

20th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices (EDM 2019) June 29 - July 3, 2019 Erlagol (Altai Republic, Russia)

20 Prospekt K. Marksa, bldg.4, 316 Novosibirsk, 630073, Russia Organizing Committee EDM 2019 Tel. +7-963-944-8847 (Shults Tatiana) Tel. +7-913-792-7098 (Khristolyubova Alexandra)

E-mail: edm.conf@mail.ru

Сайт: http://edm.conf.nstu.ru/edm2019/

CALL FOR PAPERS

SPONSORS

Novosibirsk State Technical University IEEE Russia Siberia Section

PARTNERS

Rzhanov Institute of Semiconductor Physics, Siberian Branch of Russian Academy of Sciences Biysk Technological Institute of Altai

ORGANIZING COMMITTEE

General Chair

Sergey A. Kharitonov, Dr.Sc., Prof., Head of the Department of Electronics and Electrical Engineering, Head of the Power Electronics Institute, NSTU, Russia.

Co-Chairs

Sergey V. Brovanov, Dr.Sc., Associate Prof., Vice Rector for Academic Affairs, NSTU, Novosibirsk, Russia;

Vladimir A. Khrustalev, Dr.Sc., Prof., Dean of the Faculty of Radio Engineering and Electronics, NSTU, Russia.

Program and Organizing Committee:

- → *Igor G. Neizvestnyi*, Dr.Sc., Prof., Corresponding Member RAS, Counsellor of Rzhanov Institute of Semiconductor Physics, SB RAS, Russia;
- → Svetlana V. Vorobiova, Cand.Sc., Associate Prof. of the Department Radio Engineering Systems SibSUTIS, Novosibirsk, Russia;
- → Viktor A. Gridchin, Dr.Sc., Prof., Department of Semiconductors and Microelectronics, NSTU, Novosibirsk, Russia;
- → *Dmitry I. Ostertak*, Cand.Sc., Associate Prof., Head of the Department of Semiconductors and Microelectronics, NSTU, Novosibirsk, Russia;
- → *Natalya L. Shwartz*, Cand.Sc., Senior Researcher, ISP SB RAS, Associate Prof., Department of Semiconductors and Microelectronics, NSTU, Novosibirsk, Russia;
- → Gennadii S. Evtushenko, Dr.Sc., Prof., Department of Industrial and Medical Electronics, TPU, Tomsk, Russia;

- → *Dmitri Vinnikov*, Dr.Sc.techn., Lead Research Scientist, Head of Power Electronics Group, Tallinn University of technology (TalTech), Tallinn, Estonia;
- → Gennady S. Zinoviev, Dr.Sc., Prof., Department of Electronics and Electrical Engineering, NSTU, Novosibirsk, Russia;
- → *Vladimir K. Makukha*, Dr.Sc., Prof., Head of the Department of Electron Devices, NSTU, Novosibirsk, Russia;
- → Vladislav Y. Vasiliev, Dr.Sc., Prof., Department of Semiconductors and Microelectronics, NSTU, deputy director of SibIS, Novosibirsk, Russia;
- → *Alexey S. Rodionov*, Chair of IEEE Russia Siberian Section, Prof., Department of Computer Systems, SIBSUTIS, Novosibirsk, Russia;
- → Alexander I. Aliferov, Dr.Sc., Prof., Head of the Department of Automation of Electric Technological Installations, NSTU, Novosibirsk, Russia;
- → Alexander G. Garganeev, Dr.Sc., Prof. of Division for Power and Electrical Engineering School of Energy & Power Engineering, TPU, Tomsk, Russia;
- → Maksim A. Stepanov, Cand.Sc., Associate Prof., Department of Radio Receivers and Radio Transmitters, NSTU, Novosibirsk, Russia;
- → Eugene V. Sypin, Cand.Sc., Prof., Department of Methods and Means of Measurement and Automation of Biysk Technological Institute, Biysk, Russia;
- → Vladimir N. Khmelev, Dr.Sc., Prof., Vice-Rector for Scientific Work of Biysk Technological Institute, Biysk, Russia;
- → Jürgen Petzoldt, Prof. Dr.-Ing. Habil, Technische Universität Ilmenau, Ilmenau, Germany;
- → Patricio Salmerón, Prof., Universidad de Huelva, Huelva, Spain;
- → Oleg V. Nos, Dr.Sc., Associate 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;
- → Sergey G. Mihalchenko, Dr.Sc., Associate Prof., Head of Department of Industrial Electronics of Research Institute of Industrial Electronics, TUSUR, Tomsk, Russia;
- → *Dmitry I. Panfilov*, Dr.Sc., Prof., First Deputy Director, research supervisor of Stock Company G.M.Krzhizhanovsky Power Engineering Institute, Head of Department of Industrial Electronics, NRU MPEI, Moscow, Russia;
- → *Aleksey V. Fateev*, Cand.Sc., Associate Prof., Head of Department of Radioelectronics and Data Protection, TUSUR, Tomsk, Russia;
- → Alexey V. Kiselev, Dr.Sc., Prof., Head of Department of Radio Receivers and Radio Transmitters, NSTU, Novosibirsk, Russia;
- → Mohamed Benbouzid, Ph.D., Prof., SMIEEE, Professor of Electrical Engineering at the Institut de Recherche Dupuy de Lôme the University of Brest (France) and Distinguished Professor at the Shanghai Maritime University (China), Editor-in-Chief of the IRECON Journal and an Associate Editor of the IEEE TEC, TIE, TSTE, and TVT;
- → Valery P. Dovgun, Dr.Sc., Prof., Department of Systems of automatic equipment, automated management and design, Institute of Space and Information Technologies, Krasnoyarsk, Russia;
- → *Alexey Ivanov*, Dr.-Ing., research fellow, Fraunhofer Institute for Solar Energy Systems (Fraunhofer ISE), Freiburg, Germany.

Secretaries of the Conference:

Tatiana E. Shults - engineer of the Power Electronics Institute, NSTU, Novosibirsk, Russia; Alexandra I. Khristolyubova – Senior Lecturer of the Department of Electronics and Electrical Engineering, NSTU, Novosibirsk, Russia;

Andrey V. Sidorov - engineer of the Power Electronics Institute, NSTU, Novosibirsk, Russia; Anton Rassolkin - PhD, Research Scientiest, Department of Electrical Power Engineering and Mechatronics, Tallinn University of technology (TalTech), Tallinn, Estonia.

PURPOSE OF THE CONFERENCE

The Conference makes possible the fastest and effective meet of young specialists with the latest achievements of the leading scientific schools of Russia and foreign countries, experience interchange, the establishment of business and scientific communication, own achievements presentation.

PARTICIPANTS

Young scientists under the age of 35 years, graduate students, undergraduates, senior students.

INVITED SPEAKERS

Doctors and Candidates of Science, heads of scientific groups and industrial enterprises.

WORKING LANGUAGES

Russian and English

CONFERENCE SECTIONS

Section 1. Semiconductor Physics and Technology.

Chair - Viktor A. Gridchin, Dr.Sc., Prof.

Section 2. Radio and Microwave Technology. Computer Science and Telecommunications

Chair - Svetlana V. Vorobiova, Cand.Sc., Associate Prof.

Section 3. Sonic and Ultrasonic Devices: Physics, Electronics, Application

Chair - Vladimir N. Khmelev, Dr.Sc., Prof.

Section 4. Optoelectronic Devices and Systems: Physics, Electronics, Application

Chair - Eugene V. Sypin, Cand.Sc., Associate Prof.

Section 5. Power Electronics and Power Engineering

Chair - Gennady S. Zinoviev, Dr.Sc., Prof.

Section 6. Medical Electronics

Chair - Vladimir K. Makukha, Dr.Sc., Prof.

Section 7. Robotics, Mechatronics and Automation

Chair - Oleg V. Nos, Dr.Sc., Associate Prof.

VENUE

Altai... A unique landscape, healthy mountain air and clean natural water attract many tourists, both from Russia and from countries near and far abroad. Participants of numerous scientific conferences held in the Altai, have a unique opportunity to communicate freely and to exchange. A comfortable bus will deliver participants from Novosibirsk to the the sport-camp "Erlagol". Participants and guests of the conference will be offered a variety of cultural and sporting events, excursions.

The sessions will be held in conference rooms equipped with computers and projectors.

Thanks to created conditions one can not only take part in the conference but also relax.

IMPORTANT DATES

Deadline for applications and Paper submission – December 28, 2018

Notification of paper acceptance – March 4, 2019

Deadline for payment of the <u>registration fee</u>, <u>IEEE CF</u> and <u>PDF-file</u> of paper submission – April 26, 2019

FORMS OF PARTICIPATION

It is proposed three forms of participation: absentee participation, direct participation and guest.

Absentee participation includes publication of a paper in EDM 2019 Proceedings and a copy of EDM 2019 Proceeding.

Direct participation includes publication of a paper in EDM 2019 Proceedings, a copy of EDM 2019 Proceeding, a Participant's kit, a certificate of participation, transfer NSTU - "Erlagol" - NSTU, accommodation, meals, and banquet.

Guest participation includes a Participant's kit, transfer NSTU - "Erlagol" - NSTU, accommodation, meals, and banquet.

PARTICIPANTS REGISTRATION

To take part in the conference all potential participants, including guests, must fill in the online application form. Deadline for applications and paper submission is **December 28, 2019**.

ATTENTION! If the application form is successfully completed a confirmation letter will be sent to the email address provided. In case of not getting the confirmation be sure to contact Tatiana Shults (by conference e-mail).

INSTRUCTION FOR AUTHORS

Papers submitted to Program Committee must contain the results of original (unpublished) researches. Paper should adequately convey the nature of the research, papers with low scientific level will be declined. The quality of the English text must meet the requirements of literacy, long expressions should be avoided and generally accepted scientific terminology should be used.

Publication volume cannot be less than 3 pages (excluding references and information about authors) and exceed 6 pages, authorship should be limited to six authors. The list of references should include at least 10 sources on the research topic. Papers with a self-citations level more than 20% will be declined.

At the application the authors must submit next files (file size limit is 20 MB):

- 1. **full text of the paper (doc or docx)** in English, drawn in accordance with the requirements (requirements are presented in the <u>attached file</u>). The name of the file should be in the format <u>SectionNumber_Author'sSurname_en</u> (for example 2 Petrov en);
- 2. **full text of the paper** in Russian **only for authors from the Russian Federation**. The name of the file should be in the format SectionNumber_Author'sSurname_ru (for example 2 Petrov ru);
- 3. **copy of security clearance only for authors from the Russian Federation**, drawn at the place of study/work. The name of the file should be in the format *SectionNumber_Author'sSurnameInitials_expert (for example 2_PetrovAA_expert)*;
- 4. **copy of export commission conclusion only for authors from the Russian Federation**, drawn at the place of study/work. The name of the file should be in the format SectionNumber_Author'sSurnameInitials_export (for example 2 PetrovAA export);

Pay attention that all papers submitted to program committee are checked by IEEE Cross Check system. Similarity over 30% is not acceptable.

ATTENTION! With confirmation of acceptance authors will receive the instructions converts doc(docx)-file to PDF format by **IEEE pdf eXpress**. Dear participants, Program Committee recommends to check pdf file after conversion.

Author becomes an official participant and his/her paper is included in the Proceedings of EDM 2019 when:

- 1. the Program Committee has accepted the paper for publication;
- 2. the confirmation has been sent to the author by e-mail specified during registration;
- 3. paper in pdf format has been received by Program Committee;
- 4. payment of the registration fee has been done;
- 5. copy of documents (security clearance, export commission conclusion only for Russian citizens) have been provided;
- 6. IEEE Copyright Form have been completed.

REGISTRATION FEE

Extras (additional payment required)

- each page of the paper (over 6 pages);
- shipping of the Proceedings;
- additional EDM 2019 Proceedings (it is necessary to notify the organizing committee by email till April 26, 2019).

Shipping of the Proceedings is made only on participant's request by e-mail with the title of the paper, the delivery address, and the addressee.

The registration fees will be available at conference website.

	Absentee participation	Direct Participation	Guest of the Conference
Publication of a paper in EDM 2019 Proceedings	+	+	-
EDM 2019 Proceedings	+	+	-
Program of EDM 2019	-	+	+
Participant's kit	-	+	+
Transfer charges (NSTU – "Erlagol" – NSTU)	-	+	+
Accomodation and meals (at the sport-camp "Erlagol")	-	+	+
Banquet (July 1, 2019 г., the sport-camp "Erlagol")	-	+	+
Certificate of participation	-	+	-

Glad to see you at EDM 2019!