

Dear Readers,

Welcome to the February edition of the **EURAXESS Links China Newsletter**, which comes with some changes in its structure. A whole new lay-out is expected to come soon.

The newsletter will now start with the **'EU Insight'** section, featuring an article about EU research policies provided by the German research project management agency PT-DLR, the new coordinator of the different EURAXESS Links networks existing throughout the world,. Under their coordination, further development of EURAXESS Links activities will be carried out over the next three years, which should also have a positive impact on the services offered by EURAXESS in China.

The newsletter then continues with a **'News & Developments'** section followed by the list of open **'Grants & Fellowships'** which we are now trying to classify not only based on the country offering the scheme, but also on the research area targeted by the calls. For the programmes open to different areas, we grouped them under a 'Multi- and Trans-disciplinary Calls' sub-section, always highlighting in bold the particular fields concerned by each call. We hope this will make the reading and the finding of relevant information more convenient to you and are of course open for further comments on how to improve the presentation of information, this is very much work in progress!

We strongly encourage all employing organizations seeking to reach a pool of qualified Sino-European researchers to share their announcements in the **'Jobs'** section of this newsletter already fed by the [EURAXESS Jobs portal](#).

All events announcements are from now on featured under the **'Events'** section, including EURAXESS Links China events (this edition includes for example the [announcement and invitation to register to the first EURAXESS Links China event of 2013](#)), the events EURAXESS Links China recommends and the usual list of upcoming scientific conferences in China.

Finally, the **'Press Review'** offers the same overview of the main Chinese S&T related news released in the Chinese media over the past month as in the former version of this newsletter.

We thank you very much for your interest in this newsletter and wish you a pleasant reading.

With best regards,

Jacques de Soyres

[EURAXESS Links China](#) Information officer

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 in China and the Chinese researchers 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.

Editor: Jacques de Soyres, Information Officer of EURAXESS Links China

CONTENTS

EU INSIGHT	6
Horizon 2020 (H2020): The Framework Programme for Research and Innovation (2014-2020)	6
NEWS & DEVELOPMENTS	8
EURAXESS	8
Evaluation survey of EURAXESS Links China	8
EU & Multilateral Cooperation	8
New online tool for networking among EU-China Joint Research Institutions	8
Dragon Star Website launched	9
EU provides €144 million for new research on rare diseases	9
Commission to launch bioeconomy observatory	10
Search committee invites nominations for next President of the European Research Council	10
EU Member States and Bilateral Cooperation	11
China - Projects jointly funded by NSFC and foreign research funding agencies selected	11
France – New Sino-French Joint Labs established	11
Italy - Sino-Italian Scientific and Technological Cooperation	12
Italy – Sino-Italian Project on 'Optimized bioconversion of crude glycerol into hydrogen and ethanol using Geo-Chip and coupling with MEC' launched	12
GRANTS & FELLOWSHIPS	14
Life Sciences & Medicine	14
UK - Synthetic Biology China Partnering Award	14
UK - 2013 PhD Studentships at School of Medicine, Cardiff University	14
Physical Sciences & Engineering	15
Denmark - Sino-Danish strategic research cooperation in sustainable and renewable energy	15
Germany - DLR-DAAD Research Fellowships in the fields of Space, Aeronautics, Energy and Transportation Research	15
Mathematics & Formal Sciences	16
EU - ERCIM "Alain Bensoussan" Fellowship Programme	16
Social Sciences and the Humanities	16
EU - The Joint Programming Initiative on Cultural Heritage and the Joint Heritage European Programme (JPI-JHEP) First Transnational Pilot Call for Proposals	16
France - Fernand Braudel IFER Fellowships	17
Germany - Bremen International Graduate School of Social Sciences (BIGSSS) PhD fellowships 2013/17	17
Germany - 2013 Doctoral Fellowship in Sociology or Political Science at Max Planck-Sciences Po Center in Germany	18
Italy - International Doctoral Program in Economics at Sant' Anna School of Advanced Studies, 2013/14	18
Spain - 2013 International Scholarships for Master and PhD Programme at Charles III University of Madrid	18
France - EFEO Field Scholarships	19
Germany – Humboldt Foundation Anneliese Maier Research Award	19
Multi- & Trans-Disciplinary Calls	19
China - China-EU Science and Technology Cooperation Special Program 2013	19
China - Chinese Government Scholarship 2013	20

China - Call for 2014 projects applications of the National Key Basic Research and Development Program (973 Program) and Major Scientific Research Programs	20
France - Sino-French Foundation for Science and its Applications Post-Doctoral Fellowships 2013...21	21
France – CNRS Launches Scientific Cooperation International Projects Calls for Proposals with NSFC21	21
France - ENS Cachan International Scholarship for Master and PhD Students in France, 2013-2014 22	22
Germany - International Max Planck Research School on Earth System Modelling PhD Program in Germany, 2013	22
Portugal - 2013-2014 Call for Applications for MIT Portugal Doctoral Scholarships	23
Sweden - Formas Mobility Starting Grant for Young Researchers	24
Sweden - STINT Initiation Grants	24
Switzerland - SNSF Professorships 2013.....	25
Ireland - Irish Research Council Government of Ireland Postgraduate Scholarship Scheme	25
Germany - DAAD Postdoc Programme	25
France - ANR Postdoc Return	26
Luxembourg - AFR launch of Calls 2013-1 for PhD Grants.....	26
France - Cai Yuan Pei 2013.....	26
Ireland - The Irish Research Council Postdoctoral Fellowship including Enterprise Partnership and International Career Development Schemes 2013-14.....	26
Netherlands - Innovational Research Incentives Scheme (Vici).....	26
Poland - Homing Plus Programme	26
UK - Newton International Fellowships	26
Netherlands - Rubicon Fellowship Programme	26
EU - Erasmus Mundus 2013 Call (for institutions).....	26
China - NSFC-RFBR 2013 joint call.....	27
Denmark - Danish Council for Independent Research (DFF) - Individual postdoctoral grants	27
Belgium - Pegasus Marie Curie Fellowships (Short)	27
UK - Leverhulme Trust Fellowships Visiting Professorships	27
Belgium - Odysseus Programme	27
Open calls under FP7 and Euratom	27
JOBS	29
Hong Kong - Head of Department of Chinese, Translation and Linguistics, Chinese University of Hong Kong	29
Postdoctoral and senior researchers positions at the Joint Research Centre	29
EVENTS	30
EURAXESS Links China Events.....	30
1 st EURAXESS Links China Event in 2013 – Don't miss it!	30
EURAXESS Links China Recommended Events	31
Understanding Science: “Stressing Obesity”- 19 March - Beijing	31
Young China Watchers: China’s Growing Soft Power Abroad - 13 March - Shanghai	31
CEFC Seminar - All Those Years Ago: Rethinking the MacLehose Decade, by Tai-lok Lui – 20 March – Hong Kong	31
Upcoming scientific events in China	32
PRESS REVIEW.....	36
Policy & Papers	36
Construction to speed up on key science projects	36
NDRC drafts guidance for 7 strategic areas	36
China’s R&D spending hits 1 trillion yuan	36
Voices and opinions	37
Boost science and technology	37
Research to focus on people’s livelihoods	37

Minister takes lead in promoting electric vehicles	37
Xi urges innovation-driven growth.....	38
Wen urges breakthroughs in Sci-Tech innovation	38
Thematic activities	39
Health	39
Food, agriculture and fisheries, biotechnology	41
Information and communication technologies.....	42
Nanosciences, nanotechnologies, materials and new production technologies.....	43
Environment (including climate change)	44
Energy	46
Transport (including aeronautics)	48
Socioeconomic sciences and the humanities	49
Space	51
People & Higher Education	52
Research infrastructures	53
International S&T relations.....	54

Horizon 2020 (H2020): The Framework Programme for Research and Innovation (2014-2020)

What is Horizon 2020?

Horizon 2020 (H2020) is a key pillar of [Innovation Union](#), a Europe 2020 flagship initiative aimed at enhancing Europe's global competitiveness with a proposed budget of roughly €80 bn (the European Commission's H2020 proposal can be found here: [Horizon 2020 - Proposal Nov. 2011](#)). The European Union is a global leader in many technologies, but it faces increasing competition from traditional powers and emerging economies alike.

For the first time, Horizon 2020 brings together all EU research and innovation funding under a single programme. It focuses more than ever on turning scientific breakthroughs into innovative products and services that provide business opportunities and change people's lives for the better. At the same time it drastically cuts red tape, with simplification of rules and procedures to attract more top researchers and a broader range of innovative businesses. The EU Framework Programme for Research and Innovation is the world's largest funding programme for research projects.

Difference between FP7 and H2020

The main differences between EU's Seventh Framework Programme for Research (FP7, 2007-2013) and Horizon 2020 consist in:

- bringing together all existing Union research and innovation funding, including the Framework Programme for Research, the innovation related activities of the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT);
- focusing on multidisciplinary societal challenges which the European citizens face;
- simplifying the participation of all companies, universities, and other institutes in all EU countries and beyond.

The three key objectives

Horizon 2020 will focus funds on three key objectives. It will support the EU's position as a world leader in science with a dedicated budget of €24.6 billion. Further, it will help secure industrial leadership in innovation with a budget of €17.9 billion. This includes a major investment of €13.7 billion in key technologies, as well as greater access to capital and

* Article submitted by the German Aerospace Centre - Project Management (DLR-PT)

support for SMEs. Finally, €31.7 billion will go towards addressing major concerns shared by all Europeans, across six key themes:

- Health, demographic change and well-being;
- Food security, sustainable agriculture, marine and maritime research and the bio-economy;
- Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Climate action, resource efficiency and raw materials; and
- Inclusive, innovative and secure societies.

Funding for mobility, the ERC and international cooperation

Under the Commission proposal, €5.75 billion (+21%) will be allocated to the Marie Curie Actions, which has supported the training, mobility and skills development of more than 50 000 researchers since its launch in 1996.

Funding for the European Research Council (ERC) will increase by 77% to €13.2 billion. The ERC supports the most talented and creative scientists to carry out frontier research of the highest quality in Europe, in a programme that is internationally recognised and respected.

International cooperation will also be further promoted in Horizon 2020, in order to strengthen the EU's excellence and attractiveness in research, to tackle global challenges jointly and to support EU external policies (see [Fact sheet: International Participation in Horizon 2020](#); a more detailed budget breakdown can be found here: [Horizon 2020 - Budget Breakdown](#)).

What's next?

During the coming months – by the end of 2013 at the latest – legislative acts will be adopted by the European Parliament (EP) and Council on Horizon 2020. The Specific Programme is to be accepted by the Council following an official hearing with the EP (consultation procedures).

On January 1, 2014 the framework programme will start and the first calls will be launched (for a more detailed time line and the legislative procedure see: [European Commission - A time line for Horizon 2020](#)).

Sources and further information:

[European Union](#)

[Euresearch](#)

[European Commission - Horizon 2020 Homepage](#)

[German Federal Ministry of Education and Research](#)

News & Developments

EURAXESS

Evaluation survey of EURAXESS Links China

The European Commission is carrying out the evaluation of the EURAXESS initiative (2008-2012). The objective of this evaluation study is twofold: assessing the overall progress achieved after the re-branding and regrouping of EURAXESS Services and Jobs activities in 2008 and evaluating the impact of EURAXESS Links in the US, Japan and China on the networking of European researchers, so that the European Commission better understands how EURAXESS services can be tailored to fit researchers' needs and plan future improvements. A new contract will frame the operation of the EURAXESS Links network over 2013-2015, news means will be available to organize events and coordination between the different EURAXESS Links networks will be strengthened.

As this new phase of development is starting, your input, as members of the EURAXESS Links China network, would be particularly appreciated in the evaluation of EURAXESS Links in China.

We believe you will need a maximum of 15 minutes to complete the survey questionnaire. The survey will remain open until 29 March 2013.

Access the survey at <https://www.surveymonkey.com/s/H8JYVGZ>

EU & Multilateral Cooperation

New online tool for networking among EU-China Joint Research Institutions

Following the recommendations of the 1st workshop for EU-China Joint Research Institutions (JRIs) held last November in Beijing at the initiative of the EU Delegation to China and EU Member States Embassies (report of this workshop available [here](#)), a [Linked In group called 'EU China Joint Research Institutions'](#) has been launched by the organizers of this first workshop and EURAXESS Links China.

This group aims to facilitate exchanges of information and experience among Sino-European joint research institutions, possibly leading to closer collaborations between them.

"EU-China joint research institutions" include any kind of research-conducting structure where researchers affiliated to at least one organisation from at least one EU Member State or Associated Country work on an official and permanent basis with researchers affiliated to at least one Chinese organisation.

May become members of the group:

- Representatives of existing and registered EU-China joint research institutions in China and the EU
- Junior and senior researchers in all fields, active in the public or in the private sector and interested in the creation, development and activities of EU-China joint research institutions
- Representatives of research-related organisations, private or public, interested in the creation, development and activities of EU-China joint research institutions
- Representatives of delegations, government organisations and representations of the EU in the EU and China.

Those meeting these criteria are welcome to join the group and interact with the other members as well as express suggestions regarding the content and format of the next EU-China JRIs workshop to be organised at the end of this year.

Parallel to this launch, a webpage listing EU-China JRIs has been added on the [EURAXESS Links China website](#) and is currently being worked on. Information complementing or correcting the content of this webpage is welcome and can be sent to china@euraxess.net.

Dragon Star Website launched

DRAGONSTAR is a Sino-European project funded by the European Commission which aims to support the Chinese participation in Horizon 2020 (the European Research Framework Programme for the 2014-2020 period); to enhance reciprocity in access to respective research and innovation funding programmes; and to promote bilateral cooperation in research and innovation with particular focus on technological cooperation between industrial players.

The website features information about ongoing cooperation and funding programmes. Check it now at <http://www.dragon-star.eu/>.

EU provides €144 million for new research on rare diseases

The European Commission has, on Rare Disease Day 2013 (28 February), announced €144 million of new funding for 26 research projects on rare diseases. The projects will help improve the lives of some of the 30 million Europeans suffering from a rare disease. The selected projects bring together over 300 participants from 29 countries in Europe and beyond, including teams from leading academic institutions, SMEs and patients' groups. The goal is to pool resources and work beyond borders, to get a better understanding of rare diseases and find adequate treatments. The 26 new projects cover a broad spectrum of rare diseases such as cardiovascular, metabolic and immunological disorders.

A disease or disorder is defined as rare in Europe when it affects not more than 1 in every 2 000 persons. Yet, because there are so many different rare diseases – between 6 000 and 8

000 – taken altogether they affect a significant share of the population. In the EU, as many as 30 million people suffer from a rare disease, many of them are children. Most rare diseases have genetic origins whilst others are the result of infections, allergies and environmental causes. They are usually chronically debilitating or even life-threatening.

[Read more](#)

Commission to launch bioeconomy observatory

The European Commission will establish an observatory to map progress and measure the impact of the development of the European Union's bioeconomy, European Commissioner for Research, Innovation and Science Máire Geoghegan-Quinn announced last 14 February. The observatory will gather data to follow the evolution of markets, to map EU, national and regional bioeconomy policies, research and innovation capacities, and the scale of related public and private investments. The observatory will be coordinated by the Joint Research Centre, the Commission's in-house science service.

The observatory, which is a three year project, will start in March 2013 with the aim of making the data it will collect publicly available through a dedicated web portal in 2014. In this way, the observatory will support the regional and national bioeconomy strategies now being developed by EU Member States.

Already the bioeconomy in Europe is worth an estimated €2 trillion and 22 million jobs. The Commission is considering a new public-private partnership on bio-based industries to accelerate the development of the sector. A decision is expected in June 2013.

[Read more](#)

Search committee invites nominations for next President of the European Research Council

The independent search committee set up by the European Commission for the selection of the future President of the European Research Council (ERC) is consulting the scientific community on potential candidates. The ERC President will chair the ERC Scientific Council and will be the voice and public face of the ERC. As such, s/he is expected to be a prominent advocate of frontier research and ambassador of European science within and beyond Europe, with the aim of strengthening further the ERC's performance and prestige and Europe's science base in frontier research.

Nominations are invited from organisations representative of the various segments of the research community at national and European level. The Committee expects that the nominating bodies, before submitting their nominations, will have established the willingness of candidates to serve. The Search Committee will itself also search actively for candidates.

Nominations, accompanied by curriculum vitae (and a one-page summary CV), should be sent to: rtd-erc-seco@ec.europa.eu **by 22 March 2013**.

More details available on the [European Commission's website](#).

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

EU Member States* and Bilateral Cooperation

China - Projects jointly funded by NSFC and foreign research funding agencies selected

The NSFC and the French CNRS have jointly selected [14 Sino-French projects](#) for funding in 2013, out of 47 valid proposals. The projects will be funded for 1 year.

NSFC has also released the list of [14 Sino-British projects pre-selected](#) jointly with the Engineering and Physical Sciences Research Council (EPSRC) following the call launched in November last year in the fields of smart grids and the integration of electric vehicles. The projects to be eventually funded will be selected out of this short-list. NSFC and EPSRC had received 18 proposals.

France – New Sino-French Joint Labs established

Two new joint labs have been officially launched in January 2013, one in the field of plant epigenome research and the other one in the field of computing, modelization and optimization of sustainable development systems.

The Plant Epigenome Research (PER) lab is a partnership between the French Institute of Plant Molecular Biology (IBMP), the School of Life Sciences at Fudan University and the Biology Science & Technology College of Hunan Agricultural University.

Contacts: French director: M. SHEN Wen Hui wen-hui.shen@ibmp-cnrs.unistra.fr

Chinese director: Mme. DONG Aiwu Aiwu.aiwudong@fudan.edu.cn

The Smart Computing for Sustainable Development Franco-Chinese Laboratory (SCSD-FCLAB) brings together researchers from the Laboratoire d'Informatique, de

* Including countries associated with the 7th Framework Programme.

Modélisation et d'Optimisation des Systèmes (LIMOS) at the Auvergne University in Clermont-Ferrand, the Research Center of Intelligent Computing for Enterprises & Services (ICES) at the Harbin Institute of Technology and the Fault Tolerant Computing Research Center (FTC) also at the Harbin Institute of Technology.

Contacts: Alain Quilliot (Director of Limos) alain.quilliot@isima.fr

XU Xiaofei (Director of ICES) xiaofei@hit.edu.cn

Italy - Sino-Italian Scientific and Technological Cooperation

The "Executive Programme for Scientific and Technological Cooperation" between Italy and China for the years 2013-2015 promoted by the Italian Ministry of Foreign Affairs (MAE) and the Chinese Ministry of Science and Technology (MOST) was signed in Beijing on January 16, 2013.

The initiative aims to encourage scientific and technological cooperation between Italy and China by financing joint research programs in the following areas: Applied Basic Sciences (Chemistry, Mathematics and Physics), Biotechnology and Medicine, Energy & Environment, Information Communication Technology, Nanotechnology and Advanced Materials, Space and Aeronautics, Technology Applied to Cultural Heritage.

Among the projects submitted, 31 have been selected and will be jointly carried out over the next three years by Chinese and Italian researchers.

The list of projects selected and the text of the Agreement are available on the [Italian Foreign Affairs website](#).

Italy – Sino-Italian Project on 'Optimized bioconversion of crude glycerol into hydrogen and ethanol using Geo-Chip and coupling with MEC' launched

Among the 31 selected projects, one between the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and the Harbin Institute of Technology (HIT) named 'Optimized bioconversion of crude glycerol into hydrogen and ethanol using Geo-Chip and coupling with MEC' has been initiated by a former fellow of the now terminated '*EU Science and Technology Fellowship China programme*'.

The cooperation between ENEA and HIT began in 2009 thanks to the EU Science and Technology Fellowship programme China, during which Mr. Varrone visited HIT for 18 months (also enrolling as a PhD student), performing the selection and enrichment of a suitable microbial pool, able to convert glycerol into H₂ and ethanol. Now the process has been optimized on a small scale in ENEA and needs to be scaled up. Since the previous cooperation led to interesting results (in terms of publications, conferences and awards), the new projects between ENEA and HIT will aim at a deeper understanding and further enhancement of the process, helping to bring this new technology closer to the market. In

fact some industries already showed their interest, but asked for some improvements. The goals of the new cooperation will thus be to reach the improvements asked by the industry.

If interested in this field or research, please feel free to read the [project's full description](#) and to contact Cristiano Varrone at cristiano.varrone@enea.it.

Grants & Fellowships

Life Sciences & Medicine

Biology - Genetics - Medicine

UK - Synthetic Biology China Partnering Award

Co-funded with EPSRC and the Chinese Academy of Sciences (CAS) this call follows a scoping workshop attended by Chinese and UK academics in the field of synthetic biology that took place in Beijing last January.

The workshop identified four key areas where it would be of mutual benefit nationally to collaborate:

- Development of tools and strategies for synthetic biology
- The use of synthetic biology to produce high value chemicals and products
- The use of synthetic biology to produce biofuels and bulk chemicals
- The use of synthetic biology for pollution control and bioremediation

Applications are invited for partnering awards with China in the field of Synthetic Biology. UK awards will be up to a value of £25,000 funded by Biotechnology and Biological Sciences Research Council (BBSRC) and EPSRC. Chinese awards will be up to a value of 250,000RMB which will be funded by CAS.

Partnering awards can last up to 4 years, and funding is only able to cover travel & subsistence costs. There will be up to 5 co-funded awards.

To be eligible, the partnership must bring together researchers already in receipt of a current research grant from either BBSRC or EPSRC and at least one Chinese researcher affiliated by CAS, NSFC or MoST (other Chinese partners not affiliated to these organisations are also welcome).

Deadline for application: **30 April, 2013.**

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

Chinese applicants should refer to the [CAS website](#) for full details and instructions.

UK - 2013 PhD Studentships at School of Medicine, Cardiff University

Medical Research Council and the School of Medicine offer PhD studentships in the field of medicine. These studentships are jointly funded for 4 years. Two awards are available for UK/EU applicants.

Candidates for studentships must hold qualifications at the level of, or equivalent to, a good honours degree from a UK academic institution, in a subject relevant to MRC's scientific remit.

The PhD will be carried at one of the five Cardiff University School of Medicine institutes:

- Infection & Immunity,
- Primary Care & Public Health,
- Molecular & Experimental Medicine,
- Neuroscience & Mental Health,
- Cancer & Genetics.

Applicants should send a current CV and the names of two referees along with a covering letter indicating the areas of research they are interested in and the first year course they wish to undertake.

Scholarship application deadline: **15 March, 2013**. More details on the [Cardiff University website](#).

Physical Sciences & Engineering

Physics - Chemistry - Materials - Earth science - Engineering

Denmark - Sino-Danish strategic research cooperation in sustainable and renewable energy

According to the MOU of Chinese Ministry of Science and Technology and the Danish Ministry of Climate and Energy, China and Denmark jointly launched the programme in 2013. The cooperation focuses on energy research, development and demonstration, including the development of economic, clean, sustainable energy and low carbon technologies. One to two Sino-Danish projects will be selected by both sides for this round. Funding will not exceed 3 million RMB per project on the Chinese side, while 10 million DKK (around 1.3 million Euro) have been allocated on the Danish side. Deadline is **April 30, 2013**.

More details available for Danish applicants on the [Danish Ministry of Science, Innovation and Higher Education website](#). Chinese applicants might visit [this webpage](#) for additional information.

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

Germany - DLR-DAAD Research Fellowships in the fields of Space, Aeronautics, Energy and Transportation Research

17 fellowships in space, 4 in aeronautics and 4 in energy are currently offered under this programme on the [website of the DAAD](#), with various deadlines.

Mathematics & Formal Sciences

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

EU - ERCIM "Alain Bensoussan" Fellowship Programme

Next Application deadline is **30 April 2013**.

Application is done online on the [programme's website](#).

Social Sciences and the Humanities

EU - The Joint Programming Initiative on Cultural Heritage and the Joint Heritage European Programme (JPI-JHEP) First Transnational Pilot Call for Proposals

The First Transnational JPI-JHEP Joint Pilot Call for Proposals opened on 10 January 2013.

The research topics on which this JPICH-JHEP Joint Call is focused are:

- Methods, tools (including non-invasive instruments) and modelling for understanding damage and decay mechanisms (including the effects of weathering and climate change) on tangible heritage (including buildings, sites and landscapes);
- Materials, technologies and procedures for the conservation of tangible cultural heritage;
- Use and re-use of buildings and landscapes, including the relationship between changes of use and public policy, including costs and added value (for example as a result of planning regulations and urban development);
- Increasing understanding of cultural values, valuation, interpretation, ethics and identity around all forms of cultural heritage (tangible, intangible and digital heritage).

Funding possibilities will be offered to excellent and innovative networking and / or collaborative research projects. The project must have a maximum duration of 36 months. The overall budget of the call is about 3 million Euros.

Deadline for submission will be **5 April, 2013**. Further details can be found on the [JPI-JHEP website](#).

France - Fernand Braudel IFER Fellowships

The Fondation Maison des Sciences de l'Homme offers postdoctoral fellowships to researchers in the social and human sciences who wish to have an international research experience for periods of nine months as part of its "Fernand Braudel-IFER" (International Fellowships for Experienced Researchers) programme.

The Fernand Braudel-IFER *incoming* programme is intended for foreign researchers (all nationalities are eligible) who wish to benefit from a research stay in France.

The Fernand Braudel-IFER *outgoing* programme is intended for researchers residing in France, who wish to benefit from a research stay in another European country (EU member states or affiliates).

These research stays are designed to enable researchers to:

- Carry out a research project in a host laboratory
- Integrate scientific networks in France and other European countries
- Build lasting partnerships between their home institution and the host institution

All social and human sciences are eligible. An interdisciplinary approach to research topics is encouraged.

For the present call, the FMSH offers 29 incoming and 5 outgoing fellowships. Deadline for application is **31 March, 2013**.

More details about this call and the application modalities available on the [FMSH website](#).

Germany - Bremen International Graduate School of Social Sciences (BIGSSS) PhD fellowships 2013

Bremen International Graduate School of Social Sciences (BIGSSS) offers PhD fellowships program. 15 stipends are offered to pursue PhD programme in one of BIGSSS' three thematic fields:

- Global Governance and Regional Integration
- Welfare State, Inequality and Quality of Life
- Changing Lives in Changing Socio-Cultural Contexts

The stipends of 1300 Euros/month are provided for a period of 36 months, contingent on successful completion of each year.

International students can apply for the fellowships.

Application period for the Fall 2013 semester closes on **15 March, 2013**.

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

Germany - 2013 Doctoral Fellowship in Sociology or Political Science at Max Planck-Sciences Po Center in Germany

The newly established Max Planck Sciences Po Center on Coping with Instability in Market Societies (MaxPo | www.maxpo.eu) invites applications for doctoral positions. The thesis project should be linked to the research rubrics singled out by the MaxPo's research program and the interests of the two research group leaders, though empirical research topics may be quite varied. These broad research themes should be located in economic sociology or political economy.

The applicants applying for the fellowship must hold a master's degree (or equivalent) and have received at least some training in one or more of these disciplines: sociology, economics, history, management, political science, or philosophy.

Applicants will be awarded € 2,100 / month (gross salary, about 1,600€ net) for the period of 3 years.

Deadline for application is **15 March, 2013**.

Further details available [here](#).

Italy - International Doctoral Program in Economics at Sant' Anna School of Advanced Studies, 2013/14

Sant' Anna School of Advanced Studies together with the University of Strasbourg, announces for the Academic Year 2013-2014 a public competition to attend the International Doctoral Program in Economics.

The number of grants may vary. The duration of grant is 3 years. The scholarship covers € 12.500 per year, insurance and other allowances. Selection is based on academic achievements and the Research Project. The PhD course starts from September 25, 2013. International students can apply for this scholarship.

Online application closes on **May 7, 2013**. Further details about this programme can be found online on [Sant' Anna School of Advanced Studies' website](#).

Spain - 2013 International Scholarships for Master and PhD Programme at Charles III University of Madrid

The Business Department at Charles III University of Madrid (Universidad Carlos III) is offering 15 international scholarships for its master and PhD program in management and quantitative methods, either in the finance track or management track. The objective of the

scholarships for this master is to prepare highly qualified and motivated students to carry out original research in the fields of finance and management with a thorough preparation in empirical methods and statistics.

The scholarship provides approximately 14,000 euros (before taxes) for two years (master programme) which may be extended up to three years at most (to continue on a PhD programme), if renewed.

International students in possession of a bachelor's degree, or equivalent, with quantitative training in the field of economics or business administration or with quantitative foundation (statistics, mathematics, engineering, etc) can apply to this programme and the scholarships.

The application deadline is **April 22, 2013**.

Read more details about this [master and doctoral programme](#) as well as on the [scholarships](#) on the Charles III University website.

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

France - EFEO Field Scholarships

The application deadlines in 2013 are **31 March 2013**, for scholarships tenable between 1 January and 30 June 2014, and **30 September 2013**, for scholarships tenable between 1 July and 31 December 2014.

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

Germany – Humboldt Foundation Anneliese Maier Research Award

The nomination deadline expires on **April 30, 2013**.

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

Multi- & Trans-Disciplinary Calls

China - China-EU Science and Technology Cooperation Special Program 2013

On January 22, 2013, the Ministry of Science and Technology put out a call for proposals for China-EU Science and Technology Cooperative Projects (China-EU Science and Technology Cooperation Special Program).

Topics eligible for funding include:

- **Urbanisation/transportation**, including: green energy building, waste recycling applications, comprehensive city management integrated technology, new energy vehicles etc.

- **Renewable energy resources**, including: solar energy, wind energy, smart power grids and storage, increased energy efficiency etc.
- **Information and communication technology**, including: next-generation mobile communication, cloud computing, internet of things , high-performance supercomputers, internet security etc.
- **Health**, including: clinical medicine/translational medicine, biomedicine, ageing population etc.

Project participants should have a good cooperative relationship with their European partners, and have signed a cooperative agreement or letter of intent, containing separate clauses on intellectual property rights, or have signed a separate IPR agreement. The European side should consist of at least two cooperating institutions from at least two European Union Member States.

Closing date: **April 30, 2013**

More details about this call can be found in Chinese on the [MoST website](#). English translation of the call's notice can be found [here](#).

China - Chinese Government Scholarship 2013

Chinese Government Scholarship scheme is established by the Ministry of Education of P.R. China in accordance with educational exchange agreements reached between Chinese government and governments of other countries, organizations, education institutions and relevant international organizations to provide both full scholarships and partial scholarships to international students and scholars coming to China (from undergraduate students to PhD students and scholars).

Applicants shall apply to Chinese diplomatic missions or dispatching authorities. Applicants may refer to the above authorities for deadlines for application (usually around **end of March, beginning of April, 2013**).

Further details about the different scholarships available under this programme available on the [China Scholarship Council website](#).

China - Call for 2014 projects applications of the National Key Basic Research and Development Program (973 Program) and Major Scientific Research Programs

The development of the National Key Basic Research and Development Program (hereinafter referred to as the 973 Program) is highly important for China's future development and the progress of science and technology. Will be eligible to answer this call projects related to topics listed under the 9 priority fields of the 973 programme and 6 priority fields of the Major Scientific Research Programs:

- **Agriculture,**
- **Energy,**

- ICT,
- Resources and environment,
- Health (including TCM and infectious diseases),
- Materials,
- Manufacturing and engineering,
- Interdisciplinary science,
- Nanoscience,
- Quantum control,
- Proteomics,
- Developmental and reproductive research,
- Stem cells,
- Global changes.

Applications can be submitted **from 15 to 25 March, 2013**.

More details about the call and the topics to be funded available [here](#).

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

The FFCSA Foundation (Sino-French Foundation for Science and its Applications) grants are awarded to Chinese candidates currently based in China, of less than 35 years of age and who obtained their PhD less than 6 years ago. Proficiency in English is required.

A variety of topics are eligible this year, **most of them in physical science and in life science**.

The grants fund stays in France for a period of 18 or 24 months, providing a monthly allowance of 2500 euro per month. The transportation costs between China and France are covered by the China Scholarship Council (CSC).

A pre-selection is made by the CSC and CAS, followed by a final selection by FFCSA, approved by CSC and CAS. A four months French language course is given in Beijing to all grantees prior to their departure to France.

The deadline to submit application is **1 June, 2013**. French language training will be provided from August to November 2013. Arrival in France is planned between December 2013 and January 2014.

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

France – CNRS Launches Scientific Cooperation International Projects Calls for Proposals with NSFC

Scientific Cooperation International Projects (PICS) are projects established and presented jointly by two research teams, one belonging to CNRS and one non-French one, **in all fields**. These are three years projects aiming to strengthen a collaboration between two partners

which has already resulted in one or several co-publications. Funding is provided to the CRNS-affiliated team to organize missions, seminars and working meetings with its partner. With some foreign funding agencies, CNRS has signed agreements that foresee funding provided to the partner of the CNRS research team by the foreign funding organisation.

This is the case in China where CNRS has an agreement with NSFC. In order to be eligible, Chinese applicants have to have won a NSFC call for proposals in the past. Applications are submitted separately, the CNRS team to CNRS, and the Chinese team to NSFC.

Pre-proposals (featuring brief summary of the research project and list of co-publications with the designated partner) have to be submitted before **2 April, 2013**, full proposals before 4 June, 2013. The selected projects will be announced next December.

More details can be found on the [CNRS website](#) and on the [NSFC's](#).

France - ENS Cachan International Scholarship for Master and PhD Students in France, 2013-2014

Every year, the Ecole Normale Supérieure de Cachan (ENS Cachan) welcomes between 15 and 30 foreign students at M2 level or PhD within the framework of the International scholarship programme, aimed at high level international students who are currently studying or have studied and obtained their most recent qualification outside of France.

All ENS Cachan master programmes (except the design and the management master programmes) and all ENS Cachan research laboratories are concerned by this programme covering all major research areas:

- **Physical sciences**
- **Life sciences**
- **Social sciences**
- **Engineering**

The grant amounts to 1000 euros/month. Deadline for application is **25 March, 2013**.

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

Germany - International Max Planck Research School on Earth System Modelling PhD Program in Germany, 2013

The International Max Planck Research School on Earth System Modelling (IMPRS-ESM) offers doctoral program in Germany.

The IMPRS on Earth System Modelling (IMPRS-ESM) is a multi- and interdisciplinary doctoral program that associates several German research institutions. Students contribute

to the development and application of numerical models of different complexities, including natural aspects as well as the human dimension

The PhD Program is open to applicants holding a Master's' in:

- **physics,**
- **geophysical sciences (incl. meteorology and oceanography),**
- **chemistry,**
- **ecology,**
- **mathematics,**
- **computer science,**
- **engineering,**
- **economics,**
- **political science.**

The IMPRS-ESM has assigned 5 to 10 new doctoral positions to promising applicants each year. The grant is offered for three years. International students are eligible to apply.

Deadline for registration is **11 March** (deadline for submitting application documents is **18 March**).

More details available on the [IMPRS-ESM website](#).

Portugal - 2013-2014 Call for Applications for MIT Portugal Doctoral Scholarships

Within the framework of the MIT Portugal Program, Fundação para a Ciência e a Tecnologia (FCT) launches the call for Doctoral Scholarships, taking place in Portugal and at Massachusetts Institute of Technology, US (MIT), in the following fields of research:

- **Bioengineering Systems**
- **Engineering Design and Advanced Manufacturing – Leaders for Technical Industries (LTI)**
- **Sustainable Energy Systems**
- **Transportation Systems**

The research topics available, as well as the supervisors, both at MIT and at the Portuguese Universities, are defined by the MIT Portugal Program. Hence candidates do not need to present a work program or an adviser's support letter as well as her/his CV at the time of application. The candidate is required to present a motivation letter where she/he should

indicate specific areas of potential interest. These scholarships are available to candidates holding a master degree or equivalent in the areas targeted by the MIT Portugal program.

Applicants can be either Portuguese nationals or foreign citizens, provided the application is supported by the Portuguese hosting institutions adherent to the 'Agreement for the International Cooperation in Science, Technology and Higher Education'.

Deadline for application is **31 March, 2013**.

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

Sweden - Formas Mobility Starting Grant for Young Researchers

The Research Council Formas hereby invites applications for funding of mobility starting grants for young researchers within all areas of responsibility of Formas:

- **Environment,**
- **Agricultural Sciences,**
- **Spatial Planning.**

This call is directed at young post-doctoral researchers (who were awarded a doctoral degree no more than three calendar years prior to 1 January of the year of application) and is intended only to provide funding for salary costs for the applicant, in addition to travel costs and additional costs for family accompanying the applicant during his or her stay at the host university or research institute, abroad or within Sweden.

To be eligible for funding the applicant must have an employment position at a Swedish educational institution or research institute (home university). Funding can be sought for 24 to 48 months. At least one third of the period must be spent at the home university and at least one third of the period must be spent at the host university.

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

Besides this mobility scheme, Formas is also calling for research and development projects under two other funding schemes (same deadline).

Further details about this call available on the [Formas website](#).

Sweden - STINT Initiation Grants

The purpose of STINT's activity is to strengthen the competitiveness of Swedish universities and colleges through the development of international relationships. Initiation grants are given for the implementation of short-term projects targeting the **building of new and strategically interesting international relationships between research and higher education institutions, in all fields.**

Candidates shall be active at a university or college in Sweden and have defended their doctorates. The main emphasis of the partnership shall be outside the EU/EEA area (the principal collaborating party shall be outside this area).

Applications may be submitted continuously throughout the year. Next applications' assessment round starts on **9 April**. Three more will take place in 2013 starting respectively on June 11, September 10 and November 26.

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

Switzerland - SNSF Professorships 2013

The SNSF professorships of the Swiss National Science Foundation (SNSF) enable junior researchers with several years of recognised research experience to establish an independent team to implement a research project in Switzerland. In addition, it also enables researchers to resume their careers at a Swiss higher education institution on returning from a stay abroad.

SNSF professorships are awarded for all SNSF-supported disciplines:

- **Humanities**
- **Engineering Sciences**
- **Social Sciences**
- **Biology**
- **Mathematics**
- **Medicine**
- **Natural Sciences**

The funding covers the salary of the applicant (at assistant professor level), a contribution to research costs (incl. collaborators) and a contribution to infrastructure costs.

The duration of this grant is four years and can be extended by a maximum of two years.

Deadline for application is **2 May, 2013**. More details on the [SNSF website](#).

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

Ireland - Irish Research Council Government of Ireland Postgraduate Scholarship Scheme

The deadline for applicants to the scheme is exactly **Tuesday 12th March 2013**.

Further details can be found on the [Irish Research Council website](#).

Germany - DAAD Postdoc Programme

The closing dates for applications for fellowships lasting more than 6 months are **15 March**, 15 June and 15 November.

Further details about this programme and the application procedure can be found on the [DAAD website](#).

France - ANR Postdoc Return

Deadline for application is **19 March 2013**.

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

Luxembourg - AFR launch of Calls 2013-1 for PhD Grants

Submission Deadline is **19 March 2013**.

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

France - Cai Yuan Pei 2013

Deadline for application to the 2013 edition of this programme is **20 March, 2013**.

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

Ireland - The Irish Research Council Postdoctoral Fellowship including Enterprise Partnership and International Career Development Schemes 2013-14

The deadline for applicants to the scheme is **Wednesday 20th March 2013**.

Further details can be found on the [Irish Research Council website](#).

Netherlands - Innovational Research Incentives Scheme (Vici)

The next Vici pre-proposals submission deadline is **28 March 2013**.

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

Poland - Homing Plus Programme

The closing date for applications in the current call is **March the 29th 2013**.

Further information available on the [Foundation for Polish Science website](#).

UK - Newton International Fellowships

Closing date for this programme is **10 April 2013**. However, applicants are advised to submit their application for approval to the UK host organisation approver at least 5 working days before the round deadline i.e. by 3 April 2013.

Further details available on the [programme's website](#).

Netherlands - Rubicon Fellowship Programme

There are three submission rounds annually for Rubicon. The first closing date for submitting applications is **3 April 2013**.

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

EU - Erasmus Mundus 2013 Call (for institutions)

Deadline for submission of applications under both Action 2 and Action 3: **15 April 2013**.

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

For **scholarships and individual funding opportunities** under Erasmus Mundus, visit [this webpage](#).

China - NSFC-RFBR 2013 joint call

Deadline for application is **15 April 2013**.

Details can be found on the [NSFC website](#).

Denmark - Danish Council for Independent Research (DFF) - Individual postdoctoral grants

The deadlines are different for each of the 5 research councils:

The Danish Council for Independent Research | Humanities (FKK): **1 May 2013**

The Danish Council for Independent Research | Natural Sciences (FNU): **6 May 2013**

The Danish Council for Independent Research | Social Sciences (FSE): **29 April 2013**

The Danish Council for Independent Research | Medical Sciences (FSS): **24 April 2013**

The Danish Council for Independent Research | Technology and Production Sciences (FTP):
3 May 2013

Find out more about this call on the [Danish Agency for Science Technology and Innovation website](#).

Belgium - Pegasus Marie Curie Fellowships (Short)

Next deadline for application is **1st of May 2013**.

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

UK - Leverhulme Trust Fellowships Visiting Professorships

Next deadline to submit applications is **9 May, 2013**.

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

Belgium - Odysseus Programme

Application deadline is **1 June 2013**.

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

Open calls under FP7 and Euratom

(regularly updated list available on [EURAXESS Links China website](#))

The following call for proposals is currently open under the [People](#) programme

Call for proposals	Launched	Deadline
Marie Curie Career Integration Grants (CIG)	18 October 2012	18 September 2013

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

Call	Launched	Deadline
Calls for proposals for ERC Proof of Concept Grant	10 January, 2013	3 October, 2013

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

- [Information and Communication Technologies](#) / 2 open calls
- [Environment \(including Climate Change\)](#) / 1 open call
- [Transport \(including Aeronautics\)](#) / 2 open calls
- [Joint Technology Initiatives \(Annex IV-SP1\)](#) / 5 open calls

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

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

Jobs

Hong Kong - Head of Department of Chinese, Translation and Linguistics, Chinese University of Hong Kong

Reporting to the Provost through the Dean of College of Liberal Arts and Social Sciences, the Head of Department will provide leadership and strategic direction in research and professional education for the Department. The Head will encourage and promote academic excellence, and steer the Department to enhance the mission and vision of the University in alignment with the University's Strategic Plan.

Requirements to get the position include a doctorate degree with strong academic and professional qualifications, a distinguished record of teaching, research and scholarship, and substantial relevant experience in tertiary education.

The appointee will be offered appointment to an academic rank commensurate with qualifications and experience.

More details about this offer available on the [EURAXESS Jobs portal](#).

Postdoctoral and senior researchers positions at the Joint Research Centre

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

- 1 doctoral position (deadline: 1 April)
- 25 postdoctoral positions (various deadlines from 17 March to 14 April)
- 5 senior researcher positions (deadlines: 17, 24 March, 2 April)

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

Events

EURAXESS Links China Events

1st EURAXESS Links China Event in 2013 – Don't miss it!

The role of researchers moving and working outside of their home country is often stressed as one of key importance for the progress of scientific cooperation and, from an even broader perspective, for the development of relations between different regions and civilizations of the world.

For its first event in 2013, EURAXESS Links China invites researchers, administrators and policy-makers engaged in Sino-European scientific cooperation (in all fields) to take part in an afternoon-seminar, to discuss the impact of the different kinds of researchers' mobility and exchanges on the development of the Sino-European research cooperation and overall relationship.

The idea behind this short seminar is to reflect on the assumptions that mobility and exchanges of researchers are crucial to bring the scientific cooperation as well as the overall relationship between Europe and China forward, discuss to which extent they might be true or not, and based on the participants' own experiences and best practices, what needs to be done to make them come true.

The seminar, **to be hosted at the French Embassy in Beijing on Thursday 18 April afternoon and evening** (*date and final agenda to be confirmed and sent through the EURAXESS network very soon*), will start with an introductory presentation by **Professor Philippe Meynard SJ**, director of The Beijing Center, who will share his erudition on the historical beginnings of knowledge exchanges between China and Europe.

Participants will then be divided in three parallel roundtables according to their general area of activity (Social sciences researchers, hard sciences researchers, diplomatic and policy-making actors) to discuss the topic, based on their particular experience. A questionnaire will be given to steer the discussion among all participants within each roundtable. The conclusions of each roundtable will then be shared, compared and discussed during a plenary closing session.

Last but not least, all participants will be warmly invited to join the networking 'Easter Dinner' after the closing of the seminar!

Register now by writing to china@euraxess.net. (*limited number of seats, organizers reserve the right to manage registrations based on availabilities*)

EURAXESS Links China Recommended Events

Understanding Science: “Stressing Obesity”- 19 March - Beijing

“Understanding Science” is back after the holiday and back in its original location in the [Bridge Café in Wudaokou](#).

On Tuesday 19th March at 7.30 p.m. Dr. Oulu Wang, who is a Harvard–China Scholar at Peking University, will give a talk on "[Stressing Obesity](#)".

It is well known that obesity leads to an increased risk of heart attack, stroke, diabetes, and cancer. Dr. Wang will describe her work on the negative impact of stress on obesity and show how a greater knowledge of this area may one day be used to reduce the disease burden of obesity.

"Understanding Science" is organized by the UK Royal Society of Chemistry (RSC) and the Institute of Physics (IoP). The team welcomes you to join this and future events.

Young China Watchers: China’s Growing Soft Power Abroad - 13 March - Shanghai

The next session of Young China Watchers Shanghai will feature Shen Dingli, Professor of Interational Relations at Fudan University’s Institute of International Studies and Center for American Studies.

Professor Shen will speak about the components of China’s soft power from the founding of the PRC till today, with special attention to its recent efforts and its future prospects. He will touch on China’s diplomatic roles in the Korean Peninsula, the Gulf of Aden, and Africa, as well as the link with China’s economic influence, including its support of global financial institutions and assistance to developing countries.

More details and registration to this event online at <http://www.eventbrite.com/event/5691174456/mcivte>

CEFC Seminar - All Those Years Ago: Rethinking the MacLehose Decade, by Tai-lok Lui – 20 March – Hong Kong

The so-called 'MacLehose era' has been seen as a turning point in the contemporary history of Hong Kong, marking the birth of an affluent society, the formation of local culture, and the building of a social system characterized by political stability and economic prosperity. This talk is an attempt to look at Hong Kong society in the 1970s, and the colonial rule under MacLehose, from an original perspective. The speaker calls for a re-examination of the coloniality of Hong Kong.

Tai-lok Lui is Professor of Sociology at The University of Hong Kong. This seminar will be held in English. Sebastian Veg, Director of the [CEFC](#), will chair the session. Snacks and drinks will be served after the seminar. All interested are welcome to attend.

Reservation & Contact: Heipo Leung, cefc@cefc.com.hk / tel: 2876 6910

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>)
Information management	14-15 March, 2013	Beijing	2013 International Conference on e-Education, e-Business and Information Management - ICEEIM 2013
Social Sciences & Humanities	17-18 March	Macau	2013 2nd International Conference on Social Science and Humanity - ICSSH 2013
Economics & Finance	17-18 March	Macau	2013 2nd International Conference on Economics and Finance Research - ICEFR 2013
Language, Medias & Culture	17-18 March	Macau	2013 2nd International Conference on Language, Medias and Culture - ICLMC 2013
Engineering	26-28 March	Beijing	6th International Petroleum Technology Conference (IPTC 2013)
Ophthalmology	28-31 March, 2013	Shanghai	13th International Congress of Ophthalmology and Optometry China (COOC 2013)
Material sciences	15-19 April, 2013	Shanghai	12th International Conference on Inorganic Scintillators and their applications, SCINT 2013
Cell Biology	15-19 April, 2013	Suzhou	CSH Asia 2013 Conference on Mechanisms and Functions of Non-Apoptotic Cell Death
ICT & Computer Science	21-22 April, 2013	Beijing	2013 5th International Conference on Digital Image Processing - ICDIP 2013
Bioinformatics and Computational Biology	21-22 April, 2013	Beijing	2013 2nd International Conference on Bioinformatics and Computational Biology (ICBCB 2013)
Chemistry	21-24 April, 2013	Xiamen	3rd International Colloids Conference - Colloids & Energy
Remote sensing	22-26 April, 2013	Beijing	35th International Symposium on Remote Sensing of Environment, ISRSE35
Neuroscience	6-10 May, 2013	Suzhou	Francis Crick Symposium on Neuroscience
Engineering	13-16 May, 2013	Shanghai	27th CIMAC Congress on Combustion Engine Technology

Genetics	13-17 May, 2013	Suzhou	CSH Asia 2013 Conference on Membrane Protein Structure and Function
Molecular Biology	16-19 May, 2013	Xian	EMBO Workshop: 'Membrane Shaping and Remodelling by Proteins'
Space	20-23 May, 2013	Shanghai	The 5th CSA-IAA Conference on Advanced Space Technology
Biotechnology	20-23 May, 2013	Shanghai	8th International China Pharmaceutical R&D Summit
Biotechnology	20-23 May, 2013	Shanghai	Biosimilars Asia 2013
Metabolism	20-24 May, 2013	Suzhou	CSH Asia 2013 Conference on Metabolism, Obesity and Obesity-Associated Diseases
Education	21-22 May, 2013	Beijing	2nd International Conference and Exhibition on Occupational Health & Safety
Law, IPR, Pharmacology	21-23 May, 2013	Shanghai	2nd Pharma Legal Affairs Asia 2013
Nephrology	31 May-June 4, 2013	Hong Kong	ISN World Congress of Nephrology
Medicine	3-7 June, 2013	Suzhou	CSH Asia 2013 Conference on Vaccine Design
Environment	4-7 June, 2013	Dalian	2013 Int'l Symposium on Environmental Science and Technology
Software Engineering	14-16 June, 2013	Beijing	International Symposium on Computer Science and Electrical Engineering
Mechanics	16-21 June, 2013	Beijing	13th Int'l Conference on Fracture - ICF-13
Bioinformatics	17-20 June, 2013	Shenzhen	BGI Bioinformatics Workshop
Plant Biology	17-21 June, 2013	Suzhou	CSH Asia 2013 Conference on Plant Cell and Developmental Biology
Genetics	24-28 June, 2013	Suzhou	Yersinia 11 - the 11th international symposium on Yersinia
Education	6-7 July, 2013	Hong Kong	2013 2nd International Conference on Knowledge and Education Technology - ICKET 2013
ICT	6-7 July, 2013	Hong Kong	2013 4th International Conference on Signal and Information Processing (ICSIP 2013)
Applied science, Engineering	12-14 July, 2013	Shanghai	Shanghai International Conference on Applied Science and Engineering
Nuclear engineering	29 July-2 August, 2013	Chengdu	The 21st Int'l Conference on Nuclear Engineering

Modernization science	8-10 August, 2013	Beijing	1st int'l modernization forum
Astronomy	16-18 August, 2013	Lijiang	Collaboration Meeting on Antarctic Survey Telescopes
Health	19-24 August, 2013	Beijing	Asian Mycological Congresses 2013
Atomic and Molecular Physics	20-23 August, 2013	Suzhou	CSH Asia 2013 Conference on New Advances in Optical Imaging of Live Cells and Organisms
ICT	20-23 August, 2013	Beijing	2013 IEEE International Conference on iThings/CPSCoM/GreenCom (2013 World Cybermatics Congress)
ICT	20-23 August, 2013	Beijing	2nd International Workshop on energy and Wireless Sensors (e-WiSe)
Biology, Food safety	25-30 August, 2013	Beijing	10th Int'l Congress on Plant Pathology - ICPP
Engineering	29-31 August, 2013	Macao	2013 International Symposium on Engineering and Natural Sciences
Innovation	1-2 September, 2013	Beijing	2013 4th International Conference on Innovation, Management and Service- ICIMS 2013
Management	1-2 September, 2013	Beijing	2013 2nd International Conference on Management Technology and Science-ICMTS2013
Construction & Project Management	1-2 September, 2013	Beijing	2013 4th International Conference on Construction and Project Management - ICCPM 2013
Cancer Research	2-6 September, 2013	Suzhou	CSH Asia 2013 Conference on Cell Signaling in Metabolism, Inflammation and Cancer
<i>EU-China cooperation</i> Medicine	6-7 September, 2013	Shanghai	1st Euro-Asian Experts Conference on Immune Biomarkers for Personalized Medicine in Oncology
Chemistry	8-13 September, 2013	Shanghai	The 24th International Society of Heterocyclic Chemistry Congress
Infectious Diseases	9-13 September, 2013	Suzhou	CSH Asia 2013 Conference on Molecular Basis of Aging and Disease
Pharmacology	20-22 September, 2013	Suzhou	2013 Chinese Congress and Exposition on Gerontology and Health Industry
Bioinformatics	20-22 September, 2013	Taicang	InCoB2013 - 12th International Conference on Bioinformatics
Chemistry	22-25 September, 2013	Dalian	2nd International Congress on Catalysis for Biorefineries (CatBior 2013)

Space	23-27 September, 2013	Beijing	64th International Astronautical Congress
Biotechnology	23-27 September, 2013	Beijing	The 13th International Conference on Culture Collections - ICC-13
Computational Biology	23-27 September, 2013	Suzhou	CSH Asia 2013 Conference on Frontiers in Bioinformatics and Computational Biology
Chemistry	24-27 September, 2013	Chengdu	2013 Int' l Autumn Seminar on Propellants , Explosives and Pyrotechnics
Energy	25-28 September, 2013	Shanghai	5th World Hydrogen Technologies Convention , WHTC2013
Genetics	7-11 October, 2013	Suzhou	CSH Asia 2013 Conference on Genetic, Genomic, and Translational Studies of Human Leukemia
Biology	14-18 October, 2013	Suzhou	CSHA / ISSCR Joint Meeting on Stem Cells in Science and Medicine
Biology	15-20 October, 2013	Beijing	The 11th World Conference on Animal Production , WCAP2013
Neuroscience	21-25 October, 2013	Suzhou	CSH Asia 2013 Conference on Development, Function and Disease of Neural Circuits
Immunology	28 October-1 November, 2013	Suzhou	CSH Asia 2013 Conference on Tumor Immunology and Immunotherapy
Metabolism	4-8 November, 2013	Suzhou	CSH Asia 2013 Conference on Nuclear Receptors and Diseases
Microbiology	18-22 November, 2013	Suzhou	CSH Asia 2013 Conference on Bacterial Infection and Host Defense

Policy & Papers

Construction to speed up on key science projects

China will speed up building a deep-sea scientific observation network and an observatory in the Antarctic before 2015, according to a development plan on the country's infrastructure construction for key science and technology projects from 2012 to 2030. The plan was released on the Chinese central government's website on March 4. It targets the enhancement of the country's innovation capacity and sets goals for the country's science and technology development for the coming two decades. The plan lists 16 important projects to be accelerated before 2015. Before 2030, China will focus on seven areas including sustainable energy and space exploration to boost scientific and technological innovation. (source: [China Daily](#))

NDRC drafts guidance for 7 strategic areas

A guidance that specifies the key products and services in China's seven strategic emerging industries was published by the country's top economic planner. China's strategic industries include energy-saving and environmental protection, information technology, biology, high-end equipment manufacturing, new energy, new materials and new-energy vehicles. The catalogue for guidance, published by the National Development and Reform Commission, covers about 3,100 goods and services in 125 sub-categories in the seven industries. It aims to guide the work of departments at different levels and local governments. (source: [China.org](#))

China's R&D spending hits 1 trillion yuan

China's spending on research and development (R&D) increased 17.9 percent year on year to 1.02 trillion yuan (162.24 billion US dollars). The rise comes amid the country's efforts to build an innovation-driven economy. R&D expenditure represents 1.97 percent of the gross domestic product (GDP) last year, up from the 1.84 percent and 1.75 percent registered in 2011 and 2010, respectively.

* EURAXESS Links China cannot authorise the reproduction of news items taken from other publications, nor is it responsible for the authenticity of the selected content. Anyone wishing to reproduce articles is advised to contact the originating source of the relevant news item.

China's annual R&D spending grew on average by more than 20 percent for six straight years since 2006 before slowing slightly last year. (source: [Global Times](#))

* * *

Voices and opinions

Boost science and technology

The facts and figures that Wan Gang, minister of science and technology, cited during the ongoing National People's Congress session painted a rosy picture of the country's development in science and technology. That the country's exports of high-tech products ranked first in the world in 2012 speaks volumes for the tremendous progress we've made since the central authorities issued the country's long-term and mid-term plans for the development of science and technology in 2006. But despite all these noteworthy advances, the country still has a long way to go to catch up with developed countries. With the importance the central authorities have attached to science and technology, there is no doubt that investment in research and innovation will further increase. However, the input in basic research was 49.8 billion yuan in 2012, just a little more than 4 percent of the total input in scientific research, far lower than the 10 to 20 percent in developed countries. While cultivating its enterprise-based innovation, the country must place enough importance on basic research, as this will lay the foundation for breakthroughs and foster first-class scientists for future progress. (source: [China Daily](#))

Research to focus on people's livelihoods

State revenue invested in technology research and development will be more focused on strengthening basic research and developing science and technology related to people's livelihoods, a senior official said. Gross domestic expenditure on research and development reached 1.02 trillion yuan (\$164.6 billion) last year, accounting for just under 2 percent of GDP. Of this, more than 74 percent came from enterprises rather than government, said Minister of Science and Technology Wan Gang. "State revenue will mainly cover research in public health, resources and the environment, agriculture, and disaster prevention and reduction," he said. Meng Wei, a deputy to the National People's Congress and head of the Chinese Research Academy of Environmental Sciences, said money was one of the biggest problems that hindered research more than a decade ago, but State investment in science and technology can now meet the needs of scientific research in major environmental protection issues. (source: [China Daily](#))

Minister takes lead in promoting electric vehicles

Chinese Minister of Science and Technology Wan Gang, who has championed the research and development of new energy vehicles for decades, didn't miss a chance to promote the new industry. During China's annual legislative session, Wan abandoned his official sedan and took a small electric

car instead as commuter vehicle. The silver electric vehicle (EV), with a slogan "zero-pollution, zero-emission" posted on the car body, carried Wan back and forth between the conference venue, his office and the media center. "Colleagues of the ministry are more willing to take EVs, as every kilometer they travel means a reduction of PM2.5 emission, compared with gas vehicles," Wan told a press conference on the sidelines of the annual session of National People's Congress, China's top legislature. Wan spent 10 years from 1991 as an auto engineer in the research and development of new energy vehicles for the Audi Corporation in Germany. By the end of 2000, Wan returned home at the invitation of the Ministry of Science and Technology and was appointed chief scientist and group leader of a key national electric vehicle project. In April 2001, he began to work in Tongji as director of the center of new fuel automobile. Four months later, he became Assistant President of Tongji. In July 2004, Wan was promoted to president of the university. In 2007, Wan, a non-Communist party member, was appointed the country's minister of science and technology. Subsidies are offered to private buyers of new energy vehicles, but Wan said this is only being adopted for now, and a more coordinated development will be needed in the long run. "Such coordinated development needs a combination of charging facilities, environmental protection measures, industrial development policies and efforts of power sectors," he said. (source: [Global Times](#))

Xi urges innovation-driven growth

Xi Jinping, general secretary of the Communist Party of China (CPC) Central Committee, urged boosting innovation-powered development in order to make China an economic heavyweight. Xi made the remarks while participating in a panel discussion with political advisors from the science and technology sector at the ongoing annual session of the Chinese People's Political Consultative Conference (CPPCC) National Committee, the country's top political advisory body. Xi said implementing a strategy of innovation-driven development will be fundamental in accelerating the transformation of China's growth pattern, solving deep-rooted problems concerning economic development and enhancing economic vitality. (source: [Xinhua net](#))

Wen urges breakthroughs in Sci-Tech innovation

Chinese Premier Wen Jiabao urged China's science administrators, business leaders and scientists to race to make breakthroughs in scientific and technological innovation. Speaking during his inspection tour of the Ministry of Science and Technology, Wen called for reform in the country's science work system, so that science and technology can develop hand in hand with the economy. The premier urged innovations be made in core technologies, major scientific fields and new products. He called for the scientific community to have a sense of urgency, to avoid missed opportunities at a time when all countries are competing for dominance in ever more fierce technological competitions. Furthermore, Wen said the education system should also be reformed to grow top talents and help create an environment for free thinking and innovation. (source: [China Daily](#))

* * *

Thematic activities

Health

Novel Niche-Stem Cell Interaction in *Drosophila* Testis Discovered

Stem cell niche is a specialized microenvironment crucial for stem cell self-renewal. *Drosophila* testis contains germline stem cells (GSCs) and somatic cyst stem cells (CySCs), providing a good model for studying niche-stem cell interaction. Recently, researchers from Chinese Academy of Sciences revealed that Hedgehog (Hh) signaling plays dual roles in the regulation of CySCs and GSCs in *Drosophila* testis. (source: [CAS](#))

China to further regulate stem cell clinical experiments

China will further regulate stem cell clinical experiments to protect the interests of providers and testees, according to draft rules by medical watchdogs. The Ministry of Health (MOH) and the State Food and Drug Administration (SFDA) jointly publicized the draft rules on Thursday to solicit public opinions. All clinical experiments on stem cells are subject to ethical review, said the regulations. Researchers must submit relevant materials surrounding stem cell products, selection criteria and detailed consent forms of providers and testees, safety evaluation reports, research plans, and resumes of main participating researchers to the ethical board for review. (source: [Xinhua net](#))

China to encourage innovative drug development

China's drug safety watchdog issued a plan to reform the registration process for new drugs in order to encourage innovative research and development. Wang Lifeng, director of the drug registration department of the State Food and Drug Administration (SFDA), said the plan provides incentives for the research and development of innovative clinical drugs. (source: [Xinhua net](#))

IMCAS Joins EU PharmaSea Project to Discover New Drugs from Deep Ocean

The Institute of Microbiology, Chinese Academy of Sciences (IMCAS) participated in the EU PharmaSea project on Deep-sea Organisms to discover synergistic medicines from its own proprietary marine microbial natural products library. The project was reported by BBC News on February 15, 2013. The four-year, €9.5 million (~80 million RMB) research project focuses on biodiscovery research and the development and commercialization of new bioactive compounds from marine organisms, including deep-sea sponges and bacteria. (source: [CAS](#))

Scientists find smoking-dementia link

A research team led by Chinese scientists has linked smoking to higher risks of dementia, Health News, a national health-centric newspaper, reported. The research results, published in the British Occupational and Environmental Medicine journal, concluded that Environmental tobacco smoke (ETS), including smoking and passive smoking, should be considered an important risk factor for severe dementia syndromes. The research was conducted by a team with Anhui Medical University, in cooperation with British and American scientists. (source: [China Daily](#))

Characteristic Transformation of Blood Transcriptome in Alzheimer's Disease

Recently, a research team led by Prof. LEI Hongxing at Beijing Institute of Genomics, Chinese Academy of Sciences, conducted comprehensive analyses on five published datasets concerning AD blood transcriptome, and further revealed the characteristic perturbation of cellular functional units, including up-regulation of environmental responses (immune response, survival/death signaling and cellular recycling) and down-regulation of core metabolism (energy metabolism and translation/splicing). (source: [CAS](#))

An FPR1 Polymorphism Site Sensitive to Cyclosporins Identified

Formyl peptide receptor 1 (FPR1) is a class A G protein-coupled receptor. When stimulated by chemoattractants, such as formyl peptides released by bacteria or certain virus-derived proteins, it leads to neutrophil chemotaxis, degranulation and superoxide production. These activities are essential to the elimination of invading pathogens and damaged tissues, suggesting that FPR1 plays an important role in the innate immune system. Using pharmacogenomics approaches, scientists at the National Center for Drug Screening/Shanghai Institute of Materia Medica, Chinese Academy of Sciences (SIMM), Fudan University and Shanghai Jiaotong University investigated five FPR1 single nucleotide polymorphisms (SNPs) across 209 healthy Han Chinese to map the distribution of FPR1 haplotypes. They identified the V101L FPR1 polymorphism as having greater receptor pKi for cyclosporins and enhanced downstream antagonistic activity including calcium mobilisation, MAPK phosphorylation and chemotaxis. Based on these results, it is suggested that in patients carrying the V101L FPR1 polymorphism, cyclosporin A may cause over-suppression of FPR1 activity and therefore unexpected clinical effects. (source: [CAS](#))

TCM demand grows globally

Traditional Chinese medicine, or TCM, holds a unique place in Chinese healthcare, which is widely accepted by the 1.3 billion Chinese - old and young, urban and rural. Nowadays, it's also growing in popularity in Western markets, where many want to pursue a more natural lifestyle. International drug makers are exploring ways, including joint ventures and co-development partnerships, to combine Western approaches to drug discovery with the material repertoire of TCM. (source: [China Daily](#))

Researchers Develop Novel Live-imaging Method Using Fluorescence Microscopy

Postembryonic development is an essential step during the formation of multicellular organisms after embryonic growth. To better understand the process of postembryonic development, scientists need to carry out cell dynamics study. High-resolution live imaging has been widely performed in embryos in cell cultures and provides a wealth of information for understanding embryonic development. However, due to the length and complexity of the postembryonic developmental stage and the difficulties in handling live organisms, live-imaging protocols to study postembryonic development are still scarce. Since many processes, including asymmetric cell division and directed cell migration, cannot be easily mimicked in cell culture, the development of a live-imaging system is in urgent need. Recently, Dr. OU Guangshuo's group at the Institute of Biophysics, Chinese Academy of Sciences (IBP) developed a live-imaging system to observe the cellular dynamics during *C. elegans* postembryonic development. (source: [CAS](#))

* * *

Food, agriculture and fisheries, biotechnology

China kicks off research for new type of rice

China launched a research and development plan for a new type of super rice, which is expected to yield at least 15 tons of rice per hectare, the People's Daily reported. China launched the hybrid rice research program in 1996, reaching the target unit yields of 10.5 tons a hectare in 2000 and of 12 tons a hectare in 2004, setting world records both times. (source: [China Daily](#))

City to set up lab to monitor China's scandal-hit dairy giants

Northwest China's inland city Hohhot, home to China's two dairy giants Mengniu and Yili, will set up a national-level laboratory to monitor products of the two scandal-hit companies, Hohhot Mayor Qin Yi said. "We will use the lab to supervise dairy products produced by the two companies nationwide and make sure they provide qualified products to consumers," Qin said. The mayor did not disclose when the lab will be established and how much the government will spend on it. (source: [Xinhua net](#))

China becomes world's biggest agricultural machinery maker

The total industrial output value of China's agricultural machinery industry reached 338.2 billion yuan (53.8 billion U.S. dollars) in 2012, ranking first globally, said Zhang Taolin, vice minister of agriculture. The sector has been growing by about 20 percent annually for the last six years. The sector's output surpassed that of the EU and the United States for the first time last year, according to the China Association of Agricultural Machinery Manufacturers. China needs to improve quality, safety and technology in the sector and produce more mid- and large-sized high-end agricultural machinery, according to the official. China produced more than two million tractors and one million harvesters last year, more than any other country. (source: [Xinhua net](#))

Chinese scientists decipher moso bamboo genome

Chinese scientists announced that they have decoded the genome for moso bamboo in hopes of improving the breed and using the plant as an alternative to wood. The results have been published in the online version of Nature Genetics, according to Jiang Zehui, leader of the research team responsible for decoding the genome. (source: [Xinhua net](#))

Scientists Discover New Gene for Enhancing Rice Grain Production

Cytokinin positively regulates the activity and function of the shoot apical meristem (SAM), which is a major parameter determining seed production and finally influencing rice yield formation. The rice Gn1a/OsCKX2 (Grain number 1a/Cytokinin oxidase 2) gene, which encodes a cytokinin oxidase, is a major QTL (quantitative trait locus) contributing to grain number improvement in rice breeding practice. However, the molecular mechanism of how the expression of OsCKX2 is regulated in planta remains elusive. To gain insight into the molecular mechanisms underlying the transcriptional expression of Gn1a, scientists in Dr. LI Chuanyou's group from the Institute of Genetics and Developmental Biology, Chinese Academy of Sciences carried out an extensive screening and identified a novel rice mutant, regulator of Gn1a 1 (reg1), which shows reduced OsCKX2 expression, elevated meristem activity, and increased grain number. (source: [CAS](#))

Scientists Reconstructed the Common Ancestor of Placental Mammals

An international team of researchers (including Xijun Ni, Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences) has reconstructed the common ancestor of placental mammals—an extremely diverse group including animals ranging from rodents to whales to humans—using the world’s largest dataset of both genetic and physical traits. (source: [CAS](#))

Food contaminants indicator to hit China market

A food testing indicator paper is expected to hit the Chinese market soon, to help consumers identify food products contaminated with pathogenic bacteria and excessive drug residues. The test paper was found to change color to suggest over 60 varieties of chemical factors in food samples during lab research conducted at Tianjin University of Science and Technology. (source: [China Daily](#))

* * *

Information and communication technologies

China expected to issue 4G licenses this year: minister

China is expected to start licensing telecom operators to offer services on its fourth-generation (4G) mobile phone network within 2013, a senior official has said. "China has made breakthroughs in R&D of 4G technologies, but is still facing restrictions in commercial use," Miao Wei, minister of industry of information technology, said on the sidelines of the ongoing annual session of the country's national legislature. China needs to speed up base station construction and provide more terminal products, which require greater financial and technological input, he said. "We will promulgate supporting policies at an appropriate time to guide the construction and development of the 4G network," Miao added. (source: [Global Times](#))

Uganda, China enjoy robust relation in ICT sector: Minister

The relation between Uganda and China, especially in the information and communication sector, is robust, said Thembo Nyombi, Ugandan ICT State Minister. Attending the meeting of Africa multi-stakeholder internet governance in Addis Ababa, Ethiopia, Nyobi told Xinhua that Uganda has very strong relation with China in the ICT sector which the State Minister said is growing rapidly in Uganda, significantly contributing to his country's economy. (source: [Global Times](#))

Think tank launched to protect ICT competition, innovation

The University of International Business and Economics (UIBE) established on 24 February an institution dedicated to research on competition and development in the fast-developing Information and Communication Technology (ICT) industry. The institution, named ICT Competition Laboratory, will focus on the level of openness and competition of ICT and set criteria as to whether an ICT enterprise's action is legitimate. (source: [People](#))

China's mobile telecom market sees rapid growth

China's mobile telecomm market witnessed rapid growth last year, as the country has begun to lead global technological advancements in this field, an official with the Ministry of Science and Technology

said. The number of China's mobile phone users had jumped to 1.1 billion by the end of 2012 from 976 million at the beginning of the year, Zhao Yuhai, an official with the ministry in charge of boosting cutting-edge technologies, said at a news conference in Beijing. Also, 3G subscribers saw a dramatic expansion, with more than 107 million new users emerging in 2012, bringing the total number to 234 million users by the end of last year, he said. Market expansion was accompanied by technological leaps, Zhao said, noting that 64 experimental networks of TD-LTE - the Chinese 4G mobile telecom standard - have been set up by 29 service providers around the world and 14 commercial networks have been put into use by 13 of the providers. (source: [China Daily](#))

Huawei acquired highest number of patent rights in 2012

Chinese telecom giant Huawei Technologies Co Ltd acquired the most patent rights in China last year, according to the State Intellectual Property Office. Gan Shaoning, deputy chief of the State Intellectual Property Office, said that the authority offered 217,105 patent rights in China in 2012, a year-on-year increase of 26 percent. Among domestic companies, Shenzhen-based Huawei gained the No 1 position by acquiring 2,734 patent rights last year. Its cross-town rival ZTE Corp ranked second with 2,727 patent rights. (source: [China Daily](#))

Technology firms continue to grow global foothold

The world's second-largest economy is gradually gaining international prominence in some key IT equipment sectors, including PCs, smartphones and tablets, Gao Yuan and Shen Jingting report. China's information technology equipment giants have been arming themselves with a steady stream of new technology, and the very best in local talent. But as they continue to gain a global presence, some industry insiders are suggesting that the biggest players now need be aiming at the higher end of the manufacturing market. According to a new report released by IT research firm Flurry Analytics, China has now overtaken the United States as the world's biggest market for active Android and iOS smartphones and tablets. (source: [China Daily](#))

* * *

Nanosciences, nanotechnologies, materials and new production technologies

Shape-memory Polymers Developed by NIMTE

Shape-memory polymers (SMPs) are a class of materials that are able to “remember” one or more shapes, and can be “frozen” into a temporary shape under stress, temperature, or electrical voltage. By applying some stimulus, such as heat, magnetic field, UV radiation, etc., they can recover their original shape through the internal elastic energy. Recently, Prof. ZHU Jin's group at NIMTE developed a bio-based SMP material by substituting petroleum based chain extender with rosin based one. With the careful molecular design, they constructed highly incompatible hard and soft segments along the polymer chain and obtained shape-memory polyurethane (SMPU) with supreme shape recovery property. (source: [CAS](#))

QIBEBT Develops Cathode Materials for Li-O2 Batteries

The lithium-air battery, which has a comparable theoretical energy density with gasoline, has been considered one of the most promising energy storage devices for electric vehicles. High over-potential and short cycle life-times represent two major challenges to develop the currently investigated Li-O₂ batteries. To address these issues, Professor CUI Guanglei and his colleagues at Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, have optimized various nanostructured cathode materials based on their investigation of material structure and its corresponding effect. (source: [CAS](#))

New Atomic Layer Deposition Process for Nitride LED Reflector Structures

Researchers in China have developed an atomic layer deposition (ALD) technique to create distributed Bragg reflectors (DBR) for increasing nitride semiconductor light-emitting diode (LED) output power by up to 43% [Hongjun Chen et al, Appl. Phys. Express, vol6, p022101, 2013]. Although some groups have developed DBRs for such purposes before, this is claimed as the first proposal and demonstration of DBRs grown using ALD rather than electron-beam (EB) evaporation. The advantages of ALD over EB evaporation include better thickness uniformity over large-diameter substrates and thickness control at the atomic level. (source: [CAS](#))

* * *

Environment (including climate change)

China begins underground water safety investigation

China has conducted investigations and research on the condition of underground water to determine the extent of pollution, a senior official from China's top economic planning agency said. "Based on the results we've collected so far, the safety of underground water is generally guaranteed, particularly the safety of drinking water from underground," Du Ying, deputy head of the National Development and Reform Commission (NDRC), said at a press conference. (source: [China.org](#))

China to enhance environmental protection legislation

China's top legislature will "respond positively" to the public concerns on environmental issues, a spokeswoman said at a press conference. The National People's Congress ([NPC](#)) will revise and improve the Law on the Prevention and Treatment of Air Pollution and the Environmental Protection Law, said Fu Ying, spokeswoman for the first session of the 12th NPC, which kicks off on March 5. Other measures include enhancing supervision and scrutiny of law enforcement, making environmental protection efforts and results part of the performance evaluations of local governments, and drawing up specific control measures on major pollutants and vehicle emissions, she said. (source: [Xinhua net](#))

New water-saving irrigation technology developed in China

Chinese scientists have developed a new irrigation technology that consumes 50 percent less water than drip irrigation technology. The trace quantity irrigation technology is based on the soil capillary force principle. When the technology is applied, plants take the initiative in absorbing water according

to their respective demands, rather than being watered passively, said Zhu Jun, an irrigation expert at Huazhong University of Science and Technology. (source: [Xinhua net](#))

Water undrinkable after costly cleanup

China aims to spend \$850 billion to improve filthy water supplies over the next decade, but even such huge outlays may do little to reverse damage caused by decades of pollution and overuse in the country's push for rapid economic growth, Reuters reported, citing China's government documents. (source: [Global Times](#))

New-energy buses to hit the road in Shanghai

Shanghai is to introduce 200 new-energy buses in a bid to cut emissions and reduce noise, Xinhua News Agency reported on Feb 20. A new-energy bus, using electricity rather than petrol, could run for nearly 10 hours, or 150 kilometers, even if it is fully loaded with the air-conditioner working, said Wang Binfeng, deputy general manager of the Shangnan branch under Pudong Public Transport. Meanwhile, remote monitoring will prompt alerts if the battery has problems. (source: [China Daily](#))

China to introduce carbon tax: official

China will proactively introduce a set of new taxation policies designed to preserve the environment, including a tax on carbon dioxide emissions, according to a senior official with the Ministry of Finance (MOF). The government will collect the environmental protection tax instead of pollutant discharge fees, as well as levy a tax on carbon dioxide emissions, Jia Chen, head of the ministry's tax policy division, wrote in an article published on the MOF's website. (source: [Global Times](#))

Insight: Spring Droughts Could Reduce Plant Growth and Carbon Uptake

Many parts of the world frequently experience severe droughts. Summer droughts can significantly reduce plant growth and the amount of carbon taken up by terrestrial ecosystems. Now a team of researchers from China and the US has found that the same is true for severe droughts in spring. The researchers looked at the impacts of the 2010 spring drought on primary productivity in southwestern China. Satellite observations on vegetation greenness together with climate data allowed the team to study how the drought affected both primary productivity and ecosystem carbon uptake. (source: [CAS](#))

2015 deadline for Beijing's coal-fired furnace retrofits

China's capital of Beijing has set a target of completing environmentally friendly renovations on all its coal-fired heating furnaces by 2015. Inefficient coal burning is considered one of the major causes of lingering smog in the city, which is dependent on fossil fuels for centralized heating during its four-month-long winter. (Source: [China Daily](#))

Coal burning and car exhaust emissions are the two primary sources of air pollution in the crowded, traffic-clogged city.

China will demand new buildings in cities achieve mandatory energy-saving standards and renovate existing buildings to make them greener by 2015, the country's top economic planner has said. The standard of green buildings, which are resource- and energy-saving and environmentally friendly, will

be adopted on all government-invested buildings from 2014, said an official with the National Development and Reform Commission (NDRC) (source: [China Daily](#))

Chinese cities see excessive air pollution during holiday

Festival fireworks caused readings of PM2.5 to skyrocket in many cities during the Spring Festival holiday, indicating worsened air quality, the Ministry of Environmental Protection said. Figures released by the ministry show that 42.7 percent of 74 Chinese cities reported higher-than-normal PM2.5 reading. (source: [Global Times](#))

* * *

Energy

Duckweed for Biofuels?

Duckweed may be a viable material for biofuel production according to a new report in ACS' journal Industrial and Engineering Chemistry Research. Duckweed is a fast growing floating plant that turns ponds and lakes green. Christodoulos A. Floudas, a professor at Princeton and Xin Xiao with Langfang Engineering and Technology Centre, Institute of Process Engineering, Chinese Academy of Sciences, along with several colleagues explain that duckweed, an aquatic plant that floats on or near the surface of still or slow-moving freshwater, is ideal as a raw material for biofuel production. (source: [CAS](#))

China deploys uranium enrichment centrifuge

China's largest atomic energy developer announced the successful installation of a domestically produced uranium enrichment centrifuge for industrial use. The centrifuge was built in a uranium enrichment plant in Lanzhou, Northwest China, according to a statement from the China National Nuclear Corporation (CNNC). The installation of the centrifuge marks a strategic accomplishment in terms of safeguarding the sustainable development of China's nuclear power industry, the statement said. (source: [China Daily](#))

China's energy consumption rises 3.9 pct in 2012

China's energy consumption totaled 3.62 billion tonnes of standard coal equivalent in 2012, up 3.9 percent year on year, the National Bureau of Statistics (NBS) said. Consumption of coal, crude oil, natural gas and electricity rose 2.5 percent, 6.0 percent, 10.2 percent and 5.5 percent from a year earlier, respectively. Energy consumption for every 10,000 yuan (1,601.98 U.S. dollars) of China's GDP fell 3.6 percent year on year, according to a report released by the NBS. Monitoring of 571 sections of major rivers show that water quality of 63.9 percent of the sections met or exceeded standards. However, 12.4 percent of the sections were found to have dirty or polluted water. (source: [China Daily](#))

Standards formulated amid energy-saving drive

China has drawn up 54 national standards regarding energy efficiency since 2012 as part of the country's efforts to reduce carbon emissions and push forward industrial restructuring. Those energy-saving standards have stipulated usage restrictions on sectors such as cement, coal, rare earths and chemicals, and imposed basic standards in related management systems, the National Development and Reform Commission (NDRC) said in an online statement. (source: [China Daily](#))

Power giant to spend \$48b on grid construction

State Grid Corp, the country's largest power utility, said that it will spend more than 300 billion yuan (\$48 billion) on grid construction this year and double its investment in extra-high voltage projects. The company plans to get approval and start construction of seven extra-high voltage power transmission lines in 2013, according to its corporate social responsibility report. It also plans to invest 52 billion yuan in extra-high voltage projects this year, around 26 billion yuan more than it invested last year. In 2012, the company's total investment in grid projects was 305.4 billion yuan. (source: [China Daily](#))

China eyes energy-saving products

The Chinese government is targeting energy-efficient products as part of efforts to build a cleaner and more sustainable economy. The Ministry of Finance announced on 7 February that over 9 billion yuan (1.43 billion U.S. dollars) has been earmarked from the country's central budget in 2012 to promote energy-saving products ranging from home appliances to hybrid vehicles. (Source: [China Daily](#))

NE China's first nuclear power plant starts operation

The Hongyanhe nuclear power station, the first nuclear power plant and largest energy project in northeast China, started operation on 17 February. Construction on the first phase of the project, which features four power generation units to be built at a cost of 50 billion yuan (\$7.96 billion), began in 2007 and is expected to be completed by the end of 2015, said Yang. The four units will generate 30 billion kilowatt-hours (kwh) of electricity annually by then, accounting for 16 percent of the total electricity consumption in 2012 in Liaoning province, Yang said. (source: [China Daily](#))

China promotes use of energy-saving internal combustion engines

China will step up efforts to develop energy-saving internal combustion engines and promote their use in coming years to reduce emissions, according to a guideline issued by the State Council. Energy-saving internal combustion engines will account for 60 percent of the total engines in use by 2015, the guideline issued by China's Cabinet said. The State Council said China's internal combustion engines do not meet international energy-saving standards and many energy-guzzling products are still widely used. China will accelerate the research and development of new technologies, as well as promote the application of energy-saving and emissions-reducing internal combustion engines. (source: [Global Times](#))

China to cut unit industrial energy consumption by 5 pct

In 2013 China will try to cut energy consumption and carbon dioxide emission for per unit industrial value added by over 5 percent, an energy official said. The consumption of water for per unit industrial value added will be lowered by 7 percent, while the comprehensive utilization of solid waste will be

raised by two percentage points, said Zhou Changyi, director of the energy saving department of the Ministry of Industry and Information Technology. (source: [Global Times](#))

China timetables fuel quality upgrade

China's State Council issued a timetable for its program to upgrade fuel quality, with a strict standard to be promoted nationwide before 2017. The country will issue the '5th-phase' standard for automobile petrol, with sulphur content within 10 ppm (parts per million), before the end of the year with a grace period before the end of 2017, according to an executive meeting of the State Council chaired by Premier Wen Jiabao. Beijing is the only city in China to have adopted such a standard, equal to Europe's Euro V vehicle emissions cap of sulphur content below 10 ppm. (source: [Global Times](#))

* * *

Transport (including aeronautics)

China grips technology to brake world fastest train: scientist

China has mastered braking technology to stop the world's fastest trains that travel a maximum speed of 500 kilometers per hour (km.p.h.), a railway scientist said. The eddy-current braking testing system has been completed and put into use, Li Heping, a senior researcher of China Academy of Railway Sciences, told Xinhua News Agency in an exclusive interview. (source: [Xinhua net](#))

China's first jumbo jet to debut in 2014

China's first jumbo jet, the C919, is expected to make its maiden flight in 2014 as planned, its chief designer said. The design of C919's airframe has been completed and the ground tests of the jet's major equipment will start in 2013, said Wu Guanghui, the jumbo jet's chief designer and vice-general manager of the Commercial Aircraft Corporation of China (COMAC), the aircraft's manufacturer. (source: [China Daily](#))

China needs electric cars more than hybrid

China will continue to promote **electric vehicles** despite their dim sales nationwide, China Youth Daily reported citing Wang Binggang, chief consultant of the State 863 Energy-saving & New Energy Vehicle Project. China has set a target to sell 500,000 electric vehicles by 2015 in the Development Plan for Energy-saving and New Energy Vehicles Industry (2011-20). (source: [China Daily](#))

China to approve new short-haul aircraft

A new generation of short-haul aircraft will be granted production approval soon and enter the market in 2014, the China Securities Journal reported on 1 March. The MA700 aircraft, designed by the Avic Aircraft Co., is about to be approved by the Ministry of Industry and Information Technology after years of research and development, said a source quoted by the paper. The turboprop jet will mainly be used for medium- and short-distance trips, said Geng Ruguang, vice general manager of Avic's parent company, the Aviation Industry Corporation of China. (source: [Global Times](#))

China to launch major aircraft engine project: sources

The State Council is deliberating a major aircraft engine research and development project, sources revealed. The project will require an investment of at least 100 billion yuan (about 15.93 billion U.S. dollars), a professor at the Beijing University of Aeronautics and Astronautics (BUAA) with knowledge of the project told Xinhua on condition of anonymity. The investment would be used mainly for research on technology, designs and materials related to aircraft engine manufacturing. (source: [Xinhua net](#))

Chinese developed plane engine almost complete

Chinese scientists and technicians will soon complete an indigenous, large aircraft engine that can equip the Y-20, the country's first domestically developed strategic airlifter, Chinese media quoted a military expert as saying on 24 February. Qiao Liang, a professor at the Air Force Command Institute of the People's Liberation Army, told Science Times that the prototype of the Y-20, which conducted its first test flight on Jan 26, is currently equipped with four Russian D-30 turbofan engines, and the development of an indigenous engine is "approaching success". (source: [China Daily](#))

China rewrites global high-speed rail pattern in six years

China started to import technology of high speed train with speed of 200 kilometers per hour in 2004. The first Beijing-Tianjin high speed rail with proprietary intellectual property rights began operation in 2008. Multiple unit train CRH380A started operation in 2010. China has spent six years in the high speed rail development which takes developed countries 50 years. As of the end of last December, the mileage of China's high speed railway approached 13,000 kilometers with train speed above 200 kilometers per hour. China's high speed rail ranks the first in terms of mileages, speed, scales and development speed in the world. (source: [Global Times](#))

Officials mull nuclear power for ships on polar missions

China's polar expedition ships may use nuclear propulsion in the future, experts said, after one of the country's leading shipbuilders announced it has begun developing key technologies for nuclear-powered vessels. "Compared with ships that use conventional propulsion, nuclear-powered ships can travel farther and are more reliable, factors that make the ships a reasonable choice for polar expeditionary missions," Du Wenlong, a senior researcher at the People's Liberation Army's Academy of Military Science, told China Daily. (source: [China Daily](#))

* * *

Socioeconomic sciences and the humanities

China tops list for executive gender equality

China has the world's highest proportion of women in senior management positions, according to a new study that shows more than 51 percent of top posts are held by females - a huge jump from the survey's previous figure of 25 percent, and well above the global average of 21 percent. According to the report, by international accounting firm Grant Thornton, women now hold 81 percent of human resources director positions in China, and 61 percent of chief financial officer roles, which its

researchers said were roles which particularly require detail control and communications skills. (source: [China Daily](#))

New Chinese fossil discovery named Luanchuan Man

Chinese paleoanthropologists have given the name Luanchuan Man to Homo erectus fossil specimens discovered in Central China's Henan Province. The fossilized teeth of an early human were recently discovered at the Sunjiadong excavation site in Luanchuan County in the city of Luoyang. Researchers from the Henan Provincial Bureau of Cultural Relics said that the teeth came from the skull of a deceased minor. The extinct Homo erectus species is believed to have lived around 2 million to 200,000 years ago. (source: [Global Times](#))

Chinese scientists identify prehistoric species

Chinese scientists have announced that they have identified an enigmatic prehistoric insect, with a research paper published by academic journal Nature on Feb. 21. The paper was written by Huang Diyang, a researcher with the Nanjing Institute of Geology and Paleontology under the Chinese Academy of Sciences, and his group. Based on detailed studies, Huang said Strashila is likely a member of Diptera, an order of insects that includes normal house flies and mosquitoes. (source: [Global Times](#))

23 million Chinese escape poverty in 2012

The number of people living below the poverty line in China was greatly reduced in 2012, as the country increased efforts to boost people's income, new data has showed. The National Bureau of Statistics (NBS) announced that last year saw some 23.39 million rural dwellers edge above the poverty line, currently set at 2,300 yuan (about \$365.83) in annual net income per capita. The decrease brought the total number of impoverished rural residents to 98.99 million by the end of 2012, the data showed. (source: [China Daily](#))

White paper aims for better judicial transparency

Guangdong High People's Court has published a white paper on how the court has dealt with scrutiny from netizens during a number of high profile court cases. The white paper also explores ways the southern province can make court proceedings more transparent. Publication of the white paper will help advance judicial reforms and bring court trials under greater public supervision, Zheng E, president of Guangdong High People's Court, said. (source: [China Daily](#))

Trust among Chinese 'drops to record low'

Trust among people in China dipped to a record low with less than half of respondents to a recent survey feeling that "most people can be trusted" while only about 30 percent trusted strangers. The Blue Book of Social Mentality, the latest annual report on the social mentality of China, analyzed respondents' trust toward different people and organizations and drew a conclusion that trust in society is poor. (source: [China Daily](#))

* * *

Space

Space station dream closer

A space lab will be launched in two years ahead of a key fueling experiment vital for the building of a space station, a leading official with the manned space program said. Shortly after the lab goes into orbit, a freighter will be launched. Tests and research on the freighter technology have produced encouraging results, said Zhou Jianping, chief designer of the manned space program and a member of the National Committee of the Chinese People's Political Consultative Conference. The space lab, Tiangong-2, will be built using backup craft for the Tiangong-1 space module. Tiangong-1 was launched in September 2011. Tiangong-2 will have a number of upgrades and modifications, the most important being its ability to refuel from the freighter, he said. (source: [China Daily](#))

China to launch quantum experiment satellite in 2016

China has initiated to launch a satellite for quantum information and technology experiments in 2016, a leading quantum physicist said. Prof. Pan Jianwei said, "We hope to establish a quantum communication network from Beijing to Vienna." "Such a plan is impossible without international collaborations," Pan said at a press conference on the sidelines of the annual session of the Chinese People's Political Consultative Conference. (source: [Xinhua net](#))

China's space station to welcome int'l scientists

China's planned space station will offer scientists from around the world opportunities for research and experimentation, the lead designer of China's manned space program told Xinhua. Zhou Jianping said the space station, which is expected to be built by 2020 and is aimed at engaging in space exploration and research on space resources, will include three capsules. It will be capable of docking one freight spacecraft and two manned spacecraft, and the entire system will weigh over 90 tonnes. (source: [Global Times](#))

China targeting navigation system's global coverage by 2020

China's home-grown navigation system BeiDou is expected to achieve full-scale global coverage by around 2020, a leading scientist told Xinhua on 3 March. The BeiDou Navigation Satellite System (BDS) will then be able to provide highly accurate and reliable positioning, navigation and timing service with the aid of a constellation of 35 satellites, said Ye Peijian, chief commander of Chang'e-3, China's lunar probe mission. (source: [Global Times](#))

Asteroid Scare Prompts Calls for Space Research

Major space powers have become more aware in recent years of the threat posed by objects hurtling toward Earth, but more needs to be done, said Zhao Haibin, an asteroid researcher at Purple Mountain Observatory under the Chinese Academy of Sciences. But there is another reason asteroids are a hot topic. As the planet's resources become increasingly scarce, countries and organizations are looking to asteroids for mineral supplies. Chinese scientists first turned their attention to asteroids in 1949 and were world leaders at the time. But "observing near-Earth objects is

not a major priority now, so the input is relatively small", Zhao said. China's lunar probe Chang'e-2 flew 10 million km and conducted the country's first exploration of the near-Earth asteroid Toutatis on Dec 13, making China the fourth country to explore asteroids in space. (source: [CAS](#))

* * *

People & Higher Education

China approves 1,780 internationally cooperative education projects

A total of 1,780 educational institutions and projects made possible through international cooperation were approved by China as of January, the Ministry of Education said. Of the total, 775 are at the college level or above, said Zhang Xiuqin, head of the ministry's Department of International Cooperation and Exchanges, at a press conference. "International cooperation in education still needs to be improved and the ministry will further strengthen supervision, as well as offer more guidance for education cooperation," Zhang said. (source: [Xinhua net](#))

USTC Alumnus GAO Dayong Wins Honor of Asian American Engineer of the Year, 2013

Dr. GAO Dayong, alumnus and "Master Chair II Professor" of the University of Science and Technology of China (USTC), won Asian American Engineer of the Year (AAEOY) Award, 2013 in Dallas, U.S. on Mar 2, 2013. The Award is a National Engineers Week Program of U.S. to recognize the outstanding Asian-American professionals for their leadership, technical achievements and remarkable public services in the fields of science, technology, engineering, and mathematics (STEM). Dr. GAO won the annual award for his original and distinguished contributions to cryobiology, bio-preservation engineering, and the science and technology of artificial organs. (source: [CAS](#))

Fired up on combustion science

Katharina Kohse-Hoeinghaus, president of the non-profit Combustion Institution and a professor at Bielefeld University in Germany, has just finished a one-month residency at the University of Science and Technology of China in Anhui province. During her time as a guest professor, Kohse-Hoeinghaus collaborated on projects involving measurement strategies, combustion and biomass pyrolysis - the thermo-chemical decomposition of organic material. "USTC in Hefei is one of the best universities in China in my field," she said. "I have found USTC alumni at many institutions in China, which tells me that their education is among the best." Also, both my university in Bielefeld and USTC have similar goals and values. I liked the interaction with students." She taught a class on combustion chemistry to about 80 students and visited a number of USTC laboratories, a State-level fire laboratory, and several other universities and institutions in the country to give lectures and to discuss future developments in the field. The 61-year old described herself as a curious person who has had a strongly developed interest in natural sciences since she was a young girl. She has been to China quite a few times, starting in the early 1990s, and has helped train many young Chinese experts. "Several of these excellent researchers have now returned to China as professors," she said. She is also an advisory board member for the new Combustion Energy Center at Tsinghua University in Beijing. "It is exciting to be able to work with several high-ranking Chinese universities at a time when energy is so crucial to future development," said the professor. (source: [China Daily](#))

Young Spanish scientist has a career 'made in China'

"Made in China" is a label Mario Lanza is happy to wear. The scientific researcher from Spain came to Peking University as a final-year PhD student three years ago. Today he is a scientist thankful to the country he has made his home. "I'm a made-in-China scientist because many of the things that I learned, I learned here," he said. Lanza, 30, earned a degree in electronic engineering in 2006 and a PhD in electronics in 2010 at the Autonomous University of Barcelona. Fluent in Spanish, Catalan, English, German - and now Mandarin - he worked at the University of Applied Sciences in Deggendorf, Germany, and at the University of Manchester in England before heading to Stanford University in the US, where he combined research with teaching computer science, telecommunications and electronic engineering. In 2009 he made his move to China on a 400-euro monthly stipend despite offers of better-paid scholarships elsewhere. "At that time, everyone was talking about China, saying it would become an economic leader in a few years, so I thought maybe it was the time to come." The China he saw on arrival was quite different to what he had expected - including excellent laboratory equipment, sometimes better than in prestigious Western universities. (read more in source: [China Daily](#))

Lack of skilled staff hindering growth

More than one third of Chinese businesses are struggling to recruit skilled workers, posing a major challenge for their growth prospects, a report by international accounting firm Grant Thornton said. Almost 50 percent of enterprises from industries such as technology have reported difficulties in hiring skilled workers, the report said. The survey suggests a lack of general work skills and specific technical skills is the key factor making recruitment difficult. (source: [China Daily](#))

Career growth tied to job after school

Among overseas returnees, those employed by multinational or foreign companies and those who start their own businesses enjoy better career development in China, according to analysts. Thanks to the country's rapid development, demand for such returnees from multinational and foreign companies has grown in recent years. Many people who have returned are now senior executives in these companies, said Wang Huiyao, director-general of the Center for China and Globalization in Beijing. Wang's conclusion is based on the results of a report conducted by his research team in 2012. (source: [China Daily](#))

* * *

Research infrastructures

Jiaolong set to dive for greater success

The deep-sea submersible, Jiaolong, has undergone a series of upgrades and will head to the South China Sea and the Pacific Ocean in June for a series of dives. "Jiaolong is entering a trial period ahead of a busy schedule," said Liu Feng, director of the China National Deep Sea Center. Liu said the first dive will be in the South China Sea in June, for scientific research, while the rest will likely be conducted in two areas in the western Pacific in July, pending approval by the International Seabed Authority for China's application to explore for cobalt-rich ferromanganese crusts. (source: [China Daily](#))

China to build earthquake warning system

China is planning to build a national earthquake monitoring and warning system in five years. While the system would never be able to forecast an earthquake, it could detect quakes and notify people within seconds before seismic waves actually hit them, according to an anonymous official with the China Earthquake Administration (CEA). (Source: [China Daily](#))

* * *

International S&T relations

Portugal-China to strengthen scientific research ties

A senior Portuguese official said that his nation will expand scientific and research cooperation with China, noting that the two countries will jointly establish a research center on new materials. Nuno Crato, Portugal's minister of education, higher education and science, said during his visit to China that the two sides will sign a pact over the opening of the research center, which will sit in Zhejiang University in east China's city of Hangzhou. The center is designed to promote the research and industrialization of new materials such as biological medical, eco-environment and nanometer materials in the two countries, Crato said. Based on their respective advantages, the two sides will strive to smooth the process of turning lab research fruits into industrial mass production, he said. (source: [Xinhua net](#))

* * *

* *

*