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EURAXESS LINKS CHINA

Dear Colleagues,

Welcome to the December edition of the **EURAXESS Links China Newsletter**.

This month, we met with Dr. Sebastian Veg, director of the CEFC (French Institute for Research on Contemporary China) in Hong Kong, who shared with us his views on the developments in contemporary Chinese studies in Greater China and the relevance of developing European networks in this field. You will find his interview in the **Feature** section.

As announced in last month's edition of this newsletter, EURAXESS Links China will join the CEFC in the organization of the 2nd edition of the 'New European Research on Contemporary China International Conference' to be held on 2-4 July 2014 at the EU Delegation in Beijing. The call for papers for this conference is now running and young researchers are invited to submit paper abstracts until 15 February of next year (see the **Events** section for a more detailed reminder).

In terms of **News & Developments**, the main one this month is of course the launch of the new European framework programme for research and innovation 'Horizon 2020' and the publication of its first calls on December 11th. With calls in the 2014 budget alone worth around €7.8 billion and covering virtually all fields of research, Horizon 2020 provides many opportunities for international collaborations and Chinese researchers, enterprises and institutions are strongly encouraged to team up with their European partners to seize these opportunities ([see page 11](#) for the general announcement and [page 35 for calls of particular interest to China-based researchers](#)).

This year's end period sees no slowing down in the publication of new calls for proposals and fellowship applications. As usual, you will find many funding



opportunities under the **Grants & Fellowships** section as well as a couple of **Jobs** announcements picked from the EURAXESS Jobs portal and other online research career websites, which might be of interest to researchers moving between Europe and China.

This period of the year does however feel special, not only for the coming celebrations ahead (thus explaining the earlier-than-usual publication date of this edition) but also for the perspective it offers both on the year that has passed and on the one to come. To make the best resolutions possible for the year 2014, EURAXESS would like to hear from you what you think about our services and activities and what we could do better. Your answers to the very short and straight-forward [online questionnaire](#) we prepared for this purpose would be very much appreciated.

Thank you all very much for your support and best wishes for a joyful Christmas and an exciting year 2014!

Wishing you a pleasant read,

About this newsletter

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

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

Please email to china@euraxess.net 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

Council conclusions on the global dimension of European higher education

On November 26th, 2013, the education ministers of the European Union Council of Ministers adopted two sets of Council conclusions on effective leadership in education and on the global dimension of European higher education.

“The EU has a joint vision on the importance of these two issues and will work together towards the same goals. During its Presidency, Lithuania hosted high-level events dedicated to effective leadership and the globalization of European higher education, during which the matters were considerably furthered”, the Lithuanian Minister said.

In this article, we shall focus on the conclusions drawn in the policy declaration regarding the global dimension of European higher education.

The policy declaration was developed over the course of several earlier meetings and contains suggestions made by the Council to the Member States on cooperating with higher education institutions to:

1. Pursue comprehensive strategic approaches towards internationalisation, in cooperation with the relevant stakeholders, which cover three main areas:
 - student and staff mobility
 - the internationalization of curricula and digital learning
 - strategic cooperation, partnerships and capacity-building
2. Promote two-way international degree and credit mobility for students, as well as provide opportunities for staff mobility between Europe and third countries [...]

The Council welcomes the Commission’s efforts to exploit the opportunities for international higher education cooperation within the Erasmus+ and Horizon 2020 programmes. This could, for example, happen through increased financial support through Erasmus+ for the mobility of learners and staff, but also through the Marie Skłodowska-Curie Actions under Horizon 2020 for the mobility of researchers to and from third countries.

The declaration also states that EU governments should support “the recognition of credits, degrees, qualifications and competences gained abroad by internationally mobile students, researchers and staff ...”, as well as create guidance and counseling services helping academics work abroad.

Furthermore, the systems of ‘European Credit Transfer and Accumulation’, the ‘Diploma Supplement’ and the ‘European Qualifications Framework’ should be



supported, while backing reforms to EU directives helping non-EU nationals enter Member States for research and studies.

The ministers stressed the need to encourage a “coordinated action and strategic partnerships” among European universities – including through the new Erasmus+ programme – in order to ensure the competitiveness of European higher education institutions in the digital race.

Sources:

[1] [University World News](#)

[2] [Press statement: Council of the European Union](#)

[3] [Draft Council conclusions on the global dimension of European higher education](#)





2 Feature

“Meet the Researcher”: Sebastian Veg, director of the French Institute for Research on Contemporary China (CEFC)



Sebastian Veg is the director of the CEFC (French Institute for Research on Contemporary China). He also serves as a Research Professor (directeur d'études) at the EHESS, Paris and Honorary Assistant Professor at the University of Hong Kong. He is also the director of the journal *China Perspectives*. His research deals with literature and politics in 20th century China, in particular the connection between literature, the public sphere and democracy. You can reach him at sveg@cefc.com.hk.

Dear Sebastian, you have served as the director of the CEFC since 2011. Could you briefly introduce the CEFC (French Centre for Research on Contemporary China) and elaborate on how you came to this position?

The CEFC is a French public research institute, jointly funded by the French Foreign Ministry and National Centre for Scientific Research (CNRS), with a mission to study the political, economic, social, and cultural developments in Greater China. It is part of the network of 27 public research institutes overseas funded by the French government. The CEFC was established in Hong Kong in 1991 and has been publishing its peer-reviewed journal *China Perspectives* since 1992 in French and 1995 in English. It is at the service of the French and European academic community in terms of funding research mobility, doctoral research, fieldwork and international conferences, and building networks with local institutions.

I began working as a researcher at the CEFC in 2006 after finishing a PhD in literature, focusing on early 20th century intellectual debates in China. At the end of my four-year term, I taught at the University of Hong Kong and conducted research at Tokyo University as a visiting scholar before returning to the CEFC. Over this time, through my close contact with present-day China, I have continued to expand my areas of interest to include intellectual debates in post-1949 and contemporary China.

What is your vision in terms of expanding the CEFC towards becoming a European platform for the study of contemporary China? How would you like to achieve it and why do you think it is important?

There are not many overseas institutions funded by European governments with a mandate to conduct research on extra-European cultural areas. Basically there are two networks of centres, a French one and a German one. On the other hand, research in Europe is nowadays increasingly being funded - although not necessarily conducted - on the EU level. This is also linked with the lack of critical mass in certain areas such as contemporary China. European researchers and Chinese academics who have worked in European institutions may share certain commonalities in terms of methodology and approach.

In order to provide a forum for exchange centred on Europe and contemporary China studies, the CEFC, with support from the DAAD and the Heinrich Böll Foundation organized the first New European Research on Contemporary



China conference at the EU Delegation in Beijing in July 2012. The event was a great success, and exceeded our expectations in terms of participants and quality of papers. It revealed the need for more venues for academic exchange and discussion, which led us to proposing a second edition for 2014, with the generous support of EURAXESS! (*editor's note: see the [Events section](#) below to access the call for papers of this conference*) In the medium term, we hope to build more links with other European researchers specializing in contemporary China, as the CEFC can act as a host for any European researcher who can obtain mobility funding.

The CEFC is headquartered in Hong Kong with a branch office in Taipei, and strong presence in Beijing. What makes the selection of the three cities vital for high-quality research?

Hong Kong remains the centre for academic research on contemporary China in the social sciences. We benefit from Hong Kong's academic freedom, press and media freedom, excellent academic institutions (7 universities, many of which maintain high international standards) and opportunities for research funding (the Research Grant Council system is run to international standards in terms of transparency and professionalism). Hong Kong is no longer simply a platform for China watchers but truly a pole of academic excellence in Asia. Taipei has its own specific strengths, in terms of continuity with academic traditions established during the Republican era, as well as a full-fledged democratic environment. Beijing is of course an important place to be as, despite some of the constraints that researchers may experience, it is the place where many important people and institutions are based, whether on the official, academic, or unofficial level. In fact, as we speak, the CEFC has just advertised its first full position in Beijing, which builds on the long presence you mentioned. We believe that our three-pronged strategy is the best way to cover the many aspects of studying contemporary Chinese societies.

What's your opinion on the current developments in the field of social sciences and humanities in China? Can you see stark differences in the approach or changes in mainland China, Hong Kong and Taiwan?

There is no easy overall answer to this question. Certainly, mainland China has been recently investing a lot of resources into research, though not always in social sciences and humanities. Certainly, there are many brilliant academics in mainland China, though they are not always encouraged by their institutions. Hong Kong and Taiwan have a well-established research community with stabilized sources of institutional funding, but also have their own problems in terms of originality, interdisciplinarity and internationalization. In terms of research on contemporary China, we definitely have a lot to learn from colleagues in each of the three environments.

Sebastian, thank you for the discussion!

CEFC is the only independent European Research Centre in China entirely devoted to the study of contemporary China. Established in 1991, the Centre is based in Hong Kong, with a branch office in Taipei since 1994 and researchers based in mainland China. It actively promotes doctoral research by funding mobility grants and regularly organises research seminars and international conferences. More details are available [here](http://www.cefc.com.hk):
<http://www.cefc.com.hk>



3 EURAXESS Links Activities

EURAXESS Links needs your feedback to help us serve you better - Survey

As the year comes to an end, it feels right to look back at what has been done and accomplished over the past 12 months in order to plan even more and better activities for the year ahead.

In this spirit, EURAXESS Links would like to hear from you how we can further improve our services to keep you updated about research collaboration and mobility opportunities.

We thank all of you very much in advance for taking 3 minutes to complete our - truly- short and concise assessment-survey: <https://secure.pt-dlr.de/pt-survey/index.php?sid=15663&lang=en>

The survey will be online until **31 January 2014**.





4 News & Developments

4.1 EU & Multilateral Cooperation

Horizon 2020 launched with €15 billion over first two years

On December 11th, the European Commission has for the first time presented calls for projects under Horizon 2020, the European Union's €80 billion research and innovation programme. Worth more than €15 billion over the first two years, the funding is intended to help boost Europe's knowledge-driven economy, and tackle issues that will make a difference in people's lives. This includes 12 areas that will be a focus for action in 2014/2015, including topics such as personalised healthcare, digital security and smart cities (see [MEMO/13/1122](#)).

European Research, Innovation and Science Commissioner Máire Geoghegan-Quinn said: "It's time to get down to business. Horizon 2020 funding is vital for the future of research and innovation in Europe, and will contribute to growth, jobs and a better quality of life. We have designed Horizon 2020 to produce results, and we have slashed red tape to make it easier to participate. So I am calling on researchers, universities, businesses including SMEs, and others to sign up!"

For the first time, the Commission has indicated funding priorities over two years, providing researchers and businesses with more certainty than ever before on the direction of EU research policy. Most calls from the 2014 budget are already open for submissions as of today, with more to follow over the course of the year.

Calls in the 2014 budget alone are worth around €7.8 billion, with funding focused on the three key pillars of Horizon 2020:

- **Excellent Science:** Around €3 billion, including €1.7 billion for grants from the [European Research Council](#) for top scientists and €800 million for Marie Skłodowska-Curie fellowships for younger researchers (see [MEMO/13/1123](#)).
- **Industrial Leadership:** €1.8 billion to support Europe's industrial leadership in areas like ICT, nanotechnologies, advanced manufacturing, robotics, biotechnologies and space.
- **Societal challenges:** €2.8 billion for innovative projects addressing Horizon 2020's seven societal challenges, broadly: health; agriculture, maritime and bioeconomy; energy; transport; climate action, environment, resource efficiency and raw materials; reflective societies; and security.

Horizon 2020 is fully open to international participation in all fields and areas. Chinese researchers, enterprises and institutions are strongly encouraged to team up with their European partners to make best use of Europe's excellent opportunities in research and innovation. In addition, in the 2014 calls several



topics are flagged for cooperation with China - for instance in the field of food, agriculture and biotechnology, information and communications technologies, and energy. China has become one of the EU's key international partners in research and innovation. It is now in a position to fully contribute to and benefit from Europe's research and innovation capacity under the same conditions and financial rules for participation as their peers from other emerging economies and industrialised countries. Overall, the international cooperation strategy of Horizon 2020 offers for China a more active and balanced approach for cooperation focussed on mutual interest and common benefit.

Further details available [here](#).

TOUR OF CHINA 2013 successfully concluded

On 20 November 2013, Maria Cristina Russo, RTD Director for International Cooperation, successfully concluded the Tour of China 2013 at the Tour's final stop in Beijing. The 2013 Tour of China was an ambitious promotional journey across China organised as a joint project between the EU and the Member States based in Beijing.

European Science Counsellors from 12 European Countries – Austria, Belgium, the Czech Republic, Finland, France, Germany, Hungary, Italy, the Netherlands, Norway, Romania and Switzerland – together with the Science and Technology Section of the EU Delegation Beijing and the EURAXESS Links China project presented opportunities for research and innovation collaboration at research-intensive universities in 9 key Chinese cities. Altogether, the Tour reached an audience of more than 1,000 stakeholders from academia and research.

The closing ceremony which was hosted at the Embassy of Italy in Beijing saw around 200 participants.

Source: [European Commission's "International Research Update" December 2013](#)

1st EU-China twinning workshop on solar dish technology held in Xi'an, China, last 14-15 November

As agreed under the Joint Statement on new, renewable and energy efficient technologies between the European Commission's Directorate General for Research and Innovation (DG RTD) and the Chinese Ministry of Science and Technology (MOST), workshops on solar dish technology (concentrated solar power) between China and the EU have been planned in order to define areas of mutual interest for further exchange of information and cooperation with relevant Chinese projects.



Photo: Maria Cristina Russo at the Tour's final stop in Beijing.



DG RTD's Directorate for Energy and the Department of International Cooperation of the MOST organised the first workshop on 14-15 November 2013 in Xi'an, Shaanxi Province, China. Eleven participants from Europe attended the workshop representing organizations which are beneficiaries of the FP7 projects OMSOP and BIOSTIRLING-4SKA. Thirty-four attendees were present on the Chinese side, mainly representing the organizations which are beneficiaries of a grant provided by MOST under the Call "China-EU SME energy saving and emission reduction programme". Each side presented their activities, a few research sites were visited and a matrix of R&D areas of common interest was drafted. A follow-up meeting has been planned to take place in 2014 in Europe.

Source: [European Commission's "International Research Update" December 2013](#)

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

Joint commitment to achieving ERA reaffirmed

The European Commission and organisations representing key research organisations and research funding bodies have today reaffirmed their joint commitment to achieving the goals of the European Research Area (ERA). They signed a Joint Declaration today on continued and closer cooperation. European Commissioner for Research, Innovation and Science Máire Geoghegan-Quinn signed on behalf of the European Commission. The six research stakeholder organisations represented were the European Association of Research and Technological Organisations (EARTO), the European University Association (EUA), the League of European Research Universities (LERU), NordForsk, Science Europe and the Conference of European Schools for Advanced Engineering Education and Research (CESAER).

A year and half after the ERA Communication "[A Reinforced European Research Area Partnership for Excellence and Growth](#)", which launched the reinforced partnership between Stakeholder Organisations (SHOs) and the Commission, the Joint Declaration renews political support for the initiative, and recognises the key role which stakeholder organisations will continue to play in realising a true European Research Area.

Commissioner Geoghegan-Quinn said: "*This partnership so far has made real progress towards the goals of ERA. Yet there is much more still to do and working towards ERA's key priorities is more urgent and important than ever. Continued commitment is now required by the stakeholder organisations and indeed by Member States.*"

Read more in source: [European Commission](#)

Commission launches pilot to open up publicly funded research data

Valuable information produced by researchers in many EU-funded projects will be shared freely as a result of a Pilot on Open Research Data in Horizon 2020. Researchers in projects participating in the pilot are asked to make the



underlying data needed to validate the results presented in scientific publications and other scientific information available for use by other researchers, innovative industries and citizens. For 2014-2015, topic areas participating in the Open Research Data Pilot will receive funding of around €3 billion.

The Commission recognises that research data is as important as publications. It therefore announced in 2012 that it would experiment with open access to research data (see [IP/12/790](#)). The Pilot on Open Research Data in Horizon 2020 does for scientific information what the Open Data Strategy¹ does for public sector information: it aims to improve and maximise access to and re-use of research data generated by projects for the benefit of society and the economy.

The Pilot involves key areas of Horizon 2020:

- Future and Emerging Technologies
- Research infrastructures – part e-Infrastructures
- Leadership in enabling and industrial technologies – Information and Communication Technologies
- Societal Challenge: Secure, Clean and Efficient Energy – part Smart cities and communities
- Societal Challenge: Climate Action, Environment, Resource Efficiency and Raw materials – with the exception of topics in the area of raw materials
- Societal Challenge: Europe in a changing world – inclusive, innovative and reflective Societies
- Science with and for Society

Learn more in source: [European Commission](#)

Jean-Pierre Bourguignon appointed next President of the European Research Council

The European Commission has today appointed Professor Jean-Pierre Bourguignon as the next President of the European Research Council (ERC), the EU's premier funding body for investigator-driven frontier research. Professor Bourguignon, a mathematician and French national, will take over in his new role as of 1 January 2014, replacing Professor Helga Nowotny. He will be the first ERC President to be based in Brussels, in a new reinforced role where he will devote most of his time to the job. He joins the ERC at a vital moment for its further development, with a strongly increased seven-year budget of over €13 billion under Horizon 2020, the new EU programme for research and innovation.

Professor Bourguignon is appointed by the Commission for a term of office limited to four years, renewable once. The ERC was led by Greek biologist Professor Fotis Kafatos from 2007 to 2010, and then by Austrian social scientist Professor Helga Nowotny from 2010 to 2013.

Read more in source: [European Commission](#)





The ERC's Vimeo account features [an interview](#) of the new president.

CERN to admit Israel as first new Member State since 1999

Following a resolution unanimously adopted at the 169th session of the CERN Council on 12 December, CERN (European Organization for Nuclear Research) is set to admit Israel as the Organization's 21st Member State. Israeli Membership will be effective from the date on which Israel formally notifies UNESCO that it has ratified the CERN Convention. CERN was established under the auspices of UNESCO, and UNESCO remains the depository of the CERN Convention. Israeli scientists have been involved in the CERN programme since 1991, and Israel has been an Associate Member of CERN since 2011.

"The Israeli scientific community has brought a great deal to CERN over the years," said CERN Director General Rolf Heuer. "I am looking forward to welcoming Israel as our 21st Member State and to intensifying our collaboration."

Israel's formal association with CERN began in 1991, when the country was granted Observer status by Council in recognition of the major involvement of Israeli institutions in the OPAL experiment, accompanied by contributions to the running of the LEP accelerator. Today, Israel is involved with the ATLAS experiment at the LHC, as well as the ALPHA and COMPASS experiments, and experiments at CERN's ISOLDE facility. Israel contributes to the LHC and CLIC accelerators, and operates a tier-2 centre of the Worldwide LHC Computing Grid. Israel also supports the involvement of Palestinian students at CERN.

Israel's forthcoming membership of CERN follows a decision taken by Council in 2010 to enlarge CERN's Membership. At the same time, Council established the status of Associate Membership for countries wishing to have a limited participation in the CERN programme accompanied by limited benefits of Membership. All new applicants for full Membership must pass through a period of at least two years as an Associate Member before Council takes a decision on full Membership. Countries may also apply for Associate Membership in its own right.

Following this decision, Israel became CERN's first Associate Member in 2011, and was followed by Serbia in 2012. Cyprus and Ukraine will become Associate Members as soon as their national parliaments ratify the accession agreement. Discussions are still underway with Slovenia regarding Membership, and with Brazil, Pakistan, Russia and Turkey, all of which have applied for Associate Membership. Romania has the status of Candidate for Accession, having applied for full Membership before the new procedures came into effect.

Further details in source: [CERN](#)



EU Research Highlight – 100-year mission into interstellar space

A pioneering interstellar space mission could continue to send data back to earth for 100 years, giving mankind crucial information about the conditions in deep space, thanks to a new, ultra-reliable power source.

Scientists in France are getting ready to make a prototype of a highly efficient nuclear-powered electricity generator which has no moving parts, making it much more reliable than current technology.

'We are at the beginning of a new technology, a technological breakthrough,' said Professor Maurice-Xavier François, coordinator of the SPACE TRIPS research project.

'We envisage at the moment probe (missions) of a hundred years ... but that's not possible today. It will be possible tomorrow,' he said.

By comparison Voyager 1, the furthest spacecraft from earth, will stop sending data back by around 2020 as it runs out of power, some 40 years after its launch in 1977.

To achieve the levels of extended power foreseen by Prof. François, scientists at SPACE TRIPS are developing a highly efficient generator that uses a conductive fluid that moves into a magnetic chamber. That means it has no moving parts and is therefore less likely to malfunction than the piston-driven system being developed in similar highly efficient nuclear generators in the United States, he said.

The fact that the SPACE TRIPS generator is so reliable means it could be scaled up, and even used to power a colony on Mars, for example. 'We could think of much bigger systems for electricity on Mars,' said Prof. François.

Read more in source: [Horizon](#)

EU Research Highlight - Transforming sea waves into energy

Sea waves can produce very high forces but they also tend to have very low vertical velocities. Exploiting wave energy from these low velocities often requires large generators which are too bulky and expensive for efficient use. However, a European consortium has developed a prototype that "snaps" energy out of the rise and fall of the swell, allowing for the efficient extraction of energy. With a generator that is relatively small, light and cheap, the prototype is designed to resist corrosion while deployed in water depths of up to 60m.

Started in September 2009, Snapper was a two-year project under the EU Seventh Research Framework Programme (FP7) that developed a rare-earth magnet based wave energy capture and conversion device for deployment in off-shore environments. Collectively, the project consortium represented the key stages of a viable SME-centric supply chain for the proposed system, capable of taking the project concept forward to market.



"Snapper prototype is designed to amplify velocity and effectively increases the relative velocity within the machine. This enables the generator to be downsized as a whole, while keeping the same power output as similar wave machines, thus making it a more efficient device," explains Narec's Research and Development Manager, Paul McKeever.

The potential commercial impact of Snapper is high. In 2011, the Snapper concept was awarded The Engineer magazine's Technology & Innovation Award in the Marine category, which was a timely recognition of the success of the recently completed two-year project.

The consortium is currently seeking partners to enable the launch of a commercially-viable wave energy device. Further investment is needed within the next 12 months to build a full scale prototype device and to test it in a representative off-shore environment. The consortium expects the funding to come from a mixture of public and private sources. This will provide a welcome opportunity to optimise key elements of the device and re-assess its position in the market place. "That is the next big hurdle to clear as part of our route-map towards commercialisation," concludes McKeever.

Snapper was coordinated by the National Renewable Energy Centre (Narec) in the United Kingdom and had seven industrial and research partners in several countries across Europe including Italy, Lithuania, Norway and the United Kingdom.

Find out more in source: [European Commission](#)

4.2 EU Member States*, China & Bilateral Cooperation

China/Finland – 3 joint Finno-Chinese projects on “brain plasticity and learning” jointly selected by Academy of Finland and NSFC

The Natural Science Foundation of China (NSFC) and the Academy of Finland (AF) jointly selected 3 projects on the topic of “brain plasticity and learning” out of 7 eligible proposals for joint funding over a –years period (from 1 January 2014 until 31 December 2016).

The list of projects can be found on the [NSFC website](#).

* Including countries associated with the 7th Framework Programme.



China/UK – 5 UK-China projects on “Grid Scale Storage for Intermittency” jointly selected by EPSRC and NSFC

The Natural Science Foundation of China (NSFC) and the British Engineering and Physical Sciences Research Council (EPSRC) jointly selected 5 Sino-British research projects on the topic of “Grid Scale Storage for Intermittency”.

The projects will be funded for 3 years, from 1 January 2014 until 31 December 2016.

The list of projects can be found on the [NSFC website](#).

Denmark - Danish minister promotes sustainable urbanisation and closer cooperation between Denmark and China

The Danish Minister for Housing, Urban and Rural Affairs Mr Carsten Hansen visited Beijing from the 21 – 24 November 2013. The purpose of the Minister’s visit was to promote the Danish experiences of sustainable urbanisation seen in the light of the rapid urbanisation of China that is affecting both the environment and the human living conditions.

The Minister emphasised the importance of cooperation and sustainable development during the further urbanisation of China. Denmark has significant expertise and knowhow as well as solutions to offer in respect of energy efficiency, retrofitting, environmental friendly urban solutions and preservation of cultural heritage during urban development and expansion. During the Minister’s visit the Royal Danish Embassy organized a well-attended roundtable on Retrofitting and Building Energy Efficiency Policy and Technology. Several companies and Beijing Construction Commission attended the roundtable.

Promotion of Sino-Danish city cooperation was also an important topic throughout the visit. The minister met with Vice-Mayor Chen Gang of Beijing and discussed urbanisation as well as the close cooperation between Copenhagen and Beijing. Cooperation between Danish and Chinese towns and cities are crucial for the further development of the close ties between Denmark and China. As an example of further city cooperation the Danish town of Sønderborg signed an agreement with Haiyan County at the EU-China Urbanisation Forum. The agreement focuses i.a. on green technology, climate and energy efficiency.

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

France - New developments in R&D cooperation between French companies and Chinese partners

On 29 November, French company Essilor and Shanghai University signed a three years extension of their cooperation agreement in order to continue their



joint research in nanotechnologies used in the optical glasses produced by Essilor.

The joint R&D centre between both partners celebrates this year its 6th anniversary and has already carried out 10 research projects, all of them still running, and obtained four patents already commercialized. More details can be found on the [French embassy website](#).

On 9 December, the Plastic Ominum group inaugurated its new R&D centre in Anting, near Shanghai. This new facility covers an area of 21000 sqm. And has been designed to eventually host up to 750 people. The research will focus on the development of new plastic for cars' bumpers. More details available on the [French embassy website](#).

Netherlands - Developing a Sino-Dutch approach to urbanisation

Ton Venhoeven, former Dutch state advisor on urbanisation and infrastructure, was in Beijing late November to attend the EU-China Urbanisation Forum and to further develop a research project that he is conducting in China titled: "Towards 2050: developing a Sino-Dutch approach to urbanisation". This project has an initial scope of one year and will travel to various Chinese cities (after having started in Beijing during the Beijing Design Week this year) to look at developments in China's urbanisation process and see where the Dutch approach to urbanisation could be adapted to a Chinese or Sino-Dutch approach.

Further details in source: [Dutch embassy to China](#)

Sweden - Statement of Intent signed on sustainable urban development

In connection with the EU - China Summit held in Beijing on November 21st, during the closing ceremony for the EU China Urbanization Forum, a Statement of Intent was issued between the Embassy of Sweden and the city of Changsha, capital of Hunan Province.

The agreement was signed by Ambassador Lars Fredén and the mayor of Changsha Zhang Jianfei in the presence of European Council President Herman Van Rompuy, Premier Li Keqiang and European Commission President José Manuel Barroso. Thus, the Embassy's ongoing collaboration with Changsha on sustainable urban development has been formally documented under the EU-China urbanization partnership and now has the chance to get more attention both in the EU context and from the Chinese government.

Further details available in source: [Sweden Abroad](#)



Sweden - Sustainable transportation cluster road show to Chongqing

The promotion cluster “Swedish Sustainable Transportation Solutions in China” met with the Development and Reform Commission (DRC) and the Commission of Transport (COT) of Chongqing on the 28th of November. Ambassador Mr. Lars Fredén led the delegation consisting of representatives from the Embassy, Business Sweden, ABB, Scania and Volvo Group. Mr. Shen Xiaozhong, Director of Chongqing DRC and Liang Xiongyao, Vice Director Chongqing COT, were leading the respective meetings from the Chongqing side. The discussions were focused on urban transport solutions and how to increase transport efficiency.

The meetings were held in conjunction with an inauguration of the cluster company Sapa Chalco Aluminium Products’ (Scap) new aluminum profile factory in Chongqing. Ambassador Fredén held a speech about the importance of increasing transport efficiency for inland provinces and cities. Other prominent speakers were Vice Mayor of Chongqing Mr. Chen Heping and CEO of Sapa Mr. Svein-Tore Holsether.

Further details available in source: Sweden Abroad

UK - New university partnerships and joint research centers between the UK and China

Universities in the UK and China have announced a series of new partnerships, expanding the opportunities for students to learn overseas.

David Willetts, the Universities Minister, revealed the new initiatives during the biggest ever trade mission to China this week.

The education partnerships announced include:

- The University of Nottingham investing £25 million in a Marine Economy Research and Technology Transfer Centre, as well as £27 million in the development of its Ningbo campus. It is also signing a multi-million pound agreement with Guangdong University of Finance and Guangdong Provincial Government to establish the Guangdong-Nottingham Advanced Finance Institute, which will train up to 2,000 Chinese financial specialists each year. Read more about these 3 new projects on the [UNNC website](#).

Xi'an Jiaotong-Liverpool University (XJTLU) investing £80 million in its new South Campus in Suzhou • the UK's Open University signing a new agreement with Chongqing Open University and an agreement with Peking University School of Telemedical Education • Cardiff University establishing a £6.5 million Cancer Research Centre in collaboration with Beijing's Capital Medical University • Lancaster University and Guangdong Provincial Office of Science & Technology are to sign an agreement outlining future collaborations, including the recently announced China Catalyst programme to boost trade between UK and Chinese businesses • the British Council's launching the Generation UK CEO initiative, further expanding its Generation UK scheme. The new project



aims to increase the number of UK students going to China to 15,000 over the next 3 years - currently around 4,200 UK students study in China every year.

Globally the education market is worth \$4.5 trillion (£2.75 trillion) annually.

Read more in source: [GOV.UK](http://gov.uk)



5 Grants & Fellowships

5.1 Call announcements for international researchers

Austria – Marietta Blau Grant

This programme is for highly qualified doctoral candidates who have studied a maximum of six semesters of their doctoral / PhD programme at an Austrian university at the closing date for application (exceptions are possible in the case of proven childcare periods and military or alternative service), and provides financial support to carry out a specific longer-term research stay abroad and experience in an international research environment. The financial support comes as a monthly grant of 1,200 Euros.

There is no age limit. The grant serves to support junior researchers, thus the desired career / academic career should be probable or possible with the doctoral degree.

It is also possible to apply for stays in more than one country; these, however, have to be integrated in one application.

The next closing date for application is **1 February, 2014** (Selection/interviews in June, Take-up of the grant as of August 1).

Find out more [here](#).

Austria – Ernst Mach Grant – worldwide

Ernst Mach Grants are awarded by the Austrian government to postgraduates, PhD. Students and postdocs from all over the world to conduct studies in Austria for one to 9 months in the following fields:

- Natural Sciences
- Technical Sciences
- Medicine
- Agriculture and Forestry, Veterinary Medicine
- Social Sciences, Law and Economics
- Humanities and Theology
- Arts

Eligible for application are:

a) postgraduates pursuing a doctoral/PhD programme outside Austria;

b) postgraduates and post-docs wishing to pursue research in Austria with a view to an academic career and who completed their studies (at a university outside Austria) after September 30 th, 2012;



c) post-docs who are working as lecturers at a university outside Austria.

(Applicants under a) have to prove that they pursue doctoral/PhD studies, applicants under c) have to prove that they are employed by a university.)

Applicants must not have studied/pursued research/pursued academic work in Austria in the last six months before taking up the grant.

Maximum age: 35 years (born on or after Oct. 1st, 1978).

Good knowledge of German, particularly in the respective subject area, is a prerequisite. For projects to be carried out in English a good knowledge of English in the respective subject area is required.

Deadline to apply for the academic year 2014-2015 is **1 March, 2014**.

Further details and access to the online application portal available [here](#).

Austria – Richard Plaschka Scholarship

Recipients of Plaschka grants (Postgraduates, PhD holders, researchers) can work as visiting researchers at Austrian university departments and institutes and carry out specialist studies in libraries, archives or at research institutions.

Eligible for application are only non-Austrian university lecturers in the field of history (but also related disciplines, e.g. cultural history, archaeology, musicology, provided that they deal with topics that are closely related to history) who are primarily occupied with Austria-related topics.

The scholarship is given for a period of 4 to 9 months. In case of successful research activities the scholarship can, on request, be renewed (total duration 18 months).

The scholarship includes a monthly grant of 1040 Euros and a book allowance of 93 Euros.

After having consumed at least 12 scholarship months the "Richard Plaschka Scholarship Commission" will decide whether or not the grant recipient will qualify for follow-on contact.

The closing date for applications is **1 March, 2014**.

Further details available [here](#).

Belgium - Return Grants for Researchers Working Abroad

The Back to Belgium Grants of the federal Science Policy are intended to foster the return to Belgium of talented researchers doing R&D in a foreign research centre.

Eligible candidates must be Belgian nationals or have spent at least 3 years in Belgium for R&D or higher education purposes before their post-doctoral stay abroad.



Each year, the jury meets in May and proposes to the Minister in charge a list of candidates considered apt to receive a 24 months funding. The selection criteria are mainly based on the scientific level of the candidate, the quality and the feasibility of the research proposal, the post-doc expertise acquired abroad and its possible use and its contribution to the host unit as well as the career perspectives in Belgium.

Researchers may propose a research project to be performed in a Belgian research unit, in a research team related to Inter-university attraction poles (IAP) or other research programmes financed by the Federal Authority.

The grant, awarded for a period of 24 months, includes a salary based on a research assistant salary proportionate to the experience of the candidate, an allowance of 1250€ for covering the return transportation cost and a 12500€ grant to cover research-related expenses (no overhead) within the host institution.

The call for proposals for the selection 2014 is now open. The deadline is **February 28, 2014**.

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

EU – CERN Fellowship and GET Programmes

There are two levels of fellowship within the CERN Fellowship programme:

- The Senior Fellowship Programme, addressed to people with a Ph.D. or at least four years of experience after the degree which gives access to doctoral programmes. In both cases, a maximum of ten years of experience after the degree which gives access to doctoral programmes applies.
- The Junior Fellowship Programme, for holders of at least a Technical Engineer degree (or equivalent) and at most a M.Sc. degree (or equivalent) with not more than 4 years of experience. Please note that the Junior Fellowship programme is only open to nationals of CERN Member States.

The Fellowship Programme awards approximately 150 Fellowships per year. Around half are for research work (**experimental or theoretical physics**) under the Senior Fellowship and half are for advanced development work and related research in a broad range of **applied science, computing and engineering** either under a Junior or a Senior Fellowship depending on the qualifications and experience of the individual.

Competitive and tax-free stipends are calculated individually.

In 2009, CERN introduced a new 'Graduate Engineering Training (GET)' scheme. CERN is already well-established as a central and vital force in the physics community, but CERN also offers outstanding possibilities for training and work experience in engineering fields. The aim of this scheme is to encourage Fellowship applications from talented engineers and should prove to



be a positive step forward in showing CERN is not only an exciting place to work for physicists, but is also a leading employer in engineering fields.

Engineers selected under the GET scheme benefit from the same conditions as all other Fellows.

Application deadline is **3 March, 2014** (for a start on 1 July, 2014).

Further information available on the [CERN website](#).

Germany - Freie Universität Berlin-China Scholarship Council Postdoctoral Research Program 2014

China Scholarship Council and Freie Universität Berlin have signed an agreement to establish a postdoctoral research program, which provides opportunities and scholarships for qualified Chinese young scholars to conduct post-doctoral research at FUB. This program aims at supporting highly-qualified postdocs with international research experience and integrating them into the university's research networks.

Starting in summer 2014, each postdoctoral researcher will be funded by the CSC - at first for 12 months. If both parties - Chinese Postdoc and German Research Group leader – agree, there is a possibility to apply to the CSC for the extension of a second year research stay which is funded by the German side.

Application deadline is **20 January, 2014**.

Find out more about this new programme and its first call on the [FUB website](#).

Luxembourg – FNR AFR PhD and Postdoc Grants

The FNR's AFR Grant Scheme (Aides à la Formation-Recherche) supports PhD and postdoctoral research training projects in Luxembourg and abroad, up to 4 years for PhDs and up to 2 years for postdocs.

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. In the selection process, the interest of the project in the context of Luxembourg R&D will nevertheless be evaluated.

For AFR beneficiaries with work contracts, the FNR pays a contribution to the annual salary costs of the Host Institution (max. contribution of 40,154 EUR / year for PhD grants and 56,975 EUR / year for Postdoc grants, including employer's charges). For AFR beneficiaries without work contracts, the FNR pays a fellowship (bourse) to the recipients of 18,000 EUR / year for PhD grants and 25,200 EUR / year for Postdoc grants.

Deadlines to submit application are **20 March, 2014** for the PhD grant and **11 March, 2014** for the Postdoc grant.

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



Sweden - Grants for international recruitment of leading researchers

The aim of the grant is to give Swedish higher education institutions a long-term opportunity to attract leading international researchers to Sweden.

A Swedish state-run university or higher education institution covered by the Higher Education Act and private education providers with permission to award degrees may apply for the grant.

Researchers who may be considered for recruitment shall be internationally recognised and leading within their field of research. The researcher shall be of such a level that he or she is qualified for a tenured post as a Full professor at one of the world's ten highest ranked universities. The proposed researcher shall, at the time of the recruitment, carry out his or her research and have been established outside of Sweden for at least five years.

Throughout the grant period, the recruited researcher shall work for a minimum of 50 per cent of a full-time post annually at the Swedish higher education institution.

The grant will be approved for 7-10 years. The amount may vary over the grant period. Grants of 5-15 million SEK per year may be applied for.

Application deadline for this call is **31 December, 2013**.

Find out more on the [Swedish Research Council website](#).

Sweden - Royal Swedish Academy of Sciences Scholarships

These scholarships support PhD. Students and postdoctoral researchers of all nationalities to do research in Sweden. Scholarships up to a SEK 100,000 maximum will be allocated to PhD students. Postdoctoral researchers who gained their PhDs around 5 to 6 years (depends on research field considered) ago or later will be allocated up to SEK 300,000, payable for a maximum of one year.

Calls in the following fields are currently open:

- **Astronomy and space science**
- **Chemistry**
- **Geosciences**
- **Mathematics**
- **Physics**

Application deadline for all these calls is **31 January, 2014**. Further details available on the [Royal Swedish Academy of Sciences website](#).



Switzerland - Swiss National Science Foundation (SNSF) Ambizione

Ambizione grants are aimed at young researchers who wish to conduct, manage and lead an independent project at a Swiss higher education institution.

The grants comprise the salary and project funds for a maximum of three years.

Participation requirements include:

- Doctorate
- At the submission deadline: submission of application generally up to five years after obtaining the doctorate (PhD)
- At the submission deadline (for medical practitioners): at least three years of clinical/practical experience after graduating (certificate as a specialist FMH is an advantage). Application may generally be submitted up to nine years after obtaining the medical licence (state examination).
- High-level publications
- At the submission deadline: postdoctoral research activities for at least 12 months at a different higher education institution than the one where the doctoral thesis was written.

The next submission deadline is **24 February, 2014**.

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

Switzerland - Swiss National Science Foundation (SNSF) Doc.Mobility and Early Postdoc.Mobility

Doc.Mobility fellowships are designed for doctoral students who wish to enhance their scientific profile by working at a research institution outside of Switzerland.

Participation requirements include:

- include:tion requirementsoutside of Switzerlandenhance their scientific profile by working ferent higher education institution than the one where the doctoral thesis was writtenApplication may generally be submitted up to nine years after obtaining the meless than 12 months at a research institution in Switzerland (for applicants who do not hold Swiss nationality)

The fellowships include a grant towards living costs, a flat-rate for travel expenses and, if justified, a contribution towards research and conference costs as well as matriculation fees. These fellowships are awarded for a minimum of 6 months up to a maximum of 18 months.

The next deadline for application is **1 March, 2014**.

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



Early Postdoc.Mobility fellowships are designed for postdocs at the beginning of their career who wish to enhance their scientific profile by working at a research institution outside of Switzerland.

The fellowships include a grant towards living costs, a flat-rate for travel expenses and, if justified, a contribution towards research and conference costs as well as matriculation fees. In principle, these fellowships are awarded for 18 months, in justified cases for at least 12 months.

The next deadline for application is also **1 March, 2014**.

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

UK – RSE-NSFC Joint Project scheme 2013

The Royal Society of Edinburgh (RSE) – National Natural Science Foundation of China (NNSFC) Joint Project scheme is designed to facilitate international collaboration between researchers based in Scotland and China. A grant is provided to researchers to cover travel, subsistence and research expenses.

This scheme is available for Scottish-based researchers only.

The collaboration should be based on a single project, with two teams or individuals based in Scotland and China. A relationship must have already been established between the Scotland-based and China-based researchers. The collaboration should involve bilateral exchanges between Scotland and China (applications will only be considered for bilateral, not multi-lateral, projects).

The subject areas for the 2013 (for Spring 2014) Joint Project Scheme are **Computational Cognitive Neuroscience, Psycholinguistics (particularly in relation to Chinese language processing) Interaction and Communication, Visual Cognition and Social Neuroscience**.

The Joint Project scheme runs for two years.

The RSE grant provides a maximum of £6,000 per year. This funding is to be used for travel and subsistence, with the option of using up to £1,000 on research expenses. A similar level of funding will be provided by the NNSFC to the China based applicant.

The next closing date will be **15 January, 2014**.

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

UK - Royal Society Research Professorship

This scheme is for world-class scientists who would benefit from a period of long-term support to allow them to focus on research and collaboration based at an institution in the UK.

The scheme provides salary costs, a one-off start-up grant and research expenses.

The Professorships may be awarded in any field across the **natural sciences**.



Applicants can be of any nationality, and applications are particularly welcomed from scientists currently resident outside the UK.

The scheme provides salary costs, a one-off start-up grant and research expenses. Appointments are usually made for up to 10 years.

The closing date for application to this scheme is **13 March, 2014**.

Further details can be found on the [Royal Society website](#) as well as on the [NSFC website](#).

UK - Funding for UK/EU Arts and Humanities Research Doctoral Students – Call for China-related applications

The Midlands3Cities Doctoral Training Partnership (DTP), through matching AHRC funding of £14.6M, will be awarding 410 PhD studentships over a five year period to excellent research students in the **arts and humanities**.

The DTP, a collaboration between the universities of Nottingham, Nottingham Trent, Leicester, De Montfort, Birmingham and Birmingham City, provides research candidates with cross-institutional mentoring, subject specific and generic training, and professional support in preparing for a career.

The School of Contemporary Chinese Studies at the University of Nottingham invites PhD application from students whose research interests include:

- Modern Social, Business, Economic, Legal, Military, Diplomatic and Political History of the Chinese-Speaking World (Mainland China, Taiwan and Hong Kong)
- Cultural, Art and Visual (including Performing Art) History of Mainland China and Taiwan
- Popular Culture in China
- Political Culture in China
- Differences between Chinese and British Cultures
- Intellectual History of China (from the late Qing to the present)
- Media and Communications, Internet-enabled Social Media, and Propaganda in China
- Anthropological Studies of China
- Heritage and Preservation in China
- Depictions of East Asia in European Literature; Depictions of the West in East Asian Literature

The deadline for AHRC funding applications is **9 January 2014**, by which time students must have applied for a place to study and have provided two references to a university within the DTP. For full details of eligibility, funding and research supervision areas, please visit www.midlands3cities.ac.uk or contact enquiries@midlands3cities.ac.uk.



UK - PhD studentships at the School of Contemporary Chinese Studies, University of Nottingham



The School of **Contemporary Chinese Studies**, supported by the University of Nottingham ESRC Doctoral Training Centre (DTC), invites applications for fully-funded PhD studentships in 2013 (both 1+3 and +3 awards) within Language Based Area Studies.

The School is recognised as a national leader in the provision of high quality, discipline-based research and degree programmes on contemporary China with excellent research training and the opportunity to be part of a vibrant research community.

Proposals are invited in any of the following areas in the study of China:

- Business and economy
- Finance and banking
- Domestic politics
- Foreign policy and external relations
- Political economy
- National Security and defence
- Society and social policies
- Culture, literature, the media, and social media
- Science, technology and innovation
- Modern and contemporary history
- Politics of Taiwan and Hong Kong
- Law and the judiciary

Interdisciplinary research proposals are also welcome and those interested in applying are encouraged to approach individual staff members to ascertain if their proposed research fit in with the supervisory capacity at the School.

This studentship is funded by the Economic and Social Research Council and includes full UK/EU tuition fees, plus a doctoral stipend matching UK Research Council National Minimum (£13,590 p.a. for 2012/13, updated each year) for applicants who are UK citizens or meet the UK residency requirement. UK Research Council conditions apply. Applicants are required to provide evidence of significant and appropriate research training, normally through the attainment of a previous masters qualification, in order to apply directly to the PhD programme (+3 route). Students without this will normally be funded for an MA before PhD (1+3 route).

Applicants for funding must already hold an offer of a place to study at the University of Nottingham and have already provided two academic references, via the university online application system <http://pgapps.nottingham.ac.uk/> and



the full ESRC application completed and received by the school no later than **14th January 2014**. Details of the ESRC DTC application procedure are at <http://www.nottingham.ac.uk/esrc-dtc/funding-application/index.aspx>

- The University of Nottingham's ESRC DTC website (this includes the ESRC application form).
- Academic contact - Dr Niv Horesh niv.horesh@nottingham.ac.uk
- Administrative support and general queries about applications - Mandy Felton mandy.felton@nottingham.ac.uk

5.2 Calls still open

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

France – COOPOL Innovation: 2014 Call

Deadline to submit proposals is **31 December, 2013**.

Further details available on the [French Embassy website](#).

Netherlands - Innovational Research Incentives Scheme Veni

The application deadline is **7 January, 2014**.

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

France - EIFFEL PhD scholarships

Deadline for receipt of applications by Campus France : **January 8th, 2014**

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

Netherlands - Cooperation China - Joint Scientific Thematic Research Programme (JSTP) - Joint Research Projects

Closing date for submitting expressions of interest is **8 January 2014**, 11:00am CET. Closing date for submitting joint research proposals is 26 March 2014, 11:00am CET.

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

International – IIASA Young Scientists Summer Program

Application deadline is **13 January, 2014**.



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

France – Cai Yuanpei 2014

The deadline to submit applications is **15 January, 2014**.

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

Germany - 15 PhD fellowships at the Graduate School of East Asian Studies at Freie Universität Berlin

Applicants should apply via the online portal: <https://apply.drs.fu-berlin.de/eas>

Deadline to submit applications is **15 January, 2014**.

Learn more on the [GEAS website](#).

Luxembourg - INTER Mobility Programme

The next application deadline is **20 January, 2014**.

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

Greece - Onassis Foundation Fellowships for foreigners

Deadline for application is **31 January, 2014**.

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

Belgium - Pegasus Marie Curie Fellowships (short)

The next deadline for application is **1 February, 2014**.

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

Switzerland - Swiss National Science Foundation (SNSF) Advanced Postdoc.Mobility

The next deadline for application is **1 February, 2014**.

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

Belgium – FWO Ph.D. fellowship

The next application deadline is **3 February, 2014**.

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



Belgium – Postdoctoral fellow

The next application deadline is **3 February, 2014**.

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

France – Xu Guangqi 2014

Deadline to submit application for the 2014 call is **3 February 2014**.

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

Luxembourg - ATTRACT 2014

Application deadline for the 2014 call is **3 February 2014**.

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

EU – Erasmus Mundus 2014 Call for proposals Action 2

Deadline for submission of applications is **3 March, 2014**.

Access the call on the [Erasmus Mundus website](#).

UK - DFID-ESRC China and Africa research programme

The full specification and other relevant documents can be found below.
Deadline for applications is **13 March, 2014**.

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

Netherlands - Cooperation China - Joint Scientific Thematic Research Programme (JSTP) - Dialogue Seminars

Closing date for submitting Dialogue Seminar proposals is **26 March 2014**,
11:00am CET.

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

EU - Dragon-Star Innovation Award – call for application

Deadline for application is **31 March, 2014**.

Find out more about the [eligibility criteria](#) and download the [Innovation Award application form here](#).

More details available on the [Dragon Star project website](#).



5.3 Open calls under FP7 and Euratom

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

- [Joint Technology Initiatives](#) / 3 open calls

The following call is open under the [Capacities](#) programme

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

5.4 Open calls under Horizon 2020

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

Excellent Science programme

22 open calls including:

- European Research Council:
 - [ERC Consolidator Grant](#) – Deadline **20 May, 2014**
 - [ERC Proof of Concept Grant](#) – Deadline **1 April, 2014**
 - [ERC Starting Grant](#) – Deadline **25 March, 2014**
- Marie Skłodowska-Curie actions:
 - [Marie Skłodowska-Curie Research and Innovation Staff Exchange \(RISE\)](#) – Deadline 24 April, 2014

Industrial Leadership

40 open calls

Societal Challenges

76 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-01a-2014: Genetics and nutrition and alternative feed sources for](#)



[terrestrial livestock production](#) – Deadline **12 March, 2014**

[SFS-03b-2014: Practical solutions for native and alien pests affecting plants - EU-China cooperation on IPM in agriculture](#) – Deadline **12 March, 2014**

[SFS-04-2014: Soil quality and function](#) – Deadline **12 March, 2014**

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

[LCE-18-2014: Supporting Joint Actions on demonstration and validation of innovative energy solutions](#) – Deadline **7 May, 2014**

[MG-1.8-2015: International cooperation in aeronautics](#) – Deadline **31 March, 2015**

[WASTE-2-2014: A systems approach for the reduction, recycling and reuse of food waste](#) – Deadline **8 April, 2014**

[WASTE-7-2015: Ensuring sustainable use of agricultural waste, co-products and by-products](#) – Deadline **16 October, 2014**

[WATER-5a-2014: Strategic cooperation partnerships](#) – Deadline **8 April, 2014**

[INT-01-2014: Enhancing and focusing research and innovation cooperation with the Union's key international partner countries - proposals targeting Russia and China](#) – Deadline **29 April, 2014**

Science with and for society

9 open calls including the following one including China in its scope:

[ISSI-5-2014: Supporting structural change in research organisations to promote Responsible Research and Innovation](#) – Deadline **2 October, 2014**



6 Jobs

Access thousands of jobs and fellowships announcements on the [EURAXESS Jobs portal](#).

China - CEFC Researcher and director of the Sino-French Academic Center (Beijing)

The French Centre for Research on Contemporary China (CEFC) invites applications for a Researcher position, based in Beijing, as director of the Sino-French Academic Center (two-year expatriation contract, renewable once). Applicants must hold a PhD in the humanities or social sciences and be confirmed academics with a strong research track record on contemporary China.

Start date: from 2 May 2014.

The position is restricted to citizens of member countries of the European Union, preferably holding an academic or research position.

The research project submitted by the applicant should contain a brief outline of collaborative activities planned at the CFC Beijing.

Deadline for the application: **10 February, 2014**

More information about this position announcement on the [website of the CEFC](#).

Inquiries: Alfred Aroquiame - aaroquiame@cefc.com.hk.

China - Executive Director of the Integrated Research on Disaster Risk (IRDR) programme (Beijing)

The International Council for Science (ICSU), the International Social Science Council (ISSC) and the UN International Strategy for Disaster Reduction (UN-ISDR) invite applications for the important post of Executive Director of the Integrated Research on Disaster Risk (IRDR) programme.

IRDR is an exciting decade-long, internationally integrated, all-hazards research programme bringing together the talents of the natural, social, medical and engineering sciences in a way not attempted before. Its objectives are the scientific characterization of natural and human-induced environmental hazards, vulnerability and risk; the understanding of decision-making in complex and



changing risk contexts; and the reduction of risk and curbing losses through knowledge-based actions.

The Executive Director heads an International Programme Office (IPO) for IRDR being hosted by the Institute of Remote Sensing and Digital Earth (RADI) of the Chinese Academy of Sciences in Beijing, China, with core funding coming from the China Association for Science and Technology (CAST).

The announcement will expire on **20 January, 2014**. Read the full announcement on [Nature Jobs](#).

China - Faculty Positions Available in Department of Pharmacology and Pharmaceutical Sciences, Tsinghua University (Beijing)

The Department of Pharmacology and Pharmaceutical Sciences at the School of Medicine in Tsinghua University are actively seeking candidates to fill multiple independent, principal investigator (PI) positions at all levels in research areas including but not limited to molecular and cellular pharmacology, pharmaceuticals (formulation and drug delivery), pharmacokinetics/pharmacodynamics. Tsinghua University offers highly competitive start-up package, salary and fringe benefits. Award-winning kindergartens and exceptional elementary schools, located at the heart of the campuses, will also be available to the children of all PIs.

Applicants must have a Ph.D. in related disciplines, strong publication record, and extensive research and/or development experience.

The announcement will expire on **13 March, 2014**. Read the full announcement on [Nature Jobs](#).

UK - China Scholarship Council (CSC) / Queen Mary Joint PhD scholarship : London, United Kingdom

A position, funded under the China Scholarship Council (CSC) / Queen Mary Joint PhD scholarship scheme, to work on the 'Real-time determination of human stem cells differentiation upon mechanical stimulation' project at the School of Engineering and Materials Science, Queen Mary University of London is currently open for applications.

The project aims at characterizing the effect of mechanical stimuli on the differentiation of adult human mesenchymal stem cells (hMSCs). In particular, the project will assess the role of the cytoskeleton as bridging structure between the mechanical input and the cell nucleus. Experiments will combine state-of-the-art fluorescence microscopy techniques with Atomic Force Microscopy, cell stretch or microfluidic devices.

The candidate will routinely:



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

The European Commission's Joint Research Centre (JRC) is currently advertising the following vacancies:- 1 senior researcher position (deadline 31 December, 2013)

Further information on the [JRC website](http://ec.europa.eu/jrc).

- Use cell culture, basic biochemical techniques and live-cell imaging.
- Perform biophysical experiments with diverse instrumentation such as Atomic Force Microscopes, commercial systems to apply mechanical load and microfluidic devices.
- Implement image and signal processing algorithms for data analysis.

Applicants should have a BSc or MSc in Biomedical Engineering, Biophysics or Cell Biology. Experience in some of these key areas is desired: cellular biophysics, fluorescence microscopy, image processing, atomic force microscopy, cell culture, basic biochemistry and Matlab.

Eligible candidates should be citizens and permanent residents of the People's Republic of China at the time of application.

Deadline to submit application is **10 January, 2014**.

Access the full announcement on [EURAXESS Jobs](http://ec.europa.eu/euraxess).



7 Events

7.1 EURAXESS Links China

REMINDER: CALL FOR PAPERS - 2nd New European Research on Contemporary China International Conference - Beijing

Co-organized by the French Center for Research on Contemporary China (CEFC) and EURAXESS Links China, with the support of the Delegation of the European Union to China, the European Center for China Studies (ECCS), the Heinrich-Böll Foundation and Think in China, this conference aims to bring together doctoral candidates, post-doctoral researchers and recent PhDs based in China, either European nationals or affiliated with European research institutions, in order to produce an overview of the emerging problematics in Chinese studies. The focus of the conference is on contemporary China, in a multi-disciplinary social science perspective.

The Conference is designed for doctoral candidates and recent PhDs in humanities and social sciences currently in China or planning to be in China in the summer of 2014, either European nationals or affiliated with a European university or research institute, regardless of nationality. Among the different disciplines that will be considered are anthropology, law, economics, geography, history, literature, international relations, political sciences and sociology.

The conference will sponsor domestic travel within China and accommodation in Beijing for selected participants; however, no funding is available for international travel.

Registration details and schedule:

- (1) A paper title and abstract (up to 20 lines) in English is to be sent by **15 February, 2014** to Ms. Miriam Yang: cefc@cefc.com.hk.
- (2) The selected participants will be notified by 15 April 2014
- (3) The final papers (up to 8000 words) should be sent by 31 May 2014
- (4) Selected papers may be published in the journal China Perspectives/ Perspectives chinoises.

For more information, please click [here](#). To download the call, please click [here](#).



7.2 EURAXESS Links China Recommends

2nd Shanghai Social Studies Colloquium - Invitation / Call for papers

The ESSCA School of Management warmly invites you to participate in the Shanghai Social Studies Colloquium (SSSC).

The SSSC is a platform for international and Chinese scholars of the various disciplines of the social sciences who are at all stages of their career and based in the city of Shanghai to come together for:

- presenting their research to an interested audience of other scholars and practitioners
- listening to, discussing and giving feedback to other researchers' work
- fruitful exchange of thoughts and feedback
- networking and to socializing, also with a view to develop collaborative research projects

The SSSC is an ongoing event and takes place every six to eight weeks/ two to three times per semester. The SSSC's venue is the Shanghai teaching site of ESSCA School of Management.

You may come as a regular participant to meet other researchers and discuss their work. We are also always looking for scholars who wish to present their work in the form of a working paper, a journal article, a book proposal, a book chapter or any other suitable form.

The research topics may be related to the broad range of the social sciences, including but not limited to:

- Economics/ Business Studies - Political Science/ International Relations - Sociology/ Anthropology - Law - History - ...

Registration for every session is limited. Two to three papers will be selected per session. The places for regular participants (i.e. those who will not present their research) will be allocated on a first-come-first-serve basis.

For anyone who is interested in participating in future SSSC sessions, with or without presenting a paper, please send an email to Frauke.Austermann@essca.fr.



7.3 Upcoming scientific events in China

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

| Field | Date | Location | Title <i>(click for more details)</i> |
|---------------------------|----------------------|----------|---|
| Medicine | 20-23 February, 2014 | Macau | 19th World Congress on Controversies in Obstetrics, Gynecology & Infertility (COGI) |
| Engineering, Life science | 21-23 February, 2014 | Sanya | 2014 Asia-Pacific Conference on Life Science and Engineering |
| Biotechnology | 27-28 February, 2014 | Shanghai | 4th Annual Pharma R&D Asia Congress |
| Biotechnology | 27-28 February, 2014 | Shanghai | 3rd Annual Clinical Trials & Outsourcing Asia Congress 2014 |
| Biotechnology | 25-28 March, 2014 | Beijing | 2nd Pharmaceutical Regulatory Affairs Summit Asia |
| Engineering | 17-18 May, 2014 | Nanjing | The 2nd International Conference on Materials Engineering (ICMEN2014) |
| Engineering | 22-24 May, 2014 | Beijing | 2014 2nd International Symposium on Engineering and Natural Sciences (ISEANS 2014) |
| Engineering | 22-24 May, 2014 | Beijing | 2014 The 2nd International Congress on Engineering and Information (ICEAI 2014) |
| Education | 22-24 May, 2014 | Beijing | 2014 the 2nd International Conference on Education and Social Sciences (ICEASS 2014) |
| Computer science | 19-20 July, 2014 | Shanghai | 4th International Conference on Computer Engineering and Networks (CENet 2014) |
| Marine biology | 4-9 August, 2014 | Shanghai | ClimEco4 |



8 Press Review*

8.1 Policy & Papers

Bureaucracy and favouritism drive China's security procurement, researchers say

Mainland security agencies often ignore the latest surveillance and internet monitoring technology developed by the nation's own scientists because of excessive bureaucracy and favouritism when picking which systems to use, according to researchers involved in the selection process. Professor He Yeping, deputy director at the Chinese Academy of Sciences National Engineering Research Centre of Fundamental Software, said some of the best technology developed by scientists in the mainland was sitting on shelves gathering dust. "Those selected and used by the government are often not the most technologically advanced," he said. (Source: [SCMP](#))

8.2 Voices & Opinions

Chinese scientists to play more important role: Nobel winner Higgs

Chinese scientists will play an increasingly important role in the world in future, 2013 Nobel Laureate in Physics Peter Higgs said in an exclusive interview with Xinhua immediately after a joint press conference at the Royal Swedish Academy of Sciences in central Stockholm. The Royal Swedish Academy of Sciences has decided on October 8 to award the Nobel Prize in Physics for 2013 to Peter Higgs and Francois Englert, "for the theoretical discovery of a mechanism that contributes to our understanding of the origin of mass of subatomic particles." Higgs said, in the course of his career, he had met and interacted with many impressive Chinese scientists with similar interests. "My impression is, at present time, the development of science in China is really

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being encouraged a lot and it's clear that Chinese scientists are going to play a more and more important role in the world in future," said Higgs. He also noted that in the internet age, young people should also study well basic sciences, which Chinese students appear to be good at. (Source: [Global Times](#))

8.3 Thematic Activities

Health

Vaccines at hand for humans against bird flu

China is able to mass-produce bird flu vaccines for people, said Zhong Nanshan, an academic at the Chinese Academy of Engineering and director of the Guangzhou Institute of Respiratory Diseases. "China could share the vaccine strain with other countries through the World Health Organization to aid in H7N9 epidemic control across the world," he said. The virus, which infects birds and people, has reportedly sickened more than 140 people in China, killing 45 since March, according to the National Health and Family Planning Commission. (Source: [China Daily](#))

New discovery offers hope for infertile women

Chinese scientists have made a discovery that could help women who suffer from infertility. Scientists have discovered that cullin-ring finger ligase-4 (CRL4) complex, a protein complex, is crucial in maintaining female fertility. For the first time its molecular mechanism can be revealed. A paper on CRL4 complex and how it works was published in US-based Science Magazine. Fan Hengyu, research group leader from Zhejiang University, said the discovery has revealed how CRL4 complex works in sustaining fertility and postponing the menopause. (Source: [China Daily](#))

China Makes Key Progress in Tibetan Medicine Study

Chinese scientists said great progress has been made in quality control technologies and standardization of traditional Tibetan medicine after 20 years of research. A total of 264 criteria for Tibetan medicine processing have been completed since the "key technologies and applications in Tibetan medicine quality control" program was launched in 1993, said Wei Lixin, one of the project's researchers. Researchers referred to medical theories in ancient books and techniques from the provinces of Qinghai, Gansu and Sichuan and from Tibet Autonomous Region for their research, according to Wei, researcher of the Tibetan medicine research center of the Northwest Institute of Plateau Biology under the Chinese Academy of Sciences. (Source: [CAS](#))



New chromosome abnormality discovered in China

Chinese doctors reported on Tuesday the discovery of an abnormal karyotype in human chromosome 5, the world's first such case, in northwest China's Shaanxi Province. Baoji City's maternal and child care service center diagnosed a girl with dwarfism, because of her lacking a sex chromosome and the long arm in chromosome 5 has a kink. Tang Kai, director of the center's genetics and heredity lab, said the abnormality was first of its kind seen. Clinical manifestations of the girl's disease are growth retardation and insufficient development of gonads. The case was reported to the State Key Lab of Medical Genetics, and entered the Database of the China Human Chromosome Abnormality Catalogue. "Gene analysis on the mutations should be complete to have a clearer view of their clinical effect," Tang added. (Source: [Global Times](#))

TCM Still Struggling to Find Cure for Its FDA Woes

Traditional Chinese medicines usually do not get very far in U.S. testing, and even the one that has made it into the final round has a ways to go. TCM products include patented drugs, herbal ingredients and decoction strips, which contain ingredients that result from boiling a substance. Compound TCM drugs are one variety of the patented type. For a long time, TCM herbal ingredient products such as plant extracts and decoction strips accounted for more than 80 percent of TCM exports from China. Patented TCM drugs have always accounted for a small proportion. In 2012, China exported US\$ 270 million in patented TCM drugs, primarily to Hong Kong, Japan, Singapore and Australia. These patented drugs remain almost unheard of in Europe and America, where the majority of TCM products are foodstuffs, health products or plant ingredients, primarily consumed by Chinese communities. (Source: [Caixin](#))

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Food, agriculture & fisheries, biotechnology

Gov't, Scientists Struggle to Root Out Opposition to GM Foods

In July, 61 members of the Chinese Academy of Sciences (CAS) and the Chinese Academy of Engineering submitted a petition to the country's leaders asking that they begin promoting industrial cultivation of genetically modified (GM) rice as soon as possible. Information about the petition was only released three months later by Zhang Qifa, of the CAS. Zhang said that the petition stated that "the promotion of industrialized cultivation of GM rice can wait no longer, otherwise we will harm the national interest. The commercialization of GM food will be unable to develop, which will have an enormous impact on scientific research." (Source: [Caixin](#))



CAS Scientists Expand Known Phosphorylation Sites in Tetrahymena from Dozens to Thousands

Researchers from Institute of Hydrobiology, Chinese Academy of Sciences (IHB) and Institute of Biophysics, Chinese Academy of Sciences (IBP) recently reached a millstone in *T. thermophila* phosphoproteomic study. They conducted the first global and site-specific phosphoproteome profiling of *T. thermophila* by using high accuracy mass spectrometry-based proteomics techniques. In total, 1384 phosphopeptides and 2238 phosphorylation sites from 1008 *T. thermophila* proteins were identified through the combined use of peptide prefractionation, TiO₂ enrichment, and 2D-LC-MS/MS analysis. Gene Ontology analysis and KEGG pathway mapping have shown that the identified phosphoproteins are implicated in the regulation of various biological processes such as transport, gene expression, and mRNA metabolic process. (Source: [CAS](#))

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Information & communication technologies

Chinese telecom operators begin cloud computing park construction

China Mobile and China Unicom announced the beginning of construction on two cloud computing parks with investment totaling 7 billion yuan (1.15 billion U.S. dollars) in southwest China's Guizhou Province. The two cloud computing parks will be located in Gui'an new area of Guizhou Province, where China Telecom already began construction of a similar park in October. (Source: [Xinhua](#))

China unveils first domestic cloud computer

A leading information technology company on Wednesday unveiled China's first cloud computer, a major breakthrough for Chinese cloud computing. The computer developed by the Unisplendour Corporation Limited of Tsinghua University, has a dynamically scalable function in computing power and storage capacity in accordance with customer requirements, according to a statement from the company. The number of the computer's CPU can be expanded to 65,535 and its storage space can reach up to 85 PB bytes, with a throughput of 1.2 GB bytes per second, according to the statement. (Source: [China Daily](#))

Xiaomi Plans to Expand Into Southeast Asia

Since August, when the Chinese mobile phone maker Xiaomi lured away a top Google executive, Hugo Barra, to oversee its international expansion plans, two big questions remained: When and where would Xiaomi turn its attention? At a media event in Taiwan, Xiaomi executives, including Mr. Barra, said the



company planned to set up shop in Southeast Asia early next year. When pressed for details, the company's press office said Singapore and Malaysia would be the first markets in the region to get Xiaomi phones. So far, Xiaomi's only major forays outside mainland China have been into Taiwan and Hong Kong. There, the company has stirred up considerable interest. On Monday in Taiwan, a "flash sale" on the Internet of 10,000 of the company's Hongmi phones sold out in less than 10 minutes, the company said. (Source: [NY Times](#))

Huawei's US\$500m Danish order

China's hi-tech powerhouse Huawei on Monday unveiled an investment of US\$500 million to develop Denmark's next generation mobile network over the next six years. "Our ambition is to build one of the best and the most modern networks in the world, enabling over 99 percent of the Danish population to enjoy the benefits of high-speed Internet access," said Victor Wang, president of Huawei Europe. Since 2007, Huawei has steadily expanded its business in Denmark in cooperation with local operators, Wang said at a ceremony in Copenhagen to celebrate the fifth anniversary of the establishment of Huawei Denmark. (Source: [Shanghai Daily](#))

Supercomputer technology to monitor smog

A computer model capable of more accurately forecasting and analyzing the cause of smoggy days is expected to be put into operation in the following three to five years. The simulation model will be developed using the technology of Tianhe-1A, which ranked as the world's fastest supercomputer from November 2010 to June 2011, and the model's data will be revised in light of actual observation data from other monitors, said Meng Xiangfei, a researcher with the National Supercomputer Center (NSC) in Tianjin. The model is also expected to forecast weather conditions further in advance compared with current air quality monitors in operation, according to Meng. Chinese environmental authorities have set up 668 monitoring spots in 114 cities and have released the data daily online and through traditional media. (Source: [China Daily](#))

China issues 4G mobile licenses to create trillion-yuan market

China's Ministry of Industry and Information Technology issued 4G licenses to three Chinese telecom operators to provide users 20 to 50 times faster mobile Internet access compared with current 3G network and create a new trillion-yuan market for device and service upgrade. China Mobile, the world's largest mobile carrier, got the home-grown TD-LTE license, while its rivals China Telecom and China Unicom got both domestically developed TD-LTE and the more international FDD-LTE licenses. In cities like Beijing and Shenzhen, carriers have allowed users to apply for trial commercial use of 4G services with their own devices. In Shanghai, more than 1,600 people have been invited to test 4G services. The next-generation network, along with e-commerce and software businesses, is expected to boost information consumption in China,



the country's latest strategy to transform and upgrade its economy structure. (Source: [Shanghai Daily](#))

SMAC sectors set to grow average 22%

Social networks, mobile Internet, analysis of big data and cloud computing, referred to as SMAC, are slated to be the fastest-growing sectors in China's information and communication technology (ICT) industry, a research firm IDC said yesterday. The SMAC market will be worth up to US\$195.4 billion between 2013 and 2020, or an average annual growth of 22 percent which is more than double the 7.7 percent annual ICT gain in the period and nearly three times the economic expansion of 7 percent, according to US-based IDC. A booming mobile Internet, more IT consumption by consumers and government policies to develop smart cities and accelerate the broadband speed nationwide are seen as driving the ICT market. By 2020, there are likely 840 million Internet users in China, according to IDC. (Source: [Shanghai Daily](#))

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Nanosciences, nanotechnologies, materials & new production technologies

Chinese scientists upbeat on development of invisibility cloak

Mainland scientists are increasingly confident of developing the world's first invisibility cloak, using technology to hide objects from view and make them "disappear". The technology would have obvious military uses such as developing stealth aircraft, but Beijing believes the research could lead to wider technological breakthroughs with broader uses, scientists involved in the research said. The teams involved include researchers at Tsinghua University and the Chinese Academy of Sciences. The main approaches are developing materials that guide light away from an object, creating electromagnetic fields to bend light away from what one is trying to hide and copying nature to make hi-tech camouflage materials. (Source: [SCMP](#))

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Environment (including climate change)

China weighs eco-compensation

Decades of industrialization and double-digit growth have left the country badly polluted, prompting China to speed up ecological protection and drop its pursuit of economic growth at all costs. In a key Communist Party of China (CPC)



meeting last month, the Party vowed to establish a sound system to protect the country's ecological environment. The road map released after the meeting proposed a "red line" for ecological protection, implementing a system of paid-for use of resources and ecological compensation. Analysts say harmful smog, contaminated soil and poisoned water supplies demand a valid system to protect the environment. "The red line is to limit economic development of environmentally vulnerable regions, such as river sources," said Xia Guang, director of the Policy Research Center for Environment and Economy under the [Ministry of Environmental Protection](#). (Source: [Global Times](#))

Smog crisis in China leads to increased research into effect of pollution on fertility

As China's environmental woes grow, typified by recent toxic smog, Beijing has been increasing funding for research into how pollution affects fertility. The number of studies funded by the National Natural Science Foundation of China, the leading research institute, has tripled in the last five years. It has supported 68 such research projects this year, compared to just 23 in 2008. Dr Liu Liangpo, a researcher with the Institute of Urban Environment at the Chinese Academy of Sciences, said this showed the government's "deep concern" about the growing crisis. He said infertility was a global issue, but the situation in China was "particularly grim" due to the severe pollution. And he warned: "Polluted water, unsafe food, bad air ... so many things are threatening the reproductive capacity of Chinese people. "If the situation gets worse, China's birth-control policy would become redundant." More than 40 million people on the mainland have been diagnosed as infertile. (Source: [SCMP](#))

Increased Extreme Summer Heat Events Linked with Vanishing Arctic Ice and Snow

Prof. TANG Qihong's group from the Institute of Geographic Sciences and Natural Resources Research (IGSNRR), of the Chinese Academy of Sciences, in collaboration with Research Professor Jennifer A. Francis of Rutgers University, combined satellite observations of snow cover and Arctic sea-ice extent with atmospheric reanalysis data to demonstrate the linkages between summer weather patterns in mid-latitudes and cryosphere loss. The lead-author Tang Qihong of IGSNRR explains, "the study contributes to a growing body of evidence that in addition to its effect on high-latitude environments, the melting Arctic has wide-ranging implications for people living in the middle latitudes." As Arctic and global warming continue unabated and the cryosphere continues to disappear, this study suggests more summer heat extremes in the major population centers across much of North America and Eurasia where billions of people live will likely become more frequent. (Source: [CAS](#))



Beijing joins carbon trading cities

Beijing became the third Chinese city to launch a carbon trading scheme to regulate soaring CO2 emissions from its main power generators and manufacturers, with first trades reported to have gone through at 50 yuan (US\$8.20) per permit. The capital followed newly established markets in Shenzhen and Shanghai, with southern Guangdong Province set to open one next month that will be the second-biggest in the world after the European Union. The regional markets are part of China's strategy to cut its greenhouse gas emissions per unit of GDP to 40-45 percent below 2005 levels by 2020 as the country seeks to limit climate change and address future energy security issues. (Source: [Shanghai Daily](#))

Chang'e-3 engine technology may help combat smog

Researchers have developed an incineration method that can classify combustion products based on thermal control principle applied on the Chang'e-3 engine. A combustion furnace developed with combustion technology can deal with acid gas and smoke. A set of equipment to recover sulfur and reduce nitrate has also been developed, which can be used in factories to control hazardous gas emission. Researchers have also mastered coal gasification with combustion technology, which can transfer coal ashes into essential materials for aluminum oxide, preventing the ashes from flowing into the air, which contaminates air and soil. In addition, the turbopump in the engine can be converted into a fire pump for forest fire prevention, which is small and convenient enough for police to carry. (Source: [Global Times](#))

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Energy

Chinese biologist Cui Qiu seeks out productive biofuel sources

Cui Qiu knows it is vital to create new fuels as China grapples with air pollution problems. Biologist manipulates genes of little-known bacteria to make them superstars of fuel production. In one recent achievement, Cui, a researcher with the Chinese Academy of Sciences' Qingdao Institute of Bioenergy and Bioprocess Technology, turned a few shy members of the clostridium germ family into highly productive workers. Some chewed up wood fibre and churned out sugar, while others ate the sugar and made ethanol. These small creatures would bring huge changes to the world, Cui says in an interview with South China Morning Post. (Source: [SCMP](#))



Tibet wind farm starts turning

World's highest wind farm at 4,700 meters has gone into operation in Nagchu prefecture, Tibet Autonomous Region, the last region in China to utilize wind power. The five turbines of the first phase have a capacity of 7.5 megawatts. The completed project will have 33 wind turbines capable of putting out 49.5 megawatts. Deng Changlin, of the Tibet energy administration office, said Tibet is a very windy place which receives a lot of sunlight. Developing new, green energy sources will play a big part in protection of the frail ecosystem of the region. It is estimated that annual wind energy reserves in Tibet reach 93 billion kilowatt-hours, or 34 million tonnes of coal equivalent, ranking seventh in China. (Source: [Global Times](#))

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Transport (including aeronautics)

AVIC unveils plan for next-generation regional aircraft

China's major aircraft manufacturer announced the launch of its new regional turboprop program, an indication that the country is investing heavily to grab a bigger share of the civil aviation market. Dong Jianhong, chief designer of the aircraft at Aviation Industry Corp of China, the nation's largest aircraft manufacturer, said at a news conference in Beijing that the next-generation turboprop, the 78-seat MA-700, will serve regional air transportation within an 800-km range and be able to fly at high altitudes and in high temperatures. (Source: [China Daily](#))

Chinese train maker wins Malaysia deal

A subsidiary of China's leading railway car manufacturer CSR Corp has gained a new order for light rail trains from Malaysia. The order of 30 high-performance light rail trains, which include 180 cars, will run on Malaysia's AMPANG Line Extension Project, said CSR, the locomotive company. The train's design has taken full consideration of the tropical climate in Malaysia by using aseptic and dehumidifying technologies. The sale is the company's seventh order from Malaysia for advanced rail traffic equipment and service technology. CSR, based in Beijing and listed on Hong Kong and Shanghai stock markets, has developed into one of the major players in the global railway transport industry and is one of the biggest by global sales revenue. (Source: [Shanghai Daily](#))

New high-speed rail links Tianjin, Qinhuangdao

A high-speed railway connecting Tianjin municipality and a port city in Hebei province started trial operations on Sunday. The Tianjin-Qinhuangdao rail line has nine stops, five in Tianjin and four in Hebei province, the Beijing Railway Bureau said on Sunday. The new 287-km line brings the total length of China's



high-speed rail network to more than 10,000 km. The bureau, which administrates the line, said the maximum speed of its trains is designed to be 350 km per hour but in the early stage of operations they will operate at 300 km/h. The bureau said the new railway will serve as a link to connect rail lines in Northeast China with the national high-speed railway network, as Qinhuangdao is a key city to enter Northeast China. (Source: [China Daily](#))

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Socioeconomic sciences & the humanities, archaeology & paleontology

Archaeologists discover 4,500-year-old city in east China

Archaeologists said a Neolithic Chinese city was excavated on Wednesday in East China's Anhui Province. Part of a trapezoidal city wall and moat from the 4,500-year-old Nanchengzi Ruins in Guzhen County have been uncovered, along with a great number of houses, according to archaeologists from Wuhan University. The archaeology team has also unearthed items from the Neolithic Age to the Han Dynasty, which dates back about 2,000 years. The items include deer heads and antlers, tortoise shell, and wheat and rice seeds. "The discovery is very valuable for research on historical, social and environmental changes in the area," said He Xiaolin, professor and archaeologist from Wuhan University. (Source: [Global Times](#))

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Space

China's moon rover works stably

China's moon rover, *Yutu* (Jade Rabbit), worked in stable condition following its restart after a "nap" on Friday night, according to the Beijing Aerospace Control Center (BACC). The six-wheeled rover started moving again on Saturday December 21, after shutting down its subsystems on December 16, according to the BACC. (Source: [China Daily](#))

Yutu gets rolling on the moon

China's first lunar rover and the lander took pictures of each other near midnight on Sunday, marking the complete success of the country's Chang'e-3 lunar probe mission. President [Xi Jinping](#) and Premier [Li Keqiang](#), who both came to the [Beijing](#) Aerospace Control Center late Sunday night to watch the photo-taking session, congratulated scientists for the success. Ma Xingrui, chief commander of China's lunar program, announced lunar probe Chang'e-3



mission a "complete success", after the lander and moon rover took pictures of each other. A national flag was shown pasted on the moon rover in a picture taken by the lander. It was the first time China's national flag had appeared on a celestial body. (Source: [China Daily](#))

Long March-4B rocket fails to launch joint satellite into orbit

China failed to put into orbit a satellite jointly developed by the nation and Brazil, due to rocket malfunctions. A statement carried by the Xinhua News Agency said the Ziyuan-1-03 remote sensing satellite was launched aboard a Long March-4B rocket from Taiyuan Satellite Launch Center in Shanxi province, but malfunctions occurred during the flight, resulting in the satellite failing to enter its preset orbit. Experts from both countries are analyzing the cause of the malfunctions and said they are "confident in their future cooperation", the statement added without giving any further details. Monday's failure is the first time the Long March-4B rocket has encountered a setback, following 19 successful launches. (Source: [China Daily](#))

China announces launch of Chang'e-3 lunar probe "successful"

The launch of China's lunar probe Chang'e-3 was "successful," the Xichang Satellite Launch Center announced Monday. Zhang Zhenzhong, director of the center, made the announcement after the lunar probe entered the earth-moon transfer orbit and unfolded its solar panels. Chang'e-3 lunar probe, aboard a Long March-3B carrier rocket, blasted off from the Xichang Satellite Launch Center in southwest China at 1:30 a.m. Monday. It is expected to soft-land on the moon in mid-December. (Source: [Xinhua](#))

Lunar probe boosts 'Chinese dream'

China launched the country's first moon rover aboard its Chang'e-3 lunar probe, bringing Chinese dreams of reaching the moon tantalizingly close. The moon rover is tasked with surveying the moon's geological structure, surface substances and looking for natural resources. Chang'e-3 is part of the second phase of China's lunar program, which was initiated in 2004 and includes orbiting, landing and returning to Earth. It follows the success of the Chang'e-1 and Chang'e-2 missions in 2007 and 2010. After orbiting for 494 days and intentionally crashing onto the lunar surface, Chang'e-1 sent back 1.37 terabytes of data, producing China's first complete moon picture. Launched on October 1, 2010, Chang'e-2 verified crucial technologies for Chang'e-3 and reconnoitered the landing area. Chang'e-2 is heading for deep space and is expected to travel as far as 300 million km from Earth, the longest voyage of any Chinese spacecraft. (Source: [China Daily](#))



'Solutions' Necessary for Rocket Accidents

Experts have called for an insurance plan to cover damage caused by space launches and re-entries after two houses were damaged by rocket wreckage in Hunan province. The wreckage of the Long March rocket that carried the Chang'e-3 lunar probe into space fell in a village in Suining county, Hunan province, damaging two houses. No casualties were caused. "Suppose the rocket wreckage hit a person; what would the authorities do?" said Ren Zili, a professor of insurance laws at Beihang University. The number of launches per year has climbed to as many as 20. Meanwhile, other countries and regions with active space programs such as the United States and the European Union have all established insurance plans to cover losses caused by space launches. (Source: [CAS](#))

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People & Higher Education

China leads in university rankings for emerging countries

With half of the top 10 positions, China is confirmed as the strongest nation in the world's first ranking of universities in BRICS & Emerging Economies. China is home to almost half of the universities in the table – 44 out of 100. According to the Times higher education BRICS and emerging economies rankings 2014, published by the UK's authoritative magazine on December 5, Chinese mainland takes the top two places, four of the top 10, and 23 of the top 100 in the inaugural top 100 list, while Taiwan has 21 representatives, with National Taiwan University fourth overall. (Source: [Global Times](#))

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Research infrastructures

China expands research bases in Antarctica

China is expanding its presence at the South Pole, with construction workers leaving its Zhongshan Station on Wednesday to build the Taishan summer field camp, the country's fourth Antarctic base. A design released by the Chinese Arctic and Antarctic Administration shows the construction area for the camp will cover about 1,000 square meters. It will house up to 20 people, and the main building will be shaped like a Chinese lantern. (Source: [China Daily](#))



New manned submersible being developed

China is developing a manned submersible suitable for depths of 4,500 meters and the project is expected to be completed by 2016. "The key parts of the submersible, including the vehicle's pressure hull made of titanium alloy and batteries, will be designed and manufactured by China independently," said Hu Zhen, a senior engineer with China Shipbuilding Industry Corp who is in charge of the program. He said 90 percent of the submersible's components will be made in China, adding Chinese scientists have been studying the key technologies such as materials and batteries for nearly three years. "We hope a mother ship will also be designed and manufactured for the new submersible to guarantee its future operations," Hu said. (Source: [China Daily](#))

China opens space teleoperation center

China's first center designed for teleoperation, or operation from a distance, of deep space missions was formally opened at the Beijing Aerospace Control Center (BACC) following its successful trial use on the country's first moon rover early on Sunday. The moon rover Yutu, or Jade Rabbit, separated from the lander at 4:35 am on Sunday, several hours after the Chang'e-3 probe soft-landed on the lunar surface. The successful separation and soft-landing marked the formal operation of the center, where technicians can fully control and monitor the working conditions of the rover and lander. The center provides 40 seats for operating posts ranging from commanding to route planning. (Source: [China Daily](#))

2013 International R&D Institution Mission to Chongqing Launched in Chongqing

On October 22nd, the 2013 International R&D Institution Mission to Chongqing & Liangjiang Innovation Forum hosted by the Ministry of Science and Technology (MOST) and Chongqing Municipal People's Government was launched in Chongqing. Throughout the whole year in 2013, the Mission to Chongqing has held 44 activities, including high and new technology B2B meetings, new product development seminars, international academic exchanges and high-level government forums etc. (Source: [MOST](#))

Seabed campaign quickens

China is accelerating its efforts to tap vast metal deposits on the ocean floor, with manned submersible Jiaolong scheduled to dive in the country's two contract areas in the northwest Pacific and the southwest Indian Ocean next year. China is authorized to explore the international seabed for three major types of minerals — polymetallic nodules, polymetallic sulphide deposits and cobalt crusts. The National Deep Sea Center, home of Jiaolong, started port construction in early November. This is expected to be finished by the end of



2014. Investment reached about 500 million yuan (\$81 million). (Source: [China Daily](#))

Research vessel on 30th mission

Research vessel *Dayang Yihao* (Ocean No 1) departed from the city of Sanya in the southernmost, island province of Hainan on Monday, on China's 30th oceanic exploration mission. The global voyage, which will last 180 days and cover 19,000 nautical miles, will take the vessel across the Indian Ocean. A total of 339 people are on board, including 254 scientists and engineers. Among the experiments, scientists will be testing a remotely-operated underwater vehicle, on a series of oceanic surveys mainly on polymetallic sulphide and bioresources. The *Dayang Yihao* will anchor in Port Louis of Mauritius three times before its scheduled return to Qingdao in the eastern province of Shandong on May 30, 2014. (Source: [China Daily](#))

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International S&T relations

China, Japan, SK urge joint effort to combat smog

Government officials and environmental experts from China, Japan and South Korea have urged greater cooperation in combating air pollution. At a summit held on Saturday 14 and Sunday 15 December in Xianghe, Langfang, Hebei Province, attendees from the three countries expressed the will to join hands in boosting sustainable development. Wang Chunzheng, vice chairman of the China Center for International Economic Exchanges, said that the northeastern Asian nations of China, Japan and South Korea share common benefits as well as common responsibilities in joint air pollution control. (Source: [Global Times](#))

China launches communications satellite for Bolivia

China successfully sent a Bolivian communications satellite into orbit with its Long March-3B carrier rocket from southwest Xichang Satellite Launch Center on December 21. Bolivian President Juan Evo Morales Ayma was present, the first time a foreign head of state has witnessed a satellite launch in China. The satellite was produced by China Aerospace Science and Technology Corporation (CASC) with a designed longevity of 15 years. It is Bolivia's first communications satellite. Chinese President Xi Jinping sent a message of congratulations to President Morales, saying the successful development and launch of the satellite represents the latest achievements and level of cooperation between China and Bolivia in the field of science and technology. (Source: [China Daily](#))



MoST Vice Minister Zhang Gives a Lecture during International Training Course on TTF Entrepreneurship in Rural Areas

The International Training Course on TTF Entrepreneurship in Rural Areas was held in Beijing from Oct 11th to 26th, 2013. Nineteen trainees from ministries of science and technology and ministries of agriculture of 15 countries like Ethiopia, Kenya, Laos and Cambodia attended the 15-day training. During the training course, relevant experts, scholars and outstanding front-line TTF commissioners have been invited to introduce the experience in establishing the system of TTF Entrepreneurship in Rural Areas as well as its implementation. Vice Minister Zhang attended the opening ceremony and gave the first lecture to the trainees. (Source: [MoST](#))

2013 China-U.S. Executive Secretaries' Meeting on S&T Cooperation Held in U.S.

On October 31st, the 2013 China-U.S. Executive Secretaries' Meeting on S&T Cooperation (ESM) was held in the U.S. National Oceanic and Atmospheric Administration. The meeting was co-hosted by the executive secretaries of the two countries: Mr. Ma Linying, Deputy Director General of the Department of International Cooperation of MOST, and Mr. Margolis, Deputy Assistant Secretary of U.S. Department of State. Deputy Director General Ma Linying remarked that S&T cooperation was an important force in pushing forward China-U.S. relations. The two countries have launched practical cooperation in S&T areas, including energy, agriculture, environment, health, meteorology, marine and fishery, metrology measurement standards, basic research, seismic and geological sciences, forestry, transportation, or clean cook stoves. (Source: [MOST](#))

Vice Minister Cao attends 3rd Session of China-Brazil High-level Coordination and Cooperation Committee

On 6th November, Vice Minister Cao Jianlin arrived at Guangzhou for the 3rd session of China-Brazil High-level Coordination and Cooperation Committee co-chaired by Mr. Wang Yang, Vice Premier of the State Council of China and Mr. Michel Temer, Vice President of Brazil. In the last two years, China and Brazil have seen rapid and sound development in innovative S&T cooperation. The two countries have built China-Brazil Joint Laboratory of Agricultural Sciences, China-Brazil Nanotechnology Research Centre and China-Brazil Center for Climate Change and Energy Technology Innovation. The two countries have also signed Memorandums of Understanding on establishing Biotechnology Center and Meteorological Satellite Joint Research Center, conducted cooperation on bamboo and rattan development and application and held the 1st China-Brazil High-level S&T Innovation Dialogue. (Source: [MOST](#))



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