Proceedings of the conference contains

- information about the organizers;
- materials of the conference.

#### **EVENTS**

#### Plenary meeting



#### Fundamental issues of innovations

Results of fundamental researches in different scientific and practical activities are considered

Form of the report: plenary

Time-limit of the speech – up to 30 minutes

#### **Section meetings**



#### Section 1. Information technologies in education

Questions under consideration: educational process management at the high, secondary and basic education; distance education; ICT for improvement of teaching quality and others.

Form of the report – section

Time-limit of the speech – up to 10 minutes

#### Section 2. Information technologies in science and industry



Use of modern information technologies in provision of scholar researches and new types of equipment and technologies creation.

Form of the report – section

Time-limit of the speech – up to 10 minutes

#### Section 3. Information technologies in social-economic sphere



This section is dedicated to issues of innovative and information technologies use in different spheres of society life and activities.

Form of the report – section

Time-limit of the speech – up to 10 minutes

# International Seminar on Electron Devices Design and Production (SED-2019)



Key objectives of the seminar:

- 1. Computer-aided design and production of electron devices
- 2. Electronics Manufacturing Services
- 3. Ensuring the Quality and Reliability of Electronics Devices

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E-mail: i2t@diag.ru

ATTENTION! Please follow the updates on the site WWW.DIAG.RU

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MIREA - Russian Technological University (RTU MIREA)	
Russian Centre of Science and Culture in Prague	

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Experimental laboratory NaukaSoft	NaukaSoft Paykontok

Support		
Russian Academy of Sciences	andren Deceniens Stropens Hope	
Ministry of Education and Science of the Russian Federation	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	

Organisational partners	
Association of graduates and employees of AFEA named after prof. Zhukovsky	Career to Career
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Institute of Electronics and Information Technology of Lublin University of Technology	
FSBEI HE DSMU MOH Russia	
Permanent Mission of the Republic of Dagestan to the President of the Russian Federation	
Tomsk State University of Control Systems and Radioelectronics.	TUSUR UNIVERSITY Томский государственный радиозаектроники сwiten управления и радиозаектроники
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Kudzh S.A., Professor, Doctor of Technical Sciences, Rector of RTU MIREA

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<sup>&</sup>quot;Information Technologies"

<sup>&</sup>quot;Measurement Techniques"

<sup>&</sup>quot;Quality. Innovation. Education»

<sup>&</sup>quot;Sensors and Systems"

<sup>&</sup>quot;EMC Technologies"

<sup>&</sup>quot;Methods of Management Quality"

<sup>&</sup>quot;Management Challenges"

<sup>&</sup>quot;Caspian Journal Management and High Technologies"

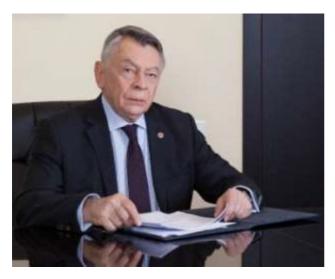
<sup>&</sup>quot;Reliability & Quality of Complex Systems"

<sup>&</sup>quot;Russian technological journal"

#### **Greeting words**

by the conference scientific supervisor, professor Alexander Sergeevich Sigov, Dr.Sci. in Physics and Mathematics, member of the RAS, president of MIREA – Russian Technological University

#### Dear colleagues!



It is my pleasure to welcome you all at the International research and practice conference, «Information Innovative Technologies» (I<sup>2</sup>T).

There is no doubt that the impact science has on all the spheres of human activity — education, production, social interactions, economy, politics — is growing rapidly.

The scientific knowledge is constantly changing in its scale and content: we come across new facts, invent novel hypotheses, develop theories and technologies that replace the old ones. And apparently, information and

communications technologies play a leading role in this process.

Development and expansion of information technologies has led to a fascinating breakthrough in all the spheres, including production, education, business, science and politics. The world is now witnessing rapid changes, that happen within a one generation lifespan. A unified system of interaction between humankind and nature is being built and consolidated – science, technology and production. Research helps us to increase quality of education, to perfect environmental monitoring and production, to develop power- and resource-saving technologies and so on. Today all of this is based on all-round implementation of innovative information technologies, and their contribution to humanity's progress is getting more and more important year by year.

At all times a person who seeks knowledge and can enrich it on his own, who can actively use and share what he knows would be valued in our society and would find a proper place to apply his efforts. Innovative technologies, nowadays, is a prerequisite tool to develop such a personality. The growth of the whole "bunch" of these technologies influences and even determines one's intelligence building as well as creativity and principles of thinking, it creates material background for sustainable development of mankind as a whole. The challenges in these spheres are — in general — considered guiding points for the modern science.

I wish the participants of the conference to have fruitful discussions and further success in their research, to reach their intended goals and develop their research directions and form new schools of science!

A.S. Sigov

#### Words of welcome

# by Stanislav Alekseevich Kudzh, the conference program committee Chairman, Full Professor, DSc., Rector of MIREA - Russian Technological University

#### Dear colleagues!



This year our university holds the next International Research and Practice Conference "Information Innovative Technologies" (I<sup>2</sup>T).

Universal implementation of advanced information technologies is one of the key conditions for countries innovative development. Besides the economic benefit. ICT-based innovations have a huge impact on the lifestyle of a modern man and overall standard of living. In years new business and public administration models, innovative technologies for vocation and research have drastically changed the world around us.

Nowadays professional personnel capacity formation is considered to be a prerequisite for the development of ICT-based innovative technologies.

In the modern context, well-performed higher education is an integral part of the innovation-oriented development of the countries' economies providing their competitive growth on the international labor market.

Organizing and conducting such research and practical conferences allow us to discuss topical issues on vocation and research in terms of innovative solutions for information and communication technologies, and to map out the route for further improvement of science and education.

I am absolutely convinced that the conference participants working together will ensure an in-depth analysis of the problems in this top-priority area, and the discussions of topical and urgent issues on the development and introduction of ICT- based innovations will be the key to their effective solution in the future. There is my confidence in this, because each of you has both great life experience and proficient knowledge.

I wish you fruitful work and success in achieving the intended goals.

S.A. Kudzh

## Greeting words to the participants of

# The International research and practice conference «Information Innovative Technologies» (I<sup>2</sup>T) By Andrei Viktorovich Konchakov,

## head of Representation Office of Russian federal cultural agency, Rossotrudnichestvo in the Czech Republic



Innovative technologies are promising tools to solve the most crucial tasks for forming information society, acquiring knowledge, developing technologies and achieving economic growth. Their broad introduction is one of the key conditions for "the knowledge-driven economy" to be built as well as for improving the overall standard of living.

A modern society's development is determined largely by information techologies being actively introduced. In the recent years new models of business, state management, education, medicine and security have drastically changed the world around us. One of the most acute issues we are facing today is tackling "the digital gap" - making information and communications technologies equally accessible for everyone. Solving this issue is directly linked to the

development of scientific research and training highly qualified experts.

Organizing such research and practice conferences as «Information Innovative Technologies» allows us to discuss topical issues of vocation and research in terms of innovative solutions for information and communication technologies and to map out a route for further development of digital economy, highlight its growth points.

It is my firm belief that wide spectrum of representatives working together at this conference will ensure deep analysis of the problems we have to solve in this top-priority area. And discussing the topical and acute issues of implementing and developing ICT-based innovations will be a prerequisite for their effective solution in the future

I wish the conference participants fruitful work and success in achieving their goals

A.V. Konchakov

#### Words of welcome

by Uvaysov Saygid Uvaysovich, Chairman of the Conference organizing committee, Full Professor, DSc, Head of the Radio-electronic equipment design and production Department of MIREA - Russian Technological University.



The International Research and Practice Conference "Information Innovative Technologies" (I<sup>2</sup>T) is held for the sixth time and has become a tradition. The wide spectrum of partners and participants strongly indicates the importance of the event. One of the best and largest Russian higher education institutions in the field of electronics - MIREA - Russian Technological University and the Russian center of science and culture in Prague, the Czech Republic, render invaluable assistance in organizing and holding the Conference.

According to most experts' opinion the widespread use of information and communication technologies is one of the key conditions for the sustainable development of countries' economies, especially in the era of ubiquitous digitalization.

In various countries of the world, the relationship between the government and the main performers of scientific, innovative and vocational activities develop differently as are based on the traditions and experience gained. That's exactly why we think that our committee's intended goal to consolidate subjects of public administration, public organizations and vocational institutions from both Russia and foreign countries has been successfully achieved resulting in this conference.

Working together, we will be able, firstly, to develop and modernize the research methodology, harmonize various scientific approaches and tackle the scientific knowledge gaps in the field of information, innovative and communication technologies, and secondly, develop science-based recommendations for further education renewal aimed at the universal introduction of ICT-based innovations.

I would like to emphasize that the preservation of our countries scientific and vocational achievements is only possible if an appropriate effective tool for introduction and use of the achievements in the field of ICT-based innovations can be designed.

I wish all conference participants fruitful work, vivid impressions, and creative inspiration. I also hope that your energetic efforts will give everyone an impetus to reach your aims.

S.U. Uvaysov