



**19th International Conference of Young Specialists
on Micro/Nanotechnologies and Electron Devices
EDM 2018**

Program

Erlagol, Altai Republic, Russia
June 29 – July 3, 2018

ORGANIZER

Novosibirsk State Technical University

SPONSORS

Novosibirsk State Technical University

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UNDER SUPPORT OF

Institute of Semiconductor Physics SB RAS

Biysk Technological Institute

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Patricio Salmerón Revuelta – Prof., Universidad de Huelva, Huelva, Spain;

Oleg V. Nos – Dr.Sc., Prof., Department of Industrial Machinery Design, NSTU, Novosibirsk, Russia;

Kasymbek A. Ozhikenov – Cand.Sc., Associate Prof., Head of the Department of Robotics and Engineering Tools of Automation, Kazakh National Research Technical University after K.I.Satpayev, Almaty, Kazakhstan;

Sergey P. Khalyutin – Dr.Sc., Prof., Head of the Department of Electrical Engineering and Aviation Electrical Equipment, MSTUCA, director of “NaukaSoft” LLC, Moscow, Russia.

SECRETARIES

Tatiana E. Shults, postgraduate student of the Department of Electronics and Electrical Engineering, NSTU, Novosibirsk, Russia

Alexandra I. Khristolyubova, senior lecturer, NSTU, Novosibirsk, Russia

Andrey V. Sidorov, postgraduate student of the Department of Electronics and Electrical Engineering, NSTU, Novosibirsk, Russia

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WORKING LANGUAGES

Russian, english.

Event Schedule

| Date | Time | Activity |
|---------------------|-----------------------------|--|
| June 29 Friday | 9.00 – 9.30 | Participants collecting (NSTU, bld.4) |
| | 10.00 | Departure in Erlagol |
| | 19.30 | Arrival in Erlagol |
| | 19.30 – 20.00 | Accommodation of the participants |
| | 20.00 – 21.00 | Dinner |
| | 21.00 – 22.00 | Participant's kit issue (hall A). |
| June 30 Saturday | 8.30 – 8.45 | Morning workout |
| | 9.00 – 10.00 | Breakfast |
| | 10.10 – 11.40 | Conference opening. Plenary Session (Hall A) |
| | 11.40 – 11.55 | Coffee break (hall B) |
| | 11.55 – 12.35 | Plenary Session |
| | 13.00 – 14.00 | Lunch |
| | 14.30 – 16.20 | Section 1, 3, 7 |
| | 16.20 - 16.35 | Coffee break (hall B) |
| | 16.35 – 17.35 | Section 1, 3, 7 |
| 19.00 – 20.00 | Dinner | |
| July 1 Sunday | 8.30 – 8.45 | Morning workout |
| | 9.00 – 10.00 | Breakfast |
| | 10.10 – 12.10 | Section 2, 4, 5 |
| | 11.40 – 11.55 | Coffee break (hall B) |
| | 11.55 – 14.00 | Section 2, 5, 6 |
| | 14.00 – 15.00 | Lunch |
| | 15.20 – 16.10 | Section 2 |
| | 16.20 – 17.00 | Program Committee Session |
| | 15.00 – 18.00 | Volleyball tournament |
| | 19.00 – 20.00 | Dinner |
| 21.30 – 23.30 | Award distribution (hall A) | |
| July 2 Monday | 8.30 – 8.45 | Morning workout |
| | 9.00 – 10.00 | Breakfast |
| | 10.00 – 14.00 | Free time (rafting, horse riding) |
| | 14.00 – 15.00 | Lunch |
| | 15.15 – 18.00 | Chemal hydropower plant excursion (optional) |
| | 19.00 – 20.00 | Dinner |
| July 3 Tuesday | 8.00 – 9.00 | Breakfast |
| | 9.00 – 9.30 | Preparation for departure |
| | 9.30 | Departure in Novosibirsk |
| | 19.00 | Arrival in Novosibirsk |

Plenary Session (Hall A)

June 30, 2018

- 10.10 – 10.20 **Opening. Chair prof. Sergey Kharitonov**
- 10.20 – 11.00 Report «**Challenges in Design of a Full Electric Aircraft Power Complex**». Reporter **Khalyutin Sergey**, Dr. Sc., prof., LLC "Experimental Laboratory NaukaSoft", head of the department of Electrical Engineering and Aviation Electrical Equipment, MSTUCA, Moscow, Russia
- 11.00 – 11.40 Report «**Fusion of Hard and Soft Control Strategies for a Smart Prosthetic/Robotic Hand**». Reporter **Desineni Subbaram Naidu**, PhD, Life Fellow IEEE Minnesota Power Jack Rowe Endowed Chair, University of Minnesota Duluth, USA
- 11.40 – 11.55 Кофе-брейк (Hall B)**
- 11.55 – 12.35 Report «**Next Generation Electronics**». Reporter **Antonova Irina**, Dr. Sc., Prof. of Rzhanov Institute of Semiconductor Physics, SB RAS, Russia

| | June 30, 2018 | July 1, 2018 |
|--------|--|---|
| Hall A | 14:30 - 17:05 Section 7. Robotics, Mechatronics and Automation Chair prof. Oleg Nos, Novosibirsk, Russia | 10:10 - 14:00; 15:20 - 16:10 Section 2. Radio and Microwave Technology. Computer Science and Telecommunications Chair associate prof. Svetlana Vorobiova, Novosibirsk, Russia |
| Hall B | 14:30 - 17:35 Section 3. Sonic and Ultrasonic Devices: Physics, Electronics, Application Chair prof. Vladimir Khmelev, Biysk, Russia | 10:10 - 13:45 Section 5. Power Electronics and Power Engineering Chair prof. Gennady Zinoviev, Novosibirsk, Russia |
| Hall C | 14:30 - 17:00 Section 1. Semiconductor Physics and Technology. Photovoltaics Chair prof. Viktor Gridchin, Novosibirsk, Russia | 10:10 - 11:40 Section 4. Optoelectronic Devices and Systems: Physics, Electronics, Application Chair Eugene Sypin, Biysk, Russia |
| | | 12:00 - 12:30 Section 6. Medical Electronics Chair prof. Vladimir Makukha, Novosibirsk, Russia |

Section 1. Semiconductor Physics and Technology. Photovoltaics
June 30, 2018 (Hall C)

- 14.30 – 14.40 **Opening**
Chair - Dr.Sc., prof. Viktor Gridchin, NSTU, Novosibirsk, Russia
- 14.40 – 15.00 **Plenary section report**
Peculiarities of A^{III}B^V semiconductors high-temperature annealing
Nataliya L. Shwartz, Cand. Sc., associate prof. , NSTU, Novosibirsk, Russia
- 15.00 -15.20 **Plenary section report** Fluorographene: fabrication, properties and research perspectives
Nadezhda A. Nebogatikova, Cand. Sc., junior researcher, A.V. Rzhanov Institute of Semiconductor Physics SB RAS, Novosibirsk, Russia
- 15.20 – 15.30 Structure and Optical Properties of Nanocrystalline Titanium Dioxide Prepared via Pulsed Laser Ablation in Liquid
Fakhrutdinova Elena Daniyarovna, National Research TSU, SPTI, Tomsk, Russia
- 15.30 – 15.40 TCAD Simulation of the Influence of Grain Boundaries on the Temperature Dependence of Conductivity in Polycrystalline Silicon Films
Saburova Vladislava Igorevna, NSTU, Novosibirsk, Russia
- 15.40 – 15.50 Investigation of Hf(Zr)O₂ Film Ferroelectric Properties Grown by Atomic Layer Deposition Method
Iskhakzay Ramin Mokhammad Khanifovich, ISP SB RAS, NSTU, Novosibirsk, Russia
- 15.50 – 16.00 Simulation of the Heterodyne Method for Measurement of the Second Derivative of the Current-Voltage Characteristic
Lysenko Nikita Igorevich, ISP SB RAS, NSTU, Novosibirsk, Russia
- 16.00 – 16.10 Research of Atomic Layer Deposited HfO₂/TiO₂ Multilayer Structures by Spectroscopic and Multiangle Monochromatic Null Ellipsometry
Mishchenko Irina Borisovna, NIIC SB RAS, Novosibirsk, Russia
- 16.10 – 16.20 Examination of Schwoebel Barrier Influence on GaN Quantum Dot Formation
Shterental David Viktorovich, NSTU, Novosibirsk, Russia
- 16.20 – 16.35 Coffee break (Hall B)**
- 16.35 – 16.45 GaAs Substrates Langmuir Evaporation Kinetics
Spirina Anna Alexandrovna, NSTU, Novosibirsk, Russia
- 16.45 – 16.55 An Evaluation of CMOS Inverter Operation Under Cryogenic Conditions
Cherepanov Anton Arkadievich, NSTU, Novosibirsk, Russia

Section 2. Radio and Microwave Technology. Computer Science and
Telecommunications
July 1, 2018 (Hall A)

- 10.10 – 10.20 **Opening**
Chair - Cand.Sc., assoc.prof. **Svetlana Vorobiova**, SibSUTIS,
Novosibirsk, Russia
- 10.20 – 10.30 Simulation and Comparative Analysis of Packet Delivery in Flying
Ad Hoc Network (FANET) using AODV
Litvinov George Alexandrovich, OmSTU, Omsk, Russia
- 10.30 – 10.40 Simulation-Based Packet Delivery Performance Evaluation with
Different Parameters in Flying Ad-Hoc Network (FANET) Using
OLSR
Leonov Alexey Viktorovich, OmSTU, Omsk, Russia
- 10.40 – 10.50 The Complementary Buffer Amplifiers with Low Static Current
Consumption for Low-Voltage Analog Microcircuits
Bugakova Anna Vitalyevna, DSTU, Rostov-on-Don, Russia
- 10.50 – 11.00 Use of Genetic Algorithm and Evolution Strategy when Revealing
the Worst Case Effects of Crosstalk Propagation in PCB Bus of
Spacecraft Autonomous Navigation System
Rustam Rifatovich Gazizov, TUSUR, Tomsk, Russia
- 11.00 – 11.10 Spectral Method of Synthesis of Geometric Models of Surface-
Distributed Objects
Artyushenko Vadim Valeryevich, NSTU, Novosibirsk, Russia
- 11.10 – 11.20 High Stability Microwave Radiometer
Ubaichin Anton Viktorovich, TUSUR, Tomsk, Russia
- 11.20 – 11.30 The Problem of Biometric Identification of a Subject and Subject's
Changed State: Perspectives of New Features Application in
Analysis of Face and Neck Thermograms
Zhumazhanova Samal S., OmSTU, Omsk, Russia
- 11.30 – 11.40 Determination of Critical Parameters of Binary Gibbs Random Field
Based on Image Modeling
Zaitseva Anna Yuryevna, NSTU, Novosibirsk, Russia
- 11.40– 11.55 **Coffee break (Hall B)**
- 11.55 – 12.05 Quantitative Measure of Phase Noise Assessment for Quartz
Oscillators
Sak Pavel Viktorovich, OmSTU, Omsk, Russia
- 12.05 – 12.15 The Differentiating Correction Circuits in Complementary Buffer
Amplifiers
Bugakova Anna Vitalyevna, DSTU, Rostov-on-Don, Russia

- 12.15 – 12.25 Differential Broadband Transimpedance Amplifier in 130 nm SiGe BiCMOS
Fakhrutdinov Rodion Renatovich, OmSTU, Omsk, Russia
- 12.25 – 12.35 Wideband Double-Balanced Active Mixer Based on Gilbert Cell with Integrated Baluns in SiGe BiCMOS 130nm Technology
Murasov Konstantin Vladimirovich, OmSTU, Omsk, Russia
- 12.35 – 12.45 Problems of Neural Networks Training
Fofanov Grigory Alexeevich, OmSTU, Omsk, Russia
- 12.45 – 12.55 SCMA Codebooks Generation for Transmission on an Arbitrary Subcarriers Number
Pokamestov Dmitriy Alekseyevich, TUSUR, Tomsk, Russia
- 12.55 – 13.05 The Analytical Dependence of the Range from the Angular Position of the Line-of-Sight for an Object Represented as Several Planes
Nikulin Andrei Viktorovich, NSTU, Novosibirsk, Russia
- 13.05 – 13.15 A Distributed Object Model with Division into Space and Time Variables
Stepanov Maksim Andreevich, NSTU, Novosibirsk, Russia
- 13.15 – 13.25 Orthogonal Multiple Chirp Modulation for Tasks of Robust Data Transmission
Puzyrev Pavel Ivanovich, OmSTU, Omsk, Russia
- 13.25 – 13.35 Experimental Research of PD/NOMA
Kryukov Yakov Vladimirovich, TUSUR, Tomsk, Russia
- 13.35 – 13.45 Testing Microcontroller Based Physical Systems Using Finite Transition Models
Laputenko Andrey Vladimirovich, National Research TSU, Tomsk, Russia
- 13.45 – 13.55 Mathematical Model and Heuristic Methods for Solving the Multi-Criteria Scheduling Problems
Zhdanov Igor Radievich, BTI AltSTU, Byisk, Russia
- 14.00 – 15.00 Lunch**
- 15.20 – 15.30 Multi-Element Film Microwave Load
Savenkov Gleb Georgievich, NSTU, Novosibirsk, Russia
- 15.30 – 15.40 Testing Digital Circuits: Studying the Increment of the Number of States and Estimating the Fault Coverage
Laputenko Andrey Vladimirovich, National Research TSU, Tomsk, Russia
- 15.40 – 15.50 An Interface Model of the Interconnection Between Integrated Circuit Chip Die and Printed Circuit Board
Antonov Andrey Andreevich, SibIS, Novosibirsk, Russia

- 15.50 – 16.00 1.58 GHz Low Noise Amplifier Design and Verification in 130 nm CMOS Technology
Surin Igor Konstantinovich, SibIS, Novosibirsk, Russia
- 16.00 – 16.10 Quasistatic Simulation of Ultrashort Pulse Propagation in the Spacecraft Autonomous Navigation System Power Circuit with Modal Reservation
Orlov Pavel Evgenyevich, TUSUR, Tomsk, Russia

Section 3. Sonic and Ultrasonic Devices: Physics, Electronics, Application June 30, 2018 (Hall C)

- 14.30 – 14.40 **Opening**
Chair - Dr.Sc., prof. **Vladimir Khmelev**, AltSTU, Byisk, Russia
- 14.40 – 14.50 The Two-Channel Instrumentation Amplifier Based on a New Radiation-Hardened Microcircuit MH2XA010-03 for Reading Signals of Differential Piezoelectric Converters
Bugakova Anna Vitalyevna, DSTU, Rostov-on-Don, Russia
- 14.50 -15.00 Features of Designing of a Specialized High-Frequency Ultrasonic Sprayer
Nesterov Viktor Aleksandrovich, BTI AltSTU, Byisk, Russia
- 15.00 – 15.10 Research of the Process of Ultrasonic Dispersing on the Example of Brown Coal and Peat
Shakura Vladislav Anatolevich, BTI AltSTU, Byisk, Russia
- 15.10 – 15.20 Experimental Study of the Process of Low-Temperature Drying of Waste Wood By the Application of Ultrasonic Fields
Zorin Sergey, BTI AltSTU, Byisk, Russia
- 15.20 – 15.30 Realization of Results of Laboratory Researches in Industrial Scales
Tsyganok Sergey, BTI AltSTU, Byisk, Russia
- 15.30 – 15.40 Development of Power Circuit of the Ultrasonic Generator with Low-Voltage Power Supply
Ilchenko Evgeniy, BTI AltSTU, Byisk, Russia
- 15.40– 15.50 The Modeling of Ultrasonic Cavitation Depolymerization Causing Reducing of Polymer Viscosity
Golykh Roman, BTI AltSTU, Byisk, Russia
- 15.50 – 16.00 Improving the Performance of the Processes in the Systems "Gas-Liquid" Methods of High-Intensity Ultrasonic Effects
Bobrova Galina, BTI AltSTU, Byisk, Russia
- 16.00 – 16.10 Spray Shape Formation at Ultrasonic Spraying Process
Genne Dmitry, BTI AltSTU, Byisk, Russia
- 16.10 – 16.20 Measuring Instrument of Impedance Characteristics of the Ultrasonic Vibrating Systems
Barsukov Roman, BTI AltSTU, Byisk, Russia
- 16.20 – 16.35 Coffee break (Hall B)**
- 16.35 – 16.45 Ultrasonic Devices for Aluminum Melt Processing
Abramenko Denis, BTI AltSTU, Byisk, Russia

- 16.45 – 16.55 Application of Discrete-Phase Model for Gas-Cleaning Efficiency Calculation
Golykh Roman Nikolaevich, BTI AltSTU, Byisk, Russia
- 16.55 – 17.05 Application of Discrete-Phase Model for Gas-Cleaning Efficiency Calculation
Golykh Roman Nikolaevich, BTI AltSTU, Byisk, Russia
- 17.05 – 17.15 Features of Designing of a Specialized High-Frequency Ultrasonic Sprayer
Nesterov Viktor Aleksandrovich, BTI AltSTU, Byisk, Russia
- 17.15 – 17.25 Research of the Process of Ultrasonic Dispersing on the Example of Brown Coal and Peat
Shakura Vladislav Anatolevich, BTI AltSTU, Byisk, Russia
- 17.25 – 17.35 Experimental Study of the Process of Low-Temperature Drying of Waste Wood By the Application of Ultrasonic Fields
Zorin Sergey, BTI AltSTU, Byisk, Russia

Section 4. Optoelectronic Devices and Systems: Physics, Electronics,
Application
June 30, 2018 (Hall C)

- 10.10 – 10.20 **Opening**
Chair - Cand.Sc., prof. **Eugene Sypin**, Byisk AltSTU, Byisk, Russia
- 10.20 – 10.30 Study of High-Frequency Brightness Amplifiers Radial Profile
Musorov Ilya Sergeevich, TPU, Tomsk, Russia
- 10.30 – 10.40 Development and Research of MOPA System Laboratory Model
Vasnev Nikolai Aleksandrovich, IAO SB RAS, Tomsk, Russia
- 10.40 – 10.50 Digital Control Circuit for Synchronization of Two Metal Vapor Lasers. Development and Application
Taratushkina Valeriya Vladimirovna, IAO SB RAS, Tomsk, Russia
- 10.50 – 11.00 Modeling of Concentration Electro-Optical Sensors for Gas and Coal Dust in Multi-Criterial Electro-Optical Device for Control of the Emergency and Pre-emergency Situations in Coal Mines
Zorin Ivan Sergeevich, BTI AltSTU, Byisk, Russia
- 11.00 – 11.10 Adaptation of the High-Speed Multipoint Electro-Optical System for Determining of Flame Spatial Coordinates at the Object of the Specified Form
Sidorenko Alexey Yu., BTI AltSTU, Byisk, Russia
- 11.10 – 11.20 Experimental Determination of Response Time for Multipoint Electro-Optical System of Flame Detection and Determination of Its Spatial Coordinates
Kin Andrey Igorevich, BTI AltSTU, Byisk, Russia
- 11.20 – 11.30 Experimental Investigation of Nonstationary Combustion for Propane-Air Mixture in Pipe with Ring Partitions
Sidorenko Anton Igorevich, BTI AltSTU, Byisk, Russia
- 11.30 – 11.40 Experimental Study on Verification of the Flame Spatial Coordinates Determining Adequacy by Multipoint Electro-Optical System
Shadrin Vyacheslav Anatolevich, BTI AltSTU, Byisk, Russia

Section 5. Power Electronics and Power Engineering July 1, 2018 (Hall A)

- 10.10 – 10.20 **Opening**
Chair - Cand.Sc., prof. **Gennady Zinoviev**, NSTU, Novosibirsk, Russia
- 10.20 – 10.40 **Пленарно-секционный доклад**
Future perspectives of power electronics
Roman L. Gorbunov, Cand. Sc., Senior lecturer, NSTU, Novosibirsk, Russia
- 10.40 -10.50 An Analysis of Input and Output THD Factors of Matrix Converter
Baranov Evgeny Dmitrievich, NSTU, Novosibirsk, Russia
- 10.50 – 11.00 Analysis of the Modern State of Power Converters for Wind Turbine Systems
Volkov Alexander Gennadievich, NSTU, Novosibirsk, Russia
- 11.00 - 11.10 Calculation of the Voltage Inverter Parameters in the Starter-Generator System of the Aircraft
Dubkova Regina Yurievna, NSTU, Novosibirsk, Russia
- 11.10 – 11.20 Mathematical Models for Analysis of Electromagnetic Processes in Thyristor Circuits of AC Voltage Regulators
Udovichenko Aleksey Vyacheslavovich, NSTU, Novosibirsk, Russia
- 11.20 – 11.30 Development of a Mathematical Model of Variable-Voltage Variable-Frequency Aircrafts Electric Power System
Khoroshev Maxim Alexandrovich, NSTU, Novosibirsk, Russia
- 11.30 – 11.40 The Regulation, Protection and Control System for Magnetolectric Generator with Combined Excitation
Mansurov Abilmansur Rafailevich, NSTU, Novosibirsk, Russia
- 11.40– 11.55 **Coffee break (Hall B)**
- 11.55 – 12.05 Modernization of the Weinberg's Converter for the Implementation of a Charge-Discharge Device in the Power Supply System of a Spacecraft
Li Dmitriy, TUSUR, RIST, Tomsk, Russia
- 12.05 – 12.15 Hybrid Microgrid in Islanded Operation Based on Renewable Energy Sources
Abbasi Mojtaba, TPU, Tomsk, Russia
- 12.15 – 12.25 SVPWM Capacitor Balancing Method for Single-Phase Three-Level NPC Impedance-Source Inverters
Filatova Alena, NSTU, Novosibirsk, Russia

- 12.25 – 12.35 Study of a Dual-Loop Subordinate Control System for a DC-DC Converter with Galvanic Isolation
Klassen Sergey Vladimirovich, NSTU, Novosibirsk, Russia
- 12.35 – 12.45 Simulation of a Metal Vapor Active Media Power Supply
Musorov Ilya Sergeevich, TPU, Tomsk, Russia
- 12.45 – 12.55 Mathematical Analysis of the Multiport Converter Operation Algorithm
Sidorov Vadim Evgenyevich, NSTU, Novosibirsk, Russia
- 12.55 – 13.05 Three Phase AC Voltage Cuk Converter with Galvanic Isolation
Sidorov Andrey Victorovich, NSTU, Novosibirsk, Russia
- 13.05 – 13.15 Buck DC-DC Converter with Neural Network Sawtooth-Similar Carrier Signal Generator
Zaev Ilya Veniaminovich, NSTU, Novosibirsk, Russia
- 13.15 – 13.25 Design Rules of the DC-DC Voltage Converter with the Two-Loop Feedback System
Gorbunov Roman Leonidovich, NSTU, Novosibirsk, Russia
- 13.25 – 13.35 Step-by-Step Design of the Digital Closed Loop System of the Boost Voltage Converter
Sevostyanov Nikita Alekseevich, NSTU, Novosibirsk, Russia
- 13.35 – 13.45 Step-by-Step Design of Two-Loop Control System for Boost DC-DC Converter
Alexandrov Ivan Viktorovich, NSTU, Novosibirsk, Russia

Section 6. Medical Electronics

July 1, 2018 (Hall A)

- 12.00 – 12.10 **Opening**
Chair - Dr.Sc., prof. **Vladimir Makukha**, NSTU, Novosibirsk, Russia
- 12.10 – 12.20 Characterization of Electrochemical Aptasensor for Lung Cancer
Tumor Marker Determination
Shabalina Anastasiia Valerievna, National Research TSU SPTI,
Tomsk, Russia
- 12.20 – 12.30 Comparative Analysis of Acoustic Parameters of the Saarbruecken
Database's Voice Records
Shevchenko Tatiana Alexandrovna, NSTU, Novosibirsk, Russia

Section 7. Robotics, Electronics and Automation

June 30, 2018 (Hall C)

- 14.30 – 14.40 **Opening**
Chair - Dr.Sc., prof. **Oleg Nos**, NSTU, Novosibirsk, Russia
- 14.40 – 15.00 **Пленарно-секционный доклад**
Analysis of Electromagnetic Processes in the Induction Channel Unit
Timofeev Viktor Nikolaevich, Dr. Sc., Prof., Head of the Department of Electrotechnology and electrical engineering of SFU, director of RPC "Magnetic Hydrodynamics" Ltd, Krasnoyarsk, Russia
- 15.00 – 15.10 Hysteresis Clutch in the Electric Drive of Pipeline Valves
Din Kyui Kong, TPU, Tomsk, Russia
- 15.10 – 15.20 The Basic Factors on Development of the Drive Control Subsystem for the Special Purpose Mobile Robot Named Geokhod
Semykina Irina Yu., KuzSTU, Kemerovo, Russia
- 15.20 – 15.30 The Control Technique for Cascaded H-bridge Multilevel Converter with Faulty Cells
Abramushkina Ekaterina Evgenevna, NSTU, Novosibirsk, Russia
- 15.30 – 15.40 The Comparative Analysis of the Maximum Slew Rate of the Output Voltage BJT and CMOS (SiGe TSMC 0.35 μ) Operational Amplifiers
Bugakova Anna Vitalyevna, DSTU, Rostov-on-Don, Russia
- 15.40– 15.50 Induction Heating with Rotating Permanent Magnets: Experimental Results on an Industrial Installation
Forzan Michele, University of Padova, Inovalab (a spin off company of University of Padova), Padova, Italy
- 15.50 – 16.00 The Robot System for Remote Robotics Hackathon
Korchagin Alexey, BTI AltSTU, Byisk, Russia
- 16.00 – 16.10 The Participants' Work Checking Subsystem of the Remote Technological Competitions in Robotics
Fokina Anastasija Aleksandrovna, BTI AltSTU, Byisk, Russia
- 16.10 – 16.20 Off-Line Legged Robot with Cross-Country Capacity
Gulyaev Nikita Alexandrovich, BTI AltSTU, Byisk, Russia
- 16.20 – 16.35 **Coffee break (Hall B)**
- 16.35 – 16.45 Increase of Flux Probable Paths Method Accuracy in Design of a Magnetic System with a Teeth-Slot Zone
Rogova Olga Valerievna, NSTU, Novosibirsk, Russia

- 16.45 – 16.55 About One Approach to the Characteristics Assessment of the Wave Solid-state Gyroscope
Khalyutina Olga Sergeevna, LLC "Experimental Laboratory NaukaSoft", Moscow, Russia
- 16.55 – 17.05 The Non-Linear Differentiating Circuits of Correction of Transient Process in Differential Operational Amplifiers
Bugakova Anna Vitalyevna, DSTU, Rostov-on-Don, Russia

