

COMPETITION DOCUMENTATION

**regulating terms and conditions of the open international grant
competition of National University of Science and Technology «MISiS»
designed to support Young scientists (PostDoc) with international
background, invited to conduct a joint research project during 2 years
(2017-2019) (the second wave)**

MOSCOW, 2017

CONTENT

INFORMATION ABOUT THE GRANT COMPETITION	3
1. General provisions	3
2. The Grant Competition Stages	3
3. Participation eligibility requirements	4
4. Research project and research project implementation requirements	4
5. Grant competition participation costs	5
6. Grant application contents	5
7. Preparing a grant application	6
8. Submitting a grant application	7
9. Opening the envelopes containing grant applications	7
10. Reviewing grant applications	8
11. Evaluating grant applications	8
12. Executing a grant agreement	10
13. Returning grant applications	10
FORMS TO BE COMPLETED BY APPLICANTS	11
Form 1. Document checklist	11
Form 2. Grant Application	12
Form 3. Young scientist's Questionnaire	15
Form 4. Young scientist's work experience and research achievements	17
Form 5. Overview of the research project area	20
Form 6. Research Project Description	211
Form 7. Project Efficiency Indicators	233
Form 8. Project Implementation Plan	254
Form A. Application Registration	265
APPENDIX 1	17

INFORMATION ABOUT THE GRANT COMPETITION

1. General provisions

- 1.1. The purpose of this grant competition is to identify, in compliance with approved procedures and regulations, the best research project proposal (proposals) submitted by an applicant (applicants) seeking support in the form of a grant of the National University of Science and Technology «MISiS» (NUST «MISiS»).
- 1.2. Grants of NUST «MISiS» are made available to invite Young scientists (hereinafter referred to as a «Young scientist») with international background to conduct a joint research project for a period of two years (to start the work in October 2017, at latest November 2017) in the amount: Young scientists salary expenses;
 - a) from 2.5 to 2.65 mln rubles to cover:
 - salary expenses (including taxes and social benefits);
 - Young scientists business trips expenses (total amount not to exceed 75 thousand rubles for 1 year)
 - b) from 4.0 to 4.1 mln to cover:
 - salary expenses (including taxes and social benefits);
 - Young scientists business trips expenses (total amount not to exceed 150 thousand rubles for 1 year)
- 1.3. Each competition winner will sign a grant agreement with NUST «MISiS».
- 1.4. The legal relationships between all parties involved in the open grant competition are regulated by applicable laws of the Russian Federation.

2. The Grant Competition Stages

2.1. First Stage

At the first stage of the competition Young scientist shall mail to projects@misys.ru the following information in electronic form:

- a) CV;
- b) at least two reference letters (signed by the author with his contacts);
- c) PhD supporting document;
- d) passport copy;
- e) area of research interest
- f) ability to work on the specified equipment.

2.2. Second Stage

At the second stage the Young scientist seeks scientific research area and possible scientific advisor at NUST «MISiS» using ([http://science.misis.ru/en/nauchnapravleniy/index.php?](http://science.misis.ru/en/nauchnapravleniy/index.php?http://en.misis.ru/), <http://en.misis.ru/>).

2.3. Third Stage

In collaboration with his/her Scientific advisor a Young scientist defines the topic of his/her project and mails to projects@misys.ru a filled in Form A. «Application Registration».

2.4. Fourth Stage

In collaboration with his/her Scientific advisor a Young scientist prepares an Application for competition participation according to cl. 6.1-6.4.

2.5. Fifth Stage

The fifth stage is an on-line interview with the Young scientist, his/her Scientific advisor and research team.

2.6 Sixth Stage

The final decision on the grant allocation is taken at stage six following competitive selection in timeframe stipulated in cl.10 of the Competition Documentation.

3. Participation eligibility requirements

- 3.1. A Young scientists who applied for a grant in collaboration with NUST «MISiS» research team, in compliance with cl. 6.1 to 6.4 of the Competition Documentation are deemed as a single applicant.
- 3.2. A Young scientist may take part in one research project only.
- 3.3. A research team shall include: a Young scientist and NUST «MISiS» - based Scientific advisor, at least one post graduate student, at least one undergraduate student.
- 3.4. Young scientists with an international PhD degree and with 2 years (in total) work experience in leading international research and development centers, are eligible to apply for the grant competition.
- 3.5. Young scientists are not eligible to apply for the grant competition if they have had job relationships with NUST «MISiS» for the last 3 years (from 2014 till 2016).
- 3.6. A Young scientist should not be older than 35 years (by the end of 2017).

4. Research project and research project implementation requirements

- 4.1. Any research projects proposed hereunder may not duplicate any prior or current research projects financially supported by the federal, regional, or municipal governments of the Russian Federation or funded from other sources.
- 4.2. NUST «MISiS» will make its grants available to support successful research projects proposed for implementation within the following STRATEGIC ACADEMIC UNITS:
 - **Meta-materials and post-silicone electronics** (*including IT direction*)
 - **Autonomous energy and energy efficiency** (*including IT direction*)
 - **Materials and technologies for improving human lifespan and overall quality of life** (*including IT direction*)
 - **Industrial design and engineering technologies to reindustrialize the economy** (*including IT direction*)
 - **Green technologies for efficient resource use** (*including IT direction*)
- 4.3. The research team inviting the Young scientist shall offer a project topic for further implementation in the course of the research project.
- 4.4. The research team shall offer a Scientific advisor for successful implementation of the selected research direction and to govern of the Young scientist.
- 4.5. The research team shall offer an assistant(s) for convenience of the Young scientist.
- 4.6. To implement the project the Young scientist shall be available at NUST «MISiS» for direct

supervision of the research project for a total of 2 years in 2016-2018(subject to obligatory formalization of labour relationship at the place of primary employment). The prolongation of the project in the second year is based on the results of the first.

4.7.NUST «MISiS» shall undertake to:

- a) Ensure continuous funding of the research project in compliance with its approved budget;
- b) Provide office space and access to laboratories and other experimental research facilities required to implement successful research projects proposed hereunder;
- c) Execute (fixed term) labor agreements with the Young scientist.

4.8.The Scientific advisor shall supervise the scientific research and the invited Young scientist during the entire duration of the project.

4.9.The Scientific advisor, together with the Young scientist, shall make decisions regarding the disbursement of the funds in accordance with the previously approved budget.

4.10. The Young scientist undertakes an obligation as a research outcome to publish

I. In case 1.2.b) clause is applicable:

- at least 2 articles in 2018 and at least 2 articles in 2019 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor in the first quartile in the field of the research.
- at least 1 article in 2017 and at least 1 article in 2018 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor of at least second quartile in the field of the research.

II. In case 1.2.a) clause is applicable:

- at least 1 article in 2018 and at least 1 article in 2019 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor in the first quartile in the field of the research.
- at least 1 article in 2017 and at least 1 article in 2018 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor of at least second quartile in the field of the research.

4.11. The Young scientist undertakes an obligation as a research outcome to create a new educational course in the research field.

4.12. The Young scientist undertakes an obligation as a research outcome to popularize the scientific research field in the form of oral reports at international conferences and events outside the territory of the Russian Federation and not less than 3 oral reports (at least 2 oral report in 2018 and at least 1 oral reports in 2019) as well as other external mass media forms.

4.13. The Scientific advisor, the Young scientist and the research team shall be responsible for achieving the research project results accounted for by their respective grant agreements with NUST «MISiS».

5. Grant competition participation costs

5.1.Applicants are responsible for covering all costs incurred thereby in connection with their participation in the open grant competition, including their costs associated with preparation and submission of their grant applications.

6. Grant application contents

6.1. Form A. «Application Registration» – to be filled in advance and mailed to projects@misis.ru

for obtaining registration number.

6.2. A grant application must contain the following:

- Form 1. «Document Checklist», listing all documents submitted as part of the grant application;
- Form 2. «Grant Application».

6.3. Documents of the Young scientist:

- Form 3. «Young scientist's questionnaire»;
- Form 4. «Young scientist's work experience and research achievements»;
- Copies of the pages of the Young Scientist's passport containing his/her full name and place of residence information.

6.4. Documents pertaining to the proposed research project:

- Form 5. «Overview of the research project area»;
- Form 6. «Research Project Description»;
- Form 7. «Project Efficiency Indicators»;
- Form 8. «Research Project Implementation Plan»;
- Appendix (if applicable).

7. Preparing a grant application

7.1. NUST «MISiS» grant applications, prepared and submitted by a Young scientist in collaboration with research team shall meet the competition selection criteria in compliance with cl.11.3. Applicants shall prepare their applications both in hard and electronic copy.

7.2. Form A. «Application Registration» shall be filled and mailed to projects@misis.ru. In reply letter registration number will be sent. The registration number shall be specified in Form 1 «Documents checklist» and on the envelope with the grant application.

7.3. Grant applications shall be prepared and submitted in Russian and in English. Grant applications submitted in any other languages will be disqualified by the Competition Commission as failing to meet the competition requirements.

If any documents that are part of a grant application package are in languages other than Russian or English, they must be accompanied by certified translations into Russian and English.

7.4. Grant application documents shall be verified by the Young scientist signature if requested by the form. Facsimile images of relevant signatures may not be used to sign the grant application documents.

7.5. Contradictions and inconsistencies identified in grant application documents will be viewed by the Commission as the applicant's failure to meet the selection requirements accounted for by the Competition Documentation.

If Grant application package misses any of the documents accounted for by cl. 6.1 to 6.4 of the Competition Documentation, or if grant applications documents are not filled in compliance with the set form or do not include the requested data, such grant applications will be deemed by the Competition Commission as non-compliant with relevant requirements of the Competition Documentation.

7.6. All grant application documents shall be arranged in the order accounted for by Form 1. «Document checklist».

7.7. All pages of a grant application shall be numbered and bound with a band or durable string which ends must be tied up on the reverse side of the last page and the number of bound pages shall be specified.

7.8. Electronic copy shall be submitted on a CD disk and shall contain the following files:

- Application in Russian in Word;
- Application in English in Word;
- Application in Russian in pdf;
- Application in English in pdf;
- Addenda (passport copy, residence permit copy (if applicable), diploma copy, PhD certificate copy, CV, copies of other diplomas and certificates, etc.).

The CD disk shall obligatory carry the Registration number.

8. Submitting a grant application

- 8.1. Participants shall submit their applications in hardcopy in a sealed envelope containing a signed CD with the grant application files in compliance with clause 7.8. Applicants must ensure that the electronic and hardcopy versions of their grant applications are identical.
- 8.2. Each applicant must label the envelope containing his/her grant application as follows: «Application for participation in the open international grant competition of NUST «MISiS» designed to support Young scientists with international background, invited to conduct a joint research project during 2 years (2017-2019) (the second wave) » and the Registration number
- 8.3. Each envelope containing a grant application must be sealed in such a fashion as to prevent its opening without breaking its integrity. If an envelope containing a grant application is not sealed or labeled in full compliance with the requirements hereof, the Department of Science shall not be liable to the applicant if his/her grant application documents go missing or if the envelope containing his/her grant application is not open in a timely fashion.
- 8.4. Envelopes with grant applications shall be submitted to the address of the grant competition organizer 119049 NUST «MISiS», room B-520, 5th floor, Leninsky prospect, 4 Moscow (International Research Projects Department, code №431) in the period from August 25, 2017 to September 07, 2017 (12:00 Moscow time) and in the period from September 11, 2017 to September 25, 2017 (12:00 Moscow time)
- 8.5. Each envelope containing a grant application shall be registered in the grant applications registry.
- 8.6. The registrar shall issue a receipt stating the date and time of delivery and the registration number of the grant application received thereby if requested by an applicant, having provided the envelope with the application.

9. Opening the envelopes containing grant applications

- 9.1. The envelopes containing grant applications shall be opened by the Competition Commission publicly on the day and at the time and place specified in the Competition Announcement.
- 9.2. Any grant applications received by the competition organizer after the grant application submission deadline will be disqualified from participation in the open grant competition.
- 9.3. The envelopes opening procedure shall be documented in the form of minutes to be signed by all members of the Competition Commission present at the envelope opening procedure. The minutes shall be posted on the official website of NUST «MISiS» Internet science portal within three working days of being signed.

10. Reviewing grant applications

- 10.1. Within 10 working days after opening envelopes with grant applications the Competition Commission shall review the documents and information contained therein with respect to the compliance:
 - a) with the selection criteria established by the Council;

- b) of the applicants with the participation qualification requirements specified in the Competition Documentation;
 - c) of the grant applications with the requirements stipulated in the Competition Documentation;
 - d) of the proposed research projects seeking financial support with relevant requirements stipulated in the Competition Documentation.
- 10.2. Following the examination of the reviewed documents and information contained in the grant applications the Competition Commission shall make a conclusion on:
- a) The applicants whose grant applications and research project proposals meet the qualification and selection requirements accounted for by the Competition Documentation;
 - b) The applicants, who do not meet and/or whose grant applications and/or research project proposals do not meet the qualification and selection requirements accounted for by the Competition Documentation.
- 10.3. The review results shall be documented in the form of minutes to be signed by all members of the Competition Commission present at review procedure. The minutes shall be posted on the official website of NUST «MISiS» Internet science portal within three working days of being signed.

11. Evaluating grant applications

11.1. The Competition Commission shall undertake assessment of only those applications which were deemed by the Competition Commission to be in compliance with all applicable requirements and forwarded for competition.

11.2. The following evaluation criteria shall be used to assess grant applications:

No.	Assessment criteria	Criteria content	Group weight	Weight of criterion within group	Maximum score
1. Young scientist's work experience and scientific achievements					
1.1	Level of scientific publications	To be assessed: types of journals (professional, leading) and number of articles published by a Young scientist; Young scientist's quotation index within his/her the research area.	40%	40%	20
1.2	Young scientist's experience in leading scientific research centers	To be assessed: scientific research experience of a Young scientist.		25%	7

1.3	Young scientist's experience and prospects in training research and academic staff	To be assessed: how sufficient the Young scientist's experience in training research and academic staff is.		10%	6
1.4	Reference level of a Young scientist according to references	To be assessed: experience of a Young scientist according to references.		25%	7
2. Prospects of the research project					
2.1	Relevance of proposed scientific research	To be assessed: relevance of the proposed research project from the point of view of the current status of global science; likelihood of achieving breakthrough world-class research results and their relevance in terms of global science and economy.	50%	50%	25
2.2	Applicant's ability to achieve the anticipated project results within the suggested timeframe and using the methods proposed thereby	To be assessed: how detailed the anticipated research project results are and if they meet the world-class research requirements; how detailed and viable the research project implementation plan is; how likely the applicant is to implement the research project plan within the suggested timeframe and using the methods proposed thereby		50%	25
3. Overview of the research team, vision of the infrastructure to be established under the project					

3.1	Publications activity of the research team	To be assessed: number of articles, monographs, and conference reports published by a research team within the past three years, the level of the journals, publishers, and conference; number and level of journal articles indexed in the «Web of Science» or Scopus; number of articles intended for publication in journals within the next two years that have been indexed in the «Web of Science» or Scopus.	10%	40%	3
3.2	Research infrastructure available for the research team	To be assessed: how modern and advanced the research infrastructure available for research team is; possibility to use it for world-class research activities; possibility to upgrade the infrastructure to meet the research project needs.		60%	7

11.3. The Competition Commission shall form expert groups and distribute the submitted applications for the purposes of evaluation.

11.4. All expert evaluation statements shall be forwarded to the Council to decide competition winners.

11.5. The Council shall review expert evaluation statements and identify the competition winners before September 30, 2017.

11.6. Grant competition results shall be posted on the official website of NUST «MISiS» Internet science portal within three working days after the Council meeting minutes being signed.

12. Executing a grant agreement

12.1. The competition winners shall sign grant agreements with NUST «MISiS» within 30 working days after posting the results of the open grant competition on the official NUST «MISiS» website Internet science portal.

13. Returning grant applications

13.1. The grant applications (including grant application documents) are not returned to the applicants except for the grant applications recalled by applicants in compliance with the established procedure.

FORMS TO BE COMPLETED BY APPLICANTS

Form 1. Document checklist

DOCUMENT CHECKLIST

List of documents required for submission to the open International grant competition of NUST «MISiS» designed to support Young scientists with international background, invited to conduct a joint research project during 2 years (2017-2019) (the second wave)

Grant application registration number _____

No.	Name of document	Page numbers (from to)	Number of pages
1.	Form 1. «Document Checklist»		
2.	Form 2. «Grant application»		
	Documents to be submitted by a Young Scientist:		
3.	Form 3. «Young scientist's Questionnaire»		
4.	Form 4. «Young scientist's work experience and research achievements»		
5.	Form 5. «Overview of the research project area»		
	Documents supporting research project		
6.	Form 6. «Research Project Description»		
7.	Form 7. «Project Efficiency Indicators»		
8.	Form 8. «Research Project Implementation Plan»		
9.	Appendix		
10.	Copies of a Young scientist passport pages		

Scientific advisor _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

Young scientist _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

Form 2. Grant Application

APPLICATION

**for participation in the open international competition
for grant of NUST «MISiS» designed to support Young scientists (PostDoc) with international
background, invited to conduct a joint research project
during 2 years (2017-2019) (the second wave)**

_____ (full name of the Young scientist)

hereinafter referred to as "Young scientist",
submits herewith a joint application for participation in the grant competition of the NUST
«MISiS» designed to support research projects implemented under the supervision of a Scientific
advisor in collaboration with a research team.

1. *Information about the research project*

1.1 STRATEGIC ACADEMIC UNITS (choose one field of science)

<input type="checkbox"/>	Meta-materials and post-silicone electronics (<i>including IT direction</i>)
<input type="checkbox"/>	Autonomous energy and energy efficiency (<i>including IT direction</i>)
<input type="checkbox"/>	Materials and technologies for improving human lifespan and overall quality of life (<i>including IT direction</i>)
<input type="checkbox"/>	Industrial design and engineering technologies to reindustrialize the economy (<i>including IT direction</i>)
<input type="checkbox"/>	Green technologies for efficient resource use (<i>including IT direction</i>)

1.2. Research area (Please, choose only one according to Appendix 1)

1.3. Project Title _____

2. *Young scientist confirms herewith that:*

- He/she has not applied for any other grants of NUST «MISiS» designed to support research projects
- The research project proposed herein does not duplicate any of *Young scientist's* prior or current research projects financially supported by the federal, regional, or municipal governments of the Russian Federation or funded from other sources.

3. *If his/her grant application is decided a winner, the Young scientist undertakes the following commitments:*

- Execute a Grant Agreement in due time
- Be available for personal supervision of the research in NUST «MISiS» during 2 years (2017-2019).

4. *If his/her grant application is decided a winner, the Scientific advisor undertakes the*

following commitments:

- Personally supervise the progress of the research project during 2 years (2017 – 2019).

5. *If his/her grant application is decided a winner, the Scientific advisor and Young scientist in collaboration with research team undertake the following commitments:*

- Make publications (please choose category)

I. In case 1.2.b clause is applicable:

- o at least 2 articles in 2018 and at least 2 articles in 2019 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor in the first quartile in the field of the research.
- o at least 1 article in 2017 and at least 1 article in 2018 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor of at least second quartile in the field of the research.

II. In case 1.2.a clause is applicable:

- o at least 1 article in 2018 and at least 1 article in 2019 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor in the first quartile in the field of the research.
- o at least 1 article in 2017 and at least 1 article in 2018 on the research matter in the peer review journals referenced in the «Web of Science» with impact factor of at least second quartile in the field of the research.

- Submit an annual research project progress report documented in compliance with the form approved by NUST «MISiS»
- Obligatory outcome of the research is implementation of an academic course
- Obligatory outcome of the research is popularization of the scientific area in the form of oral reports (at least 2 oral report in 2018 and at least 1 oral reports in 2019) at international conferences, workshops, etc outside the territory of RF and as well as in other mass media.
- Scientific advisor and Young scientist in collaboration with the research team undertake responsibility for achieving specified results of the scientific research.
- Submit an annual research project progress report documented in compliance with the form approved by NUST «MISiS»

6. Pursuant to RF Federal Law No.152-FZ of July 27, 2007, «On personal data», the *Young scientist* agrees hereby to have his/her personal information presented in his/her grant application processed and used for the purposes of the grant competition and execution of relevant grant agreements by the competition organizer and third parties contracted thereby, as well as to have his/her personal information saved in the database of NUST «MISiS» containing information about the grant competition participants, their respective grant applications.

7. *The University herewith confirms that:*

- It fulfills its tax obligations by paying requisite tax amounts to budgets of all levels and _by making mandatory payments to state non-budget funds, is solvent, is not under liquidation or reorganization, has not been found insolvent (bankrupt), has not had its property seized or its economic activities suspended;
- The research project proposed herein does not duplicate any of its prior or current research projects implemented by the team financially supported by different level budgets and funded from other sources.

8. If a grant application is decided a winner, NUST «MISiS» shall undertake the following commitments

- Ensure continuous funding of the research project in compliance with its approved budget;
- Execute, within the designated timeframe, a grant agreement in compliance with the approved form;
- Provide office space and access to laboratories and other experimental research facilities required to implement the research project proposed herein.

Scientific advisor _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

Young scientist _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

Form 3. Young scientist's Questionnaire

Information	Young scientist's Information
<i>Personal data</i>	
Last name	
First name	
Patronymic	
Date of birth	
Citizenship	
Second citizenship (for individuals with dual citizenship)	
<i>Education</i>	
Education, Name of the University graduation date, country (Master Degree)	
Academic degree (PhD), name of the University, country, year	
Advanced qualification, training	
<i>Place of residence</i>	
Country	
Mailing address	
Telephone	
E-mail	
<i>Employer</i>	
Full name of employer organization	
Job title	
Country	
Mailing address	
Telephone	
Fax	
E-mail	
Previous employers	
Full name of the organization, period, country	
Full name of the organization, period, country	
...	
Scientometrical indicators	
Researcher ID ¹	
SPIN ²	
Sphere of scientific interests ³	
H-index ⁴	
Number of articles published in peer review periodicals referenced in the «Web of	

¹ In order to obtain Researcher ID it is necessary to be registered at: <http://www.researcherid.com>.

² Only scientists operating in Russia should fill-in this field. In order to obtain SPIN-code (Scientific Personal Identification Number), it is necessary to be registered in SCIENCE INDEX system at: [http://elibrary.ru/author_info.asp?isnew=1&rpape=.](http://elibrary.ru/author_info.asp?isnew=1&rpape=)

³ Key words describing the scientist's specialty.

⁴ As of the date of filing an application.

Science» database_	
Number of citations of the articles published in periodicals referenced in the «Web of Science» database	
Average number of citations per article published in periodicals referenced in the «Web of Science» database	
Number of articles published in periodicals referenced in the «Web of Science» database within the past five years	
Average number of citations per one article published in periodicals referenced in the «Web of Science» database within the past five years	
Average weighted impact factor of the periodicals in which the articles were published within the past five years ⁵	

Additional personal information

Scientific advisor _____
 Scientist's signature Scientist's surname, first name, patronymic (if available)

Young scientist _____
 Scientist's signature Scientist's surname, first name, patronymic (if available)

⁵ Only for periodicals referenced in the «Web of Science» database.

Form 4. Young scientist's work experience and research achievements

Section 1. Young scientist's research achievements

1.1. Young scientist's research work and principal scientific achievements ⁶

1.2. Scientific placements, advanced qualifications of the Young scientist

No.	Name of scientific placement/ advanced qualification	Country	University, company, country	Period	Supporting document
1.					
2.					

1.3. Young scientist's skills to use equipment

No.	Equipment	Application area	Origin country	Period of work with the equipment	Supporting document (is applicable)
1.					
2.					
....					

1.4. Young scientist's awards

No.	Name of award/honorary title	Issuing authority	Year of winning an award	Achievement awarded by prize/honorary title
1.				
2.				

⁶ Description of the Young scientist's work and work results in his/her research area.

Section 2. Intellectual deliverables of the Young scientist for 2011-2016

2.1. *Young scientist's publications in journals indexed in the Web of Science*⁷

No.	Name of the journal	Authors (in the order specified in publication)	Title of the article	Year, volume, issue	Impact-factor of publication
1.					
2.					

2.2. *List of patents, know-how, authorship certificates owned by the leading scientist*

No.	Object of intellectual property-	Object type	Priority date	Territory (country) and term of validity	Title of protection (patent registration certificate)	
					No.	Date of issue
1.						
2.						

2.3. *International conferences at which the Young scientist made presentations in 2011-2016*

No.	Name of conference	Conference place and time and language of presentation	Presentation's authors and title	Type of presentation (invited/regular oral/poster)
1.				
2.				

⁷ Impact factors of the publication are specified in the descending order. Publications should meet the following

requirements: a) must fall within the «article» or «review» category; b) be published in academic journals indexed at the time of application submission in Science Citation Index Expanded, Social Science Citation Index, Arts&Humanities Citation Index. Lists of indexed journals and forms for search are on open access at: <http://ip-science.thomsonreuters.com/mjl/>.

Section 3. Young scientist's experience in training research and academic staff

3.1. *Leading scientist's teaching experience*

Section 4. Reference letters submitted by the Young scientist

4.1. *Research experience supported by references*

No.	Author of the reference (name)	Post, place of work, University and country of the reference author	Period of work with the author of the reference	Type of joint activity and place
1.				
2.				

Young scientist

Scientist's signature

Scientist's surname, first name, patronymic (if available)

Form 5. Overview of the research project area

Section 1. Overview of research in the chosen area at NUST «MISIS»⁸

Section 2. Existing infrastructure in the department of the chosen research area⁹

Section 3. Anticipated research team and their professional qualifications with indication of their Scientific advisor

3.1. Anticipated research project staff members

No.	Full name	Position, academic degree, academic title Specify if student/graduate student	Year of birth	Place of work	Number of publications in journals indexed in the Web of Science in 2011– 2016 ¹⁰	Area of research interests
1.						
2.						

Scientific advisor _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

Young scientist _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

⁸ Including availability of research structures within the host organization (laboratories, divisions, multiple access centers, etc.) that are working within the proposed research project area.

⁹ Describe equipment of the infrastructure which can be used in the proposed research.

¹⁰ Publications should meet the following requirements: a) be an article or a review; b) be published in academic journals indexed at the time of application submission in Science Citation Index Expanded, Social Science Citation Index, Arts & Humanities Citation Index. Lists of indexed editions and forms for their search are on open access at : <http://ip-science.thomsonreuters.com/mjl/>.

Form 6. Research Project Description

Section 1. General information about the project

1.1. Name of the Project

1.2. Project goal

1.3. Project objectives

1.4. Anticipated project results¹¹

Section 2. Detailed Project description

2.1. Description of the proposed research project¹²

a. Description of the scientific approaches and methods proposed to achieve the anticipated project results

2.2. Description of completed project-related work and associated research results achieved by the research team members¹³

Section 3. Project funding from other sources

Name	2017 (mln Rub)	2018 (mln Rub)	2019 (mln Rub)	Total (mln Rub)

¹¹ Including anticipated inventions, patents, know-how, etc.

¹² Relevance of the research project from the viewpoint of the current status of global science; likelihood of achieving breakthrough world-class research results and their relevance in terms of the global science and economy.

¹³ Description of project-related work already completed by the entire research project group based on their work outside the research project.

Russian and foreign investors' funds				
Commercial agreements				
Grants				
Other				
Total				

Section 4. Research area prospects upon completion of the project

Scientific advisor _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

Young scientist _____
Scientist's signature Scientist's surname, first name, patronymic (if available)

Form 7. Project Efficiency Indicators

No.	Effectiveness indicator	Unit of Measure	2017	2018	2019
1.	The total number of articles published in scientific periodicals indexed in the «Web of Science» that were written by the Young scientist in collaboration with research team on issues related to the proposed research project area ¹⁴	pcs			
1.1.	<i>The number of articles published in scientific periodicals indexed in the «Web of Science» in journals included in the first quartile of impact factor in the chosen research area¹⁵</i>	pcs			
1.2.	<i>The number of articles published in scientific periodicals indexed in the «Web of Science» in journals below the second quartile of impact factor in the chosen research area¹⁶</i>	pcs			
2.	Number of oral reports presented by the Young scientists at international (outside RF) conferences on issues related to the proposed research project area	pcs			
3.	Number of lectures (lecture courses) delivered by the Young scientist	pcs			
4.	Number of grants received during the project implementation period	pcs			
5.	Number of commercial agreements/contracts executed and implemented during the project implementation period	pcs			
<i>Other indicators independently identified</i>					
6.					
...					

Note: All data must be specified by the year (not by accrued total).

Scientific advisor _____

¹⁴ Publications must meet the following requirements: a) they must fall within the "article» or "review" category;

¹⁵ Publications must meet the following requirements: a) they must fall within the "article» or "review" category; b) they shall be in the first quartile of impact factor in the chosen research area

¹⁶ Publications must meet the following requirements: a) they must fall within the "article» or "review" category; b) they shall be in the below the second quartile of impact factor in the chosen research area

Young scientist

Scientist's signature

Scientist's surname, first name, patronymic (if available)

Scientist's signature

Scientist's surname, first name, patronymic (if available)

Form 8. Project Implementation Plan

Young scientist:

Research project:

Phase No.	List of activities	Scheduled results of activities	Scheduled scientific publications, results of inventive activities ¹⁷ and conference papers	Implementation period (start -finish) (date)
1.	<i>List of activities funded by the grant</i> 1.1. 1.2.			__.__.2017 – 01.07.2017
2.	<i>List of activities funded by the grant</i> 2.1. 2.2.			01.01.2018 – 30.06.2018
3.	<i>List of activities funded by the grant</i> 3.1. 3.2.			01.07.2018 – 31.12.2018
4	<i>List of activities funded by the grant</i> 4.1. 4.2.			01.01.2019 – __.__.2019

Scientific advisor _____

Scientist's signature

Scientist's surname, first name, patronymic (if available)

Young scientist _____

Scientist's signature

Scientist's surname, first name, patronymic (if available)

¹⁷ Articles in the periodicals referenced in the «Web of Science» database, monographs, chapters in monographs, applications for a patent for an invention, utility model, or commercial prototype, receipt of certificates, patents.

APPENDIX 1

Rank	Research areas
1	ACOUSTICS
2	ASTRONOMY & ASTROPHYSICS
3	AUTOMATION & CONTROL SYSTEMS
4	BIOCHEMICAL RESEARCH METHODS
5	BIOCHEMISTRY & MOLECULAR BIOLOGY
6	BIOLOGY
7	BIOPHYSICS
8	BIOTECHNOLOGY & APPLIED MICROBIOLOGY
9	CELL & TISSUE ENGINEERING
10	CELL BIOLOGY
11	CHEMISTRY, ANALYTICAL
12	CHEMISTRY, APPLIED
13	CHEMISTRY, INORGANIC & NUCLEAR
14	CHEMISTRY, MEDICINAL
15	CHEMISTRY, MULTIDISCIPLINARY
16	CHEMISTRY, ORGANIC
17	CHEMISTRY, PHYSICAL
18	CLINICAL NEUROLOGY
19	COMMUNICATION
20	COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE
21	COMPUTER SCIENCE, CYBERNETICS
22	COMPUTER SCIENCE, HARDWARE & ARCHITECTURE
23	COMPUTER SCIENCE, INFORMATION SYSTEMS
24	COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS
25	COMPUTER SCIENCE, SOFTWARE ENGINEERING
26	COMPUTER SCIENCE, THEORY & METHODS
27	CRYSTALLOGRAPHY
28	ECOLOGY
29	ECONOMICS
30	EDUCATION & EDUCATIONAL RESEARCH
31	EDUCATION, SCIENTIFIC DISCIPLINES

32	EDUCATION, SPECIAL
33	ELECTROCHEMISTRY
34	EMERGENCY MEDICINE
35	ENDOCRINOLOGY & METABOLISM
36	ENERGY & FUELS
37	ENGINEERING, AEROSPACE
38	ENGINEERING, BIOMEDICAL
39	ENGINEERING, CHEMICAL
40	ENGINEERING, CIVIL
41	ENGINEERING, ELECTRICAL & ELECTRONIC
42	ENGINEERING, ENVIRONMENTAL
43	ENGINEERING, GEOLOGICAL
44	ENGINEERING, INDUSTRIAL
45	ENGINEERING, MECHANICAL
46	ENGINEERING, MULTIDISCIPLINARY
47	ENVIRONMENTAL SCIENCES
48	GEOCHEMISTRY & GEOPHYSICS
49	GEOLOGY
50	GEOSCIENCES, MULTIDISCIPLINARY
51	IMMUNOLOGY
52	LOGIC
53	MANAGEMENT
54	MARINE & FRESHWATER BIOLOGY
55	MATERIALS SCIENCE, BIOMATERIALS
56	MATERIALS SCIENCE, CERAMICS
57	MATERIALS SCIENCE, CHARACTERIZATION & TESTING
58	MATERIALS SCIENCE, COATINGS & FILMS
59	MATERIALS SCIENCE, COMPOSITES
60	MATERIALS SCIENCE, MULTIDISCIPLINARY
61	MATERIALS SCIENCE, PAPER & WOOD
62	MATERIALS SCIENCE, TEXTILES
63	MATHEMATICAL & COMPUTATIONAL BIOLOGY
64	MATHEMATICS

65	MATHEMATICS, APPLIED
66	MATHEMATICS, INTERDISCIPLINARY APPLICATIONS
66	MECHANICS
67	MEDICINE, RESEARCH & EXPERIMENTAL
68	METALLURGY & METALLURGICAL ENGINEERING
69	MICROBIOLOGY
70	MICROSCOPY
71	MINERALOGY
72	MINING & MINERAL PROCESSING
73	MULTIDISCIPLINARY SCIENCES
74	NANOSCIENCE & NANOTECHNOLOGY
75	NUCLEAR SCIENCE & TECHNOLOGY
76	ONCOLOGY
77	OPTICS
78	PHARMACOLOGY & PHARMACY
79	PHYSICS, APPLIED
80	PHYSICS, ATOMIC, MOLECULAR & CHEMICAL
81	PHYSICS, CONDENSED MATTER
82	PHYSICS, FLUIDS & PLASMAS
83	PHYSICS, MATHEMATICAL
84	PHYSICS, MULTIDISCIPLINARY
85	PHYSICS, NUCLEAR
86	PHYSICS, PARTICLES & FIELDS
87	ROBOTICS
88	SOCIAL SCIENCES, MATHEMATICAL METHODS
89	SPECTROSCOPY
90	TELECOMMUNICATIONS
91	THERMODYNAMICS
92	TOXICOLOGY
93	TRANSPLANTATION
94	TRANSPORTATION
95	TRANSPORTATION SCIENCE & TECHNOLOGY
96	WATER RESOURCES