

**Belarusian Institute of System Analysis and Information  
Support of Scientific and Technical Sphere**

**Newsletter on the Science,  
Technology and Innovation  
Development in Belarus**

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## Foreword

The Republic of Belarus pays much attention to the development of international cooperation in science, technology and innovation. The Agreements on Scientific and Technical cooperation had been concluded with 51 countries.

Issue 3 of the *Newsletter on the Science, Technology and Innovation in Belarus* has been prepared in order to provide stakeholders with the verified and complete information on the status of Belarusian science, technology and innovation systems as well as on main cooperation opportunities. It will be of interest for governmental agencies, research institutes, universities and business enterprises dealing with research and development, and innovation.

This Newsletter is dedicated to trends in science, technology and innovation developments of the Republic of Belarus and contains four parts as follows: (1) science and technology news, (2) data on science and technology joint calls for proposals, (3) data on English language S&T journals edited in Belarus.

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## I S&T News

### **Nuclear power plant inspires to spur development of electric transport in Belarus**

20.08.2020

Launching of the Belarusian Nuclear power plant will give an impulse to the developing of electric transport in Belarus. The development of electric transport and the formation of a new transport ecosystem will become a most important priority in Belarus. There is a government program on the development of electric transport in 2021-2025. The program will contribute to broader use of environmentally-benign and energy-effective transport powered by electricity. Belarusian scientists and engineers have their own accomplishments and competences in the area of energy, radio electronics, and mechanical engineering, which will allow starting the production of electric transport components soon.

**Source:** [State Committee on Science and Technology](#)

### **China-Belarus Industrial Park Great Stone joined a free trade and innovation alliance**

01.09.2020

Industrial Park Great Stone has joined a free trade and innovation alliance. The Alliance pledged to build a community of common responsibilities in response to the global and regional campaigns and initiatives such as the “Belt and Road Initiative,” the “2030 Agenda for Sustainable Development,” and the “Agenda 2063 – The Africa we want”.

The Alliance includes 47 China's domestic free trade zones. The Great Stone joined the alliance as one of foreign special economic areas. Other alliance members include Nigeria's Lekki Free Trade Zone, the Cambodian Sihanoukville Special Economic Zone, the Djibouti International Free Trade Zone in East Africa, and others.

**Source:** [Belarusian Telegraph Agency](#)

### **Changchun's Technopark in China expected to strengthen Belarus-China relations**

03.09.2020

The Chairman of the State Committee on Science and Technology of the Republic of Belarus, Aleksandr Shumilin took part in the Belarusian-Chinese Innovation Forum “From joint projects to an integrated ecosystem”, that was running online on 3-4 September 2020.

During the Forum there were registered the first resident companies. They include the China-Belarus Center for Research and Development of precision medical equipment, the Belarus-China center for joint development and use of carbon-to-carbon compound materials, and the Belarus-China center for development of small fruit crops.

In the period of 2020-2021, Belarus and China have been implementing 35 joint projects in the areas of microelectronics, optics and laser technology, new materials, and biotechnology. The number of bilateral R&D projects grew by 65% over 2015-2016.

**Source:** [Belarusian Telegraph Agency](#)

## **Belarusian Scientists Developments**

11.09.2020

The Chairman of the Presidium of the National Academy of Sciences of Belarus, Vladimir Gusakov represented the latest developments of the Belarusian scientists and specialists during the meeting with the President of Republic of Belarus. The latest developments include: the artificial growing of human organs and tissues, the synthesizing of an artificial cell with a collection of genes, the creation of nanomedications with preprogrammed qualities, the creation of microrobots able to carry out any manipulations in human organs, the creation of an artificial intelligence that can surpass human brain, the creation of new composite materials for various applications, the creation of electric machines that can be controlled with a thought or with sensors, the development of smart city technologies.

**Source:** [Belarusian Telegraph Agency](#)

## **Cooperation with WIPO in the sphere of on implementation of electronic systems**

21.09.2020

The Republic of Belarus is going to expand cooperation with the World Intellectual Property Organization in the sphere of electronic systems implementation for the examination of applications and management of industrial property rights, as well as systems related to the automation of processes in the field of collective management. This direction for cooperation was mentioned within the 61st series of meetings of the Assemblies of the Member States of WIPO.

**Source:** [State Committee on Science and Technology](#)

## **The Innovation Center opened in the Great Stone Industrial Park**

24.09.2020

The Belarusian-Chinese Industrial Park is preparing for the opening of the Innovation Center on its base by the end of 2020. The center will open its doors in order to commercialize the R&D results and is designed to become a comprehensive platform for nurturing startups. It is planned that it will work at full force in 2021. Also there is one more project – the establishing of a center for industrial technology. In the frame of this project, a business incubator for scientific and technological innovative enterprises, including a platform for demonstration of the R&D results of Chinese and Belarusian research organizations and to conduct joint research are going to set up.

**Source:** [Belarusian Telegraph Agency](#)

## **Belarusian State University to get €31m from World Bank to set up research center**

30.10.2020

Belarus and the World Bank signed an agreement on a €100 million loan for the project to upgrade higher education in Belarus). The funds will be also used to develop a modern educational environment at universities, introduce innovative approaches, teaching and learning technologies, and also expand reforms in management and ensuring high quality of education. The work on the project has already been launched.

**Source:** [Belarusian Telegraph Agency](#)

## **Belarus and Kazakhstan Cooperation**

26.11.2020

The seventh Meeting of the Belarusian-Kazakhstan Commission on Scientific and Technical Cooperation between the State Committee on Science and Technology of the Republic of Belarus Alexander Shumilin and the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan took place. During the event the Parties identified priority areas for cooperation for 2021-2023. The cooperation areas cover the following spheres: digital information and communication technologies, mechanical engineering and instrument making, medicine and biotechnology, energy and agro-industrial complex.

For reference: Science organizations from Belarusian and Kazakh are carrying out two joint scientific and technical projects and three pilot innovation projects within the framework of the Interstate Program of Innovative Cooperation of the CIS Member States for the period up to 2020. In addition, higher education institutions of Belarus and Kazakhstan carry out joint research and have already applied for joint patents for inventions.

**Source:** [State Committee on Science and Technology](#)

## **Great Stone Industrial Park Administration and Udmurtia Development Corporation signed an agreement on cooperation**

27.11.2020

It was fixed on November 27, 2020. According to the document the Parties will collaborate in investors' attraction. They also will promote cooperation between the park's residents and industrial enterprises of the Republic of Udmurtia as well as provide mutual informational, consultancy and expert support, business events organization. Udmurtia Development Corporation is a state institute founded by the Government of the Republic of Udmurtia for investments attraction, projects administration and realization, investment infrastructure development in the region as well as small, medium enterprises and community organizations support.

**Source:** [Great Stone Industrial PARK](#)

## **Belarus and Turkey Cooperation**

01.12.2020

The Joint Belarusian – Turkey Commission Meeting on Cooperation in Science and Technology was held. The focus of the meeting put on the cooperation in such spheres as power engineering, ICT, healthcare, chemical technologies, new materials, and biotechnology was in focus of the second session.

The cooperation between Turkish and Belarusian technoparks and between the Turkish Polar Research Institute and the NASB National Center for Polar Research was discussed.

**Source:** [Belarus Telegraph Agency](#)

## **New Center of biotechnologies opened in Belarus' Academy of Sciences**

03.12.2020

The center of biotechnologies opened in the Microbiology Institute of the National Academy of Sciences of Belarus.

The biotech center is an enterprise that uses biotechnologies and modern equipment to cultivate microorganisms and make various commercial forms of biological preparations.

The R&D center is expected to satisfy the domestic demand for competitive environmentally-friendly biotech products, expand the product choice. Also it should bolster the export potential and demand on the world market while contributing to the development of biotechnologies in the country as a whole.

**Source:** [Belarus Telegraph Agency](#)

## II S&T Joint Calls for Proposals

### **Belarus and Mongolia are to hold a Joint Call for Proposals for 2021**

The Belarus Republican Foundation for Fundamental Research and the Mongolian Foundation for Science and Technology announced about the Joint Call for Research Proposals for 2021. The call was held according to the following priority areas: physics, mathematics and informatics; technical sciences; chemistry and Earth sciences; medical technologies and pharmacy; agricultural and biological sciences; social and humanitarian sciences. The deadline for call submission was November 23, 2020.

**Source:** [Belarus Republican Foundation for Fundamental Research](#)

### **Belarus and Russia announced about the Joint Call for Proposals**

The Belarus Republican Foundation for Fundamental Research and Russian Foundation for Basic Research announced the Call for Grant Proposals for young scientists in order to attract talented people from the Republic of Belarus and the Russian Federation to perform joint basic scientific research, create additional incentives for effective scientific creativity and improve the quality of training of scientific personnel. The call was held according the following priority areas: mathematics and mechanics; physics and astronomy; chemistry and materials; biology; information and communication technologies, economics and others. The deadline for proposal submission was October 1, 2020.

**Source:** [Belarus Republican Foundation for Fundamental Research](#)

### **Joint Call for Proposals between Belarus and Israel Science Fund**

The Belarus Republican Foundation for Fundamental Research and the Israel Science Fund announced Joint Call for Scientific Proposals for 2021. The call was held according with the following priority areas: physics, mathematics, informatics, technical sciences, humanities, medicine and Life sciences. The deadline for proposals submission was October 30, 2020.

**Source:** [Belarus Republican Foundation for Fundamental Research](#)

### **Joint Call for Proposals between Belarus and the Science Committee of Republic of Armenia**

The Belarus Republican Foundation and the Science Committee of Republic of Armenia announced a Joint Call for Research Projects "RA MESCS SC - BRFFR -2021". The call was held according with the following priority areas: mathematics, mechanics and computer science; physics and astronomy; chemistry; biology and medical science; sciences about man and society; Earth sciences; information technology and computing systems; Fundamentals of Engineering Sciences. The deadline for proposal submission is February 1, 2021.

**Source:** [Belarus Republican Foundation for Fundamental Research](#)



### III English language S&T journals edited in Belarus

*Below you can find several journals related S&T sphere in Belarus. There are definitely many other editions in Belarus, these ones are under the BSEU, BSTU, BelStat and NANB)*

#### **Statistical bulletin “Science and Innovation activity in the Republic of Belarus” (BelStat, Minsk, 2020 in Russian/English)**

The bulletin presents statistical data on activities of organizations in the field of science and innovations in the Republic of Belarus. It presents the information on the key indicators of science and innovation activities in the Republic of Belarus for the years 2015-2019.

**Download** [here](#)

#### **The Scientific and Practical Journal “Belarusian Economic Journal (Minsk, BSEU, 2020)**

The task of the Belarusian Economic Journal is to introduce the reader to new areas of knowledge that contribute to the innovative development of the country, the implementation of scientific solutions in the field of enhancing the efficiency of using the economic potential, and enriching the Belarusian economic model with an innovative imperative.

**Download** [here](#)

#### **Science & Technique (Minsk, BSTU, 2020)**

The “Science & Technique” is the international scientific and technical journal. It contains topics on the formation of structure and properties of materials under the influence of high energy density, the use of nanomaterials in the engineering and construction materials, computer modeling of material handling, transport complex contemporary issues etc. are discussed in the journal. mechanical engineering. The journal publishes original scientific articles in Russian and English submitted by authors from Belarus and other countries. Science & Technique is an open access journal. All articles are made freely available to readers immediately upon publication.

**Download** [here](#)

#### **Informatics (Minsk, The United Institute of Informatics Problems of the National Academy of Sciences of Belarus, 2020)**

The main purpose of the journal is a publication of new significant results in the field of information technologies development, image, signal and speech processing, information protection, automation engineering, computer aided design, operations research, logistics, supercomputer systems and parallel computing.

**Download** [here](#)

#### **The Journal of Engineering Physics and Thermophysics (Minsk, the A.V. Luikov Heat and Mass Transfer Institute of NAS of Belarus, 2020)**

The Journal highlights papers examining contemporary problems in the fields of technology, engineering, and physics. Specifically, it publishes the results of theoretical and experimental studies in thermophysics, heat and mass transfer, heat conduction, thermodynamics of irreversible processes, theory of drying, heat and mass transfer in disperse and porous systems, formation of

carbon nanostructures, low-temperature plasma, hydrogen power engineering, ecology, rheodynamics, and rheology.

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