

# CHINA SCIENCE AND TECHNOLOGY NEWSLETTER

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## **Special issue: Innovation becomes the keynote of international S&T cooperation**

- **President Xi Underlines International Innovation Cooperation**
- **Chinese, Brazilian Presidents Hail Launching of CBERS**
- **Minister Wan Gang Emphasizes the Importance of Collaborative Innovation**
- **Seek New Breakthroughs through Cooperation**
- **APEC PPSTI Meeting Opens in Beijing**
- **2<sup>nd</sup> China-ASEAN Forum on Technology Transfer and Collaborative Innovation Held in Nanning**
- **Construction of Largest Aperture Synthesis Radio Telescope Discussed in Guizhou**
- **China-Italy STI Week Held in Italy**

## **President Xi Underlines International Innovation Cooperation**

The 2014 Pujiang Innovation Forum opened in Shanghai on October 25, 2014. Chinese President Xi Jinping and Russian President Vladimir Putin extended congratulations on the forum.

President Xi said in his congratulatory message that “science drives development and innovation changes the world”. In the unfolding scientific revolution and

industrial changes, science and technology has become an increasingly important contributor to socioeconomic progress. China is implementing a strategy of innovation-driven development and promoting comprehensive innovation with science and technology as the core. China will strengthen collaboration with international partners and actively engage in the global

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innovation network to address common challenges and realize common development with other peoples in the world.

President Xi hoped that with the theme of "Coordinated Innovation and Sharing Opportunities" this year, the forum could become a platform for dissemination of innovation ideas and a bridge for innovation cooperation.

President Putin said both China and Russia have unique economic potential and a long-standing tradition of cooperation in many fields. It is of great significance to promote cooperation, increase mutual investment, launch promising innovation projects, and expand the direct communication between the two countries' science

and business communities. Putin believed the forum would inject vigor to the China-Russia Comprehensive Strategic Partnership of Coordination.

Initiated in 2008, the Pujiang Innovation Forum is an annual event organized by the Ministry of Science and Technology and the Municipal Government of Shanghai. The forum has been centering around the theme of innovation and national needs in a global perspective, with the focus on hot topics relevant to innovation. Russia was the Guest Country of Honor for the 2014 forum.

(Source: Science and Technology Daily, October 26, 2014)

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## Chinese, Brazilian Presidents Hail Launching of CBERS

Chinese President Xi Jinping and his Brazilian counterpart Dilma Rousseff exchanged congratulatory messages on the launch of the Chinese-Brazilian CBERS-4 satellite on December 7, 2014 from China's Taiyuan base.

In his message, Xi noted that the CBERS (China-Brazil Earth Resources Satellite, CBERS) Program has "set a successful precedent for developing countries to conduct cooperation in space industries". The successful launch of the CBERS-4 satellite by Long March-4B rocket coincided with the 200<sup>th</sup> Long March rocket family launch, Xi said, adding that it demonstrated the latest achievements of bilateral science and technology cooperation between the two countries. The Chinese president hoped that the two countries would actively implement a decade-long bilateral space cooperation plan, strengthen technological

innovation, promote the China-Brazil comprehensive strategic partnership, and bring benefit to the peoples.

For her part, Rousseff said the CBERS Program showed potential of cooperation in science, technology and innovation between developing countries. It also carries historic significance since Brazil and China will share the satellite images with African and Latin American countries under the spirit of South-South Cooperation, she added. The launch of the CBERS-4 satellite strongly stimulated the development of Brazil-China comprehensive strategic partnership, she said, adding that Brazil will firmly support the CBERS Program.

(Source: Science and Technology Daily, December 8, 2014)

## Minister Wan Gang Emphasizes the Importance of Collaborative Innovation

At the 2014 Pujiang Innovation Forum held in Shanghai in late October, Dr. Wan Gang, Vice Chairman of the National Committee of CPPCC and Minister of Science and Technology of China, and Mr. Andrei Fursenko, Science Adviser to Russian President, read the congratulatory letters of their respective leaders of the two countries and delivered keynote speeches.

Wan Gang noted that with scientific and technological innovation high on the agenda, the CPC Central Committee and the State Council require government departments to get a clear picture of world trends, boost innovation capability, and make plans with global vision, in an effort to make tangible progress in implementing innovation-driven strategy.

Wan Gang said that deepening international cooperation in the field of science and technology is an important initiative to promote collaborative innovation and share innovation opportunities. Over the years, China has taken

an active part in multilateral scientific and technological collaboration and international mega-science projects, and has built sound innovation network with both developed and developing countries. China is at a critical historical juncture as it is adjusting its economic structure and shifting economic growth model. To pursue innovation-driven development, China needs to pursue wider and deeper international cooperation, draw on experiences of other countries in reform and innovation, and tackle problems arising from development through an open innovation and collaboration.

The forum was co-sponsored by the Ministry of Science and Technology and Shanghai municipal government. And the opening ceremony was chaired by Mr. Xu Guanhua, Chairman of Pujiang Innovation Forum and an academician of Chinese Academy of Sciences.

(Source: Science and Technology Daily, October 25, 2014)

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## Seek New Breakthroughs through Cooperation

### --Minister Wan Delivers a Speech at 3<sup>rd</sup> Open Innovations Forum in Moscow

Dr. Wan Gang, Vice Chairman of the National Committee of CPPCC and Minister of Science and Technology, attended the third “Open Innovations” Moscow International Forum for Innovative Development at the invitation of Russia, and delivered a keynote speech at the Partner Country Innovation Dialogue.

In his speech, Wan said science and technology is the engine of development, and innovation is the soul of mankind’s progress. This forum, centering on open innovations, is of great significance.

In a brief review of China-Russia collaboration in science and technology, Wan Gang noted that growing wider, deeper and more diverse over the years, the scientific and technological cooperation has become an important part of the comprehensive strategic partnership of coordination between the two countries. Wan said it’s a shared responsibility of all scientists across the world to achieve sustainable development of mankind. In the face of the unfolding scientific and industrial revolution in the world, China and Russia should promote

collaborative and open innovation, in a bid to make new breakthroughs. He suggested the science authorities of the two countries conduct a strategic, in-depth cooperation, bolster collaboration on major projects, and boost non-governmental ties as well.

Mr. Dmitry Livanov, Minister of Education and Science of Russian Federation, first expressed his appreciation in his speech to China for attending the events of the forum as the partner country. He said China's participation demonstrates that cooperation in science, technology and innovation is playing an increasingly prominent role in the relations of the two countries. He believed that closer interaction between scholars and experts under the framework of the forum will add new impetus to bilateral collaboration in science and education, and bring bilateral collaboration in science, technology and innovation to a

new level.

Mr. Andrei Fursenko, Adviser to Russian President and former Minister of Education and Science of Russia, Academician Zhores Alferov, Vice President of Russian Academy of Sciences and Nobel Prize laureate, Mr. Viktor Vekselberg, President of Skolkovo Foundation, and Professor Xue Qikun, Vice President of Tsinghua University, and other Chinese representatives also addressed the forum, proposing new recommendations for the two countries' collaboration in science, technology and innovation.

The forum was sponsored by Russian government and China was invited to attend as the only partner country. It had around 800 participants from various communities in science, investment, trade, and education across the world. (Source: Science and Technology Daily, October 16, 2014)

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## **APEC PPSTI Meeting Opens in Beijing**

On September 17, 2014, the fourth meeting of Policy Partnership on Science, Technology and Innovation (PPSTI) of APEC was held in Beijing. The theme of APEC 2014 was "Shaping the Future through Asia-Pacific Partnership".

APEC this year had nearly 100 participants from 21 APEC member economies including China, Japan, South Korea, Malaysia, New Zealand, Russia and the US, APEC Secretariat, and Macau and the Association of Pacific Rim Universities (APRU).

Dr. Cao Jianlin, Vice Minister of Science and Technology, said in his speech that China is willing to boost STI policy dialogues, exchange ideas on STI-friendly practices, draw on each other's experience,

and promote substantive project cooperation and joint research. He addressed that particularly in basic and frontier sciences and technologies related to public well-being, we need to share scientific and technological resources, further open up major infrastructure facilities, and promote scientist interflow within APEC region, and boost exchanges among young scientists and their capacity building.

The meeting discussed the latest advances in STI cooperation within APEC framework, explored how to bring the private sector to be an active part of PPSTI activities and issues concerning PPSTI development, and reviewed the cooperative achievements over the past year. The meeting adopted APEC innovation-driven

development initiative, aiming to strengthen scientific capacity building, establish an innovation-friendly ecosystem, boost scientific and technological ties within the region, and promote the sustainable economic and social development of APEC economies and region through policy dialogues and practical collaboration between government, academia and industry. White Paper of Internet of Vehicles was released, APEC Science Prize for Research, Innovation and Education presented, and PPSTI cooperation achievements exhibition held on the sidelines.

The three priority topics of APEC 2014 are advancing regional economic integration, promoting innovative development, economic reform and growth, and strengthening comprehensive connectivity and infrastructure development. As the highest-profile mechanism with the broadest participation in the Asia-pacific region, APEC is vital to promoting economic integration, and economic and technological cooperation within the region.

(Source: Science and Technology Daily, September 18, 2014)

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## **2<sup>nd</sup> China-ASEAN Forum on Technology Transfer and Collaborative Innovation Held in Nanning**

Hosted by the Chinese Ministry of Science and Technology (MOST) and the People's Government of Guangxi Zhuang Autonomous Region, the 2nd China-ASEAN Forum on Technology Transfer and Innovation was convened in Nanning, China on September 15-19, 2014.

The China-ASEAN Technology Transfer Center organized a series of activities around the theme of “innovation, cooperation and development”, including the High-level Forum, the Seminar on Science and Technology Innovation Policies, the Forum on Agricultural Science and Technology, the Advanced Technology Exhibition, the Seminar on Transfer of Beidou Satellite Navigation Technology, the Technology Matchmaking Meeting, and the visit to the China-Malaysia Qinzhou Industrial Park.

Dr. Cao Jianlin, Chinese Vice Minister of Science and Technology, and senior science and technology officials

from Cambodia, Laos, Myanmar, Thailand and other ASEAN countries addressed the high-level forum on September 16.

In his keynote speech, Vice Minister Cao talked about China's latest scientific and technological development and the implementation of the China-ASEAN Science and Technology Partnership Program. He pointed out that under the principles of equality and mutual benefit, demand orientation, capacity building and wide participation, an array of bilateral and multilateral cooperation projects have been launched, promoting the sharing of experience in the development of science and technology (S&T). The partnership program has been highly recognized by Chinese and ASEAN leaders, for its contribution to advancing science and technology in the region. The program was included in the joint statement by leaders of China and ASEAN member states to commemorate the 10th Anniversary of the

China-ASEAN Strategic Partnership.

To follow up with the Joint Statement, MOST identified four priorities for the partnership program in the short run.

**Firstly**, promoting the projects already launched such as joint laboratories, technology transferring centers, remote sensing satellite data sharing and service platform, and the Young Scientists Visiting Program.

**Secondly**, facilitating active exchanges and cooperation on the policies of science and technological innovation. MOST will set up a collaboration network together with S&T policy research institutes of ASEAN member states so as to share experience in S&T planning, development

of S&T parks and incubators, and policies in support of innovation and entrepreneurship.

**Thirdly**, speeding up the development of China-ASEAN agricultural S&T cooperation network to facilitate agricultural research institutes, universities, enterprises and associations.

**Fourthly**, the China-ASEAN New Energy and Renewable Energy Action Plan will be implemented to drive the growth of new-energy industries, restructure the energy mix and confront climate change and energy challenges.

(Source: Science and Technology Daily, September 16, 2014)

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## Construction of Largest Aperture Synthesis Radio Telescope Discussed in Guizhou

The 15<sup>th</sup> Council of the SKA (Square Kilometer Array) was held in Guiyang, Guizhou Province from October 15 to October 16, 2014. Representatives from 11 member states including Australia, Canada, Germany, India, Italy, the Netherlands, New Zealand, South Africa, Sweden, the UK and China discussed matters concerning SKA construction.

As the world's largest aperture synthesis radio telescope, SKA integrates the strongest S&T forces all across the world. The SKA's receiving area covers 1 km<sup>2</sup>, and its resolution is fifty times greater than that of the Hubble Space Telescope. The SKA's survey is faster than any other existing facility, and its CPU processing capacity is equivalent to 100 million PCs. It will provide important technical support for mankind's exploration on the universe. Having conducted pre-research for over 20 years, the international astronomy community has agreed

on the importance, necessity and feasibility of SKA.

After the Council, the representatives went to Pingtang County of Guizhou Province to inspect the construction of the mega-science project: Five-hundred-meter Aperture Spherical Radio Telescope (FAST), which was launched by China Academy of Sciences (CAS) and local government in 2008. Mr. John Womersley, SKA Director General and the chairman of STFC (Science and Technology Facilities Council), said at the construction site that as an inspiring project it is to be the world's largest single-antenna radio telescope, China should be proud of this upcoming greatness. According to introduction, FAST will help scientists unveil the mystery of the universe, explore the origin of life and study the evolution of the Milky Way, thus realizing greater scientific breakthroughs.

(Source: Science & Technology Daily, October 21, 2014)

## China-Italy STI Week Held in Italy

At the 5<sup>th</sup> China-Italy Science, Technology and Innovation (STI) Week (hereinafter referred to as the Week) held in Milan in mid-October of 2014, Chinese Premier Li Keqiang and Italian Prime Minister Matteo Renzi delivered their speeches.

Premier Li spoke highly of the contribution of the Week to facilitating China-Italy STI (science, technology and innovation) cooperation, pointing out that China would stand ready to strengthen innovative cooperation in S&T, industrial design and manufacturing.

Sponsored by the Chinese Ministry of Science and Technology and Italian Ministry of Education, Universities and Research and organized by Beijing Municipal Science and Technology Commission and China-Italy Technology Transfer Center, the Week incorporated a series of activities in Naples and Milan such as the Innovation Forum, project promotion, technical exchanges and exhibitions.

Theming on cross-industry integration, mutual benefit and win-win outcomes, the Week gathered over 200 Chinese representatives from enterprises and institutions as well as over 500 Italian attendees. And the participants conducted in-depth discussions on smart city and emerging industries as well as project match-making in ICT, smart city and green transportation, green technology and new energy, bio-medicine, food and health, innovative city and design, space technology and advanced manufacturing and financial capital, etc.

During the Week, contracts on 6 technology transfer projects were signed between Beijing Anzhen Hospital, Bank of China, China Recycling Development Corporation Ltd. and their Italian counterparts. The technology-transfer volume totaled about 60 million yuan, and the total investment was estimated to stand at 650 million yuan. Several cooperative projects are as the following:

---- CVD (Cardio Vascular Disease) cooperation enters

a new phase

Beijing Anzhen Hospital and Italy's San Donato Hospital collaborated to develop new medical and surgical technology and treatment, establish an international clinical follow-up database, conduct screening and treatment for CHD (Coronary Heart Disease) children and adults as well as valvular heart disease, and foster medical staff in CVD, medical education and hospital management.

----Waste oil recycling technology cooperation is elevated

To start business in waste oil recycling, China Recycling Development Corporation Ltd. chose to cooperate with Italy's Viscolube as its partner who exported their hydrogenation refining technology to China.

Thanks to the technology exported, the Chinese corporation will build a green and efficient regional recycling networks all across the country, set up internationally advanced large-scale processing facilities, realize concentrated recycling and processing of waste lubricating oil, tackle environmental pollution brought by waste oil once and for all, and maximize the value for development of waste oil.

----Transnational investment and financing services are facilitated

The Bank of China and Italian financial institutions worked together to help Chinese enterprises go global and foreign ones enter Chinese market. During the Week, the Bank of China signed cooperation contracts with the Bank of Siena and the Bank of Sondrio, thus establishing long-term, stable and comprehensive cooperative relations. The two sides will build a transnational investment and financing platform for SMEs and better related services, thus doing the utmost for transnational business transactions between SMEs of both countries.

---China-Italy technology Transfer Center is to play its role better

As early as 2010, China and Italy jointly issued a three-year action plan on strengthening economic cooperation, which treated STI cooperation as the priority. In line with the action plan, in 2011 Beijing Municipal Science and Technology Commission and the Italy's Agency for the Promotion of Technologies for Innovation jointly organized the building of China-Italy Technology Transfer Center. The Center has become a specialized service agency for China-Italy STI cooperation, serving as a bridge connecting technology transfer from each side and an important platform for China-Italy innovation cooperation.

In recent years, with the focus on Beijing, the China-Italy Technology Transfer Center has established its presence all over the country, thus greatly supporting regional cooperation among enterprises, universities

and research institutes as well as technical cooperation. The Center aimed to establish long-term cooperation mechanisms between Chinese localities and Italian regions. The Center supported cooperation between Chinese and Italian science parks, and encourage the establishment of incubators and accelerators in each other's parks. It also facilitated technical innovation cooperation between Chinese and Italian SMEs, thus improving the innovation capacity of SMEs in both China and Italy.

Relying on openness, cooperation and innovation, China and Italy have laid a solid foundation for common development and win-win outcomes. With the leadership of both governments and participation of academic communities, enterprises and service agencies, China-Italy STI cooperation will be elevated to a higher level.

(Source: Science & Technology Daily, November 6, 2014)