



Science, Technology and Education News from China

Number 58 – April 2009

Please note that the previous newsletters can be downloaded from the website of the Embassy of Switzerland in China: www.eda.admin.ch/beijing¹. To subscribe/unsubscribe or send us your comments, please send an email with the corresponding subject to shu.zhou@eda.admin.ch.

Introduction

Scientists in space technology see the 2nd navigation satellite shoot up into the sky. Stem cell research in China has been given more light and is seeing more results. A study shows that the forests in China are helping reducing CO2. Archaeologists are using robots to find hidden treasures.

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¹ Please click on the blue texts to activate the hyperlinks to either email addresses or related websites.



Policies

Introduction the Chinese Academy of Social Sciences (CASS)

Since 1977, CASS has been separated from the Chinese Academy of Sciences (CAS) and now functions as a think tank for the Government and as a research base in social sciences and humanities.

- Funding (only about 20% of the funds available for research in the area of social sciences goes to CASS, the rest goes directly to the Universities.

- CASS has five academic divisions:

- Philosophy, Literature and History
- Economics
- Law, Social and Political Studies
- International Studies
- Marxist Studies

It is now made up of 35 research institutes, more than 90 research centres, and one graduate school (Graduate School of Chinese Academy of Social Sciences); CASS is also in charge of 105 national academic communities throughout China.

- International cooperation has increased since the strategy of "Going Global" started in the 1990's. In 2007, the number of international academic exchanges totalled 4460 person-times. CASS also welcomed 1429 person-times of international scholars to China that were invited by other Chinese institutions. CASS organised 74 International forums in 2007, compared to 104 in 2006. CASS currently has 55 Framework Agreements with international educational institutions, 33 Agreements with Equal Mutual Exchange, and has collaboration with 11 international education foundations, such as the Konrad Adenauer Foundation in Germany. Economics, international relations, history, law, sociology, literature and linguistics were the top seven disciplines with the largest number of exchanges in 2007. In terms of annual total number of exchanges, the top ten countries were Japan, the United States, the Republic of Korea, Russia, Germany, France, the United Kingdom, Italy, Thailand, and India.

CASS has recently expressed its interest for closer cooperation with Swiss institutions. University of Zurich, acting as the Associate Leading House in the Sino-Swiss Science and Technology Cooperation Program, is currently exploring ways to tie the links with this important institution.

Source: CASS Annual Report 2007.

News

1. [Research Fellowship for International Young Scientists \(Trial Implementation\)](#)

(NSFC, 01-04-2009)

The Research Fellowship for International Young Scientists (hereafter abbreviated as the Research Fellowship) is oriented to encouraging excellent international young scientists to conduct basic research in the field of natural sciences in mainland China, so as to promote the research collaboration and academic exchanges between Chinese and international young scientists. The procedure for a trial implementation is published on the National Natural Science Foundation of China website.



2. China's Biggest Large-Scale Scientific Facility SSRF Completed

(People's Daily, 01-05-2009)

On April 29, China's biggest ever large-scale scientific facility - the Shanghai Synchrotron Radiation Facility (SSRF) - was officially completed in Shanghai Zhangjiang Hi-tech Park and opened to domestic and foreign users. The facility involves a total investment of about 1.2 billion yuan. Hospitals use X-ray to take photos of human skeletons and blood vessels while the SSRF similarly uses ultra-strong X-ray to bring an "imaging revolution" to our understanding of the micro-world. It makes use of synchrotron radiation light, which is 100-million-fold brighter and one-million-fold stronger than light from common X-ray apparatus, to image microcosmic substances. It is regarded as an irreplaceable tool in the study of many cutting-edge subjects and is the most advanced of its kind in these subjects. Among all 20 third-generation synchrotron radiation light sources that have been built worldwide, China's SSRF ranks fourth in terms of power, preceded only by Japan, the US and Europe.

3. CAS Academician: China Should Strengthen International Co-op in Large Scale Astro-observation Research

(CAS, 30-04-2009)

"China's astronomy research should be more active in international cooperation, so as to shorten the gap with the advanced astronomy research in the world," said Chen Jiansheng, researcher from China's National Astronomical Observatories (NAOC) and academician of the Chinese Academy of Sciences (CAS), in the Commemorative Conference for The International Year of Astronomy 2009. China may participate in international construction of large scale astronomy equipments selectively, Chen suggested. The cooperation will help to improve China's science and technology research, and to promote the development of the country's high-tech and fabrication techniques. [...] The International Year of Astronomy 2009 is a global effort initiated by the International Astronomical Union (IAU) and UNESCO to help people rediscover their place in the universe by engaging a personal sense of wonder and discovery.

4. China Launches 2nd Navigation Satellite

(Xinhua, 27-04-2009)



China successfully launched its second navigation satellite early Wednesday, as part of the country's independent global satellite navigation system. [...] The system, code named "COMPASS", is a crucial part of the country's space infrastructure for providing navigation and positioning services in transportation, meteorology, petroleum prospecting, forest fire monitoring, disaster forecast, telecommunications and public security among others. It can bring significant social and economic benefits, the official said. The system can help clients know their location at any time and place with accurate longitude, latitude and altitude data, and will offer "safer" positioning, velocity, timing communications for authorized users. [...] China launched the first "Compass" navigation satellite into geostationary orbit in April 2007 to build up its own positioning system following the United States' Global Positioning System (GPS), the Galileo Positioning System of Europe and Russia's Global Navigation Satellite System (GLONASS).

5. Chinese Scientists Look For New Way to Repair Damaged Brain Cells

(Xinhua, 23-04-2009)

Chinese neuroscientists are beginning new research on changing the nature of brain neurons after disproving theories that neurons can change themselves to replace cells damaged by strokes or by diseases like Alzheimer's or Parkinson's. [...] Yang Zhengang, of Shanghai-based Fudan University, who led the study, said that his future study would focus on exploring genetic modification methods to trigger changes in cells that could replace the functions of the damaged ones. [...]



6. [China Looks to Expand Stake in Stem Cell Technology](#)

(Reuters, 08-04-2009)

China will build Asia's biggest base to develop uses for stem cell medical technology, which the health minister described as having huge potential for development, reporter said. [...] China is looking to expand its stake in this increasingly competitive area, where it has few of the regulatory controls and controversies that have constrained research elsewhere. [...] China's base will be in Taizhou, an area of Jiangsu with many medical and pharmaceutical businesses, and will cover 20,000 square meters and include a clinic, said the report. It did not say when the project will be completed.

7. [Injectable Testosterone May Provide Effective Male Contraception](#)

(Newswise, 30-04-2009)

Researchers in China may have found a method for male contraception that is effective, reversible and without serious short-term adverse effects according to a new study accepted for publication in The Endocrine Society's Journal of Clinical Endocrinology & Metabolism (JCEM). [...] Males were injected monthly with 500 mg of a formulation of testosterone undecanoate (TU) in tea seed oil for thirty months. Results showed a cumulative contraceptive failure (pregnancy) rate of 1.1 per 100 men in the 24-month efficacy phase. No serious adverse events were reported and reproductive function returned to the normal fertile reference range in all but two participants. [...]

8. [China's Forests Have Role in Soaking Up CO2: Study](#)

(Reuters, 22-04-2009)

China's forests and other vegetation absorbed around a third of its greenhouse gases in the late 20th century, but the rate may now be falling because of a surge in industrial emissions, scientists said. [...] Kevin Robert Gurney, a carbon expert at Purdue University in Indiana, welcomed the study as helping understanding of China. "We haven't had a really good handle on Chinese emissions until now," he said. More than 190 nations aim to agree a new U.N. climate treaty by the end of 2009 that may include credits for policies to slow deforestation. Under the new treaty, Gurney said that China could only claim credit for a tiny amount of the absorption -- from deliberate forest plantings. The U.N. Climate Panel says that greenhouse gases are heating the planet and will bring heatwaves, more powerful storms, extinctions of animals and plants and rising ocean levels.

9. [Robot to Creep into Ancient Tomb for Exploration](#)

(China Daily, 09-04-2009)

A robot specially designed for underground exploration is opening up a lost world of historic treasures for Chinese archaeologists. Scientists are planning its second excursion next week when it will go into an ancient tomb in Xi'an, China's ancient capital in the north-western Shaanxi Province. [...] Equipped with infrared lights and a digital camera, the robot could "see" clearly underground, and with help of a sensor, it could identify gases in the environment, and send back data, including temperature and humidity readings, [...] Chinese archaeologists already use robots widely in underwater explorations.



Events (May – October 2009)

May 2009

Minimal Landscapes Exhibition

Date: 11-15 May 2009

Place: Peking University, College for Life Sciences

- An exhibition by the scientist/artist Prof. Ariel Ruiz I Altaba, organized by the Embassy of Switzerland in Beijing and co-sponsored by IBSA Biomedical Company in Switzerland. For participation at the opening ceremony on May 11, 2009, 6pm, please R.S.V.P. to Shu.Zhou@eda.admin.ch by May 7, 2009

International Science and Art Exhibition 2009

Date: 15-20 2009

Place: Shanghai Pudong Expo, No.201 Hehuan Road, Pudong New Area, Shanghai

- The 2009 Exhibition will showcase artistic beauty in scientific discovery and use Hi-tech tools to display artistic beauty. Various art techniques describe science and technology. All public participants from 7-year olds to 77-year olds are welcome to enjoy a wonderful experience.

CHITEC Exhibition 2009 – the 12th China Beijing International High-tech Expo

Date: 20 – 24 May 2009

Place: Beijing

- Annual high-tech expo in Beijing

2009 China International Weighing Instrument Exhibition

Date: 5 May 2009

Place: Shanghai

- Electronic Balance Weighing System Weighing Instrument

International Solar Energy & PV Projects (Shanghai) Exhibition, SNEC International Solar and PC Conference

Date: 6 May 2009

Place: Shanghai

- Solar energy, PV project

Shanghai Int'l Exhibition & Seminar on New Tech. and New Equipment of the Starch Industry 2009

Date: 13 May 2009

Place: Shanghai

- Starch and Related Productions and Equipment

The 3rd China (Beijing) Int'l Exhibition and Symposium on Police and Anti-Terrorism Technology and Equipment

Date: 19 May 2009

Place: Beijing

- Police vehicles; Supervising, checking and monitoring equip.

2009 Int'l Equipment Exhibition & Technical Seminar of Forensic Science, Narcotics Control and counter -Terrorism

Date: 20 May 2009

Place: Beijing

- Equipments & products for forensic science, investigation, drug control and anti-terrorism, police vehicles, police protection, etc

The 3rd Shanghai Int'l Aerospace Technology and Equipment Exhibition

Date: 26 May 2009

Place: Shanghai

- S & T cooperation and exchange



Aviation Tech. Expo China 2009

Date: May 2009

Place: Beijing

- Aviation Equipment

Int'l Conference on Scientific Computation and Differential Equations

Date: May 2009

Place: Beijing

- Academic Exchange

16th Real Time Conference, IEEE-NPSS Technical Committee on Computer Applications in Nuclear and Plasma Sciences

Date: May 2009

Place: Beijing

- Academic Exchange

Int'l Conference on Mathematical Control Theory

Date: May 2009

Place: Beijing

- Academic Exchange

June 2009

The 11th China Int'l Environmental Protection Exhibition and Conference- CIEPEC 2009

Date: 1 June 2009

Place: Beijing

- Environmental Protection

Tenth Int'l Conference on the Science and Application of Nanotubes

Date: June 2009

Place: Beijing

- Academic Exchange

July 2009

1st Dalian International Education and Cultural Innovation Industry Fair

Date: 17- 20 July 2009

Place: Dalian World Expo Centre

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Int'l Congress of Biochemistry and Molecular Biology

Date: 20 July 2009

Place: Shanghai

- Academic Exchange

23th Int'l Congress on Conservation Biology

Date: July 2009

Place: Beijing

- Academic Exchange

Young Scientists Program 2009

Date: July 2009

Place: Shanghai

- Academic Exchange



Int'l Symposium on the Family Zingiberaceae

Date: July 2009

Place: Yunnan

- Academic Exchange

2009 Symposium on Computational Chemistry and HPC Applications

Date: July 2009

Place: Haerbin

- Academic Exchange

August 2009

The 5th China Reproductive Health New Technologies & Products Expo

Date: 5 August 2009

Place: Beijing

- Reproductive Health

The 17th Int'l Congress of the IFAA

Date: August 2009

Place: Beijing

- Academic Exchange

September 2009

Int'l Conference on Nanoscience and Technology, China 2009

Date: September 2009

Place: Beijing

- Academic Exchange

October 2009

13th Int'l Fire Protection Equipment, Technology Conference & Exhibition China

Date: 13 October 2009

Place: Beijing

- Fire equipment, Rescue Equi., Fire Pumps, Fire Resistant Building Materials, Design for Five Protection Engineering

The 7th China Int'l Exhibition for Roofing & Waterproofing Tech.

Date: 14 October 2009

Place: Beijing

- Roofing & Waterproofing Tech

The First Int'l Conference & Exhibition on Reagents and Their Application

Date: 14 October 2009

Place: Beijing

- Reagents and Their Application

The 11th Multinational Urban Traffic Conference and Exhibition

Date: 18 October 2009

Place: Beijing

- Traffic planning and urban development, ITS

The 1st China (Beijing) Int'l Cleaning Energy Technology & Equipment Exhibition and Summit of Conserving Energy & Reducing Emissions

Date: October 2009



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Federal Department of Foreign Affairs

Embassy of Switzerland in China
Science, Education, and Health section



- Place: Beijing
- Solar power technology

Source: www.most.gov.cn