





## **INFO EDITION NO. 2, 2016**

National Contact Point for Research Infrastructures (RIs) in Russia The National University of S&T MISIS

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RUSSIAN FOUNDATION FOR BASIC RESEARCH

#### I. Russian Foundation for Basic Research (RFBR). General information

Russian Foundation for Basic Research (RFBR) is a self-governed state nonprofit organization. It was established in 1992. The main task of the Foundation is to select on the basis of competitions the best scientific projects among those that were submitted to the Foundation by scientists in an initiative order and subsequently to support the selected projects organizationally and financially. The principal direction of the Foundation is the competition of initiative projects performed by small (up to ten persons) groups of scientists or by individual researchers.

#### **RFBR** is an active participant of the world scientific process.

#### The foundation organizes:

- competitions for projects of joint fundamental research by Russian and foreign scientists;
- competitions for projects for supporting participation of Russian scientists in conferences and meetings abroad.
- The geography of international RFBR competitions reflects already active cooperation with 32 foreign partners from 25 countries, among which European countries predominate. In accordance to agreements with partner foundations in some of these countries joint competitions are held not every year and can be limited to one or two types of competitions. The closest and most fruitful ties are with colleagues from Germany, France, and China. Special attention is given to international projects leading to innovation breakthroughs in different fields.
  More information: http://www.rfbr.ru/rffi/eng/info



Joint call of RFBR and the S&T Department of Government of India I. Deadline for proposals: 05 May 2016 More information: <a href="http://www.rfbr.ru/rffi/ru/international\_announcement/o\_1943129">http://www.rfbr.ru/rffi/ru/international\_announcement/o\_1943129</a> П. Joint call of the RFBR and the Royal Society of London (Great Britain) Deadline for proposals: 15 February 2016 More information: http://www.rfbr.ru/rffi/ru/international\_announcement/o\_1944729 III. Joint call of the RFBR and Ministry of S&T of Taiwan Deadline for proposals: 15 June 2016 More information: http://www.rfbr.ru/rffi/ru/international\_announcement/o\_1951248 IV. Joint call of the RFBR and the Indian Council of Medical Research Deadline for proposals: 02 May 2016 More information: http://www.rfbr.ru/rffi/ru/international announcement/o 1952018 V. Joint call of RFBR and the National Natural Science Foundation of China (NSFC) Deadline for proposals: 17 June 2016 More information: http://www.rfbr.ru/rffi/ru/international\_announcement/o\_1952308



#### I. Russian Foundation for Basic Research. International calls in 2016

VI. Joint call of the RFBR and CNRS - The National Center for Scientific Research (France) Deadline for proposals: 02 June 2016 More information: http://www.rfbr.ru/rffi/ru/international announcement/o 1954053 VII. Joint call of the RFBR and Vietnam academy of science and technology Deadline for proposals: 17 June 2016 More information: http://www.rfbr.ru/rffi/ru/international announcement/o 1954056 VIII. Joint call of the RFBR and the EMBO — European Molecular Biology Organization Deadline for proposals: 01 August 2016 More information: http://www.rfbr.ru/rffi/ru/international\_announcement/o\_1955434 IX. Joint call of the RFBR and the Japan Society for the Promotion of Science Deadline for proposals: 08 September 2016 More information: http://www.rfbr.ru/rffi/ru/international announcement/o 1955553 X. Coordinated call for BRICS multilateral projects – Pilot call 2016 with RFBR Deadline for proposals: 28 August 2016 More information: <u>http://brics.rfbr.ru/rffi/eng/brics</u>

#### II. Saint Petersburg University programmers are the best in the world

The Saint Petersburg University team have defeated their competitors from Harvard University, ITMO University, Massachusetts Institute of Technology, Shanghai Jiao Tong University, Lomonosov Moscow State University and other HEIs, with a total of 130 teams.

The contest operates under the auspices of the Association for Computing Machinery (ACM) and is sponsored by IBM. Tens of thousands of university students from all over the world take part in the contest annually.

The Saint Petersburg University representatives have won contest three times: in 2000, 2001 and 2016. For the past three decades, the ACM International Collegiate Programming Contest has been the most prestigious intellectual competition for young programmers in the world.

The first team competition under the auspices of ACM was held at Texas A&M University in 1970. The contest evolved into its present form in 1977, with the first Finals held in conjunction with the ACM Computer Science Conference.

More information:

http://english.spbu.ru/news/800-spbu-programmers-are-the-best-in-the-world

# III. St. Petersburg State Polytechnical University creates one of the most powerful supercomputing centers in Russia

RSC has created the most innovative and one of the most powerful supercomputer centers in Russia for St. Petersburg State Polytechnical University based on latest Intel® Xeon® E5-2600 v3 processors and Intel® Xeon Phi<sup>™</sup> co-processors. The project is in the scope of the Federal Program "Research and development in priority fields of science and technology in Russia for 2014-2020" and Federal Targeted Investment Program "Upgrading Technical Base of the St. Petersburg State Polytechnical University based on creation of a Supercomputing Center". The new "Polytechnic" supercomputing center (SCC) is focused on solving interdisciplinary problems in natural sciences and design of complex technical systems for high-tech knowledge-intensive segments of Russian industry and economy. More details: <u>http://www.rscgroup.ru/</u>





#### IV. Top universities of Brazil, Russia, India, China and South Africa officially joined the BRICS Network University

BRICS Network University is a research and educational project aimed at forming a common educational environment, developing academic mobility and training highly qualified professionals in the priority areas of development of BRICS countries. The Memorandum of Understanding for Establishment of the BRICS Network University was signed on November 18, 2015 in Moscow by the Ministers of Education of Brazil, Russia, India, China and South Africa.

The thematic priorities of the BRICS Network University are energy, computer science and information security, BRICS studies, ecology and climate change, water resources and pollution treatment, economics. On April 6-9, the first Forum of the BRICS Network University was held at Ural Federal University (Ekaterinburg, Russia) upon the initiative of the RF Ministry of Education and Science. More than 150 representatives of universities and Ministries of Education of Russia, India, China, Brazil and South Africa took part in the event. The Forum was the first official event held in the frames of the project.

As a result of the two-day discussions each international thematic group presented an action plan for the development of joint programs. In accordance with the actions plans during the next academic year the participating universities will start their first summer and winter schools and explore the opportunities for expanding academic exchange on student and faculty levels. In a year the universities are planning to launch the first network Master and PhD programs taught in English.

More information: http://urfu.ru/en/news/news/15470/



#### V. "Study in Russia" website for foreign students was launched in the frame of 5/100 project

Project Office 5 -100 launches its new website <u>http://studyinrussia.ru/</u> to attract foreigners to study in Russian universities. For the first time all the necessary information about studying in the leading Russian universities is gathered on a single website.

Users are provided with a unique option to quickly look for a training program. The site currently contains descriptions of more than 2 800 programs of higher and postgraduate education. Another option is a step-by-step instruction for entering a Russian university, presented in the form of infographics. Applicants can easily find a list of required documents, information on quotas on free higher education, competitions and events in the field of education.

The site can help to quickly choose a university, a degree level and a field of study, as well as to learn about the cost of a particular program and even to take a Russian language proficiency test. The information is given in three languages - Russian, English and Chinese.

The site has a page on all main social networks - Facebook, Instagram, Twitter, V-Kontakte, Google+, and You tube.

More information: https://www.utmn.ru/en/media/news/education/215188/

#### VI. RUSSIAN RESEARCH INFRASTRUCTURES AND FACILITIES IN DIFFERENT THEMATIC DOMAINS

- **Research infrastructures** are facilities, resources and services that are used by the research communities to conduct research and foster innovation.
- They include: major scientific equipment (or sets of instruments); knowledge-based resources such as collections, archives or scientific data; e-infrastructures, such as data and computing systems and communication networks; any other infrastructure of a unique nature essential to achieve excellence in R&I. **"Research Infrastructure of the modern Russia" portal** encompasses the information about 400 Joint Use Centers (JUCs); 150 Unique Scientific Equipment & Complexes (USE&C) in different thematic domains in 7 Federal districts of RF.

Interactive map and database of JUCs are available: http://www.ckp-rf.ru



List of Russian research infrastructures (large-scale research facilities) which have expressed interest in cooperation with European scientific communities and which may be of particular interest to European researchers and scientists has been presented in the web-site of the National contact point: http://h2020-infra.misis.ru/en/?start=15

#### VI. RUSSIAN RESEARCH INFRASTRUCTURES AND FACILITIES IN DIFFERENT THEMATIC DOMAINS. WHO SUPPORTS?

- 1. In 90-s the National network of Joint Use Centers was supported by the RFBR
- 2. Since 2002 the Research Infrastructure has been developed in the framework of the **following Federal Targeted Programs:**
- R&D in the Priority Fields of S&T Development 2002-2006
- R & D in Priority Areas of Development of the Russian S & T Complex 2007-2013
- R & D in Priority Areas of Development of the Russian S & T Complex 2014-2020: Activities 3.1.1 (Support and development of Unique Scientific Equipment & Complexes) and 3.1.2 (Support and development of Joint Use Centers)
- 3. Development of Infrastructure for Nanoindustry in the RF in 2008-2011
- 4. Leading Scientists programme (Resolution No.220 of the RF Government of April 9, 2010) the aim of which is bringing world-renowned scientists to Russian Universities and creating competitive research laboratories
- 5. 5/100 Russian academic Excellence project

### VII. JINR joined the Medipix-4 collaboration (CERN)

In early March, the European Organization for Nuclear Research (CERN, Geneva, Switzerland) signed an agreement on the establishment of an international research organization Medipix-4 and JINR became a member of it.

The goal of Medipix is chips family development to create the pixel detectors of ionizing radiation. Such detectors are called "smart", because they are not just registering radiation, but also making signal preprocessing, which might be sometimes quite complicated.

Medipix main feature is that its detectors not only fix the presence of certain radiation sources, but also determine the energy of the particles produced by them. This allows X-ray images of ultrahigh quality, as well as to determine the chemical composition of the samples on the tomograms. It also helps to examine the microstructure of tissues of living organisms and to determine the fraction of different materials in them.

Meanwhile, this area is not new to the JINR, which carries out research with Medipix detectors since 2008. One of the products of these developments became a system for monitoring the state of the background radiation in the ATLAS detector, operating within the framework of the Large Hadron Collider.

More information: http://www.jinr.ru/posts/jinr-joined-the-medipix-4-collaboration-cern-2/



#### VIII. Pre-announcement: Joint Call for German-Russian Project Proposals in Life Sciences, Social Sciences and Humanities

The German Research Foundation (DFG) and the Russian Science Foundation (RSF) will launch a new call for proposals in the fields of Life Sciences, Social Sciences and Humanities on 15 September 2016. The submission deadline will be 12 December 2016.

Following up on a successful first round in Physics and Mathematics in 2015 DFG and RSF now want to extend their common activities to cover new disciplines.

#### The aims of the call are:

to support research in the above mentioned disciplines carried out by German-Russian teams

to strengthen cooperation between Russian and German researchers in basic (knowledge-oriented) research

All proposals will be reviewed by both organizations separately. The results of the review process will be shared between the agencies. Support will be granted for those proposals where both DFG and RSF recommend funding.

Further information on this call will be made available on 15 September 2016. A next round including all fields of science (Social Sciences and Humanities, Life Sciences, Natural Sciences and Engineering) is foreseen for 2017.

More information:

http://www.dfg.de/en/research\_funding/announcements\_proposals/info\_wissenschaft\_16\_53/index.html

#### IX. International Events in R&I in Russia in 2016

I. Open innovation, Forum, Moscow, 22-29 October 2016: <u>http://forinnovations.ru/en/</u>

II. 2-nd International scientific conference "Science of the future", Kazan, September 20—23: <a href="http://sf-conf.com/">http://sf-conf.com/</a>

III. International Conference on new educational technologies #EdCrunch, Moscow, MISIS, 12-14 September 2016: <u>http://edcrunch.ru/en/</u>

IV. The 3-d International conference "EU-Russia S&T cooperation. Related support instruments and future opportunities", the St.Petersburg State Polytechnic University, Saint-Petersburg, October 7-8, 2016: <a href="http://h2020-infra.misis.ru/en/">http://h2020-infra.misis.ru/en/</a>

V. BarCamp St. Petersburg: Alternative Event Formats of Science Communication Start date: 19.10.2016, End date: 23.10.2016, Location: St. Petersburg http://www.st-gaterus.eu/en/112.php?vnr=1430











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