LEADING AHEAD, WHILE PRESERVING TRADITIONS

ANNUAL REPORT / 2016

MISIS
National University of
Science and Technology

National University of
Science and Technology

RECTOR'S INTRODUCTION

Dear colleagues and partners!

The year 2016 has been successful, bright and fruitful for NUST MISIS. Coherent implementation of the University's comprehensive development strategy has made it possible to achieve outstanding results in all fields of activities – from education and research activities to cooperation with the business community and formation of an original creative environment for all-round development of students.

NUST MISIS traditionally devotes priority attention to the quality of education and development of new much-in-demand educational programmes, including in partnership with leading international and Russian universities and the business community.

Several large research projects have been launched at the University, such as participation in the design engineering of a new experimental SHiP unit for European Organisation for Nuclear Research (CERN) and creation of the NUST MISIS Quantum Centre. Our University has completed several major infrastructure projects. New world-class research laboratories, modern research & educational and engineering centres have been opened engaging leading Russian and foreign scientists. A large number of research studies conducted at the University have led to a significant quantitative and qualitative increase in publications in top-rated academic journals. Young scientists of NUST MISIS have become winners of prestigious state prizes in science and technology.

More and more talented and motivated entrants choose our University every year. In 2016, NUST MISIS rolled out the most successful entrance campaign in five years making it possible to include the University in the TOP-5 best technical universities in Russia in terms of the quality of entrance. For the first time in the history of NUST MISIS the average Unified State Exam (USE) grade has exceeded 80 points. This has been made possible through successful implementation of the Occupational Navigation Programme as part of which federal and international projects are implemented.

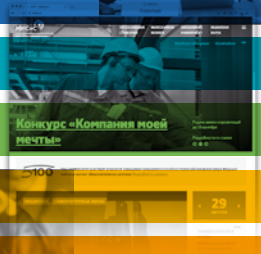
The University's transformation takes place with the active support of the student community. Following the results of the Ranking of Students Councils at Educational Institutions of Higher Education, the NUST MISIS Student Council has been included in the TOP-10 of the best students councils and has been ranked first in the Student Trust nomination.

The University's successful development has been objectively reflected in the strengthening of its positions in the world leading university rankings. In 2016, NUST MISIS showed the highest growth rates among Russian universities in the QS world and regional rankings, up by 100 positions in the first one.

Accelerating technological development and high competition in the academic community bring about more and more ambitious goals and challenges for us. I am sure we will meet them with dignity. NUST MISIS has everything it needs to become one of the best technical universities not merely in Russia, but also in the world. This is due to a well-chosen development strategy, a highly professional team, talented students, a modern research and teaching infrastructure and support of the business community.

NUST MISIS Rector
A. A. Chernikova


MISIS


Конкурс «Компания моей мечты»


МИСИС


Новые материалы на службе России
2015
2014
1930

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ABOUT UNIVERSITY

ABOUT UNIVERSITY

Colleges	9
International School of Business and Technology	1
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Research Laboratories	29
World-class Engineering Centres	3
Small Innovative Enterprises	> 30
Common Use Centre	1
Employees	4 000
Doctors and Candidates of Sciences	> 1 000
Students	17 000
International Students	3 300 from 69 countries


МИСИС
Национальный исследовательский технологический университет
НИТУ МИСИС
MISIS

HISTORY

2016

NUST MISIS showed the highest growth rates among Russian universities in the QS world and regional rankings

2015

NUST MISIS was among the best universities in the world according to THE rankings and was at 19th position in THE World's Best Small Universities Ranking

2014

Merger of NUST MISIS and MSMU (Moscow State Mining University). The University was among the best world universities according to the QS Rankings

2013

NUST MISIS was pronounced the winner of Project 5-100

2008

National University of Science and Technology MISIS – NUST MISIS

1962

Moscow Institute of Steel and Alloys – MISiS

1930

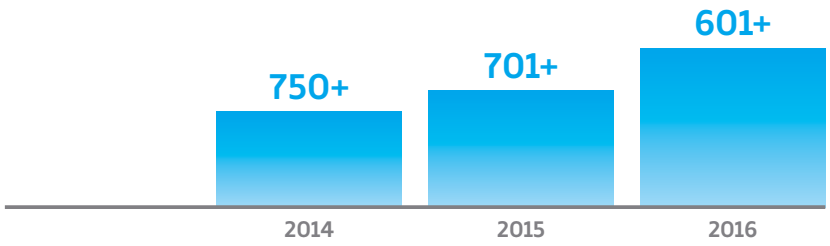
Moscow Institute of Steel – MIS

1918

Moscow Mining Academy

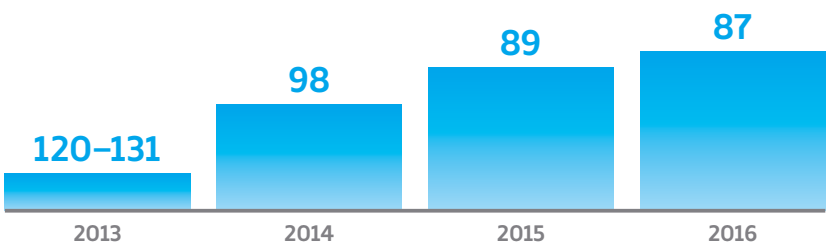
QS RANKINGS

For the first time joining the ranks of the world best universities according to Quacquarelli Symonds rankings in 2014, in 2016 NUST MISIS showed the highest growth rates among Russian educational institutions of higher education in the QS world and regional rankings.



QS WORLD UNIVERSITY RANKINGS

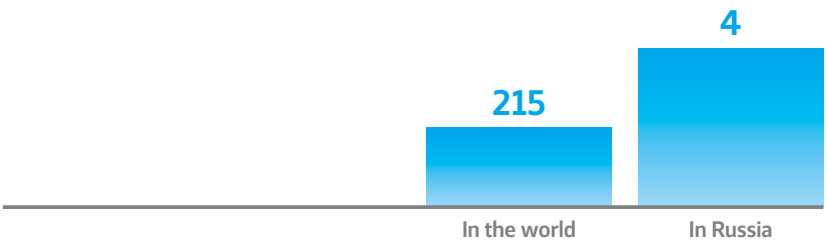
601–650 QS World University Rankings



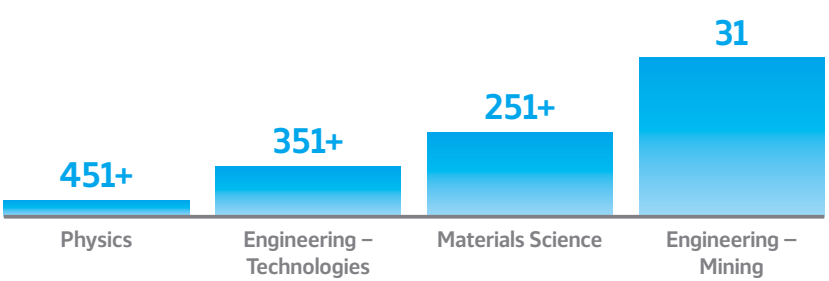
QS UNIVERSITY RANKINGS BRICS

87 QS: BRICS

The University improved its index by 100 positions in the QS World University Ranking, from the 89th up to the 87th position in the QS Ranking: BRICS and from the 75th up to the 63rd position in the Ranking for Developing Countries in Europe and Central Asia. In the QS Graduate Employability Rankings NUST MISIS was among 7 world universities that scored the maximum 100 points in “Organisation of Interaction Between Employers and Students”.



201+ QS Graduate Employability Rankings



2017 QS World University Rankings by Subject

U.S.NEWS & WORLD REPORT RANKINGS, THE RANKINGS

283

TOP-300 U.S. News Best Global Universities-2017 by Materials Science subject

U.S.News & WORLD REPORT

801+

in the world

TOP-200

among the BRICS countries

THE WORLD UNIVERSITY RANKINGS

«NUST MISIS along with the California Institute of Technology (Caltech) showed world-class capabilities available in small universities.».

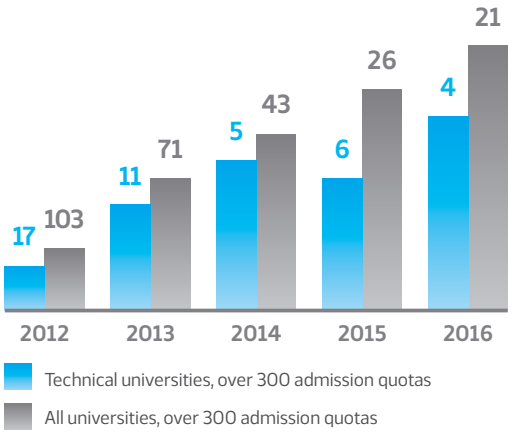
Phil Baty Editorial Director of The Times Higher Education World University Ranking

Members of NUST MISIS International Scientific Advisory Council at the Laboratory for Amorphous and Nanocrystalline Alloys

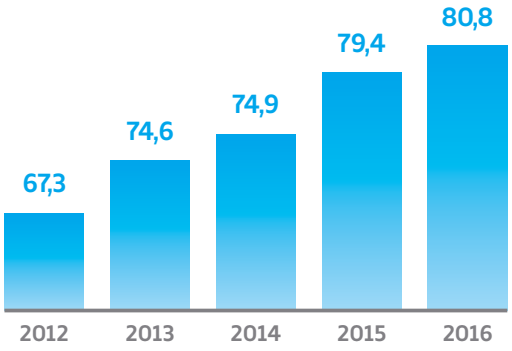
NATIONAL UNIVERSITY RANKINGS

According to the results of the annual quality monitoring of all-Russian admission of applicants in higher education institutions, NUST MISIS improved its position from the 103rd up to the 21st rank in the general rankings and from the 17th up to the 4th rank – among the best technical universities.

ADMISSION QUALITY GROWTH



AVERAGE USE GRADE GROWTH



02

EDUCATIONAL ACTIVITIES

Professor I. A. Abrikosov, Head of NUST MISIS Laboratory for Modelling and Development of New Materials

EDUCATIONAL SYSTEM

Vocational Education Levels	**4**
Training Fields	**135**
Educational Programmes	**263**
Educational Programmes in English	**8**

In the field of education, the University is focused on continuous improvement of the curricula quality. As part of the Competitiveness Enhancement Programme, NUST MISIS resources are concentrated on breakthrough training fields; the educational activities were restructured. Admission to Bachelor Degree and Specialist programmes was reduced, while admission to Master's programmes was more than doubled. New Master's programmes are created every year, including courses in English.

NUST MISIS was awarded the Russian Federation Government Prize for the Centres for Technological Support of Education – the networking system of continuous education.

«It is extremely important for a researcher to realise his ideas. I've always been interested in IT technologies, and when I found out that computer vision can be studied at NUST MISIS, this University became my final choice. Here we have excellent conditions – perfect labs, famous professors, access to all scientific journals. This is all a student and a young scientist like me needs».

Vivek Kumar student in the Master's programme in Innovative Software Systems: Design, Development & Applications, India

ADMISSION CAMPAIGN

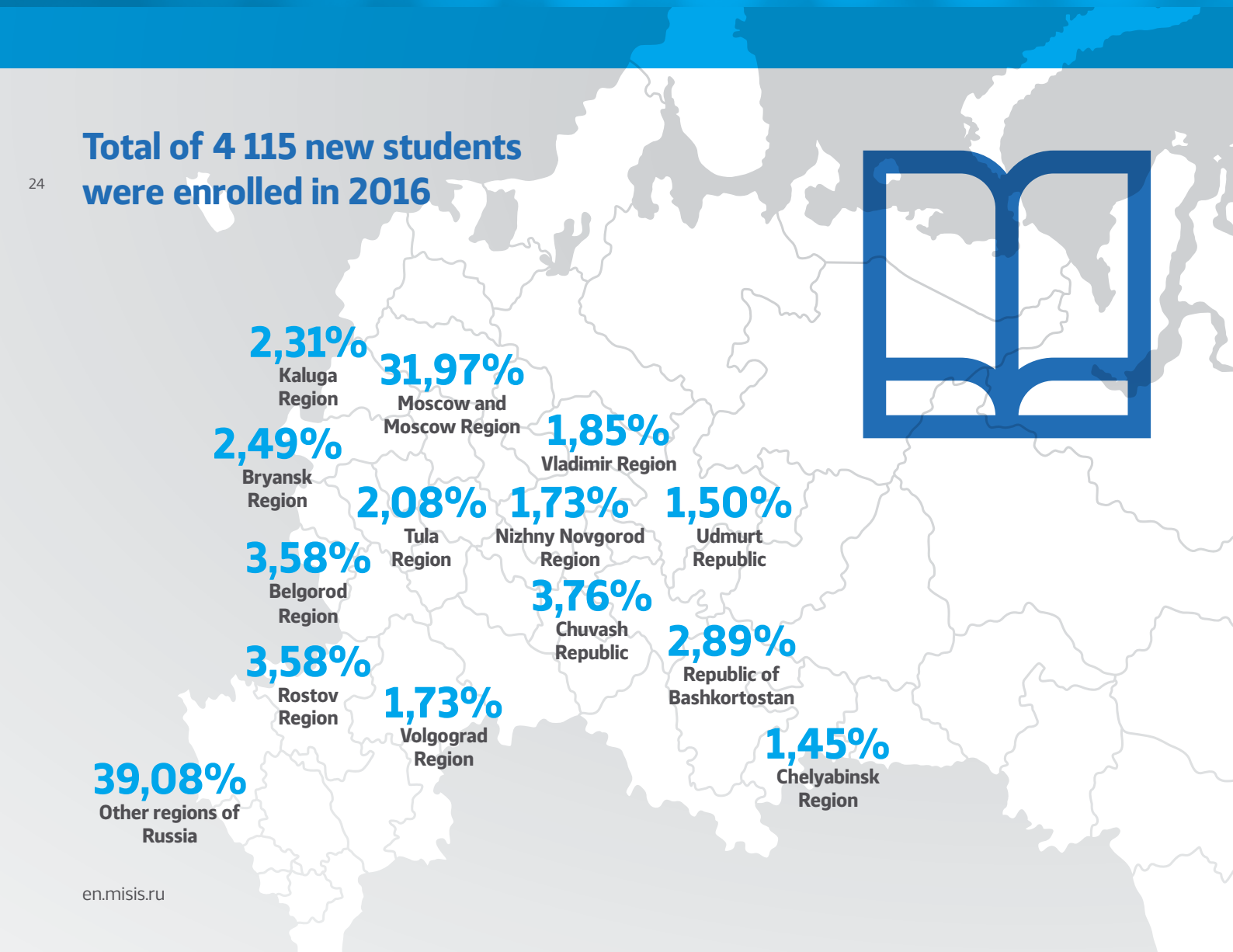
The admission campaign 2016 became the most successful of NUST MISIS campaigns over the last 5 years. Since 2012, the average USE grade in the University increased from 67.3 up to 80.8.

More and more talented and motivated entrants choose our university every year. NUST MISIS became the first choice university for every second entrant – 52% of entrants submitted original documents when applying. In 2016, the competitive selection at NUST MISIS reached 50 applicants per one seat to fill in for a number of courses. The most popular colleges are: College of IT and Automated Control Systems, College of New Materials and Nanotechnology and College of Mining.


ПОСТУПАЮЩЕГО

DISTRIBUTION OF ENROLLED STUDENTS BY RUSSIAN FEDERATION REGIONS

Total of 4 115 new students were enrolled in 2016



ADMISSION CAMPAIGN BEST PRACTICES

NUST MISIS has more than 20 Occupational Navigation Programmes for secondary school students. In addition to traditional programmes, such as various academic olympics, Welcome Days and University Saturdays, participation in exhibitions and conferences, arrangement of various scientific and creativity competitions, NUST MISIS implements projects jointly with the Department of Education of Moscow, as well as its own special ones.

Engineering School

NUST MISIS created an Engineering School within its Occupational Navigation Programme focused on high school seniors from Russian regions and the near abroad countries.

Engineering Class in Moscow School

By purposefully inviting talented and motivated students NUST MISIS in cooperation with the Department of Education of Moscow implements the Engineering Class in Moscow School Project. 35 Moscow schools joined the project just in a year since the launch. This cooperation experience was highly appraised by Moscow Mayor Sergey Sobyanin.

Occupational navigation activities

Total of 150,000 secondary school students in Russia and 32,000 in neighbouring and other countries took part in the occupational navigation activities arranged by NUST MISIS.

Extension of individual achievements list

In 2016, NUST MISIS extended the list of achievements for which 10 points to be added to the USE results. Now it contains 22 positions compared to 14 in the past. According to the results of admission of applicants, 32% of all the enrolled students received additional points for winning academic olympics and gaining honours diplomas / certificates.

OCCUPATIONAL NAVIGATION

Moscow and Moscow Region

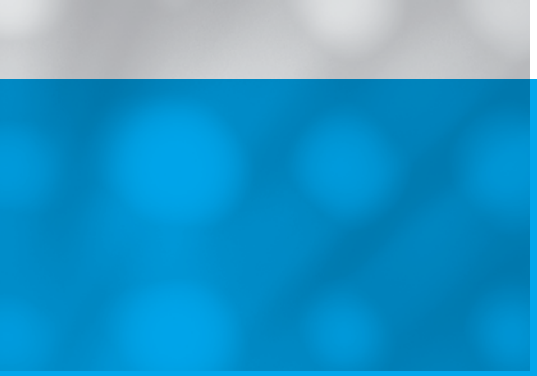
- WELCOME DAY
- PRE-STUDY COURSES
- AWAY WELCOME DAYS
- ACADEMIC OLYMPICS, TESTS, COMPETITIONS
- **EXHIBITIONS:**
  Moscow Career Guidance Day
  Entrance Navigator
  Higher Education Fair (Dubna)
  High School Senior Day (Podolsk), etc.
- ENGINEERING CLASS OF MOSCOW SCHOOL
- TWO DAYS IN NUST MISIS
- UNIVERSITY SATURDAYS
- DIGITAL PRODUCTION IN FABLAB
- FESTIVAL OF SCIENCE
- UNIVERSITY FOR CHILDREN
- UNIVERSITY OF DREAMS

Russia

- FUTURE INTELLECTUAL LEADERS OF RUSSIA FORUM (YAROSLAVL)
- NUST MISIS AWAY WELCOME DAYS
- **EXHIBITIONS:**
  "Education. Career – 2016" (Chelyabinsk, Ufa)
  "UchSib – 2016" (Novosibirsk)
  "Entrance Navigator" (St. Petersburg, Yekaterinburg, Nizhny Novgorod)
- ACADEMIC OLYMPICS, CREATIVITY COMPETITIONS
- EXCURSIONS AND WORKSHOPS
- ENGINEERING SCHOOL

For International Entrants

- ACADEMIC OLYMPICS "TIME TO STUDY IN RUSSIA!"
- **EXHIBITIONS:**
  "Education and Career"
  "Education in Russia" (Armenia, Azerbaijan, Latvia)
  "Moscow International Education Salon"
  Six largest educational exhibitions (NAFSA, EAIE, AULA, etc.)
- ACADEMIC OLYMPICS, CREATIVITY COMPETITIONS
- PRE-STUDY DIVISION
- EXCURSIONS AND WORKSHOPS
- ENGINEERING SCHOOL
- METHODOLOGICAL WORKSHOPS FOR TEACHERS ON THE RUSSIAN LANGUAGE



NUST MISIS Academic Olympics

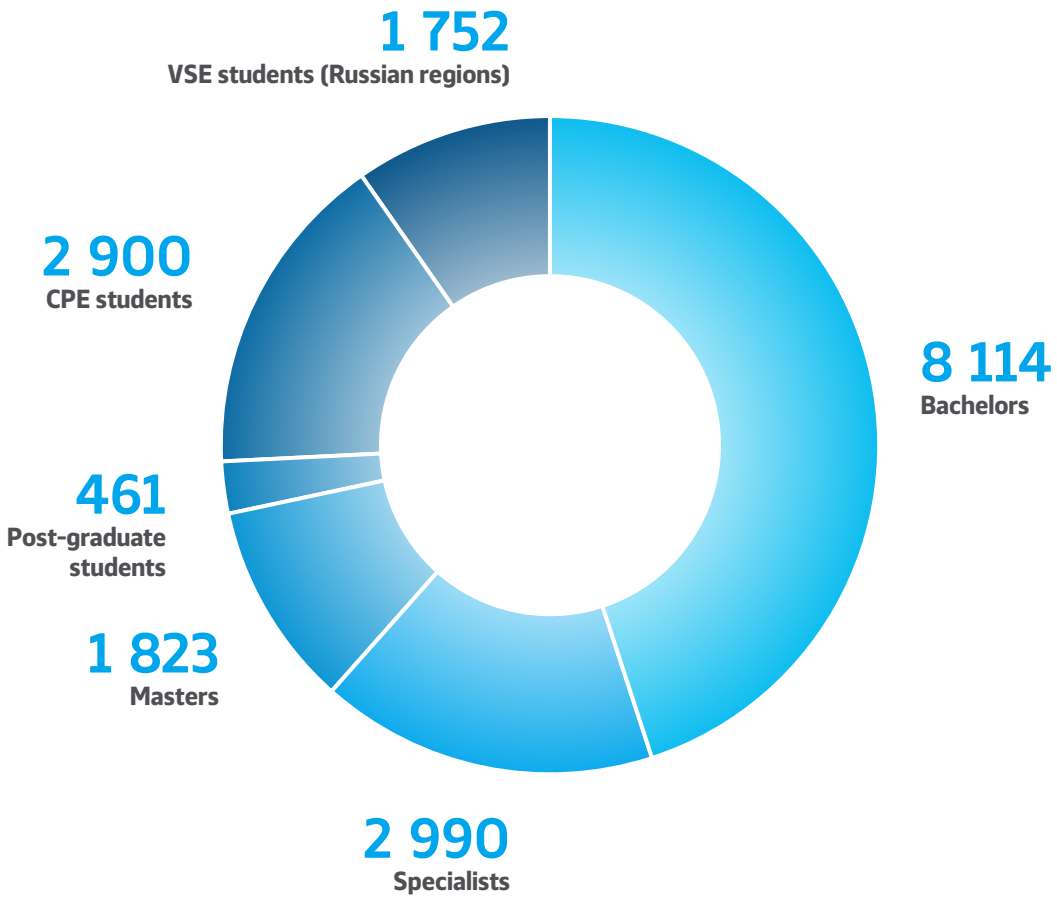
- "MISIS LIGHTS STARS"
- "ENGLISH FOR GLOBAL PROGRESS"
- "MINING SHIFT"
- "BECOME AN IT PROFESSIONAL"
- CREATIVITY COMPETITION FOR MASTER'S PROGRAMME ENTRANTS

All-Russian Academic Olympics

- "UNITED INTER-UNIVERSITY MATHEMATICAL COMPETITION"
- "STAR" MULTI-DISCIPLINE ENGINEERING COMPETITION
- "SCHOOL INTERNET-COMPETITION IN PHYSICS"
- "UNITED COMPETITION IN CHEMISTRY"
- NUST MISIS OPEN COMPETITION IN PROGRAMMING AND COGNITIVE TECHNOLOGIES

STUDENTS STRUCTURE

More than 18 000 people study at NUST MISIS at all levels of education and programmes: vocational secondary education (VSE), Bachelor's, Specialist's, Master's, post-graduate and continuing professional education (CPE) programmes.



EDUCATIONAL ENVIRONMENT

A A Project-Oriented Approach

New models and tools are constantly being introduced into the educational process of the University: project-oriented learning (idea – design – implementation – management), multimedia and interactive technologies, online education, training devices, simulators – everything that helps to better convey learning materials to students and improve the quality of education.

B English-Language Educational Programmes

NUST MISIS offers 8 educational programmes in English. In June 2016, the first masters graduated from NUST MISIS having completed the English-language programmes Advanced Metallic Materials for Engineering and Quantum Physics. More than half of them will continue their education in PhD programmes at leading foreign and Russian universities.

C English for Engineers of the Future

Learning English at NUST MISIS is conducted under a unique and currently the only specialised programme in Russia called Touchstone@MISIS. It is based on an innovative Touchstone course, developed jointly with Cambridge University for future engineers and researchers. The University students who have succeeded in the examination in English will receive an IELTS certificate which enables them to continue education abroad.

D Academic Writing University Centre

The Academic Writing University Centre activities contributed to a large extent to a significant increase in the number of publications and citations of NUST MISiS scientists in 2016. The Centre allows researchers to improve their skills in writing articles in English for leading academic journals, preparing presentations and speaking at international conferences.

EDUCATIONAL PROGRAMMES ACCREDITATION

State Accreditation

Total Accredited Programmes	119
Bachelor's Programmes	59
Master's Programmes	23
Specialist's Programmes	4
Post-graduate Programmes	17
VSE Programmes	16

Professional and Public Accreditation – Bachelor's Programmes	14
Professional and Public Accreditation – Master's Programmes	8
Professional and Public Accreditation – VSE Programmes	2

EUR-ACE® International Quality Mark – Bachelor's Programmes	13
EUR-ACE® International Quality Mark – Master's Programmes	6

NEW EDUCATIONAL STANDARDS

Higher education standards used at NUST MISIS were developed with due consideration of current professional standards, the EUR-ACE Framework Standards and Guidelines for technical education and the Global CDIO Initiative, and constitute a fundamental principle for designing and development of competitive educational programmes in the Russian and international labour markets.

24 educational programmes have professional and public accreditation: 14 Bachelor's programmes, 8 Master's programmes and 2 VSE programmes.

13 Bachelor's programmes and 6 Master's programmes were awarded the EUR-ACE® European Quality Mark.

The University offers 8 Master's programmes in English. Two of them have the ASIIN accreditation: Multicomponent nanostructured coatings.

Nanofilms and Quantum physics for advanced materials engineering.

The University and its branches have the licenses to conduct educational activities in 135 fields, while 119 of them have state accreditation.

ENGLISH-LANGUAGE SUMMER SCHOOLS

In order to attract applicants for Master's programmes, NUST MISIS organised 3 English-language summer schools in materials sciences, quantum technologies and thermodynamics:

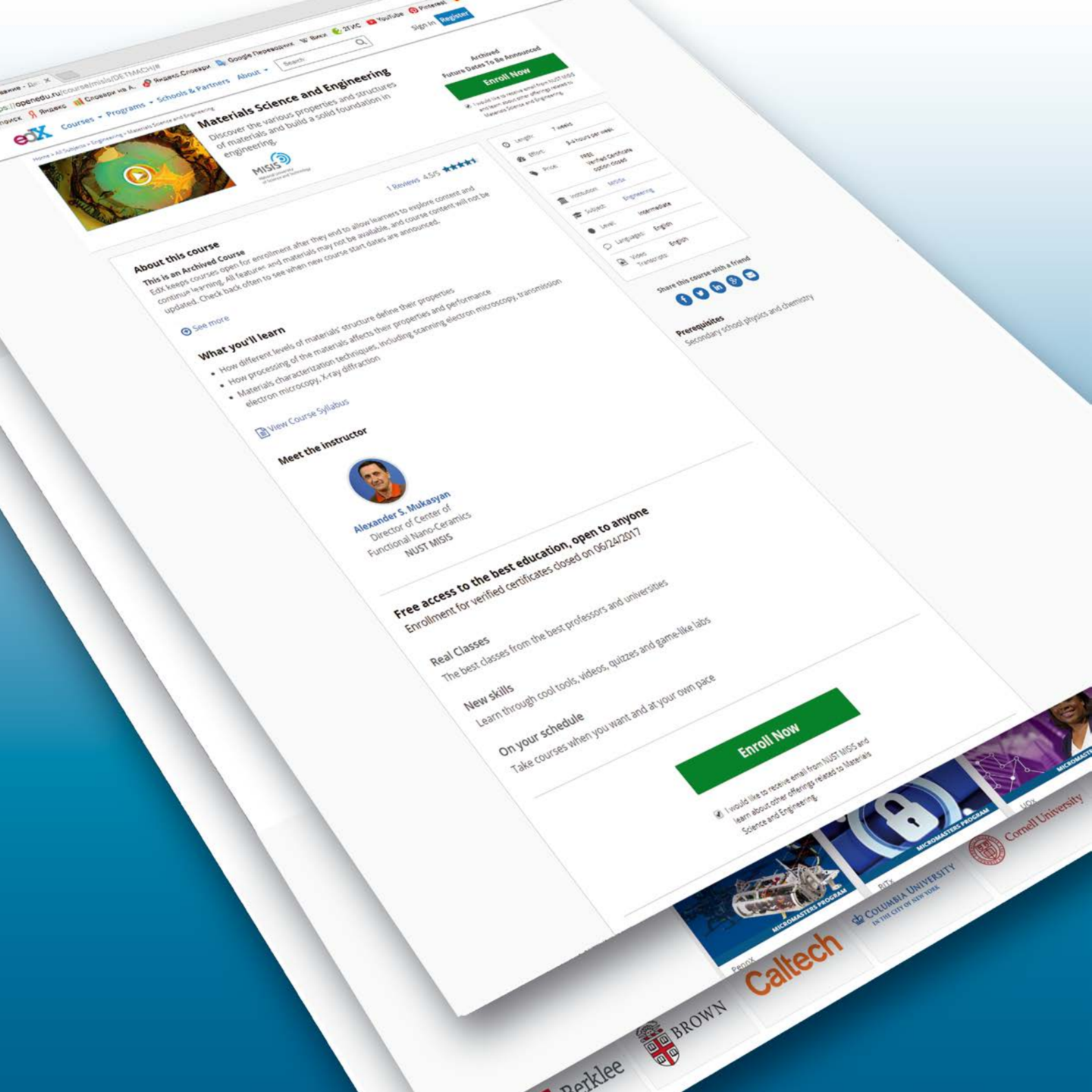
Summer School «Materials and Technologies»

Summer School 2016

was organised jointly with the Russian Quantum Centre

APDIC WRRS Summer School

Students and scientists from all over the world took part in the summer schools. More than 100 students from China, Poland, Ukraine, Ethiopia, Nigeria, Pakistan, India, Ghana and other countries attended the training. Leading experts from Russia, Germany, Japan, Sweden, Czech Republic, Austria, Great Britain, France, Finland, etc. served as instructors.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Programs
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Sign in
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Materials Science and Engineering
Discover the various properties and structures of materials and build a solid foundation in engineering.
Archived
Future Dates To Be Announced
Enroll Now
About this course
This is an Archived Course
edX keeps courses open for enrollment after they end to allow learners to explore content and continue learning. All features and materials may not be available, and course content will not be updated. Check back often to see when new course start dates are announced.
See more
What you'll learn
How different levels of materials' structure define their properties
How processing of the materials affects their properties and performance
Materials characterization techniques, including scanning electron microscopy, transmission electron microcopy, X-ray diffraction
View Course Syllabus
Meet the Instructor
Alexander S. Mukasyan
Director of Center of Functional Nano-Ceramics
NUST MISIS
Free access to the best education, open to anyone
Enrollment for verified certificates closed on 06/24/2017
Real Classes
The best classes from the best professors and universities
New skills
Learn through cool tools, videos, quizzes and game-like labs
On your schedule
Take courses when you want and at your own pace
Enroll Now
I would like to receive email from NUST MISIS and learn about other offerings related to Materials Science and Engineering
Share this course with a friend
Prerequisites
Secondary school physics and chemistry
MICROMASTERS PROGRAM
Caltech
BROWN
COLUMBIA UNIVERSITY
Cornell University

ONLINE COURSES

14 **online courses were developed and launched by the University on the National Open Education Platform (NPOEd)**

During a year of NPOEd's existence the University developed and launched 14 online courses in NUST MISIS specialised disciplines: materials science, engineering, physical chemistry, etc.

NUST MISIS has the largest after Lomonosov Moscow State University number of online courses in natural sciences on educational platforms.

42 000
listeners of online courses at openedu.ru

More than 40 000 listeners of NUST MISIS online courses were registered at openedu.ru in 2016.

3rd
place among the most popular online courses

The time management course takes the 3rd place among the most popular NPOEd courses.

2
English-language online courses

2 English-language online courses were developed for the EdX Platform.

STUDENT OFFICE

More than 50 services for students

2016 was declared the year of “Services for Students” at NUST MISIS. The activities held were aimed at optimising the procedures related to student document management. In 2016, the Student Office was formed – a new structural unit, the main objective of which is to form and support the information infrastructure of student services, including the one-stop service. Using its personal account, a student can order documents, track its grades in disciplines, find schedules, get homework assignments, as well as use scholarly libraries and Scopus and Web of Science analytical databases. For four months of work, more than 4,500 documents were issued. Entrants can also use a personal account to easily submit documents for admission.

ADDITIONAL OCCUPATIONAL EDUCATION

In 2016, NUST MISIS Opened the International School of Business and Technology.

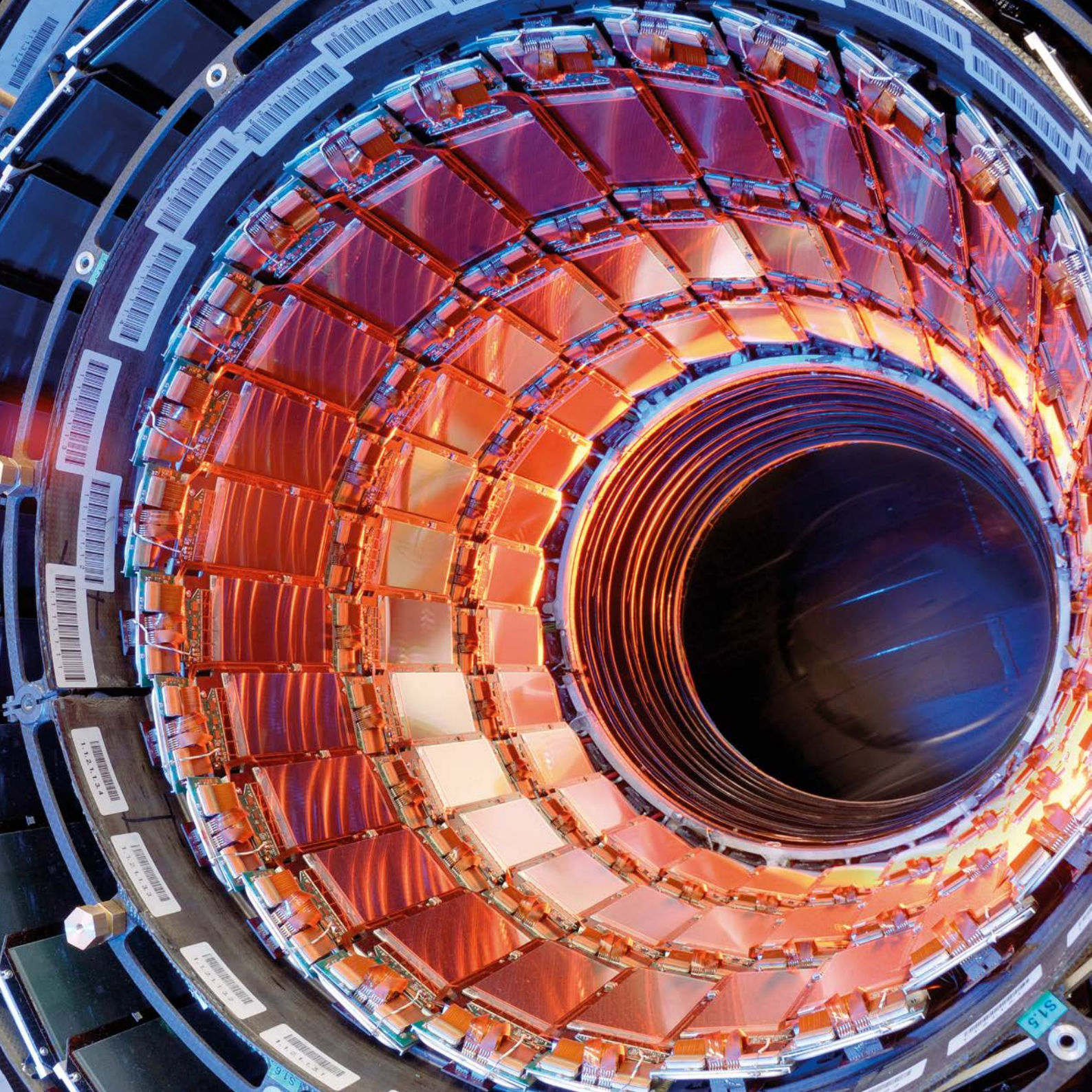
Training in the business school is built using practical-oriented MBA programmes and short-term advanced professional development programmes for corporate customers – representatives of small, medium and large businesses in Russia and near abroad countries. Synthesis of NUST MISIS engineering competencies and educational programmes of the International School of Business and Technology makes it possible to hold specialised occupational retraining courses for representatives of the business community.

In order to increase occupational and management skills of OMK managers – the University's strategic partner, in October NUST MISIS launched the MBA programme in Industrial Enterprise Management which consists of modules and combines theoretical material with practical work. Training of OMK line managers includes studying the product life cycle and quality management principles, getting to know the best practices in project management, developing an efficient operating strategy. The training of future managers includes business games, case solutions, workshops by experts and holding top managers, internships and creation of their own project.

3 027 specialists were trained in additional occupational programmes in 2016

03

RESEARCH ACTIVITIES



RESEARCH ACTIVITIES

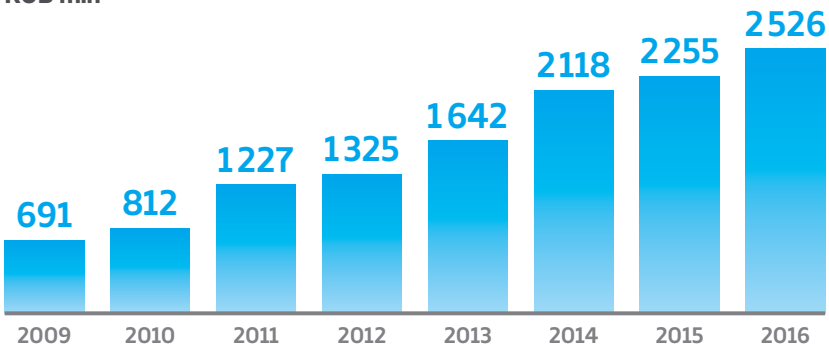
	2015	2016
Number of Doctors and Candidates of Sciences	>1 000	>1 000
Number of Academicians, who Completed Advanced Training	288	302
Tutors Completed Retraining	32%	35%
Tutors Conducting Research and Project Work	38%	39%
Professors with Work Experience at the World's Leading University Centres	24,5%	24,5%

As one of the leading technical universities in Russia, NUST MISIS is also a full-featured research and development centre, specialising in such strategic areas as materials science, metallurgy, mining, biomaterials, nano- and IT technologies. The University has 29 modern labs and 3 engineering centres engaging leading Russian and foreign scientists.

FINANCING OF SCIENCE

In 2016, the amount of financing of the research and development (R&D) conducted by the NUST MISIS research team significantly increased both due to the orders of business entities and the federal budget funds.

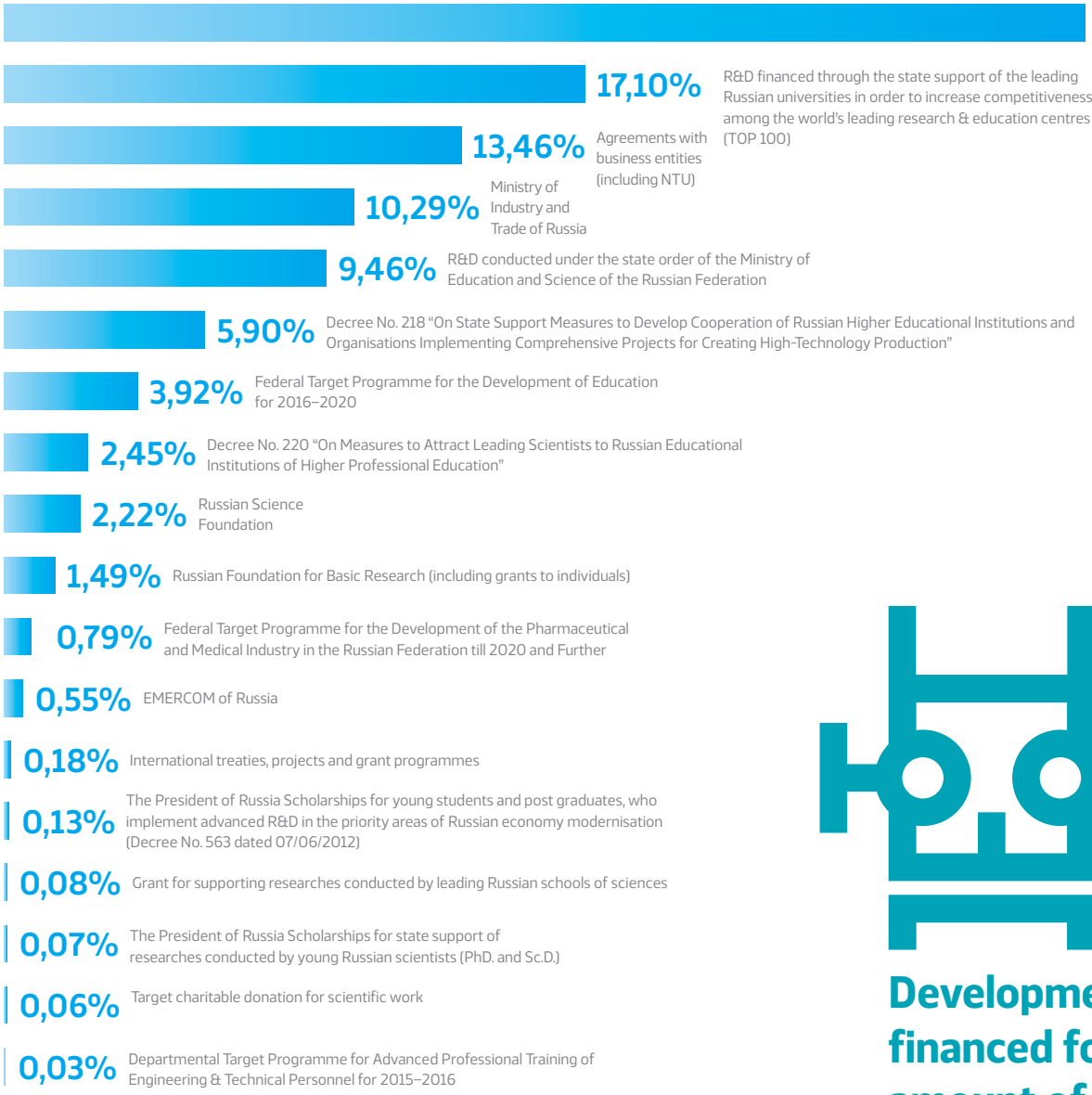
FINANCING OF RESEARCH ACTIVITIES, RUB mln



«I would like to especially emphasise the dynamics of changes. I am sure my university could learn from NUST MISIS in terms of making decisions and implementing ambitious plans».

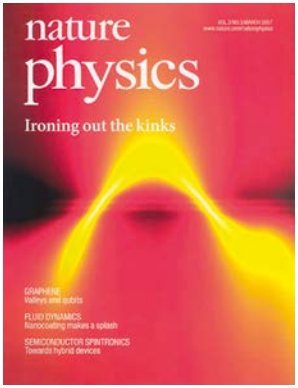
Jan van Ruitenbeek Professor, Member of NUST MISIS International Scientific Advisory Council (Leiden University, Netherlands)

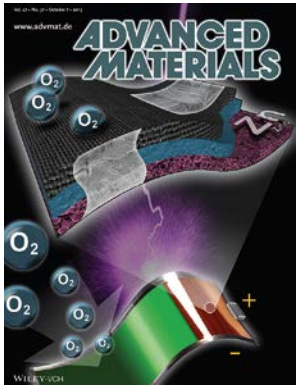
R&D FINANCING STRUCTURE IN 2016, %



Development was financed for a total amount of RUB 2 528.42 million

PUBLICATIONS IN TOP 1% JOURNALS BY SNIP





In 2016, the University's scientists published articles in the top-rated journals included in TOP 1% by SNIP. Articles of NUST MISIS scientists were published in such periodicals as Nature Materials (article by K. B. Efetov), Science (article by S. V. Morozov), Nature Physics (articles by I. M. Eremin and A. N. Vasiliev), International Materials Reviews (articles by E. A. Levashov, A.S . Mukasian, A. S. Rogachev, D. V. Shtanskoy) and in other highly cited journals.

Articles of the University's scientists were published in the most prestigious academic journals

SCIENTIFIC PARTNERSHIP AND COOPERATION WITH UNIVERSITIES

There is a growing number of articles by NUST MISIS scientists published in collaboration with leading Russian and foreign research and development centre.

472 articles were published in partnership with international universities in 2016:

Texas A&M University – 27

Linköping University – 21

Ruhr-University Bochum – 13

University of Notre Dame – 13

Paris-Sud University – 13

University of the Basque Country – 13

National Academy of Sciences of Belarus – 13

Vienna University of Technology – 12

Monash University – 12

University of Southampton – 11

Ikerbasque, the Basque Foundation for Science – 11

National Institute for Materials Science, Japan – 10

Harvard University – 10

Karlsruhe Institute of Technology – 10

and others.

300 articles were published in collaboration with Russian universities in 2016:

Russian Academy of Sciences – 116

Lomonosov Moscow State University – 91

Moscow Institute of Physics and Technology – 29

National Research Nuclear University MEPhI – 18

A. M. Prokhorov General Physics Institute, Russian Academy of Sciences – 15

Bauman Moscow State Technical University – 9

National Research University of Electronic Technology – 9

and others.

NUST MISIS QUANTUM CENTRE

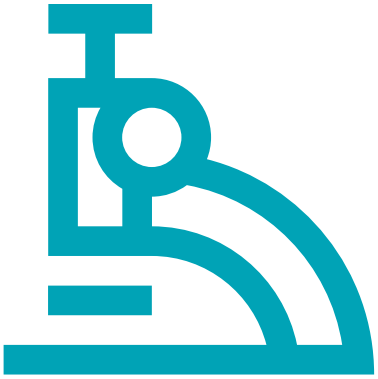
NUST MISIS Quantum Centre

In September 2016, NUST MISIS and the Russian Quantum Centre established a scientific collaboration NUST MISIS Quantum Centre which included about 10 research labs and centres. The combined potential offers NUST MISIS Quantum Centre the possibility to hold leadership positions among the best world's research centres specialising in this field.

INVENTIONS AND INNOVATIONS

Scientific developments of NUST MISIS were awarded at Russian and international exhibitions.

Archimedes 2016 (Moscow) 3 gold awards ●●●	**Inventions Geneva (Switzerland)** 2 gold awards1 ●● bronze award ●	**INST-2016 (Taiwan)** 2 gold awards ●●
iENA-2016 (Germany) 1 gold award ● 1 silver award ●	**SIIF-2016 (South Korea)** 2 gold awards ●● 2 silver awards ●● 1 bronze award ●	**China Association of Inventions** Great gold award ●



6 innovative solutions of NUST MISIS scientists are among TOP-100 Russian Inventions

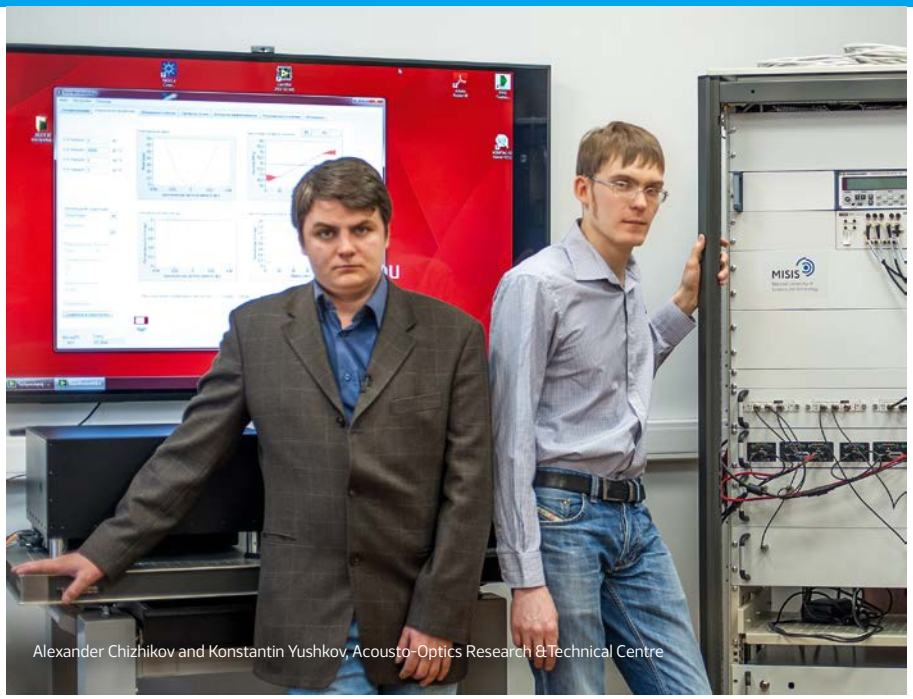
GOVERNMENT AWARDS

The Russian Federation Government Prize in Science and Technology

In November 2016, the scientists of NUST MISIS Acousto-Optics Research &Technical Centre, namely Alexander Chizhikov, Engineer, and Konstantin Yushkov, Leading Researcher, won the prizes for the creation of a unique laser station for controlled nuclear fusion to be used in the new generation inertial confinement fusion unit being built in Russia.

The Moscow Government Prize

In February 2016, Vyacheslav Bazhenov, Senior Researcher, Foundry Technologies and Material Art Processing Department of NUST MISIS, won the prize for the development of an import-substituting technology for producing molded titanium alloy components for the Russian aviation industry.



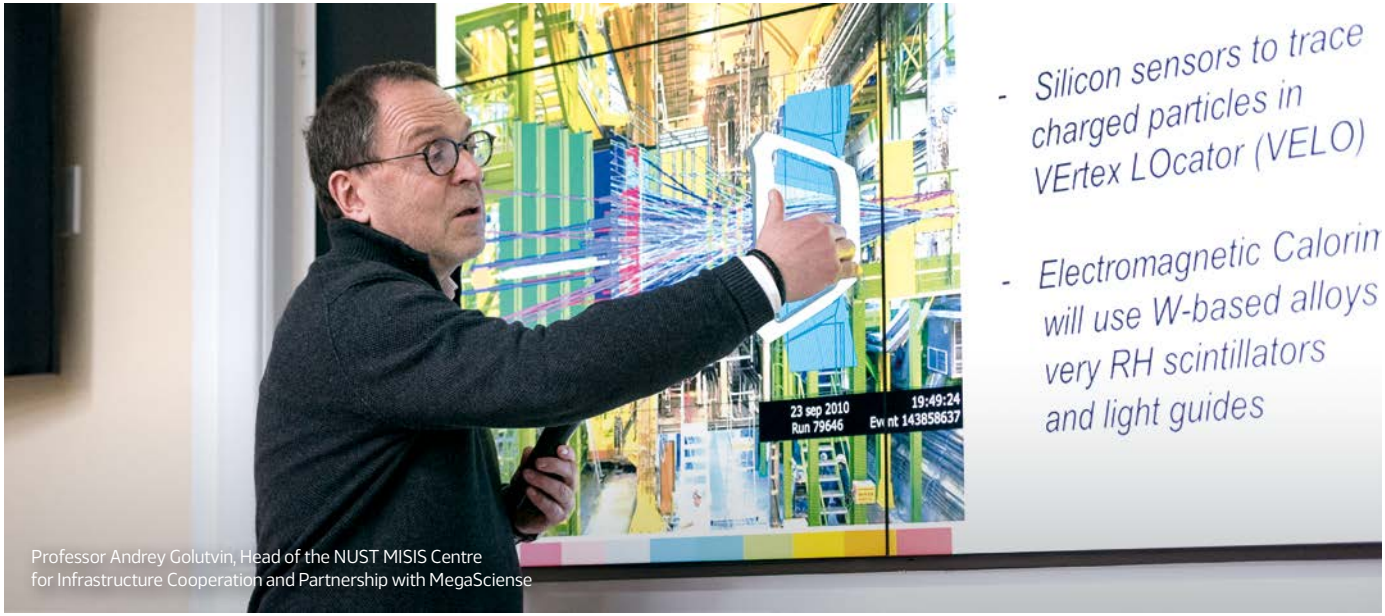
Alexander Chizhikov and Konstantin Yushkov, Acousto-Optics Research &Technical Centre

NUST MISIS post-graduate students won gold awards at the All-Russian Competition of Scientific and Technical Creativity of the Youth

COLLABORATION WITH MEGASCIENCE PROJECTS

In October 2016, NUST MISIS engineer team started designing the most massive part of the new experimental SHiP (Search for Hidden Particles) unit – decay volume chamber – at the European Organisation for Nuclear Research (CERN, Geneva).

The SHiP experiment included 41 scientific organisations from 16 countries. NUST MISIS joined the SHiP project in 2015 as an expert in superconductive magnets and various types of alloys and steels used in the construction of the SHiP system, as well as one of the main participants in designing and implementing the engineering part of the project.



Professor Andrey Golutvin, Head of the NUST MISIS Centre for Infrastructure Cooperation and Partnership with MegaSciense

LEADING SCIENTISTS

Thomson Reuters

The World's Most Influential Scientific Minds 2016 by Thomson Reuters included two NUST MISIS researchers, namely Professor S. V. Morozov, Chief of the Laboratory for Functional Low-Dimension Structures, and Professor D. V. Golberg, Chief of the Laboratory for Inorganic Nanomaterials.

S. V. Morozov
Professor, Chief of the Laboratory for Functional Low-Dimension Structures

D. V. Golberg
Professor, Chief of the Laboratory for Inorganic Nanomaterials

Associate Professor Alexey Basharin,
Researcher of the Laboratory Superconducting Metamaterials NUST MISIS

19

young academicians gained international PhD degrees

> 70

NUST MISIS researchers have h-index of more than 20


MISIS
Louis
Halamek
Harry
Bhadeshia

INTERNATIONAL ACTIVITIES

04

INTERNATIONAL ACTIVITIES

Number of International Students	3 300
Number of Countries of the International Students' Origin	69
Number of Students Sent to Foreign Educational Organisations	74
% NUST MISIS Academicians, who Participated in Academic Mobility Programmes	44%
Scientific Events Abroad, Including Speeches at Scientific Conferences and Symposia	250
NUST MISIS Employees, who Completed Advanced Training Abroad	230

Meeting of students of NUST MISIS and NUST MISIS International Scientific Advisory Council, Technology of Success Project

Lindsay Greer, Professor at the University of Cambridge, Member of the NUST MISIS International Scientific Advisory Council

BEST PRACTICES: INTERNATIONAL SCIENTIFIC ADVISORY COUNCIL

In 2016, NUST MISIS International Scientific Advisory Council (ISAC) continued its work uniting the world's leading scientists from eight countries: Great Britain, Germany, the USA, Israel, Canada, Russia, Sweden and the Netherlands.

In 2016, two meetings of the International Scientific Advisory Council were held. The main discussion items on the agenda were the prospects for the development of strategic academic units (SEU), NUST MISIS educational activity and implementation of the Competitiveness Enhancement Programme. The panel discussion NUST MISIS ISAC: Success Stories held within the Technology of Success Project was of much interest to students and post-graduates: ISAC members shared the secrets of building a successful career in science, education and management.

«Throughout the collaboration with NUST MISIS I have observed significant achievements of the Russian colleagues both in educational and research activities. The number of publications in the world's leading periodicals, such as Nature, Nature Physics, Nature Communication, has dramatically increased».

Sir* Harry Bhadeshia Professor, Member of NUST MISIS International Scientific Advisory Council (University of Cambridge)

* awarded knighthood for services to Science and Technology

INTERNATIONAL ACTIVITIES

International Youth Collaboration

In order to promote international collaboration and internationalisation of education, NUST MISIS arranged and held a number of major events in 2016.

On 12-14 April, the University hosted the International Congress of Student Unions 2016 for the first time in Russia, which was organised by NUST MISIS International Friendship Club under the sponsorship of the Ministry of Education and Science of the Russian Federation. About 1,000 delegates from across the world, from China to Finland, met at the University's site.

On 19 May, NUST MISIS hosted the first ever Russian-Latin-American Student Forum under the auspices of the Ministry of Foreign Affairs of the Russian Federation and the National Committee for Economic Cooperation with Latin American Countries.

On 20 May, the University hosted the inauguration ceremony of the African Student Union, which brought together representatives of African countries studying at Moscow universities.

Day of Nationalities at NUST MISIS

05

INFRASTRUCTURE

UNIVERSITY'S INFRASTRUCTURE

ON AN OPERATIONAL MANAGEMENT BASIS

247 FACILITIES
384 400 M²

ON A FREE-OF-CHARGE BASIS

5 FACILITIES
20 900 M²

ON A LEASEHOLD BASIS

2 FACILITIES
6 200 M²

DORMITORIES

99 800 M²

EDUCATIONAL & LABORATORY BUILDINGS

246 400 M²

EDUCATIONAL & RESEARCH PRODUCTION FACILITIES

38 200 M²

Centre for Industrial Prototyping
of High Complexity at NUST MISIS

NUST MISIS Commune House

CONSTRUCTION AND RECONSTRUCTION

The Commune House is a Monument of Architecture

A large-scale project for reconstructing the Commune House, a historical and architectural monument belonging to the Constructivism Era, and creating a modern and comfortable dormitory capable of accommodating 600 NUST MISIS students had been implemented since 2009 and was finally completed in May 2016, after the third building of the complex was put into operation. At the All-Russian Review Competition, organised by the Ministry of Education and Science of the Russian Federation and the Russian Trade Union of Public Education and Science Workers, the Commune House was recognised as the best student dormitory in Russia. In December 2016, NUST MISIS won the competition Moscow Restoration 2016 in the nomination "Best Organisation of Repair and Restoration Work".

Everything You Need for Study and Rest

The extension of the implemented research areas and the increase in the quality of educational process set ambitious targets for the University to develop the infrastructure necessary for training, research activities and creative environment. In 2016, the capital repair of the K building was completed, modern lecture halls equipped with advanced equipment were commissioned, comfortable recreation areas were created, a new dining room was opened, improvement of the dormitories in Moscow was carried out and the construction of a dormitory in Stary Oskol was launched.

Construction of New Laboratories

Following the results of NUST MISIS Open International Grant Competition a new Hybrid Additive Technology Laboratory was opened at the University, headed by I. Y. Smurov, Professor of the National Engineering School of Saint-Étienne (France). In 2016, the construction of the facility was completed, while the research laboratory complex will be fully formed in early 2017. Furthermore, in 2016, four research laboratories opened in 2015 and three labs opened in 2014 were replenished.

Completion of the Prototyping Centre Construction

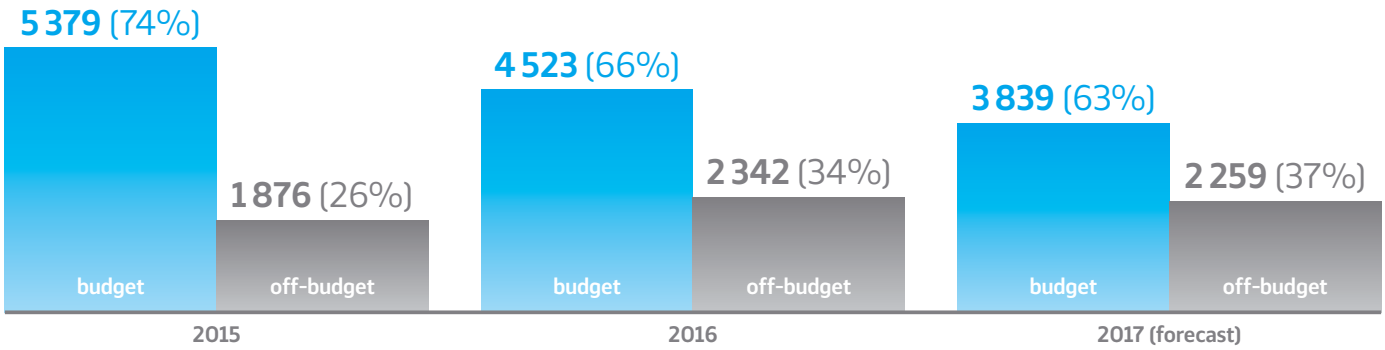
In 2016, the construction of the Centre for Industrial Prototyping of High Complexity, headed by the globally renowned designer Vladimir Pirozhkov, was completed. The fundraising for the project amounted to RUB 1.2 bln. The Centre will become a unique high-tech platform for our country, that is capable of completing a full cycle of innovation development. The functionality of the Centre allows generating, creating, calculating and building digital complex functional products in multi-industry formats. The size of the created object may vary from 1 micron to 20 m.

06

FINANCES

FUNDING OF NUST MISIS

FUNDING STRUCTURE DYNAMICS PER INCOME SOURCE, RUB million



INCOME STRUCTURE (WITH BRANCHES)

Income	2016
Education	**35%**
Science	**30%**
Federal Target Investment Project	**3%**
Development Programmes	**19%**
Others	**13%**

Quality Assessment of Financial Management

Sustainable financial and economic position makes it possible to consistently develop research and educational activities of NUST MISIS in partnership with the business community and with the support from the state.

NUST MISIS applies the best global practices, and pursues the concept of openness in all of its areas. In 2016, the IPSAS financial report for 2015 was finalised and audited according to the International Standards on Auditing by PricewaterhouseCoopers. The 2015 NUST MISIS Financial Report and audit findings were approved for publication, and submitted to the Supervisory Board. The audit findings were taken under consideration, and the report was approved by the Supervisory Board.

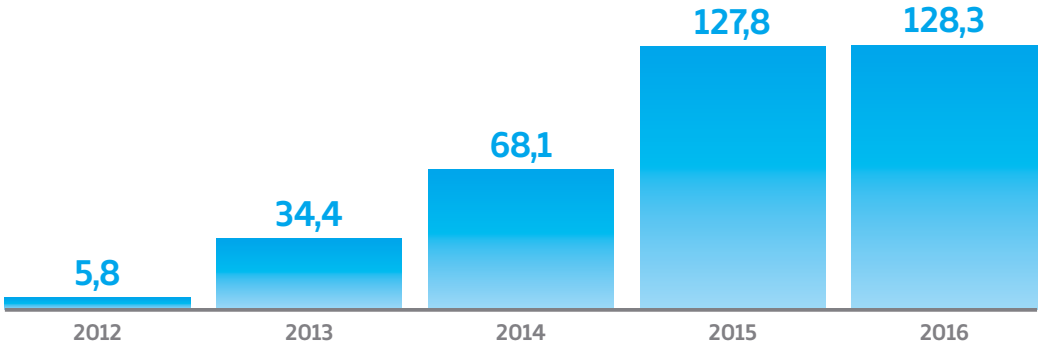
ENDOWMENT FUND

07

Russian Prime Minister Dmitry Medvedev visiting NUST MISIS

GROWTH RATES OF THE ENDOWMENT FUND

ENDOWMENT FUND GROWTH RATE, RUB million



NUST MISIS Endowment Fund is fuelled by business partners, whose owners or head officers are the University's alumni, as well as by separate individuals. In 2016, the University received the diploma "For Efficient Communication with Alumni" at the 4th International Forum of Higher Educational Establishments conducted by the Expert RA (RAEX).

NUST MISIS Endowment Fund stands for over 500 charity givers, 45 implemented projects, and a 15 000-alumni community.

SUPPORTING SCIENCE AND EDUCATION

NUST MISIS offers five scholarships and monetary rewards, funded by private charity givers and legal entities, such as Giredmet OJSC, VNIIHT JSC, TMK OJSC, and TVEL. In 2013–2016, 46 people received payments in the total amount of RUB 1.4 million.

NUST MISIS Endowment Fund carries out 45 programmes funded by charity givers. Target contributions from State Corporation Rosatom, TMK OJSC, Severstal PJSC and OMK help to fund educational and research projects, and develop the University's infrastructure.

A special debit card for NUST MISIS alumni and students was issued with the support of Alfa-Bank, under which 1% of every transaction is transferred to the University's Endowment Fund. The card also serves as a pass to the NUST MISIS and provides the owners with a number of discounts and privileges.

EDCRUNCH CONFERENCE

The annual conference EdCrunch which has been carried out under the auspices of the Russian Ministry of Education and Science since 2014 is one of the Fund's major projects. EdCrunch is the largest international conference in Europe on innovative educational technologies.

The conference was attended by over 4 000 physical participants, and 15 000 of online viewers.

250 **expert presenters from 30 countries and 70 Russian regions**

PROJECTS OF THE ENDOWMENT FUND

Competitions

NUST MISIS Endowment Fund conducts an annual contest Student of the Year for supporting the most talented and active students. The best student of the year receives a monetary award of RUB 150 000, and winners in the nominations Culture, Sport, Public Work, and Science each get RUB 50 000. The winner in the nomination Tutor of the Year gets a monetary payment of RUB 150,000, and winners in the nominations The Best Young Tutor, Honor and Dignity, Research Instructor each get RUB 50 000.

RUB 100 000 is granted to the winner in the nomination Employee of the Year.

The winner in the nomination Tutor of the Year gets RUB 150 000.

Endowment Breakfast

Endowment Breakfast stands for free breakfasts to NUST MISIS students and employees, who can get a free meal every morning from 8.30 a.m. to 10 a.m. Monday to Friday in any of the University's canteens. The project does not only aim at raising the awareness of the Fund but also to promote the healthy lifestyle and more active attendance.

Granting of the Student of the Year award

Technology of Success Project, meeting with an Olympic box champion Evgeny Tishchenko

PROJECTS OF THE ENDOWMENT FUND

Cultural MISIS

The Endowment Fund helps to establish a creative environment at the University, and build strong and creative personalities. To this end, the project called Cultural MISIS was launched which provides students with tickets to the best theatres of the capital on a discounted or free basis, and organises free tours and visits to exhibitions.

Creating Room for Work and Rest

With the target contribution from OMK JSC, the Fund created a recreational room on the 11th floor, Building B, where students and tutors can wind down or work in a comfortable environment. In total, the Fund invested RUB 4.6 million into the project.

Technology of Success Project, Ruben Vardanyan

Technology of Success

As part of the Technology of Success Project, NUST MISIS students met in 2016 with Ruben Vardanyan and Maria Kozhevnikova, and participants of 2016 Summer Olympic Games in Rio de Janeiro who are the University's alumni. The NUST MISIS Fund granted money prizes to Evgeny Tishchenko, an Olympic box champion (graduated from the Underground Development of Ore Deposits Department), and Adlan Abdurashidov, a Russian boxer, winner of the 2013 Summer Universiade in Kazan, Russia (graduated from the Underground Development of Ore Deposits Department).

CAREER CENTRE

08

CAREER CENTRE

NUST MISIS attaches special significance to the graduates' employment. To this end, the Career Centre was established which cooperates with 1,500 Russian and foreign companies. In 2016, the Centre helped to employ around 4,500 students, organised over 100 career events: the all-Russia forum for students and alumni of technical departments Breakpoint, the forum for preparing for employment Professional Navigation, the championship on solving metallurgical business cases CUP MISIS CASE. The last championship was carried out in 2016 at the federal level, and hosted over 1,000 students and graduate students from 56 Russian universities. Moreover, the Centre organises Career Days with potential employers and business partners, internships, and on-site tours.

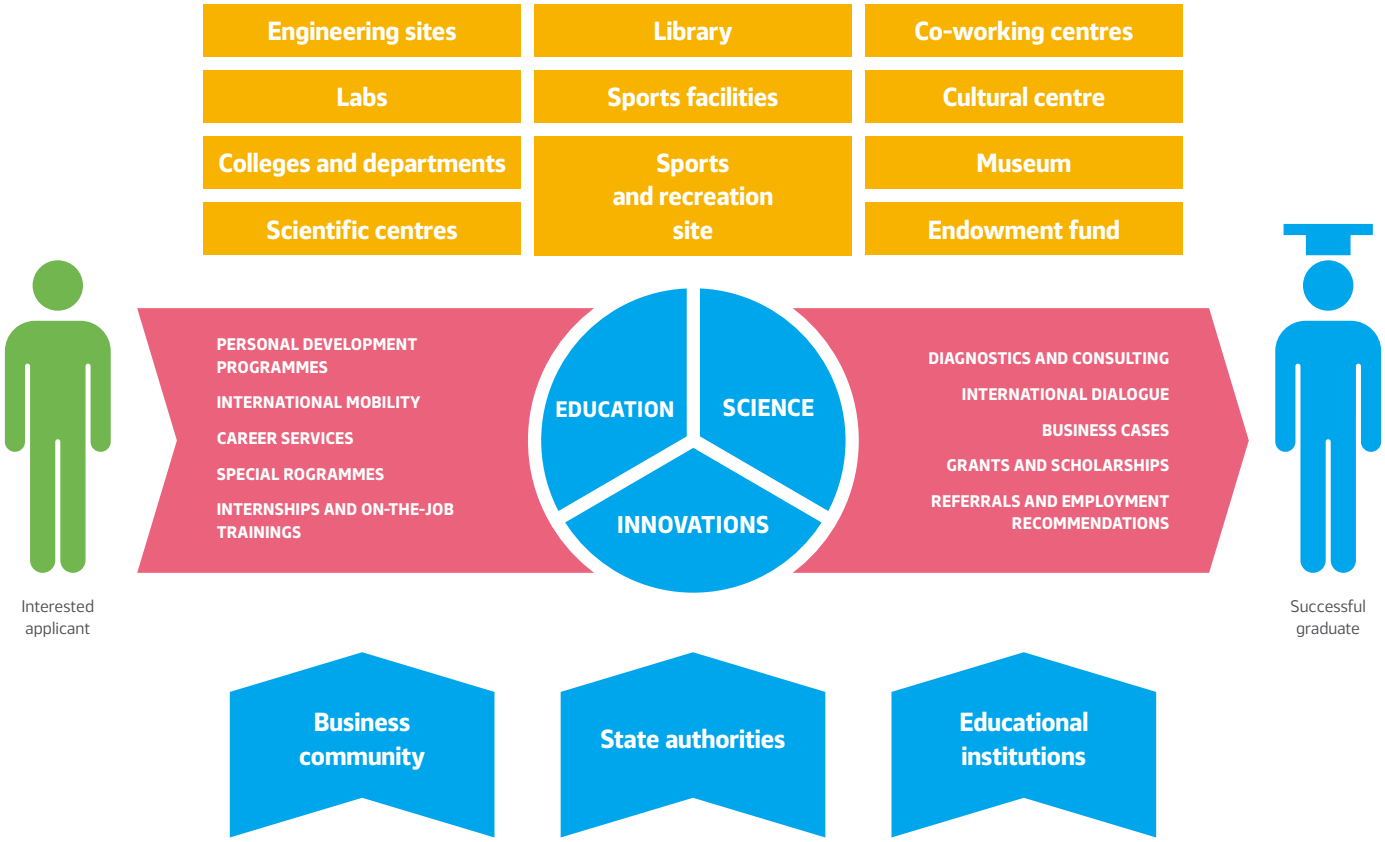
The Centre's efficient cooperation with the business community helped NUST MISIS to rank high in the QS Graduate Employability Rankings against the criterion "Organisation of Interaction Between Employers and Students". The University topped the list of all Russian universities, having scored 100 out of 100. Only seven other universities around the world have scored similarly high.

Business Case Cracking Championship CUP MISIS CASE

1 position

amongst Russian universities in the QS Graduate Employability Rankings: 100 out of 100

CAREER ECO-SPHERE FOR STUDENTS



DEVELOPMENT DYNAMICS OF CAREER SERVICES

	2015	2016
Number of Students Supported	1 500	4 463
Number of Partner Companies in the Database	1 267	1 487
Number of Conducted Events	180	435
Number of Participants of the Business Case Championship	450	1 100

NUST MISIS students visiting Severstal, My Dream Company Project

KEY PROJECTS WITH PARTNERS

	Number of participants
All-Russia Student Forums Breakpoint, YouLead	2 700
Mass Career Events Career Days, Job Fairs, Excursions, etc.	1 500
Business Case Cracking Championship CUP MISIS CASE	1 100
Professional Navigation Programme New Level 2.0	420
Graduate Photo Album Project since 2014	5 210
Career: Successful Start Programme	30
Theme Lectures CultLAB, Professions of the Future (with A. Vladimirskaya), Technical Entrepreneurship Day	720
Professional Diagnostics and Consulting	389

INTERNSHIPS AND ON-THE-JOB TRAININGS

1500 around 1 500 partner companies

1200 internships and on-the-job trainings with over 1 200 companies

9 000 over 9 000 unique internships and on-the-job trainings

SCHOLARSHIPS AND GRANTS FROM BUSINESS PARTNERS

Over 50 scholarships and grant programmes

Our key business partners carry out the largest scholarship programmes. The major areas of the programmes: support to young scientists and successful students, study abroad, and extra-curricular achievements.


МИСИС
Национальный исследовательский
технологический университет

STUDENT LIFE

09

UNIVERSITY 4.0

University 4.0

NUST MISIS applies the model of University 4.0, according to which traditional education, science and innovations are complemented with a creative environment spanning across all fields of activities. The prime goal is not only to equip students with professional knowledge and skills to be competitive in the labour market but also provide opportunities for personal growth, filling their student years with bright and memorable events.

Personal Development

In 2016, workshops for students were carried out under the Professional Efficiency Project, engaging the most prominent personalities from business, academic environment and artistic elite who shared their experience, knowledge and skills related to self-presentation, goal-setting and time management.

The Public Speaking School trains the students in public presentations, simultaneously enabling them to brush up the newly-developed skills in a number of prominent events organised by the University.

Leadership

New Level 2.0 prepares the leaders of student self-governing, as well as curators and professional navigators. Within this framework, multiple workshops are carried out on the basics of modern communications and public speaking, as well as on teamwork skills. The Student Leader Contest is conducted annually for identifying the strongest leaders from the student pool.

Those students who have been successfully shortlisted by the Student Self-Governance School Horizon attend practical courses and workshops on team building, leadership, motivation, conflict management, and legislative basis for student self-governance.

STUDENT SELF-GOVERNANCE

Student Self-Governance

NUST MISIS was enlisted as one of 15 Russian universities having successfully implemented the Programme for Developing Student Unions in 2016 for the following areas:

- Science and innovations,
- Professional competences,
- Student sport and healthy lifestyle,
- Intercultural dialogue,
- Student informational resources,
- International cooperation,
- Social standards and students' rights.

Students actively participate in the development and upgrading of the University. This has been confirmed by the leading positions in the student councils ranking of the Russian universities.
In December 2016, the NUST MISIS Student Council topped the nomination Student Confidence, and was included into the TOP-5 best councils of the Russian universities in the nomination Material Support of Activities and TOP-10 in the nomination Promotion of Student Self-Governance, and Openness and Transparency of Activities.

Open Administration

Twice per academic year the University's management conducts open meetings with the students of all levels of training at which students can voice their ideas and suggestions for development of the University, discuss most pressing issues and ask questions. Due to the well-settled feedback system, positive changes can be introduced extremely smoothly and efficiently. In 2016, the University's website saw a new section added which enables students to get a prompt response from the administration.

Student Media

In 2016, NUST MISIS student media received the award of the all-Russia contest Cut-Glass Arrow 2016 in the nominations The Best TV Program, and The Best Publication Editor.


Open Administration Project

LEARN TO DO GOOD

Volunteer Movement

Hundreds of NUST MISIS students act as volunteers and participate in large-scale all-Russia events, as well as in the University's projects carried out jointly with the major business partners. The students visit orphanages and special boarding schools, children's hospitals and hospices.

As an example, in 2016, the volunteer students participated in events organised by OMK JSC, such as Red Fair, Christmas Garland, and others. Jointly with Evraz Holding, the University's students acted as patrons over the children's rehabilitation centre in Kolomna, Moscow Region.

Patriotic Upbringing

Patriotism is one of the basic elements of educating the youth at NUST MISIS. The students participate actively in scouting forces, the Memory Watch, patriotic military festivals and concerts, meetings with war and labour veterans, trips to prominent war places, as well as federal-scale social projects, such as the Memorial March, St. George Ribbon, etc.

A large-scale project was implemented to commemorate the 75th anniversary of the counter-attack of the Soviet troops in the Moscow battle, which comprised an all-Russia scientific conference with international participation Patriotic Upbringing in Higher Education, a round table and a photo exhibition commemorating the 75th anniversary of the Moscow militia battles, a concert by the Central Military Band of the Russian Ministry of Defence, and a singing competition amongst students.

The Victory day celebration

SPORTS AND ARTS

Sports achievements

Two students and two alumni of NUST MISIS joined the Russian team at the 2016 Summer Olympics in Brazil. One of them – Evgeny Tishchenko – won the first for the Russian team in Rio de Janeiro Olympic gold medal in boxing.

In December 2016, Rozaliya Nasretdinova, a third-year student of NUST MISIS College of Mining, became the world aquatics champion in the Canadian Windsor. She won a gold medal in 4×50m mixed freestyle.

Nine boxers from NUST MISIS participated in the final round of the 5th All-Russia Summer Universiade in July 2016, and won 8 medals, which was half of all the event's gold medals.

Club of the Funny and Inventive People (KVN) Movement

According to the results of the 27th International Festival of KVN teams KiViN 2016 in Sochi, Russia, the Combined Team of the State University of Management and NUST MISIS became one of the 20 best teams of the International KVN Union. In 2016, the team played in the Major TV KBN League on the First Chanel, getting through to the quarterfinals.

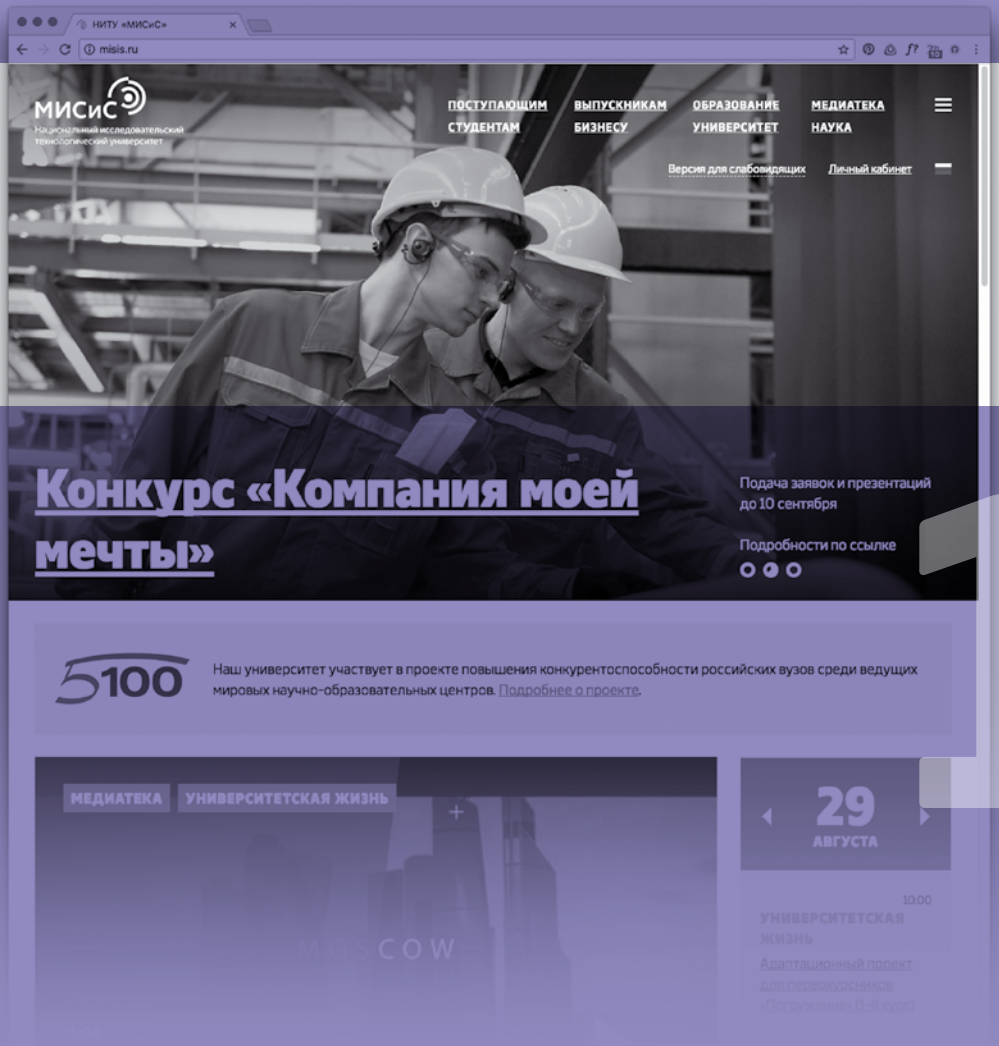
Artistic Groups

The pop vocal and dance group Andeor is the laureate and winner of many Moscow and all-Russian festivals and contests.

Student Leisure Time

NUST MISIS provides students with all the possibilities for proper balancing of intensive studies and proper rest. During the summer holidays, the University organised recreational trips for over 500 students, who went to the resorts and recreational sport camps in Crimea and Krasnodar Territory, Altai and the Lake of Baikal, as well as Pitsunda (the Republic of Abkhazia).

Khasan Temirov, team GOSTi,
the winner of NUST MISIS KVN Cup


НИТУ «МИСиС»
misis.ru
МИСиС
Национальный исследовательский технологический университет
ПОСТУПАЮЩИМ
СТУДЕНТАМ
ВЫПУСКНИКАМ
БИЗНЕСУ
ОБРАЗОВАНИЕ
УНИВЕРСИТЕТ
МЕДИАТЕКА
НАУКА
Версия для слабовидящих
Личный кабинет
Конкурс «Компания моей мечты»
Подача заявок и презентаций до 10 сентября
Подробности по ссылке
5100
Наш университет участвует в проекте повышения конкурентоспособности российских вузов среди ведущих мировых научно-образовательных центров. Подробнее о проекте.
МЕДИАТЕКА
УНИВЕРСИТЕТСКАЯ ЖИЗНЬ
MOSCOW
29
АВГУСТА
10:00
УНИВЕРСИТЕТСКАЯ ЖИЗНЬ
Адаптационный проект для первокурсников «Погружение» (1-й курс)

10

UNIVERSITY PROMOTION

UNIVERSITY PROMOTION

New Website

In 2016, NUST MISIS launched a new state-of-the-art adaptive-design website, which positions the University as the country's leading scientific and education centre for preparing leaders in the strategic areas of business, such as materials sciences, metallurgy, mining, as well as nano- and IT technologies.

The website traffic increased by 50%. In 2016, NUST MISIS experienced the fastest gain in Webometrics ranking, climbing 695 notches up to the 1,398th spot amongst 25,000 universities..

Increased Media Presence

Starting from 2014, the University has been actively promoted across all leading Russian media. In 2016, the average monthly number of publications was 1,106, which was 60% higher YoY. Over the third of publications were presenting scientific achievements of the University and new developments of NUST MISIS scientists.

In 2016, systematic efforts were undertaken for promoting the University across foreign media – over 1,000 publications were initiated, including the renowned editions like The Guardian, Guangming Daily, The Times of India, and others.

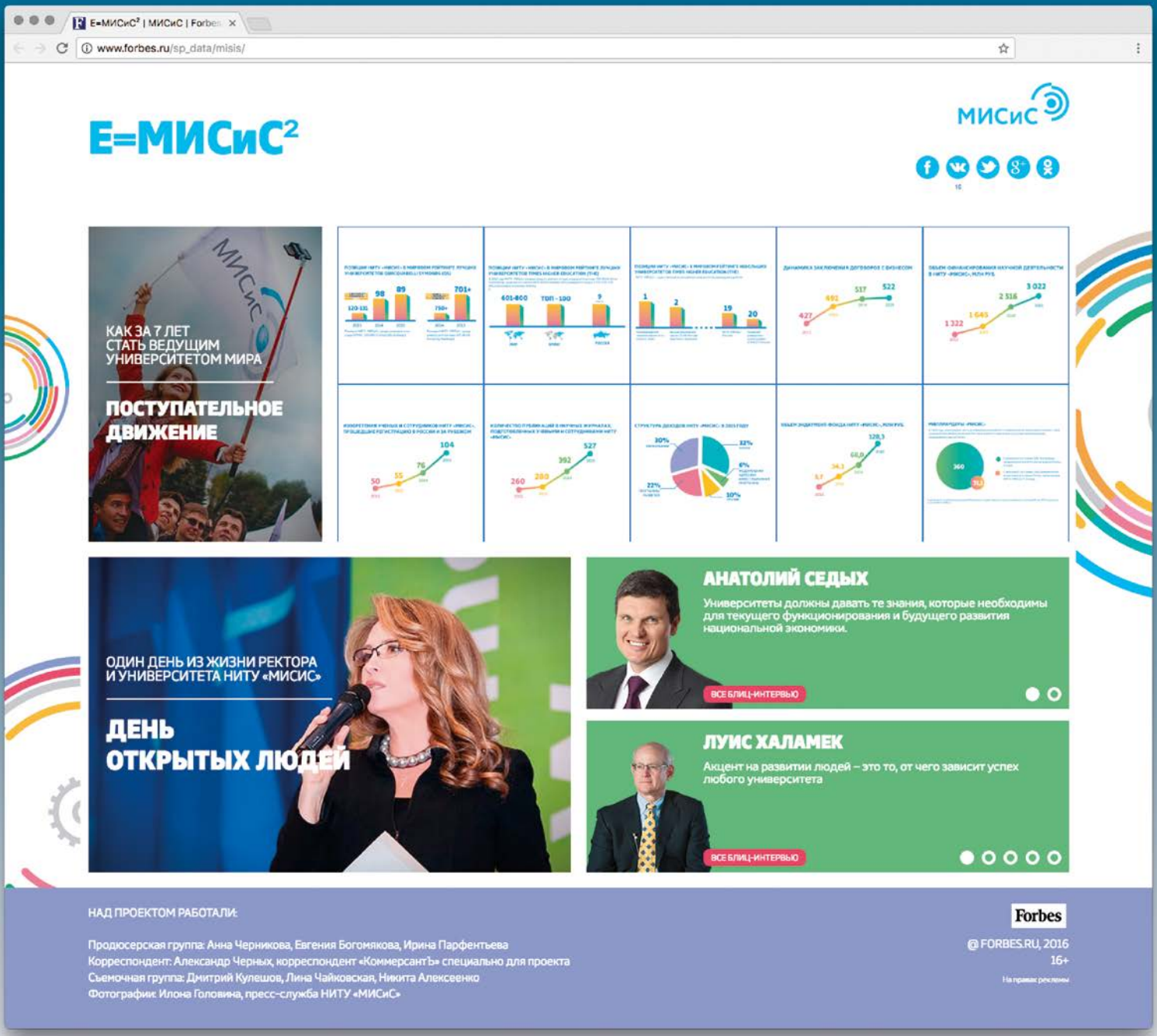
Special Projects with Media Anchors

To improve brand awareness across the academic and business circles, NUST MISIS carried out special projects with the anchors of scientific and business media: Postnauka website, N+1 website, and jointly with Forbes. All the materials on N+1 website got into the TOP-10 best read publications. The joint project with N+1 called Five Elements for promoting the developments of NUST MISIS scientists got to the final stage of the all-Russia contest Tech in Media, established by the RVC.

EdCrunch

The largest in Europe conference EdCrunch for innovative education technologies was the brightest and most mass-scale newsworthy event of 2016. It was the third conference conducted by NUST MISIS under the auspices of the Russian Ministry of Education and Science. The event was titled Mixed Education: Traditions and the Future, with the number of appearances in media exceeding 600, which was 50% YoY.

Special project on the activities of NUST MISIS on the Forbes website



11

EVENTS CALENDAR

JANUARY

18 January

Jointly with Severstal PJSC, NUST MISIS won the contest conducted by the Russian Ministry of Education and Science for innovative development and production of longitudinally welded oil&gas pipes.

21 January

The University's project System for Developing Scientific and Technical Creativity in Children and Young People through Converging Best Pedagogical Technologies and Infrastructural Resources of the Higher School was awarded the Russian Government Prize in education for 2015.

23 January

The Combined Team of the State University of Management and NUST MISIS became a member of the Major KVN League upon the results of the gala concert of the 27th International KVN team festival KiViN-2016 in Sochi.

26 January

NUST MISIS became the only Russian university included into the international specialised rating THE: World's Best Small Universities Ranking, comprising just 20 best small universities of the world. NUST MISIS ranked 19th.

The KVN Combined Team of the State University of Management and NUST MISIS on the First Channel

FEBRUARY

3 February

NUST MISIS got up to the 1,962th ranking of Webometrics Ranking of World Universities, having climbed 131 notches up. Overall, the ranking has around 25,000 universities from all over the world.

10 February

The young scientist from NUST MISIS Vyacheslav Bazhenov received the Russian Government Prize for developing a unique model-free technology for producing large aircraft parts from titanium alloys.

15 February

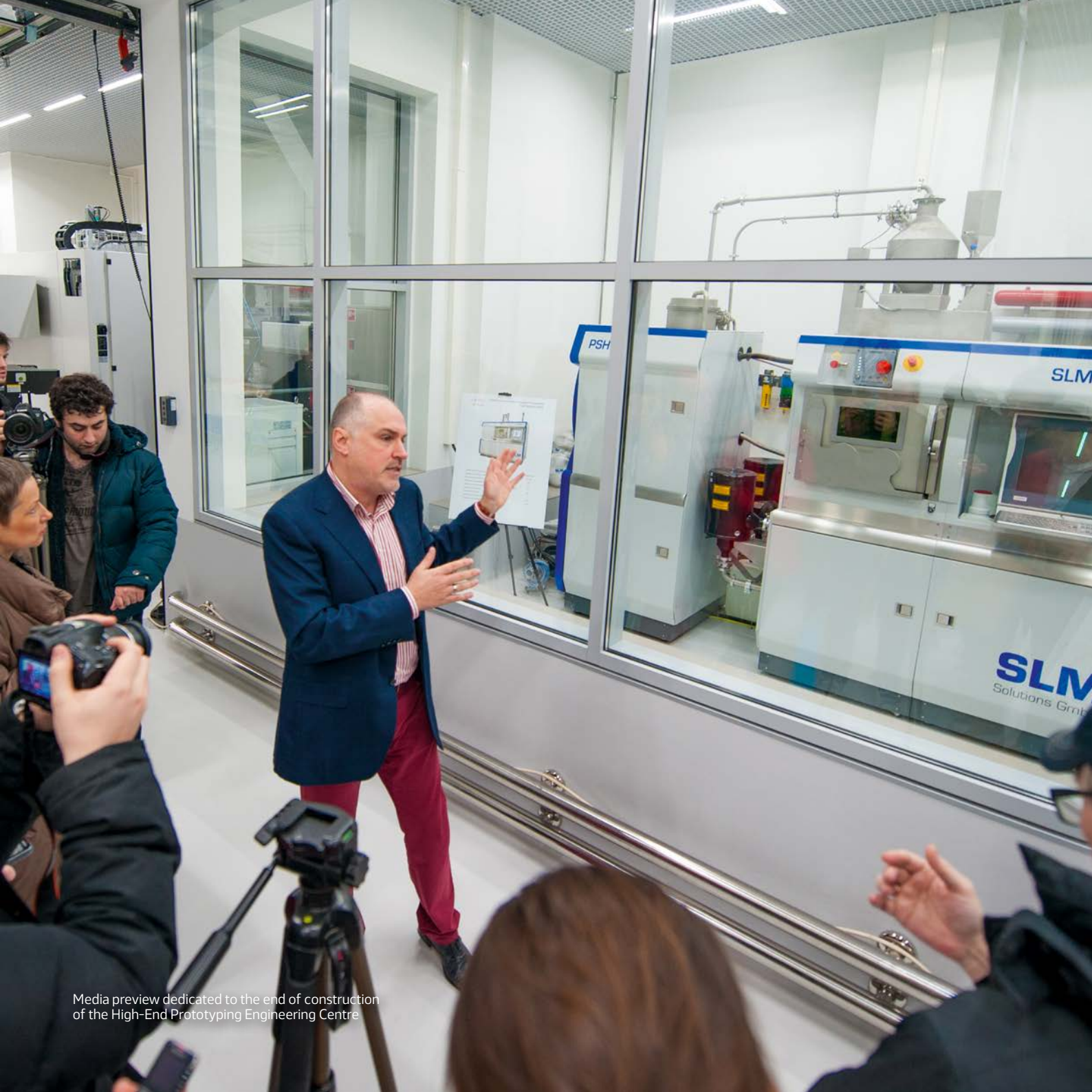
The Welcome Day of NUST MISIS was attended by the record high number of visitors – over 1,500 prospective students and their parents familiarised themselves with the University and its admission rules in 2016.

25 February

NUST MISIS conducted a media preview dedicated to the end of construction of the High-End Prototyping Engineering Centre, which is to become Russia's leading high-tech digital lab for industrial design and high-end prototyping for local manufacturers.

27 February

The educational and exhibition centre Zhelezno! celebrated its first anniversary. It was established under the joint programme of NUST MISIS, Metalloinvest Holding and Moscow Polytechnic Museum whose scientific and technical exhibits formed the basis for the exhibition.



Media preview dedicated to the end of construction
of the High-End Prototyping Engineering Centre

MARCH

2 March

The 5th meeting of NUST MISIS International Scientific Advisory Council hosting prominent scientists from Russia, Great Britain, the USA, Israel, Sweden, the Netherlands, Canada and Germany, gave fresh impetus to further incremental development.

9 March

Preliminary round of the 4th International Engineering Championship Case-In at NUST MISIS had 43 student and graduate student teams who competed in cracking engineering cases developed based on the materials from the leading industry companies in five areas.

16 March

Ruben Vardanyan, a prominent entrepreneur and philanthropist, Vice-Chairman of the International Advisory Board of Moscow School of Management SKOLKOVO, conducted a workshop for NUST MISIS students and employees as part of the Technology of Success Project.

17 March

During the visit to NUST MISIS of Alex Diaz Mamani, Bolivian Ambassador Extraordinary and Plenipotentiary, agreements were signed on developing by the University of educational programmes for students from Bolivia, as well as on conducting joint research projects in geology, mining and metallurgy.

19 March

The 4th All-Russia Forum of Technical Students and Graduates Breakpoint conducted by NUST MISIS and the international organisation AIESEC hosted over 1,200 participants from 60 regions of Russia.


BREAKFAST

APRIL

6 April

Three innovative developments presented by NUST MISIS at the 19th Moscow International Salon of Inventions and Innovative Technologies Archimedes – 2016 received gold medals, with the University's high level of innovative developments being recognised with a special award of Taipei International Association of Inventions and Innovations..

11 April

The Day of Technological Entrepreneurship at NUST MISIS was opened by Anatoly Chubais, Chairman of the Management Board of Rusnano Management Company, who gave a speech on global international trends and developmental paths towards innovative economy.

12 April

The University solemnly celebrated the 115th anniversary since the birth of Avraami Zavenyagin, first Director of NUST MISIS, an outstanding politician.

13 April

NUST MISIS presented the project Virtual Testing Ground for testing self-driving cars. It will be based at the NUST MISIS Robotics Centre under the auspices of the Russian Ministry of Education and Science.

16 April

NUST MISIS became a group for the annual international educational event Total Quiz, with 150,000 people participating from 732 cities of 68 countries on 6 continents.

23 April

NUST MISIS conducted an open applied research conference Engineers of the Future, which was attended by around 2,000 schoolchildren, their parents, educators and business representatives

29 April

Six innovative developments by NUST MISIS scientists were enlisted as Russia's Top 100 Best Developments upon the results of the annual shortlisting conducted by the Russian Federal Service for Intellectual Property. This is the best-ever result for the University..

Total Quiz at NUST MISIS

MAY

11 May

Having conducted unique by their complexity calculations on NUST MISIS supercomputer, a group of scientists headed by Prof. I. A. Abrikosov disproved the classical theory of the Earth's magnetic field.

19 May

NUST MISIS conducted the first Russia-Latin American Student Forum, which was attended by the representatives of the Russian Ministry of Foreign Affairs and heads of diplomatic missions of Latin American countries, as well as Latin American students from the leading Russian universities..

20 May

NUST MISiS undergrad team became prizewinners in 9 out of 10 nominations at the All-Russia Scientific Conference and Competition. The event was of the international scale – it was attended by the representatives of 43 countries.

27 May

Prof. G. L. Krasnianskiy, Academic Adviser of the Centre for Strategic Management and Commodity Market Opportunities at KARAKAN INVEST LLC, presented the Centre's master programme aimed at preparing professional managers for the leading mining companies.

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31 May

NUST MISIS conducted the traditional Spring of Metallurgists event, which celebrated sports, healthy lifestyle and arts. It was the 13th festival in a row conducted by the University.

Prof. G. L. Krasnianskiy, Chairman of the Board of Directors at KARAKAN INVEST LLC, member of the Expert Mining Counsel of NUST MISIS

JUNE

1 June

NUST MISIS conducted the final stage of the 4th International Engineering Championship Case-In. More than 300 finalists from 39 universities of Russia, Kazakhstan and Mongolia competed for the title of the best engineering student team in five leagues, including Metallurgy, Electric Power Sector, Mining, Exploration, and Oil and Gas Engineering.

7 June

NUST MISIS conducted the first meeting of the special committee of the Russian Ministry of Energy on the safety of coal production under extra-hazardous mining and geological conditions, which had been established by the order of the Russian Prime Ministry Dmitry Medvedev. The University's scientists joined the working group as industry experts alongside the employees of the relevant ministries and business structures.

15 June

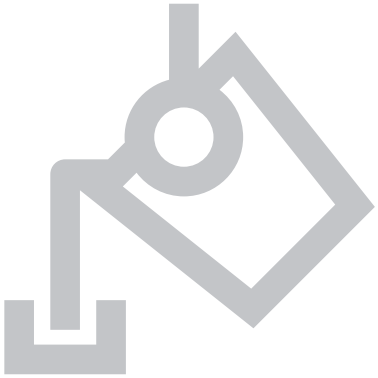
NUST MISIS moved 12 notches up in the dedicated ranking of the top universities in the developing countries of Europe and Central Asia (QS University Rankings: EECA 2016), having made the largest gain across Russian universities.].

28 June

NUST MISIS became a laureate in three nominations at the 10th All-Russia Competition for Developing Student Self-Governance Student Assets: Best Educational System of an Educational Institution; Best Student Scientific Society, and Best Rector.

29 June

All-Russia Quality Organisation awarded NUST MISIS with the diploma of EFQM Recognised Excellence. The University received the highest grade – 5 stars, having received 600 points out of 700.



NUST MISIS Team, the winner of the 10th All-Russia Competition Student Assets

JULY

10 July

For the first time in Russia, NUST MISIS conducted the world-renowned festival of inventors Mini Maker Faire, whose main concept is that a creative idea of any person can turn into a real invention. The event was attended by the representatives of almost 100 companies from Russia, America, the Netherlands and Japan.

14 July

NUST MISIS was selected as the first point in the ambitious programme of visit by Vietnam Steel Association in Russia. The top managers of the largest metallurgical manufacturing and trade companies of Vietnam part of the Association highly praised the competences of the University's dedicated experts.

21 July

For the second year in a row, NUST MISIS demonstrated positive dynamics in the TOP-100 educational ranking of the leading universities of the BRICS countries. In 2016, the University continued the positive trend, having moved up to the 87th position. In total, the experts analysed achievements of 250 best universities of the BRICS countries.

28 July

Prof. S. D. Kaloshkin, Director of NUST MISIS College of New Materials and Nanotechnology, was elected as a member of the international committee ISMANAM, which brings together the international scientific community for researching matters related to the forming of non-equilibrium and nanostructural states in materials.

29 July

The University acted as a partner to the traditional summer festival Afisha Picnic, having organised a specific scientific stand within its site, scientific battles Science Slam and a NUST MISIS 3D FabLab.

NUST MISIS students at Mini Maker Faire-2016

AUGUST

2 August

Under the management of A. A. Basharin, Research Assistant of Superconductive Metamaterials Lab, NUST MISIS students designed and built an echo-free mini-chamber, which outperforms the current analogues by accuracy of measurements, miniature dimensions and low production costs.

16 August

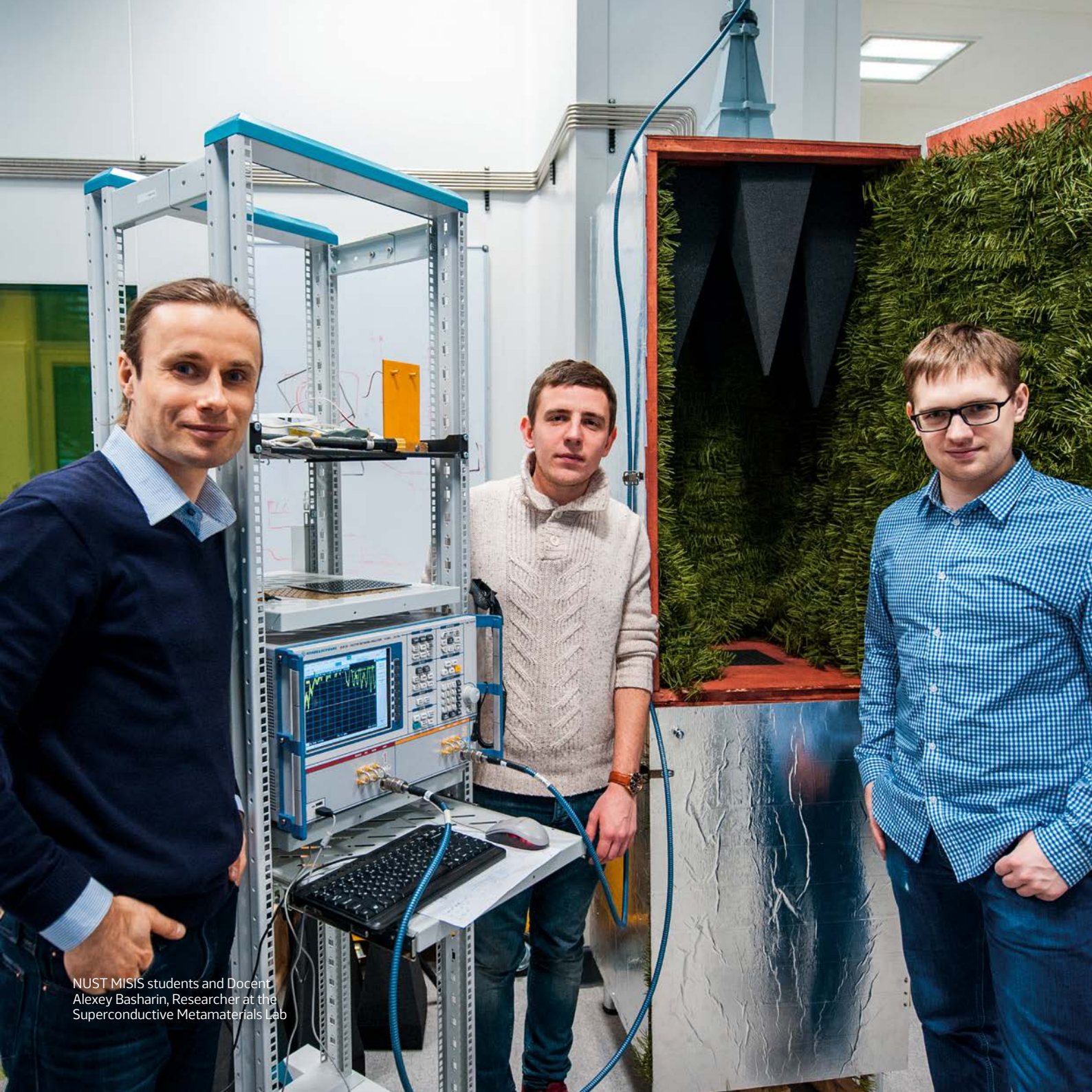
Evgeny Tishchenko, NUST MISIS graduate and successful representative of the University's boxing school, won the Olympic gold medal in boxing in Rio de Janeiro. The Russian Olympic team had other NUST MISIS students and graduates on-board, including Rozaliya Nasretdinova (swimming), Adlan Abdurashidov and Andrey Zamkovoy (boxing).

18 August

NUST MISIS designed a new type of unique magnets, which can be efficiently used in the engines of civil and military vehicles in the temperatures ranging from -180°C up to +150°C. The magnets are made of local raw materials, which makes it possible to launch independent manufacturing.

23 August

NUST MISIS and the Russian Quantum Centre launched an international summer school with the world's most prominent scientists as instructors. The audience comprised starting researchers specialising on quantum technologies and quantum optics.



NUST MISIS students and Docent Alexey Basharin, Researcher at the Superconductive Metamaterials Lab

SEPTEMBER

6 September

NUST MISIS surged in the annual Quacquarelli Symonds World University Rankings 2016 having climbed 100 notches up and made the largest gain amongst Russian participants of the ranking.

9 September

At the Military Technical Forum Army 2016, NUST MISIS presented at its stand innovative developments of the University's most prominent scientists for producing military and dual-purpose products, and conducted the applied research conference Magnets and Magnetic Systems.

12 September

The annual monitoring of the admission quality across Russian universities in 2016 demonstrated a sustainable improvement of the awareness and image of NUST MISIS, which became a TOP-5 leading technical university of the country, and ranked 21st in the all-Russia ranking of universities.

13 September

NUST MISIS hosted the third international conference on new educational technologies EdCrunch. Europe's largest educational forum on mixed educational issues was attended by the representatives of educational establishments and business communities from all Russian regions and 30 countries of the world.

21 September

NUST MISIS launched the International School of Business and Technologies that focuses on advanced training and occupational retraining of the representatives of small, medium and large businesses from Russia and near-abroad.

27 September

NUST MISIS launched the project Smart Mondays, which is a round of popular science lectures on the Russian language by the most prominent Russian linguists, organised jointly with Gramota.Ru, Total Quiz, and the Russian Language Institute of the Russian Academy of Sciences.

NUST MISIS stand at Army 2016

OCTOBER

4 October

A science team from NUST MISIS Centre of Composite Materials, led by F. S. Senatov, PhD in Physics and Mathematics, developed a new type of shape-memory polymeric bone implants which stands out with a better survival ability, and may turn out being most promising in oral and maxillofacial surgery.

10 October

NUST MISIS participated in the All-Russia Science Festival. The University's scientists gave speeches on the most recent sci-tech developments and demonstrated some samples. The event primarily aims at promoting scientific knowledge, and generating schoolchildren's interest in technical universities.

18 October

NUST MISIS conducted the 6th meeting of the International Scientific Council with the participation of the leading scientists from global scientific centres. The meeting focused on a number of matters, such as strategic promotion of the University, cooperation with the business community, improved efficiency of the master and postgraduate programьys, and the establishment of Strategic Academic Units.

19 October

The team NUST MISIS: NEVERMIND got through to the semifinal of the world championship ACM International Collegiate Programming Contest, having made the largest gain in the entire history of NUST MISIS participation in the contest – it scored 9th out of 240 teams.

24 October

NUST MISIS designed a new post-graduate program, the MBA course Industrial Enterprise Management, tailored to the needs of the line managers of United Metallurgical Company (OMK JSC), which is part of the partnership building programme. The modular programme successfully combines theory with practice.

The team of young scientists of NUST MISIS Centre of Composite Materials led by F. S. Senatov, PhD in Physics and Mathematics

NOVEMBER

1 November

Under the auspices of the Russian Ministry of Education and Science, NUST MISIS conducted the All-Russian Engineering Festival, which included live broadcasting from the International Space Station, a popular scientific show Science Slam, and on-site visits to the University's scientific labs.

2 November

NUST MISIS signed a cooperation agreement with the Beijing University, which is a TOP-50 university in the global ranking The Times Higher Education. The universities have agreed to foster scientific and educational cooperation.

16 November

NUST MISIS young scientists won 14 grants in the final stage of the scientific and innovation contest for carrying out scientific research in the following areas: Advanced Materials and Generation Technologies, The Medicine of the Future, Novelty Devices and Hardware Systems.

17 November

NUST MISIS conducted the 7th All-Russia Forum YouLead, which brought together over 1,000 students, fresh graduates, representatives of business community and public organisations.

Daria Daubaraite won in the nomination Young Scientist of the Russian National Award Student of the Year 2016..

21 November

With his lecture on the transformation of materials in extreme conditions, Prof.I. A. Abrikosov opened the fifth anniversary round of the Christmas Lectures, a project aimed at promoting science.

22 November

The Cup MISIS Case got to the federal level, having become a cooperation platform for talented students and best employers. The event was attended by over 1,000 participants from 66 universities of Russia.

23 November

NUST MISIS reiterated its leadership position in promoting cooperation between universities and employers, having entered the TOP-5 List of Russian universities in the world QS Graduate Employability Rankings.

28 November

NUST MISIS signed an agreement on developing academic mobility and cooperation in the scientific and educational sphere with Arizona State University, which is the largest educational and research university in the United States.

Popular science show Science Slam
at NUST MISIS

DECEMBER

1 December

Thomson Reuters named NUST MISIS Scientists Prof. D. V. Golberg and S. V. Morozov, Doctor of Physical and Mathematical Sciences, amongst the World's Most Influential Scientific Minds 2016.

8 December

NUST MISIS won the contest 2016 Moscow Renovation for the reconstruction of the constructivist memorial Commune House dormitory. Earlier, the campus won the all-Russia review competition for the best student dormitory.

12 December

NUST MISIS Student Counsel joined the group of leaders in the Ranking of Student Councils of Higher Educational Establishments in several nominations, the main of which was Student Trust.

20 December

NUST MISIS and United Company RUSAL concluded an agreement on joint scientific, technical and innovation initiatives related to superhard lightweight materials, advanced alloys and composite materials based on aluminium, additive manufacturing technologies.

Prof. D. V. Golberg, Head of the Nonorganic Nanomaterials Lab, Christmas Lectures Project at NUST MISIS

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