

# INFO EDITION NO. 2, 2017 AIPRIL – JUNE

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

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## ERA. NET RUS PLUS CALL 2017 FOR S&T PROJECTS

**The goal of the ERA. Net RUS Plus Call 2017 for S&T projects** is to create a long-term research collaboration in the field of research, technology and innovation between EU Member States/Associated Countries and Russia.

Research proposals can be submitted in Nanotechnologies, Environment/Climate change, Health, Social Sciences and Humanities, Robotics.

**Participating countries: B**elgium, Bulgaria, Estonia, Finland, Germany, Latvia, Moldova, Romania, Russia, Serbia, Slovakia, Switzerland, Turkey

Proposal submission deadline: 04.07.2017 at 15.00 CEST (16.00 Moscow time)

General information and Terms of Reference of the Joint Call on S&T are available at: <a href="http://www.eranet-rus.eu/en/196.php">http://www.eranet-rus.eu/en/196.php</a>

Proposal submission must take place in electronic form by using the **PT-Outline** web tool accessible at: <a href="https://secure.pt-dlr.de/ptoutline/app/users/login/RUS\_ST2017">https://secure.pt-dlr.de/ptoutline/app/users/login/RUS\_ST2017</a>

More information: http://www.eranet-rus.eu/



#### THE SIXTH COMPETITION FOR THE "MEGAGRANTS"

Ministry of Education and Science of the Russian Federation announced 6-th open call for grants of the Government of the Russian Federation for state support of scientific research conducted under the auspices of leading scientists in Russian educational institutions of higher education, scientific institutions subordinate to the Federal Agency for Scientific Organizations, and state scientific centers of the Russian Federation.

Grants of the Government of the Russian Federation in the amount of up to 90 million rubles each will be awarded on the competitive basis for conducting scientific research over 3 years (2018 – 2020).

Russian educational institutions of higher education or scientific institutions subordinate to the Federal Agency for Scientific Organizations or state scientific centers of the Russian Federation can apply in collaboration with a Russian or foreign leading scientist occupying one of the top positions in a specific scientific field.

Applications should be submitted before 18 hours 00 minutes (Moscow time) 14 July 2017.

Winners of the competition will be notified no later than 15 November 2017.

Further information and call documentation: http://www.p220.ru/en/home/news/item/1261-6kmgo



## NOMINATION SUBMISSION FOR RUSNANOPRIZE 2017 IS OPEN

**RUSNANOPRIZE** is an annual Prize awarded in one of the following fields: Optics and Nanoelectronics; Nanomaterials and Surface Modification; Medicine, Pharmacology and Biotechnologies; Energy Efficiency and Green Technologies.

The Prize is awarded to researchers, scientists and developers (up to three people) being the authors of scientific-technological discovery or discoveries in the field of Nanotechnologies, and to the company being the first to apply the discovery (discoveries) to mass production with the annual production output of at least \$10 million and reached business success through the application of the discovery (discoveries). Financial rewards, prize symbols and honorary diploma of the Prize are awarded to inventors, scientists and developers, the authors of the R&D projects or technologies implemented into production. The company that has achieved some significant commercial success due to the implementation of these technologies is awarded with an honorary diploma and a glass ball, which is a RUSNANOPRIZE symbol.

In 2017 **RUSNANOPRIZE** shall be awarded for research conducted in the fields of nanomaterials and surface modification.

Nominations submission period will last till July 31.

Fore more information: <u>http://en.rusnano.com/press-centre/news/20170502-fiop-nominations-submission-for-rusnanoprize-2017-is-opened</u>



#### BIGGEST X-RAY LASER IN THE WORLD GENERATES ITS FIRST LASER LIGHT IN HAMBURG

**The European XFEL**, the biggest X-ray laser in the world, has reached the last major milestone before the official opening in September 2017. On 05 May 2017, the 3.4 km long facility, most of which is located in underground tunnels, has generated its first X-ray laser light.

«The first laser light produced today with the most advanced and most powerful linear accelerator in the world marks the beginning a new era of research in Europe», — Helmut Dosch, Chairman of the DESY Directorate, said (DESY is one of the XFEL collaborators).

The X-ray laser light of the European XFEL is extremely intense and a billion times brighter than that of conventional synchrotron light sources. The achievable laser light wavelength corresponds to the size of an atom, meaning that the X-rays can be used to make pictures and films of the nanocosmos at atomic resolution-such as of biomolecules, from which better understandings of the basis of illnesses or the development of new therapies could be developed. Other opportunities include research into chemical processes and catalytic techniques, with the goal of improving their efficiency or making them more environmentally friendly; materials research; or the investigation of conditions similar to the interior of planets.

#### 12 countries, including Russia, contribute to the European XFEL.

#### The official start of research operation of the European XFEL is planned for September 2017.

Source of information: <u>http://www.jinr.ru/posts/biggest-x-ray-laser-in-the-world-generates-its-first-laser-light</u>



#### CREATION OF THE "CREMLIN DATA MANAGEMENT PLATFORM FOR LEPTON COLLIDERS"

The Lepton Collider Platfom aims at sharing information among participants in e+e- collider studies. The creation of the "CREMLIN data management platform for lepton colliders" is completed.

The platform serves as a collaborative tool and was created in the framework of Work Package 7 (WP7) of the EU-funded CREMLIN project in order to share common experiences, software applications and hardware solutions. The participating institutes of WP7, Budker institute (BINP) and CERN, are both pursuing design studies for future e+e- colliders (SCT, FCC-ee and CLIC).

The platform can serve the wider e+e- collider community.

The website will evolve further in the coming months. In particular, more technical information will be included on the twiki page.



The platform consists of a website <a href="http://leptoncolliderplatform.web.cern.ch/">http://leptoncolliderplatform.web.cern.ch/</a>

and a corresponding twiki page: <u>https://twiki.cern.ch/twiki/bin/viewauth/LeptonColliderPlatform/WebHome</u>

#### Source:

https://www.cremlin.eu/news/2017/creation of the cremlin data management platform for lepton colliders/



### CERN-JINR COLLABORATION: STATUS AND PROSPECTS

On 25 April 2017, a Meeting devoted to the cooperation of CERN and Joint Institute of Nuclear Research (JINR) was held in Geneva.

CERN Director-General Fabiola Gianotti opened the meeting, describing the current activities of the European Organization for Nuclear Research (<u>CERN</u>).

JINR Director Victor Matveev presented the new <u>Seven-Year Plan for the Development of the Joint Institute</u> for Nuclear Research 2017–2023 and spoke about the main directions and prospects of the JINR advanced research.

The participants discussed the status of the CERN-JINR partnership and possibilities of renewal and extension of protocols on cooperation between organizations.

During the Meeting, the parties discussed the details of participation of the JINR in CERN experiments at the <u>LHC Collider</u>, as well as prospects and opportunities of CERN participation in the NICA mega-project.

Programme of the Meeting can be found here: <u>https://indico.cern.ch/event/622402/</u>

Source of information: http://www.jinr.ru/posts/cern-jinr-collaboration-status-and-prospects



#### TSAGI HOSTS MEETING OF THE RUSSIA-EU WORKING GROUP IN THE FIELD OF AVIATION RESEARCH IN THE CIVIL SECTOR

In April 2017, Zhukovsky Central AeroHydrodynamic Institute (TsAGI) hosted a meeting of the Russian-European Working Group in the Field of Aviation Research in the Civil Sector.

The event took place with the participation and support of the National Contact Point (NCP) "Aeronautics", which operates on the basis of the Institute. The main task on NCP is to broaden the cooperation between Russia and the EU in the field of aerospace research.

During the discussions with colleagues from the European Commission, special attention was drawn to highpriority topics and flagship projects of the Working Program "Horizon 2020" for the years 2018 to 2020, involving high-speed passenger aviation, safe air transport (in terms of icing) and the employment of distributed combined power plants.

"The meeting concluded on a positive note, its result being the affirmation by the European Commission of its commitment to broadening the scientific and research cooperation between the Russian and European partners," explained Sergey Chernyshev, the head of the NCP, Director General of TsAGI and Member of the Russian Academy of Sciences. "At the moment, the federal ministries of the Russian Federation and the European Commission have started their efforts in coordinating preparatory activities for holding joint competitions as part of the Working Program 'Horizon 2020' for the years 2018 to 2020. We believe that ahead of us is a productive work in close cooperation with our European colleagues."

Source: http://tsagi.com/pressroom/news/3037/



#### RUSSIA AND EU COMBINE THEIR EFFORTS TO COMBAT HIV, TUBERCULOSIS AND HEPATITIS C

Technical meeting to prepare a coordinated call in Health and to present topics for future EU-Russia cooperation on Health research was held at Moscow State University on 16 May, 2017.

Joint call on infectious diseases will be launched in the end of 2017 in frames of Work Programme 2018-2020 Horizon 2020 and Action 2.2 Federal Targeted Programme for Research and Development in Priority Areas of Development of the Russian Scientific and Technological Complex for 2014-2020.

Russian and European scientists will initiate collaborative projects aimed at increase of efficacy and diagnostics of infectious diseases burdening healthcare in developed societies. Attention will be focused on HIV, hepatitis C virus and tuberculosis problems.

Representatives of the EU-member states Embassies (France, Germany, Denmark, the Netherlands, Czech Republic) took part in the event. They presented a short update on bilateral S&T cooperation with Russia and perspectives for future cooperation.

All the participants of the event indicated great potential for collaboration of Russia and the EU.

Presentations that were maid during the event are available at <a href="http://www.h2020-health.ru/en/node/459">http://www.h2020-health.ru/en/node/459</a>

#### **Sources of information:**

 The Russian Health NCP <a href="http://www.h2020-health.ru/en/node/458">http://www.h2020-health.ru/en/node/458</a>

 The website of the Ministry of Science and Education of RF:

 http://минобрнауки.pd/%D0%BF%D1%80%D0%B5%D1%81%D1%81 

 %D1%86%D0%B5%D0%BD%D1%82%D1%80/10067



#### TOMSK POLYTECHNIC UNIVERSITY (TPU) LAUNCHES MASTER PROGRAM BIG DATA SOLUTIONS

This year Tomsk Polytechnic University launches a new master program **Big Data Solutions**, delivered in English, within the program Computer Engineering.

The graduates of the program will be world-class specialists. They will be able to participate both in large science projects such as the Large Hadron Collider and in large sectors of industry and business including bank sector, telecommunications, mining industry, energy, retail sector, logistics companies and municipal structures.

#### The first students will be enrolled in September 2017.

Big Data is a set of technologies that are designed to perform three operations. First, to process larger amount of data compared to standard scenarios of big data. Second, to be capable of operating everincreasing large amounts of data. Third, to be able to deal with structured and poorly structured data in different aspects simultaneously.

The program is initially designed in English as international colleagues and business representatives are supposed to participate in its implementation.

Source of information: https://tpu.ru/en/about/tpu\_today/news/view?id=2261





#### EUROPEAN SPACE AGENCY TO SUPPLY CAMERAS FOR RUSSIAN LUNAR MISSION

With plans to blast off to the Moon in 2019, Russia have enlisted the help of the European Space Agency (ESA) to provide high-resolution cameras necessary for the landing of the spacecraft as Russia prepares to initiate its new lunar exploration program.

The first mission of Russia's lunar program, Luna-Glob, will be one of five spacecraft that is intended to fly to the Moon to study its south pole from both space and on the ground, with further craft aiming to return lunar soil samples back to Earth with a device also supplied by ESA.

"We hope, at least as of today all agreements have been reached, that the European Space Agency will take part in lunar research," said director general of the NPO Lavochkin research and industrial association, Sergey Lemeshevsky.

"It is quite possible that ESA will take part in the development and manufacture of the high-precision landing systems. It will be the third explorer," said Lemeshevsky. "We have invited the Europeans to take part, they said 'yes' concerning soil collecting devices and 'yes' concerning high-precision cameras for the 2019 spacecraft. However talks on high-precision landing are still underway," he added.

Russia's lunar program has been years in the making, but has been repeatedly delayed. Now with ESA on board, who already have substantial investments in other Russian-EU programs such as ExoMars, the lunar mission may finally achieve its 2019 launch target.

#### **Source of information:**

https://room.eu.com/news/esa-to-supply-cameras-for-russian-lunar-mission



## THE 1<sup>ST</sup> MEETING OF BRICS WORKING GROUP ON RESEARCH INFRASTRUCTURES AND MEGA-SCIENCE PROJECTS

A two-day meeting of the BRICS Working Group on Research Infrastructures and Mega-Science projects was held in the Joint Institute for Nuclear Research, Dunba on 15-16 May 2017.

The Russian initiative on establishment of the BRICS Working Group on Research Infrastructures and Mega-Science projects was approved on 8 October 2016 at the 4th BRICS S&T&I Ministerial Meeting and recorded in the Jaipur Declaration.

The Russian delegation which was headed by Director of the Department of Science and Technology of the Ministry of Education and Science of Russian Federation Sergej Matveev acted as co-chair of the Meeting along with representatives of a delegation of China that assumed presidency of the BRICS in 2017.

The program of the first day of the Meeting includes two topical sessions and a visit to the JINR basic facilities, including the accelerator complex NICA under construction.

Speakers of the Meeting noted that the choice of JINR as the venue for the first Meeting of the Working Group reflects the fact, that in addition to the Russian Federation which is a JINR Member State and South Africa that participates in the JINR activities as an Associated Member, a high degree of cooperation was achieved with other BRICS countries: China, India and Brazil.

Source of information: <u>http://www.jinr.ru/posts/1st-meeting-of-brics-working-group-on-research-infrastructure-and-mega-science-projects/</u>



## OPEN INNOVATIONS: DIGITAL ECONOMY. CHALLENGES OF GLOBAL TRANSFORMATION. Moscow, October 16-18, 2017

15000 participants

Events

150 interactive sessions

700 speakers 99 countries

https://forinnovations.ru/en/



THE 7<sup>TH</sup> INTERNATIONAL CONFERENCE ON INFORMATION COMMUNICATION AND MANAGEMENT (ICICM 2017)

The 7th International Conference on Information Communication and Management (ICICM 2017) is an annual conference which aims to present the latest research and results of scientists (professors, doctoral students, and post-doc scientists) related to Information Communication and Management topics.

This conference provides opportunities for delegates from different areas to exchange new ideas, applications and experiences face to face, to establish business or research relations, and to find global partners for future collaboration. The conference results in significant contributions to the knowledge base in these scientific fields.

The conference has been held in Singapore, Hong Kong, Paris, Geneva, Paris, and Hatfield in the past 6 years.

ICICM features invited keynote speakers as well as peer-reviewed paper presentations. The conference is completely open (one needs to register first), you will not have to be an author or a discussant to attend.

Venue of conference: Moscow

Date: August 28-30, 2017

More information: Website: http://www.icicm.org/



#### CREMLIN WP2 WORKSHOP ON "FUNDING AND JOINT RESEARCH PROGRAMMES AT THE MEGASCIENCE RACILITIES"

Long-term sustainability of the Russian Megascience facilities requires not only sufficient funding to secure their operation, but also optimized research programmes and targeted funding schemes for efficient scientific use. Various research and funding programs have been implemented in Europe on an EU-wide, bilateral or membership level, with the aim to open and optimally exploit existing research infrastructures. Coherence and coordination of the various funding and research programmes are in the prime interest to ensure maximum scientific impacts with key principles of peer review processes based on scientific merit, quality assurance and joint evaluations where different funding organizations or agencies are involved.

This CREMLIN workshop is devoted to the topic of funding and joint research programmes with a focus on European-Russian collaboration in the context of the Megascience facilities. It shall address issues on coordinated funding and research programmes between the EU or individual member (MS) states and the Russian Federation around new Megascience facilities.

The workshop will bring together representatives, experts and analysts from existing European, Russian and international institutions, funding agencies, networks and organizations in order to not only discuss from various viewpoints the opportunities and challenges of existing funding programmes and implementation schemes, but also to work out recommendations for even more targeted funding of EU-Russian joint research at research infrastructures (RI).

Date: 15-16 June 2017

EVENIS

**Venue:** European Synchrotron Radiation Facility ESRF; 71, avenue des Martyrs 38043 Grenoble Cedex 9, FranceESRF, Grenoble,

More information: <u>https://indico.desy.de/getFile.py/access?resId=0&materialId=1&confId=17780</u>

SCIENCE OF THE FUTURE

#### III All-RUSSIA SCIENTIFIC FORUM " SCIENCE OF THE FUTURE – SCIENCE OF THE YOUTH"

**The 1st International Scientific Conference** "Science of the Future" took place in St. Petersburg, September 2014

The 2-d edition of the conference was held in Kazan, September 20-23, 2016

**The 3-d forum will be held in Nizhny Novgorod, 12-17 September 2017** Conference organizer: the Ministry of Education and Science of the Russian Federation

500 PARTICIPANTS

=v=nts

50 EVENTS

360 PROJECTS 100 EXPERTS

Website: <u>http://sfy-conf.ru/en/</u>



### INTERNATIONAL SUMMER SCHOOL "HIIGHER EDUCATION AND ACADEMIC MOBILITY OF YOUTH AT CONTEMPORARY INTEGRATION PROCESSES"

Jean Monnet Centre of Excellence and Centre for Studies of International Organizations and Networks welcomes students to take part in the International Summer School "Higher Education and Academic Mobility of Youth in Contemporary Integration Processes".

The Summer School is intended for undergraduate and graduated students, including young scientists and Ph.D. students from Russia and European countries.

The main task of Summer School is to present and discuss international youth mobility experience aimed at obtaining professional education, practice and work in the framework of integration processes.

The event will take place at Tomsk State University on 2-5 July, 2017.

Deadline for applications is June 1, 2017

Further information is available at:

http://cees.tsu.ru/en/news/2017/03/30/international-summer-school-higher-education-and-academic-mobilityof-youth.html



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