## Competition Documentation for an Open Public Competition to Receive Grants from the Russian Science Foundation within the Program «Research Conducted on the Base of the World Class Research Laboratories within the Priorities of the Scientific and Technological Development of the Russian Federation» Under the Presidential Program of Research Projects Carried out by the Leading Scientists Including Young Scientists

1. The open grant competition of the Russian Science Foundation within the program «Research Conducted on the Base of the World Class Research Laboratories within the Priorities of the Scientific and Technological Development of the Russian Federation» under the Presidential program of research projects carried out by the leading scientists including young scientists and the priority area of the Russian Science Foundation «Basic Scientific Research and Exploratory Scientific Research by Order of the President of the Russian Federation» (hereinafter — competition, grants) shall be conducted in accordance with the Procedure for the Competitive Selection of Scientific and Technical Programs and Projects Presented for the Foundation (hereinafter — Foundation) (Minutes No. 12 as of August 02, 2018).

2. The source of the Foundation grants shall be the property of the Russian Science Foundation.

3. The grants shall be allocated for scientific and technical programs and projects, basic research and exploratory research (hereinafter — projects, scientific research) conducted in 2019-2022, with a possible extension of the project duration for a period from one to three years, in the following branches of knowledge:

- 01 Mathematics, Computer and Systems Sciences;
- 02 Physics and Space Sciences;
- 03 Chemistry and Materials Sciences;
- 04 Biology and Life Sciences;
- 05 Basic Research for Medicine;
- 06 Agricultural Sciences;
- 07 Earth Sciences;
- 08 Humanities and Social Sciences;
- 09 Engineering Sciences.

The scientific research (project) has to be targeted to resolve specific issues within one of the areas listed in the Strategy of Scientific and Technological Development of the Russian Federation (approved by the Order of the President of the Russian Federation No 642 as of December 1, 2016 on the Strategy of Scientific and Technological Development of the Russian Federation) (see the list below), and should enable to achieve scientific and technological results and create technologies to form the basis for the innovation development of the domestic product and service market, Russia's stability in the foreign markets, and should make possible:

N1. Shifting to advanced digital, smart production technologies, robotic solutions, new materials and construction methods, large volume data processing systems, machine training, and artificial intelligence.

N2. Shifting to ecologically friendly and resource-smart power industry, increased efficiency of hydrocarbon development and advanced processing, creating new energy sources, energy transportation and storage ways.

N3. Shifting to personalized medicine, hi-tech health care, and health protection technologies including but not limited to the rational use of medicines (primarily, of antibacterial medicines)

N4. Shifting to high producing eco-friendly agricultural and aqua-farming, development and application of biological and chemical agricultural plant and animal protection systems, storage and effective processing of agricultural products, creation of safe, high quality foods, including functional nutritional products.

N5. Countering anthropogenic, biogenic, and sociocultural threats, terrorism and ideological extremism, as well as cyber threats and other possible dangers to society, economy, and state.

N6. Connectivity between regions of the Russian Federation by creating smart transport and telecommunication systems; acquiring and maintaining leadership in international transport and logistics system development; outer space, airspace, World ocean, Arctic, and Antarctic exploration and use.

N7. Opportunity for the Russian society to effectively respond to the current global challenges in terms of human-to-nature, human-to-technology, and social institutions interaction, using the methods of humanitarian and social sciences.

The project realization has to be targeted, in particular, to form the scientific and technological groundwork which will ensure economic growth and social development of the Russian Federation.

Priority support will be afforded to the projects that provide for the output of new products or the improvement of the current products (goods, works, services), the output of new technologies or the development of the existing ones.

4. The competition is open to projects by research teams that conduct the world class research on the base of the established laboratories (structural divisions) of Russian research organizations, Russian higher educational institutions, and other organizations whose constituent documents provide possibility for scientific research, international (inter-state and inter-governmental) organizations located on the territory of the Russian Federation (hereinafter — research team, laboratory<sup>1</sup>, organization), regardless of the position, academic degree and citizenship held by the head of the research team (hereinafter — project leader) and the type of business organization and ownership of the companies with which the project leader and members of the research team are associated in their civil or professional activities.

<sup>&</sup>lt;sup>1</sup> For the purposes of the current competition a laboratory is meant for any structural division of an organization (institute, center, department, for example), which is established in accordance with the established procedure.

5. The Foundation grants shall be provided for the realization of a research project by the research team to the project leader on a free and non-refundable basis according to the competition results under the terms specified by the Foundation, via organization.

6. The project leader cannot be the scientist who served as a project leader that was previously supported by the Foundation and that would not be completed by January 2019.

The scientist who was deprived of the right to lead the project for a specific period of time<sup>2</sup> as a result of leadership disclaimer for a project previously supported by the Foundation and/or early termination of a project previously supported by the Foundation is not eligible to be the project leader by resolution of the Foundation Supervisory Board.

7. The scientist who is in any way involved in the implementation of two or more projects supported by the Foundation is not eligible to be a member of the research team at the point of his/her involvement in the implementation of the project, winner of the current competition.

A member of the research team can not be an employee who is supervising administratively the leader of the Russian research team.

8. The project leader and research team members may be employees of the organization as well as the other persons hired to implement the project who have employment or civil relations with the organization over the duration of the practical implementation of the project.

The project leader must have employment relations<sup>3</sup> (excluding remote work) with the organization over the entire duration of the practical implementation of the project.

A labour contract with the project leader should anticipate his in person participation in the project works performance on the territory of the organization during<sup>4</sup> no less than 180 days for Russian<sup>5</sup> and 90 days for foreign scientists.

9. Prior to the competition, the project leader must have a number of publications<sup>6</sup> in peerreviewed Russian and foreign scientific journals indexed in the Web of Science Core Collection or Scopus<sup>7</sup> database and published over the period from January 1, 2014, to the date of the application submission:

<sup>2</sup> The list of grounds for revoking the right to manage a project is posted on the website of the Russian Science Foundation (www.rscf.ru) under Documents > Individual Decisions of the Supervisory Board.

<sup>3</sup> The project leader is entitled to distribute grant funds from the moment that changes are made (if necessary) to the current employment contract with the organization in accordance with the agreement signed by the Russian Science Foundation, the project leader and the organization on the disbursement of grants for carrying out fundamental scientific research and exploratory scientific research (hereinafter the Agreement) or a (fixed) labour contract is concluded in accordance with the Agreement.

<sup>4</sup> No less than 120 days for Russian and 60 days for foreign scientists – at the first year of the project implementation.

<sup>5</sup> Citizens of the Russian Federation who are the tax residents of the Russian Federation.

<sup>6</sup> If a work is published in a journal that is indexed in the Web of Science Core Collection or Scopus databases and has an impact factor that places it in the JCR Science Edition, JCR Social Sciences Edition or Scopus SJR for the first quarter (Q1) of the year of publication (Q1 journals are listed in the database http://www.scimagojr.com/, then the article in question is weighted as two publications. Publications belonging to Q1 are indicated in Article 2.9, Annex 1, Form 2.

<sup>7</sup> The list of publications is provided in Article 2.9, Annex 1, Form 2.

a) for branches of knowledge 01 - 07, 09 specified in clause 3 of this competition documentation – no less than ten different publications;

b) for branch of knowledge 08 – no less than five different publications.

10. The financial provision of the project in the amount of no less than 32 (thirty two) million rubles annually is comprised of the Foundation's grant and co-financing. The size of each grant is no more than: 30 (thirty) million rubles – in 2019; 28 (twenty eight) million rubles – in 2020; 26 (twenty six) million rubles – in 2021; 24 (twenty four) million rubles – in  $2022^8$ .

Co-financing<sup>9</sup> can be provided by any legal entity (hereinafter — partner) interested in the project results, which should be proved out by the corresponding documents<sup>10</sup>.

The Foundation has the right to sign the agreement only on receipt of the documents which prove out co-financing in the year 2019.

For purpose of co-financing of the projects supported on the results of the competition during the whole period of its realisation with the use of the Foundation's grant, one cannot raise money different from those provided by partners, including governmental, internal resources of the organisation and other foundations' grants, if another is not provided for by the present competition documentation for the reimbursement of the concrete expenditures.

11. The Foundation may alter the amount of annual funding in the event of a reduction in the size of the Russian Federation property contribution to the Russian Science Foundation or by decision of the Foundation Supervisory Board in accordance with the results of an peer-review of the grant application, reports submitted on the implementation of the project and on the proper use of the grant by its recipient.

12. The proportion of research team members aged up to and including 39 years directly involved in the performance of scientific research shall be no less than 40 (forty) per cent over the entire duration of the practical implementation of the project<sup>11</sup>.

Each member of the research team shall receive remuneration annually for work performed as part of the project's implementation.

The total amount of annual remuneration for one member of the research team may not exceed 15 per cent of the total annual remuneration for all members of the research team<sup>12</sup>.

<sup>&</sup>lt;sup>8</sup> The planned amount of financing under the project is indicated in Article 1.8, Annex 1, Form 1. Any violation of the terms and conditions herein shall lead to the application being rejected regardless of its current status.

<sup>&</sup>lt;sup>9</sup> Any sources of financing in monetary form, which are allowed by the legislation of the Russian Federation, shall be used. For the purpose of co-financing one can use finances invested in the project realization (excluding invoices), R&D agreements with partners aimed at project co-financing and accounting for work delivery on project thematic.

<sup>&</sup>lt;sup>10</sup> Supporting documents (if any) or the certified copies of them are provided as part of the application.

<sup>&</sup>lt;sup>11</sup> The composition of research teams is listed in Article 1.6, Annex 1, Form 1. Any violation of the terms and conditions herein shall lead to the application being rejected regardless of its current status.

<sup>&</sup>lt;sup>12</sup> Including guarantees established by the legislation of the Russian Federation and deductions for insurance contributions – compulsory pension, medical and social insurance (the latter to cover instances when the individual is physically unable to work and maternity leave), and social insurance (to cover work-related accidents and occupational diseases).

The total number of members of the research team (together with the project leader) may not exceed 30 persons<sup>13</sup>.

13. The project leader shall be entitled<sup>14</sup> to submit only one<sup>15</sup> application as a team leader to take part in this<sup>16</sup> competition. There shall be no restriction on the number of projects one organization may implement.

14. It shall not be permitted to submit a project to the Foundation that is similar in scope to a project which has been concurrently submitted for other competitions of the Foundation, or other research foundations or organizations, or which is currently being implemented using the funds of foundations or organizations, state (municipal) order, and development programs funded by the federal budget. Should these conditions be violated, the Foundation shall discontinue funding for the project regardless of its stage of implementation with the simultaneous recovery of the funds paid to the grant recipient in the prescribed manner.

15. The projects supported as a result of the competition may not contain information that constitutes a state secret or other restricted information that is to be protected in accordance with the legislation of the Russian Federation.

16. A mandatory condition for the provision of the grant by the Foundation shall be undertaking of the following obligations by the research team in the name of the project leader:

16.1. To make the results of their scientific research part of the public domain in accordance with the legislation of the Russian Federation by publishing them in Russian and foreign peer-reviewed scientific journals.

16.2. To make publications<sup>17</sup> in Russian and foreign peer-reviewed scientific journals during the practical implementation of the project:

a) for branches of knowledge 01-07 and 09 specified in clause 3 of this competition documentation – no less than 40  $(forty)^{18}$  publications indexed in the Web of Science Core Collection or Scopus databases;

b) for branch of knowledge 08 – no less than 25 (twenty five) publications indexed in the Web of Science Core Collection or Scopus databases.

<sup>&</sup>lt;sup>13</sup> The number of research team members is indicated in Article 1.6, Annex 1, Form 1.

<sup>&</sup>lt;sup>14</sup> There is no limit to the number of other projects in which the individual can take part.

<sup>&</sup>lt;sup>15</sup> Any violation of the terms and conditions herein shall lead to the application being rejected regardless of its current status.

<sup>&</sup>lt;sup>16</sup> In the event that the project leader is involved in several competition competitions organized by the Russian Science Foundation at the same time, he/she is required to attach a letter to all subsequent applications indicating his/her priorities with regard to the projects that submitted to the Russian Science Foundation, with due account of the restrictions set forth in clause 6 of the present competition documentation. The letter is automatically generated by the IAS, taking the priorities indicated by the project leader into account, printed, signed and sent to the Russian Science Foundation as part of the application package.

<sup>&</sup>lt;sup>17</sup> The number of planned publications is indicated in Article 1.9, Annex 1, Form 1.

<sup>&</sup>lt;sup>18</sup> If a work is published in a journal that is indexed in the Web of Science Core Collection or Scopus databases and has an impact factor that places it in the JCR Science Edition, JCR Social Sciences Edition or Scopus SJR for the first quarter (Q1) of the year of publication (Q1 journals are listed in the database http://www.scimagojr.com/, then the article in question is weighted as two publications.

16.3. To mention the financial support received from the Foundations in published results of any research work performed as part of a project supported by the Foundation.

16.4. To agree that the summary of the supported project and relevant project implementation reports will be published by the Foundation, including publications on the Web.

16.5. To attract during the first 12 months of the project realization on the base of the open competition no less than three young scientists with PhD (postdocs) at the age of up to 35 inclusively from other organization for the work on the project. Herewith the duration of working time foreseen by the labor agreement with each of the young scientist shouldn't be less than the regular duration<sup>19</sup> of the working time (or shortened<sup>20</sup> in cases foreseen by the legislation of the Russian Federation). The Organization has to provide no less than 50 (fifty) percent of the funds to cover the expenses for their work.

16.6. To agree that the summary of the supported project and relevant project implementation reports will be published by the Foundation, including publications on the Web.

16.7. To agree, that the application submitted for the competition may be subject of international peer-review.

17. Applications for the competition shall be submitted by the project leader using the forms in accordance with Appendix 1 to this competition documentation both electronically (via the Foundation Information and Analysis System (hereinafter the IAS) and as hard copy (printed from the IAS), both forms identical. Applications shall be submitted to the Foundation in Russian with the exception of several fields of the application forms that are to be completed in English (only where specifically indicated).

18. Applications shall be completed in the Foundation IAS located on the Internet at the address http://grant.rscf.ru<sup>21</sup>. As an application receives a registration number in the IAS, the project leader must print and submit one hard copy of the application and additional materials to the Foundation **no later than 12:00 (noon, Moscow time) October 18, 2018**, at the address: Moscow, GSP-2, 109992, ul. Solyanka, d. 14, str. 3. The project leader shall independently choose the method for delivering the application materials to the Foundation that ensures that they are received by the Foundation by the required deadline.

19. The hard copy of the application (including additional materials) must be **bound/stitched and affixed with the organization seal** (if applicable), while the relevant forms must be personally signed by the project leader, the core research team members (core investigators) and the head of the organization (authorized representative acting on the basis of a power of attorney)<sup>22</sup>.

20. Applications received by the Foundation shall not be returned.

<sup>&</sup>lt;sup>19</sup> In accordance with Article 91 of the Labour Code of the Russian Federation.

<sup>&</sup>lt;sup>20</sup> In accordance with Article 92 of the Labour Code of the Russian Federation.

<sup>&</sup>lt;sup>21</sup> The application cycle consists of the following stages: registration of the leader of the project and up to three core investigators (if this was not done previously), filling out in the IAS the information about the leader of the Russian research team and the core investigators, preparing the application, registration of the application.

<sup>&</sup>lt;sup>22</sup> In the event the application is signed by an authorised representative, a power of attorney (copy of a power of attorney certified by the organisation's seal) shall be attached to the hard copy of the application.

21. The following applications are not eligible for the competition:

a) applications that are completed and/or submitted to the Foundation violating the requirements of clauses 17, 18 and 19 of this competition documentation;

b) applications that are completed and submitted to the Foundation violating the requirements for the content of the application to take part in the competition set forth in the announcement on the competition and the competition documentation;

c) applications whose hard copy version differs from the electronic version registered in the IAS;

d) applications whose hard copy versions were received<sup>23</sup> by the Foundation after the submission deadline;

e) applications whose content violates the requirements of clauses 3, 4, 6, 7, 9, 10, 12-16, and 36 of the competition documentation, including the qualification requirements set out in clause 9;

f) applications containing conflicting information regarding the qualification requirements of applicants, specifically under clause 2.9 of Annex 1 in Form 2;

22. The Foundation shall notify the project leader via the IAS about the registration of the application, the receipt of the hard copy of the application, and the results of the competition.

23. The project leader shall be entitled to withdraw an application submitted for the competition provided that the relevant written notification is submitted to the Foundation.

24. The project leader is entitled to make changes in the application submitted for the competition only in the form of its withdrawal in accordance with clause 23 of this competition documentation and submission of a new application for the competition by the required deadline.

25. Applications eligible for the competition shall undergo a peer-review in accordance with the Procedure for Expert Evaluation of Scientific and Technical Programs and Projects Submitted for a Competition of the Russian Science Foundation and the Criteria for the Competitive Selection of Scientific and Technical Programs and Projects Submitted for a Competition of the Russian Science Foundation<sup>24</sup>.

Applications are approved for peer-review in accordance with the classifier codes for the branches of knowledge specified in the applications by the project leaders.

26. The competition results shall be approved by the Foundation Supervisory Board by March 01, 2019.

27. The list of supported projects based on the competition results shall be published on the Foundation website no later than 10 days after the competition results are determined.

28. Should the projects be supported by the Foundation, the agreements with the following data will be sent to the project leaders via the IAS system for completion and signing within 15 business days after the competition results approval date:

<sup>&</sup>lt;sup>23</sup> Regardless of their submission for delivery and / or the reasons for delays in the delivery to the Foundation.

<sup>&</sup>lt;sup>24</sup> The documents were published on the Internet at the address http://rscf.ru/ru/documents.

— area of scientific research;

- research work plan and budget layout<sup>25</sup>;

- obligation for the project leader to submit annual report on the project implementation;

- obligation for the organization to provide the research team with the necessary facilities, equipment, and supplies as well as access to available experimental base for the scientific research;

– obligation for the organization to conclude civil or employment (fixed-term) contracts<sup>26</sup> with each member of the research team in accordance with the grant conditions;

- obligation for the organization to pay remuneration to the members of the research team for the work performed as part of the project under written orders from the project leader;

- obligation for the organization to keep separate records of grant expenditures and present reports on its proper use;

- conditions and procedures for the parties to terminate the agreement and the return of the grant funding (partial), including the cases when the Foundation identifies the misuse of the grant;

- obligation of the organization to ensure co-financing to the research team;

- other rights and duties of the Foundation, the project leader, the head of organization associated with the use of the grant.

29. The amount of the financial support for the project in the agreement may be reduced compared to the amount requested by the project leader in accordance with the decision of the Foundation Supervisory Board based on the recommendations from the Foundation Review Board.

30. The Foundation may not conclude an agreement if the project leader is different from the one declared in the application that has undergone peer-review procedure.

31. Within 15 business days after receipt via the IAS of a draft agreement signed by the Russian team leader and authorised representative of the organisation, the agreement or a substantiated refusal by the Russian team leader or organisation to sign the agreement must be submitted to the Foundation. The Russian team leader shall independently choose the method for delivering the signed agreement to the Foundation that ensures that it is received by the Foundation on time. If this deadline is violated, the Russian team leader and organisation shall notify the Foundation about the impermissible delay with the signing of the agreement. If the duly signed agreement is not received by the Foundation within the following 5 business days, the relevant project shall be excluded from the list of projects supported by the Foundation, and the relevant notice will be published on the Foundation's official website.

32. The Foundation's grant may be used solely in compliance with the purposes<sup>27</sup> specified in the agreement.

<sup>&</sup>lt;sup>25</sup> For informational purposes only.

<sup>&</sup>lt;sup>26</sup> If such contracts were not previously concluded.

33. Detection of the grant misuse shall constitute grounds for the termination of the agreement and the return of the grant (in full or part amount) in the way specified in the agreement.

34. Any Intellectual Property Rights, originating from the implementation of the project belong in equal rights to the researchers, representing the research team. The Russian Federation may use<sup>28</sup> the results of the intellectual activity obtained during the research for the state purpose on the basis of non-exclusive license provided by the rights holder to the state customer upon remuneration.

35. The organization shall be responsible for the proper use of the Foundation grant.

36. The organization's overhead expenses may not exceed 5 per cent of the amount of the Foundation grant. Payment for research work performed by the third-party organizations can not exceed 10 percent of the grant amount. Payment for works and services performed by the partners, including its workers, using the project funds is not eligible.

<sup>27</sup> The awarded grant funds may not be expended on project costs incurred for the construction of capital facilities, for educational activities, for organization and conducting any scientific or educational events. <sup>28</sup> The organization is responsible for settling matters associated with the implementation of this clause with the

<sup>&</sup>lt;sup>28</sup> The organization is responsible for settling matters associated with the implementation of this clause with the foreign research team.