



Russian Scientific and Social Programme for Youth and Schoolchildren “The Step Into The Future”[®]



Russian scientific and social programme for young people and schoolchildren “The Step into the Future” is the authoritative national movement of scientific youth, academics, teachers and professionals seeking to develop jointly an innovative future of their country. “The Step into the Future” was established in 1991, at the initiative of the Moscow State Technical University named after N.E. Bauman, which has played a leading role in its development. Since 1995, the work on the implementation of the program is being held in conjunction with the Russian Youth Engineering Society.

Currently the programme involves more than 150 thousands of schoolchildren, students and young scientists. The programme's geography is spread across 9 time zones. In accordance with the Decree of the Government of the Russian Federation as of May 20, 1998, No. 573-r, “The Step into the Future” programme is defined as an integral part of the State policy in the field of providing human resources for the Russian science. The collective creators of “The Step into the Future” were awarded **the Prize of the President of the Russian Federation in the field of education**.

The laureates of programme were greeted by **the Russian Presidents Vladimir Putin, Dmitry Medvedev, Boris Yeltsin**. Russian President **Vladimir Putin**, addressing the winners of “The Step into the Future” programme, said: “Our country is rich with thinking talented people, possessing a huge creative potential. Today, the main task is to combine the results of your research with the practical needs of production industries, which will, I am sure, largely solve the problems facing the domestic economy.”

“The Step into the Future” programme is the main link of the national system of **Scientific and Technical Creativity of the Youth (STCY)**. The programme is partnered with the key innovative state institutes – Russian Ministry of Economy and Development, Open University “Skolkovo”, Rusnano, SIBUR Holding, PJSC Rosseti, PJSC Aeroflot, RusHydro. Programme's projects are re-

ceiving support from Presidential Executive Office, Federation Council, The State Duma, Russian Ministry of Science and Education, Russian Ministry of Economy and Development, Russian Ministry of Defense, Russian Academy of Science.

The goal of the program is to foster **highly promising** young people able to create and implement scientific innovations, modern equipment and high technologies in priority sectors of the Russian economy. The Russian Ministry of Education recommends winners of “The Step into the Future” programme for **awards of the Government of the Russian Federation for support of talented youth**.

The main difference of “The Step into the Future” programme in contrast to similar projects in Russia is the implementation of long-term and continuous work on the scientific training of young people rather than only the presentation of its achievements. “Step into the future” programme is hosting mass propaganda and work among youth, that originates from Russian villages; mass work, devoted to proper training of young people and evaluation of the best and most talented. In the year 2020 **laureates from 235 cities, 350 towns and villages, from 49 regions of the country participated in “Step into the future” Forum**.

At the World Innovation Summit for Education (WISE, Doha, 2011) “The Step into the Future” programme, along with “Skolkovo” Center, has been recognized by the international community as one of the two **major innovative projects in Russia**. 1300 leading scientists and specialists from over 100 countries around the world took part in the Summit. The projects for presentation were selected by the authoritative international Commission as a result of the independent monitoring. The programme managers have been nominated for the “Nobel Prize” in the field of education (WISE-Prize).

Each year “The Step into the Future” programme, through its regional offices, conducts nearly 300

scientific and professional events with young people in the geographical area from Kaliningrad in the West to Anadyr in the East and from Murmansk in the North to Derbent in the South. Throughout its lifetime the Programme is being implemented in the regions by 114 universities, by 50 research organizations (of which 15 are the institutes of the Russian Academy of Sciences), by schools, youth creativity centers, and enterprises. The program pays special importance to education and upbringing of **children living in cities and towns remote from research and scientific centers**. Today the program incorporates more than ten thousand of such participants. About **eight thousands** of leading scientists and specialists, doctors and candidates of sciences across the country are engaged in the programme for teaching young researchers, fostering the future of highly qualified specialists for domestic **innovative** economic improvements.

In an extensive network of regional offices of “The Step into the Future” programme there are 102 **Coordination centers**, and more than **300 organizations are associate members**, which form various public and state bodies. Each regional office is a complex that includes schools, universities, youth creativity centers, research institutes and enterprises. As a rule, **regional authorities governing education, science and youth policy** are the members of the Coordination centers founding organizations.

In 1995, “The Step into the Future” programme established the Russian Youth Engineering Society (RYES). The Board of Trustees of the RYES included the Minister of science and technological policy of the Russian Federation, the Chairman of the RF Committee on higher education, the Minister of Education of the Russian Federation, the Chairman of the RF Committee for youth and a number of other officials. The RYES was attended by more than 90 thousand of young scientists, students, schoolchildren, who were merged into 24 regional organizations. RYES has been included in the **National register of children's and youth associations**.

In 1997, “The Step into the Future” programme organized **the first in Russian history** innovative youth contest called “Youth. Science. Business“. The State Support Fund for assistance to small innovative enterprises in the scientific and technical field participated in it. In 1998, the programme “Step into the future”, being a systematic innovative tool, has formed a **national** network of youth scientific and engineering exhibitions. The first exhibitions were held in Moscow, Lipetsk, Murmansk, Nalchik, Chelyabinsk, Usolye-Sibirskiy.

In the early 2000's the Russian Youth Engineering Society and Coordination centers of “The Step into the Future” programme have organized in the country's regions the work of 37 design offices and laboratories, 283 research groups, 576 academic and professional youth societies, 1113 study groups, optional classes, and lecture centers. In those years, members of the RYES have registered about 200 patents, received more than 150 certificates for utility models, published almost 4000 scientific works.

In the year 2010, “The Step into the Future” programme was the first in the educational history of Russia to start a major project of **research study for especially promising students “Scientific Human Resources of the Future”**. Within the framework of the project “Scientific Human Resources of the future” the research training for students (including distant learning) has been organized in such scientific and technical fields as robotics, ground and space transport, biomedical engineering, nanotechnology, energy systems of the future, etc. At the end of the training, the participants of the project “Scientific Human Resources of the future” continue their research activities in professional groups of scientists and creators of new technology.

The main national event of the programme is the all-Russian Youth Scientific Forum “The Step into the Future”. The Forum is held in Moscow in late March and collects the flower of the scientific youth of Russia. The forum participants are about 1,000 people who are winners of regional, town and rural scientific competitions organized by “The Step into the Future” programme throughout the country. The 40 sections and the scientific exhibition of the Forum exhibit **the best projects** in the field of engineering, natural sciences, social and human sciences. The oldest and prominent Russian universities and scientific centers traditionally provide the galleries for all-Russian Forum “The Step into the Future”: Bauman Moscow State Technical University, Lomonosov Moscow State University, National University of Science and Technology “MISIS”, MIREA - RTU, MSTU “STANKIN”, RSUH, Pushkin State Russian Language Institute, The Research Centre “Fundamentals of Biotechnology” of the RAS, the Institute of Arts of RSU named after A.N. Kosygin and a number of others, Whole History Institute of RAS, Psychological institute of RAE, etc. The Forum is widely covered by electronic and print media, and by the main TV channels.

The system of annual national scientific and educational activities of “The Step into the Future” programme includes: Russian scientific and engi-

neering exhibition “The Step into the Future” (*for senior schoolchildren and university students of junior courses*), the Russian contest of young researchers “The Step into the Future, Junior” (*for schoolchildren of 2-7 years of study*), the all-Russian Conference of young researchers “The Step into the Future” and the National Festival of young fashion designers (*for schoolchildren of 7-11 years of study and university students of junior courses*); the Russian scientific school-seminar/workshop “The Academy of the Young” (*schoolchildren of 4-9 years of study are taught at master-classes of leading Russian scientists and specialists*).

Since the year 2006, in autumn, “The Step into the Future” programme conducts the **Federal-District contest “The Step into the Future, Russia”** in all federal districts of the Russian Federation. The winners of regional, town, rural scientific youth competitions, conferences, Olympiads, exhibitions take part in federal-regional contests. The contests are scientifically and practically oriented and aimed at economically advanced areas of technical, natural and social-humanitarian knowledge, demonstrating the real scientific and engineering advances at exhibition displays and at specialized sessions in the form of a project defense.

The Council of experts of “The Step into the Future” programme and the jury of scientific activities include leading national scholars. Winners of the program are awarded with large and small scientific medals, academic medals and academic scholarships, diplomas and prizes of winners in major and professional nominations, with awards of scientific sections and contests. Teams of young researchers, representing the regions of the Russian Federation, annually compete for the main national science award – the Great Scientific Cup of Russia. The young researchers’ works and articles are published in collective papers “Scientific works of young scientists – participants of “The Step into the Future” programme”.

Domestic producers of goods and services, publishing houses, financial, commercial and scientific organizations establish prizes and diplomas for the best young minds in the country - the winners of “The Step into the Future” programme. Among foreign donors that promote young Russian talents every year are: European Commission, Ricoh Corporation, Mu Alpha Theta Society, “In vitro” Biology Society, Yale Science and Engineering Association, American Meteorological Society, ASM International Foundation, the International Association of professional women in the

field of Earth Sciences, American Psychological Society, Arizona State University.

In the year 2000, the program “The Step into the Future”, with the assistance of the Russian Academy of education, organized a permanent Russian scientific-methodical seminar **“Science in school”** (Order of Ministry of education of Russia as of September 19, 2000 No. 144). Annually **two or three sessions** are held. The seminar allows teachers, scholars and professionals from the most remote regions of the country to familiarize themselves with the methods of science-oriented pedagogy. “The Step into the Future” holds pedagogical workshops, publishes collections of works of young researchers, youth scientific and technical exhibitions catalogues, teaching guides for conducting research with young people.

“The Step into the Future” programme is keeping in touch with **46 countries** in the field of scientific training of young people. In cooperation with “The Step into the Future” programme, **the European Commission** is organizing National contests of young scientists in Russia. Each year, “The Step into the Future” programme and Russian Youth Engineering Society send national delegations to major international youth scientific events, which take place on three continents, among them: the Stockholm International Youth Science Seminar with the participation in **the Ceremony of awarding Nobel prizes** (since 1998), the Contest of young scientists of the European Union (since 1997), the London International Youth Science Forum (since 1996), international and European scientific exhibitions “EXPO-Science (since 1996), the International scientific and engineering Fair, Regeneron ISEF (the USA, since 1996) and others.

Winners of “The Step into the Future” repeatedly took prizes at the international level, were awarded special prizes, including internships at leading research centers abroad.

In the year 2005, at the Bauman MSTU, in cooperation with “The Step into the Future” program and Russian Youth Engineering Society, the Contest of young scientists of the European Union was held, which is the official event organized annually by the Commission of the European Union, the Government of the United Europe. It was for the first time that the Contest was held in a country outside the European Union. To participate in this great youth scientific forum, official delegations from 35 countries of Europe, the United States, Japan, China and Korea, the leaders of the European Union came to Moscow. The President of the Government of the Russian Federation personally welcomed the participants. The

European Union Commission announced the decision to hold the competition in Russia at the Summit of the national organizers in Brussels in 2004. The EU Commission underlined the contribution to the development of youth research in Europe made by the programme "The Step into the Future", which was a decisive factor in winning the contest, in which the right to host the prestigious Youth Forum along with Russia was contended for by a number of countries-members of the European Union.

The Press Center and regional press-services of "The Step into the Future" prepare and publish annually more than 600 reports on the scientific creativity of youth in mass media, of which in regional mass media about 450. Information support to "The Step into the Future" is provided by the

broadcasting companies: TVC Russia 1, STRC "Kultura", Vesti-Moscow, RIC "Russia 24", TV "Centre", TC "Podmoskovye", Moscow-24, RT "Russia Today"; SRC "Radio of Russia", TVC "Prosvescheniye", BMSTU Television Studio, the magazines: "PC World", "Science and life", "Agricultural biology", "Junior technician", "Tekhnika Molodezhi"; the newspapers: "Izvestia", "Uchitelskaya gazeta", "Moskovskiy Komsomolets", "Poisk", "University Vestnik", "Pionerskaya Pravda", "Young Moscow", "Vechernyaya Moskva", "Baumanets"; publishing houses: Drofa, Meshcheryakova, Eksmo. Both the central and regional websites of the programme are in operation.