

Ministry of Education and Science of Russian Federation
Federal State Budget Educational
Institute of Higher Education
“Kalashnikov Izhevsk State Technical University”
FSBIS “Institute of Mechanics UB RAS”
AO “Izhevskiy Radiozavod”
OOO “Corporation “Axion”
“Izhevsk Electromechanical Plant “Kupol”, JSC
OAO “Rostelecom” branch in Udmurt Republic
Izhevsk regional office of the OAO “MegaFon” Ural branch in Udmurt Republic

XIII International Conference

**Instrumentation Engineering in the XXI Century.
Integration of Science, Education and Production**

November 22–24, 2017

PROGRAMME

**Izhevsk, Russian Federation
2017**

TIME SCHEDULE

Activity	Time (GMT+4)	ISTU Building	Room
November 22 (Wednesday). Opening ceremony			
Plenary Session	15 ⁰⁰	1	3
Session 2-B. Magnetic Phenomena in Animate and Inanimate Nature (in Russian)	17 ⁰⁰	1	519
November 23 (Thursday). Work of sessions			
3 rd International Forum «Instrumental Engineering, Electronics and Telecommunications» (IEET-2017)	14 ⁰⁰	1	3
Session 1. Design and manufacture of electronic means. Space Instrument Engineering (in Russian)	14 ⁰⁰	1	308
Session 2. Instruments for Industry, Healthcare and Environment (in Russian)	9 ⁰⁰	1	508
Session 2-B. Magnetic Phenomena in Animate and Inanimate Nature (in Russian)	14 ⁰⁰	1	519
Session 3. Instruments in Control and Monitoring Systems (in Russian)	10 ⁰⁰	1	324
Session 4. Information Technologies in Electronics and Communications (in Russian)	9 ⁰⁰	2	233a
Session 5. Physical Methods for Instrumental Engineering (in Russian)	12 ⁰⁰	1	413
Session 6. Algorithms and Software Systems for Instrumental Engineering (in Russian)	10 ⁰⁰	1	414
November 24 (Friday). Conference closing			
Participants award ceremony	15 ⁰⁰	1	3

PLENARY SESSION

November 22, 2017, 15⁰⁰

Kalashnikov ISTU, building 1, hall 3

1. Word of greeting from organizers of the conference

Grakhov, Valery Pavlovich,

Chairman, DSc, Prof., Rector of Kalashnikov ISTU,

Shchenyatsky, Alexey Valerievich,

Vice-chairman, DSc, Prof., Vice-rector for Research and Innovation Activity,

Abilov, Albert Vinerovich,

Vice-chairman, Executive Organizer, CSc, Dean of Instrumentation Engineering Faculty

2. «Rostelecom»: building smart cities

Shperling, Andrey Alexeevich,

Director of the OAO “Rostelecom” branch in Udmurt Republic

3. The role of Kalashnikov Izhevsk State Technical University knowledge integration into the production activities of “Corporation “Axion” enterprises

Nikolichev, Sergey Borisovich,

Vice-director for development of the OOO “IIKP”

4. Development trends of modern control and measuring equipment

Plotnikov, Dmitry Sergeevich,

Director for sales of OOO “Novye inzhenernye tekhnologii”

5. The role of robotic profile additional education institutions in training of engineers of the future

Pervushina, Alevtina Alexandrovna,

Vice-director of MBEI AE “Station of young technicians of Ustinovsky district of Izhevsk”

6. Prospects of development in robotics at OAO “Izhevskiy Radiozavod”

Isayev, Eduard Petrovich,

chief specialist of OAO “Izhevskiy Radiozavod”

3rd International Forum
Instrumentation Engineering, Electronics and Telecommunications – 2017
(IEET-2017)

November 23, 2017, 14⁰⁰
Kalashnikov ISTU, building 1, hall 3

Session chairman: Abilov Albert Vinerovich,
Dean of Instrumentation Engineering Faculty, CSc

Secretaries: Murashov Sergey Andreevich, CSc,
Emelianov Vladimir Nikitich, CSc.

Oral Reports

1.	Photonic applications and their coexistence with standard data transmissions Jan Radil, Tomas Horvath, Petr Munster, Ondrej Havlis, Vladimir Smotlacha, Pavel Skoda, Josef Vojtech Praha, Czech
2.	Wireless data transmission device for Information exchange between a remote indicator and a signal intelligence station Rafael Komarskij, Nail Khakimov, Valerij Pokhvashchev Voronezh, Russia
3.	Cardiac arrhythmias detection based on sequential and linguistic analysis Aleksey Menlitdinov, Alexander Korobeynikov, Vladimir Stepanov Izhevsk, Russia
4.	Optimal location of biogas complexes in the region Denis Nefedov, Ekaterina Kasatkina Izhevsk, Russia
5.	Photoplethysmography system for video of face using Eulerian video magnification Konstantin Strokanev, Alexander Korobeynikov Izhevsk, Russia
6.	Rigorous Analysis of Collision Free 3D Navigation Algorithms and their Implementation in an Autonomous Flying Robot using LabVIEW Ibrahim Nizar Ibrahim, Muhammad Aiman Al Akkad, Almaghout Karam Izhevsk – Tehran, Russia – Iran
7.	Quantum mechanical explanation of the Young's double slit experiment using the simulated photon wave function in coordinate representation Alexandr Davydov, Tatiana Zlydneva Magnitogorsk, Russia
8.	Software package for technical diagnostics of non-stationary processes in pumping equipment Maxim Novozhenin, Alexey Lutov Ishimbai – Ufa, Russia

Correspondence reports

9.	Increased demands for space applications technologies Marek Šimčák, Ivan Szendiuch	Brno, Czech
10.	Acquisition and reducing the redundancy of measurement data for monitoring systems based on the National Instruments R-series modules Larisa Ginis, Larisa Gordienko, Sergey Levoniuk	Taganrog, Russia
11.	The importance of the P2P network for crowd-hosting: the integration of science, education and production Alexey Grahov	Omsk, Russia
12.	Time trends in crowdfunding and P2P lending Alexey Grahov, Elena Grahova	Omsk – Tomsk, Russia
13.	Text independent speaker identification using wavelet transform Andrey Zemtsov	Volgograd, Russia
14.	Automation of indicators estimation in the problem of demographic classification Andrey Zemtsov	Volgograd, Russia
15.	Copyright protection for e-learning using digital watermarking Andrey Zemtsov	Volgograd, Russia
16.	Web performance of full text search for database content Andrey Zemtsov, Ubidad Kinan Hasan Fawwaz	Volgograd, Russia
17.	Applying the analytic hierarchy process in web development Andrey Zemtsov, Ubidad Kinan Hasan Fawwaz	Volgograd, Russia
18.	Multi-purpose ultra wide band receiver with low noise in the band (1..18) GHz Alexei Lyashuk, Sergey Zavyalov, Konstantin Murasov, Rodion Fakhrutdinov, Evgeny Chaschin	Omsk, Russia
19.	The process model of fault tolerance operation of the computing system with the parallel architecture when solving the problem of clustering Mikhail Makarov	Vladimir, Russia
20.	Feature extraction model in in systems of diagnostics of plant diseases by the leaf images Nomaz Mirzaev, Ergash Saliev	Tashkent, Uzbekistan
21.	Orthogonal multiple chirp modulation for tasks of highly reliable data transmission Pavel Puzyrev	Omsk, Russia

22.	Ku band planar antenna for perspective telecommunication facilities Uriy Sedelnikov, Evgeniy Oleynik, Mohamed Shaban, Viktor Klassen	Kazan, Russia
23.	Fast-acting digital fiber-optic devices for control and telecommunications systems Marat Urakseev, Konstantin Vazhdaev, Azat Sagadeev	Ufa, Russia
24.	Method of analog-to-digital conversion of sub-terahertz signals by photonic time-stretched analog to digital conversion of continuous modulated optical waves Vitaly Florentsev	Moscow, Russia