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## EURAXESS LINKS CHINA

Dear Colleagues,

This May 2013 edition of the **EURAXESS Links China Newsletter** comes with a new layout that will hopefully be seen as an improvement.

Contentwise, it features the same columns as previously, starting with this month's **EU Insight** taking a closer look at European Research Infrastructures, an important pillar of Europe's scientific excellence.

We then move to recent **News & Developments** in the EURAXESS network, with the launch of a EURAXESS Links LinkedIn group for internationally mobile researchers and the publication of the full report of the EURAXESS Share event organized last 18 April, and in EU-China research & innovation cooperation.

In this respect, the initiative taken by several Chinese and European research funding agencies to collaborate together on a multi-lateral level in launching a joint research programme (see p. 10) is an interesting development and may show one way to push the cooperation between Europe and China to the next stage in terms of scale and impact.

Another way already taken by a growing number of stakeholders, is the establishment of joint laboratories and research centers in China. This month we announce again the creation of four more: 2 between France and China in the fields of sociology and environment (see p.16).and 2 between Germany and China in the fields of health and innovation research (see p.18).

We thank the Helmholtz Association Beijing office for sharing their insights in China's and Beijing's roadmaps regarding science infrastructure and technology transfer centers respectively. The article about China's science infrastructure's roadmap until 2030 fits particularly well in this edition, after the first article introducing Europe's initiatives in this area.

Among the list of **Grants & Fellowships** listed in this newsletter, you will find a brand new PhD programme established by the University of Salento on the topic

of 'Technology Innovation and Entrepreneurship' including longer stays in China and offering full scholarships to successful candidates. Applications from international researchers and in particular Europeans are very welcome (see p. 20).

Another interesting call for what it reveals about the new international research dynamics, is the one recently published under AgriTT, a new initiative between the UK Department for International Development (DFID), the Ministry of Agriculture, China, and the Forum on Agricultural Research in Africa (FARA) to promote transfer of agricultural technologies, knowledge and management innovations from China to low-income countries in Africa and Southeast Asia. See page 26 for more details.

In this edition you will also find under **Events** a pre-announcement about the "**EURAXESS Science Slam China 2013**" which is scheduled to take place end of next September and at which we hope to see many of you.

We wish you a pleasant read.

#### **About this newsletter**

EURAXESS LINKS CHINA NEWSLETTER is a monthly electronic newsletter, edited by EURAXESS Links China, which provides information of specific interest to European researchers and non-European researchers in China who are interested in European research landscape and conducting research in Europe or with European partners.

The information contained in this publication is intended for personal use only. It should not be taken in any way to reflect the views of the European Commission nor of the Delegation of the European Union to China.

Please email to [china@euraxess.net](mailto:china@euraxess.net) for any comments on this newsletter, contributions you would like to make, or if you think any other colleagues would be interested in receiving this newsletter, or if you wish to unsubscribe.

Editor: Jacques de Soyres,  
Country Representative of  
EURAXESS Links

With best regards,

**Jacques de Soyres**

[EURAXESS Links China](#) Country Representative



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# 1 EU Insight

## European Research Infrastructures

Research infrastructures (RIs) play an increasingly important role in the advancement of knowledge and technology. They are a key instrument in bringing together a wide diversity of stakeholders to look for solutions to many of the problems society is facing today. RIs offer unique research services to users from different countries, attract young people to science, and help to shape scientific communities.

The European Commission has been supporting access to effective research infrastructures for researchers all over Europe for more than a decade. This action has been instrumental in enhancing European researchers' access to the infrastructures they require to conduct their research, irrespective of the location of the facility.

### What are Research Infrastructures?

The term 'research infrastructures' refers to facilities, resources and related services used by the scientific community to conduct top-level research in their respective fields, ranging from social sciences to astronomy, genomics to nanotechnologies. Examples include singular large-scale research installations, collections, special habitats, libraries, databases, biological archives, clean rooms, high-capacity/high speed communication networks, highly distributed capacity and capability computing facilities, data infrastructure, research vessels, and so forth.

### Research Infrastructures at EU Member State Level

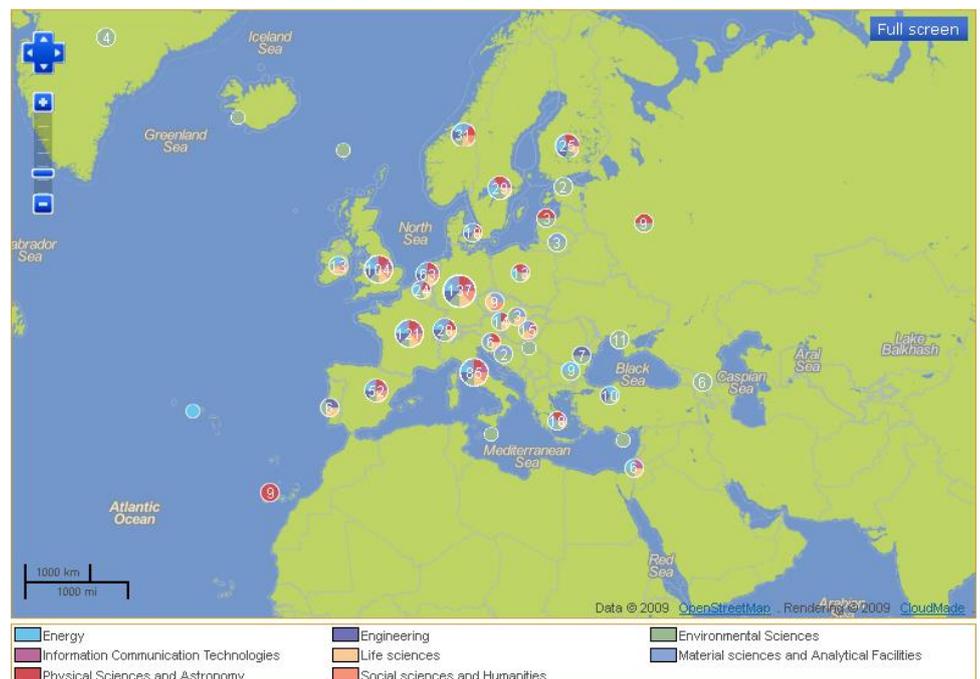
RIs were originally seen as national endeavours and most RIs today are still funded and run at national level. Member States will retain a central role in the development and financing of infrastructures. They will need to maintain and develop their capacity to create and exploit new technologies, products and services in the context of global competition: RIs make an important contribution to economic growth, competitiveness, quality of life, a better environment and the creation of jobs in Europe.

Recently, most EU countries have begun the task of identifying their future national RI needs. National roadmaps articulate not only national priorities, but also stress the importance of participation in overseas facilities through bilateral agreements with host countries. A clear strategic view on how to guarantee and maintain access to research facilities is also set out in the national roadmaps.



One example is the [German national “Roadmap for Research Infrastructures”](#) which was published in late April 2013 by the [German Federal Ministry for Education and Research](#) and is based on an evaluation performed by the [Wissenschaftsrat](#) (the German Council of Science and Humanities). The list entails 24 projects from a large range of scientific fields that are already under implementation and three new projects which the German federal government intends to fund in principle. In 17 of the 27 projects European and international partners are involved.

Another example is the [“Netherlands’ Roadmap for Large-Scale Research Facilities”](#) which was published in February 2013 and is already an update of the first Roadmap (2008-2012) prepared in 2008.



*Interactive Map for Research Infrastructures:* The European Commission’s [website for research infrastructures](#) now also features a [“Map of Research Infrastructures”](#) which shows the location of the research infrastructures funded under FP7 that provide transnational access to researchers.

### European Research Infrastructure Initiatives

Although some countries invest heavily in RIs, none can provide all the required state-of-the-art facilities on a national basis. In addition, in the smaller European Member States, the high investment and operational costs against small local demand prevent the construction and operation of necessary RIs. Present limits on national and institutional budgets restrict the flexibility and capability of players to respond to the growing demand. Today, an EU-wide effort is needed to foster capacity-building in Europe. In 2011, the [European Strategic Forum for](#)



[Research Infrastructures \(ESFRI\)](#) – established in 2002 – published the “[Strategy Report on Research Infrastructures – Roadmap 2010](#)” which identifies new Research Infrastructures (RI) of pan-European interest corresponding to the long term needs of the European research communities, covering all scientific areas, regardless of possible location.

The European Commission is supporting the development of a policy on research infrastructures at European level, providing added value by pooling talent, maximising resources, and helping to generate a strategic vision for the reinforcement of RIs in the European Research Area. Through the Framework Programmes, the EC has been funding a number of [projects](#) which contribute significantly to boosting Europe’s research potential and reinforcing its research communities. For FP7 (2007-2013) the EC will spend €1.85 billion on RIs.

### What’s ahead?

The future EU activities under Horizon 2020 for integrating and opening national research infrastructures correspond to the follow-up of the successful FP7 actions named “[Integrating Activities](#)” (conditional to the approval of the European Commission proposal for the next Framework Programme for Research and Innovation, Horizon 2020, by the EU Parliament and Council). The aim of these activities is to provide a wider and more efficient access to, and use of, the research infrastructures existing in EU Member States, Associated Countries, and at international level when appropriate.

### Sources:

[European Commission’s Research Infrastructures website](#)

“[Roadmap for Research Infrastructures](#)”, April 2013, German Federal Ministry of Research and Education

“[Uncharted Frontiers: the Netherlands’ Roadmap for Large-Scale Research Facilities](#)”, February 2013, Dutch Ministry of Education, Culture and Science



## 2 News & Developments

### 2.1 EURAXESS

#### **Report of EURAXESS Links China 'Share' Event published**

The report and photos of the EURAXESS Links China 'Share' event held last 18 April at the French embassy can be downloaded from the [EURAXESS Links China website](#).

We thank all the participants again for their contributions to the discussions on that day, as well as those of who took the time to answer the short satisfaction questionnaire sent afterwards, the results of which are also included in the event's report.

Similar events were or are going to be organized in the other EURAXESS Links countries, we invite you to check their [websites](#) and hope to see you at the next EURAXESS Links China open event to be organized after the Summer (see In this newsletter the [Events](#) section below)

### 2.2 EU & Multilateral Cooperation

#### **Pre-announcement of a Pending Call for European-Chinese Joint Research Projects “Societal Challenges – Green Economy and Population Change”**

The research funding organisations of China (NSFC), France (ANR), Germany (DFG), The Netherlands (NWO) and the United Kingdom (ESRC) are launching a new multi-lateral collaboration consisting of a joint research programme on two basic societal challenges:

- the challenges of the Green Economy
- the challenges of Population Change

There will be a number of priority areas within these themes and researchers from these countries will be invited to submit proposals for joint projects in these areas. Researchers may have any disciplinary background within the social sciences and beyond, however, the proposal should be predominantly within the social sciences and applicants must satisfy the eligibility criteria of their



home funding agency. Projects will also need to involve a number of Chinese and European partners; full guidance will be announced in the call.

The call, its decision procedure and funding mechanisms will be based on the Open Research Area for Social Sciences (ORA), a process established on international standards. Funding will be distributed among the partners according to the place of work of the researchers, and according to the funding rules of each individual agency.<sup>2</sup>

Further information about the priority areas will be made available by the end of June 2013 with the full call launched in September. The closing date of the call will be in early December 2013.

The contact people in each of the participating institutions mentioned above can be found on the [DFG website](#).

### **ESOF 2014 call for proposals for the Science-2-Business and Career Programmes**

ESOF is a biennial, interdisciplinary, pan-European general science meeting, which aims to showcase the latest advances in science and technology, promote a dialogue on the role of science and technology in society and public policy and stimulate and provoke public interest, excitement and debate about science and technology. The 2014 edition will take place in Copenhagen, Denmark.

The ESOF 2014 calls for proposals for the Science-2-Business Programme and the Career Programme are now open. The Science-2-Business Programme will include sessions on innovation, entrepreneurship and business development. The Career Programme will deal with career issues for researchers at all stages.

The ESOF 2014 Programme Committee invites original and excellent session proposals for these two programmes: on the relation between science and business for the Science-2-Business Programme, and related to how to create more attractive and sustainable career conditions for researchers for the Career Programme.

Both calls will close on **August 11, 2013**.

Further details are available on the [ESOF 2014 website](#).

### **Open Day 2013 at JRC's Ispra site breaks previous record numbers**

On Saturday, 4 May 2013, over 10 300 visitors followed the invitation to spend a day dedicated to science exploration and discovered how the European Commission's in-house science service, the Joint Research Centre (JRC) helps to promote growth, jobs and innovation, a healthy and safe environment, consumer protection and secure energy supplies.



A group of visitors follow the explanations of a JRC scientist about research on water quality © EU, 2013

Máire Geoghegan-Quinn, European Commissioner for Research, Innovation and Science, was impressed by the way JRC scientists brought to life the motto of the JRC Open Doors Day during the "Year of the Citizen" (2013), 'La scienza per te – Science for you'. Indeed, the thousands of enthusiastic visitors of all ages appreciated the practical demonstrations, lively presentations and experiments in unique laboratories and in the open space of the JRC's biggest site in Northern Italy.

The JRC pays great attention to communicating science, and to providing practical examples of the added value of European policies to citizens of all ages. It has become a tradition in Ispra to open the site to visitors at the beginning of May to celebrate Europe Day. The first guided tour for 300 persons was organized back in 1992. Since then the numbers have grown steadily - the 2011 edition counted over 10 000 people - with the Open Day becoming a popular biennial occurrence, not just for the public in the immediate neighbourhood.

Further details in source: [JRC](#)

### **European Inventor Award 2013 goes to outstanding inventors from Austria, France, Sweden, Switzerland, Spain and the US**

The EPO today announced the winners of the European Inventor Award 2013, which honours outstanding inventors for their contribution to social, economic and technological progress. Some 500 guests attended the award ceremony at the Beurs van Berlage in Amsterdam.

The 2013 awards were presented in five categories, in addition to the Popular Prize:

**Lifetime Achievement: Martin Schadt (Switzerland)**, inventor of the world's first flat-panel liquid crystal display, better known as LCD.

**Industry: Claus Hämmeler and Klaus Brüstle (Austria)** from Austrian manufacturer Julius Blum for their invention of a damper system for soft closing of furniture doors, drawers and wall cabinets.

**Small and Medium-Sized Enterprises: Pål Nyrén (Sweden)** for inventing pyrosequencing – a far faster, less complicated and cheaper method of sequencing DNA strands.

**Research: Patrick Cuvreur, Barbara Stella, Véronique Rosilio, Luigi Cattell (France, Italy)**, a team at Paris-Sud University, for their invention of nano-capsules - 70 times smaller than red blood cells and protected by a biodegradable coating - which destroy cancer cells without harming healthy tissue.

**Non-European Countries: Ajay V. Bhatt, Bala Sudarshan Cadambi, Jeff Morriss, Shaun Knoll, Shelagh Callahan (USA)**, for creating and developing Universal Serial Bus (USB) technology, one of the most important advances in computing since the silicon chip.

The winner of the **Popular Prize** was **José Luis López Gómez (Spain)**, whose invention to use a unique 'independent guided' wheel design rather than a standard axle on high-speed passenger trains makes those trains some of the most comfortable and safe in the industry. The new technology also helps to reduce energy consumption, premature wear and costs of maintenance.

Further details available in source: [EPO](#)

### **European Commission's Chief Scientific Adviser Attends Inauguration of the Atacama Large Millimetre Array (ALMA)**

On 13 March, the Chief Scientific Adviser to President Barroso, Professor Anne Glover, represented the European Commission at the inauguration of the Atacama Large Millimeter/Sub-Millimeter Array (ALMA).

With 66 parabolic antennas placed at 5050m on the Chajnantor Plateau on the Chilean-Bolivian border, ALMA is the largest radio telescope in the world, offering unprecedented insights into the universe. The 1 billion Euro project has been co-funded by the Member States of the European Southern Observatory (ESO), the United States of America, Canada, Japan, Taiwan and Chile.

The inauguration took place at the ALMA Operations Centre near San Pedro de Atacama. Chile's President Sebastián Piñera gave the opening speech

In the following days, the Chief Scientific Adviser also visited the European Southern Observatory's Very Large Telescope (VLT) at Cerro Paranal, where she was welcomed by ESO Director-General Tim de Zeeuw. With its four telescopes equipped with 8.2m primary mirrors, the VLT is the world's most advanced ground-based facility for astronomy using visible wavelengths.

Following a tour of the VLT support facilities, Professor Glover met with ESO senior management. Discussions included the issue of Brazilian membership of ESO, and the preparations for the construction of the European Extremely Large Telescope (E-ELT) scheduled to be built on nearby Cerro Armazones.

Source: [International Research Update May 2013](#)

For more information regarding the European Commission's international research cooperation activities worldwide, read the [European Commission's monthly "International Research Update"](#).

## 2.3 EU Member States\*, China & Bilateral Cooperation

### China - NSFC announces 3.9 bln USD in funds in 2013

Funds totalling 23.8 billion yuan (about 3.9 billion U.S. dollars) are set to finance science projects in China this year, the National Natural Science Foundation of China (NSFC) announced Tuesday, 28 May.

About 71 percent of the funds will be covered by the central government, according to the foundation, which has received over 158,000 applications for funding so far this year. Yang Wei, president of the foundation, said more than 70 percent of the funds will be channeled into projects involving intensive disciplines and will contribute to innovation-driven economic development. The foundation will lend its full support to the growth of innovative talent, and it seeks to improve the status of science in China through expanded cooperation with the rest of the world, according to Yang. The foundation said it will promote research integrity in the country by completing amended regulations to punish misconduct and creating a database for cases of violations of research ethics.

In 2012, the foundation processed more than 177,000 applications. Of the total, 38,411 items were eligible for a portion of funds totalling 23.7 billion yuan.

Source: [CAS](#)

### China - China approved its national roadmap for science infrastructure till 2030

The Chinese state council made a formal press release and announcement on February 23, 2013 concerning China's roadmap for its science infrastructure till 2030. It has stated that in retrospect to the on growing demand for international competition and collaboration, in order to deal with the grand challenges like global climate change, global warming, environmental protection etc, China has the needs to further build up its large science facilities and infrastructures in the next 20 years. In order to transform China into an international innovative nation, China has vowed to improve the quality of science facilities and the management, as well as data-sharing system. Many facilities are planned to be updated to reach world leading level in the near future. 7 areas including energy, health and life science, earth system and environment, material science, particle physics and nuclear physics, space and astronomy, as well as technical engineering science are chosen with priority for national concern.

China has outlined 16 projects for the first period in the 12th five-year plan, including deep-sea-observation network; synchrotron light source; ADS system

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\* Including countries associated with the 7th Framework Programme.

for nuclear waste, studying facility for materials at extreme conditions; heavy-ion accelerator; test-facility for high-efficiency low-emission gas turbines; cosmic observatory at high-altitude; test facilities for future IT networks; ground-based simulator for space environment; facilities for translational medicine; Chinese Antarctic observatory; research facilities for precision gravity; large-scale low-speed wind tunnel; facilities for animal model and genetic phenotyping; numerical simulator for earth system, etc.

Source: Helmholtz Beijing Office, contact: [hehong@helmholtz.cn](mailto:hehong@helmholtz.cn)

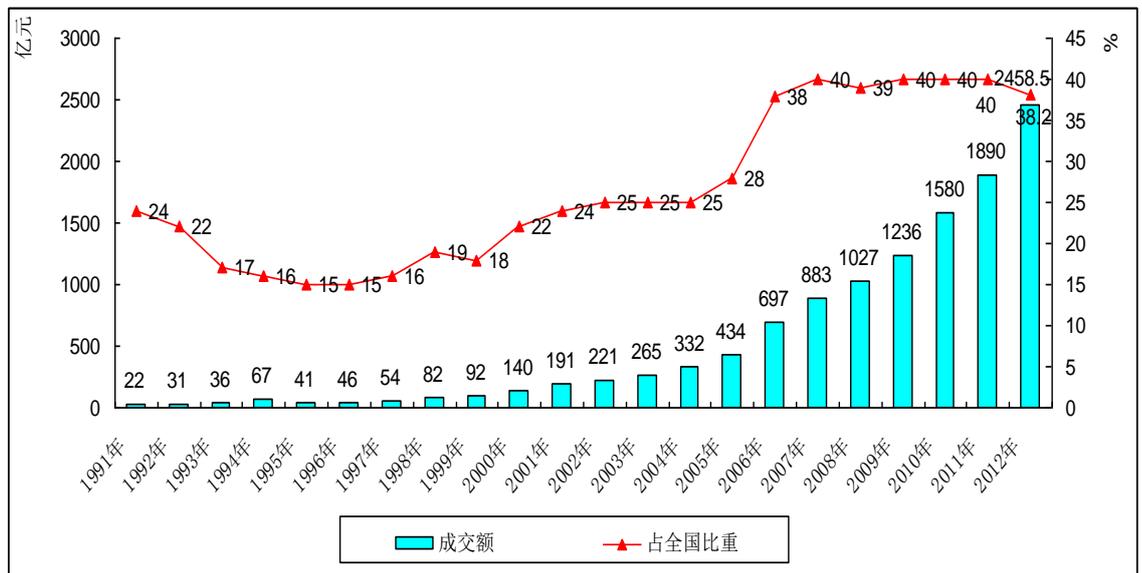
### China - Beijing strikes for Intl. Technology Transfer Centre

The Beijing government has organized the 3rd International Technology Transfer Congress (ITTC) together with the Chinese Ministry of Science and Technology on 25-26.04 in Beijing. In a speech given by Mr. CHEN Gang, a standing member of the BCP, Beijing has broken its record for technology transfer in 2012 amounting to around 30 billion euro, near 40% of the whole volume in China. Zhongguanchun Science Park, seen as the Chinese Silicon Valley, again managed 48% of the whole figure in Beijing.

At present, Beijing has 44 organizations granted as national demonstration sides for technology transfer, around 16% of China; Beijing has 58 organizations and government agencies for productivity promotion and over 630 research institutes and engineering centres at municipal level; it has 122 incubators, 27 of which were approved by the Ministry of Science and Technology plus 14 university science parks at national level.

Volume of technical contracts in 100 million RMB for Beijing in last years, spectacular annual growth

Source: Helmholtz Beijing Office, contact: [hehong@helmholtz.cn](mailto:hehong@helmholtz.cn)





## **Denmark - Boosting Bioenergy Collaboration between China and Denmark**

Innovation Centre Denmark and Invest in Denmark hosted the large seminar on bioenergy the 22nd of April in Shanghai, which was funded by the Danish Ministry of Foreign Affairs and Danish Ministry of Science, Innovation and Higher Education.

The Danish Consul General in Shanghai, Karsten Ankjær Jensen, opened the seminar which was attended by over 100 scientists and company representatives from both China and Denmark.

The Danish delegation will the next days have individual meetings with some of the best universities in Shanghai and Nanjing and will 25-27 April participate in the World Congress of Bioenergy in Nanjing, where Innovation Centre Denmark has organised a Danish session on Bioenergy.

In the next days after the seminar, the Danish delegation had individual meetings with some of the best universities in Shanghai and Nanjing on 25-27 April participated in the World Congress of Bioenergy in Nanjing, where Innovation Centre Denmark had organised a Danish session on Bioenergy.

Further details in source: [Denmark in China](#)

## **France - Two new Sino-French joint labs established during visit of French minister for higher education and research**

During the visit to China of French minister of Higher Education and Research Mrs. Geneviève Fioraso, three agreements establishing two new 'Associated International Laboratories' (LIA) and extending the operation of the Sino-French Research Center for Life Sciences and Genomics in Shanghai were signed during a ceremony also attended by Chinese minister for Science and Technology, Mr. Wan Gang, held on 26 April.

The first new joint laboratory established on this occasion is simply called "Sociology" is a partnership between the French National Scientific Research Centre (CNRS) and the Chinese Academy of Social Sciences (CASS) and will bring together researchers and students from both sides to jointly work in the area of "post-western sociologies and field sciences in China and in France".

The second joint lab launched last 26 April is called 'SALADYN' and involves twelve French and four Chinese institutes and laboratories. The agreement was signed by the CNRS and the Cold and Arid Regions Environmental and Engineering Research Institute of the Chinese Academy of Sciences (CAS). This joint lab will study the movements of sediments and the dynamics of landscapes in Central Asia.

Finally, the amendment of the convention of the Sino-French Research Center for Life Sciences and Genomics ensures the continuation of this important bilateral cooperation tool, first established in 2002 and which brings together the CNRS, Inserm and Institut Pasteur on the French side, and the Shanghai

Institute for Biological Sciences, the Ruijin Hospital, School of Medicine of Jiaotong University and the Chinese National Human Genome Center on the Chinese side.

Details in source: [La France en Chine](#)

### **France - Sino-French Public-Private Joint Research Institutions booklet released**

After having published a booklet listing around 40 Sino-French public joint research institutions in July 2012, the S&T office of the French embassy to China is now introducing seven institutions established jointly by French private companies based in China and Chinese academic research bodies. These public-private joint labs cover fields such as environment, chemistry and biomedical research.

Access further details and the pdf version of the booklet on the [La France en Chine website](#).

### **Germany - Green Talents Competition 2013**

The German Federal Ministry of Education and Research (BMBF) is now holding the 5th round of its prestigious "Green Talents – International Forum for High Potentials in Sustainable Development". The competition, under the patronage of Minister Professor Johanna Wanka, annually awards the 25 most outstanding minds worldwide. Hailing from various research disciplines, the winners are honoured for their original solutions for a more sustainable future.

Selected by a high-ranking [jury of German experts](#), the "Green Talents" will be invited to a two-week [science forum](#), touring Germany in the fall of 2013. This visit will not only grant them unique access to some of the country's hot spots of sustainable development but also allows the participants to exchange ideas with peers and senior scientists. In addition, the awardees will have the chance to present themselves to experts of their choice and discuss their work with them in [individual appointments](#).

The year following the forum, the winners are invited to return to Germany for an additional [research stay](#) of up to three months at an institute or company of their choice.

With [previous awardees](#) from 30 different countries, the "Green Talents" build a network of outstanding young researchers, renowned experts and top-class facilities that is unparalleled.

Deadline for submissions is 09 June 2013, at 12 p.m. (Central European Time). [Apply here](#).

Further details on the [Green Talents 2013 webpage](#).



## Germany - PICB, IUF Establish Joint Research Group on Environmental and Genetic Epidemiology of Aging

The CAS-MPG Partner Institute for Computational Biology (PICB) and Leibniz Research Institute for Environmental Medicine (IUF) established a joint research group on environmental and genetic epidemiology of aging in PICB on May 24, 2013.

The joint research group aims at exploring the environmental and genetic factors affecting population aging, a severe problem in both China and Germany. And particularly, it focuses on air pollution exposure and its interaction with genes, and the role of systemic inflammation on ageing-related outcomes in an elderly Chinese population.

PICB was jointly founded by the Chinese Academy of Sciences (CAS) and the Max Planck Gesellschaft (MPG) of Germany in Shanghai, China in October 2005. The Institute has been dedicated to contribute to the development of the life sciences, aiming at bridging theoretical and experimental work in biology and unveiling life's secrets through mathematical methods.

Source: [CAS](#)

## Joint Center for Innovation Research established between the Fraunhofer ISI and the Institute of Policy and Management (CAS) in Beijing



Professor Marion A. Weissenberger-Eibl, director of the Fraunhofer ISI, and Professor Mu Rongping, director of the IPM, sign the agreement for the "Joint Center for Innovation Research".

The Fraunhofer Institute for Systems and Innovation Research ISI strengthens its commitment in China: On 23 May, the director of the institute Professor Marion A. Weissenberger-Eibl signed the agreement for the "Joint Center for Innovation Research" with the Institute of Policy and Management (IPM) at the Chinese Academy of Sciences (CAS) in Beijing. The aim is to intensify the cooperation, which has existed for many years, and to offer German and European clients an excellent consultancy service.

The presence in China and the direct contact with the Chinese partners were already in the past a key element in projects for the Federal Ministry for Education and Research, the German embassy in Beijing, the European Union, the World Bank and German enterprises.

In the "Joint Center for Innovation Research of IPM in Collaboration with Fraunhofer ISI", which has now been established, initially two Chinese and two German scientists will work closely together to create the basis for more joint projects.

As of now, the "Joint Center for Innovation Research" will deal with consultancy projects from all areas of knowledge which are covered by both research institutes. These include energy efficiency and renewable energies, water infrastructures, urban transport systems, technology transfer, rights of intellectual property, the cooperation of science and research and the technical and economic development of the Chinese market.

Learn more about this new joint research centre on the [Fraunhofer ISI website](#) and on the [IPM website](#).

### **Italy - 2nd Sino-Italian conference on urban planning and sustainable development held on 14-15 May in Haerbin**

The second Sino-Italian bilateral meeting entitled “International Conference on Urban Planning and Sustainable Development: City and Countryside (UPSD 2013)” co-organized by the School of Architecture of the Harbin Institute of Technology, the S&T office of the Italian embassy in China and the University of Sassari took place on 14 and 15 of May on the campus of the Harbin Institute of Technology.

The conference was dedicated to the study of the relationship between city and land after a century that saw the final affirmation of the city over the countryside, at a topic of particular importance in China, a country which is experiencing an urbanisation process of unprecedented scale.

Further details in source: [Italian embassy](#)

### **Italy - Institute of High Energy Physics (IHEP-CAS)-Italian Institute of Nuclear Physics (INFN) Annual Cooperative Meeting held at IHEP on 13 May**

The IHEP-INFN Annual Cooperative Meeting was successfully held at IHEP on May 13th, 2013.

An IHEP group of 10 people headed by Prof. Wang Yifang, Director of IHEP and an INFN group of 4 people headed by Prof. Fernando Ferroni, President of INFN attended the meeting. They both introduced to the other participants the activities of their institutes.

The on-going cooperative activities between both sides were reviewed and discussed. Both sides expressed their satisfaction with the status of those activities. Collaborations on Daya Bay Experiment, DM searches, BESIII, space projects and LHAASO were particularly discussed, it was agreed that those discussions would continue and concrete arrangements would be made to further those collaborations.

Both sides agree that the next INFN-IHEP cooperative meeting will be held in Rome in 2014.

Source: [IHEP](#)

### **Netherlands - Innovation and the environment take centre stage at trade dinner**

On Wednesday 8 May, Dutch Minister of Foreign Trade and Development Cooperation Lillianne Ploumen hosted a trade dinner for representatives of Dutch companies in the Minister’s delegation and Dutch entrepreneurs in the

Beijing area. The trade dinner was organized by the Netherlands Embassy in Beijing.

This evening the Minister officially announced to the public that Amsterdam will have the honour of acting as the guest city of the Beijing Design Week 2013. The Beijing Design Week takes place in September at various locations throughout the city. The festival forms a platform for prominent designers and up-and-coming design talent. Minister Ploumen expressed the wish to utilize this platform to connect Dutch designers with Chinese planners on issues such as architecture and sustainable city development.

The official launch of the ICAP ETS Summer School in Beijing also took place during the trade dinner. ETS - or Emissions Trading System - is an instrument for industries to improve energy efficiency and reduce carbon emissions, thereby taking steps to address climate change. The Netherlands and Dutch industries are world-renowned for their experience with emissions trading. The Netherlands is intend on sharing the knowledge and experience it has acquired in emissions trading with its Chinese partners by means of this Summer Schools, in order to stimulate the development of a green economy in China.

More details in source: [Netherlands Embassy in Beijing](#)

### **Netherlands - The Netherlands signs agreement with Hong Kong in the field of waste processing**

In the presence of Dutch waste treatment companies, Minister for Foreign Trade and Development Cooperation Lilianne Ploumen signed a partnership agreement with the authorities of Hong Kong, with the aim of fostering greater cooperation in the field of waste processing between the Netherlands and Hong Kong. Companies, knowledge institutes, industry and government will work together closely over the next several years on training, innovation, exchanging experiences, and in formulating and implementing waste and recycling policy for Hong Kong.

More details in source: [Netherlands Embassy in Beijing](#)

### **Spain - China, Spain to enhance sci-tech cooperation**

China and Spain have agreed to enhance cooperation in science and technology innovation between the two countries during a recent visit to Spain by a senior Chinese official.

According to Chinese Science and Technology Minister Wan Gang, the two countries signed an agreement on science and technology cooperation during Wan's visit to Spain from May 23 to 26.

They also reached an action plan to encourage cooperation between Chinese and Spanish science parks and enterprises, and enhance sharing of scientific research facilities. Energy, environment, bio technologies and information technologies are also set as future fields for cooperation between the two countries.

Source: [China Daily](#)

### **Sweden - State Secretary Ingela Bendrot on visit to China to discuss cooperation on transport solutions**

Ms. Ingela Bendrot, Swedish State Secretary to the Minister for Infrastructure, is currently on a visit to China for meetings and activities focussing on transport solutions.

Ms. Bendrot had a meeting at the Ministry of Transport on 13 May for a half-time review of the Sino-Swedish Action Plan on transport solutions signed in 2011. The Action Plan has led to furthered Sino-Swedish exchange in the areas of urban transport, road transport and safety, shipping, maritime affairs and green flights.

On Tuesday 14 May morning the State Secretary made a visit to the [Beijing Alignment Academy](#). Ms Bendrot later attended a Sino-Swedish seminar on Urban Transport on Tuesday afternoon, co-hosted by the China Academy of Transportation Sciences. Topics such as congestion charges, modern city bus solutions and traffic planning and management were discussed.

The Swedish National Road and Transport Research Institute co-hosted the 16<sup>th</sup> "[Road Safety of Four Continents](#)" conference in Beijing 15-17 May together with the Research Institute of Highway (RIOH) of Ministry of Transport of China, and Transportation Research Center at Beijing University of Technology. State Secretary Bendrot attended the opening ceremony on Wednesday 15 May.

For more information on how Sweden has managed to reach one of the lowest traffic-related fatality rates in the world, please visit the [Vision Zero Initiative website](#).

Further details in source: [Sweden in China](#)



## 3 Grants & Fellowships

### 3.1 Call announcements for international researchers

#### **China - Shanghai 2013 S&T Innovation Action Plan International Cooperation Programme**

The Shanghai S&T Innovation Action Plan International Cooperation Programme aims to enhance international S&T cooperation and open innovation, and accelerate S&T development and independent innovation capability of Shanghai.

The programme is divided into three parts: the first part targets international cooperation between enterprises, the second part international cooperation between governments and the third part academic cooperation. The funding offered under the programme targeting enterprises is no more than 2 million RMB per project, the funding offered for governmental international cooperation is no more than 500 000 RMB per project and the funding offered for academic international cooperation is no more than 300 000 RMB per project.

Application deadline is **30 June, 2013**. Further details are available [here](#).

#### **EU - European Union Academic Programme Hong Kong (EUAP) Visiting Scholarships (PostDoc)**

The European Union Academic Programme Hong Kong (EUAP) is inviting applications for Visiting Scholarships at the postdoc level for research/teaching sojourns of four months duration (one semester) at EUAP institutions in Hong Kong (fall/winter term 2013, 2014, 2015).

Review of applications will begin by late March 2013 and will continue until the positions are filled. **The deadline has been extended.** The envisaged starting date for the first Visiting Scholar is 1 September 2013.

Successful applicants will receive a monthly stipend plus accommodation allowance of max. 53,000 HK\$ to cover living expenses and an additional travel allowance to/from Hong Kong up to 12,000 GK\$.

Interested candidates may make informal confidential enquiries via the EUAP office ([euaphk@hkbu.edu.hk](mailto:euaphk@hkbu.edu.hk)), Mr. Martin Ho.

Further details available on the [EUAP website](#) or download the [PDF version of this announcement](#).

## EU - European Institutes for Advanced Study (EURIAS) Fellowship Programme

The European Institutes for Advanced Study (EURIAS) Fellowship Programme is an international researcher mobility programme offering 10-month residencies in one of the 16 participating Institutes: Berlin, Bologna, Brussels, Budapest, Cambridge, Delmenhorst, Freiburg, Helsinki, Jerusalem, Lyon, Marseille, Paris, Uppsala, Vienna, Wassenaar, Zürich. The Institutes for Advanced Study support the focused, self-directed work of outstanding researchers. The fellows benefit from the finest intellectual and research conditions and from the stimulating environment of a multi-disciplinary and international community of first-rate scholars.

EURIAS Fellowships **are mainly offered in the fields of the humanities and social sciences but may also be granted to scholars in life and exact sciences**, provided that their proposed research project does not require laboratory facilities and that it interfaces with humanities and social sciences.

For the 2014-2015 academic year, EURIAS offers 39 fellowships (20 junior and 19 senior positions).

All IAS have agreed on common standards, including the provision of a living allowance (in the range of € 26,000 for a junior fellow and € 38,000 for a senior fellow), accommodation (or a mobility allowance), a research budget, plus coverage of travel expenses.

Applications are submitted online via [www.eurias-fp.eu](http://www.eurias-fp.eu), where you will find detailed information regarding the content of the application, eligibility criteria, selection procedure, etc.

The deadline for application is **July 5th, 2013**.

Further details on this call are available on the [EURIAS website](http://www.eurias-fp.eu).

## EU - EXPERIMEDIA Open Call 2013

EXPERIMEDIA is a collaborative project aiming to accelerate **research, development and exploitation of innovative Future Media Internet products and services** through testbeds that support experimentation in the real world which explore new forms of social interaction and experience in online and real world communities.

By means of this open call, the EXPERIMEDIA project seeks innovative experiments in Future Media Internet systems that offer potential to deliver significant impact to users and businesses within EXPERIMEDIA venues' ecosystems.

EXPERIMEDIA has three venues for experimentation in this call:

- Schladming: an Austrian alpine resort
- CAR: a high performance athletic training facility in Barcelona
- FHW: a Greek cultural centre and museum for Hellenic culture and history



Each venue has specific requirements and is seeking experiments focusing on different topics. Learn more about this funding opportunity and the various topics that are targeted on the [EXPERIMEDIA website](#).

Deadline for application is **3<sup>rd</sup> of July, 2013**.

### **Germany - Sofja Kovalevskaja Award**

The Sofja Kovalevskaja Award provides funding for top-rank junior researchers from abroad to spend five years building up a working group and working on a high-profile, innovative research project of their own choice at a research institution of their own choice in Germany. Applicants should have completed their doctorate with distinction within the past 6 years and have published work in prestigious international journals or publishing houses.

Scientists and scholars **from all disciplines** may apply directly to the Alexander von Humboldt Foundation. The Humboldt Foundation plans to grant up to eight Sofja Kovalevskaja Awards. The award is valued at up to 1.65 million EUR.

The application submission deadline is July 31, 2013. The selection is scheduled for March 2014.

Further details on the [Humboldt Foundation website](#).

### **Germany - Germany / Hong Kong Joint Research Scheme**

The Research Grants Council (RGC) and the German Academic Exchange Service (DAAD) invite applications for the Germany / Hong Kong Joint Research Scheme 2013/14 exercise. Launched in 1996, the Scheme aims to promote research collaboration between Hong Kong and Germany by providing researchers in the two places with one-year or two-year travel grants. This scheme is **open to researchers from all fields**.

The budget for the 2013/14 exercise on the Hong Kong side is HK\$1.2 million. The grant size for the travel grants is HK\$45,000 per year for projects involving travel of research postgraduate student(s) and HK\$30,000 per year for projects not involving students' travel.

On the German side the grant size is EUR.- 7000 per year.

Additional funding support from Hong Kong and German institutions / companies to individual grant recipient is most welcome.

Detailed information regarding the Scheme and its application procedure can be obtained on the [RGC website](#) and on the [DAAD website](#).

### **Italy - 6 Scholarships available to join University of Salento's new PhD Program in *Technology Innovation and Entrepreneurship*, including 6 months stay in China**

The Department of Engineering for Innovation (University of Salento – Lecce, Italy) is launching a brand new Ph.D Program “Technology Innovation and



Entrepreneurship". A key distinctive feature of the program is the mobility between Italy and China, where PhD candidates are expected to spend at least six months over the three years duration of the program, starting from the first year.

The number of positions is limited to 6 for which full scholarships are available.

Admission to the program is selective and will be based on: a) the evaluation of a research project proposal (maximum 5 pages, including references on topics relevant to the PhD); b) an oral colloquia that can be held either in presence (in Lecce) or at distance (via Skype) for candidates coming from outside Italy.

The calendar with dates, times and places of selections is available since May 30th, 2013 in the section [BANDI E CONCORSI/CONCORSI/RICERCA/Bandi per dottorati di ricerca](#) on [www.unisalento.it](http://www.unisalento.it).

Deadline for application is 24 June, 2013.

For information on how to apply, the application form and the documents required please refer to the the [leaflet](#) and the annexes ([research topics introduction](#) and [application form](#)) attached or to the [Official Competition Announcement](#) on [www.unisalento.it](http://www.unisalento.it).

### **Italy - Fellowship on the 'Relations between China and the European Union in the framework of intellectual property and competition' at the University of Salento**

The issues of intellectual property and competition are assumed as keys to look at the evolution of the Chinese legal system in a diachronic and comparative perspective, examining the role played by the Western legal models.

The Italian Ministry of Education, University and Research is offering a 12 months fellowship to PhDs, graduates and scholars in possession of scientific and professional curriculum suitable for the conduct of research, to conduct research on the topic of the **'Relations between China and the European Union in the framework of intellectual property and competition' at the Department of Legal Studies** of the University of Salento, Italy.

The deadline for application is **7 June, 2013**.

Learn more about this fellowship on the [EURAXESS Jobs website](#) or download directly the [call document](#).

### **Netherlands - Rubicon**

Rubicon offers talented researchers who have completed their doctorates in the past year the chance to gain experience at a top research institution outside the Netherlands.

Postgraduates who are currently engaged in doctoral research or who have been awarded a doctorate in the twelve months preceding the relevant deadline



can apply. Applicants who are still engaged in doctoral research may only apply if their supervisor provides a written declaration approving their thesis.

In the five years directly preceding the submission deadline, applicants must have conducted scientific research at an academic research institute in the Netherlands for a period at least equivalent to three years fulltime.

Applicants can apply for a period of up to two years at an excellent research institution outside the Netherlands. The minimum duration is twelve months. The eligible costs are the salary including fringe benefits, travel costs and a limited amount for research costs.

Next deadline for application is **4 September, 2013**.

Further details can be found on the [NWO website](#).

### **Switzerland - Swiss National Science Foundation Advanced Postdoc.Mobility programme**

The fellowships for advanced postdocs are a funding scheme from the Swiss National Science Foundation (SNSF) enabling advanced postdocs to continue or to conduct a research stay outside of Switzerland.

The Advanced Postdoc.Mobility fellowships are awarded for 12 months up to a maximum of 36 months. In general, the maximum duration of 36 months for the mobility fellowships may not be exceeded. These fellowships are in principle awarded for a continuous stay.

In order to apply, candidates must hold a Doctorate (PhD) obtained no more than 5 years ago and have at least 1 year's experience as a postdoc. Foreigners (Non-Swiss) can apply but must have at least 3 years of research activity at a Swiss research institution.

The next deadline for application is **1<sup>st</sup> of August, 2013**.

Further details are available on the [SNSF website](#).

### **UK - AgriTT Research Challenge Fund: Working with China to accelerate agricultural technology transfer to low-income countries**

AgriTT is a new initiative between the UK Department for International Development (DFID) and the Ministry of Agriculture, China, and the Forum on Agricultural Research in Africa (FARA) to promote transfer of agricultural technologies, knowledge and management innovations from China to low-income countries in Africa and Southeast Asia. AgriTT has three components: Pilot Development Projects in selected countries; a Research Challenge Fund; Knowledge and communication of lessons on effective partnerships between China, UK and low-income countries to improve agricultural productivity and food security.



The AgriTT Research Challenge Fund invites teams of researchers to apply for grants to work on one of the following themes:

- **Critical agricultural technologies:** taking an agricultural technology innovation originating from China, and developing and adapting it to an LIC context with attention to the whole value chain from field to consumer.
- **Effective value chain development:** enhancing a commodity supply chain, where the commodity represents an innovation of proven technical feasibility sourced from China or elsewhere.
- **Innovation in knowledge sharing and communication:** enhancing agricultural information and knowledge flows related to a technology innovation to enable poor rural communities to make better informed decisions about their livelihoods.

Applications are invited from research teams that include partners from China, the UK and a low-income country in Africa/Southeast Asia. Researchers from other countries or international organisations may also be included.

Proposals selected for funding will demonstrate a high degree of innovation in their approach to use of new technologies, new products or services, new uses for existing technology, or new processes, including new mechanisms to deliver products or services.

Concept Notes should be submitted by **28th June 2013**, the best of these will be shortlisted and invited to submit full proposals. The deadline for full proposals is 30th August, 2013. Grants will be awarded in October 2013, and will run until October 2015. Grant will range between £150,000 and £300,000, depending on the theme addressed.

In addition, to the Open Call for Proposals outlined above, the RCF also supports Targeted Research linked to the Pilot Development Projects on cassava in Uganda, and aquaculture in Malawi. Proposals may request funding up to £300,000.

To apply, and for guidance notes on the Research Challenge Fund please visit [www.agriTT.org](http://www.agriTT.org).

### **UK - EPSRC-NSFC call for collaborative research with China on Grid Scale Energy Storage for Intermittency**

EPSRC, as part of the Research Councils UK Energy Programme, wishes to support collaborative research projects between the UK and China, in partnership with the National Natural Science Foundation of China (NSFC) in the field of "Grid Scale Storage for Intermittency". A scoping workshop was held in China in April to identify the following themes as priority areas for this call:

- **Advanced thermal and mechanical large scale energy storage from materials to devices**
- **Advanced electrochemical large scale storage from materials to devices**



- **Management, diagnosis and control of grid scale storage technologies**
- **Economics, policy and business models for grid scale storage**
- **Operation and control for balancing and stability of power systems with grid scale storage.**

Proposals are invited from leading UK researchers wishing to develop contacts and joint projects with leading researchers eligible for NSFC support in China.

Up to £5M is available from EPSRC with matched equivalent resources from NSFC (up to 3M RMB per project). Up to 5 projects starting in January 2014 are expected to be funded through this call. The costs of the UK institutions will be met from EPSRC funds, and those for the Chinese partners will be met by NSFC.

The call was issued on 14 May and will close on **2 July, 2013**.

More details can be found on the [EPSRC](#) (English) and [NSFC](#) (Chinese) websites.

### **UK - Wellcome Trust funding programmes**

The Wellcome Trust funds research in public health (including communicable and chronic diseases) and tropical medicine (including clinical and biomedical). The Trust's funding aims to support the brightest minds **in biomedical research and the medical humanities**, with the aim of improving human and animal health. A wide variety of funding schemes, including Investigator Awards, fellowships and Strategic Awards are offered to researchers at different stages of their careers. Non-UK researchers can in most cases also apply.

To learn more about these schemes, starting with the forthcoming application deadlines in [biomedical research](#) and [medical humanities](#), please visit the [Wellcome Trust website](#).

### **3.2 Calls still open**

Calls first announced in [previous editions of the newsletter](#)

### **Belgium - Odysseus Programme**

Application deadline is **1 June 2013**.

More details available on the [FWO website](#).



### **France - Sino-French Foundation for Science and its Applications Post-Doctoral Fellowships 2013**

The deadline to submit application is **1 June 2013**.

Find out all details about this call, the eligible topics and the application process, on the [French embassy website](#).

### **Switzerland - SNSF International Exploratory Workshops**

Although the call for this funding instrument is always open, there are three cut-off dates per year when the evaluation process begins. The next cut-off date is **5 June 2013**.

More details available on the [SNSF website](#).

### **Sweden - STINT Initiation Grants**

Next applications' assessment round starts on **11 June**. Two more will take place in 2013 starting respectively on September 10 and November 26.

Read more about this programme on the [Swedish Foundation for International Cooperation in Research and Higher Education \(STINT\) website](#).

### **Ireland - SFI Industry Fellowships Programme 2013**

Deadline for proposal submission is **21st June, 2013**. Pre-approval may be required to apply to the programme, please see the Programme Call Document on the [SFI website](#) for full details on eligibility and application procedure.

### **Switzerland/EU - PLANT FELLOWS**

The third call will be open from February 1st 2013 until **24 June, 2013**. See details at <http://www.plantfellows.ch>.

### **UK - Royal Society International Exchanges Scheme**

The closing date of the current round of application (R2/2013) is **26 June 2013**.

Find out more about this scheme and the current call on the [Royal Society website](#).

### **China - National Natural Science Foundation International Young Scientists Fellowship**

Two calls are issued every year. The deadlines for the 2nd call in 2013 are as follow: Deadline for host institution recommendation: **30 June, 2013**

Deadline for the recommended researchers to submit their application form: 19



July 2013.

Details available in source: [NSFC](#)

### **Luxembourg - INTER Mobility Programme**

The second and last deadline for application in 2013 is **1<sup>st</sup> of July**. Further information about this scheme can be found on the [FNR website](#).

### **Italy - 2013 PhD Scholarships for International Students at Institutions Markets Technologies Institute**

Deadline for application is **17 July 2013**. Further details can be found on the [IMT website](#).

### **EU - European/International Joint PhD in Social Representations and Communication Fellowship**

The deadline for application is **31 July, 2013**. Read the full announcement on the [EURAXESS Jobs \(and fellowships\) portal](#).

### **Germany - German Chancellor Fellowships for Prospective Leaders**

Application can be submitted until **15 September 2103**. The fellowship begins on 1 October of the following year.

More details available on the [Alexander von Humboldt Foundation website](#).

### **France - EFEO Field Scholarships**

The next application deadline in 2013 is **30 September 2013**, for scholarships tenable between 1 July and 31 December 2014.

Further details can be found on the [EFEO website](#).



### 3.3 Open calls under FP7 and Euratom

The following calls for proposals are currently open under the [Ideas](#) programme (managed by the ERC)

Call	Launched	Deadline
<a href="#">Calls for proposals for ERC Proof of Concept Grant</a>	10 January, 2013	3 October, 2013

The following calls for proposals are currently open under the [People](#) programme :

Call for proposals	Launched	Deadline
<a href="#">Marie Curie Intra-European Fellowship for Career Development (IEF)</a>	14 March 2013	14 August 2013
<a href="#">Marie-Curie International Incoming Fellowship (IIF)</a>	14 March 2013	14 August 2013
<a href="#">Marie Curie International Outgoing Fellowship for Career Development (IOF)</a>	14 March 2013	14 August 2013
<a href="#">Marie Curie Career Integration Grants (CIG)</a>	18 October 2012	18 September 2013

The following calls are open under the [Cooperation](#) programme

- [Transport \(including Aeronautics\)](#) / 1 open call
- [Joint Technology Initiatives \(Annex IV-SP1\)](#) / 4 open calls

The following calls are open under the [Capacities](#) programme

- [Support for the coherent development of research policies](#) / 1 open call
- [Research Potential](#) / 1 open call

## 4 Jobs

### 4.1 Jobs & Positions in China

#### **Assistant Professor (Lecturer)/Associate Professor in Economics at the University of Nottingham Ningbo Campus (UNNC)**

Applications are invited for the above post in the School of Economics based at the University of Nottingham Ningbo China. The new School is an integral part of the Nottingham University School of Economics, awarding the same internationally recognized degrees offered by Nottingham in the UK.

The successful candidate will contribute to the School's reputation as a recognised centre of international excellence. Applications are welcomed from candidates with interests across all areas of the discipline. The successful candidate will be expected to deliver high quality teaching programmes at both undergraduate and postgraduate level, assist with the leadership and administration of the School and undertake high quality research.

For the position of Assistant Professor (Lecturer) candidates must have a PhD in a relevant discipline (or be close to completion). Experience of teaching and tutorial work in relevant subjects at undergraduate and postgraduate level in an international English-speaking institution is also essential.

In addition to the requirements above, for the position of Associate Professor the successful candidate must have a PhD in a relevant discipline and should have experience in teaching and course leadership and an international reputation in research and scholarship.

For the position of Assistant Professor (Lecturer) the salary will be within the range of £33,230 - £44,607 per annum depending on skills and experience (salary progression beyond this is subject to performance).

For the position of Associate Professor the salary will be within the range of £47,314 - £56,467 per annum depending on skills and experience (salary progression beyond this is subject to performance).

In addition, an attractive package including accommodation allowance, travel allowance and insurance will be provided for international appointments.



EU – Postdoctoral and senior researchers positions at the Joint Research Centre

The European Commission's Joint Research Centre (JRC) is currently advertising the following vacancies:

- 7 doctoral position
- 56 postdoctoral positions
- 4 senior researcher positions

Further information on the [JRC website](#).

This post is available from 1 September 2013 or as soon as possible thereafter and will initially be offered on a fixed-term contract with the University of Nottingham Ningbo China for a period of up to five years. This contract may be extended on an indefinite basis by mutual agreement.

Deadline for application is **16 June, 2013**.

Learn more about this offer on the [University of Nottingham website](#).

## 4.2 Positions still open

Positions first announced in [previous editions of the newsletter](#)

### **Hong Kong - Editor in Chief job at the French Center for Contemporary Chinese Studies (Cefc)**

More details about this position and the desired profile can be seen [here](#).

Details about the application requirements are available [here](#).

Application is to be done online on the [French Foreign and European Affairs Ministry](#). Deadline to submit application is **7 June, 2013**.

:  
Access many other jobs & fellowships offers in Europe and worldwide on [EURAXESS Jobs](#).



## 5 Events

### 5.1 EURAXESS Links China Events

#### EURAXESS Science Slam China 2013

##### *What's a science slam?*

A science slam is a new and entertaining form of science communication. It is basically a scientific talk where scientists present their research work in a given time frame – usually 10 minutes or less - in front of a non-expert audience. The audience will judge the presentations based on criteria such as clarity, creativity, interest raised in the topic etc. and designate a winner.

##### *What's EURAXESS Science Slam China 2013?*

EURAXESS Science Slam China 2013 will be the first edition of an event that will give young Chinese and international researchers the chance to showcase their work as well as their oral talent and creativity in front of members of the research & innovation community and the wide public, in a joyful and convivial atmosphere.

This first edition is scheduled to take place in Beijing end of September.

Every presentation will be done in English by one researcher in a short time-frame and can be supported by video and audio material, ppt. slides and any other kind of media available, as well as by scientific equipment. The event will be open to PhDs student and post-docs of all nationalities, from all over China and from from all fields of research.

The winner of the slam will be awarded a trip to Europe and other surprises!

EURAXESS Science Slams will be held around the same time in all the other countries outside of Europe where EURAXESS is present, in the US, Brazil, India, ASEAN and Japan.

##### *How to participate?*

A pre-selection of the researchers who will be able to take part in the September final in Beijing is foreseen via online video-posting. Details are still being worked on and will be published soon on the EURAXESS Links China website and in the next edition of this newsletter... stay tuned!

Contact: [china@euraxess.net](mailto:china@euraxess.net)

## 5.2 EURAXESS Links China Recommends

### **Next ThinkIN China Session: The Civil Factor – NGOs in China, 6 June 2013, Beijing**

The guest speaker will be Professor Dr. ZHANG Changdong, Assistant Professor at the Department of Political Science at Peking University. Before transferring to Beida in 2012, he was an Assistant Professor in Political Science at Shanghai Jiao Tong University. Dr. Zhang received his Ph.D. of political science from University of Washington, Seattle (2011). He holds an M.A. degree in Political Science from Peking University (2008) and a B.A. degree of Economics from Beijing Technology & Business University (2004). His research interests include state-society relations, institutionalism and institutional change, local governance in China, and methodology.

Prof. Zhang will give a short overview of the history of NGOs in China, in what areas they are active, in what areas they thrive, and where they run into obstacles. How independent are NGOs? What political impact are they to bring to China? When can NGOs affect government policy in a strong authoritarian party-state like China?

This event is the final installment in the Spring 2013 season and the last one of the third academic year of ThinkIN China. The sessions and other activities will resume in September.

The practical information for next Thursday's session are as follow:

**Date:** June 6th, 2013

**Time:** 19:00

**Venue:** The Bridge Cafe Rm 8, Bldg 12, Chengfu Lu 成府路五道口华清嘉园12号楼8号

Contact [bridgethinkinchina@gmail.com](mailto:bridgethinkinchina@gmail.com) for more details.



### 5.3 Upcoming scientific events in China

Find out about major events in Europe on the [European Commission's 'Conferences & Events' website](#).

Field	Date	Location	Title <i>(click for more details)</i>
Medicine	3-7 June, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Vaccine Design</a>
Environment	4-7 June, 2013	Dalian	<a href="#">2013 Int'l Symposium on Environmental Science and Technology</a>
Software Engineering	14-16 June, 2013	Beijing	<a href="#">International Symposium on Computer Science and Electrical Engineering</a>
Mechanics	16-21 June, 2013	Beijing	<a href="#">13<sup>th</sup> Int'l Conference on Fracture - ICF-13</a>
Bioinformatics	17-20 June, 2013	Shenzhen	<a href="#">BGI Bioinformatics Workshop</a>
Plant Biology	17-21 June, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Plant Cell and Developmental Biology</a>
Genetics	24-28 June, 2013	Suzhou	<a href="#">Yersinia 11 - the 11th international symposium on Yersinia</a>
Education	6-7 July, 2013	Hong Kong	<a href="#">2013 2nd International Conference on Knowledge and Education Technology - ICKET 2013</a>
ICT	6-7 July, 2013	Hong Kong	<a href="#">2013 4th International Conference on Signal and Information Processing (ICSIP 2013)</a>
Applied science, Engineering	12-14 July, 2013	Shanghai	<a href="#">Shanghai International Conference on Applied Science and Engineering</a>
Nuclear engineering	29 July-2 August, 2013	Chengdu	<a href="#">The 21<sup>st</sup> Int'l Conference on Nuclear Engineering</a>
Modernization science	8-10 August, 2013	Beijing	<a href="#">1<sup>st</sup> int'l modernization forum</a>
Astronomy	16-18 August, 2013	Lijiang	<a href="#">Collaboration Meeting on Antarctic Survey Telescopes</a>
Health	19-24 August, 2013	Beijing	<a href="#">Asian Mycological Congresses 2013</a>
Biotechnology	20-21 August, 2013	Shanghai	<a href="#">5th Annual BioProcess International™ China</a>
Atomic and Molecular Physics	20-23 August, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on New Advances in Optical Imaging of Live Cells and Organisms</a>
ICT	20-23 August, 2013	Beijing	<a href="#">2013 IEEE International Conference on iThings/CPSCoM/GreenCom (2013 World Cybermatics Congress)</a>
ICT	20-23 August, 2013	Beijing	<a href="#">2nd International Workshop on energy</a>



			<a href="#">and Wireless Sensors (e-WiSe)</a>
Biology, Food safety	25-30 August, 2013	Beijing	<a href="#">10<sup>th</sup> Int'l Congress on Plant Pathology - ICCPP</a>
Engineering	28-31 August, 2013	Macau	<a href="#">International Congress on Engineering and Information (ICEAI 2013)</a>
Engineering	29-31 August, 2013	Macau	<a href="#">2013 International Symposium on Engineering and Natural Sciences</a>
Management & Economics	29-31 August, 2013	Macau	<a href="#">Annual Symposium on Management, Operation Research and Economics</a>
Innovation	1-2 September, 2013	Beijing	<a href="#">2013 4th International Conference on Innovation, Management and Service- ICIMS 2013</a>
Management	1-2 September, 2013	Beijing	<a href="#">2013 2nd International Conference on Management Technology and Science- ICMTS2013</a>
Construction & Project Management	1-2 September, 2013	Beijing	<a href="#">2013 4th International Conference on Construction and Project Management - ICCPM 2013</a>
Cancer Research	2-6 September, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Cell Signaling in Metabolism, Inflammation and Cancer</a>
Pharmacology	4-6 September, 2013	Shanghai	<a href="#">World Biopharma Week China Focus 2013</a>
<i>EU-China cooperation Medicine</i>	6-7 September, 2013	Shanghai	<a href="#">1st Euro-Asian Experts Conference on Immune Biomarkers for Personalized Medicine in Oncology</a>
Chemistry	8-13 September, 2013	Shanghai	<a href="#">The 24<sup>th</sup> International Society of Heterocyclic Chemistry Congress</a>
Infectious Diseases	9-13 September, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Molecular Basis of Aging and Disease</a>
Pharmacology	20-22 September, 2013	Suzhou	<a href="#">2013 Chinese Congress and Exposition on Gerontology and Health Industry</a>
Bioinformatics	20-22 September, 2013	Taicang	<a href="#">InCoB2013 - 12th International Conference on Bioinformatics</a>
Chemistry	22-25 September, 2013	Dalian	<a href="#">2nd International Congress on Catalysis for Biorefineries (CatBior 2013)</a>
Space	23-27 September, 2013	Beijing	<a href="#">64<sup>th</sup> International Astronautical Congress</a>
Biotechnology	23-27 September, 2013	Beijing	<a href="#">The 13<sup>th</sup> International Conference on Culture Collections - ICC-13</a>
Computational Biology	23-27 September, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Frontiers in Bioinformatics and Computational</a>



			<a href="#">Biology</a>
Chemistry	24-27 September, 2013	Chengdu	<a href="#">2013 Int'l Autumn Seminar on Propellants · Explosives and Pyrotechnics</a>
Energy	25-28 September, 2013	Shanghai	<a href="#">5<sup>th</sup> World Hydrogen Technologies Convention · WHTC2013</a>
Genetics	7-11 October, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Genetic, Genomic, and Translational Studies of Human Leukemia</a>
Neuroscience	10-15 October, 2013	Shenyang	<a href="#">3rd International Neural Regeneration Symposium (INRS2013), in conjunction with the 5th International Spinal Cord Injury Treatments and Trials Symposium</a>
Biology	14-18 October, 2013	Suzhou	<a href="#">CSHA / ISSCR Joint Meeting on Stem Cells in Science and Medicine</a>
Biology	15-20 October, 2013	Beijing	<a href="#">The 11<sup>th</sup> World Conference on Animal Production · WCAP2013</a>
Neuroscience	21-25 October, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Development, Function and Disease of Neural Circuits</a>
Immunology	28 October-1 November, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Tumor Immunology and Immunotherapy</a>
Metabolism	4-8 November, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Nuclear Receptors and Diseases</a>
Environment	17-20 November, 2013	Beijing	<a href="#">Urban Environmental Pollution 2013 Asian Edition (UEP2013)</a>
Microbiology	18-22 November, 2013	Suzhou	<a href="#">CSH Asia 2013 Conference on Bacterial Infection and Host Defense</a>
Engineering	19-21 December, 2013	Hong Kong	<a href="#">2013 Hong Kong International Conference on Engineering and Applied Science</a>



## 6 Press Review\*

### 6.1 Policy & Papers

#### **Urbanization plan not rejected: NDRC**

The State Council of China hasn't rejected an urbanization proposal drafted by the National Development and Reform Commission (NDRC), said the director of the commission on Friday on the sidelines of Premier Li Keqiang's official visit to Switzerland. The commission has been studying plans to further the nation's urbanization drive and hasn't submitted any urbanization plan to the State Council yet, said Xu Shaoshi, denying earlier reports that Premier Li Keqiang has rejected an urbanization proposal from the NDRC. China will continue to actively and steadily advance its urbanization drive, putting people first and ensuring environmental protection, added the director. (source: [China Daily](#))

#### **EC to revise visa rules for non-EU researchers**

The EC has announced plans to update the current EU legal framework governing visas for non-EU national researchers and students. The core aim of the proposal, which seeks to update two current Directives dating from 2004 and 2005, is to make it easier and more attractive for non-EU national researchers and students to enter and stay in the EU for periods exceeding three months.

The new legislation will seek to set clearer time limits for national authorities to decide on applications, and will make it easier for a researcher from a non-EU country to move to another EU country and access the job market during their stay. The proposal follows a recent consultation and progress report in which a number of problematic issues with the current rules were identified, such as the differing conditions on entering and staying in the EU between different EU countries. The UK did not participate in Directive 2004/114/EC (on non-EU national students) and Directive 2005/71/EC (on non-EU national researchers),

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but would have the possibility to opt in to the new single Directive. This would come into force in 2016. (**Further information:** <http://europa.eu/rapid/>)

### **CAS Hugs Headquarters Institutional Reform on Scientific Research Management**

The Chinese Academy of Sciences (CAS), a leading academic institution and comprehensive research and development center in natural science, technological science and high-tech innovation in China, launches an institutional reform in the headquarters on science and development management this week. The reform, under the guidance of “Innovation 2020” Strategic Planning, will focus on sorting out relationships between the CAS headquarters and the research institutes, strengthening their coordination and improving the work efficiency. Chinese government is carrying out a series of functional transformations of the institutions, cutting government interventions that hinder more robust growth in the world's second-largest economy. The Chinese economy growth should transform from factor-driving to innovation-driving, while innovation includes not only scientific innovation, but management and model innovation. New departments in the CAS headquarters will be set up according to their practical work and divided into two categories: scientific research management and general business management. The CAS institutes will enjoy more decision-making freedom after the reform; while the CAS headquarters will reduce interventions in specific management of its research institutes. So far, CAS has 12 branch offices, 104 institutes with legal entity, more than 100 national key laboratories and national engineering research centers, and about 1,000 field stations throughout the China. (source: [CAS](#))

### **Top leaders unsatisfied with urbanization plan**

Top Chinese government officials have delayed a meeting on national urbanization development because they are unsatisfied with the draft plan, *CBN Daily* reported. The development plan proposes upgrading the metropolitan regions surrounding Beijing-Tianjin-Hebei, the Yangtze River Delta and the Pearl River Delta by 2020 to make them more internationally competitive. More city clusters will be also be built in central and western regions. However, top government leaders are not satisfied with the plan because it did not have any detailed measures for specific areas, an insider said. Many important policies will come out in July and the end of this year, according to sources from the National Development and Reform Commission. Opinions on the overall draft urbanization plan are being sought from different departments and local governments, and will be published after the national urbanization meeting. (further details in source: [China Daily](#))



### **'New-style' urban plans to protect migrants**

The State Council, or China's cabinet, has called for a middle to long-term plan to promote new-style urbanization, enabling more migrant workers and their families to settle in cities. The government will accelerate hukou, or household registration system, reform, and protect rights of rural citizens, officials said at a regular meeting of the council. Drafting of the first national plan for promoting urbanization was completed before the two legislative sessions in March, and advice is being sought from ministries, local governments and experts. The plan could be launched in the middle of the year, with supporting measures announced in the second half of the year, according to experts involved in the drafting. Compilation of the plan was led by the National Development and Reform Commission, with the help of more than 10 ministries, including the Ministry of Housing and Urban-Rural Development and the Ministry of Human Resources and Social Security. (source: [People](#))

## **6.2 Voices & opinions**

### **President Xi pledges not to sacrifice environment**

President Xi Jinping on Friday pledged that China will not sacrifice the environment for temporary economic growth. China will have to carefully balance economic development and environmental protection, Xi said, at a study session with members of the Political Bureau of the Communist Party of China (CPC) Central Committee. "We have to understand that to protect the environment is to preserve our productivity and to improve the environment is to develop our productivity. Such concepts should be deeply rooted," Xi said. The country will consciously promote a green, sustainable and low-carbon development pattern, he said. (source: [China Daily](#))

### **Li stresses importance of innovation, IPR protection**

Chinese Premier Li Keqiang on Saturday stressed the significance of innovation and called for more technological cooperation between enterprises. Innovation can create immeasurable wealth, Li said during a visit to the Einstein House museum in the Swiss capital of Bern, the residence of Albert Einstein from 1903 to 1905. Protection of intellectual property rights must be stepped up so as to rev up the passion of innovators and make sure that they receive merited returns, added the premier. He also encouraged enterprises to pay attention to technological cooperation and come up with products that are both technologically advanced and aligned to market needs. The Chinese government, he said, has put forward a series of measures to boost

technological innovation, and welcomes investment by Swiss and European companies. (source: [China Daily](#))

### **High-tech, scientific cooperation encouraged**

Germany has been urged to become "even more open and flexible" on joint high-tech and scientific research with China, which is expected to result in tremendous new economic and trade opportunities and boost the two countries' economic relations. Cheng Lesheng, executive director of the Beijing-based Sino-German Center for Research Promotion, made the proposal as Premier Li Keqiang visits Germany on the last leg of his four-country visit. "If Germany decides to take a more open attitude during the premier's visit and further relaxes its control over high-tech cooperation, it will gain even more opportunities in China," said Cheng. He asked Germany not to follow the actions of the United States and the EU, which have imposed restrictions on China for a number of reasons including security concerns. Cheng urged German leaders' "strategic thinking" in this endeavor and recommended that the two countries beef up future economic and trade cooperation. He said China and Germany will sign a series of joint projects in science and technology during Li's visit that will also involve "international mega projects". Cheng's center, jointly set up by the German and Chinese governments 13 years ago, has already offered research grants to 17,000 scientists from both sides, launched 19 joint research labs and sponsored more than 300 seminars. (source [China Daily](#))

### **Chinese VP stresses scientific, tech innovation**

Vice President Li Yuanchao has called for science and technology (S&T) workers to devote themselves to innovation. Li made the remarks on Saturday at the opening ceremony of the 15th annual meeting of the China Association for Science and Technology (CAST). The meeting, which lasted until Monday 27 May, was attended by more than 2,500 S&T workers, as well as renowned scientists and scholars from abroad. Li said the country's innovation drive will require the wisdom of all its S&T workers, encouraging them to ensure that their own professional pursuits are in line with the requirements of the country's strategic development. Li said enterprises should use innovation to help them transform their industrial growth modes. While encouraging ambitious professionals to go beyond campuses and research institutes to set up their own S&T companies, Li also urged CAST organizations at all levels to improve services for S&T workers. (source: [China Daily](#))



### **Sci-tech groups to take new social roles: Government will transfer some responsibilities to associations**

Vice-President Li Yuanchao urged science-and-technology associations and societies to strengthen their social management roles. Li made the call in a speech at the opening ceremony of the 15th Annual Meeting of the China Association for Science and Technology, which began in Guizhou province's capital Guiyang on Saturday. The China Association for Science and Technology is the country's largest nongovernmental organization of scientific and technological workers, with 181 member societies. The annual meeting is a grand gathering of China's science community, staged annually in different cities since 1999. Li said the government's transformation requires the association to assume responsibility for some social functions. Science societies often engage in public service. (source: [China Daily](#))

### **Changing nature of urbanization**

Focus should be on improving people's quality of life, sustaining resources and protecting the environment. Urbanization has played an important role in driving China's economic growth over the past decades since the launch of reform and opening-up. However, with economic development driven by industrialization, investment and measures to expand the size of the economy, urbanization has been reliant on the low-cost utilization of resources and a degraded environment. (further details in source: [China Daily](#))

### **Scientists paying more to reach world**

The fast-growing economy has had one unintended consequence: Scientists must pay more if they want to get published in international journals, which no longer consider China a low-income country. For example, US online publication PLoS One charges Chinese researchers as much as \$1,350 per article, a standard fee for contributors from the United States and Europe. In comparison, it charges nothing for papers submitted from low-income countries such as Afghanistan, Cambodia and Ethiopia, while charging \$500 for lower-middle-income countries such as India, Cuba and Egypt, in accordance with a country's per capita GDP and investment in science and technology. Many other international journals do not recognize China as a developing economy. Li Jing, a Chinese researcher working in Finland, used his blog to call on Chinese scientists to boycott PLoS One - and more than 60 scientists signed up to protest the fees. However, the nation's scientists believe the ultimate solution lies closer to home. (source: [China Daily](#))



## **Xi pins hope on youth for innovation, advancement**

Chinese President Xi Jinping said he pins his hope on the Chinese youth for innovation and national advancement during dialogues with young representatives on the Youth Day. Visiting an exhibition on China's space technological progress together with a group of outstanding young people from different circles on 4 May, Xi encouraged them to spare no efforts to master first-rate skills. The Chinese Youth Day, which falls on May 4 each year, was set to commemorate the beginning of the May 4th Movement in 1919, an anti-imperialist, anti-feudalist movement growing out of student demonstrations. Xi said his visit was to commemorate the patriotic May 4th Movement and inspire all Chinese including the youth to strive for realizing the "Chinese dream," or the great renewal of the Chinese nation. (source: [Global Times](#))

## **6.3 Thematic activities**

### **Health**

#### **Chinese Biologists Find New Method to Improve Cell Reprogramming Efficiency**

Sequential introduction of the proteins known to reprogram cells could improve the efficiency of cell reprogramming, according to a new study reported in Nature Cell Biology on Sunday. Currently, researchers use simultaneous introduction method in cell reprogramming, which introduces the proteins to reprogram cells back to a pluripotent, embryonic-like state. Chinese stem-cell biologist Pei Duanqing and colleagues from Chinese Academy of Sciences reported that the sequential introduction of reprogramming proteins outperforms simultaneous introduction. According to the report, sequential introduction leads to a greater number of cells being reprogrammed than traditional method, and the increase in efficiency was observed both for mouse and human differentiated cells. The successive expression of reprogramming factors promotes the cells to adopt mesenchymal characteristics before going through an epithelial state and finally reaching pluripotency. This discovery provided a technique for further optimizing the reprogramming of somatic cells to induced pluripotent stem cells, researchers said. (source: [CAS](#))

#### **Scientists reveal H7N9 clinical findings**

A new report by Chinese scientists has showed that all the 111 H7N9 avian influenza patients investigated for the research had a fever while 90.1 percent had developed coughs, and males and the elderly are more likely to be infected.

The report by scientists from 30 hospitals in seven Chinese provinces and municipalities revealed for the first time the clinical findings of 111 patients who were confirmed as infected with H7N9. According to the report, published recently on the website of the New England Journal of Medicine, one of the world's most prestigious peer-reviewed medical journals, 76.6 percent of the studied patients were admitted to an intensive care unit while 27 percent died. The median age of the patients was 61 years, and 42.3 percent were 65 years of age or older, indicating that the elderly are more likely to be infected with the disease. (source: [China Daily](#))

### **Intestine transplant operation a success**

Asia's first intestine transplant, between twin sisters, was successful, Xijing Hospital announced on Tuesday in Xi'an, capital of Shaanxi province. Zhao Qingchuan, head of the operation team, told China Daily that the operation was conducted on May 4 with more than 50 doctors and nurses in his hospital. The patient, a 45-year-old resident of Xi'an, suffered from small intestine and colon necrosis (dying tissue) which left only 14 cm of small intestine, a fortieth for a normal person and was unable to eat. Fortunately, the patient had a twin sister who could provide part of her small intestine without fear of rejection by the body. Doctors took out 160 cm of small intestine from the elder sister and transplanted it to the patient. Six days after the operation, the patient was able to eat and move around the ward. (source: [China Daily](#))

### **Researchers Discover New Approach to Discriminate and Study Chemical Phylogenetic Relationships among *Dendrobium* Species**

*Dendrobium*, commonly known as SHI-HU in China, is a precious herbal medicine. The high biodiversity of *Dendrobium* and the therapeutic needs require tools to discriminate different *Dendrobium* species correctly. At present, because of their wide usage in TCM, some *Dendrobium* species are over exploited from the wild. Therefore, it is very important to find other *Dendrobium* species as alternative resources to substitute the efficacy-confirmed and endangered species. Recently, Prof. CHUN Ze's team from Chengdu Institute of Biology performed an experiment in order to discriminate different *Dendrobium* species using FTIR spectral features and study the chemical phylogenetic relationships among *Dendrobium* species through chemometric analysis of their IR spectra. The researchers analyzed the FTIR spectra of seven *Dendrobium* species from Yunnan province, China to study the possibility of discriminating different *Dendrobium* species based on their species-special IR features. They also constructed the chemical phylogenetic relationships through chemometric analysis of their corresponding secondary derivative IR spectra. (source: [CAS](#))



### **Chinese Scientists Unravel Sperm New Inheritance Contribution to the Offspring**

Chinese scientists have revealed that the DNA methylome of sperm, not oocytes, is inherited by offspring. The discovery was made by a research team led by Professor LIU Jiang from Beijing Institute of Genomics, Chinese Academy of Sciences. Their findings were published in leading international academic journal *Cell* as a cover story on May 9th. (source: [CAS](#))

### **China uses space technology to modify artificial heart**

A sheep implanted with a new type of artificial heart developed by Chinese scientists using cutting-edge aerospace technology has lived for 62 days thus far, the heart's developers announced on Monday 13 May. The development of the heart was jointly conducted by scientists from the China Academy of Launch Vehicle Technology and TEDA International Cardiovascular Hospital in north China's Tianjin Municipality. The sheep, nicknamed "Tianjiu," is in sound condition after receiving the blood pump on March 14, said Liu Xiaocheng, president of the hospital. (further details in source: [People](#))

### **SIMM Identifies Novel Mechanism for Drug Selectivity**

Pharmacological augmentation of neuronal potassium currents by small molecule drugs is now an attractive strategy to treat certain hyperexcitatory neurological diseases including epilepsies. The combination of homologous subunits and distinct functional roles of various potassium channels argues for subtype selectivity of active small molecules. Compound selectivity for a targeted protein is commonly attributed to biochemical binding specificity. Researchers from the International Scientist Working Station of Neuropharmacology, Shanghai Institute of Materia Medica, Chinese Academy of Sciences (SIMM), revealed that the drug selectivity on protein targets is dynamic and may be regulated by receptor signaling via PIP2. (source: [CAS](#))

### **China's biopharmaceutical industry booms**

Sales revenue of China's biopharmaceutical industry hit 178 billion yuan (\$28.92 billion) last year, up 18.4 percent from 2011, and is expected to maintain fast growth over the coming years, said industrial commerce chamber. The boom is mainly down to surging market demands government support and the emergence of Chinese companies, according to the China Chamber of Commerce for the Import and Export of Medicines and Health Products. China has become an aging society, resulting in a higher incidence of chronic diseases and cancer. The effectiveness of biomedicines against these illnesses

is much better than that of chemical drugs so demand is likely to continue to increase. (source: [People](#))

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## **Food, agriculture & fisheries, biotechnology**

### **Carrefour China opens food-safety lab in Shenyang**

Carrefour China opened its fourth A-level lab for food safety on May 22. The lab, in Shenyang, capital of Liaoning province, will release the food testing results to the public regularly to guarantee food safety. The 5-million-yuan (\$815,000) lab is capable of detecting 46 different pesticides and additives in more than 65 kinds of food and vegetables, meat and fish. Carrefour promised to withdraw unqualified products, inform the supplier and report the action to the local government as soon as possible. Carrefour China's other three A-level laboratories for food safety are in Beijing, Shanghai and Chongqing. (source: [China Daily](#))

### **'Super rice' top China draw for 2015 Milan Expo**

A "super rice" hybrid will be the central exhibit of the China Pavilion at the World Expo 2015 in Milan, officials said. The China Pavilion will be the second largest at the Expo Milan, which has agriculture and food as its theme. It will cover some 4,500 square meters, second in size only to the 4,900-square-meter Germany Pavilion, said Wang Jinzhen, vice president of the China Council for the Promotion of International Trade. "This hybrid rice has contributed a lot to feeding not only Chinese people but also people in southeast Asia and Africa," Wang told a press conference in Shanghai yesterday. (source: [China.org](#))

### **Electronic chip will help tackle carcass dumping**

A new technology developed in the ear tag of pigs will help prevent the casual dumping of dead swine, a practice that aroused food safety concerns earlier this year in Shanghai and several parts of China. Shanghai Bio-tag Co has developed an electronic chip that has been, so far, embedded in the ear tags of 170,000 female pigs in Shanghai, eastday.com reported on May 14. Hopefully the technology will be promoted to all pig farms in Shanghai in two years. The company could not be reached for a comment. The chip – the size of a watermelon seed – will store information, including the animal's conditions while being raised, time of slaughter and vaccinations. The tag will also allow carcasses to be traced. In March, more than 10,000 pig carcasses dumped by farmers were found floating on a river through Shanghai. (source: [China Daily](#))



### Food safety system

To do well the jobs that fall within their jurisdiction is what Premier Li Keqiang required of governments at all levels at Monday's 13 May State Council meeting. Ensuring that food is safe to eat is one of the most urgent and demanding jobs. Li stressed that monitoring and inspection should be tightened and crackdowns be severe in line with the law to relieve residents of their worries about food safety. He said that both the central and local governments must pay sufficient attention to the problem, and, tight as finances might be, money must be spent on guaranteeing food safety. The most recent incidents of fake mutton and poisoned ginger have again raised concerns about food safety. To make more money, some people have illegally passed off pork or duck meat or even rat meat as mutton. Some villagers have used banned chemicals on ginger in order to kill pests. However, the ginger grown in such conditions is harmful to humans. It is shocking that these people have no morals or scruples and they should be punished as severely as the law prescribes. Yet if the food inspection system were tight enough to block such fake and poisonous products from entering the market, no matter how heartless these people are, they would not have bothered. If the punishment were severe enough to let them feel real pain once caught, they would not dare to produce such dangerous foodstuffs. In addition, some corrupt food inspectors take bribes to allow unsafe food into the market. While the culprits in the fake mutton and poisonous ginger cases must first of all be punished for their offenses, the traditional case-by-case approach to handling food safety problems has proven inadequate. In the long run, food safety should be included in the assessment of the work performance of government leaders at all levels so that they will pay due attention to the work of food monitoring and inspection. How to make the food monitoring and inspection system function as it should is a problem this government must solve once and for all. (source: [China Daily](#))

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### Information & communication technologies

#### 4GS/s 8bit ADC Chip and 3GS/s 12bit DAC Chip Developed in IMECAS

4GS/s 8bit Analog Digital Converter (ADC) chip and 3GS/s 12bit Digital Analog Converter (DAC) chip designed by the Microwave Devices and Integrated Circuits Department (Department No.4) of the Institute of Microelectronics of Chinese Academy of Sciences (IMECAS), have been successfully developed in late May 2013. 4GS/s 8bit ADC Chip consists of two circuits of ADCs. Each road is integrated with wide-band sample-and-hold circuits and designed by structural shape optimization of Folding/Interpolating. Inner-structure of the chip is integrated with SPI program interface, which can calibrate the offset between two ADC circuits and make the ADC Working Mode more flexible. This 4GS/s 8bit ADC Chip has been fabricated by domestic technology. Significant digit in test is larger than 7.0 bit. Input signal simulation bandwidth is 1.5GHz. The chip has the highest maximum sampling frequency of 8bit ADC in China up to now. (source: [CAS](#))

**5,000 city users to put 4G services to the test**

Long-awaited 4G services, which provide mobile users with Internet access 20 to 50 times faster than 3G network, make their debut in Shanghai next month when China Mobile begins large-scale trials, the carrier said. The trial in the world's biggest mobile phone market indicates that the country is ready to adopt the most advanced mobile technology for more than a billion handset users, and create a billion-dollar market for telecommunications equipment and handsets. From June 1, China Mobile's Shanghai branch will invite 5,000 users to test the latest 4G products including mobile phones and data cards based on TD-LTE (time division-long term evolution) technology, a domestic 4G technology. (source: [Xinhua net](#))

**China's software industry growth quickens**

The growth of China's software industry quickened last year despite sluggish market demand caused by an economic slump at home and abroad, showed official data revealed. Chinese software companies garnered 2.48 trillion yuan (399.55 billion U.S. dollars) in revenue in 2012, a rise of 31.5 percent from the previous year, the Ministry of Industry and Information Technology said. The growth rate was up from the 25.4 percent recorded in 2011, according to the ministry's data. The increase is attributable to flourishing software businesses in the nation's major cities, Chen Wei, director of the ministry's Department of Software Service Industry, said at a Beijing press conference for an upcoming software expo. (source: [Xinhua net](#))

**Remote-control via facial expression**

Ever wished you could ring up a friend just by winking, or turn off a light by yawning but without getting out of bed? Researchers at Nankai University in Tianjin say they have worked out a remote-control gadget that can send simple instructions to cell phones, lights and other modified devices by facial expression. The gadget, which includes a headphone-like brainwave scanner and a receiver that connects to a laptop, can read the user's mind. Software installed in the laptop then instructs a preselected cell phone to ring, said Duan Feng, associate professor in the university's automation department. (further details in source: [China Daily](#))

### The future of wearable computers



Photo/Xinhua

Ji Huaxia, technical director at Yunnan North OLIGHTEK Opto-Electronic Technology Co, shows an OLED (Organic Light Emitting Diode) micro display, in Kunming, Southwest China's Yunnan province, May 9, 2013. Ji, who has a doctorate from the University of Birmingham, has been engaged in OLED micro display research in China since 2006. The display is applied to eye-book, a wearable computer product developed by the company that sold 15,000 sets in 2012. Ji said the company is trying to improve the technology and increase capacity to make the product cheaper and as popular as cellphones. (source: [China Daily](#))

### Full speed ahead

Though 3G is still a new concept for many Chinese people, China Mobile - the world's largest telco - is actively building and touting a faster 4G network at full throttle. The 4G LTE (long-term evolution) platform, developed by the 3GPP (3rd Generation Partnership Project), is the new standard for mobile communications, widely expanding on the domains of earlier 2G and 3G networks. While US and European markets are based on the FDD-LTE (frequency division duplex-LTE) platform, Chinese consumers are looking toward TD-LTE (time-division LTE), a homegrown platform co-developed by China Mobile together with other telecom equipment makers in China and abroad, including ZTE, Datang Telecom, and Nokia Siemens Network. (further details in source: [Global Times](#))

### Sophisticated 3-D becoming more affordable

China's fast-growing 3-D printing technology has become more sophisticated yet more affordable. Technology savvy buyers may now spend as little as 6,800 yuan (\$1,100) for a printer that churns out anything from a microwave to a hammer or a doll. "As long as you have computer aided design software, we can have it printed. New manufacturing techniques may shorten the production cycle and meet personalized needs," Li Yizhe, a representative of Shaanxi Hengtong Intelligent Machine, said at the China (Shanghai) International Technology Fair. More than 100 new technologies showcased by 30 companies aim to ride the 3-D printing boom and eat away at the market share of dominant foreign companies. (further details in source: [China Daily](#))

### Smart cities can change the world

A press conference aiming at promoting the 2013 Smart City Expo World Congress kicked off on May 7, 2013 in Beijing. The meeting is being jointly held by the China Communications Industry Association, China Smart City Planning

and Construction for Promotion Alliance and Representative Office of Fira De Barcelona in China, at the Institue Cervantes. Smart City Expo World Congress was held twice. The previous Smart City Expo World Congress was held at the Gran Via Venue in Barcelona, Spain, Nov 13, 2012. Experts and leaders from the smart city community shared the latest developments, results and strategies to tackle the challenges of the global scenario for the future of cities. (source: [People](#))

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## **Nanosciences, nanotechnologies, materials & new production technologies**

### **Benchmark Solutions for Sound Propagation in an Ideal Wedge Proposed**

Sound propagation in a wedge-shaped waveguide with perfectly reflecting boundaries is one of the few range-dependent problems with an analytical solution. Hence, it provides an ideal benchmark for a full two-way solution to the wave equation. An analytical solution for the sound propagation in an ideal wedge with a pressure-release bottom was presented in the year of 1990. The ideal wedge problem with a rigid bottom is also of great importance in underwater acoustics. Currently, an exact analytical solution to the ideal wedge problem with a perfectly reflecting bottom, either rigid or pressure-release is proposed by LUO Wenyu, YANG Chunmei, QIN Jixing, ZHANG Renhe who is one of the Chinese Academy of Sciences(CAS) Members from the State Key Laboratory of Acoustics, Institute of Acoustics, CAS (IACAS). This proposed analytical solution can be used as a primary range-dependent benchmark to establish the accuracy of numerical models. (source: [CAS](#))

### **A New 3D-graphene Foam Neuroscaffold YET**

Prof. CHENG Guosheng's research group with the Suzhou Institute of Nano-Tech & Nano-Bionics, Chinese Academy of Sciences, firstly reported a new three-dimensional graphene foam as an active neuroscaffold for neural stem cell culture. This work has recently been published in Scientific Reports (2013, 3,1604). Graphene, 2-dimensional monolayer of carbon atoms, is a promising candidate for the ultrafast nanoelectronic devices, quantum computers, transparent electrodes, nanocomposite materials and biomedical materials, due to its instrincky novel thermal, mechanical and electronic properties. It has already been utilized in a variety of biomedical applications, such as cellular imaging and drug delivery, bio-analysis and even photothermal therapy for tumor. (source: [CAS](#))



### **Bayer wants to export technology made in China**

Germany-based Bayer Group said that while China is continuously exporting products to the global market, it's also expected to export technology to the rest of the world. "We are aiming to reach a global innovation footprint for Bayer and its partners by exporting China-made technology to the rest of the world by 2020," said Patrick Thomas, CEO of Bayer MaterialScience, a subgroup of the Bayer Group and a world leading polymeric materials provider for high tech solutions. According to Thomas, China is quickly catching up with peers due to its increased spending, which accounts for about 15 percent of Bayer MaterialScience's global R&D spending, or 242 million euros (\$311.8 million) in 2012. Thomas's expectations are based on the company's regional innovation hub in Asia-Pacific, which was officially launched on Tuesday at the company's polymer research and development center in Shanghai. Together with its customers, the company will develop new ideas for the use of high-performance plastics, foams and coatings in key sectors such as mobility, construction, IT and renewable energy. Li Yongwu, chairman of the China Petroleum and Chemical Industry Federation believes the regional innovation hub is in line with the promotion of indigenous innovation and efforts to enhance R&D laid out in China's 12th Five-Year Plan (2011-15). (source: [China Daily](#))

### **Carbon Aerogels Sop Up Hydrocarbons**

Foamy, ultralight aerogels made of carbon, like their more well studied silicon-based cousins, have innumerable potential uses, from catalysts to sensors. Until now, their synthesis has been expensive or complicated, or has required toxic materials. A team led by [YU Shuhong](#) at the Hefei National Laboratory for Physical Sciences at Microscale (HFNL), University of Science and Technology of China (USTC) is pursuing their production from biomass. They selected bacterial cellulose (BC) pellicles, a commonly used, inexpensive, nontoxic form of biomass consisting of a tangled network of cellulose nanofibers, as precursor to produce ultralight carbon nanofiber aerogels in large-scale. This biomass can easily be produced on an industrial scale through microbial fermentation. (source: [CAS](#))

### **Printing Electronics Just Got Easier**

Do-it-yourself electronics manufacturing may soon be possible with your desktop printer, say the designers of a new system that directly prints electronic circuits onto ordinary paper. Jing Liu, of the [Chinese Academy of Sciences](#) in Beijing, said his team's advance—published May 9 in the journal [Scientific Reports](#)—could be a leap forward in the booming business of printed electronics. "This brand-new technique offers a vital opportunity to realize rapid fabrication of inexpensive, disposable, conveniently portable circuits and functional components," he said, adding that the process could help "pave the way toward personal printed electronics." (source: [CAS](#))



### **Dark Field Imaging of Rattle-type Silica Nanorattles Coated Gold Nanoparticles in vitro and in vivo**

In recent years, metal nanoparticles have showed great application prospect in the field of biological imaging, cancer diagnosis and treatment due to its unique optical scattering and optical absorption properties. In many metal materials, gold nanoparticles have caused concerns in the field because of its simple preparation, easy to modify advantages. However, the poor stability in physiological fluids environment and the potential toxicity of gold nanoparticles always restricts its application in the biological field. TANG Fangqiong and her group from Laboratory of Controllable Preparation and Application of Nanomaterials, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences have been devoted to the controllable preparation of nanomaterials and biological applications. In recent years, they invented a method to fabricate silica nanoparticles with the special rattles-type structure named silica nanorattles (SNs) and developed the nanoparticles as drug delivery system, biological detection and catalytic. (source: [CAS](#))

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### **Environment (including climate change)**

#### **China to issue new plan for air pollution control**

A national plan for air pollution control could be outlined as early as this week (May 27- June 2<sup>nd</sup>), said 21cbh.com, a professional financial news website Tuesday 28 May. The outline will target the reduction of air pollution on a national scale by establishing clear standards of air quality in different regions. Coal plants, motor vehicles and dust that produce fine particulate matter will be the focus of strict control in the outline initiated by the Ministry of Environmental Protection, according to multiple sources who told the news website. The overall plan has undergone multiple revisions and will be submitted to the State Council, China's cabinet, for review by the end of this month, the Shanghai Securities News quoted Yang Tiesheng, deputy director of the energy saving department under the Ministry of Industry and Information Technology, as saying on May 22. The specific measures put forward by the plan include stipulating the declining rates of atmospheric pollutants such as PM2.5 (particles smaller than 2.5 microns in diameter), sulfur dioxide, nitrogen oxide in cities, the reduction of coal consumption throughout the country, as well as the promotion of using clean energy such as natural gas, while banning coal-fired power plants in cities and minimizing heavy-polluting vehicles. The Yangtze River Delta region and the Pearl River Delta region will be the key areas of the new air pollution prevention campaign. (source: [China Daily](#))



### **Machines help turn trash into treasure**

The Beijing Subway's Line 10 will soon have "reverse vending machines", which will pay customers for their empty plastic bottles. After customers put their empty bottles into the machines, the devices identify and compact the bottles, and customers have their monetary reward scanned into their transportation cards. The refrigerator-sized machines, about 40 in all, will be in most Line 10 subway stations. (source: [China Daily](#))

### **First-tier cities barely livable, report says**

Most first-tier cities in China are barely suitable for living due to their poor ecological environment, despite rapid economic development and preferential regulations for investment, said a newly released report by a top Chinese think tank on Sunday. First-tier cities, including Beijing, Shanghai and Guangzhou, failed to make the list of habitable cities even though they are in the top 10 in terms of commercial advantages, unification of city and countryside, and culture development, according to a report on China's urban competitiveness from the National Academy of Economic Strategy under the Chinese Academy of Social Sciences. Only two first-tier cities, Hong Kong and Macao, are among the country's most livable cities, said the report. Beijing ranks best in terms of academic resources and intellectual atmosphere, second-best in business environment and sustainability, and third in cultural industry. But it dropped to 74th and 119th in habitable and ecological environment, the report said. (source: [China Daily](#))

### **Researchers Detect Multiple Glacial Refugia in Qinling Mountains for Vertebrate Species**

Pleistocene climatic changes impact the diversification patterns of species around the world. The Qinling Mountains, which is an important biogeographic divider of East Asia and has specific Pleistocene glaciations, may have contributed to distinct evolutionary patterns of species in this region. But limited empirical data restrict the understanding of diversification patterns and demography associated with Pleistocene climate changes in this important biota. Prof. JIANG Jiangping's group of Chengdu Institute of Biology, Chinese Academy of Sciences has long been committed to the investigation of the diversification patterns and evolutionary mechanism of amphibians and reptiles. They used mtDNA data to test hypotheses concerning the effects of the Pleistocene glaciations on phylogeographic patterns of a frog species, *Feirana taihangnica*, which is endemic to the Qinling Mountains. Their data firstly provide substantial evidence for multiple glacial refugia for a vertebrate species (*Feirana taihangnica*) endemic to the Qinling Mountains. Moreover, their results indicated that *Feirana taihangnica* have been experienced postglacial expansions throughout the Qinling Mountains. This work provides foundation

for the further study on the diversification patterns associated with the Pleistocene climatic changes in the Qingling Mountains. (source: [CAS](#))

### **Ministry approves environmental impact report on hydro project**

A yearlong assessment of the controversial Shuangjiangkou hydropower project in southwestern China has been given approval on Monday 13 May, prompting concern among green campaigners and local residents. Despite critics claiming the dam - on the upper reaches of Dadu River in Sichuan province - would affect water quality, kill fish and result in several nature reserves being submerged, the Ministry of Environmental Protection gave the assessment the green light. China Guodian Corp has invested 24.68 billion yuan (\$4 billion) in the hydropower project, which started construction in 2008. The project is expected to generate an installed capacity of 2,000 megawatts. (further details in source: [China Daily](#))

### **High- and Low-Flow Variations in Annual Runoff and their Response to Climate Change in the Headstreams of the Tarim River**

Global climate change is a hot issue for the international scientific community. Surface runoff, which is indispensable in the natural hydrologic cycle, relates closely to climate factors such as precipitation, air temperature and evaporation. The response of runoff to climate factors is more sensitive in arid and semi-arid areas, where a slight climate fluctuation can affect runoff fluctuation to greatly varying degrees. For this reason, exploring the high- and low-flow variation in the regional runoff and its response to climate factors will help realize the sustainable development of the local economy and environment. The precipitation and air temperature of Xinjiang both had increasing trends in recent years, with marked spatial and temporal differences, and the Tarim River Basin has suffered severe flood disasters. Therefore, more studies focus on the runoff change of Tarim River Basin and its response to the regional climate change. On the basis of measured data of air temperature, precipitation and annual runoff for the northern and southern headstreams of the Tarim River in a recent 50-year period, LING Hongbo et al. analyzes variation trends and abrupt changes of high- and low-flow indexes ( $Z$  index) and climate factors employing a nonparametric test, explores the periods and coming variations of air temperature, precipitation and high- and low-flow indexes ( $Z$  index) by using the wavelet analysis, and discusses the correlation between high- and low-flow indexes ( $Z$  index) and climate factors (air temperature and precipitation) on multiple time scales using cross-wavelet spectra. (source: [CAS](#))

### **Sacred Lotus - Ancient Chinese Secret Genome Sequence Enlightens Scientists**



The sacred lotus (*Nelumbo nucifera*) is a symbol of spiritual purity and longevity. Its seeds can survive up to 1,300 years, its petals and leaves repel grime and water, and its flowers generate heat to attract pollinators. Now researchers report in the journal *Genome Biology* that they have sequenced the lotus genome, and the results offer insight into the heart of some of its mysteries. The sequence reveals that of all the plants sequenced so far – and there are dozens – sacred lotus bears the closest resemblance to the ancestor of all eudicots, a broad category of flowering plants that includes apple, cabbage, cactus, coffee, cotton, grape, melon, peanut, poplar, soybean, sunflower, tobacco and tomato. (source: [CAS](#))

### **Monitoring Shows Quake-hit Zone Restored after Five Years**

The worst-hit areas in a devastating earthquake five years ago in Southwest China have been restored, according to airborne remote sensing images from a Beijing institute. The images show that the townships of Wenchuan County in southwest China's Sichuan Province have been rebuilt, said a report from the Beijing-based Institute of Remote Sensing and Digital Earth, of the Chinese Academy of Sciences, which has monitored the quake zone environment through remote sensing images since 2008. (further details in source: [CAS](#))

### **IMHE Reveals the Disaster Sites of Lushan Earthquake**

The remote sensing image interpretation of quake zone has been finished jointly by Institute of Mountain Hazard and Environment, Chinese Academy of Sciences, and Geomatics Center of Sichuan Province. Experts recognized and extracted the potential sites of geo-hazard in quake zone, and uploaded the files to Geo-Information Platform of Lushan Earthquake, which offered technical support to disaster relief and rebuilt work. (source: [CAS](#))

### **Seawater can save thirsty country**

More government support, including subsidies and a favorable pricing mechanism, is needed for the country to use desalinated seawater to quench its thirst, a top industry expert said. "The lack of an effective pricing mechanism for desalinated water and support for an operable policy is affecting the development of the country's sea desalination industry," said Li Linmei, director of the State Oceanic Administration's Institute of Seawater Desalination and Multipurpose Utilization in Tianjin. The country aims to produce 2.2 million cubic meters of desalinated seawater daily in 2015, about three times current capacity, according to a National Development and Reform Commission plan released last year. (source: [China Daily](#))

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## Energy

### **Solar negotiations with EC fail**

A leading trade organization announced on Wednesday that first-round talks between China and the European Commission over a solar trade probe have broken down. The announcement came as the European Union excluded further talks until the probe's preliminary determinations are published. The Chinese government and the EC had agreed that the China Chamber of Commerce for Import and Export of Machinery and Electronic Products, or CCCME, would represent the Chinese PV industry and begin consultations with the Brussels-based commission on the anti-dumping and anti-subsidy investigations against Chinese PV products, the CCCME said in a statement on its website. The CCCME recently sent a delegation to meet with the commission following the latter's invitation. The Chinese delegation put forward a practical and workable proposal upon the commission's request, according to the statement. "However, the proposal was firmly and entirely rejected by the European Commission without any explanation. Besides, there was no response from the commission regarding the questions raised by the CCCME delegation and we regret that," Zhang Yujing, head of the CCCME, told a news conference on Wednesday in Beijing. (source: [China Daily](#))

### **China's largest nuclear power firm renamed**

China's largest nuclear power company announced on Wednesday (15 May) that it is to change its name to China General Nuclear Power Group (CGN) to consolidate its image as a state-owned enterprise. The previous name of China Guangdong Nuclear Power Group had frequently led to its being wrongly believed to be a provincial-level firm from south China's Guangdong Province. With total assets of 268.9 billion yuan (\$43.7 billion) reported in the first quarter, the company had an installed nuclear power generating capacity of 7.2 million kilowatts, accounting for 53 percent of the country's total. (source: [Global Times](#))

### **GIEC Builds A New-Type 15KW Straw Prepared Biogas Power Generation Pilot Equipment**

Biomass energy is one of the greenest, cheapest and easiest ways to extract energy from. Under cooperation with companies, Professor CHEN Xinde and his team from Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences (GIEC) built a New-Type 15KW Straw Prepared Biogas Power



Generation Pilot Equipment. The equipment has successfully generated electricity and been on continuous operation for 10 days till 7th, May. In this research, Prof. CHEN used straws as raw materials. The straws were chemically liquefied into water-soluble BOD and fermented via liquid feed. In such way, Prof. CHEN and his team developed efficient liquefied hydrolysis technology for straws and also built an equipment by which straws can be efficiently fermented to produce biogas. (further details in source: [CAS](#))

### **QIBEBT Reveals Cellulose Degradome of *Clostridium cellulolyticum***

Lignocellulosic biomass is the most abundant biopolymers on earth, yet its recalcitrance to enzymatic hydrolysis has hampered its exploitation for renewable bioenergy and biomaterials. Cellulolytic bacteria such as *Clostridium cellulolyticum*, which digest cellulose via a cell surface-attached extracellular enzymatic complex called the cellulosome, represent a major paradigm for efficient biological degradation of cellulosic biomass. However, the genome-wide metabolic and regulatory networks underpinning bacterial cellulose degradation remain poorly understood. From the Functional Genomics Group of Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences (QIBEBT), Dr. XU Chenggang, PhD student HUANG Ranran and colleagues proposed a molecular model of the “Cellulose Degradome” for one cellulolytic model organism *Clostridium cellulolyticum* by analyzing its complete genome and comparing its transcriptomes and extracellular proteomes. The model revealed a “core” set of CAZymes required for degrading cellulose-containing substrates, as well as an “accessory” set of CAZymes required for specific non-cellulose substrates. The core and accessory CAZymes are respectively transcriptionally regulated by a Carbon Catabolite Repression (CCR) mechanism and two-component systems (TCSs). The CCR-mediated monitoring of cellular needs for energy and the TCS-mediated sensing of environmental substrate-availability likely ensure both sensitivity to environmental nutrients and the efficiency of cellulose degradome. Thus these findings can serve as a blueprint for constructing potent cellulase systems (*in vitro* or *in vivo*) optimized for the targeted substrate. (further details in source: [CAS](#))

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## **Transport (including aeronautics)**

### **Gutter oil to be used as auto fuel**

Processed gutter oil is expected to be used as bus fuel within two years in Shanghai, as part of efforts to advance a circular economy and prevent recycled cooking oil from returning to the kitchen. The Shanghai Municipal Food Safety Committee will cooperate with Tongji University and six businesses that process used cooking oil into biodiesel that can power vehicles, said Yan Zuqiang, the committee's director, in an interview with a local news portal on Saturday.



Owing to the comparatively high cost of transforming recycled cooking oil to vehicle diesel, those who use the oil will receive subsidies, he said. Lou Diming, a professor at Tongji's School of Automotive Studies who has led the study for the past three years, said after many experiments it is now the right time to turn the application of recycled cooking oil for vehicles into a reality. His team has experimented with using mixed diesel fuel on more than 300 taxis, buses and lorries. (source: [China Daily](#))

### **35 cities get green light for urban rail**

Thirty-five cities on the Chinese mainland have got the green light to build nearly 6,000 km of urban rail lines, according to the China Communications and Transportation Association. The estimated cost of the lines will be about 1.3 trillion yuan (\$212 billion). Urban rail transit systems are under construction in 30 cities, said the association, which will sponsor the Metro China 2013 between Nov 11 and 22 in Beijing, a major exhibition to look at the future of rail. The association said that as of the end of 2012, China's urban rail systems, including subway and light rail, reached 1,980 kilometers in length, operating in 16 cities. (source: [China Daily](#))

### **Youth devoted to unmanned aerial vehicle research**

Model aircraft enthusiast Jia Mingxiao had the idea to develop an unmanned aerial vehicle in 2010 when she heard from TV reports that rescuers had difficulty in finding people trapped by floods in Jilin province. She cooperated with her four friends, all born in the 1980s, to establish a company and improve the aerial vehicle mainly for emergency relief efforts. After two years' numerous trials, the vehicle can now undertake GPS-guided flight, automatically make a return voyage, and send back real-time images. On March 3, the vehicle, carrying drinking water and food, almost reached nine people on a ferry stranded in the Songhua River, but had to abort because of bad weather and its battery running-out. But the failure only got Jia more determined to make the unmanned aerial vehicle a great help for those in need. "I believe my dream will come true as we improve the technology," Jia said. (source: [China Daily](#))

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## **Socioeconomic sciences & the humanities**

### **China's urban unemployment rate remains 4.1 pct**

China's urban unemployment rate stood at 4.1 percent in 2012, unchanged from a year earlier, said the Ministry of Human Resources and Social Security on Monday. Some 767.04 million people were employed in China's urban areas in 2012, an increase of 2.84 million on the previous year, according to the

ministry. Tertiary industry accounted for 36.1 percent of these employees nationwide. Primary industry accounted for 33.6 percent and secondary industry 30.3 percent. Altogether, 12.66 million jobs were created in urban China in 2012, 450,000 more than in 2011. In 2012, the number of farmer-turned-workers hit 262.61 million, 9.83 million more over the previous year. As of the end of 2012, registered alien workers in China stood at 246,400. (source: [China Daily](#))

### **Think tank urged to research 'Chinese dream'**

A senior Chinese official on Monday called for the Chinese Academy of Social Sciences (CASS), a leading think tank, to research the "Chinese dream." With this reference to a great renewal of the Chinese nation dominating the zeitgeist, Liu Qibao, head of the Publicity Department of the Communist Party of China Central Committee, said the academy should conduct deep research on socialism with Chinese characteristics. This would provide academic support for self-confidence in the Chinese path, theories and system, he said. Researchers in different fields should focus on the requirement to realize the Chinese dream from various perspectives, he said. Liu urged the 36-year-old CASS to strengthen its basic research and studies for decision-making and consultation so as to become China's top academy of philosophical and social sciences. He also encouraged the CASS to promote the international influence of Chinese academics with theories and discourse systems that are understandable and convincing for the world. (source: [China Daily](#))

### **Researchers find trickery in ancient Chinese divination**

Archaeologists revealed that the divination rituals used by ancient Chinese thousands of years ago may have featured some behind-the-scenes trickery. During the Shang Dynasty (1600 BC -- 1046 BC), emperors relied heavily on prophecy and divination to help them make decisions on matters ranging from domestic policy to the meanings of their dreams. One divination technique involved burning turtle shells or cattle bones, with the diviner predicting the future based on the patterns of cracks left in the materials after burning them. "We have learned from our experiments that the appearance of certain crack patterns is basically controllable," said Hou Yanfeng, a researcher at an archaeology laboratory under the Henan Provincial Administration of Cultural Heritage. "During the Shang Dynasty, the emperor was the leader of the diviners. Thus, it is possible that he controlled public opinion via oracle bone divination," he said. (source: [Xinhua net](#))



### **China pilot program to better protect minors**

A pilot program covering 19 cities and a prefecture will be run to help establish a social system to protect the rights of the minors, the Ministry of Civil Affairs announced on Tuesday 14 May. The program is aimed at reducing the number of vagrant minors to a minimum and ensuring health for minors by helping those in need and their families with their livelihoods, custody, education and growth, officials with the ministry said. Though measures have been taken by the ministry to protect the rights of minors in recent years, some of them are still faced with problems concerning survival, custody and growth due to poverty, domestic violence and improper education, according to the ministry. The program has asked the 19 cities, including Beijing and Dalian, and Aksu Prefecture in northwest China's Xinjiang Uygur Autonomous Region, to establish a network of protection connecting communities. The places will conduct checks on dropout children and kids who are roaming, begging and without custody. The cities and the prefecture are also required to contribute to a crackdown on crimes using and instigating minors. (source: [People](#))

### **Guangzhou moves to abolish rural *hukou***

Guangzhou has taken the lead in Guangdong province to scrap a rural *hukou*, or household registration system, which is preventing farmers from enjoying many rights and advantages enjoyed by their urban peers. Starting this week, household registration departments under the Guangzhou Public Security Bureau have required local residents to change their residence booklets to identify them as permanent Guangzhou residents, according to a notice on the bureau's official website. "That indicates all the farmers in the southern metropolis will become urban residents after they have changed their residence booklets in the following months," said the notice. "The move will safeguard the employment rights, education and other legal interests of the city's many farmers who are now losing their farmland because of rapid industrial and service-sector development," the notice said. (further details in source: [People](#))

### **New Species of Meat-eating Dinosaur Found in China**

Biologists said they have discovered the fossil remains of a baby dinosaur in China that represents a new species of small theropod, or meat-eating dinosaur. Named *Aorun zhaoi* after the Dragon King in the Chinese epic tale *Journey to the West*, the youngster lived more than 161 million years ago, in the earliest part of the Late Jurassic Period. Its small, numerous teeth suggest that it would have eaten prey like lizards and small relatives of today's mammals and crocodilians. In a research paper published in the *Journal of Systematic Paleontology*, researchers explained that they were able to recover the skull, mandible and partial skeleton of the dinosaur in 2006, in a remote region of Xinjiang in China. It measured just one meter long and weighed about 3 pounds, or about 1.3 kilograms. (source: [CAS](#))



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## Space

### Chinese firm signs satellite deal

Xi says Beijing to continue support of development with Sri Lanka. China will expand its presence in Sri Lanka after signing a contract in Beijing on Tuesday to deliver Sri Lanka's first communications satellite. China Great Wall Industry Corp - the nation's only authorized provider of commercial satellite launch services to the global market - and SupremeSAT Ltd, a Sri Lankan satellite operator, will provide the satellite in the near future. President Xi Jinping and visiting Sri Lankan President Mahinda Rajapaksa witnessed the signing of the contract after meeting on Tuesday. The two countries pledged to expand bilateral trade, investment and cooperation in agriculture, space technology and infrastructure. (source: [China Daily](#))

### China to Invest Big to Support Beidou System

China is expected to invest 7 billion yuan (\$1.13 billion) to support the development of industries related to the country's Beidou satellite navigation system before 2015, an industry insider said. "Industries related to the Beidou system are entering a booming development stage," Yang Qiangwen, a senior engineer at the China Satellite Navigation Office, said at the Fourth China Satellite Navigation Conference on Thursday in Wuhan. According to the office's figures, the central government has already invested around 3.5 billion yuan to boost industries related to the Beidou system. And as the support from the central government continues, Yang said that the Beidou system will bring new economic growth to the country. Industry experts estimated that the Beidou system may unleash a potential market worth 225 billion yuan, which may be the reason for the country's surging investments in the project. The navigation system is already being used in many areas across China. The Ministry of Transport required all tour coaches, long-distance buses and vehicles carrying dangerous goods in nine provinces, or around 80,000 vehicles, to install the Beidou system before June, or the vehicles' permits may not be approved. (source: [CAS](#))

### Voyage to Mars has its skeptics

The Dutch businessman behind a planned one-way trip to Mars, which has received a flood of applicants from China, has dismissed accusations that the project is a scam. Mars One has been promoted as a manned mission to establish a human colony on the red planet. Anyone who fits the physical requirements can apply for the trip, with organizers expected to whittle the pool

down to 24 to 40 candidates who will get training before a vote by television viewers will decide the four who will make the trip in 2023. "Our plan is very complicated, but we knew that when we started," Bas Lansdorp, co-founder of the Mars One project, said in an e-mail to China Daily on Monday. "We are committed to landing humans on Mars in 2023. "With all plans of high ambition and complexity, there is a risk for delay," he said, but insisted the project is currently on schedule. His comments came after Chinese media reports questioned the feasibility and legitimacy of the project. Guangzhou Daily reported on Monday that the headquarters of Lansdorp's nonprofit organization is in a rented house with just one employee. "Mars One is registered at my home address because our office is in a Regus flexible workspace office," the e-mail response said, referring to the Luxembourg-based office-furniture manufacturer. The paper also claimed Mars One has already generated more than \$1 million in nonrefundable application fees. According to the project brochure, applicants pay an administration fee based on their country's per capita GDP. Chinese applicants pay only \$11. Lansdorp also confirmed that at least 78,000 people worldwide, including about 10,000 from China, had submitted applications worldwide as of May 7. A businessman from Dujiangyan, Sichuan province, who applied for a spot, also dismisses the concerns. "I don't understand why there are so many people questioning this project," Ma Qiang said. "It's an interesting project, and I'll keep an eye on its progress." (source: [China Daily](#))

### **China mapping organization wins international award**

The National Administration of Surveying, Mapping and Geoinformation was presented the National Mapping Organization of the Year 2012 Award in the 2013 Geospatial World Forum in Rotterdam, Netherlands, earlier this month, Song Chaozhi, deputy director of the administration, said on May 22. The biennial Geospatial World Forum is a premier event for the global geospatial community, showcasing state-of-the-art technology and its use in the world economy. Besides China, the national mapping organization award has been won by the surveying and mapping administrations in the UK, Canada, Switzerland and New Zealand, for their contributions to surveying and mapping. Song said China has actively participated in the world's surveying and mapping work with a global mapping program expected to be completed this year. The program will be available to all countries. (source: [China Daily](#))

### **Towards a Better Understanding of the Moon-Solar Wind Interaction**

A research team at Lab of Solar System Exploration, National Space Science Center (NSSC) has recently presented a three-dimensional magnetohydrodynamic (MHD) simulation of the lunar wake to further our understanding of the Moon-solar wind interaction. By establishing a 3D MHD model with high spatial resolution, PHD candidate XIE Lianghai, with his



supervisor Dr. LI Lei and colleague ZHANG Yiteng studied three cases in which the interplanetary magnetic field lies at 90°, 180° and 135° to the solar wind flow. Some basic features of the interaction were revealed, including the plasma density decrease in the wake and the central wake magnetic field increase. The model also shows that the plasma temperature is enhanced in the void and an acceleration region may appear in the near wake. More than that, as the plasma moves into the wake, some rarefaction waves propagate away from the limb via the fast magnetosonic mode, which is anisotropic and propagates with different velocities. Compared with previous global models, one of the advantages lies in its self-consistent way of handling all variables without any simplification. And results show consistency with WIND spacecraft observations. (source: [CAS](#))

### **Beidou set to spread its wings in region**

China's Beidou navigation system is set to increase its presence in the Asia-Pacific region, with Pakistan expected to become its fourth overseas customer later this month. Huang Lei, international business director of Beijing BDStar Navigation, which helps promote Beidou, or Compass, in the international market, told China Daily the company will build a network of stations in Pakistan to enhance the location accuracy of Beidou. These continuously operational reference stations will be built after the two countries sign a cooperation agreement, which will see Pakistan follow in the footsteps of Thailand, Laos and Brunei in becoming a Beidou customer. (source: [China Daily](#))

### **Final test begins on lunar explorer**

The last major test on China's third lunar explorer, Chang'e-3, has begun, before it blasts off for the moon in the second half of this year, China National Space Administration said in a statement on its website. The 40-day testing simulated the environment on the moon to see if Chang'e-3 can endure the extreme temperatures on the moon, which range from -200 C to 150 C. Part of the second phase of the Chinese lunar exploration program, Chang'e-3 is scheduled to be launched in the second half of the year and it will become the country's first lunar explorer to have a soft landing on the moon. (source: [China Daily](#))

### **China conducts scientific probe in high-altitude atmosphere**

Chinese scientists on 13 May Monday conducted an experiment in the high-altitude atmosphere and near-Earth space with the launch of a sounding rocket, it was confirmed on 14 May Tuesday. The National Space Science Center (NSSC) under the Chinese Academy of Sciences said the rocket was launched at 9 p.m. Monday from Xichang Satellite Launch Center in southwest China. The experiment was designed to investigate energetic particles and magnetic

fields in the ionized stratum and near-Earth space. According to a preliminary analysis by the NSSC, the experiment has reached expected objectives by allowing scientists to obtain first-hand data regarding the space environment at different altitudes. (source: [People Daily](#))

### **Intercomparison of Global Leaf Area Index (LAI) Data Estimated from Remote Sensing**

Leaf Area Index (LAI) indicates the amount of live green leaf above ground surface. Many agro-meteorology, atmospheric general circulation, and biogeochemical models rely on LAI to parameterize the vegetation interactions with the atmosphere. A series of LAI products have been generated from different satellite data. However, to effectively use these LAI products in various disciplines, it is important to know how these products perform. [Prof. FANG Hongliang](#), Institute of Geographic Sciences and Natural Resources Research (IGSNRR), together with several European and American scientists, developed a benchmark to compare five major global LAI products: MODIS, GEOV1, GLASS, GLOBMAP, and JRC-TIP. (source: [CAS](#))

### **CAS, ESA Further Cooperation to Promote Space Science Satellite Missions**

The 9th ESA (European Space Agency)-China Space Science Bilateral Meeting kicked off in Palermo, Italy on May 2, 2013. Chinese delegation headed by YIN Hejun, vice president of Chinese Academy of Sciences (CAS) attended the meeting. YIN delivered a speech at the opening ceremony stressing the importance of the ESA-China bilateral cooperative mechanism. “Up to now, eight bilateral seminars have been held under the joint effort of ESA and CAS. It provides a solid platform for space science scientists from both sides and enhances the bilateral exchange of ideas as well as future cooperation in space science activity.” The ESA delegation introduced their ongoing space science programs and WU Ji, director general of National Space Science Center (NSSC), introduced CAS’s Strategic Pioneer Program on Space Science, followed by an action report of the 8th ESA-China bilateral meeting by WANG Chi, deputy general of NSSC. Both parties discussed in detail the joint call for a cooperative space science satellite mission and reached an in-depth understanding of further actions. A minute was signed by both parties to promote further cooperation in the upcoming year. The ESA-China Space Science Bilateral Meeting was initiated by ESA and China in 2004 when Mr. JIANG Mianheng, former vice president of CAS, visited the headquarters of ESA and was received by David Southwood, science director of ESA. Both parties reached a consensus to establish a regular consultative mechanism in the field of space science. The 10th ESA-China Space Science Bilateral Meeting will be held in China in 2014. (source: [CAS](#))

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## People & Higher Education

### Chen Yu-Ao honored with Fresnel Prize

Chen Yu-Ao, a physicist from the University of Science and Technology of China, was awarded the European Physical Society's Fresnel Prize on May 14 at the European Conference on Lasers and Electro-Optics in Munich, Germany. The prize is named after Augustin-Jean Fresnel, a leading physicist in the 19th century. It is regarded as the highest global honor for scientists under the age of 35 in the field of quantum electronics and optics. (source: [China Daily](#))

### Chinese businesses partner with Sydney MBA students

Sydney MBA students will advise Chinese enterprises on investing in Australia and doing business with Australian companies, in a landmark initiative announced Wednesday by the University of Sydney. The Australian Master of Business Administration students will engage in a hands-on consulting experience in association with Jiaotong University in Shanghai. The program aims to be mutually beneficial for businesses and students alike, said Richard Hall, Business School associate dean of Management Education. "Typically Australian students focus on doing business in China. Our students will provide Chinese firms with invaluable advice while also gaining a deep knowledge of China itself," Hall said. The new MBA program was launched in March of this year, and focuses on leadership skills and experiential learning, plus a specialised China module to equip students for the Asian Century. (source: [Global Times](#))

### Science students calculate formulas for love

Writing rosy poetry should be second nature to liberal arts students, but now Chinese science and engineering students have their own literature. On May 20, a date that in Chinese sounds similar to "I love you", the 10 most romantic love poems written by science majors nationwide were chosen from more than 600 candidates. The competition was co-organized by Shanghai's Fudan University and Guokr, a Chinese science website. According to the rules, the poem needed to be written in three lines with science language and symbols. "It's commonly perceived that scientists are nerds," said Liu Daisong, a university teacher. "In reality, they have their own ways to express love and warmth." Initiated last year by Fudan's School of Mathematical Sciences, the contest was named after Johann Peter Gustav Lejeune Dirichlet, a German mathematician who made great contributions to number theory, analysis and mechanics. (source: [China Daily](#))



### **Leading scientist wins think tank nod**

A professor and dean who sparked controversy after he won a place at a leading US academy but failed to make it into China's leading institute has been named as a candidate for this year's membership election of the Chinese Academy of Sciences (CAS). Shi Yigong, professor and dean of the School of Life Sciences at Tsinghua University, who was elected a foreign associate to a leading US academy - which sparked a heated online debate after he failed to make it into the CAS- has been named as a candidate for this year's membership of the esteemed Chinese establishment, CAS announced on its website on Monday. The renowned professor of biochemistry and molecular biology failed to be enrolled by the CAS, one of the country's major think tanks, in 2011. On April 30, 2013, he was elected one of the 21 foreign associates of the National Academy of Sciences based in the United States. This sparked controversy in China on the criteria for CAS membership election. Most of the 391 new candidates for this year's CAS membership come from China's top universities and research institutes. Li Guoying, vice minister of water resources, is the only candidate as a government official. The average age of the candidates is 53.7, with the eldest at 76 and the youngest 37. CAS elects at most 60 new members every two years. (source: [China Daily](#))

### **Female oceanauts to steer manned sub Jiaolong**

Female oceanauts are being considered to steer China's record-breaking submersible Jiaolong, after the country sent its first female astronaut into space last year, officials have announced. The National Deep Sea Center in east China's Shandong province will train a second group of six oceanauts, including two women, for the sub's future missions, director of the center Liu Feng said Tuesday. Liu said training was expected to start in September or October and will last one or two years. Jiaolong set a new national dive record after reaching 7,062 meters deep in the Pacific Ocean's Mariana Trench in June 2012, demonstrating China's ability to conduct deep-sea scientific research and resource exploration in 99.8 percent of the world's oceans. (source: [China Daily](#))

### **China supports central, western universities**

China on Wednesday unveiled a plan to support universities in its less developed central and western regions, with these institutions having been left behind by peers in the country's richer coastal areas. The ministries of education and finance along with the National Development and Reform Commission, the country's top planning agency, jointly issued the plan designed to help strengthen the faculties and facilities of universities in central and western China before 2020. Government authorities plan to inject 10 billion yuan (around \$1.62 billion) between 2012 and 2015 into 100 higher education institutions where bachelor degree programs are available in those regions,

according to the official document. Zhang Daliang, head of the higher education department under the Ministry of Education, said at a press conference on Wednesday that the relative weakness of these universities has created a bottleneck for higher education development in central and western China. (source: [China Daily](#))

### **State Council calls for more rural students in top universities**

The State Council, China's cabinet, has called on the country's top universities to enroll more students from rural areas, promoting equality in education. The State Council issued a statement after a meeting presided over by Premier Li Keqiang on Wednesday 15 May, saying that the government will offer more opportunities to hard-working students. The central government also decided to increase the quota of students from the country's least-developed areas attending top universities to 30,000, up from 10,000 last year, according to the statement. (source: [Xinhua net](#))

### **Russia expects to attract more Chinese students**

Russia is expecting more young Chinese to study in its universities, said a Russian education official in Beijing on 14 May Tuesday. The Russian government will step up efforts to promote its education resources and work with Chinese agencies to introduce more young people to Russian universities, said Margarita Barzhanova, the representative of the Russian Ministry of Education and Science, attached to the Russian Embassy in China. During Chinese President Xi Jinping's visit to Russia in March, the two countries agreed to bring the total number of their overseas students in each other's countries to 100,000 by 2020. (further details in source: [People](#))

### **China awards 28 outstanding overseas students in southern US**

Twenty-eight Chinese students from colleges in eight southern US states received an annual Chinese government award on 4 May in Houston. At a ceremony at the Chinese Consulate General in Houston, Deputy Consul General Li Guixi handed out the 2012 National Scholarship for Outstanding Self-Financed Chinese Students abroad. The recipients came from more than ten colleges in southern US states, and their majors cover physics, chemistry, optics, computer, environmental engineer and mathematics. "The recipients are very outstanding Chinese students and many of them have papers published on professional magazines," said Consul Zhang Yiqun. For the year of 2012, the award, which was established in 2003 by the Chinese government, was presented to 489 Chinese students pursuing diplomas abroad, according to Zhang. "Overseas students are valuable human resources of China and important contributors to the country's future construction and development," Li said at the awarding-ceremony. The award was aimed to encourage overseas



Chinese students to excel in their studies and better serve their country in the future, he said. "The award is not only a honor, but also an encouragement to overseas Chinese students," said Wang Qing, an award-recipient from Tulane University. "We will continue to work hard and better serve our country after graduation," said Wang. From 1978 to 2012, the number of overseas Chinese students totalled 2.64 million. In 2012, 399,600 Chinese students went abroad to study. More than 90 percent of the overseas Chinese students are self-financed, according to statistics from the Chinese Education Ministry. (source: [Global Times](#))

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## Research infrastructures

### Deep-sea vessel to have 5-year trial period

The State Oceanic Administration said on Wednesday 15 May that the deep-sea submersible *Jiaolong* will enter commercial operation after a five-year trial operation. The administration said that in the next five years, the submersible's capabilities will be improved, and a team of oceanauts and maintenance workers will be created. The trial period will be in the area where the China Ocean Mineral Resources Research and Development Association obtained exploration rights. The vessel will explore the resources in the deep sea and study geological and environmental features. *Jiaolong* will head to the South China Sea and the Pacific Ocean in June for a series of dives, marking the start of the submersible's trial operation. The submersible reached its record depth of 7,062 meters in the Mariana Trench in June 2012, proving China's ability to explore 99.8 percent of the world's ocean floor. (source: [China Daily](#))

### China to increase input on the Arctic

China pledged increased cooperation and contribution to peaceful and sustainable development in the Arctic as it was granted observer status by the Arctic Council on Wednesday 15 May. China "appreciates and welcomes" the council's decision, Foreign Ministry spokesman Hong Lei said in a statement. He reiterated China's support for the council, recognition of Arctic countries' sovereignty, and respect for Arctic residents' values, interests and culture. (source: [China Daily](#))

### China granted observer status in Arctic Council

China, together with five other states, has been granted observer status in the Arctic Council on Wednesday (15 May). China, India, Italy, Japan, Republic of Korea and Singapore were granted new Observer States status at the Eighth Ministerial Meeting of the Arctic Council convened in Kiruna, the northernmost city of Sweden. Gao Feng, head of China's delegation to the event, told Xinhua

that the long-awaited observer status of China is a "right and wise" decision, and it would be constructive for future international cooperation on the Arctic issues. "China will first get to know the Arctic better, and then it is able to join effectively international cooperation," said Gao. (further details in source: [Xinhua net](#))

### **Around China: Jiaolong poised for South China Sea mission**

Three oceanauts of China's manned submersible, the Jiaolong, are studying geographic and biodiversity data of the South China Sea as they prepare for the sub's first scientific deep-sea mission in June. Jiaolong completed a record dive of 7,062 meters in the Pacific Ocean's Mariana Trench during its trial operation in June 2012, enabling China to conduct deep-sea scientific research and resource exploration in 99.8 percent of the world's oceans. The crew are expected to leave Qingdao, a port city in east China's Shandong Province, for the 103-day mission on June 5. As the first oceanauts for the country's independently developed sub, the crew are aged between 29 and 34 and have helped in the development of the vessel. (further details in source: [Xinhua net](#))

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## **International S&T relations**

### **2013 International Training Program**

In 2013, China will hold 35 international training workshops dedicated to developing countries, covering a variety of topics such as agriculture, new energies, resources, environment, healthcare, science and technology management etc. (brochure of the training in source: [MOST](#))

### **French President Visits Institut Pasteur of Shanghai**

French President Francois Hollande visited Institut Pasteur of Shanghai, Chinese Academy of Sciences (IPS-CAS) on April 26 and inaugurated for its new facilities. Prof ZHANG Yaping, Vice President of the CAS, Prof Ralf Altmeyer, director general of IPS, and Prof SUN Bing, co-director of IPS, welcomed the President. IPS-CAS, a life science research institution, was established in 2004 by the joint effort of the CAS, Shanghai Municipal Government and Institut Pasteur, dedicating to translate excellence in research into benefits for public health. IPS-CAS has proved its excellence of science by the increasing scientific production on influenza, enterovirus, HIV, Herpes, etc. Now, its new building with a suffice of 16000m2 on the campus of the Shanghai Institutes for Biological Sciences (SIBS) in the Xuhui District is ready for further development. (source: [CAS](#))



**China, Japan, S. Korea to promote environmental cooperation**

China, South Korea and Japan said in a Joint Communiqué that they will enhance trilateral cooperation to cope with global and regional environmental issues, particularly in air pollution in the Northeast Asia. The communiqué, released after the 15th Tripartite Environment Ministers Meeting among China, Japan and South Korea (TEMM) also said the three nations will "work together to enhance the full effective and sustained implementation of the United Nations Framework Convention on Climate Change." According to the paper, the nations will improve joint researches and technical cooperation in fields such as green development, bio-diversity and air pollution. The three countries also agreed to establish the Tripartite Policy Dialogue on Air Pollution so as to exchange information on relevant policies, technologies for monitoring, prevention and control technologies, said the communiqué. (source: [Global Times](#))

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