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EURAXESS LINKS CHINA

Dear colleagues,

Welcome to the last newsletter edition of 2014!

Each end of the year brings an opportunity to look back and summarise. It is especially the case for EURAXESS Links China, since we have become 5 years old. We celebrated our “birthday” at a Researchers’ Night in Shanghai on 9th December (big thanks to all who cheered with some Belgian beer and a delicious EURAXESS German apple cake!). It’s been a successful journey so far, therefore we hope we will keep bringing researchers from China and Europe together also in the next years.

To achieve this goal, we will be glad if you can fill [a short satisfaction survey](#) for us to know how to improve.

In this newsletter, you can read a [unique interview with a Marie Curie fellow Dr Guojie Zhang](#) who is one of the main leaders behind the Avian Phylogenomics Project that reconstructs the evolutionary history of birds.

Otherwise, you will find the usual portion of [news and stories from the European Research Area](#), as well as [EU collaboration with China](#). On page 24, we include a list of [new grants, fellowships and calls for proposals](#) for PhD students, post-docs as well as senior researchers. You find also new [job openings](#) (including one for EURAXESS Links China), and at the end a regular [press review](#) highlighting this month’s developments on China’s S&T scene.

Have a relaxing end of the year. We wish you a good start to 2015!

With best regards,

Jacques de Soyres

Andrea Střelcová

[EURAXESS Links China](#) Country Representatives

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 the European research landscape and in 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 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.

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1 EU Insight – RESAVER: boost to supporting researcher mobility

In August 2014, the newsletter's 'EU Insight' section introduced the pan-European Retirement Savings Vehicle for European Research Institutions (RESAVER)[1]. This pension arrangement will enable researchers to remain affiliated to the same pension fund, even when changing jobs and moving between different countries within the European Research Area (ERA). Singled out as a priority in the [2012 Communication on ERA](#) [2], in which the European Commission pledged to "support stakeholders in setting up pan-European supplementary pension fund(s) for researchers", this initiative received two major boosts within the past months:

First, on 1 October, the consortium was launched that aims to establish this new pan-European pension arrangement [3]; and second, on 16 December, the Commission reported that a four-year, four million euro framework contract in support of creating RESAVER has been awarded to *Aon Belgium* [4] in response to the call for tender launched by the Commission in summer 2014.

Two major boosts to RESAVER establishment

The RESAVER consortium, a group of committed employers, will be working as an international not-for-profit association registered in Belgium. The founding members are: Central European University Budapest; Central European Research Infrastructure Consortium (CERIC-ERIC); Elettra - Sincrotrone Trieste S.C.p.A; Fondazione Edmund Mach; [Istituto Italiano di Tecnologia](#); Technical University of Vienna; and the Association of universities in the Netherlands (VSNU)[3].

The consortium plans to set up the pension arrangement with the first contribution being paid in 2015. The four-year framework contract awarded by the Commission in mid-December will cover the initial set-up costs. This will enable the consortium to roll out the single European pension arrangement across the European Economic Area by 2018.

By participating in RESAVER, employers will be able to sponsor a single European pension arrangement capable of delivering:

- Cross-border pooling of pension plans;
- Continuity of the accumulation of pension benefits as professionals move between different organisations and countries during their career;



- Lower overhead costs (and therefore improved member benefits) through economies of scale;
- Access to high quality investments regardless of the country where the employee is based (where legally possible), thereby improving overall member benefits;
- A pan-European risk pooling solution covering death benefits;
- A centralised portal for tracking and administering pension contribution [4].

“Mobile researchers face obstacles related to social security, in particular with regard to their pensions. [...] [B]y removing barriers to researchers’ mobility and ensuring safe and sustainable pensions for research professionals, [RESAVER] will contribute to the establishment of a European labour market for researchers.” European Commission, ERA Progress Report 2014 [5]

Sources and further information on RESAVER

[1] EURAXESS Links newsletter: [EU Insight - The Pan-European Pension Fund RESAVER](#), August 2014.

[2] European Commission: [2012 Communication on ERA](#), Brussel, 17 July 2012.

[3] European Commission press release: [New pan-European pension fund to boost researcher mobility](#), Brussels, 1 October 2014.

[4] European Commission press release: [Major contract to support new pan-EU pension fund](#), Brussels, 16 December 2014.

[5] European Commission: [European Research Area Progress Report 2014](#), Brussels, 15 September 2014.

[6] European Commission brochure: [“RESAVER – Retirement Savings Vehicle For European Research Institutions”](#)



2 Feature – Meet the researcher

Guojie Zhang, Marie Skłodowska-Curie Fellow (University of Copenhagen, BGI-Shenzhen)

We interviewed Dr. Guojie Zhang at the occasion of EURAXESS Share event “Advance Your Research through Mobility” during which the EU-funded researcher introduced the Marie Skłodowska-Curie scheme to Shanghai-based audience.

The large-scale [Avian Phylogenomics Project](#) under his co-leadership has just been highlighted by *Science* [in a special issue of the journal](#) released on 12th December 2014. As a breakthrough explaining the evolution of birds, it also got significant attention throughout global media outlets such as [The Economist](#), [Reuters](#), [The Guardian](#) etc.



Dr. Guojie Zhang has just been appointed as tenure track Assistant Professor at the Department of Biology, University of Copenhagen (Centre of Social Evolution), which hosted his Marie Curie International Incoming Fellowship (2012-2014; “European Fellowship” under Horizon 2020).

As Associate Director of National Genebank at BGI-Shenzhen, he has pioneered the application of genomic technologies in evolutionary studies of ants, birds, bats, fish and other non-model organisms to reveal the animal evolution history and the molecular mechanism of adaptation.

Guojie Zhang has published 70 peer-reviewed papers including 11 in *Nature* or *Science* as a leading author, including the new [Avian Phylogenomics Project](#).

Dr Zhang, what is your research background?

I graduated from Xiamen University in 2004 and then I started a joint PhD programme between Kunming Institute of Zoology and BGI Shenzhen in 2005. I began working on molecular evolution and comparative genomics. I started my PhD at a right time when a new generation of sequencing, a very important genomics technology, appeared. I started working on this in 2007 when it became first commercially available.

Since then I participated in a lot of works in comparative genomics, especially leading de novo animal genomics study at BGI and using comparative genomics tools to understand the evolution history of diverse animals, demographic history of animal populations, and their adaptation mechanisms.

How did you start working with European partners?

After I finished my PhD in 2010, I continued working at BGI. In 2011, I received the Marie Curie International Incoming Fellowship, because I am very interested in eusocial animals - bees, ants, or termites. They have highly advanced societies, just like humans. They evolved the royal system, labour division, soldiers, workers, who participate on various labour tasks in the society. I think they could be good models to study social behaviour evolution. This is how I started working with the Centre for Social Evolution at the Department of Biology at the University of Copenhagen.

So you knew your host institution well before you applied.

Yes, I knew the people well, especially the director of the centre, Professor Koos Boomsma, who is very well-known in his field. I visited the institute in



The University of Copenhagen (Københavns Universitet) is one of the oldest and most prestigious research institutions in Europe. Names such as Søren Kierkegaard, Tycho Brahe, Niels Bohr, several high-profile Scandinavian politicians, writers as well as 8 Nobel laureates, are included among its famous alumni. Founded in 1479, it currently has six faculties. www.ku.dk/english

The [Centre for Social Evolution \(CSE\)](#) is at the Faculty of Science between the Department of Biology and the Department of Plant and Environmental Sciences. CSE is funded by the Danish National Research Foundation, the European Research Council and several smaller grants. It hosts a number of individual Marie Curie fellows.



BGI Shenzhen (华大基因) is one of the world's premier genome sequencing centers. It was founded in 1999 in Beijing and is headquartered in Shenzhen since 2007. Learn more at www.genomics.cn

November 2010 and stayed for one month, which was a kind of a sabbatical for me. I saw that the people were very satisfied with their personal lives and also their research, and everyone was friendly there. That was one important reason why I wanted to join them.

The second very important reason was that at that time, I was trying to move into a different research direction. I planned to do some functional study on behaviour using ants as models based on my previous results on comparative genomics in ants. And to develop this, I needed a place that could provide me the facilities to rear ants, as well as people with experience and knowledge about the behavioural ecology of ants. The Copenhagen institute was the perfect place, as they have worked on ants for over 20 years, and they also wanted to start some genomics works at that time. So we had very complimentary research interests.

How did you learn about the Marie Skłodowska-Curie fellowship in the first place?

I learned about it from Professor Boomsma. After my visit to his centre, I started thinking whether there is any possibility to move there, as I felt it was the place for me to start a new direction. In May 2011, I organised a meeting on eusocial insect genomics in Shenzhen. Professor Boomsma attended that meeting too. We discussed together the plan during the meeting and he suggested to me I should apply for the Marie Curie fellowship.

Do you have any tips for future applicants?

Firstly, it is very important to know each other with your host institution before your application. The second thing is that you need to find a common interest – a complimentary research plan where you could fit into the institute. It is not only you who will benefit from the grant - you also have to consider how other people in the host institution could benefit from you.

It is a highly competitive grant, so you should give yourself enough time to prepare. When I wrote the grant I only had three months left, and I also had a lot of other things to do, so basically, had not much time to edit it... Everything was in rush.

Are there many differences in conducting research or getting funding between the two places?

There are a lot of differences between Denmark and China, and many of these are based on culture. For me, the most important is their different scientific systems. While in Europe, scientific research society has been established for several hundred years and the evaluation system is transparent, the scientific research system in China was established within 40 years and the evaluation system is not as mature.



Although there are more opportunities in China now than before, the system prefers to support well established researchers. In Europe, the funding system is more transparent. Although the competition is high, young researchers can still have a chance to receive big funding. It is relatively harder for junior scientists in China to survive. And most junior scientists in China do not get paid very well.

Why is scientific collaboration between Europe and China important?

We can see a substantial increase in scientific research collaboration between China and other countries. I myself have greatly benefitted from such collaborations. I just published a project on bird genomes in a special issue of Science. It is a big international project, led by myself, Erich Jarvis at the Duke University, and Tom Gilbert from University of Copenhagen. We have resolved the long debate regarding the question of modern bird family tree using 48 bird genomes. This project is very successful and has produced over 30 papers. One of the main reasons behind the success of this project is the good collaboration of over 200 scientists from 21 countries.

Can you tell us more about the project?

The evolutionary relationship among modern bird species has been debated for centuries, since Darwin. It is very hard to resolve because the ancestors of modern birds have experienced a rapid radiation, called 'big bang' of the speciation.

In the past, we could only use morphological data or few genetic data to build the phylogenetic tree. The problem is that with few DNA sequences, you can genome data, it is possible for us to provide a better solution for the phylogenetic analysis. Therefore, we have sequenced 48 bird species representing all the major branches of birds. This is so far the largest scale of genomics study for non-human organisms.

This project lasted four years from 2010 to 2014. Over 200 scientists from 80 institutions in the world have been involved. We just finished it this year and published eight papers in Science as a special issue on 12th December. A project of such scale is hard to be done by a single institute or a single country. Thanks very much to the Marie Curie funding that enabled me to stay in Europe, so it was more convenient for me to discuss the project with other researchers there.

You finished your PhD in 2010, gained the Marie Curie fellowship in 2011. You have been one of the leaders of the Avian Phylogenomics Project and applied also for a European Research Council grant. What a rocket start!

My main research field, comparative genomics is very new. Most of the progress has been made after the Human Genomic Project, which only finished 13 years ago. And I started my PhD at the right time when the new generation sequencing technology appeared. This technology is a great innovation that has



The **Marie Skłodowska-Curie Actions**, named after the double Nobel Prize winning Polish-French scientist, support researchers at all stages of their careers, irrespective of nationality.

The **prestigious EU scheme** funds PhD students and research staff through doctoral training and various programmes, as well as post-doctoral researchers with the Individual Fellowship. There are two types of **Individual Fellowships – European and Global**. The Individual Fellowship has helped Dr Zhang pursue his research in Europe. The new call will open in March.

ec.europa.eu/research/mariecurieactions



now been applied in many fields in biology. My group at BGI developed many tools in the data analyses, which have allowed me to initiate a number of animal genomics studies using this technology in the past few years.

Comparative genomics study is a powerful tool to uncover the evolutionary history and evolutionary patterns that we could not observe before. And it is also very useful to provide a correlation between genotype and phenotype. However, to reveal their causal link and the exact function of genes, we had to move on to the next step and work on the functional genomics study. In my ERC application, I have planned to work on eusocial insects, and study their complex eusocial system with functional genomics data.

How can we enhance the mobility of European researchers to China and vice versa?

You are correct that there are fewer international researchers who would consider working in China. The current situation reflects the truth that scientific research in China is still under development. We can see that Chinese researchers have recently made great achievements in some fields. But most research labs are dominated by domestic researchers.

Part of the reasons might be that most Chinese researchers do not play well in public media to advocate themselves, thus do not have a chance to attract good students outside China. Most labs in China don't even have their website in English. It is thus very hard for foreign students to find relevant information.

In other words, Europeans don't know what is going on in Chinese research.

Even for me this information is difficult to find. Most of the lab websites are very simple and have not been updated for a long time. It is even harder for foreign researchers to find English information in detail.

What could China or Denmark improve?

I found most European students could really enjoy themselves in their research. Most of them choose doing research because of their own interest. They have very good motivation for doing science. In China, a lot of students continue their PhD simply because it is very hard to find a job with a bachelor or master degree. Although Chinese students work very hard, many don't actually enjoy their scientific research.

It is the same for the senior researchers. Many lab leaders in China are very busy with meetings and funding. They have little time to communicate with students or think about their own projects. And also I can see a third difference regarding scientific meetings. Based on my experience, many meetings in China are not very useful and insightful; many researchers do not take it seriously and only present results that they published long time ago. I have even seen people using the same slides for several years in different meetings. The communication is also inefficient, as people mostly talk about funding rather than the projects during the breaks.



I participated on many small workshops in the US or Europe. These workshops only invited a small group of people and strictly focus on scientific questions and collaboration on a specific topic. It is hard to see similar meetings in China. This is something we need to improve.

Dr Zhang, thank you for the discussion!

3 EURAXESS Links Activities

EURAXESS Links China celebrates 5th anniversary at Researchers' Nights in Beijing and Shanghai

On 4th and 9th December, another edition of the “Researchers’ Nights” took place in Beijing and Shanghai. The latter networking event for European, Chinese and international researchers also presented an opportunity to celebrate our 5th anniversary.



Researchers' Night in **Beijing**, co-organized for the 4th time with ThinkIN China and Understanding Science, took place at The Steps Bar in Beijing's famous university area of Wudaokou.

Once again, the event was met with much enthusiasm on behalf of attending researchers of all fields and nationalities based in Beijing. They all gathered to enjoy an evening of presentations, food and drinks, as well as friendly exchanges and discussions about Sino-European cooperation and research in China.



Next, the Researchers' Night moved to **Shanghai**. Given the fact that EURAXESS Links China was launched on 10th December 2009, the Shanghai event on 9th December provided a great opportunity to celebrate the anniversary.

Researchers from both public and private sectors met at the informal networking event at Kaiba Taphouse in central Shanghai. The evening featured testimonials by interesting European researchers based in Shanghai and reflections on their experience of pursuing a research career between Europe followed, as well as a tasty 'birthday' cake for EURAXESS Links China!

The Researchers' Nights have become a regular outlet for European and Chinese researchers to exchange advice and experience in an informal atmosphere. It is a way to establish new contacts, to form networks and help progress each others' research.

We hope EURAXESS Links will continue to successfully bring together researchers from Europe and China in the following years!



EURAXESS Links Satisfaction Survey 2014

Dear EURAXESS Links community members!

EURAXESS Links would like to hear from you how we can further improve our services to keep you updated about research mobility opportunities.

We would appreciate you taking the time to please take our brief user survey, which is designed to help us to better understand what you need. The survey should take between 3-5 minutes to complete.

Thank you very much for your feedback!

Your EURAXESS Links Team

Link to survey: <https://secure.pt-dlr.de/pt-survey/index.php?sid=79264&lang=en>

4 News & Developments

4.1 EU & Multilateral Cooperation

Feathered friends: researchers unveil bird 'family tree'

Scientists have unveiled the most comprehensive bird 'family tree' ever devised, using genetic data from 48 species to trace how modern bird lineages arose and flourished after the mass extinction that killed off the dinosaurs.

The work by researchers from 20 countries helps clarify the evolutionary relationships of modern bird groups and reveals the genetic underpinning of traits such as singing, toothlessness, colorful feathers and color vision.

"We have produced a well-resolved bird family tree and provided a clear picture of how the modern birds originated and evolved," said geneticist Guojie Zhang of the BGI genome research center in Shenzhen, China and the University of Copenhagen. ([Reuters](#))

Europe and Africa double research efforts to tackle AIDS, Ebola and other infectious diseases

The EU and Africa are doubling the research efforts to develop new and better medicines for poverty-related diseases affecting sub-Saharan Africa such as AIDS, tuberculosis, malaria, hookworms and Ebola.



Building on the success of the first programme, the second European and Developing Countries Clinical Trials Partnership programme (EDCTP2) will work with a budget of €2 billion over the next ten years to fight infectious diseases in developing countries. For this, the EU will contribute €683 million from Horizon 2020, the EU's research and innovation programme, and around €1.5 billion will come from European countries. EDCTP2 heralds a new era of cooperation between Europe and Africa in medical research with countries from both continents working as equal partners.

Carlos Moedas, European Commissioner for Research, Science and Innovation, said: "*Infectious diseases like AIDS, Ebola or malaria are a major global threat, but they hit poor communities hardest. The latest Ebola outbreak reminds us that more research is needed to find new medicines and vaccines that will help save millions of lives. Today, Europe and Africa are stepping up their efforts to fight the spread of infectious diseases together. With the investment of EUR 700 million from Horizon 2020, the EU will boost research efforts to prevent new epidemics in the future.*"

Prof. John Gyapong, Board Member of the EDCTP Association said: "*The birth of EDCTP2 is very timely. Neglected Infectious Diseases and Implementation Science Research are now covered. This presents a great opportunity for African countries to improve their health care delivery systems through good science. The prospects are indeed very bright.*"

The [EDCTP Association](#) now includes 13 European countries (Austria, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, and the United Kingdom) and 11 African countries (Cameroon, the Republic of the Congo, the Gambia, Ghana, Mozambique, Niger, Senegal, South Africa, Tanzania, Uganda, and Zambia). Mali, Burkina Faso, Sweden and Switzerland are about to join as well.

[Read more](#) (European Commission)

See also [EDCTP Calls for Proposals](#): EDCTP-TDR Clinical Research and Development Fellowships (Deadline: 30 January 2015) and Diagnostic tools for poverty-related diseases (Deadline: 2 March 2015)

EU companies must boost R&D investment to stay globally competitive

Investment in research and development by companies based in the EU grew by 2.6% in 2013, despite the unfavourable economic environment. However, this growth has slowed in comparison to the previous year's 6.8%. It is also below the 2013 world average (4.9%), and lags behind companies based in the US (5%) and Japan (5.5%).

These results are published this month in the European Commission's 2014 [EU Industrial R&D Investment Scoreboard](#), which analyses the top 2500 companies worldwide, representing about 90% of the total business R&D expenditure. Data show that EU-based companies (633) invested €162.4 billion in 2013, whereas



[Infographics: EU R&D Scoreboard. Benchmarking EU industry innovation performance to help shape EU policy](#)
[Infographics: EU R&D Scoreboard. Benchmarking EU industry innovation performance to help shape EU policy](#)

US-based companies (804) invested €193.7 billion and the 387 Japanese ones €85.6 billion.

Carlos Moedas, Commissioner for Research, Science and Innovation said: *"Despite the harsh economic climate, EU companies continue to invest in R&D. That is good news, but more is needed to keep up with our competitors. With public resources limited, attracting private R&D investment is even more essential. Horizon 2020 is already engaging more businesses than ever before, but now we're ready to step up our game. The EUR 315 billion investment plan presented by the Commission and European Investment Bank will help to raise more private investment for riskier projects, benefiting R&D across Europe."*

Tibor Navracsics, Commissioner for Education, Culture, Youth and Sport highlighted: *"Thanks to the presence of excellent researchers and good knowledge-sharing opportunities Europe is an attractive destination for R&D investment. But to keep up with global competitors we need to boost investments – and these should benefit a range of research disciplines and sectors. Building a knowledge economy requires strong foundations and we count on our industry partners to help us in these efforts."*

[Read more](#) (European Commission)

See also the [Fact sheet "World trends in R&D private investment. Facts and figures"](#)

Switzerland and EU join forces in science and research

The European Union and Switzerland signed on 5 December 2014, a comprehensive international agreement associating Switzerland to parts of Horizon 2020, Research and Training Programme of Euratom and the ITER project. This will see Switzerland participate in project consortia in eligible programmes on an equal footing with EU Member States, while financially contributing to these programmes with an estimated €400 million until the end of 2016.

Commenting on the signature of the agreement, Carlos Moedas, European Commissioner for Science, Research and Innovation said: *"This agreement is of paramount importance for our scientific communities. EU researchers benefit from access to excellent Swiss research facilities and institutions. At the same time, access to schemes for researcher mobility like Marie Skłodowska-Curie or to excellent research in programmes like ERC and Future and Emerging Technologies is vital for the Swiss. Furthermore, with this agreement Switzerland renews its commitment towards our long standing and fruitful collaboration."*

As part of the Horizon 2020 programme, Swiss beneficiaries will be able to participate with an associated status in actions under the "Excellent Science" pillar, which contains the European Research Council, Future and Emerging Technologies, Research Infrastructures and the Marie Skłodowska-Curie actions as well as in actions under the specific objective "Spreading excellence and widening participation". In addition, Switzerland will also participate as an associated country in the Euratom Programme and the ITER project.



The participation of Switzerland is effective from 15 September 2014 until 31 December 2016. Beyond 2016, association to these programmes will depend on Swiss measures to ensure the non-discrimination of Croatian citizens and researchers. If Switzerland resolves the issue of the free movement of persons by February 2017, the association will expand to the whole of Horizon 2020 including the parts not yet covered. Otherwise, the whole agreement will be automatically terminated.

[Read more](#) (European Commission)

EU backs 328 top early-career researchers with €485 million

The European Research Council (ERC) has selected 328 first class scientists to receive its prestigious Starting Grants, worth up to €2 million each. The awarded €485 million contributes to supporting a new generation of top scientists in Europe developing so-called "blue sky research": ambitious high-risk, high-gain research projects in any field.

The projects selected cover a wide array of topics, including wearable electronic textiles powered by body heat, detection of bacteria by smell, 'toxic expertise' in the petrochemical industry, the origins of human rationality, combatting cancer related inflammation, as well as optimising user interface design. Read about some of the selected projects [here](#).

Carlos Moedas, Commissioner for Research, Innovation and Science said: *"To create tomorrow's innovation and growth, cutting-edge research is a must. With its Starting Grants, the European Research Council nurtures the next generation of excellent scientists allowing them to follow their scientific curiosity and take risks. To be at the forefront, Europe needs this gutsy mindset, and to invest in young talent."*

This year, grants are awarded to researchers of 38 nationalities, hosted in 180 different institutions throughout Europe. In terms of host institutions, Germany (70 grants) and the UK (55 grants) are in the lead, followed by France (43) and The Netherlands (34). Researchers are also hosted in Austria, Belgium, Czech Republic, Denmark, Finland, Hungary, Ireland, Israel, Italy, Norway, Portugal, Romania, Serbia, Spain, Sweden and Turkey, along with one project in CERN in Switzerland.

Around 40 of the researchers are of non-European nationality; for instance North and South Americans, Asians, Australians, New Zealanders and Russians. Many of them were already based in Europe.

There are also 18 researchers coming to Europe to carry out their ERC-funded projects, including 13 returning Europeans, as well as scientists moving to Europe from Australia and North America. This is in line with the ERC mission to attract more excellent researchers to Europe.

The average age of selected researchers is about 35 years.

[Read more](#) (European Commission)



European Research Council
Established by the European Commission

ERC News

Read also the ERC Press Release: [ERC Starting Grants: €485 million to 328 top researchers](#) to see the lists of selected researchers [by country of host institution](#), by domain in alphabetical order ([Physical Sciences and Engineering](#), [Life Sciences](#), [Social Sciences and Humanities](#)) and some indicative [statistics on the Starting grants](#).



Strengthening the SET-Plan

Over 650 energy stakeholders from Europe and beyond gathered in Rome this month for the 7th Strategic Energy Technology Plan (SET-Plan) Conference. The conference offered a unique opportunity for all stakeholders and representatives of national and EU institutions to have in-depth discussions on the new developments of the SET Plan towards an integrated roadmap and action plan addressing research & innovation challenges and needs of the EU energy system.

The "[towards an integrated Roadmap](#)" document which will ultimately lead to the Action Plan was presented at the event, and is the result of in depth consultation and inputs from more than 150 stakeholders and the SET-Plan steering committee from the Member States. The document has been compiled based on these inputs by the European Commission's Directorates-General for Energy, Research and Innovation and the Joint Research Centre. The JRC coordinated the technical and scientific input to the consultation process.

Source: [Joint Research Center](#)



This year's record crop resulted in a price decrease: prices should recover over the projection period due to a strong feed demand, compensating a slower than expected increase of biofuels demand.
© Fitimmz, Fotolia

Crop, dairy and meat markets projections for the next 10 years

JRC expertise in modelling with a focus on baseline projections and particularly on uncertainty scenarios has fed into the latest issue of the European Commission's agricultural outlook for the next decade. The outlook "[Prospects for EU Agricultural Markets and Income](#)," was compiled by the [Directorate-General for Agriculture and Rural Development](#) and presented during a [dedicated conference](#). The publication describes the trends for major EU agricultural commodity markets such as crop, milk and meat markets until 2024.

[Read more](#) (Joint Research Center)

Using the science of invisibility to make black holes in the lab – Prof. Ulf Leonhardt

From the galactic to the quantum, the science of invisibility is revealing new ways to manipulate the world, said Professor Ulf Leonhardt, from Israel's Weizmann Institute, after giving a presentation at TEDxBrussels "[The Science of invisibility](#)" on 1 December.

[Read the interview](#) on HORIZON The EU Research & Innovation Magazine.

'Kitchen blender' graphene could enable printable circuits and sensors – Prof. Jonathan Coleman

Graphene that can be made in a kitchen blender is opening up a new world of printable electronic devices, according to Professor Jonathan Coleman, speaking after making a presentation at the TEDxBrussels conference "[How the magic of nano connects blenders, printers and rubber bands](#)" on 1 December .



How the magic of nano connects blenders, printers and rubber bands | Jonathan Coleman | TEDxBrussels



[Read the interview](#) on HORIZON The EU Research & Innovation Magazine.

The light fantastic

Light pulses that last just a billionth of a billionth of a second are allowing scientists to view the movement of electrons in detail for the first time. In the darkest month of the year, Horizon turns its gaze towards the science of light.

We discover how these rapid light pulses are helping scientists make 'molecular movies' of chemical reactions, and learn how Europe is leading the way in the use of extreme light, from the world's brightest X-ray to one of the world's most powerful lasers.

We investigate the new materials that are harnessing sunlight to clean our environment, from pollution-absorbing bus lanes to paint that purifies drinking water. Finally, we explore how new LED technology could not only dramatically cut Europe's lighting bills but also influence the way we interact with our environment.

[Read more](#) (HORIZON The EU Research & Innovation Magazine)



Marie Curie Fellow Leads Analysis of the Genomes of Malaria-Carrying Mosquitoes

Dr Robert Waterhouse, a Marie Curie International Outgoing Fellow at the Massachusetts Institute of Technology, has published his findings on malaria-carrying mosquitoes genome analysis in 'Science'.

[Read more](#) (Marie Skłodowska-Curie actions (MSCA))

Commission announces winners of European Business Awards for the Environment 2014-2015

EU Environment, Maritime Affairs and Fisheries Commissioner Karmenu Vella announced the winners of the European Business Awards for the Environment 2014-15 at an evening ceremony early December. The awards recognise companies that combine competitiveness with respect for the environment in five categories: management, product and services, process innovation, business and biodiversity and international business cooperation. This year's winners include large corporations and SMEs:

- **Eczacıbaşı Yapı Gereçleri (Turkey)**, a leading producer of ceramic bathroom products and tiles, for management
- **EcoNation (Belgium)**, a company supplying lighting solutions, for product and services
- **Daimler AG (Germany)**, a motor vehicle and engine manufacturer, for process innovation
- **Interface Nederland BV (Netherlands)**, the world's largest designer and maker of carpet tiles, for international business cooperation



- **Red Eléctrica de España (Spain)**, an electricity operator, for business and biodiversity

[Read more](#) (European Commission)

10 December - A Magic Date: The Nobel Prize Award Ceremony 2014

The Nobel Laureates have taken center stage in Stockholm on 10 December, when they received the Nobel Medal, Nobel Diploma and a document confirming the Nobel Prize amount from King Carl XVI Gustaf of Sweden.

In Oslo, the Nobel Peace Prize Laureates received their Nobel Peace Prize from the Chairman of the Norwegian Nobel Committee in the presence of King Harald V of Norway. An important part was the presentation of the Nobel Lectures by the Nobel Laureates.

In Stockholm, the lectures are presented days before the Nobel Prize Award Ceremony. In Oslo, the Nobel Laureates deliver their lectures during the Nobel Peace Prize Award Ceremony.

Source: Nobelprize.org

4.2 EU Member States*, China & Bilateral Cooperation

France – Yearly meeting of Mainland China-based French researchers held for the first time in Chengdu on 5-6 December

Around 30 PhD students, postdocs and senior researchers from various scientific areas (including hard sciences and social sciences) were gathered to share their experience of working in China around two main topics: research in China, and the life of a French researcher in China. Staff from the French embassy and consulates introduced the different schemes offered by the embassy to support researchers' mobility.

The meeting unfolded in a very friendly atmosphere and helped bridge the researchers' community and the diplomatic staff as well as identify some issues of relevance to the researchers which the embassy could work on (in particular visa issues).

Source: La France en Chine



* Including countries associated with Horizon 2020.



France – First ever Innovation Awards for Franco-Chinese Teams

As part of the “France Technology – so French, so innovative” publicity campaign, the France China Committee (CFC) and its partners have organized the first ever Innovation Awards for Franco-Chinese Teams.

The Innovation Awards for Franco-Chinese teams are intended to showcase and reward people who contribute to world-class research and development of innovative projects designed to transform our lifestyles for the better.

The projects presented have been developed jointly by bi-cultural teams from universities, top ranking schools, laboratories and R&D centers, covering the entire range of French and Chinese innovation.

The jury decided to reward the winning teams on the basis of the following criteria:

- Innovative qualities and endorsement of intellectual property
- Economic viability
- Usefulness of the project in social, economic, industrial and environmental terms.

The two winning teams have been chosen from 22 projects involving over 200 French and Chinese engineers, competing in 2 different categories:

- R&D
- Innovative Product.

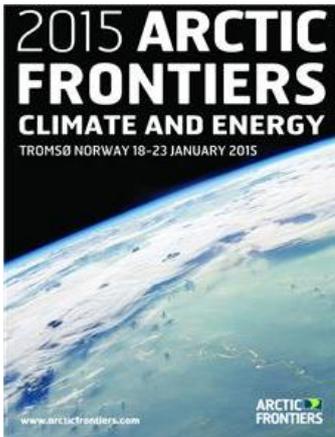
The R&D Prize has been awarded to EDF & IEE-CA (Institute of Electrical Engineering- Chinese Academy of Science) for their R&D project into Concentrated Solar Power (CSP) technology for towers.

The Innovative Product Prize has been awarded to ALCHIMEDICS S.A.S, SINO MEDICAL SCIENCES TECHNOLOGY INC for their “BuMA” product: A vascular stent maximizing patient protection and cutting healthcare costs.

The winners received their prizes at a press conference held on December 4 in Beijing at the Raffles Hotel, in the presence of HE Maurice Gourdault-Montagne, French Ambassador in China, and the two co-chairmen of the Jury, Yves Lapierre, Managing Director of INPI, and HE Zhimin, Deputy Commissioner of SIPO.

The two winning teams received cash awards of RMB 30,000 per team, and airline tickets donated by Air France and tablets donated by Huawei.

Source: [France Technology](#)



Norway – Norway supports Chinese researchers to take part in Arctic Frontiers conference 2015

The ninth Arctic Frontiers conference (18-23 January, 2015) will soon take place in Tromsø – the Norwegian city known as the Gateway to the Arctic. The 2015 conference's major topics are climate and energy.

Arctic Frontiers is an international arena for sustainable development in the Arctic. It brings academia, government and business together to create a firmer foundation for decision-making and sustainable economic development in the Arctic.

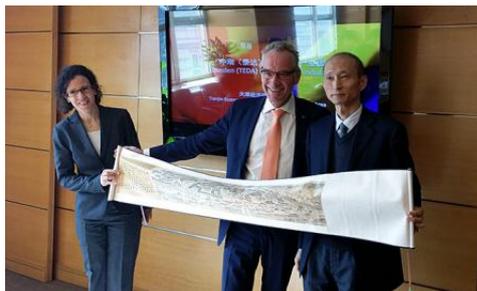
The annual Arctic Frontiers conference addresses the management of opportunities and challenges to achieve viable economic growth with societal and environmental sustainability.

The 2015 conference takes place in Tromsø, Norway, January 18th-23rd, and the Norwegian Consulate General in Shanghai sponsors three Chinese Arctic researchers to participate.

The conference is composed of a policy section and a scientific section. The scientific section on climate and energy will address three main themes: Arctic climate change and global implications, ecological winners and losers in future Arctic marine ecosystems, and the Arctic's role in the global energy supply and security.

For more information about Arctic Frontiers, please follow this [link](#). You can also see the full conference program [here](#).

Source: [Norway in China](#)



Maisoun Jabali (CENTEC), Mats Denninger (IMT), and Zhang Jun (TEDA)
PHOTO: TEDA

Sweden - Extensive environmental technology cooperation with Tianjin

By invitation from partners in Tianjin, Mr. Mats Denninger, Swedish Government's High Representative for International Environmental Technology Cooperation (IMT), led a delegation to Tianjin Economic-Technological Development Area (TEDA) and Tianjin Baodi District on 1 December to explore opportunities for Swedish clean tech companies.

The Vice Chairman of TEDA, Zhang Jun, had an in-depth discussion with Mr. Denninger on the opportunities and challenges facing international environmental technology cooperation in China.

The Vice Governor of Tianjin Baodi District, Yin Jianguo, took the delegation for a site visit to see a smart heating and cooling system inside a high-end property development project using Swedish rock-energy technology.

The same technology is to be applied for a new Buddhist Temple that is to become the largest in China.

Source: [Sweden Abroad](#)



UK - New UK-China research collaboration to combat natural hazards

A 3-day scoping workshop between UK and China was held in Chengdu from 18-21 November 2014.

The workshop is under the Increasing Resilience to Natural Hazards joint programme funded by the UK's Natural Environment Research Council (NERC), Economic and Social Research Council (ESRC) and the National Natural Science Foundation of China (NSFC) with support and facilitation from Research Councils UK (RCUK) China office. This programme is implemented under the [UK-China Research and Innovation Partnership Fund \(Newton Fund\)](#).

Over 70 participants attended the workshop, including 25 leading academics from the UK, the largest delegation to attend a Research Council UK workshop in China. Participants shared knowledge on priority areas under this programme, which aims to increase social and economic resilience in earthquake-prone and volcanic regions by reducing risks from multiple natural hazards.

A total of £3 million pounds will be provided by NERC and ESRC to UK scientists, with NSFC providing matched funding to Chinese researchers. This is the first time NERC and ESRC have jointly partnered with NSFC. One of the programme's principal goals is to integrate natural and social science research to ensure that new knowledge is used to effectively tackle resilience by benefitting those most vulnerable to natural hazards.

More details in source: [UK.GOV](#)

UK - Shanghai Theatre Academy opens doors to UK researchers

UK's Arts and Humanities Research Council has signed a Memorandum of Understanding with the Shanghai Theatre Academy in China.

The agreement was signed in Shanghai on 12 November by Professor Rick Rylance, CEO of the Arts and Humanities Research Council (AHRC), and Professor Han Sheng, President of the Shanghai Theatre Academy (STA). Under this Memorandum of Understanding (MOU), the STA will join the AHRC's International Placement Scheme (IPS) with immediate effect. The IPS provides funded fellowships at some of the world's leading research institutions for UK early career researchers, doctoral-level research assistants and AHRC-funded doctoral students. Up to four fellowships will be available at STA from 2015. It will also allow the AHRC and STA to pursue further options for collaboration in the future.

The Shanghai Theatre Academy is a comprehensive university of performing arts. More details in source: [UK.GOV](#)





UK – New report from the British embassy in Beijing on China's efforts to peak carbon emissions by 2030

China has announced a target of peak carbon emissions in 2030. There are indications that they could do so earlier. The single biggest factor will be the speed and direction of economic restructuring. Growth is slowing in the big emitting industries. Latest figures for coal consumption show a decline for the first time in decades.

Read more in the report [China's 2030 emissions peak: is industry shifting down a gear?](#)

Source: [UK.GOV](#)



5 Grants & Fellowships

5.1 Calls announcements for international researchers

Belgium - FWO PhD and Postdoctoral Fellowships

The FWO-Vlaanderen is the funding agency of Flanders for research performed at the universities in Flanders. **The PhD Fellowship** is the most important funding channel to prepare young and promising researchers to complete their PhD. The candidates must submit a proof that the university trustees grant him or her permission to prepare a PhD thesis (for PhD fellowships) or that he has a PhD or equivalent degree. The fellowship is for the period of 2 years, renewable once. Net scholarship amount: minimum €1,860.55.

EU (EEA or Switzerland) nationalities, non-EU candidates must have obtained a basic master's degree within the European Economic Area.

For the funding of a limited number of fellowships, the FWO collaborates with: [SCK•CEN](#), [L'Oreal-Unesco](#) and [VITO](#). The PhD research must be fundamental in nature. The deadline is **1 February 2015**. More information on the PhD Fellowship is [here](#). There are also: [Special PhD fellowships](#) which enable persons not employed within scientific research to complete a PhD within one year (deadline is 1 February 2015), and a [Clinical PhD Fellowship](#) which supports specialists (doctors, veterinary surgeons, dentists and pharmacists) who are employed in a full-time clinical role, to pursue fundamental clinical research (but must live and work in Belgium). [ICM-FWO Fellowship](#) is a specific funding channel to prepare young and promising researchers to complete their PhD based on high-quality research in the field of management sciences, from various basic disciplines, interdisciplinary and practice-oriented.

The postdoctoral fellowships are intended to support researchers who have only recently completed their PhD, in developing an independent, international research career. The funding is for 3 years, renewable once. Salary scale: minimum €29,069.73 - maximum €45,317.25. Applicants must hold a PhD and if, on October 1, they are older than 36 years, they must have obtained a PhD no longer than 6 years ago (+ 1 year per pregnancy or parental leave). Interested candidates can access all relevant information, details and guidelines as well as an example of application form [online here](#).

Czech Republic – Scholarships for Academic Year 2015/2016

Scholarships to foreign nationals, pursuant to bilateral intergovernmental or departmental agreements concluded with a number of countries (see online). Scholarships are awarded to applicants – students or PhD candidates – who wish to pursue a study or research stay. They must be nominated by the competent authorities of eligible countries. For some countries, only academic staff members are eligible for exchange. All research fields welcome.



Scholarships of this type are designed for university/college students or graduates and PhD candidates (exceptionally also for university researchers/teachers) who wish to accomplish a **study or research stay** at one of the [Czech public institutions of higher education](#). Its length usually ranges **from 2 to 10 months**.

Scholarship-holders may be admitted for **research visits** (i.e. either attending non-degree courses of their choice, or pursuing an independent research activity, depending on their qualifications and preferences), or for **study visits**.

You can find more information as well as a list of eligible countries (including China) under [this link](#). Deadline is set by relevant agreements with eligible countries, **usually 31 March**.

FiDiPro Finland Distinguished Professor Programme 2015 (First phase)

FiDiPro - the Finland Distinguished Professor Programme enables distinguished researchers, both international and Finnish expatriates to work and team up with the Finnish academic research. It provides competitive grants to projects recruiting highly merited scientists. Deadline is **26 February 2015**.

The application process takes place at two stages. The projects invited to proceed to the second stage are selected on the basis of the first phase proposals. Applications for FiDiPro funding are submitted by a Finnish research organisation. The projects can also be organised as parallel projects between research organisations and companies.

Tekes FiDiPro call for proposals 2015: the first phase FiDiPro project proposals should be at Tekes on **26th February 2015**. www.tekes.fi/en/fidipro/apply/

The FiDiPro projects funded by Tekes can be either:

- **parallel projects between companies and research organisations**
In a parallel project, each party submits its own funding application to Tekes. A joint project plan is drawn up for parallel projects, enabling each party to implement its own part of the project. [More information about parallel projects](#) (In Finnish)
- **Public research networked with companies**

FiDiPro Professor funding is intended for inviting highly merited international professors to Finland.

FiDiPro Fellow funding is intended for inviting international top researchers to Finland. Under the title FiDiPro Fellow, funding is granted to promising top researchers past their post doc stage (eg. associate/assistant professor, junior professor, researcher). **In this call, Tekes is asking applications especially for FiDiPro Fellow funding.**



Finland – Finnish Government Scholarship

- The Finnish Government Scholarship Pool programme is open to **young doctoral level students from all academic fields**. The scholarships cannot be applied for post-doctoral studies or research. The scholarships are based mainly on cultural agreements or similar arrangements between Finland and other countries. The applicants may contact the scholarship authorities in their home country for information on the national deadline for submitting the application documents. All research fields welcome.
- Nationals of countries that have a cultural agreement with Finland, including China, can apply.
- Finnish Government Scholarship Pool programme application form is not an application for a study/research placement. It is merely an application for funding.

The scholarship includes a monthly allowance of EUR 1500 for a period of 3 -9 months. The deadline is February 2015.

Read more information on the dedicated website [here](#).

Finland – Foundation's Post-doc Pool

Säätiöiden post doc -pooli ("the Foundations' Post Doc Pool") is a grant resource set up by Finnish foundations, all members of the Council of Finnish Foundations, and intended for post-doctoral research abroad.

The Pool's aim is to make Finnish research more international by offering young scholars flexible funding from one source that covers all expenses of a research period abroad for at least one academic year. The grants are intended only for **sending researchers abroad from Finland**.

They are for at least one academic year for scholars, who have recently completed their doctoral degree and wish to conduct research abroad. Grants may also be awarded for periods longer than one year. They are **also available for non-Finnish nationals**.

The Pool's grant is may cover all expenses for conducting research abroad, including travel and moving costs and schooling expenses and insurance. The total sum of the grant awarded is based on the applicant's own cost estimate.

The Spring application round is open from **15 December 2014 to 15 January 2015**. Visit www.postdocpooli.fi/

France – EFEO Field Scholarships

The École française d'Extrême-Orient awards scholarships to research students tenable for periods of research in an EFEO or ECAF (European Consortium for Asian Field Study) Centre in Asia.



The scholarships offer a monthly stipend varying between 700 and 1 360 € according to the academic level of the applicant (MA or PhD student) and the country of field research in Asia. Duration: 1 to 6 months.

Research in humanities or social sciences applied to the history and civilizations of Asia. Applicants must have a good command of the language(s) required to successfully complete the field research project, as well as a working knowledge of French. The deadline is **31 March 2015** before noon (Paris time), for scholarships tenable between 1 July and 31 December 2015. More info [here](#)

Germany - DAAD: Reintegration of German scientists

- German PhD students about to finish their doctorate, German postdocs/junior researchers and German senior researchers who are no longer integrated in the German academic system and would like to return to Germany after having spent at least 1 year abroad.
- Individuals may apply for travel grants for job interviews and scientific presentations in Germany to enable their possible return, or for monthly scholarships to conduct research in Germany with the goal of reintegrating into the German scientific community. More information [here](#).

Germany – Humboldt International Climate Protection Fellowships

The Humboldt Foundation is inviting applications for International Climate Protection Fellowships to promote prospective leaders from transition and developing countries. Applications may be submitted **from now until 15 March 2015**.

Up to 20 young climate experts from non-European transition or developing countries who already have initial professional and leadership experience in this field will be funded in the next round. They are involved with issues relating to the **scientific, engineering, legal, economic or social aspects of climate change**.

Together with a host, they will work in Germany for a year on a research-based project of their own choice in the field of climate protection. The fellowships, which are funded under the International Climate Protection Initiative by the Federal Environment Ministry, will begin on 1 March 2016.

[View the call online.](#)



Germany – Humboldt Research Fellowship for Post-doctoral Researchers

A Humboldt Research Fellowship for postdoctoral researchers allows awardees to carry out long-term research (6-24 months) in Germany. Applicants choose their own topic of research and their academic host.

Scientists and scholars of all nationalities and disciplines may apply to the Alexander von Humboldt Foundation directly **at any time**. The Humboldt Foundation grants approximately 500 Humboldt Research Fellowships for postdoctoral researchers and [experienced researchers](#) annually. Short-term study visits, participation in congresses and training courses cannot be financed.

The fellowship is worth €2,450 per month. Additional benefits: e.g. travel lump sum, language fellowship, subsidies and allowances for accompanying family staying longer than three months. An allowance towards research costs will be offered to the host institute.

[Visit the website](#) for more information.

Ireland - Government of Ireland Postgraduate Scholarship Scheme 2015

The Government of Ireland Postgraduate Scholarship Scheme offers scholarships for suitably qualified individuals to pursue a postgraduate degree in any discipline at an eligible HEI within Ireland. In addition, a number of targeted Scholarships are offered in collaboration with our strategic funding partners (available [online](#)).

The Council funds excellent researchers across all disciplines and encourages interdisciplinary research and engagement with enterprise. Scholars must be full-time students affiliated with an eligible HEI in Ireland. Scholars from any country may hold a Council Postgraduate Scholarship. However, they must maintain her/his principal residence in Ireland during the period of the Scholarship. Deadline for applicants is **11th February 2015**. The Guide for applicants is [available online](#) with all necessary documentation.

Israel - Post-Docs and PhD fellowships: History of Mongol Eurasia

The European Research Council (ERC) project **Mobility, Empire and Cross-Cultural Contacts in Mongol Eurasia** at the Hebrew University of Jerusalem is offering Post-Docs, PhDs and Visiting PhD's fellowships beginning in 2015-16 for outstanding candidates fluent in Chinese, Arabic and Persian (at least one of the above) and with a sound knowledge of the history of the Mongol Empire. The successful candidates will take

part in a team work, which creates a prosopographical database of people active under Mongol rule, and can use the accumulated data for their own research.



Applicants with knowledge of Arabic, Persian and/or Chinese can apply for [Ph.D. Fellowships](#), [Post-Doctoral Fellowships](#) and [Visiting Ph.D. Fellowships](#). For more info about the project visit <http://mongol.huji.ac.il/> or contact Michal Biran at biranm@huji.ac.il

Deadline: **February 1st 2015**

The Netherlands - NWO VISITORS TRAVEL GRANT

Highly qualified foreign senior researchers who hold a PhD can apply for a Visitor's Travel Grant to stay in the Netherlands. With this grant these researchers can stay in the Netherlands for a maximum of four months. The aim of the visitor's grants is to facilitate the cooperation between Dutch and foreign researchers.

The host with a tenured position at one of the Dutch universities, KNAW institutes, NWO institutes, NKI, MPI Nijmegen, researchers from the Dubble Beamline at the ESRF in Grenoble, NCB Naturalis, and the Advanced Research Centre for NanoLithography (ARCNL) can apply for a visitor's grant. The applicant or a researcher of the applicant must act as the host/hostess. Applications can be submitted until the reserved budget for the programmes Visitor's Travel Grant, Cooperation Germany - Von Humboldt Stiftung, Cooperation Japan, Cooperation Taiwan and Cooperation China travel and subsistence costs, seminars has been exhausted. The call is now open, information [here](#).

Luxembourg - AFR PhD Grants

The FNR's AFR PhD Grant Scheme (Aides à la Formation-Recherche) provides funding for PhD research training projects in Luxembourg and abroad for up to 4 years. Applicants must be holders of a university degree allowing them to enter into doctoral training. The AFR scheme promotes public/private partnerships by paying an incentive for research projects carried out in collaboration with the private sector.

Applicants must be holders of a University degree allowing them to enter into doctoral training. The AFR programme has no thematic limitations and is open to all researchers, regardless of their nationality, desirous to engage into research training in Luxembourg or abroad. max. AFR contribution (including employers' charges) will be 40,154 EUR / year.

Click [here](#) for more. The deadline for the submission of proposals will be **17 March 2015**.



Sweden - Royal Academy of Sciences – Chemistry, Geosciences

These scholarships support PhD students and postdoctoral researchers to do research in Sweden. In addition to the funding available by means of general applications, special foundations and research exchanges are allocated.

Closing date for applications: **31 January 2015**.

Chemistry: Scholarships up to SEK 100,000 maximum can be allocated to PhD students. and postdoctoral researchers can be allocated up to SEK 300,000. Applicants who gained their PhDs in the past five years are prioritized among the latter. Scholarships are payable for a maximum of one year. Special requirements in 2015: This year, Swedish citizenship is required for about two thirds of the available fundings, according to the purposes of the funding foundations. More information [online](#).

Geosciences: Available funding 2015: 407 000 SEK. Scholarships up to SEK 100,000 maximum can be allocated to PhD students. and postdoctoral researchers can be allocated up to SEK 300,000. Applicants who gained their PhDs in the past five years are prioritized among the latter. Scholarships are payable for a maximum of one year. Details [here](#).

The UK – Arts and Humanities Research Council International Placement Scheme

The annual International Placement Scheme (IPS) provides funded research fellowships at world-leading international research institutions for early career researchers, doctoral-level research assistants and AHRC/ESRC*-funded doctoral students.

- From 2015, IPS fellowships are available at:
- [Harry Ransom Center, The University of Texas at Austin, USA](#)
- [Huntington Library, San Marino, California, USA](#)
- [Library of Congress, Washington D.C., USA](#)
- [National Institutes for the Humanities, Japan](#)
- [Shanghai Theatre Academy, China \(new!\)](#)
- [Smithsonian Institution, Washington D.C., US](#)
- [Yale Center for British Art, New Haven, Connecticut, USA](#)

Fellows can enjoy a fellowship of two to six months, a travel contribution of up to £800, visa costs paid, plus a £1200 monthly stipend (in addition to the normal stipend paid as part of any existing AHRC/ESRC award). All applicants must be resident in the UK. The closing date is **15th January 2015**.

[Click on the website](#) for more details.



Romania – PhD Scholarships for International Students

Romanian Ministry of Foreign Affairs offers 85 scholarships for under- and post-graduate studies in Romania. Citizens of non EU countries (irrespective of their country of residence) can apply. Priority is given to citizens from non EU states with which Romania does not have cultural and education cooperation agreements.

The **3rd cycle (=doctorate) scheme** is dedicated to the graduates of university/postgraduate studies (i.e. master); it lasts for 3-4 years, equivalent of EUR 85 per month plus living expenses covered. Priority will be given to the candidates applying for: political and administrative sciences, education studies, Romanian culture and civilization, journalism, technical studies, oil and gas, agricultural studies, veterinary medicine, architecture, music, arts, music.

The beneficiaries of the scholarships should study only in the Romanian language (one extra year of language study can be provided). **Deadline is 15 March 2015**; all information can be found [online](#).

China - CAS President's International Fellowship Initiative, Category D: CAS-TWAS PIFI for International PhD Students

The Chinese Academy of Sciences (CAS) offers a package of international fellowships, collectively called the "CAS President's International Fellowship Initiative (PIFI)", to support highly-qualified international scientists and postgraduate students to work and study at CAS institutions and strengthen their scientific collaboration with CAS researchers. The PIFI programme is available for four categories of international researchers and students: distinguished scientists, visiting scientists, postdoctoral researchers and **international PhD students**.

The **CAS-TWAS President's Fellowship for International PhD Students** supports 200 international graduates each year, to pursue their PhD degrees at the University of the Chinese Academy of Sciences (UCAS), the University of Science and Technology of China (USTC) or CAS institutes around China.

International students will take regular training courses at UCAS/USTC for about a year and carry out research and dissertation at CAS institutes. In addition to tuition waivers, this program will provide travel support and visa application fees for selected awardee, as well as a monthly allowance to each awardee. The deadline for submitting all material and applications is **31st, March, 2015**.

Information on CAS website dedicated to [PIFI](#).

China - Chinese Government Scholarship - EU Programme

Chinese Government Scholarship—EU Program is a full scholarship established by MOE for candidates from EU member countries. This



programme is a full scholarship for candidates from EU member states. It supports undergraduate programs (under 25 years old), master's programs (under 35), doctoral programs (under 40), general scholar programs (under 45) and senior scholar programs (under 50). Full scholarship, a waiver of fee for registration, tuition, laboratory experiments, internship, and basic textbooks; free on-campus dormitory accommodation; monthly living allowance; one-off settlement subsidy; outpatient medical service and Comprehensive Medical Insurance and Protection Scheme for International Students in China; one-off inter-city travel Reimbursement. Partial scholarship includes one or some items of the full scholarship items.

Applicants should apply to the Office for Education and Culture, Mission of P. R. China to the European Union from January to **30th April 2015**.

Detailed information on how to proceed with application can be found [here](#). Please consult the application receiving agencies for specific deadline.

China - Beijing Municipal Scholarship

The Beijing Government Scholarship (BGS) was established by Beijing Municipal Government, aiming to provide tuition fees fully or partially to the international students studying or applying for studying in Beijing. Its administrative office is the International Cooperation and Exchange Office of Beijing Municipal Commission of Education. Applicants may choose institutions and specialties from the Chinese institutions of higher education in the Beijing region. 1. Excellent international students who pursue degrees at Higher Education Institutions (HEIs) in Beijing. The duration of the scholarship is no more than 4 academic years. Applicants can choose from applying to programmes for:

- 1. Chinese language students and senior scholars. The duration of the scholarship is no more than 1 academic year.
- 2. General scholars. The duration of the scholarship is no more than 1 academic year.
- 3. Exchange students and students with special contributions. The duration of the scholarship is no more than 1 academic year.

The scholarship is RMB 40,000 / year for a Doctoral degree and RMB 10,000 / year for a Senior training or long-term language program. All application materials should be handed to the relevant university or college before the **end of February**.

More info on www.ebeijing.gov.cn/Study/Scholarships/t1117679.htm

China - Shanghai Government Scholarships

In order to attract more outstanding international students to study in Shanghai, the Shanghai Municipal Education Commission established the Shanghai



Government Scholarships (SGS) for International Students in 2005. It offers funds to prospective international students to pursue a bachelor's, master's degree, PhD degree or general scholar at institutions of higher education in Shanghai. HEIs will start accepting applications in **January**.

Non-Chinese nationals from all research fields are eligible. Awardees should not be recipients of Chinese Government Scholarship at the same time. The full scholarship (Class A) for graduate students includes tuition, living expenses and Comprehensive Medical Insurance, monthly living allowance RMB 1,700 for master's and RMB 2,000 for doctoral candidates. Partial scholarship (Class B) includes one or some items of the full scholarship items. Class C (Scholarship for Excellent Students) honors academically excellent international students who are attending long- term programs in HEIs in Shanghai with a one-off bursary. You can view the application guide [here](#).

5.2 Calls still open

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

Austria – Marietta Blau Grant

The next application deadline is **2 February, 2015**.

Access the call on the [OEAD website](#).

Austria – Ernst Mach Grant

Grant for studying up to 9 months in Austria

The next application deadline is **1 March, 2015**.

Find out more on the [grant.at website](#).

Austria – Franz Werfel Grant

Grant for **young university teachers of German language and Austrian literature**.

The next application deadline is **1 March, 2015**.

Find out more on the [grant.at website](#).

Austria – Richard Plaschka Fellowship

Grant for visiting researchers in one of the following fields: **Humanities and Theology, Historical Sciences, Linguistics and Literature Sciences**.

The next application deadline is **1 March, 2015**.



Find out more on the [grant.at website](http://grant.at/website).

EU – Scholarships available under ERASMUS Mundus projects involving China

[EM LEADERS: Application deadline is 11 January 2015](#)

[Lotus+: Application deadline is 1 March 2015](#)

EU – ERC Consolidator Grant

ERC Consolidator Grant amount to €2.0M with the possibility of an additional €0.75M for a period of 5 years. The latest Consolidator Grant call was published on 13 November and will close on **12 March, 2015**.

Learn more on the [ERC website](#) and access the call on the [Horizon 2020 Participant Portal](#).

EU – IIASA Young Scientists Summer Program (YSSP)

On-line applications for the 2015 programme will be accepted until **12 January 2015**. Find out more details on the [IIASA website](#).

France – Discover China Programme

This programme allows French researchers to deepen their knowledge on the researches done in their domain in China. It grants French scientists for a short trip in China.

The application deadline is **2 February, 2015**.

Find out more [here](#).

France – Cai Yuan Pei

The Cai Yuanpei programme aims at fostering the exchanges of PhD students and their supervisors and related post-docs between France and China.

The application deadline is **20 February, 2015**.

Find out more on the [Campus France website](#).

France – CEFC PhD Scholarship Research on Contemporary China, 2015 edition

Application deadline is **15 January, 2015**. Find out more on the [CEFC website](#).



**Greece – Onassis Foundation Foreigners' Fellowships Programme**

Application deadline is **31 January, 2015**.

The Netherlands – NWO-NSFC Cooperation Programme 2014 call - Advanced Materials

Sino-Dutch research teams can apply until **15 January, 2015**.

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

The Netherlands – Innovational Research Incentives Scheme: Veni grants

The closing date to submit proposals for a Veni grant is **6 January, 2015**.

Find out more details on the [NWO website](#).

UK – Climate Science for Service Partnership (CSSP), Calls for Expressions of Interest Year 2

Deadline to submit your expression of interest is **27 February, 2015**.

Find out more on the [Met Office website](#).

Israel – ISF-NSFC joint research programme

The application deadline for both sides is **7 January 2015, 4 pm**.

Read more on the [NSFC website](#).

France – Eiffel Excellence Scholarship Programme

The application deadline for the 2015-2016 academic year is **9 January 2015**. Foreign students in French educational establishments should contact their administrative staff to be nominated.

More details available on their [Campus France website](#).

Luxembourg – ATTRACT 2015 programme

The deadlines for this call currently open are as follows:

12 January 2015 (14:00 CET): Joint Submission by the candidate and the Luxembourg host research institution of a Pre-Proposal

1 April 2015 (14:00 CET): Full Proposal deadline.

Read more on the [FNR website](#).

Austria – Institute of S&T Austria PhD programme



Application deadline is **15 January, 2015** for a start of the programme in September 2015.

Find out more about this programme on the [Austria IST website](#).

Germany – 17 PhD fellowships in East Asian Studies at the Graduate School of East Asian Studies, FU Berlin

Applications are accepted until **16 January 2015**, via the online application system.

Find out more on the [GEAS website](#).

France – Xu Guangqi programme

The deadline of the 2015 call is **19 January, 2015**.

More details are available on the [Campus France website](#).

Germany – DAAD Research Stays for University Academics and Scientists

The application deadline for Chinese applicants is **30 January 2015** for stays to begin between July and December 2015.

More details can be found on the [DAAD website](#).

EU – New call for ERC Starting Grants

The [current call opened on 7 October 2014 and will close on 3 February 2015](#).

5.3 Open calls under Horizon 2020 and Euratom

Access all open calls on the [Horizon 2020 Participants' portal](#).

Excellent Science programme

11 open calls including:

European Research Council frontier research grants:

[ERC Starting Grant](#) – Deadline **4 February 2015**

[ERC Consolidator Grant](#) – Deadline **12 March 2015**

[ERC Proof of Concept Grant](#) – Deadline **1 October 2015** (cut-off dates 5 Feb. and 28 May 2015)

Marie Skłodowska-Curie Actions:

[Marie Skłodowska-Curie Innovative Training Networks \(ITN\)](#) – Deadline **13 January 2015**

Industrial Leadership



20 open calls, including the following one particularly encouraging collaboration with China (*however, it should be kept in mind that ALL calls are open to Chinese participation!*):

[COMPET-06-2015: International Cooperation in space science](#) – Deadline **8 April 2015**

Societal Challenges

33 open calls including the following ones particularly encouraging collaboration with China (*however, it should be kept in mind that ALL calls are open to Chinese participation!*):

[SFS-13-2015: Biological contamination of crops and the food chain](#) – Deadline **24 February 2015**

[WASTE-7-2015: Ensuring sustainable use of agricultural waste, co-products and by-products](#) – Deadline **21 April 2015**

[MG-5.5a-2015: Demonstrating and testing innovative solutions for cleaner and better urban transport and mobility](#) – Deadline **23 April 2015**

[MG-1.8-2015: International cooperation in aeronautics](#) – Deadline **23 April 2015**

[LCE-18-2015: Supporting Joint Actions on demonstration and validation of innovative energy solutions](#) – Deadline **5 May 2015**

[INT-11-2015: European cultural and science diplomacy: exploiting the potential of culture and science in the EU's external relations](#) – Deadline **28 May 2015**

Science with and for society

No open call currently.

Euratom

No open call currently.

6 Jobs

Access thousands of jobs and fellowships announcements in Europe and worldwide on the [EURAXESS Jobs portal!](#)

France - PhD in Public Policy Evaluation at Sciences Po-LIEPP (Paris)

The Laboratory for Interdisciplinary Evaluation of Public Policies (LIEPP) invites applications for doctoral positions. The recipients of the PhD fellowship will be formally enrolled through the doctoral programs of Sciences Po in Economics or



Sociology or Political Science. As an interdisciplinary project, LIEPP welcomes applications for doctoral positions in ECONOMICS, SOCIOLOGY or POLITICAL SCIENCE, as long as the thesis projects are linked to the LIEPP's research agenda on Public Policy Evaluation. We invite applications from a wide range of fields, including, inter alia, educational policies, fiscal policies, employment policies, social policies, housing & urban policies, higher education, public health policies or the public perceptions of policies. Fellowship amount : € 1777 / month (gross salary, about 1,300€ net); 3-year contract starting on October 2015.

The candidate will hold a master's degree (or equivalent) with a strong research component and have received at least some training in one or more of these disciplines: sociology, economics, political science. S/he must have good command of quantitative and/or qualitative methods. There is no nationality requirement, however a firm command of English is required.

Application deadline is **15 March, 2015**.

Access the full announcement on [EURAXESS Jobs](#).

France – 6 Associate scientists 2nd class positions at CNRS, 2 of them preferably with a focus on “Gender” and “China or Korea or Japan”

In 2015, the French CNRS is recruiting researchers in all scientific fields without any nationality requirements for candidates.

Selection is done through open competitions. Registration period runs from 1 December 2014 until **6 January, 2015**.

Candidates to these 6 associate scientists 2nd class positions must present a proposed research programme that pertains to the themes (Politics, Power, Organization) and sub-themes of [Section n°40](#) or the priority theme(s) above-mentioned, including „China, Korea or Japan“.

Access the full announcement via [EURAXESS Jobs](#).

Europe - 123 postdoc / R&D positions for innovation in sustainable energy (more locations) PATHWAYS funded by EU

[KIC InnoEnergy](#)'s strategy is to be “*The European company for innovation, business creation and education in sustainable energy*”. It fosters the integration of education, research and business (the knowledge triangle), strengthening the culture of innovation and entrepreneurship.

The PATHWAYS Fellowship Program, crafted and operated by KIC InnoEnergy (KIC-IE), offers 123 two-year fellowships to junior researchers hosted by the [KIC-IE Partners](#) and [KIC-IE supported startups](#).

The fellowships include 25% time spent on Professional Development Activities. These are composed of:



- a. [Disruptive Activities](#), in which the R&D Activities are extended towards business, and
- b. the [Programme's world-class Training](#) on Technology Transfer, Innovation and Business.

The Programme's ambition is to enable its fellows to bridge the gap between industry and research. The programme is open to young researchers both in hard and soft sciences (PhDs, engineers with 4+ years of experience and postdocs) to facilitate their mobility within Europe.

The programme is designed for researchers who want to make an impact in sustainable energy:

- renewable energy
- smart and efficient buildings and cities
- clean coal technologies
- electricity storage
- energy efficiency
- energy from chemical fuel
- sustainable nuclear and renewable convergence
- smart electric grid

All nationalities can apply. There are regular application rounds (autumn session expires on 31 December). All information can be found [online](#).

Slovenia - Two Postdoctoral Research Fellows or Associates in Physics (Ljubljana)

The Jožef Stefan Institute is looking for two researchers for a period of 2 years (starting February 2015 or in agreement with selected candidate); one candidate for experimental work, one candidate for theoretical work.

The Laboratory is offering Postdoctoral Research Fellow to work on real time studies of phase transitions funded by an ERC Advanced Grant on »Coherent trajectories through symmetry breaking transitions« (PI: Dragan Mihailovic).

The [Jožef Stefan Institute](#) is the leading Slovenian scientific research institute, covering a broad spectrum of basic and applied research.

Read the full announcement on [EURAXESS Jobs](#).

China – EURAXESS Country Representative Support Staff (Beijing)

EURAXESS Links is a networking tool for European researchers working outside Europe and non-European ones wishing to collaborate and/or pursue a research career in Europe. The tasks of the project are carried out by a



dedicated EURAXESS Links Country/Regional Representative. The EURAXESS Links Country Representative support staff shall assist the EURAXESS Links Country Representative in China with the following activities: the delivery of newsletters and reports, the organisation of networking events and the participation in research-related workshops and conferences to increase visibility and efficiency of the network.

For this position, professional language skills in English, a university degree at the MA/MSc-level of at least four years' duration (including BA) and proof of at least three years' of relevant professional experience in the field of project management with at least one year in EU affairs are prerequisites. A working knowledge of the Chinese language is required. Deadline for application is 15 January 2015, for more information visit [EURAXESS Jobs](#).

China - Open Positions in Proteomics and Translational Medicine at the National Center for Protein Sciences, *aka*. The 'PHOENIX Center' (Beijing)

In the last decade, China has undergone phenomenal growth in proteomics research, encompassing both methodology development and bio-medical applications. The PHOENIX Center (Pilot Hub Of ENcyclopedicproteomIX) is finishing construction and will open its doors in the spring of 2015. It is located in Zhongguancun Life Science Park (ZLS Park) in the northwest suburb of Beijing, an important life science R&D hub in China. The PHOENIX Center will be a place that integrates proteomics and translational biology. The center is seeking candidates to fill 30 or so faculty positions at all academic levels. The center is also soliciting applicants for the positions of the Center Director and the Section Chief to lead the 5 divisions (Analytical Proteomics, Functional Proteomics, Translational Medicine, Bioinformatics, and Supporting Facilities) in the PHOENIX Center. These positions will begin in August 2015.

Applications should be submitted no later than **February 28, 2015**.

Access the full announcement on [EURAXESS Jobs](#).

China - Full-time Professor/PI positions in Model Animal Research Center (MARC) of Nanjing University (Nanjing)

The Model Animal Research Center (MARC) of Nanjing University, which focuses on basic and translational medicine research with the achievement published in high profile journals such as Cell, Nature, Neuron, Nature Medicine and their sister series, invites applications for full-time faculty positions, at academic ranks of Associate or Full Professor. Individuals with demonstrated accomplishments in, but not limited to, the following areas are encouraged to apply:

- Organogenesis and Birth Defect
- Physiological Homeostasis Control and Metabolic Disease
- Cancer and Stem Cell Biology



- Neurobiology and neurodegenerative disease
- Bioinformatics Specialists.

Highly competitive research support will be provided in an interactive and nurturing environment. Individuals will have an opportunity to establish a state-of-the-art independent research program in newly renovated space and to interact with a strong group of affiliated scientists.

This announcement expires on **5 February, 2015**.

Access the full announcement on [EURAXESS Jobs](#).

China - High-end Staff Recruitment for 2015 at Changzhou University (Changzhou)

Changzhou University (CZU) is located in Changzhou, a famous historical and cultural city with highly developed economy. It is to the south of Yangtze River, Jiangsu Province, China. Founded in 1978, Changzhou University, authorized by the State Council, was officially named as Jiangsu Institute of Chemical Technology in 1981. In 1992, it became attached to China Petrochemical Corporation Group (originally China Petrochemical Corporation) and it was thus renamed as Jiangsu Institute of Petrochemical Technology, which was later changed to Jiangsu Industrial Institute. In 2010, the University was approved by the Ministry of Education to be named as Changzhou University. In 2011, the Government of Jiangsu Province signed an agreement with the China National Petroleum Corporation (CNPC) and the Sinopec Group Company to co-develop Changzhou University.

Changzhou University is offering job opportunities to Discipline/academic leaders and Ph.D holders in the following research areas:

- Chemical engineering
- Food science
- Material sciences
- Bio-pharmaceuticals
- Machinery engineering
- Environmental engineering
- Rail transportation
- Electronic and information engineering
- Economic management
- Law, languages and fine arts
- Other unmentioned new and interdisciplinary areas

This announcement expires on **6 February, 2015**.



Access the full announcement on [EURAXESS Jobs](#).

China - Donghua University Seeks Global Talent (Shanghai)

Donghua University, located in Shanghai, is one of the key universities under the direct administration of the Ministry of Education since 1960. It is a member of Project 211. It has three campuses, in Songjiang District and Changning District, with an area of nearly 2,000 acres. Donghua University was founded in 1951 as East China Textile College.

Donghua University has developed into a distinctive multi-disciplinary university, with engineering as the predominant discipline alongside the coordinated development of engineering, science, management, and the liberal arts disciplines in the past 60 years.

Donghua University has long commitments to the international exchange and cooperation in education and research, and established close ties with over 100 renowned universities, research institutes and enterprises globally.

Donghua University invites applications for full-time Professors, Associate Professors and excellent scientists. Successful candidates will be provided competitive salaries and start-up funds.

Positions are available at the following colleges:

- College of Materials Science and Engineering
- College of Textiles
- Fashion Art Design Institute
- Glorious Sun School of Business and Management
- School of Environmental Science and Engineering
- College of Mechanical Engineering
- College of Science (Physics, Mathematics)
- College of Foreign Languages
- College of Chemistry, Chemical Engineering and Biotechnology

Positions are offered under various programmes such as the Recruitment Program of Global Experts (1000 Plan Professorship), the Chang Jiang Scholars Program, the Recruitment Program of Global Young Experts (1000 Plan Professorship for Young Talents) or as Donghua University Distinguished Research Fellows.

This announcement expires on **26 January 2015**.

Access the full announcement on [Nature Jobs](#).





7 Events

7.1 EURAXESS Links China recommends

Call for Papers on: WTO and Health: The Law & Policy of Traditional Chinese Medicine

Understanding TCM in WTO and in the bilateral relationship between China – European Union Relationship is hosted by the Shanghai University of International Business and Economics (**27 June 2015**) and it is organized by: Shanghai University of International Business and Economics and Vrije Universiteit Brussel.

China and EU could be in a win-win situation on the cooperation of seeking better healthcare solutions. The cooperation always based on a more understandable platform on legislations, business, technology and education and so on. WTO is one of the platforms that provide the possibility for the harmonization on China and EU health care system.

The conference will be an exceptional event for improving the development of the healthcare systems in both China and EU. It will provide an opportunity to discuss and delineate the latest development on relevant issues to the legislation of TCM in the healthcare system both in China and EU. The conference promotes interdisciplinary and cross-disciplinary exchanges to promote policy-relevant and scientifically sound outcomes and recommendations.

The conference will combine paper and poster sessions combined with roundtable debates. There will be an equal learning opportunity for young as well as senior delegates.

Researchers and practitioners are welcome to submit abstracts (500-1000 words) no later than **20 January 2015** to Ms. Saisai Wang via saisai.wang@vub.ac.be. Abstracts from a legal, policy and trade are welcome, as well as papers addressing the scientific/medical aspects of these issues. Inter-disciplinary or cross-disciplinary contributions that can take the form of collaborative or jointly authored papers are encouraged.

Submission could include, but are not limited to:

1. Health care in WTO law
2. Scientific proof on safety and efficacy of Traditional Chinese Medicine
3. WTO rules on the quality and safety of food, health food and ingredients
4. Ethical issues in pharmaceutical industry in EU, China and WTO
5. Education and training for Traditional Chinese Medicine
6. IPR protection on TCM
7. Rules on the importing and exporting medical device
8. Rules on TCM practitioners in EU and China





9. TCM and international environmental law
 10. TCM migration and Human right (esp. related to migrant communities)

More information [online](#) or on [Facebook](#) fan page for Chetch project.

7.2 Upcoming scientific events in China

Field	Date	Location	Title (click for more details)
Applied Mathematics	29-31 January 2015	Shanghai	The 2nd Computational Mathematics and Applications Conference(CMA 2015)
Applied Mathematics	29-31 January 2015	Shanghai	2015 Conference on Operations Research and Fuzziology (ORF2015)
Mathematics	29-31 January 2015	Shanghai	2015 Combinatorics and Graph Theory Conference (CGT2015)
Applied Mathematics	29-31 January 2015	Shanghai	2015 Conference on Geometry, Topology and Applications (GTA2015)
Nanomaterials	29-31 January 2015	Shanghai	The 4th Conference on Nanomaterials (CN 2015)
Materials Science	29-31 January 2015	Shanghai	2015 International Conference on Thin Film Technology and Applications(TFTA2015)
Materials Science	29-31 January 2015	Shanghai	2015 International Conference on Polymer Materials Science (PMS2015)
Physics	31 Jan. - 2 Feb. 2015	Shanghai	The 2nd Conference on New Advances in Condensed Matter Physics (NACMP 2015)
Physics	31 Jan. - 2 Feb. 2015	Shanghai	2015 Spectroscopy and Spectral Analysis Conference (SSA2015)
Physics	31 Jan. - 2 Feb. 2015	Shanghai	2015 Conference on New Advances in Acoustics (NAA2015)
Physics	31 Jan. - 2 Feb. 2015	Shanghai	2015 Conference on Magnetism and Its Applications (MIA2015)
Astrophysics	31 Jan. - 2 Feb. 2015	Shanghai	2015 Conference on Astrophysics and Space Science (APSS2015)
Education	31 Jan. - 2 Feb. 2015	Shanghai	The 6th International Conference on Information Technology in Education (CITE2015)



Education	31 Jan. - 2 Feb. 2015	Shanghai	2015 Conference on Advances in Chemistry Education (ACE2015)
Education	31 Jan. - 2 Feb. 2015	Shanghai	2015 Mathematics Education Conference (MEC2015)
Psychology	31 Jan. - 2 Feb. 2015	Shanghai	2015 Conference on Cognitive Psychology (CCP2015)
Education	31 Jan. - 2 Feb. 2015	Shanghai	2015 Conference on Preschool Education and Child Psychology (PECP2015)
Pharmacology	16-19 March, 2015	Shanghai	Pharmaceutical Compliance
Chemistry	18-20 March 2015	Suzhou	2015 Conference on Advances in Biochemistry and Molecular Biology (CABMB 2015)
Biological Physics	18-20 March 2015	Suzhou	2015 International Conference on Advances in Biophysics (ICAB 2015)
Microbiology	18-20 March 2015	Suzhou	2015 Microbiology and Immunology Conference (MIC 2015)
Plant biology	18-20 March 2015	Suzhou	The 2nd Conference on Botany (CB 2015)
Reproductive Endocrinology	18-20 March 2015	Suzhou	2015 Conference on Tissue Engineering and Regenerative Medicine (CTERM 2015)
Cancer research	18-20 March 2015	Suzhou	2015 Conference on Advances in Prevention and Treatment of Cancer (CAPTC 2015)
Medicine	18-20 March 2015	Suzhou	2015 Conference on Laboratory Medicine and Clinical Research (CLMCR 2015)
Pathology and Pathobiology	18-20 March 2015	Suzhou	2015 International Conference on Pathology (ICP 2015)
Medicine	18-20 March 2015	Suzhou	2015 Conference on Advances in Evidence-Based Medicine (CAEBM 2015)
Occupational Medicine	18-20 March 2015	Suzhou	2015 Conference on Occupational Medicine and Endemiology (COME 2015)
Computer science	18-20 March 2015	Suzhou	The 4th International Conference on Signal and Image Processing (CSIP



			2015)
Engineering	18-20 March 2015	Suzhou	2015 Conference on Radio Science and Antenna Technology (RSAT 2015)
Physics	18-20 March 2015	Suzhou	2015 International Conference on Microwave and Terahertz Technology (ICMTT 2015)
Computer science	18-20 March 2015	Suzhou	2015 Conference on New Advances in Optical Communications and Networks (NAOCN 2015)
Oncology	10-12 April, 2015	Shanghai	Asian Oncology Summit 2015
Earth and Env. sciences	10-12 April, 2015	Beijing	2015 Conference on Environmental Pollution and Public Health (EPPH 2015)
Electrical/Electronic engineering	12-14 April, 2015	Beijing	The 7th Asia-Pacific Power and Energy Engineering Conference (APPEEC 2015)
Engineering	14-16 April, 2015	Beijing	2015 Spring World Congress on Engineering and Technology (SCET 2015)
Computer science	16-18 April, 2015	Shenzhen	The Third International Conference on Digital Enterprise and Information Systems (DEIS2015)
Engineering	22-24 April, 2015	Chengdu	The 3rd Asia Symposium on Engineering and Information (ASEAI)
Biological Engineering	22-24 April, 2015	Chengdu	The 3rd International Symposium on Biological Engineering and Natural Sciences
Education	22-24 April, 2015	Chengdu	The International Conference on Education, Psychology and Society
Cancer research	4-8 May, 2015	Suzhou	Precision Cancer Biology and Medicine
Computer science	24-26 May, 2015	Beijing	2015 Conference on New Advances in Big Data (NABD 2015)



Computer science

24-26 May, 2015

Beijing

[2015 Conference on Internet of Things and Smart City \(IoTSC 2015\)](#)

8. Press Review*

Policy & Papers

Central planning for Beijing-Tianjin-Hebei cluster to launch

Coordinated development of the Beijing-Tianjin-Hebei area has become the primary mission on the list of economic goals for next year, which was released by the Central Economic Work Conference concluded in Beijing on Thursday, the Beijing News reported on Friday [12 December]. Transportation, environment and industry will lead the reform. In terms of transportation, governments of the three regions and China Railways Corporation plan to invest 10 billion yuan (\$1.61 billion) to build a Beijing-Tianjin-Hebei railway transportation company, said Yang Chongyong, executive vice-governor of Hebei province, in a forum recently. A common transportation card is expected to be used between Beijing, Tianjin and some major cities in Hebei province in 2017. The deadlock of the Beijing-Tianjin-Hebei economic integration is expected to be broken early next year after nearly 30 years of stagnation. ([China Daily](#))

Charity Law Proposal Urges Relaxation of Foreign NGO Rules

Academics from Tsinghua and Peking universities have called upon lawmakers to give legal status to overseas charity organizations operating in China in a recommendation for enacting a charity law.

In the proposed Charity Law, academics have laid out rules clarifying registration procedures for foreign NGOs and their legal status, rights and liabilities in China, according to Jin Jinping, director of Center for NPOs Law of Peking University.

However the proposed law stops short of touching upon another sensitive issue – the legal status of charity projects which receive funding from overseas institutions and operate under their guidelines.

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Authorities have been wary of political activism from the presence of foreign NGOs in China and charitable work sponsored by foreign institutions. For years, foreign NGOs with operations in China have been denied NGO status. Jin, the Peking University professor, said that inasmuch as social responsibility goes beyond national borders, overseas charity organizations should be able to operate in China the same way as Chinese charity groups can go abroad.

She said that if China wants to play bigger role in the international community, it must open up the non-profit sector as it has done in other areas. ([Caixin](#))

Three new FTZs to test market

China is to launch three pilot free trade zones to test greater opening up, a government meeting decided on Friday [12 December]. The new FTZs will be set up in coastal provincial areas of Guangdong, Fujian and Tianjin, the executive meeting of China's State Council decided, a year after it set up the pioneering China (Shanghai) Pilot Free Trade Zone. The three areas will take on what are considered the boldest reform initiatives in decades - those now being applied in the Shanghai FTZ. They will be able to adopt "new reform trials that fit into local characteristics". Experts said that by taking on Shanghai's trial, the new zones will be able to enjoy easier market access for foreign companies and more financial opening. Previously, the Shanghai FTZ has slashed the so-called negative list by 26.8 percent to 139 areas in July. The negative list is a list that names areas and circumstances where foreign investors are barred. Among the current 139 listed areas, 29 are fully prohibited while the rest are under conditional restriction. ([China Daily](#))

Voices & opinions

How Chinese Universities Can Learn the Largesse Game

Universities need capital to excel. Currently, the majority of Chinese tertiary institutions are public, with the government footing 70 percent of their operating costs. To supplement their income, they have been encouraged to commercialize their research. Thus many have set up their own businesses in the past 20 years.

The result has been disappointing so far. About 80 per cent of such enterprises have already closed. In 2009, profits from the remaining businesses only paid for a measly 0.2 percent of the schools' expenses.

The cons, on the other hand, far outweigh the benefits. With no clear lines separating the commercial from the non-commercial, these enterprises tend to be a management nightmare. In recent years, the State Council has stepped in to try to clarify roles and duties, but the root problem remains unsolved. In too many places, the university's administrators are also its business managers.



Such muddled organization only encourages corruption. Unsurprisingly, not a few university leaders have been caught in the current crackdown on corruption. It is time for a clean break to let universities return to their core duties of teaching and research. ([Caixin](#))

Stop Fining Families for Breaking One-Child Policy, Expert Urges Gov't

China eased its one-child policy late last year and is considering revising the way couples are fined for having too many children, but a law professor at Peking University says the ultimate goal is to get rid of the fines altogether.

Professor Zhan Zhongle said the goal of reforms should be to abolish the levying of "social maintenance fees," rather than revising the way the fees are calculated and collected.

He said the country is not facing problems related to overpopulation, but in how the population is structured, and called on the government to protect the right to have children.

China took steps to ease its one-child policy late last year – allowing couples to have a second child if either parent is an only child – but other couples face steep fines that are levied on the discretion of local authorities.

The penalty is known as the social maintenance fee and is usually a multiple of a couple's combined annual income. In cases of bigamy or extramarital relations, the fine can be even higher. Early this year, film director Zhang Yimou was fined 7,480,000 yuan for having three children with his second wife. ([Caixin](#))

President Xi stresses role of innovation in economy

Chinese President Xi Jinping highlighted the role of innovation in economic development. Xi made the remarks during an inspection tour in eastern Jiangsu Province where he visited scientific research institutions, enterprises, countryside and farmers' houses. At Jiangsu Industrial Technology Research Institute in Nanjing, capital city of Jiangsu, Xi said China must rely on innovation to achieve continuous and healthy economy development. The president called for close coupling between science and technology and the economy, as well as deep integration among industry, university and research, so as to realize seamless connection between industries and science and technology, and increase the contribution rate of science and technology to economic growth. The key to developing the economy lies in transforming the development model, restructuring the economy and upgrading the medium-to-low industrial structure to a medium-to-high one, said Xi. He urges the establishment of new mechanism to the benefit of producing innovation fruits and converting these results to industrial applications. During the inspection, Xi highlighted the importance of a modern agriculture, prosperous rural areas and affluent farmers in the nation's overall modernization drive. The president also called for more efforts to provide safe, effective, convenient and inexpensive public health and



basic medical services to people living in rural areas as well as those in cities. ([China Daily](#))

President Xi calls for better overseas education

Chinese President Xi Jinping has called for more efforts in government work on overseas studies to cultivate talent in the drive to achieve national rejuvenation. Xi gave the instruction to a conference on promoting work on Chinese students studying overseas and foreigners receiving education in China. The conference was held on Dec. 12 and 13 in Beijing. Xi said he hoped Chinese overseas students could open their eyes to the world and study hard to contribute wisdom to the country. China has sent more than 3 million students to study abroad since 1978, when the country started its reform and opening-up drive. About 360,000 international students are studying in China. Premier Li Keqiang also encouraged promoting overseas education. Chinese overseas students should work hard to master advanced knowledge and technology. The government should also improve service to foreign students in China to enhance international friendship and exchange, Li said. He instructed the government to provide a sound environment for returned overseas students so they can become a new force in business and innovation. ([China Daily](#))

Thematic Activities

Health

Overseas centers to help infectious disease research

China is planning to setup overseas research centers for pathogens and tropical infectious diseases in Africa to improve international collaboration and to practice a preemptive strategy of epidemic control, according to a senior public health official. The Ebola epidemic is expected to be reined in by June with enough personnel and constant intervention efforts, Gao Fu, deputy director of the Chinese Center for Disease Control and Prevention, said after returning to China last month from a two-month Ebola deployment in worst-hit Sierra Leone. "China should learn from developed countries setting up their own permanent research centers in Africa, particularly for special pathogens like Ebola, under a preemptive strategy for epidemic control," he said. "We would have our own high safety-level labs and research capacity where such epidemics started. That surely helps China's own research and capability in epidemic response." To help curb the deadly virus, the Chinese government has sent hundreds of clinical and public health experts to Africa. ([China Daily](#))

China's Ebola vaccine enters clinical trials

An Ebola vaccine developed by a military research institute has been approved to enter the human test stage, the Chinese People's Liberation Army's (PLA) General Logistics Department announced.



The restructured vaccine, developed by the Academy of Military Medical Sciences (AMMC), is based on the 2014 mutant gene type and especially targets the strain plaguing west Africa.

The vaccine is currently in the form of freeze-dried powder, which will keep it stable for at least two weeks in temperatures of up to 37 degrees Celsius. This will make it suitable for the tropical west African region and assist with large-scale production, according to a review report by 17 experts in the field.

It makes China the third country to put Ebola vaccine under clinical trials following the United States and Canada. ([China Daily](#))

Scientists detects laryngeal cancer gene

Chinese and international scientists have for the first time identified the three gene loci susceptible to laryngeal squamous cell carcinoma (LSCC), according to a statement from the Chinese PLA General Hospital on Wednesday [4 December]. The scientists used the method of genome-wide association study (GWAS) to determine the locus. This is the first time GWAS has been applied to laryngeal cancer research, and the successful result was published on the tenth issue of the international journal Nature Genetics in October. The expert team includes top Otolaryngology-head and neck surgery-practitioners from China and abroad. From the Chinese side are Doctor Liu Mingbo, Wang Jialing and Yang Shiming from the Chinese PLA General Hospital, Doctor Lin Dongxin, Wuchen from Chinese Academy of Medical Sciences and Doctor Wei Qingyi from Shanghai Medical College of Fudan University. The team carried out GWAS on 993 laryngeal cancer patients. The study will help early diagnosis and molecular targeting treatment for laryngeal cancer. ([Global Times](#))

Peking University opens one of Asia's biggest hospitals

The Peking University International Hospital started to admit patients on Monday [8 December], marking the beginning of one of Asia's largest hospitals. Located in Huilongguan in Beijing's northwestern suburb, it is the ninth hospital affiliated to Peking University, one of China's top universities. The hospital is spread over about 440,000 square meters and costed 4.5 billion yuan to build (\$730 million). It has 1,800 beds and 46 operation rooms, including 159 beds in intensive care units. More than 1,400 people are employed at the hospital, with nearly 75 percent of them being medical staff. The floor-to-ceiling height of the hospital's outpatient lobby is some 15 meters, and looks like an airport terminal where 10,000 people can gather a day. The hospital has announced it will collaborate in medical research with University of Pennsylvania, London School of Economics and Political Science, Charite-University Medicine Berlin, UCLA Medical Center and other educational institutions. "With the Peking University and Peking University International Hospital, we share a common mission to serve the local and international communities," said Michael Arthur, president of University College London. "I'm glad I came to Beijing to see first-hand its (the



hospital's) tremendous scale, facilities, equipment and resources," the invitee added. ([China Daily](#))

New Hospital a Springboard for Health Reform

The sprawling Peking University International Hospital in Beijing has been touted as a major step for medical reform. Doors have swung open to welcome up to 10,000 patients a day at the largest hospital in China backed by non-state investors, Peking University International Hospital (PUIH) on Beijing's north side.

The sprawling, 4.5 billion yuan facility opened in December after 12 years of planning and construction. It boasts 1,800 beds and 440,000 square meters of wards, labs, clinics and even a rooftop helicopter pad.

For China's health care industry, PUIH is being touted as a poster child for reform. The hospital's opening comes amid efforts by government and private sector reform supporters to let companies rather than governments finance and manage hospitals across the country.

Reform advocates applauded PUIH's long-anticipated launch. Hospital Director Wang Shang called it "an important achievement for health care reform" because "not a penny from the government was spent on the construction of this large hospital." At the hospital's opening ceremony on December 5, PUIH officials unveiled a number of international cooperation projects. Doctors can also earn more money at PUIH than at public hospitals thanks to a flexible salary system. ([Caixin](#))

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Food, agriculture & fisheries, biotechnology

CRISPR-Cas9-mediated Gene Editing in Spermatogonial Stem Cells Corrects Genetic Disease in Mice

The clustered regularly interspaced short palindromic repeat sequences (CRISPR)-Cas9 system from bacteria has been recently employed in gene therapy. Two studies, one from Dr. LI Jinsong's lab (*Cell Stem Cell*, 2013, 13, 659) and the other from Dr. Olson's lab (*Science*, 2014, 345, 1184), reported that the CRISPR-Cas9 system, after being injected into zygotes, could correct disease-causing mutations in mice. However, direct injection of CRISPR-Cas9 system into zygotes could not produce healthy progeny at an efficiency of 100% and could potentially generate off-target modifications. To circumvent these problems, single spermatogonia stem cells (SSCs) harboring genes corrected with CRISPR-Cas9 but without any other unwanted genomic changes were selected, and the SSC lines could be used to produce healthy offspring at 100% efficiency. Recently, a study from researchers at Shanghai Institutes for Biological Sciences (SIBS) of Chinese Academy of Sciences and Peking University provided proof of principle for using the CRISPR-Cas9 to correct genetic disease through SSCs. ([CAS](#))



China aims to boost 'super corn' yield

China aims to boost yields of a "super corn" through research on inbred corn lines, according to the research team. The "super corn," coded "Denghai 618," was cultivated by Li Denghai, a well-known corn breeder in east China's Shandong Province. Its yield hit a record high of 1,335.8 kg/mu (15 mu is equal to one hectare) in a 10-mu experimental field and 1,151.6 kg/mu in a 100-mu experimental field this year. Guo Jiucheng, deputy head of the Shandong Provincial Science and Technology Bureau, said on Thursday [11 December] that Li's research aims to improve the corn's yield to 1,350 kg/mu by 2020 and 1,400 kg/mu by 2025. Li said he will select wild corn plants for the research to help boost the yield. With less than 10 percent of the world's farmland, China produces one-fourth of the world's grain and can feed its 1.3 billion people on its own. To ensure food security, the country must continue to boost grain production. Experts said that corn is expected to account for half of the country's grain increase in the future. China's corn output has jumped 43 percent in the previous four crop years and reached 217 million tonnes in 2013. ([Global Times](#))

Gene Critical to the Development of Low Arsenic Plants Identified by Scientists

Concerns about arsenic in food have grown in recent years with high concentration found in rice, fruit juices and even baby food. A naturally occurring element found in soil and water, arsenic has also been used as a pesticide, and is taken up by plants and can then enter the food chain. The issue has led to scientific work to investigate how plants deal with arsenic and research has identified that some plants are able to pump out the poison, but not how they do this. In a paper published today (December 8) in the journal PLOS Biology an international team led by the University of Aberdeen has identified a gene critical to this process – a finding which could be used to breed new varieties of crops that naturally accumulate less arsenic. The research team, which includes scientists from the Shanghai Institutes for Biological Sciences of the Chinese Academy of Sciences, Nanjing Agricultural University and Rothamsted Research, found that the gene HAC1 is used by the flowering plant *Arabidopsis thaliana* (Mouse-ear cress) to control arsenic accumulation and that when it is removed, the concentration of arsenic in the plants increased 300-fold. Identification of this key gene in the easy to work with Mouse-ear cress now makes it simpler to identify the equivalent gene in crops that large populations depend on for food, such as rice and wheat. ([CAS](#))

Researchers Identify Genes for Bitterness in Cucumbers

An international team led by Chinese researchers said Thursday [27 November] they have identified the genes responsible for the intense bitter taste of some cucumbers, a plague to lovers of this vegetable. The research, published in the



U.S. journal Science, revealed how cucumbers, believed native to India, were domesticated from their wild ancestors that have extremely bitter fruits to make them more edible. Today's domestic cucumbers are delicious, stress conditions such as a lack of water or temperatures too cold or too hot, however, are still able to cause them to bear bitter tasting fruits, Huang said. In the new study, Huang and colleagues performed genomic and biochemical analyses on 115 diverse cucumber lines to unravel the biosynthetic pathway involved in domesticating cucumbers to the non-bitter fruits people eat today. They were able to identify nine genes involved in making cucurbitacins, which confer a bitter taste in cucumbers, and showed that the trait can be traced to another two genes that switch on these nine genes to produce the compounds. In short, bitterness is controlled by two "master switch" genes, "Bl" which confers bitterness in leaves and "Bt", which leads to bitter fruit, Huang said. The study also found that a mutation in the Bt gene is able to keep domestic cucumbers from becoming bitter even when exposed to stress conditions such as cold temperatures. ([CAS](#))

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Information & communication technologies

China's homegrown GPS ready to be used for smartphones

A Chinese company has rolled out a chip that can help smartphones get easy access to the country's homegrown GPS-like Beidou System. The 40-nanometer chip, developed by Shanghai Beiga Satellite Technology Co., was revealed at an exhibition event in Shanghai that promotes civilian use of military technologies. Wang Yongping, general manager of Beiga, said they are currently doing test work with some smartphone, who are expected to begin mass production of devices with the chip next year, according to a report by China News Service. The chip is a sign that China's independently developed Beidou System will be applied to consumer electronics field. Previously, chips using the Beidou system were too large and had high energy consumption in daily use. According to the company, the chip can also be used on tablet computers and wearable devices. ([China Daily](#))

Tencent ready to launch China's 1st private internet bank, WeBank

Tencent today launched the website for what will likely be the first ever private internet bank in the People's Republic of China. China began a [trial program](#) early this year that would allow five new private banks to be set up.

Web giants Alibaba and Tencent signed up, and the maker of WeChat looks to be first out of the gate. Setting up their own banks means these internet companies will administer their own customers' assets rather than just being the fresh face of an existing bank. That includes greater flexibility to hand out loans and set interest rates.



WeBank's scope covers personal banking, corporate banking, and international banking. No date was given for when operations officially begin. ([TechInAsia](#))

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Nanosciences, nanotechnologies, materials & new production technologies

QIBEBT Scientists Reported Promising Key Materials for Electrochemical Energy Storage

Electrochemical energy storage devices consist of electrode materials, electrolyte, and current collector, which is critical to the overall electrochemical performance. There is an urgent need to solve the safety problems of lithium ion battery (LIB) for application in electric vehicles and power storage. The commercial separators (polypropylene and polyethylene membranes) suffer from poor dimensional thermo-stability, flammability and poor wettability, although these separators deliver moderate electrochemical properties for LIB. Professor CUI Guanglei and his colleagues from Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, reported a promising composite membrane of glass microfiber and polyimide with favorable interfacial stability and compatibility. This separator significantly improves thermo-stability of LIB due to its excellent dimensional thermo-stability and flame retarding. The cell with the composite membrane as separator shows superior cycling performance at elevated temperature of 120°C. The composite separator will be a promising separator for high power battery, with an enhanced safety property of LIB in future ([Nano Energy, 2014, 10, 277](#)). ([CAS](#))

Resistance Memory with All-nitride Structure

Changchun Institute of Optics, Fine Mechanics and Physics (CIOMP), Chinese Academy of Science (CAS) researchers have developed a memory resistor (memristor) based on III-nitride semiconductors with a metal-insulator-semiconductor (MIS) structure [Yiren Chen et al, Appl. Phys. Lett., vol105, p193502, 2014]. The team from State Key Laboratory of Luminescence and Applications (SKLLA), CIOMP, believes that the structure could result in monolithic integrated one-transistor-one-resistor (1T1R) memory in conjunction with III-nitride high-electron-mobility transistors (HEMTs). Similar devices are being developed in mainstream silicon technologies as an alternative to the capacitance-based structures used commercially. ([CAS](#))

Secondary Relaxation in Metallic Glasses: A key to Glassy Materials and Glassy Physics



Humans have been experimenting with and utilizing glassy materials for more than ten millennia, dating back to about 12000 B.C. Although glassy materials are the oldest known artificial materials, new discoveries and novel applications continue to appear. Yet understanding of glass is far from complete, and the nature of glass constitutes a longstanding puzzle in condensed matter physics. In a new overview titled "The β -Relaxation in Metallic Glasses" and published in the Beijing-based National Science Review, co-authors Hai Bin Yu and Konrad Samwer, based at the Physikalisches Institut of Germany's Universität Göttingen, and Wei Hua Wang and Hai Yang Bai of the Chinese Academy of Sciences Institute of Physics in Beijing, demonstrate that many outstanding issues of glassy physics and glassy materials are connected with one relaxation process - the so-called β relaxation or secondary relaxation. Focusing on metallic glasses as model systems, they review the features and mechanisms of β relaxations, which are intrinsic and universal to supercooled liquids and glasses. To gain a more perfect understanding of the nature of β relaxations, they suggest, computer simulations are urgently needed. ([CAS](#))

A Bright Future for LEDs

With the cost of the LED chips falling, the cost of packaging the chips and assembling them with other components to form an LED lamp is becoming more important. The ideal scheme in terms of packaging and assembly costs would be to use one LED chip per lamp, but the limited output power of single chips seriously curtails the use of this scheme. In the latest issue of Electronics Letters, a team from Suzhou Institute of Nano-tech and Nano-bionics, Chinese Academy of Sciences, Xiangneng HuaLei Optoelectronic Co. Ltd. and several Universities in China, report successful creation of a single wafer level LED chip producing more than 150W output, using a single chip assembly approach. ([CAS](#))

China produces first space-based 3D printing machine

Scientists have produced a 3D printing machine, the first of its kind in China, which astronauts will be able to use while on space missions, according to the China Aerospace Science and Technology Corporation (CASTC) on Monday [8 December]. The machine is capable of printing optical lens brackets used in spaceborne equipment, complicated components used in nuclear power testing equipment, impellers used in aircraft research and special-shaped gears used in automobile engines, said Wang Lianfeng, a senior engineer with CASTC Shanghai's research arm. The machine, which uses both long-wave fiber and short-wave carbon dioxide lasers, can produce items smaller than 250 millimeters. The machine, which looks like a gray cabinet, can fashion items out of stainless steel, titanium alloy and nickel-based superalloy. "The products made will have to be tested thoroughly, due to the strict quality requirements of aerospace products," said Wang, adding that the prospect for 3D printing is promising. ([China Daily](#))





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Environment (including climate change)

Beijing hints at harsher curbs on private cars to ease air pollution

Beijing officials appear to be building a case for a long-term policy on restricting the use of private cars to alleviate the city's notorious air pollution.

Environmental officials have said their analysis of air pollution levels during the week of the Apec summit in November showed that limiting the number of vehicles on the road was the most effective way to improve air quality.

The analysis concluded that vehicle restriction is the most effective method for reducing PM2.5 levels and suggested that one direction the environment bureau could work on is to limit the use of vehicles. The conclusion hints at the possibility of harsher policies that could profoundly affect the city's nearly four million private car owners and the findings have provoked an apparent backlash online.

Internet users argue that factory emissions in Beijing's suburbs and neighbouring cities are the major source of pollution, and voiced concerns that the report was pointing to a long-term alternating odd-even scheme, where cars are prohibited from travel on particular days based on whether the last digits on their number plates are odd or even. ([SCMP](#))

China's glaciers shrink by 18 pct in half century

China's glaciers have retreated by about 7,600 square km, an 18 percent retreat since the 1950s, Chinese scientists have found. A survey using remote sensing data between 2006 and 2010 showed China had 48,571 glaciers covering 51,840 square km in the west region, according to the Chinese Academy of Sciences (CAS), which released its second catalog of the country's glaciers on Saturday [13 December]. An average of 243.7 square km of glacial ice had disappeared every year over the past half century, according to the survey by the CAS Cold and Arid Regions Research Institute. The worst shrink was detected on the Altai Mountains located in Xinjiang Uygur autonomous region and the Gangdise Mountain in the Tibet autonomous region, with retreat hitting 37.2 percent and 32.7 percent respectively over the past five decades. Major glaciers on the Qinghai-Tibet plateau, especially the east part of Gangdise as well as the southern and western Himalayas were melting at the most rapid pace, with areas shrinking by 2.2 percent every year, according to the survey. ([China Daily](#))

China resolves to promote low carbon urban development

China has been striving to take a new road of urbanization featured by intensive land use, smart city, and green and low carbon development, China's top



climate negotiator said in Lima, Peru, on Wednesday [10 December]. "As our country enters into the middle and later stage of industrialization, urbanization will become the main areas of future growth of carbon emissions and energy resources," said Xie Zhenhua, vice chairman of the National Development and Reform Commission (NDRC), who heads the Chinese delegation at the China Pavilion during the UN Climate Change Conference in Lima, capital of Peru. At a side event of UN climate talks, Xie emphasized the importance of Chinese cities to meet the country's national goal of peaking emissions around 2030. The Chinese official said it is "quite realistic" for China to set a goal around 2030. China has 36 low carbon pilot cities and 55 pilot industrial parks, which aim to explore how sustainable design can be better for people and the economy. ([China Daily](#))

Yangtze water not a cure-all for Beijing's thirst

Beijing is looking to water from the Yangtze River to ease its drought, but experts say the ambitious south-to-north water diversion project is not a cure-all for the capital's thirst. The landmark middle route of the 500-billion-yuan (81-billion US-dollar) project started supplying water to Beijing Friday [12 December]. It will pump 9.5 billion cubic meters of water each year from the Danjiangkou reservoir in central China's Hubei Province to the northern provinces of Hebei and Henan as well as Beijing and Tianjin, benefiting some 100 million people.

About 1.05 billion cubic meters of water from the Hanjiang River, the Yangtze's largest tributary, will be running from Beijingers' taps each year through 1,400 km of pipelines and canals. The flow of Yangtze water to Beijing is a decades-old dream dating back to Mao Zedong's days as leader. The Yangtze water will make up a third of Beijing's total supply and will hopefully narrow the huge gap between its annual water demand and supply. With Yangtze water piped in, Beijing will have 150 cubic meters per person, an increase of 50 percent, according to figures provided by the Beijing water authority. Despite the increase in water supply, the water diversion project is by no means a final solution to ease Beijing's water shortage, said Sun Guosheng, chief of Beijing's office of the South-to-North Water Diversion Project, in an interview with Xinhua. Sun said the government should use the price leverage to encourage all of society to save water. "To save is to survive," he said. "Individuals and businesses should all use the tap sparingly, and heavy fines should be levied for wasting water." ([China Daily](#))

Global Science Programme to Focus on Urban Wellbeing

A global scientific research programme has been launched in China to examine the unintended consequences of urban policies on human health and wellbeing. The Urban Health & Wellbeing Programme aims to better understand what makes a "healthy urban environment". People living in cities face a number of health risks, such as air pollution. The majority of people now live in towns and cities and the global urban population is growing by an estimated one million



people each week. The launch of the programme comes amid a growing body of research that links urbanisation with growing health risks. The consortium behind the Urban Health and Wellbeing Programme, which will provide a hub for “interdisciplinary scientific knowledge”, include the International Council for Science, the InterAcademy Medical Panel and the United Nations University. The programme’s secretariat will be hosted by the Chinese Academy of Sciences’ Institute of Urban Environment in Xiamen, China. ([CAS](#))

Beijing looks for 10-year pledge on climate policy

A new global climate agreement to be signed next year in Paris should cover all key elements and be effective for 10 years, the deputy head of China's delegation at the United Nations climate talks in Lima, Peru, said on Thursday [4 December]. Su Wei, the country's chief climate negotiator, said China has an open mind on the final term for referring to the Paris agreement: It will be either be a "protocol" or some other form that carries legal force, he said. "First we need to determine the substance, and then let the substance determine the form," Su said. The agreement should address all key elements, including mitigation, adaptation, financing, technology transfer and transparency, he said. The talks started on Monday [8 December] and will run through Dec 12. China favors a 10-year commitment, rather than five years, because it provides more accountability in the market, Su said, whereas a five-year commitment could result in too much time spent on negotiations. ([China Daily](#))

Chinese vice premier stresses protection of biological diversity

China will make more efforts to protect biological diversity, Vice Premier Zhang Gaoli said Monday [8 December]. Safeguarding the country's biological diversity should be regarded as an important task for realizing China's green development and a foundation for the long-lasting development of the Chinese nation, said Zhang, also a member of the Standing Committee of the Political Bureau of the Communist Party of China Central Committee. Zhang said in some places the eco-system has seen serious deterioration, with plants and animals facing threats of extinction. He asked authorities to harshly punish acts damaging biological diversity and advance legislation on the protection of nature reserves. The collection, research and exploitation of biological resources should also be standardized. He said China will launch several major projects in this area and set biological diversity protection as an index for evaluating local governments' performance. ([China Daily](#))

Coal burning major contributor to China smog: expert

Excessive use of "unclean" energy, not vehicle emissions or straw burning, is the main contributor to China's recurrent smog, a China Youth Daily report quoted a Chinese expert as saying on Monday [8 December]. Speaking at a symposium organized by the China Association for Science and Technology, Zhang Xiaoye, director of an atmospheric composition committee under the



China Meteorological Society, said that though straw burning, fireworks and vehicle emissions have contributed to air pollution, "excessive use of 'unclean' energy is the real culprit." According to the report, Zhang used "unclean" energy to refer mainly to coal. "Coal and other unclean energy sources are the number one contributor to China's smog," he said, adding that vehicle emissions may come second, especially in big cities. Citing PM 2.5 readings recorded in early November, when Beijing hosted the Asia-Pacific Economic Cooperation (APEC) meetings, Zhang said the figures showed a considerable drop of 35 percent. He said only ten percent of the pollution reduction came from the odd-and-even license plate vehicle restrictions, which reduced daily traffic by up to 11.7 million cars, whereas the rest was the result of cuts in coal burning in Beijing's neighboring regions starting Nov. 6. ([China Daily](#))

Excess heavy metals endanger agriculture: experts

Severe soil contamination threatens agricultural safety in some parts of China, the Economic Information Daily reports, citing experts at the 4th China Forum on Environmental Remediation Development Strategy. Some areas face heavy soil contamination, especially where heavy polluting enterprises, derelict industrial land, industrial parks, centralized disposal sites for solid waste, oil producing regions, mining areas, sewage-irrigated areas and arterial highways are located. The main pollutants are cadmium, arsenic, lead, mercury, chromium and copper, said Wei Fusheng, an academic from the Chinese Academy of Engineering. The China National Environmental Monitoring Centre (CNEMC) recently sampled 4,910 point locations in vegetable cultivation areas, 1,188 of which were polluted, accounting for 24.3% of the sampled locations. Of all pollutants, heavy metal pollution accounted for 17.5%. ([China Daily](#))

Beijing to receive desalinated water by 2019

Thirsty Beijingers can look forward to clean, tasty water after neighboring province Hebei announced it would be complete a water desalination project by 2019, authorities said Friday [5 December]. Having been approved by Hebei's planning body, the project, once operational, will have the potential to desalinate 1 million tonnes of seawater daily, said Beijing Enterprises Water Group Ltd.'s seawater desalination department director Wang Xiaoshui. This supply would provide one tenth of the metropolis' current annual water consumption. The project is divided into two parts: seawater desalination and processed water delivery to Beijing. The preliminary draft on the feasibility report has been finished and research work on the second part, which will include water pipeline distribution, is under way, according to Wang. The project will be located along the Bohai Sea at Caofeidian district of Tangshan city. The ocean's current has created favorable conditions and the seawater is of a good quality compared with other parts of the Bohai Sea. To avoid the project having any negative environmental impact, a salt farm and chemical plant will process the project's by products to produce salt and chemical products, Wang said. ([China Daily](#))



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Energy

China forges ahead with nuclear development

China's central authorities have signed off a major nuclear power development scheme despite the lingering shadow cast by Japan's Fukushima disaster. On Thursday [4 December], the National Development and Reform Commission, China's top economic planner, announced plans to develop offshore nuclear power projects, with spokesman Li Pumin ensuring that all projects will comply with the highest international security standards. In addition, efforts to draft related administrative rules for nuclear power development have been heightened, according to head of the National Energy Administration's nuclear power department Liu Baohua. There are currently 27 nuclear power plants under construction in China, placing it top in the world in that category. However, nuclear power facilities provide less than 2 percent of the country's power supply, far below the world average of 15 percent. The initiative is expected to give the nuclear power sector a boost, driving high-end equipment production and optimizing power generation in a country that largely depends on thermal power for electricity. ([China Daily](#))

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Transport (including aeronautics)

CRCC to Join Bid for Singapore-Kuala Lumpur Link

China Railway Construction Corp. Ltd. (CRCC) is looking to bid for the construction of a 70-billion-yuan high-speed railway project linking Singapore and Malaysia's capital, Kuala Lumpur, a source from the company said.

The state-owned infrastructure developer recently suffered a setback overseas with the abrupt cancellation by the Mexican government of a US\$ 3.75 billion contract it won in November to a bullet train line in the country. The deal would have been China's first export of bullet trains. It fell apart amid questions raised over the bidding process, which was lambasted by Mexican lawmakers as hasty and vague. ([Caixin](#))

AVIC takes aim at the overseas market

If the Aviation Industry Corp of China had announced 10 years ago that it wanted to compete with Western or Russian aviation giants such as Lockheed Martin and Sukhoi, its aspirations would have been dismissed as a daydream. Now, although the company's grand goal has yet to be fully realized, observers



will have no doubts that AVIC is serious about its ambitions, especially after seeing the results of the company's past decade of effort. The hundreds of thousands of aviation enthusiasts and professionals that attended the 10th China International Aviation and Aerospace Exhibition in Zhuhai, Guangdong province, in mid-November, were treated to dazzling displays by AVIC's new aircraft. Air Commodore Khalid Mahmood of the Pakistani Air Force was among the crowd at the event, often known simply as Airshow China, and watched a flypast by the J-31 Gyrfalcon, a twin-engine, fifth-generation, radar-evading plane. "The past 15 years have been very fruitful for the Chinese aviation industry, and now we have seen the results," Mahmood said, as the stealth jet's turbofans deafened the observers below. "I'm a professional in this field, so I can tell you that the J-31 is a next-generation aircraft, and that no one else in the world has made as much progress as quickly as AVIC." ([China Daily](#))



An unmanned aerial vehicle, or drone, is ready to spread pesticide for pest control in Yuncheng, Shanxi province.
Li Xiangdong / Xinhua

Drone market has room to soar

A huge market for civilian unmanned aerial vehicles, commonly known as drones, is emerging in China, industry observers said, prompting the need for the government to speed up regulation. "More than 10,000 civilian drones will be needed in China once the industry is fully developed and regulations are put in place," said Zhang Feng, secretary-general of the Aircraft Owner and Pilots Association of China. "The market value of developing, manufacturing, operating and maintaining these drones will reach 50 billion yuan (\$8.18 billion)." There are about 20,000 drones on the Chinese mainland used for civilian purposes, and businesses including agricultural pest control, environmental monitoring, geographical survey, aerial mapping, forest patrol, resource exploration as well as maritime operations have greatly benefited from drones, Zhang said. Yu Min, an aviation industry analyst in Beijing, said aviation experts he has talked with are optimistic about the sector's future in China. ([China Daily](#))

Scientists use drones at south pole

Chinese scientists are using unmanned aerial vehicles to gather site information for the country's first airport in the South Pole, during the country's 31st mission to the Antarctic continent. The drone, made by Beihang University in Beijing, will be used to collect information such as ice temperatures and geological conditions of the ice sheet during the site inspection, as part of the ongoing South Pole expedition, which traveled to Antarctica aboard the Chinese research vessel and icebreaker Xuelong, or Snow Dragon. Liang Jianhong, a professor with the university who is leading the drone project, said the drone is called White Shark and can receive signals from China's Beidou navigation satellite system and is equipped with an infrared thermometer, radar ranging equipment and an optical camera. The data collected can be used by scientists to analyze if the ice sheet is suitable for an airport runway, he added. ([China Daily](#))

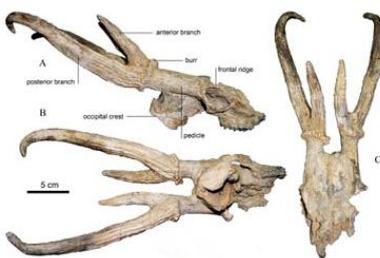


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Socioeconomic sciences & the humanities, archaeology & paleontology

Tourist inflow closely affected by air quality

Chinese researchers said on Sunday they have measured the effects of air quality on inbound tourists, calling for more attention to air pollution treatment. The researchers looked at the proportion of days each year with air quality that meets the official standard. For each one-percent drop in good air days, the number of inbound tourists fell by about 443,550 people, according to the 2014 China Tourism Development Report released by the Wuhan Chapter of the China Tourism Academy. Researcher Hu Jing, chief of the Wuhan Chapter, said that air quality had become a pivotal factor in people's travel decisions. According to the report, more than 80 percent of respondents said they would avoid tourism destinations prone to smog. Meanwhile, more than 70 percent of respondents said they would schedule their travel based on air quality index. The report also indicated that air quality influences visitors' traveling experiences, with more than ninety percent saying smog ruins the sights and their mood. China began to include PM2.5, a key indicator of air pollution, and ozone in its new air quality standard in 2013. Statistics from the Ministry of Environmental Protection showed that the proportion of days with up-to-standard air quality in 74 cities during the first half of the year was 60.3 percent, slightly up compared to 58.7 percent during the same period last year. ([China Daily](#))



First Known Skull of the Muntjak *Eostyloceros* Found in China

Dr. DENG Tao from the Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences and his colleagues reported a new species of the muntjak *Eostyloceros* in the journal of [Zootaxa](#) 3893 (3) recently. The new species, *Eostyloceros hezhengensis* sp. nov., is established based on a skull with its cranial appendages collected from the Late Miocene Liushu Formation of the Linxia Basin in Gansu Province, northwestern China. ([CAS](#))

Museums call for shared research

Historians, scholars and curators of the world's major anti-fascist museums and memorials gathered in Beijing on Wednesday [10 December], the 67th global Human Rights Day, and called for the creation of a world union to enhance exchanges and cooperation and share information for research. The representatives made the call during the two-day International Seminar on



Human Rights and Museology. Addressing the theme "Drawing lessons from history, cherishing peace and protecting human rights", more than 100 scholars, historians and curators of various anti-fascist war museums and memorials from 15 countries and regions, including China, Russia, France, Brazil and Belgium, gave presentations at the seminar. The event was co-sponsored by the China Foundation for Human Rights Development and the Museum of the War of Chinese People's Resistance Against Japanese Aggression. The main debate of the seminar hinged on lessons learned from World War II, its illumination of the human rights cause and the responsibility of all countries to protect world peace. ([China Daily](#))

Urumqi OKs ban on full veils, body coverings

Legislators in Urumqi, capital of the Xinjiang Uygur autonomous region, have passed a regulation banning the wearing of full-face veils and full-body coverings in public. The move is the latest attempt in the region to use the law to curb the spread of religious extremism. The approval of the regional people's congress will be required before it takes effect, [www.ts.cn](#), the regional government's website, reported on Thursday [11 December]. Details of the regulation were not given.

Officials say the wearing of full-face veils and full-body coverings is associated with religious extremism. A recent report by the Regional Bureau of Religious Affairs says the number of women wearing such clothing in Xinjiang, especially in southern areas, has increased significantly over the past few years. The report says this reflects the deep and extensive spread of religious extremism imported from abroad, and adds that many women are forced to wear the clothes. ([China Daily](#))

Shaanxi to build China's first archaeology museum

China's first archaeology museum will be built in Xi'an city in northwest China's Shaanxi Province, the provincial department of cultural relics announced on Wednesday [3 December]. With a total investment of 315 million yuan (\$51.2 million), the museum will be in Chang'an District of Xi'an. Xi'an, famous for the Terra Cotta Warriors and Horses, was the capital for 13 dynasties. The province owns 235 national cultural relics protection sites. According to the plan, the museum will cover 170,000 square meters and will include exhibition halls of archaeological history and the latest archaeological discoveries. The museum will also have a cultural relic protection lab and an academic exchange center. ([Global Times](#))

Residence permit reform to give migrants equal rights

China unveiled a plan to reform the country's residence permit system on Thursday that would grant migrants equal access to more public services. Residence permit holders would be able to get benefits such as medical



services and education for their children like urban dwellers, according to the plan released by the Legislative Affairs Office of the State Council. Public opinion on the reforms is being solicited before the formal plan is released. Migrant workers who stay in a city for half a year with a stable job and residence may apply for the residence permits. China plans to phase out its hukou, or household registration system, and help about 100 million people settle in towns and cities by 2020. ([China Daily](#))

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Space

Life on Mars? Chinese Scientists Find New Evidence

Did Mars ever harbor life? Scientists have found new evidence for possible life on the Red Planet in a piece of Martian meteorite that landed on Earth after about 700,000 years of space travel. According to research carried out by teams of Chinese, German, Swiss, and Japanese scientists, more than 10 pieces of coal-like carbon particles, thinner than one-tenth of the width of a strand of hair, were found in a thumb-sized piece of the meteorite. "We used advanced equipment to determine the carbon particles are organic matter, and to rule out the possibility of graphite, which is inorganic," said Lin Yangting, a lead scientist of the research team from the Institute of Geology and Geophysics, Chinese Academy of Sciences. "Furthermore, we found an enrichment of the light carbon isotope in the organic matter," said Lin. "It's so exciting! This could be a promising indicator of life on Mars."

([CAS](#))

China, Brazil to enhance space efforts

China and Brazil have pledged to deepen their cooperation in satellite development and applications, according to senior officials from both sides. "We hope we can improve our collaboration so that we can send more satellites together and use these space assets to help nations in South America and Africa," Clelio Campolina Diniz, Brazilian minister of science, technology and innovation, told China Daily on Tuesday [9 December]. Diniz was attending a bilateral meeting on strengthening space collaboration in Beijing. The first images taken by a satellite jointly developed by China and Brazil were published at the meeting. The Ziyuan-1-04, or CBERS-4 as it's known in Brazil, was sent into Sun-synchronous orbit by a Long March-4B rocket from the Taiyuan Satellite Launch Center in Shanxi province on Sunday morning. The launch marked the 200th flight of the Long March rocket family. The device is a remote sensing satellite intended for operation as part of the China-Brazil Earth Resources Satellite Program between the China Center for Resources Satellite Data and Application and Brazil's National Institute for Space Research. The program is a technological effort that develops and operates Earth observation



satellites. The Ziyuan-1-04 carries four cutting-edge cameras, such as the infrared multispectral scanner and wide-field imager. ([China Daily](#))

China's rockets to use pollution-free propellants

China's next generation carrier rockets using non-polluting propellants may fly as early as 2015, a top space scientist revealed on Monday [8 December]. The rockets fueled by liquid oxygen and diesel as well as liquid oxygen and liquid hydrogen, will make their maiden flights within the next two years, Lei Fanpei, chairman of the China Aerospace Science and Technology Corporation, the main contractor for the country's space program, said in an interview with Xinhua. The next generation will include the heavy Long March-5 and the smaller Long March-7. It will take about 15 years for an overall upgrading. The Long March-5 will have a payload capacity of 25 tonnes to low Earth orbits, or 14 tonnes to geostationary transfer orbit, about twice the current capacity, and could be a serious competitor to the U.S. Delta-4H. The Long March-7 will carry up to 13.5 tonnes to low Earth orbit or 5.5 tonnes to sun-synchronous orbit at a height of 700 km. It will carry cargo craft for the planned space station. Its maiden flight should be next year. ([Global Times](#))

Countdown to China's new space programs begins

China hopes to put a rover on Mars around 2020, complete a manned space station around 2022 and test a heavy carrier rocket around 2030, a top space scientist revealed Sunday [7 December]. Lei Fanpei, chairman of the China Aerospace Science and Technology Corporation (CASC), the main contractor for the space program, revealed the details in an interview with Xinhua after the launch of CBERS-4, a satellite jointly developed with Brazil, from the Taiyuan base, by a Long March-4B rocket. It was the 200th flight of the Long March variants since April 1970 when a Long March-1 carried China's first satellite, Dongfanghong-1, into space. ([China Daily](#))

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People & Higher Education

International students to get better services

Services for international students will be improved, Chinese top officials said during a meeting on overseas study. China will take measures to continue educational cooperation with other countries, including sending more Chinese students overseas and receiving more international students, and strengthening services for those who go out and come in, Vice-Premier Liu Yandong said at the national meeting on overseas study, which was held in Beijing on Friday and Saturday [12 and 13 December]. The meeting, which focused on Chinese students studying abroad and international students studying in China, is the



first one of its kind since the People's Republic of China was founded in 1949. With a total of 3.06 million Chinese students studying abroad between 1978 and 2013, China has become the country that sends the largest number of students overseas to study. China has also been one of the top destinations in Asia for overseas study, with 360,000 international students studying here in 2013 - a far cry from 36 years ago, when only 1,200 foreign students were studying in the country. ([China Daily](#))

China to allow students to start their own business in school

Chinese students with a pioneering spirit can now defer their studies to start their own business, in a move by the education ministry to deal with the record number of college graduates due next year. China will see 7.49 million people graduate from college next year, 220,000 more than the number last year. Helping them find a job is a tremendous challenge. The Education Ministry has found measures to cope with the unprecedented number of graduates. In a notice published on Wednesday [10 December], it called on colleges to offer a more flexible schooling system, allowing students to suspend their studies to pursue business opportunities off campus. ([China Daily](#))

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International S&T relations

China urges US to abandon prejudice against Confucius Institutes

China has never interfered with academic freedom of Confucius Institutes (CI) in the United States, Foreign Ministry spokeswoman Hua Chunying said on Friday, urging relevant sides to "abandon prejudice." All class and cultural activities of CI in the United States are open and transparent, Hua said at a routine press briefing, stressing that all CI in the United States were voluntarily applied for by US universities. In the cooperation between Chinese and US universities, the Chinese side provides assistance on teachers and teaching materials according to requests from the US side, said Hua. Institutes aim to help foreigners learn the Chinese language, understand Chinese culture, enhance educational and cultural exchanges and promote international friendship, and CI is a bridge of friendship connecting the world with China, according to Hua. The first CI was established in Seoul in 2004. As of October, CI had 471 institutes and another 730 Confucius Classrooms in 125 countries or regions worldwide, including about 100 institutes and 356 classrooms in the United States. According to an Associated Press report, a US congressional hearing was warned Thursday that China's government is gaining a foothold on



American campuses by funding dozens of institutes, compromising the academic integrity of US universities. ([China Daily](#))

China opens 475 Confucius Institutes worldwide

China now has 475 Confucius Institutes in 126 countries and regions. According to a statement released by the Confucius Institute headquarters during the institute conference in Xiamen, there are also 851 Confucius Classrooms in middle and primary schools. The institutes and classrooms have received a total of 3.45 million students. Established in 2004, the Confucius Institute is a non-profit public institution which promotes Chinese language and culture abroad. There are about 100 million Mandarin learners around the world, more than four times of the number ten years ago, the statement said. During the past ten years, about 100,000 teachers, volunteers and managers have been involved with the institutes, which have also trained more than 200,000 Mandarin teachers in more than 100 countries. ([China Daily](#))

Confucius Institutes: Quo Vadis?

Since the first institute opened ten years ago, 475 Confucius Institutes (CIs) and 851 smaller Confucius Classrooms (CCs) have been established in 126 countries. In 2014 alone, 35 CIs and 205 CCs have been opened worldwide, according to Hanban, the Chinese organization in charge of the institutes.

These numbers raise concerns outside of China about the institute's intentions, and have prompted some to consider the future of China's most prominent and most controversial cultural diplomacy initiative. Debates about the "Confucius Institute Dilemma" of foreign universities – whether CIs are "hardly a threat to academic freedom" or whether they are "academic malware" – is nothing new.

The most recent hearing at the US Congress, which among other aspects highlighted the issue of potential self-censorship by American academics, prompted a spokeswoman of the Chinese Foreign Ministry to respond by saying that all Confucius Institutes in the United States had been voluntarily applied for by U.S. universities and that critics should "make joint efforts to reject prejudice." The same tone was adapted by Xu Lin, the chief executive of CIs, during the annual Confucius Institute Conference held on December 7 and 8 in Xiamen.

While it is, from the Chinese point of view, an understandable attempt to separate the institutes from politics (a tendency that is not unique to Chinese cultural diplomats), the conference itself clearly illustrated that CIs are in fact closely related to China's politics and foreign policy. Not only did Liu Yandong, vice premier of the PRC, attend the conference as she did in previous years, but in her keynote speech she clearly outlined the political implications of the work of CIs. She linked the institutes to the two "centennial goals" of the Chinese people, namely to double the 2010 GDP and people's income and finish the building of a society of initial prosperity in all respects by 2020, as well



as to the attempts to realize “the Chinese Dream of the great rejuvenation of the Chinese nation.” Another political hint, maybe minor but nevertheless telling, was that all delegates were invited to a presentation of the dance drama “The Dream of the Maritime Silk Road.”

Next to these political components the conference illustrated that CIs (still) face a number of practical issues, including a lack of teachers, teaching materials, insufficient division of labor between local and Chinese partners, and apparently issues of finances. ([The Diplomat](#))

Chinese, Brazilian presidents pledge to promote science, technology cooperation

Chinese President Xi Jinping and his Brazilian counterpart Dilma Rousseff on Sunday vowed to enhance bilateral science and technology cooperation for the benefit of the two countries and the two peoples. The two leaders underlined the consensus in the congratulatory messages they exchanged on the launch of the CBERS-4 satellite, jointly developed by China and Brazil, on Sunday [7 December] from China's Taiyuan base. ([China Daily](#))

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