# CHINA SCIENCE AND TECHNOLOGY NEWSLETTER

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## News Updates - International S&T Cooperation

### 1st Inter-agency Meeting on China-ROK Innovation Park Held in Beijing

The first session of China's inter-agency meeting on the China-ROK Innovation and Entrepreneurship Park was held in Beijing on April 29th 2016. The meeting reviewed progress so far, discussed relevant matters and

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policy measures, and made arrangements for key areas in the upcoming work.

Science Minister Wan Gang conveyed messages from Premier Li Keqiang and other leaders of the State Council before elaborated on the organization and rules of work of the inter-agency mechanism. In line with requirements of the State Council, the Chinese Ministry of Science and Technology signed a memorandum of understanding on cooperation in innovation and entrepreneurship with the South Korean Ministry of Science, ICT and Future Planning. To build up the Innovation Park, Minister Wan put forward three requirements. First, it is important to better understand the overall interest and recognize the importance of the project. Second, efforts should be made to study on policy measures and initiative proposals so as to provide momentum for the project. Third, further support should be given to promote innovation in Sichuan Province to advance the Innovation Park and the Independent Innovation Demonstration Zone in Chengdu.

(Source: Website of the Ministry of Science and Technology, May 9, 2016)

## Vice Minister Yin Meets Ambassador Robert Holleyman

Yin Hejun, Vice Minister of Science and Technology met Robert Holleyman, visiting U.S. Deputy Trade Representative with the rank of Ambassador in Beijing on May 4th, 2016.

Yin noted that China has made much headway in many aspects since the reform and opening-up drive. The country still faces challenges of population growth, environment and energy. Therefore China must put innovation at the core of the national development scheme to enable the leading role of S&T innovation (STI) in the transformation of economic growth model. He made a highly positive comment on the constructive role of Sino-U.S. innovation dialogue in building mutual trust, exchanging views of policies, and sharing best practices. He hoped the two sides would continue leveraging the platform to explore topics of common interest.

Ambassador Holleyman expressed his appreciation of China's achievements in STI, saying the two sides have fruitful cooperation through platforms of the Innovation Dialogue and U.S.-China Clean Energy Research Center. The two countries should strengthen communication, exchange best practices and engage in cooperation of mutual benefit in areas of innovation incentives, global challenges of energy and environment, and the growth of emerging industries.

(Source: Website of China International S&T Cooperation, May 9, 2016)

## Director General of International Cooperation Jin Xiaoming Meets Vice Chancellor of Nottingham University

Jin Xiaoming, Director General of the Department of International Cooperation, Ministry of Science and Technology met David Greenaway, visiting Vice Chancellor of the University of Nottingham on April 12, 2016. They had a thorough exchange of views on Sino-British S&T cooperation and innovation under the 13$^{th}$ Five-Year Plan. Jin said China is now implementing reforms of the management system of national S&T Programs, seeking to build a management platform to facilitate the commercialization of scientific discoveries and stimulate creativity of businesses. Meanwhile, the STI plan in the 13$^{th}$ Five Years underlines innovation-driven development, improved pro-innovation environment, further basic research and crucial technology R&D, as well as personnel training and international cooperation. Jin added that Sino-British ties are now in a golden age

with increasing interest in S&T cooperation. The two sides should engage in cooperation in more key areas, making constant innovations in cooperation mechanisms.

Vice Chancellor Greenaway said Britain and China have a lot in common when it comes to the development and planning of STI. He introduced the in-depth cooperation between Chinese universities and businesses and the University of Nottingham. His university has established joint research centers in Shanghai, Shenzhen, Guangdong province and Jiangsu province, engaging in fruitful cooperation with Chinese partners in areas of new materials and low-carbon technology. The Vice Chancellor said his university would continue expanding cooperation with China.

(Source: Website of China International S&T Cooperation, May 5, 2016)

## 1st Workshop on China-Ontario Young Scientists Exchange Program Held

Upon invitation of the Ministry of Research and Innovation of Ontario in Canada, delegates from China Science and Technology Exchange Center (CSTEC) under the Ministry of Science and Technology (MOST) attended the 1st Workshop on China-Ontario Young Scientists Exchange Program from April 26 to 28, 2016. The Chinese side elaborated on the background, the plan and latest progress of the management reform of China's S&T Programs as well as MOST's success in delivering exchange programs with the United States, Australia and New Zealand.

The Canadian side extended a warm welcome to the Chinese delegation, hoping to strengthen communication and coordination with the Chinese side in an effort to successfully implement the first China-Ontario Young Scientists Exchange Program from July to August in 2016. During the visit, the two sides also exchanged views on detailed arrangements of the Program and the progress of governmental cooperation projects for the year 2016. Both had reached consensus on future cooperation in science popularization.

(Source: Website of the Ministry of Science and Technology, May 10, 2016)

## Benchmarks of Science Literacy Issued

The State Council designated the Ministry of Science and Technology, the Ministry of Finance,the Publicity Department of the CPC Central Committee to lead the other 17 departments in the formulation of the Benchmarks of Science Literacy of Chinese Citizens (the "Benchmark"). This is to fulfill such tasks as specified in the Law on Popularization of Science and Technology and the Outline on the National Medium- and Long-term Program on Science and Technology, and the Outline on Action Plan of Science Literacy 2006-2010-2020. The Benchmark features a system of monitoring indicators which facilitate surveys of science literacy and data collection of science popularization on a regular basis and provide reference for China to measure progress made.

The Benchmark was formulated based on expert review, tests and assessment in pilot provinces, and a broad consensus obtained after extensive opinion polls. The Benchmark has now been promulgated.

(Source: Website of the Ministry of Science and Technology, April 18, 2016)

## National Science Week 2016 Held Successfully

On May 21, 2016, National Science Week 2016 and Beijing Science Week were successfully concluded in the Beijing Cultural Palace of Nationalities for the main-venue activities. The event was co-sponsored by Ministry of Science and Technology, the CPC Central Committee Publicity Department, and China Association for Science and Technology. The present Science Week was themed on "Innovative Growth, Shared Development", while the main-venue activities were held in the form of a large-scale science popularization exposition. The event demonstrated the main achievements of advancement of shared economic development through science and technology innovation, showcasing results of construction of STI centers across the country.

A total of 200 plus interactive projects at the main venue of Beijing Science Week have registered over 80,000 visits to the sites for participation or experiencing. There have been 30 million counts of watching live broadcast of main-venue activities or browsing such news through Xinhua News Agency Network or China SciTech Network as well as Weibo micro-blogging or WeChat interaction through Beijing Science Week 2016, SciTech Beijing, or Pop Science Beijing. In addition, over 30 exhibition items have been rated Public Favorite Popular Science Projects, including BMI Calculator, VR military experience, ultra high-definition 10k display, astronaut cabin walkout virtual experience, Malaysia virtual drilling platform, Five hundred meters Aperture Spherical Telescope, balcony garden kit, full-nutrition wolf-berry product series, and charming dancers, among others.

The main-venue activities of the present Beijing Science Week have attracted individuals, families, communities, businesses and government-budgeted institutions, and schools and universities to come to the site in groups. The visitors were from more than 10 provinces, municipalities or autonomous regions, including Beijing, Tianjin, Hebei, Shanxi, Shandong, Anhui, Sichuan and Inner Mongolia, with many from other countries. Visitors of varied education background, age brackets, regions and nationalities gathered in the Science Week with the 6,000 square meters gallery being immersed in intense atmosphere of STI amid interaction between various cultures.

A total of 12 national massive scientific devices appeared in front of the public, including Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST),

Shanghai Synchrotron Radiation Facility (SSRF) - one of the 3G synchrotron radiation light sources, and Experimental Advanced Superconducting Tokamak (EAST), among others. Seven Beijing-based massive start-up spaces with 40 plus items of new technologies and products made their debut during the exhibition, including Yingchuang Dream Workshop, 369 Cloud Factory, Cocoa Bean Innovation Incubation Platform, Vstartup, Gehua Creative Design Center, Health Work, and UR Work.

The "Belt and Road" Science Popularization Station at the exhibition offers information regarding social customs and habits of countries alongside the belt and road. The Popular Science Amusement Park displays nearly 100 concerning STI, including EEG tortoise-hare race, manual 3D reconstruction desktop, amusement VR smart wiggle & waggle bike, smart bus stop e-display, and wearable smart cloud alerting device for the elderly.

Based on the strengths of the new media communication, the Beijing Science Week main-venue theme is launched on mainstream new media like Xinhua News Agency Network and China Science & Technology Network, providing live broadcast online, request broadcast and reporting with 300 plus articles published and 30 million counts of record high traffic. With Weibo micro-blogging public accounts of Beijing Science Week 2016 and Popular Science Beijing, the public can follow the public accounts to enjoy exploring the Science Week; over 60,000 people have followed the accounts in 8 days. Also, 36 Weibo or WeChat accounts were providing continuous reports, including Hot Topics Today, Dine & Wine Beijing, among others, with click counts reaching over 600,000 for reading and comment. The Online Exhibition Hall of Science Week Beijing WeChat Public Account has been created to allow the public to continue to experience the excitements of the never-closing Science Week via the online Hall after the event was concluded.

(Source: Website of the Ministry of Science and Technology, May 26, 2016)

## In Retrospect: Progress of Science Popularization during 12th Five-Year Plan Period

During the 12th Five-Year Plan period, the team of science popularization has continued to grow, with increased budget allocated, marked improvements in infrastructure, multiple means of media communication, and gradually richer content of science dissemination activities.

**1. Increased science literacy**

During the 12th Five-Year Plan period, the popular science undertaking of this nation was to introduce knowledge of natural sciences and social sciences to the general public and. With broad participation of all social circles, much progress has been made in dissemination of S&T knowledge. According to data of the 9th Science Literacy Survey of China, the percentage of population with science literacy in 2015 hit 6.2%, or an increase of 90% from the 3.27% in 2010, measuring up to the above 5% goal towards the end of the 12th Five-Year Plan. The gap between China and major developed countries has been further narrowed in this regard and the present achievements serve to lay a solid foundation for enhanced science literacy during the 13th Five-Year Plan period.

**2. Steady growth of science popularization team**

According to the latest data of China Science Popularization Statistics 2015, the personnel of science popularization in China have seen continued growth. The total number has reached 2,012,300 nationwide with 14.71 staff of science popularization in every ten thousand people, up by 14.89% and 12.63% respectively from 2010. The number of part-time personnel has, inter alia, grown to 1,777,000 from 1,528,000 with the number of registered volunteer personnel of science popularization nationwide increasing from 2,390,000 in 2010 to 3,370,000 in 2013.

**3. Increased budget of science popularization**

The main source of science popularization funds still came from the government. The funds raised for

science popularization in the whole society in 2014 totaled RMB15.003 billion, up by 50.76% from 2010; the government fund allocation accounted for 76.01%, nearly 8% higher than the 68.42% in 2010. The whole-country science popularization special funds per capital stood at RMB 4.68, an increase of RMB 2.07 from 2010 or an increase of 78.97%.

**4. More popular science facilities with growing participants**

During the 12th Five-Year Plan period, China has stepped up efforts in construction of popular science galleries or venues. Now, there are 1,058 science galleries and science museums nationwide, an increase of 244 from 2010 or 29.98%. The number of visits reached 141,069,300, an increase of 78.16% from 2010. The area of popular science galleries or venues per ten thousand people is 53.32 square meters, up by 43.46% from 2010.

According to relevant personnel in Ministry of Science and Technology, China has completed construction and renovations of 42 brick-and-mortar science galleries in five years. At present, the qualified science galleries nationwide total 155 while 50 more are being built; a total of 220 mobile science galleries have been developed with a modest estimate of 1,071 popular science caravans nationwide, while China Digital Science and Technology Museum has daily traffic counts of over 2.2 million for web page browse. Moreover, the central financial budget in 2015 earmarked RMB346 million as subsidies for providing the public with free access to 92 science and technology museums across the country. With construction of the popular science education bases in steady progress, the number of science galleries had grown to 724 in 2014 from 555 in 2010. Now, the number of national-level popular science bases has exceeded 5,000 with vigorous growth registered in popular science bases including national land and resources, environmental protection, forestry, seismology, and meteorology, among others.

**5. Over 6,712 research institutes open to public**

During the 12th Five-Year Plan period, there have been enriched science activities for the general public in China, with 622 million counts of civic participation in popular science events in 2014. There are over 6,712 research institutions and universities that offer general public free access to science activities, an increase of 33.3% from 2010.

The popular science activities have also attracted a number of overseas institutions of popular science. In the main venue of the 2015 Popular Science Day, 37 science organizations from 23 countries and Macau and Taiwan regions have brought about 50 interactive experience projects, including Harvard University, Switzerland University, and the British Royal Society of Chemistry.

**6. Number of popular science websites reaching 2,652**

During the 12th Five-Year Plan period, the communication of popular science in China has assumed multiple forms with conventional means of communication such as books, periodicals, and radio and TV columns for popular science in steady progress. More importantly, the new media represented by mobile internet has seen sharp increase, becoming a major form of science communication. Meanwhile, the total number of popular science websites nationwide reached 2,652, an increase of 24.7% from 2010.

(Source: Website of the Ministry of Science and Technology, March 7, 2016)