

Helmholtz International

On this special page, we report news from the Helmholtz offices in Brussels, Moscow and Beijing several times a year. Specific focus is on co-operation and partnership ventures of the Helmholtz Association in Russia, China and the EU as well as on select international research policy news.

News from the Moscow Office:



The Russian space agency Roskosmos and the European Space Agency ESA are planning joint missions to Mars. Photo: ESA/DLR/FU Berlin (G. Neukum)

Roskosmos and ESA: Joint Mars Missions

On 14 March 2013, the Russian space agency Roskosmos and the European Space Agency ESA signed an agreement for sending unmanned missions to Mars in the context of the ExoMars project. The agreement, which incorporates the equal involvement of both parties, enables also co-operation projects for exploring the Moon and Jupiter. Initially, the Mars mission is to detect methane and other gases on the planet's surface. Later, a rover will be brought in, which can drill up to two metres deep into the Martian soil and which will collect samples that may allow for the identification of traces of life.

Roskosmos currently expands also the training and continuing education of space flight experts in Russia. Together with the Ministry of Education and Science of the Russian Federation, the Russian Academy of Sciences, leading Russian universities and astronautics enterprises, an initiative was developed for creating a scientific training consortium in the field of space research. The aim is to implement projects for research and development in the field of space flight and to create standards as regards the corresponding vocational education and training.

Russian Super Unis Selected

Chaired by Dmitry Livanov, Minister of Education and Science of the Russian Federation, the first session of the cross-institutional committee for strengthening the excellent Russian universities took place on 18 April 2013. The committee consists of six Russian and six foreign members. Its aim is to strengthen the competitive position of leading Russian universities on an international level and to promote the image of the Russian education system. For this, the Russian government intends to allo-

cate about 225 million Euro. The involved universities must be prepared to implement a number of modernisation measures, such as regarding the education programmes, administration and research activities. It can be expected that a total of 15 to 18 universities will be selected for funding. The Russian government hopes that by way of this project a minimum of five Russian universities will make it into the global Top 100 by 2020.

Russia Creates Jobs for Young Researchers

The Ministry of Education and Science of the Russian Federation intends to increase its support for talented post-docs from Russia and abroad. The new federal target programme for 2014 to 2020, "Scientific and Scientific-Pedagogical Personnel of the Innovative Russia" is planned to create new temporary jobs at Russian universities and research institutions for young post-doc researchers from all research fields. This form of programme is new in Russia. The first jobs will be created in 2014: at first some 200, whereas this number could rise to 1,500 as

early as in 2015. It is planned that each position will be financed with 3 million ruble (75,000 Euro) per year over a period of a maximum of three years. The hiring university or research institutions will determine the project topics and supervisors and will take care of accommodating the researcher. Yet first, the institution itself is to participate in a tender. The selection committee will focus on institutions with excellent infrastructure and good conditions for accommodating the post-docs.

News from the Brussels Office:

Workshop Series on EU Future Technologies Funding

Because of the European Commission's funding of the Human Brain Project, the EU's "Future Emerging Technologies" programme is very much on the agenda this year. It serves to provide funding for ground breaking, high-risk research, which furthermore carries the expectation of significant technological innovations. In addition to the high-profile flagship funding for the Human Brain Project and Graphene, there are further funding initiatives within the FET programme. As regards topics, these were usually limited to information and communication technologies. In future, however, these subject matter limitations are to be lifted, making them more interesting for applicants from within the Helmholtz Association.

During the first half of 2013, the Helmholtz Office Brussels therefore dedicates a four-part workshop series for some 30 guests per session to the FET programme. The aim is to discuss the programme's potential with those it addresses and with the responsible Commission clerks from the Directorate General CONNECT. At the same time, it provides a forum for exchange between representatives from various scientific organisations, universities and the Commission. To begin with, the kick-off workshop in March focused on the programme's basic funding principles. Ulrich Schurr from Forschungszentrum Jülich highlighted the advantages and disadvantages of the programme from a researcher's point of view. The April workshop dealt with the question of in how far it is possible to submit applications going beyond the

topic of information and communication technology.

On 28 May, the topic of "FET vs. ERC: duplication of instruments?" will be discussed, including the question whether or not both EU programmes target the same – that is, excellent science conducted within small groups – and whether or not this is in contradiction to the ever-present striving towards simplification of these programmes.

The series will conclude on 25 June with a focus on the connections to the industry: "FET's linkage to KET: expectations from industry". Together with two European Commission directors, the question will be discussed, whether there can be synergy effects with EU programmes for the promotion of key technologies. What are the industry's expectations at this point and what forms of co-operation could there be?

Registration for the last two workshops still can be submitted to kristine.august@helmholtz.de.

More information on the FET programme: http://cordis.europa.eu/fp7/ict/programme/fet_en.html

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Brussels Annual Event

"Big Science, Big Data – Big Challenges, Big Solutions?" – this was the title of the Brussels Annual Event held on 14 May 2013. The starting point: research produces ever increasing amounts of data. The challenges associated with this cover a broad range, including processing, data preparation and analysis, access to data and data interoperability. What are the technological conditions required in this? Representatives from CERN, from the Max Planck Institute Nijmegen, the KIT, from Forschungszentrum Jülich and the Helmholtz Zentrum München contributed their respective scientific points of view. Subject of discussion

was also which European approaches could prevent the system from drowning in the flood of data. Jürgen Mlynek, President of the Helmholtz Association, argued the case for recognising the masses of data as an opportunity for gaining further insights. He said that, "data is like gold one needs to dig up," and that it is in the pan-European interest to create favourable framework conditions for doing so. The importance of the issue was highlighted by the great interest in the event, which attracted some 170 guests.

News from the Beijing Office:

China Passes National Roadmap for Research Infrastructures

On 23 February 2013, China's State Council published a roadmap for research infrastructures covering the years up to 2030. It advocates the expansion of the large research institutions and infrastructures in order to meet the global challenges such as climate change and protection of the environment while at the same time ensuring China's international competitiveness. On its path to becoming an internationally innovative nation, China

intends to push the quality of its research institutions, management and data access to an international top standard. In doing so, seven research fields are given the highest priority in the national interest: energy, health and life sciences, earth and environment, material science, particle and nuclear physics, space and astronomy and technical engineering sciences.