Kapystin Sergey*, Superhydrophobic surface based on xerogel from CNTS.
3. *Begunova Anastasia*, Influence of seymchan meteorite structure on the synthesis of carbon nanotubes.
4. *Frolov Viktor*, The synthesis of fluoride nanopowders with the help of pulse-periodic CO₂-laser.
5. *Permiakova Anastasia*, Synthesis and catalytic activity of lanthanum manganite doped with alkali metals.
6. *Hanfi Mohamed*, The correction of gross beta measurements of the surface sediment in the different urban zones.
7. *Voronin Vladislav*, Development of technology for the preparation of lightweight cement slurry for wells with the addition of planar nanoparticles improve strength of the adhesive properties of concrete.

Section 5. Information technology

Oral reports

1. *Mikhailov Igor*, Detection of buildings on aerial photographs.
2. *Khmara Guzel*, The experience of using the joint control devices of voltage and reactive power regulation on a laboratory bench.

Poster Session

1. *Rakhmatova Anna*, Data separation for training the artificial neural network to simulate the spatial distribution of chromium in the surface layer of the soil.
2. *Kostarev Vyacheslav*, Simulation of passive removal of residual heat from radioactive wastes subject to weather conditions.
3. *Rusova Daria*, Dendrites on the surface of NaCl water solution, observed with infrared camera.
4. *Seitov Dastan*, Sintering UO₂ nanocrystals of octahedral shape contacting along an edge: a molecular dynamics simulation.

Section 6. Bioengineering and biotechnology

Oral reports

1. *Savintseva Marina*, Research of properties of packaging materials for sterilization processing of medical instruments.
2. *Elsayed Israa*, Red biotechnology: a healthy World.
3. *Kasianova Valentina*, Physico-chemical properties of maltodextrin stabilized cerium dioxide nanoparticles.

Poster Session

1. *Shchelkanov Alexey*, Experimental stand for phantom research in medical radiology.
2. *Butova Ksenia*, The method of evaluating how the parameters of mechanical deformation affect myocardial contractility.
3. *Nazarov Evgeniy*, Tritium and carbon-14 in discharges of reactor installations.
4. *Javed Fatima*, Microencapsulation of vitamin D by using natural polymers (pectin & cellulose).

Section 7. Innovations and social technologies

Oral reports

1. *Ozornin Stanislav*, Agile project management in Russia: characteristics and modern state.
2. *Pakhomova Oksana*, The role of universities in improving the quality of working life of young people.

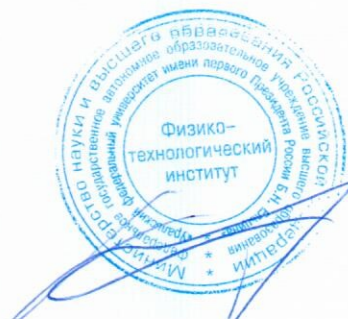
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3. *Sukhorukova Anna*, Quantitative evaluation of students social sufficiency.

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