

## **Programme of activities of the Russian Science Foundation for 2015-2017**

### ***General provisions***

The Russian Science Foundation (hereinafter the Foundation) was established to provide financial and organisational support to basic scientific research and exploratory scientific research, train research personnel and develop research teams that hold leading positions in a particular field of science.

The Foundation performs its activities in accordance with Federal Law No. 291-FZ dated 2 November 2013 “On the Russian Science Foundation and Amendments to Certain Legislative Acts of the Russian Federation” and the decisions of the Foundation’s Board of Trustees.

The Foundation’s activities aim to achieve the objectives of the Innovative Development Strategy of the Russian Federation for the period until 2020 approved by Order No. 2227-r of the Government of the Russian Federation dated 8 December 2011, the Science and Technology Development government programme of the Russian Federation approved by Order No. 2433-r of the Government of the Russian Federation dated 20 December 2012 and the Programme for Basic Scientific Research in the Russian Federation for the Long-Term Period (2013-2020) approved by Order No. 2538-r of the Government of the Russian Federation dated 27 December 2012.

The Foundation provides funding for basic scientific research and exploratory scientific research on a competitive basis for the following branches of knowledge (unless otherwise stipulated in the documentation for individual competitions):

- 01 Mathematics, computer science and systems sciences;
- 02 Physics and space sciences;
- 03 Chemistry and materials sciences;
- 04 Biology and life sciences;
- 05 Fundamental research for medicine;
- 06 Agricultural sciences;

07 Earth sciences;

08 Humanitarian and social sciences;

09 Engineering sciences.

The Foundation may conduct the competitive selection of fundamental and exploratory scientific projects that aim to meet specific objectives within the framework of the scientific priorities approved by the Foundation's Board of Trustees as a result of problems with the socioeconomic development of the country and society, while the projects should produce world-class results and make a significant contribution to resolving key problems involving these scientific priorities.

**The Foundation's mission** is to identify the most promising and ambitious scientific projects as well as the most effective and efficient scientists who are capable of rallying a team of like-minded thinkers and educating the younger generation of Russian researchers who carry out research at the highest international level. If the winners of the Foundation's competitions obtain results that are significant for international science, the Russian economy and the public, they will have long-term prospects for conducting research with the necessary financial support.

#### *Core values of the Foundation*

**Creativity and initiative**, revealing and realising the potential of Russian researchers and searching for and developing promising ideas.

**World-class research**, its relevance and novelty and the significance of the results for international science and to meet the needs of the Russian economy and public.

**Opportunities for the development** of young researchers and research teams.

**Attracting** new researchers, approaches and competencies to science.

**Providing feedback** with the scientific community.

#### *Core principles of the Foundation's activities*

The core principles of the Foundation's activities are:

**Publicity and transparency.** The Foundation is open to cooperation with any Russian, international or foreign organisations, research teams and scientists who contribute to achieving the Foundation's objectives and implementing its

mission. The Foundation informs scientists and the public about its plans, current activities and their results.

**Competence.** The Foundation allocates grants based on the conclusions of the most highly qualified and competent experts – both Russian and foreign.

**Adherence to public interests.** The Foundation acts in the interests of the Russian Federation and is one of the tools used to implement public policy in the field of science.

**Independence.** The Foundation operates within the framework of the legislation of the Russian Federation and the decisions of the Foundation's Board of Trustees and may independently perform duties and exercise the rights granted to non-profit organisations.

**Policy in matters involving rights to the results of intellectual activities.** The rights to the results of intellectual activity created when implementing the programmes and projects funded by the Foundation shall belong to the investigators of these programmes and projects. The Russian Federation may use the results of intellectual activity created when implementing the programmes and projects funded by the Foundation for government needs on the conditions of a royalty-free, ordinary (non-exclusive) licence granted by the right holder to the government customer with the payment of remuneration by the government customer to the author of the results of the intellectual activity.

### *Priority areas of the Foundation's activities*

The Foundation performs its work according to the following priority areas of the Foundation's activities as approved by the Foundation's Board of Trustees:

As part of the competitions held by the Foundation in 2014.

**Basic scientific research and exploratory scientific research by individual research groups.** As part of this priority area, the Foundation provides funding for the projects of individual research groups in the amount of up to 5 million roubles per year; the duration of the projects is up to 3 years with possible extension by 2 years.

**Basic scientific research and exploratory scientific research by the teams of existing scientific laboratories (departments).** As part of this priority area, the Foundation provides funding for research projects by existing scientific laboratories (departments) in the amount of up to 20 million roubles per year; the duration of the projects is up to 3 years with possible extension by 2 years.

**Basic scientific research and exploratory scientific research by new joint scientific laboratories established by a research organisation and university.** As part of this priority area, the Foundation provides funding to research projects by joint laboratories newly established based on the integration of a research organisation and higher education organisation in the amount of up to 25 million roubles per year; the duration of the projects is up to 3 years with possible extension by 2 years. Each project requires the organisation that wins the competition to be involved in building infrastructure for the new laboratory and co-funding the project (including by the founder of the winning organisation) in an amount totalling at least 25 per cent of the Foundation's grant.

**The implementation of integrated scientific programmes that provide for the development of scientific and higher educational organisations in order to bolster the human resource capacity of science, engage in world-class scientific research and engineering, and create high-tech products.** As part of this priority area, the Foundation provides funding for integrated scientific programmes by individual research organisations or universities. The grants are for up to 150 million roubles per year, while co-funding by the winning organisation (founder of the winning organisation) is to amount to at least 25 per cent of the Foundation's grant. The duration of funding for the programme by the Foundation is 5 years.

**Basic scientific research and exploratory scientific research by international research groups.** As part of this priority area, the Foundation provides funding of up to 10 million roubles per year for research projects by international research teams that are conducting basic scientific research and exploratory scientific research on the core of Russian research organisations and Russian higher education organisations located on the territory of the Russian Federation and international (interstate and intergovernmental) research organisations. The duration of each project is up to 3 years with possible extension by 2 years.

As part of the competitions organised by the Foundation in 2015.

**Basic scientific research and exploratory scientific research on priority research subjects.** As part of this priority area, the Foundation will provide funding for research projects on priority research subjects approved by the Foundation's Board of Trustees in an amount ranging from 4 to 6 million roubles per year; the duration of the projects is up to 3 years with possible extension by 2 years. For several priority subjects, an additional condition

(advantage) may be that the project is interdisciplinary and involves multiple research teams.

**Basic scientific research and exploratory scientific research by international research teams.** Projects within this priority area are to be selected as part of coordinated competitions with foreign partners (as the relevant negotiations are summarised and both parties are prepared to announce the competitions). The Foundation will provide funding for the Russian side of an international research team in the amount of approximately 6 million roubles per year; the duration of the projects is up to 3 years with possible extension by 2-3 years. The foreign partner will provide approximate parallel funding for the foreign side of the international research team.

**Basic scientific research and exploratory scientific research with the involvement of young researchers.**

This priority area involves the selection of projects under the guidance of effective scientists who work permanently at research organisations and universities located in the regions of Russia except for Moscow, the Moscow Region, St Petersburg and the Leningrad Region that provide for the regular participation in each project of at least two young (under the age of 35) candidates of science from other cities who have defended their dissertation no earlier than 1 January 2013. Funding for the project by the Foundation is up to 8 million roubles per year; the duration of the project is up to 3 years with possible extension by 2 years. The project must require the young researchers to move to another region.

**Basic scientific research and exploratory scientific research with the results presented as part of an international conference (congress).** As part of this priority area, the Foundation will provide funding of up to 8 million roubles per year for projects that provide for holding a prestigious international scientific conference (congress) on a subject of the project on the territory of the Russian Federation in addition to performing basic scientific research and exploratory scientific research. The conference should be held earlier at least twice on the territory of other countries. At least two schools for young scientists should also be organised as part of the project with leading Russian and foreign scientists invited as lecturers. The duration of the projects is up to 3 years.

**Basic scientific research and exploratory scientific research in small groups under the guidance of leading Russian and foreign scientists.** As part of this priority area, the Foundation will provide funding of up to 10

million roubles per year for projects that involve research under the guidance of leading Russian or foreign scientists. The duration of the projects is up to 3 years with possible extension by 2 years. One of the conditions for a foreign scientist is full-time project management and staying on the territory of the Russian Federation (employment at the organisation where the project is being implemented) for at least 183 days per calendar year. One of the conditions for a Russian scientist is full-time project management in a Russian region that is different from scientist's permanent place of residence for at least 183 days per calendar year, and the organisation where the project is being implemented may not be located on the territory of Moscow, the Moscow Region, St Petersburg or the Leningrad Region.

**Basic scientific research and exploratory scientific research requiring the purchase of high-tech scientific equipment.** As part of this priority area, the Foundation will provide funding of up to 15 million roubles per year for projects in physics, chemistry, biology, medicine, earth sciences and engineering sciences which require the use of the latest scientific equipment and which previously could not be implemented in Russia due to the lack of such equipment, including at common use centres. The duration of the projects is up to 3 years with possible extension by 2 years if the amount of funding is reduced under an extension of up to 6 million roubles per year. As part of each project, co-funding is provided for the first three years of the project by the organisation that won the competition (including by the founder of the winning organisation) in an amount totalling at least 25 per cent of the Foundation's grant. One of the conditions for the project's implementation is the winner's obligation to organise access to the purchased equipment (relevant services) for third parties with the coverage of expenses.

### **Purpose of the Programme**

The purpose of the Programme is to contribute to the formation in the Russian Federation of an advanced sector of fundamental and exploratory research that is globally recognised and develop the human resource capacity of Russian science.

### **Objectives of the Programme**

To organise the competitive selection of research programmes and projects that ensures grant support for the most competent and productive researchers who are capable not only conducting world-class research but also educating the new generation of Russian scientists and specialists.

To ensure the qualified and objective expert evaluation of applications submitted for the Foundation's competitions.

To develop international scientific cooperation and integrate Russian fundamental science into the global scientific space.

***Main approaches to competitive and expert procedures when implementing the Programme***

The Foundation's competitions are public and conducted in accordance with the civil legislation of the Russian Federation and the procedure approved by the Foundation's Board of Trustees for the competitive selection of scientific and technical programmes and projects submitted for a competition of the Russian Science Foundation.

The Foundation provides support for the projects that are victorious at the competitions regardless of the position held by the project leader, the form or incorporation, ownership form or location of the research organisations or higher educational organisations with which the project leader and research team members have employment or civil relations.

Conditions for the provision of financial support by the Foundation include applicants assuming the obligation to publish the results of the scientific research with reference to the Foundation's financial support as well as their consent to the publication of the main provisions of the competitive application and reporting materials over the implementation of the relevant project.

In accordance with a decision by the Board of Trustees, the Foundation may impose restrictions on competition participants, including restrictions associated with the publication activities of competition participants and their involvement in projects previously supported by the Foundation.

Projects supported by the Foundation may not have any other funding sources unless stipulated in the competition documentation. A project may not be submitted to the Foundation that is similar or close to any project in scope submitted concurrently for the competitions of research foundations and other organisations.

The Foundation's Information and Analytical System (IAS), which ensures the remote submission of applications and all additional materials for a competition, is used for competitive and expert evaluation procedures along

with a similar mode of operation for work with applications by the Foundation's experts.

All applications eligible for the competition shall undergo an expert evaluation in accordance with the procedure for the expert evaluation of scientific and technical programmes and projects submitted for the Foundation's competition. Applications shall be referred for expert evaluations in accordance with the classifier codes according to the branches of knowledge specified by the project leaders in the applications.

Information about the content of the applications and the expert evaluation is confidential. Members of the Foundation's expert councils, hired Foundation experts and Foundation employees are not entitled to disclose such information. They are not permitted to communicate with the applicants on matters involving the consideration and expert evaluation of applications.

After the competition results are tallied, the Foundation shall provide project leaders with the opportunity to study an excerpt from the expert opinions. The project leader may submit written objections to the Foundation against the findings in the expert opinions. The results of project expert evaluations are not revised, but the Foundation may verify the validity of the contested expert opinions.

The expert evaluation of projects is a multi-stage process. During the first stage, the evaluation is performed by the Foundation's experts (multiple experts per application), but foreign scientists may be involved in the expert evaluation for certain priority areas of the Foundation's activities.

The second stage of the expert evaluation involves an assessment of the application materials by the sections of the Foundation's relevant expert council (if available) or individual members of the Foundation's expert council under orders from the chairman of the Foundation's expert council. This assessment is conducted taking into account the results of the first stage of the expert evaluation. The results of the second stage of the expert evaluation are considered at a meeting of the Foundation's relevant expert council.

The competition results are approved by the Foundation's Management Board based on the recommendation of the Foundation's relevant expert council.

### ***Anticipated results of the Programme's implementation***



Achieving significant results for global science, the Russian economy and society in fundamental and exploratory research.

Strengthening the position of young researchers in science and education.

Developing international scientific ties among Russian scientists and enhancing the standing of Russian science in the international scientific community.

### ***Resource support for the Programme***

The programme is to be implemented through the property contribution of the Russian Federation to the Foundation, which will total 54.6 billion roubles in 2015-2017, including 17.2 billion roubles in 2015, 18.7 billion roubles in 2016 and 18.7 billion roubles in 2017, as well as income earned by the Foundation from the investment of idle funds.

### ***Programme performance indicators***

<b>Indicator</b>	<b>Measurement unit</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Proportion of researchers under the age of 39 in the overall number of investigators of projects supported by the Foundation	%	45	50	55
Number of citations per 1 publication by Russian researchers supported by the Foundation in scientific journals indexed in the Web of Science	Unit	0.5	1.0	1.3
Proportion of publications containing the results of research supported by the Foundation in the overall number of publications by Russian scientists indexed in the Web of Science	%	5	10	12
Number of publications of Russian authors indexed in Scopus per 100 researchers whose projects are supported by the Foundation	Unit	5	11	12
Number of publications indexed in the international database of the RSCI per 100 researchers whose projects are supported by the Foundation		10	25	30