Competition documentation for conducting an open public competition for receiving Russian Science Foundation grants on priority areas of the Russian Science Foundation "Performing fundamental scientific research and exploratory investigations in high-priority research topic areas"

- 1. The competition for receiving Russian Science Foundation grants on priority areas of the Russian Science Foundation "Performing fundamental scientific research and exploratory investigations in high-priority research topic areas" (hereinafter − competition, grants) is being carried out in accordance with the competitive selection Procedure for scientific and scientific-technical programs and projects presented for the Russian Science Foundation's competition, by decision of the management of the Russian Scientific Foundation (hereinafter − the Foundation) (Protocol № 19 dated 9 December 2014).
- 2. The Russian Federation's contribution to the Russian Science Foundation is the source of the Foundation's grants.
- 3. The grants are allocated for carrying out scientific and scientific-technical programs and projects, performing fundamental scientific research and exploratory scientific investigations (hereinafter projects, scientific research) in the years 2015-2017 with subsequent possible extension of the time period for completing the project by one or two years for the following subject areas:
 - 01 Mathematics, computer science and systems science;
 - 02 Physics and space science;
 - 03 Chemistry and materials science;
 - 04 Biology and life science;
 - 05 Fundamental medical research;
 - 06 Agricultural science;
 - 07 Earth science;
 - 08 Humanitarian and social sciences;
 - 09 Engineering sciences.

The scientific research (project) should be aimed at resolving specific issues¹ within the framework of one of the scientific priorities established by the Foundation's Board of Trustees for the competition and driven by issues of the socio-economic development of the country and society (see list below); the anticipated result of the research (project) should be on a world-class level and make a significant contribution to resolving key problems of the established scientific priority:

- P5 New technology for the extraction and refining of heavy oils;
- P6 New approaches to battling infectious diseases;
- P7 Advanced manufacturing technology;
- P8 Interethnic relations and ethno-social processes. Analysis of global and domestic experience. Reasons for why conflicts arise and mechanisms for predicting, preventing and regulating them.
- 4. Research teams may participate in the competition regardless of what position the team's leader occupies (hereinafter project leader), their academic credentials, citizenship, the organizational-legal form or form of organizational ownership with which the project manager and research team members occupy in labor or civil-legal relations.
- 5. Grants are presented to the scientific team on a gratuitous and irrevocable basis according to the results of the competition under the conditions stipulated by the Foundation, through Russian scientific organizations, Russian organizations of higher education, international (multinational and intergovernmental) scientific organizations located in the Russian Federation, on the basis of which the projects will be carried out (hereinafter organizations).
- 6. The project manager may not be a scientist who is acting as manager of a project (head of an integrated scientific program of an organization) previously supported by the Foundation which has not been completed by the date the application is submitted.
- 7. Members of the project's research team may not be scientists who have participated in any capacity in completing two or more projects (including the direction of integrated scientific programs of organizations) previously supported by the Foundation and which have not been completed by the date the application is submitted.

¹Listed in Point 1.2 of Form 1 in Appendix № 1.

- 8. The project leader and research team members may be employees of the organization or other individuals engaged in the project and who are in labor or civil-legal relations with the organization at the time of the project's practical implementation. The project leader should be in labor relations with the organization during the entire duration of the project's practical implementation.
 - 9. For the five years preceding the competition², the project leader should have the following number of publications in Russian and foreign peer-reviewed scientific journals indexed in the Web of Science or Scopus databases³:
 - a) for subject areas 01, 04-07, 09 indicated in point 3 of this competition documentation at least five different publications;
 - b) for subject areas 02, 03 at least seven different publications;
 - c) for subject area 08 at least three different publications.
- 10. The size of one grant shall be from 4-6 (four to six) million rubles annually.
- 11. The Foundation may change the amount of the annual funding if the amount of the Russian Federation's asset contribution to the Russian Science Foundation is reduced or on the basis of a decision by the Foundation's management which is made as a result of analysis of reports submitted on the implementation of the project and on the recipient's proper use of the grant.
- 12. The percentage of the research team members directly engaged in performing the scientific research who are age 39 or under must be at least 35 (thirty-five) percent of the total number of team members during the entire period of the project's practical implementation⁴. Each member of the research team should receive compensation for work done on the project. The total amount of a research team member's compensation may not exceed 30% of the amount of the entire research team's annual compensation⁵. The amount of the annual compensation of all researchers under the age of 39 (inclusively) who are members of the research team may not be less than 25% of the amount of the entire research team's annual compensation. The total number of research team members (including the project leader) may not exceed 10 persons⁶.
- 13. The project leader has the right to submit only one application in the capacity of leader⁷ to participate in this competition. There is no limit on the number of projects that can be implemented in one organization.
- 14.Submission of projects which are similar in content to a project simultaneously submitted to competitions of the Foundation, other scientific foundations or organizations, or are currently being carried out at the expense of foundations or other organizations, state (municipal) tasks or development programs financed by the federal budget is not allowed. In the event that these conditions are violated, the Foundation will stop the funding for the project regardless of its stage of implementation, and simultaneously reclaim the funds paid out to the recipient from the grant according to established procedure.
- 15. Projects supported as a result of the competition may not contain information consisting of state secrets or which relates to any other restricted access information protected by the laws of the Russian Federation.
- 16. The research team must adopt the following requirements which are mandatory conditions for the Foundation to offer the grant:
- 16.1. Make the results of their scientific research part of the public domain in accordance with Russian legislation by publishing them in peer-reviewed Russian and foreign scientific journals.
- 16.2. Publish⁸ the following in peer-reviewed Russian and foreign scientific journals during the project's implementation:

²During the period from 1 January 2010, up until the due date for competition applications.

³ List of publications is in Point 2.9 of Appendix № 1.

⁴ The composition of the research team is outlined in Point 1.8 of Appendix № 1.

⁵ Including the guarantees established by Russian law, deductions for premiums for compulsory pension insurance, compulsory medical insurance, compulsory social insurance in the event of temporary disability or maternity, for compulsory social insurance against occupational injury and illness.

⁶The number of research team members is indicated in Point 1.8 of Appendix № 1.

⁷Number of other projects where they are indicated as an executor is not limited. Violating the terms of this point will result in rejection of the application at any stage.

⁸The number of planned publications is indicated in Point 1.11 of Appendix № 1.

- a) for subject areas 01-07, 09 indicated in point 3 of this competition documentation at least eight publications in journals indexed in the Web of Science or Scopus databases;
- b) for subject area 08 at least four publications in journals indexed in the Web of Science or Scopus databases.
- 16.3. When disclosing the results of any scientific work completed within the framework of the project supported by the Foundation, indicate that financial support was received from the Foundation and organization.
- 16.4. Agree to allow the Foundation to publish an annotation of the supported project and related reports on the implementation of the project, including on the Internet.
- 16.5. Agree to a possible international assessment of the application submitted for the competition.
- 17. Applications for the competition are submitted by the project leaders on the forms in accordance with Appendix 1 of this competition documentation in two forms electronic (via the Foundation's information analysis system [hereinafter IAS]) and hard copy (printed from the IAS), the content of which should be identical. Applications are submitted to the Fund in Russian and certain fields of the application form are to be filled out in English (only where specially indicated).
- 18. Applications are processed using the Foundation's IAS online at the address http://grant.rscf.ru⁹. After the registered application number is received by the IAS, the project leader should print and submit one hard copy of the application and additional materials to the Foundation no later than 12:00PM (Moscow time) on 16 February 2015 at the following address: Moscow, Municipal Post Office-2, 109992, 14 Solyanka Street, bldg. 3. The project leader may independently choose the method for delivering the application materials to the Foundation in order to ensure that they are received within the established time period.
- 19. The hard copy of the application should be bound and fastened with the organization's seal, and the appropriate forms should be signed by the project leader, main members of the research team (principal executors) and the manager of the organization (authorized representative acting on the basis of a power of attorney)¹⁰.
- 20. Applications sent to the Foundation will not be returned.
- 21. The following will not be accepted for the competition:
 - a) applications finalized and/or submitted to the Foundation which violate the requirements of points 17, 18, 19 of this competition documentation;
 - b) applications finalized and submitted to the Foundation which violate the requirements for content of the applications for participation in the competition as set out in the announcement of the competition and competition documentation;
 - c) applications for which the hard copy differs from the electronic version registered in the IAS;
 - d) applications for which the hard copy versions are received by the Foundation after the established deadline has lapsed.
- 22. The Foundation will inform the project leader that their application is registered, that the hard copy of their application was received and about the results of the competition via IAS.
- 23. The project leader has the right to rescind their application if they submit a corresponding written notification to the Foundation.
- 24. The project leader has the right to make changes to their already-submitted application only in the form of a statement in accordance with point 23 of this competition documentation and to submit a new application within the established time period.
- 25. Applications accepted for the competition will undergo an assessment in accordance with the Procedure for carrying out assessments of scientific and scientific-technical programs and projects presented for the Russian Science Foundation's competition and the Criteria for competitive selection of scientific and scientific-technical programs and projects presented for the Russian

⁹The application processing cycle consists of the following stages: applicant registration (if this was not done earlier, including individual registration of the project leader and up to three main members of the research team), filling in applicant information in the IAS, preparing application, registration of application.

¹⁰ If the application is signed by an authorized representative, the power of attorney (copy of the power of attorney, certified by the organization's seal) should be attached to the printed copy of the application.

Science Foundation's competition¹¹. Applications are sent for assessment according to the classifier codes for the branches of science indicated by the project managers in the applications.

- 26. The results of the competition will be confirmed by the Foundation's board by 27 April 2015.
- 27. The list of projects to be supported as a result of the competition will be published on the Foundation's website no later than 10 days following the date the competition ends.
- 28. Within 15 business days after the results of the competition are confirmed to the managers of the projects chosen by the Foundation, agreements which indicate the following will be sent via IAS for processing and signature:
- direction of the scientific research;
- work plan and estimated cost for performing the research;
- the project leader's obligation to submit an annual report on the project's performance;
- the organization's obligation to provide the research team with the necessary workspace, equipment and materials, as well as access to the experimental base to perform the scientific research;
- the organization's obligation to sign civil-legal or labor (temporary work) agreements¹² with each member of the research team;
- the organization's obligation to pay compensation to the research team members for their work on the project according to written instructions from the project leader;
- the organization's obligation to keep a separate account of the grant expenditure and present reports on its intended use;
- the organization's obligation to present a report on the intended use of the grant;
- conditions and procedure for the parties to terminate the agreement in the event that the Foundation discovers that the grant is being misused;
- other rights and obligations of the Foundation, project manager and organization involved with the use of the grant in accordance with the conditions of this competition documentation.
- 29. The amount of the Foundation's financial support for the project may be reduced in comparison with that which the project leader requested by decision of the Foundation's board made on the basis of recommendations from the Foundation's council of experts.
- 30. The Foundation does not have the right to sign an agreement in which the leader has been changed in comparison with the corresponding materials of an application which has undergone the examination procedure.
- 31. Within 15 business days after the project agreement is received via IAS, the foundation must receive either an agreement signed by the project leader and an authorized individual from the organization or a reasonable refusal to sign the agreement from the project leader or organization. The project leader may independently choose the method for delivering the signed agreement to the Foundation in order to ensure it is received in time. If the deadline is missed, the Foundation will inform the project leader and organization that there is an unacceptable delay with the signing of the agreement. If the signed agreement does not reach the Foundation within five business days, the project will be excluded from the list of projects to be supported by the Foundation and a message to this effect will be published on the Foundation's official website.
- 32. The grant may be used only for the purposes indicated in the agreement.
- 33. If it is discovered that the grant is being misused, this is grounds for termination of the agreement and returning of the grant according to the procedure established in the agreement.
- 34. The rights to the intellectual property created when executing the project belong to the executors of the project. The Russian Federation may use this intellectual property for state needs on the basis of an unpaid, simple (non-exclusive) license issued by the rights holder to the state, with the state to pay compensation to the authors of the intellectual property.
- 35. The organization is responsible for the proper use of the grant.
- 36. The amount of the organization's overhead expenses shall not exceed 10 percent of the amount of the grant.

¹¹ Documents are published online at http://rscf.ru/fonddocs.

Form T. Title page of application to Russian Science Foundation

2015 Competition "Performing fundamental scientific research and exploratory investigations in high-priority research topic areas"

Project name		Project number	
		Project type: P	
		Subject area:	
		Main classifier code:	
		Additional classifier	codes:
		GRNTI code:	
Last name, first name, pa	atronymic (if applicable)	Project leader phone	number and e-mail:
of project leader:			
Full and shortened name	of organization via which	h project funding should	d como:
Tun and shortened name	of organization via winc.	ii project funding snoun	i come.
Amount of project funding	ng (thousands of rubles)	Year in which	Year in which project
in 2015 –	8 (* * * * * * * * * * * * * * * * * * *	project begins:	ends ¹³ :
		2015	
Last names, first names,			
patronymics (if			
applicable) of major ¹⁴			
project executors			
(full)			
		eader not indicated in t	
I ensure that no copyrights or other rights of third-parties were violated when preparing this			
application and/or consent was obtained from rights holders to present materials to the Foundation and for the Foundation to use them for examination and disclosure (in the form of			
application annotations).		for examination and di	sciosure (in the form of
Project leader signature		Date of application reg	istration
1 Toject leader signature		Date of application reg	,istration
Signature	bearing witness		
/	/		
M.P.			

¹³ Only the following may be indicated: 2015 (for projects designed for 1 year); or 2016 (for projects designed for 2 years); or 2017 (for projects designed for 3 years); other options will not be accepted.

14 Up to 3 main executors regardless of the total number.

Project Information

- 1.1. Project name in Russian in English
- 1.2. Scientific priority, specific objectives and key challenges:

P5 New technologies for extracting and refining heavy oils.

Objective P5-1. Methods and ways of increasing effectiveness of extracting heavy oils. Key challenges:

P5-1-1 Reservoir stimulation methods for enhanced extraction of heavy oil.

P5-1-2 New well drilling technology and new drilling fluids for use in harsh environments and which are environmentally safe.

P5-1-3 Methods for reducing energy consumption when extracting heavy oil.

Objective P5-2. Preparing heavy oils in the fields for transportation.

Key challenges:

- P5-2-1 Establishing features of the structure and composition of hydrocarbon dispersion systems in different types of heavy oils, establishing factors determining the stability of petroleum dispersion systems, depending on their composition and structure.
- P5-2-2 Searching for methods which can provide a sharp decrease in viscosity and increase in aggregate stability of heavy oil with minimum energy consumption.
- P5-2-3 Determining the basic compounds and structures responsible for the high sulfur content in the oil. Developing methods of chemical functionalization and destruction of these materials, choosing methods to eliminate sulfur or organic sulfur compounds without destroying the dispersion system.
- P5-2-4 Developing special additives and nano-sized systems for dramatically improving the transportation of heavy oil.

Objective P5-3. Increasing the depth of refining heavy oil in order to obtain valuable output.

- P5-3-1 Comprehensive study of the structure of nano-sized catalysts and methods for converting on these catalysts different heavy hydrocarbon dispersion systems, resins and asphaltenes. Studying the mechanisms of stabilization and destruction of direct and inverted emulsion in heavy oil, the effect of native and introduced surface-active substances and hyrdrotropes on the stability of emulsions, synthesis methods for highly concentrated emulsions for catalyst preparation.
- P5-3-2 Establishing mechanisms for creating nanoparticles in inverted emulsion of heavy oil. Developing methods for the formation of microemulsion precursor solutions of nanoparticle catalysts in heavy oil and residues; preparing highly concentrated nanoparticle dispersions in hydrocarbon environments and nanoemulsions.
- P5-3-3 Development of heterogeneous catalysis of nanoparticles suspended in the hydrocarbon environment in slurry reactors. Creating nano-sized catalytic reaction systems and apparatuses for converting heavy hydrocarbons into light-end products under mild conditions, ensuring that the stability and activity of these systems is maintained. Discharging, reactivating and repeated utilization of nano-sized catalysts for converting heavy oil and its residues.

- P5-3-4 Researching the content and distribution of metal fractions in heavy oil and natural bitumen, determining the structure of the structural elements of dispersed systems containing basic amounts of individual metals.
- P5-3-5 Studying various methods (physical, solvent, thermal, catalytic) of metal concentration in heavy oil and petroleum residues.
- P5-3-6 Studying the interaction of nano-sized catalytic systems with metals of heavy oil during refining.
- P5-3-7 Developing methods for extracting metals from their concentrates in oil residues.
- Objective P5-4. Constructing the scientific foundations of digital oilfields for heavy oils. Key challenges:
- P5-4-1 Advanced technical equipment and software for remote monitoring of reservoirs and wells, processing mass data and 3D/4D visualization of the results in real time.
- P5-4-2 Mathematical modeling of physical and chemical effects on reservoir stimulation and well processes in order effectively manage heavy oil extraction.
- P5-4-3 New methods for optimal management of heavy oil fields based on mathematical modeling of its life cycle.

P6 New approaches to fight infectious diseases.

Objective P6-1. Fundamental principles of pathogenesis of acute and chronic infectious diseases.

Key challenges:

- P6-1-1 Studying the dynamics of the pathogen and host organism in various stages of the infection process.
- P6-1-2 Molecular and physiological aspects of life-threatening conditions brought on by infectious agents.
- P6-1-3 Mechanisms of forming resistance to antibiotics and other preventative medicine.
- Objective P6-2. Search for new areas of prevention and diagnosis of infectious diseases.

Key challenges:

- P6-2-1 Developing effective vaccines against pathogens characterized by high levels of variability.
 - P6-2-2 Developing drugs to specifically prevent infections.
 - P6-2-3 Search for new nonspecific immunity boosters.
- P6-2-4 Developing precision methods for early diagnosis of especially dangerous and resistant infections based on proteomic technologies.
- P6-2-5 New approaches to controlling the spread of infectious diseases which are resistant to therapies.
- Objective P6-3. Developing new ways to treat infectious diseases.

- P6-3-1 Developing new antibiotics and other antibacterial drugs.
- P6-3-2 New ways of treating viral infections.
- P6-3-3 Creating new drugs to treat parasitic diseases.
- P6-3-4 Searching for new ways to fight resistant forms of pathogens.

P7 Advanced manufacturing technology.

Objective P7-1. Developing equipment and technology for synthesis of multi-functional coating.

Key challenges:

- P7-1-1 Developing nanocomposite, ion-plasma and thermal spray coatings to increase erosion, corrosion, abrasion and fatigue resistance of structures, including large-sized structures.
 - P7-1-2 Development of universal nonporous coatings with a low friction coefficient.
- P7-1-3 Creating a modern, high-capacity system for spraying materials for synthesis of multifunctional coatings.
- Objective P7-2. Developing techniques and portable devices for effective diagnosis of defects, microstructure, physical and mechanical properties of welded connections, coatings and base materials during their long-term use.

Key challenges:

- P7-2-1 Creating new methods for determining the remaining operational life of devices and effective control of the microstructure and physical-mechanical properties of items and construction materials, during their operation with identification of defects, stress concentration zones and deformations (including structural) on various scales.
- P7-2-2 Creating new portable devices for effective control of the microstructure and physical-mechanical properties of items and constructions materials, and determining the remaining operational life of devices.
- Objective P7-3. Printing technology for receiving materials and electronic and photonic devices (2D printing).

- P7-3-1 Developing chemical composition and methods for producing functional fluid compositions based on organic or inorganic materials, including using nanoparticles, in order to create materials and devices for printed electronics and photonics with predetermined characteristics.
- P7-3-2 Studying self-organization of matter after applying on a substrate of the composition and dependence of the resulting structure and characteristics of the solid phase from the phasic and chemical composition and the composition's curing conditions.
- P7-3-3 Development of computer modeling methods allowing to predict potentially useful substances according to specified physical characteristics of materials and devices obtained using 2D printing.
- P7-3-4 Developing compositions and fundamental stages of printing single-layered and multi-layered functional (emissive, conductive, photoconductive, barrier, etc.) film for electronic devices and photonics.
- P7-3-5 Developing computer models depicting the processes for forming single-layer and multi-layer film using the roll-to-roll method.
- P7-3-6 Developing compositions to create film using the ink-jet method and matrices with specified functional characteristics for electronic devices and photonics. Developing computer models depicting the main stages of creating film and matrices using the ink-jet method, the link between chemical composition, a material's structure and the major fundamental characteristics of electronic devices and photonics.
 - P7-3-7 Developing technical equipment for printing electronic devices and photonics.

Objective P7-4. Additive technology for manufacturing products (3D printing) for mechanical engineering and medicine.

Key challenges:

- P7-4-1 Developing methods for creating inorganic (metallic, ceramic) and organic (including polymeric) single-component and multicomponent dispersion systems with a given particle size and form distribution.
- P7-4-2 Developing methods to form ordered layers of dispersions based on the external physical effect on the dispersion layer and/or self-organization of the particles in the layer.
- P7-4-3 Establishing mechanisms and principles of the formation of the structural-phase state of metallic (primarily iron, nickel and titanium), ceramics and polymer materials during the process of particles fusing in the layer when exposed to laser light or spark plasma (or other actions) in order to obtain materials with specified physical properties.
- P7-4-4 Developing methods of computer-aided design of chemical and particle size distribution properties of the starting components and architecture of the material needed to make products with the required characteristics using additive technology. Developing methods for computer modeling of the fusion process of micro- and nano-particles, formation and self-organization of layers, laser and plasma sintering of particles in additive technology.
- P7-4-5 Developing additive technology for creating the element base of photonics and microelectronics.
- P7-4-6 Developing additive methods of forming biocompatible polymers and composite 3D framework structures of complex morphology to provide the desired physical-chemical characteristics of created media and structural elements of the carriers.
- P7-4-7 Creating new composite biocompatible and bio-resorbable materials optimized for modern additive technology and developing the corresponding 3D printing technology.
- P7-4-8 Developing additive technology to prepare individual medical devices in the fields of orthopedics, dentistry, maxillofacial surgery, neurosurgery and oncology.

P8 Inter-ethnic relations and ethno-social processes. Analysis of global and national experience. Reasons for conflicts arising and mechanisms for predicting, preventing and regulating them.

Objective P8-1. Developing theoretical-methodological bases for researching and regulating international, interethnic and inter-religious relations in the context of world and national history, in cooperation with socio-economic and cultural processes.

- P8-1-1 Analysis of the global and Russian experiences in balancing and implementing the right of nations to self-determination and the principle of territorial integrity of states.
- P8-1-2 Studying the global experience of regulating ethno-cultural and ethno-political processes, interethnic, inter-religious and international relations and forming a common cultural civil identity.
- P8-1-3 Developing theoretical and methodological foundations for a new scientific vision of diverse international, interethnic and inter-religious relations and processes.

- P8-1-4 Identifying and forming common values systems that are accepted and shared by the scientific-expert community on issues of sustainable harmonious development of Russia and its regions in conditions of national, religious and ethno-cultural diversity.
- P8-1-5 Diagnosing and identifying constructive (positive) fields of interethnic, international, and inter-religious cooperation, their scientific understanding and transformation in the social values system.
- P8-1-6 Improving interdisciplinary research methods of historical experience and social practices for managing international and inter-religious relations.
- P8-1-7 Research based on the global experience of the influence of socio-economic, political and cultural features on the development of countries and peoples, as well as on the nature and specificity of international relations.

Objective P8-2. Improving monitoring systems for ethno-social processes at the state and regional levels

Key challenges:

- P8-2-1 Developing conceptual and methodological foundations for creating a transparent, multilevel (local regional federal) monitoring system of demographic, ethno-cultural and political processes in the international relations system.
- P8-2-2 Monitoring the creation and development of regional elite as a leading actor in the political and socio-economic processes in Russia's multiethnic regions, identifying the main trends and contradictions.
- P8-2-3 Analyzing the state of social and humanitarian knowledge and education as instruments of rehabilitation and transformation of values and meanings that are significant for the stabilization of international and inter-religious social relations and favorable conditions of intercultural cooperation.
- P8-2-4 Studying issues of linguistic and cultural identity, methods and conditions for the formation of shared positive cultural and historical symbols as factors of social stability.
- Objective P8-3. Forecasting changes in the social structure of a population and development of interethnic, inter-religious and international relations

Key challenges:

- P8-3-1 Creating formal forecasting models of the development of interethnic relations in Russia's regions.
- P8-3-2 Adapting the forecasting models of the development of international and interethnic relations in Russia's regions to the decision-making system at various levels of government.

Objective P8-4. Identifying the best approaches and methods of regulating interethnic, inter-religious and international relations and ethno-social processes.

- P8-4-1 Developing methodological foundations of state (federal and regional) and local policies aimed at harmonizing interethnic, inter-religious and international relations, regulating demographic, ethno-cultural and political processes. Determining the interrelation between these processes and social, economic and cultural processes at the country level and regional level.
- P8-4-2 Analyzing the world historical experience of preventing, managing and overcoming conflicts in the area of national relations. Analyzing the applicability of the

international experience of resolving problems of interethnic relations in the Russian context.

- P8-4-3 Using interdisciplinary methods and know-how from the social and humanitarian sciences (sociology, political science, psychology, law, economic and historical sciences) to improve the tools for analysis of conditions and development of ways to prevent, manage and overcome international and inter-religious conflicts.
- P8-4-4 Developing a government system (at the federal and regional levels) for creating shared civic values and filling them with national meaning using tools and technology from culture, art, social and humanitarian sciences, media, etc.
- 1.3. Justification of the project topic's conformity to the scientific priority and corresponding objective, importance and significance of the project's implementation for resolving specific key problems.

in Russian

in English

- 1.4. Priority areas of development in science, technology and engineering in the Russian Federation, critical technology¹⁵:
- 1.5. Key words (no more than 15 terms)

in Russian

in English

1.6. Project annotation ¹⁶ (not more than two pages; including brief description of the relevance and scientific originality)

in Russian

in English

1.7. Anticipated results and their significance¹⁷ (indicates the anticipated results and their scientific and social significance [evaluated in terms of conformity with planned results at the world-class level of research, possibility of practical use of the project's planned results in economic and social areas, contribution to resolving the specific tasks and key issues of scientific priority as indicated in the application])

in Russian

in English

1.8. The composition 18 of the scientific research team will include:

 project executors ¹⁹	(including	the leader),	which includes
executors under the	age of 39.	of which:	

___ are full-time postgraduate students, adjuncts, interns, medical residents, or students.

1.9. The planned structure of the research team with the last names, first names and patronymics (if any) of the team members, their ages at the time of application, academic

16 This information may be published on the Foundation's website on the Internet.

17 This information may be published on the Foundation's website on the Internet.

18 The research team's failure to comply with the requirements in Point 12 of the competition documentation is grounds for rejection of the competition application.

19 Regardless of whether the executor has labor or civil-legal relations with the organizations.

¹⁵ Indicated according to the list (Russian Presidential Order №899 dated 7 July 2011) in the event that the project topic is related to one of the priority areas and makes a contribution to the development of Russia's critical technology.

organization (labor agreement, civil-legal agreement) during the time that the project is being carried out.

1.10. Expected amount of project funding for the years (in thousands of rubles): 2015 - _____, 2016 - _____, 2017 - ____.

1.11. According to the results of the project and during its execution, the research team will publish²⁰ in Russian and foreign peer-reviewed scientific journals at least ____ publications, of which ____ will be in journals indexed in the Web of Science and Scopus databases; ____ in Russian-language journals, including the Russian Science Citation Index; ____ theses.

1.12. The number of publications from members of the research team over the past five years²¹, preceding the competition, ____, of which ____ - were published in journals indexed in Web of Science or Scopus.

credentials, professions and primary places of work, type of relationship with the

(if any).

1.13. Planned participation of the research team in international collaborations (projects)

The project leader confirms that

- He will maintain labor relations with the organization during the entire duration of the project's implementation;
- when publishing the results of any scientific work performed within the framework of project supported by the Foundation, he and his research team will indicate that financial support was received from the Foundation and the organization, as well as agree to the Foundation publishing an annotation and anticipated results of the supported project, and any related reports on the project on the Internet;
- except for the Foundation grant, the project shall not have any other sources of funding during the entire period while it is being implemented;
- the project shall not be similar to any other project which is also being simultaneously entered in competitions being held by scientific foundations or other organizations;
- the project does not contain information consisting of state secrets or which relates to any other restricted-access information protected by the laws of the Russian Federation;
- the percentage of research team members aged 39 or under must be at least 35 percent of the total number of team members during the entire period of the project's practical implementation;
- he will present an annual report on the project's implementation.

Project leader's signature

20 Data is provided for the entire duration of the project. Reducing the number of publications with regard to the threshold established in Point 16.2 of the competition documentation is grounds for rejecting the competition application.

²¹ In the period from 1 January 2010 up until the date that the competition announcement was published.

Project Manager Information

1 Toject Munager information
2.1. Last name, first name, patronymic (if applicable) in Russian
last name and initials in English
2.2. Date of birth (date, month, year)
2.3. Citizenship 2.4. Academic degree, year awarded ²²
2.5. Awards and prizes for scientific activity, membership in leading scientific
communities (if any), participation on editorial boards of leading peer-reviewed scientific
journals (if any).
2.6. Primary place of work at the time application is submitted – position, full name of
the organization (shortened name of the organization) ²³ .
2.7. Area of scientific interest – key words (no more than 15 key words) in Russian
in English2.8. Area of scientific interest - Foundation classifier codes
2.9. List of project manager's publications for the past five years preceding the
competition and which meet the conditions of Point 9 of the competition
documentation ²⁴ .
in English ²⁵
The list contains publications in journals indexed in Web of Science, Scopus.
2.10. Project manager's major scientific results for the period since 2010 (results should
be verified using information from the application, for example – publications)
2.11. Total number of publications during the period from 2010, of which:
——————————————————————————————————————
2.12. Additional list of project manager's publication from the past five years (theses,
copyrighted intellectual property, publications in leading peer-reviewed scientific
journals, publications in journals indexed in citation systems Web of Science, Scopus; do
not list more than 10 publications, provide link for Internet publications [mandatory for
publications in indexed journals], indicate the impact factor of the scientific publication,
if any [according to 2013 JCR Science Edition or 2013 JCR Social Sciences Edition]).
in English
2.13. Experience managing scientific research projects (indicate name of foundation

[organization], number, name of project and duration for the past five years).

2.14. Planned participation in scientific research projects (in any capacity) in 2015. Total number - _____, of which: acting as leader - _____, participating as executor - _____,

specifically:

²² If there are several academic degrees, indicate those which most closely correspond to the project topic.

²³ At the time the application is submitted, the project leader may not be an employee of the organization, but if he wins the competition, he should sign an employment agreement with the organization.

²⁴ It is sufficient to provide links to publications in an amount equal to the established threshold in the competition documentation. A mismatch between the number of publications in the list and/or listed in the lines below and the requirements of Point 9 of the competition documentation is grounds for rejection of the competition application.
25 For Russian names, information is provided in Russian and with a translation in English. It should be understandable that it is one and the same document (for example, by adding the word "translation").

(indicate the project funders or originators and the source of funding, for example – government task founder, grants from the RFFI, RGNF, FPI, RNF, other foundations, government contracts [client, program], other business contracts, other grants or subsidies).

- 2.15. Proportion of working time planned to be devoted to management of the project in the event that it wins the Foundation competition _____ percent²⁶.
- 2.16. Participation in educational activities (indicate information on managing graduate students, developing and giving new educational courses in Russian and foreign universities).
- 2.17. Mailing address
- 2.18. Telephone number
- 2.19. E-mail address
- 2.20. Participation in project: Project manager
- 2.21. Files with additional information²⁷ (resume, other additional information which the project leader thinks may be useful for making a decision to justify funding for the project).

in Russian (separate file) and English

I am familiar with and agree to the terms of the Russian Science Foundation's competition. I confirm my participation in the project.

I give my consent ²⁸ for the personal data which I indicated above to be used (this includes collection, systematization, accumulation, storage, adjustment, use and elimination) by the Russian Science Foundation (address: Moscow, 14 Solyanka Street, bldg. 3) in order to perform an evaluation of the application and prepare analytical materials for the competition for the period up until the liquidation of the operator (Foundation). This consent may be revoked by me in written form.

Certifying document		

(type, number, date submitted, issuing authority, filled in by hand)

Project executor's signature

²⁶ Meaning – from full-time employment within the framework of employment or civil-legal agreements, i.e. spare time outside of one's main working time which is devoted to working on the project should also be accounted for. 27 In PDF format, up to 3 MB.

²⁸ In accordance with the requirements of Federal Law №152-FZ "On Personal Data" dated 27.07.2006.

Project Executor Information²⁹

.
2.1. Last name, first name, patronymic (if applicable)
in Russian
last name and initials in English
2.2. Date of birth (date, month, year)
2.3. Citizenship
2.4. Academic degree, year awarded ³⁰
2.5. Awards and prizes for scientific activity, membership in leading scientific
communities (if any), participation on editorial boards of leading peer-reviewed scientific
journals (if any).
2.6. Primary place of work at the time application is submitted – position, full name of
the organization (shortened name of the organization)
2.7. Area of scientific interest – key words (no more than 15 key words)
in Russian
in English
2.8. Area of scientific interest - Foundation classifier codes
2.9. Total number of publications during the period from 2010, of which: were
published in journals indexed in Web of Science or Scopus.
2.10. Project executors' list of publication from the past five years (theses, copyrighted
intellectual property, publications in leading peer-reviewed scientific journals,
publications in journals indexed in citation systems Web of Science, Scopus; do not list
more than 10 publications, provide link for Internet publications [mandatory for
publications in indexed journals], indicate the impact factor of the scientific publication,
if any [according to 2013 JCR Science Edition or 2013 JCR Social Sciences Edition]).
in English ³¹
2.11. Experience managing and participation in scientific research projects (indicate
name of foundation [organization], number, name of project and duration for the past
five years).
2.12. Planned participation in scientific research projects (in any capacity) in 2015. Total
number, of which: acting as leader, participating as executor,
specifically:
(indicate the project funders or originators and the source of funding, for example -
government task founder, grants from the RFFI, RGNF, FPI, RNF, other foundations,

subsidies).

the event that it wins the Foundation competition - _____ percent³².

government contracts [client, program], other business contracts, other grants or

2.13. Proportion of working time planned to be devoted to participation in this project in

²⁹ This form should be completed only by the main executors named in Form T (up to three persons).

³⁰ If there are several academic degrees, indicate those which most closely correspond to the project topic.

³¹ For Russian names, information is provided in Russian and with a translation in English. It should be understandable that it is one and the same document (for example, by adding the word "translation").

³² Meaning – from full-time employment within the framework of employment or civil-legal agreements, i.e. spare time outside of one's main working time which is devoted to working on the project should also be accounted for.

- 2.14. Participation in educational activities (indicate information on managing graduate students, developing and giving new educational courses in Russian and foreign universities).
- 2.15. Telephone number, email address.
- 2.16. Participation in the project: Project executor.

I am familiar with and agree to the terms of the Russian Science Foundation's competition. I confirm my participation in the project.

I give my consent³³ for the personal data which I indicated above to be used (this includes collection, systematization, accumulation, storage, adjustment, use and elimination) by the Russian Science Foundation (address: Moscow, 14 Solyanka Street, bldg. 3) in order to perform an evaluation of the application and prepare analytical materials for the competition for the period up until the liquidation of the operator (Foundation). This consent may be revoked by me in written form.

Certifying doci	ıment				
		1 , 1 , 1	 C·11 1 · 1 1	7)	

(type, number, date submitted, issuing authority, filled in by hand)

Project executor's signature

³³ In accordance with the requirements of Federal Law №152-FZ "On Personal Data" dated 27.07.2006.

Organization Information

(for organizations through which funding will be provided)

- 3.1. Full name (in accordance with registration documents)
- 3.2. Shortened name
- 3.3. Name in English
- 3.4. Form of legal entity's incorporation (as indicated by the OKOPF)
- 3.5. Form of ownership (as indicated by the OKFS)
- 3.6. Departmental affiliation
- 3.7. Tax ID number
- 3.8. Address
- 3.9. Physical address
- 3.10. Federal subject of the Russian Federation
- 3.11. Position, last name, first name, patronymic (if any) of the head of the organization
- 3.12. Telephone number
- 3.13. E-mail address

The head of the organization confirms that:

- I am familiar with the terms of the Foundation's competition and agree to funding of the project, if it is supported, through the organization.
- the organization fulfills its obligation to pay taxes at all levels of the government and makes compulsory payments to government extra-budgetary funds, is financially solvent, is not in the process of liquidation or reorganization, has not been declared insolvent (bankrupt), its property has not been seized and its business activities have not been suspended.
- in the event that its application is selected as the winner, the organization assumes the following responsibilities:
- to sign civil-legal or labor (temporary labor) agreements with the members of the research team³⁴;
- to pay compensation to the members of the research team for the work performed on the project, according to the project leader's instructions;
- to submit an annual report on the proper use of the Russian Science Foundation's grant.

The head of the organization ensures:

- that the total amount of annual compensation paid to any one member of the research team does not exceed 30 percent of the amount of annual compensation for all members of the research team³⁵;

³⁴ If such agreements were not previously signed.

³⁵ Including the guarantees established by Russian law, deductions for premiums for compulsory pension insurance, compulsory medical insurance, compulsory social insurance in the event of temporary disability or maternity, for compulsory social insurance against occupational injury and illness.

- that the total amount of annual compensation for researchers under the age of 39 (inclusively) included in the research team will not be less than 25 percent of the amount of annual compensation for all members of the research team;
- that the research team will be provided with a workspace and access to an experimental base for performing scientific research.

Project leader's signature

Organization manager's signature (authorized representative, acting on the basis of a power of attorney)³⁶, **seal of the organization.**

36 If the form is signed by an authorized representative of the organization, the power of attorney (copy of the power of attorney, certified by the seal of the company) should be attached to the printed copy of the application.

Content of the Project

4.1. Scientific issue which the project aims to resolve

in Russian

in English

4.2. Relevancy of the issue for the given subject area, scientific significance of resolving the issue

in Russian

in English

4.3. Specific objective within the framework of the issue which the project aims to resolve, its scope

in Russian

in English

4.4. Scientific originality of the assigned objective, rationale of the achievability of the assigned objective and possibility of receiving the anticipated results

in Russian

in English

- 4.5. Current state of research on the given issue, main directions of research in the science world
- 4.6. Main global scientific competitors
- 4.7. Proposed method and approaches, general work plan for the entire duration of the project's implementation and expected results (write at least two pages; indicate expected specific results per year; general plan is given with a breakdown by year)

in Russian

in English

- 4.8. Scientific potential of the research team for the project (indicate results received previously, programs and methods already developed)
- 4.9. List of equipment, materials, information and other resources that the research team has to implement the project (describe the necessity of using them for implementation of the project)
- 4.10. Work plan for the first year of the project's implementation (indicate travel assignments for the project).
- 4.11. Content of the work of each main project executor planned for the first year of the project (*including the project leader*).
- 4.12. Specific scientific results anticipated by the end of the first year (should summarize the possibility of analyzing the results and assessing the extent to which the declared work plan was fulfilled).
- 4.13. List of equipment, materials, information and other resources for the project's implementation which is planned to be acquired using the grant (describe the necessity of using them for implementation of the project).
- 4.14. File 1³⁷ with additional information 1³⁸

³⁷ With diagrams, photographs, sketches and other information on the content of the project. In PDF format, no larger than 3MB.

³⁸ The text of the files containing additional information should be in Russian. An English translation is required if the applicant assesses that this information is essential for the reviewer.

File 2³⁹ with additional information 2 (if the information included in File 1 is insufficient) Project leader's signature

³⁹ With diagrams, photographs, sketches and other information on the content of the project. In PDF format, no larger than 3MB.

Requested Funding for 2015

5.1. Planned Project Expenses

Nº	Guidelines for Grant Spending	Total expenses (in thousands of rubles ⁴⁰)
	TOTAL	
1.	Compensation for project executors	
2.	Payments for services from third-party organizations ⁴¹	
3.	Expenses to acquire equipment and other property necessary for conducting research (including installation, commissioning and start-up training for employees and repairs)	
4.	Expenses on acquiring materials and components for conducting research	
5.	Other expenses for purposes of the project	
6.	Organization's overhead expenses ⁴²	

5.2. Breakdown of planned expenses

For Point 1 – indicates the amount of compensation (including for the leader, main executors and other executors engaged in working on the project), including guarantees established by Russian law, deductions for insurance premiums for compulsory pension insurance, compulsory medical insurance, compulsory social insurance in the event of temporary disability or maternity, for compulsory social insurance against occupational injury and illness.

For Point 2 – list of planned agreements (accounts) with third-party organizations, indicating the subject and amount of each agreement.

For Point 3 – list of planned purchases of equipment and other property needed to perform the research.

⁴⁰No spaces, with one marker after the comma.

⁴¹ No more than 15 percent of the grant.

⁴²No more than 10 percent of the grant.

For Point 4 – *breakdown of planned materials and components.*

For Point 5 – other expenses for implementing the project, including for travel assignments, payments for communications and transportation services, expenses are not broken down

For Point 6 – expenses are not broken down and not justified.

Project leader's signature

Organization manager's signature (authorized representative, acting on behalf of a power of attorney)⁴³, **seal of the organization.**

43If the form is signed by an authorized representative of the organization, the power of attorney (copy of the power of attorney, certified by the seal of the company) should be attached to the printed copy of the application.