CHINA SCIENCE AND TECHNOLOGY NEWSLETTER

Department of International Cooperation
Ministry of Science and Technology(MOST), P.R.China

No.11 June 15 2016

Latest news of international scientific and technological cooperation

- Minister Wan Gang Attends 8th China-U.S. S&ED
- Vice Minister Wang Zhigang Attends 7th Round of China-U.S. High-Level Consultation on People-to-People Exchange
- China-U.S. Plus Clean Stoves Strategic Forum Held in Beijing
- China-U.S. Forum on Innovation and Cooperation of Science and Technology Parks Held in Beijing
- China-Israel Technology Matchmaking Meeting Held

Outline of National Strategy of Innovation-Driven Development

- Outline of National Strategy of Innovation-Driven Development Printed
- Eight Tasks Identified in Outline of National Strategy of Innovation-Driven Development

Latest news of international scientific and technological cooperation

Minister Wan Gang Attends 8th China-U.S. S&ED

On June 6 to 7, 2016, the Eighth Round of China-U. S. Strategic and Economic Dialogue was held in Beijing, China. Chinese Minister of Science and

Technology Wan Gang made a speech on the promotion of economic development through advancing science and technology cooperation. Minister Wan talked about

Monthly-Editorial Board:54,Sanlihe Road Beijing 10045,china

Contact: Liu Bin E-mail:liub@cstec.org.cn nis@cstec.org.cn http://www.cistc.gov.cn

the role of China's innovation strategy and China-U.S. cooperation in boosting S&T innovation amid economic and social development, reporting on the results of the 7th Round of China-U.S. Innovation Dialogue and the consensus regarding innovation policy. Cooperation in S&T innovation is the precursor of economic and trade cooperation between the two sides, Minister Wan said. Through exchange and cooperation in S&T innovation, the two sides can pull their wisdom and gather momentum from all sectors so as to realize mutual benefit and winwin outcomes for both countries.

On June 7, at the strategic dialogue co-chaired by Chinese State Councilor Yang Jiechi and the U.S. Secretary of State John Kerry, Minister Wan made a speech on strengthening cooperation in S&T innovation to boost bilateral ties. This year, the two countries renewed the Agreement on S&T Cooperation to cement the foundation of bilateral S&T cooperation and further the tradition of S&T cooperation, the Minister said. By enhancing cooperation in key areas of agriculture, environment, health and energy, the two countries can open and share resources of innovation, foster young scientists and entrepreneurs, and explore the best practices of innovation as well as innovation principles for both countries.

(Source: Website of China International Science and Technology Cooperation, June 14, 2016)

Vice Minister Wang Zhigang Attends 7th Round of China-U.S. High-Level Consultation on People-to-People Exchange

On June 6, 2016, Wang Zhigang, Vice Minister of the Ministry of Science and Technology ("MOST") attended the joint opening ceremony of the Eighth Round of the China-U.S. Strategic and Economic Dialogue and the Seventh Round of the China-U.S. High-level Consultation on People-to-People Exchange held at the Diaoyutai State Guesthouse. On June 7, Vice Minister Wang attended the plenary session of the consultation co-chaired by Chinese Vice-Premier Liu Yandong and U.S. Secretary of State John Kerry at the National Museum of China.

In accordance with the arrangements of the mechanism, Vice Minister Wang published a signed article in People's Daily during the current round of consultation to present progress of cooperation in science, technology and innovation and people-to-people exchanges between the two countries, and look into the prospects of future cooperation.

As a member of the mechanism, the MOST has taken part in the successive consultations held since the initiation of the mechanism in 2010. During the current round of consultation, the MOST and the U.S. Department of State jointly held a working group meeting on science and technology, which was attended by the Chinese Academy of Sciences, the U.S. Department of Health and

Human Services, the National Science Foundation and other representatives. The two sides reviewed progress made in people-to-people exchange in the science and technology field and reached agreement on topics of common interest and key work at the next step.

In addition, during the current round of consultation, the MOST also organized two side events, namely the China-U.S. Plus Clean Stove International Development Forum and the China-U.S. Science Park Innovation Cooperation Forum. 29 scientific and technological achievements were submitted to the current round of consultation, which include young scientist exchanges, scientific and technological cooperation in wider fields, new models of personnel mobility, and so on. It is hoped that through pragmatic cooperation, the science community could expand the people-to-people exchange and contribute to building a new model of major-country relationship between the two countries.

(Source: Website of China International Science and Technology Cooperation, June 8, 2016)

China-U.S. Plus Clean Stoves Strategic Forum Held in Beijing

On June 6, China-U.S. Plus Clean Stoves Strategic Forum, a science and technology side event of the 7th China-U.S. High-Level Consultation on People-to-People Exchange, was held in Beijing. Yin Hejun, Vice Minister of Science and Technology of China, and Dr. John Holdren, Assistant to the U.S. President for Science and Technology and Director of the White House Office of Science and Technology Policy, attended the forum.

Vice Minister Yin pointed out in the forum that both China and the U.S. attached great importance to clean stoves and clean fuels, and the two sides enjoyed great complementarity. He hoped that the enterprises, universities and research institutes of the two countries could work together to design, produce and disseminate clean stoves and clean fuels suited to the needs of developing countries and contribute to the global endeavor of energy conservation and emissions reduction. Dr. Holdren said that China and the U.S. have made important progress and gained rich experience in the joint research of clean stoves, and that the U.S. government will continue to promote bilateral cooperation in the research of clean stoves with China.

During the forum, experts in the relevant fields conducted discussions on such themes as household fuels, stove design, performance test and pollutant control, and visited China's clean stove and clean fuel exhibition.

(Source: Website of China International Science and Technology Cooperation, June 13, 2016)

China-U.S. Forum on Innovation and Cooperation of Science and Technology Parks Held in Beijing

On June 6, China-U.S. Forum on Innovation and Cooperation of Science and Technology Parks, a science and technology side event of the 7th China-U.S. High-Level Consultation on People-to-People Exchange (CPE), was held in Beijing. The theme of the forum was "exploring new models of innovation and cooperation of Chinese and American science and technology parks for win-win outcomes". The Chinese side said that the forum aimed to promote cooperation in science and technology, explore exchange mechanisms of science and technology parks, mobilize the innovation resources of the two countries and jointly build the system of science

and technology innovation. The American side said that the U.S.-China Business Council is willing to explore opportunities of cooperation with Chinese science and technology parks and promote exchanges between businesses and research institutions of the two countries. Representatives of Chinese and American universities and enterprises delivered keynote speeches on such topics as carriers and policies of science, technology and innovation and innovation in science financing.

(Source: Website of China International Science and Technology Cooperation, June 13, 2016)

China-Israel Technology Matchmaking Meeting Held

In order to promote the innovation cooperation between China and Israel in compliance with relevant requirements specified in Three-Year Action Plan for China-Israel Innovation Cooperation (2015-2017), and to fulfill one of the work priorities of China-Israel

Innovation Cooperation Center this year, China Science and Technology Exchange Center (hereinafter referred to as CSTEC) attended Bio-Med 2016 in Israel during May 22-27, 2016 under the guidance of Department of International Cooperation, MOST and the support of

the Science & Technology Section of the Embassy of the People's Republic of China in the State of Israel. During that period, CSTEC also organized China-Israel Technology Matchmaking Negotiation Meeting jointly with MATIMOP, participated by 13 renowned investment institutions such as Photon Fund Capital, as well as 7 industrial companies under the leadership of Hi-Tech International Business Incubator.

Israel Bio-Med 2016, the biggest annual exhibition event in the field of life and health in Israel, was hosted by Israel Advanced Technology Industries (IATI) and participated by a number of bio-medicine high-tech companies and international pharmaceutical giants from Israel, the United States, China, France, Italy and Switzerland, with their latest products debut in the

exhibition. As one of the priority areas for China-Israel cooperation, life science enjoys great potential and wider market for future cooperation. Chinese companies had direct contacts and exchanges with Israeli companies engaging in bio-medicine, medical apparatus and instruments and medical carrier, attended symposiums to get information of their business operation status and progress of life health in Israel, and also conducted discussions with interested exhibitors. 20 Chinese investment institutions and industrial companies got the opportunity to perform B2B meetings with 190 Israeli companies.

(Source: Website of China International Science and Technology Cooperation, June 12, 2016)

Outline of National Strategy of Innovation-Driven Development Printed

The Central Committee of the Communist Party of China (CPC) and the State Council recently promulgated its Outline of the National Strategy of Innovation-Driven Development (Outline) and issued a notice requesting all the regions and departments to implement the Outline based on their actual conditions.

The Outline identifies requirements, arrangements, tasks, safeguards and a three-step roadmap to deliver the strategy of innovation-driven development.

- Step 1: China will become an innovative country by 2020;
- Step 2: China will join the top tier of innovative countries by 2030;
- Step 3: China will become a world powerhouse of scientific and technological innovation by 2050.

The 18th CPC National Congress proposed the Strategy of Innovation-driven Development, emphasizing that scientific and technological innovation serves as a strategic fulcrum for China to boost its productivity and comprehensive national strength and thus must occupy a central place in China's development strategy. This is a major national development strategy set out by the central leadership with the overall interests in mind, in line with the global trend, and for the purpose of promoting overall growth with focus on priority sectors.

In the strategic and systematic document for top-level design, the Outline emphasizes innovation as a primary engine of development, with scientific and technological innovation facilitating innovation in other sectors. Four basic principles were followed, i.e. serving development, deepening reform, increasing incentives and expanding opening-up.

To achieve innovation-driven development is a systemic transformation, which requires the building of a new power system for development based on "two-wheel drive, one system and six transitions". The two-wheel drive means that the two wheels of scientific and technological innovation and institutional innovation

must rotate synchronously and incessantly. One system refers to the building of a national innovation system. Six transitions include the transition in development pattern, driving force of development, industrial sector, innovation competency, allocation of resources and innovation actors.

Eight tasks were put forward in the Outline:

- 1. Promote innovation in the system of industrial technologies and cultivate new development advantages
- 2. Stimulate original innovation to increase sources of supply
- 3. Improve the planning of regional innovation to forge local growth poles
- 4. Deepen military-civilian integration and interactive innovation
 - 5. Empower innovation actors to steer development
- 6. Implement major programs and projects to leapfrog in key areas
- 7. Build teams of high-caliber professionals to cement the root of innovation
- 8. Promote innovation making and businesses starting to stimulate the creativity of the whole society

We must strengthen safeguards for the implementation of the innovation-driven development strategy through such efforts as advancing institutional reform, building a sound environment, investing resources and further opening up.

- 1. Reform the innovation management system
- 2. Step up input in innovation through multiple channels
 - 3. Promote open innovation in an all-round way
 - 4. Improve an innovation-oriented evaluation system
- 5. Implement the IPR, standard, quality and brand strategies
 - 6. Foster an innovation-friendly social environment (Source:Science and Technology Daily, May 20, 2016)

Eight Tasks Identified in Outline of National Strategy of Innovation-Driven Development

As written in The Outline of the National Strategy of Innovation-Driven Development, differentiated strategies and asymmetric pathways will be adopted to fortify the assignment of tasks in priority sectors, thus sharpen economic competitiveness, facilitate social development and ensure national security.

Eight tasks are put forward in the Outline:

1. Promote innovation in the system of industrial technologies and cultivate new development advantages

We will augment the application of IT in industrialization, make digital, Internet, intelligent and green technologies the cornerstone of sharpening industrial competitiveness, promote cross-sector innovation of emerging technologies, build a well-structured modern system of advanced, applicable, open, compatible, independently controllable and internationally competitive industrial technologies, and pursue collective technological breakthroughs to support and guide the development of emerging industry clusters and promote the upgrading of industries.

- (1) New-generation information network technologies will be developed to enhance the IT foundation of economic and social development.
- (2) Intelligent and green manufacturing technologies will be developed to help manufacturing industry move up the value chain.
- (3) Modern agricultural technologies that are ecofriendly, green, efficient and safe will be developed to ensure food security and safety.
- (4) Safe, clean and efficient modern energy technologies will be developed to facilitate energy production and revolutionize consumption.
- (5) Resource-efficient and green technologies will be further developed to build a society conscious of resource and environment conservation.
- (6) Advanced and applicable marine and space technologies will be promoted to foster a marine and a space economy.

- (7) Technologies for building smart cities and a digital society will be developed to advance new-type urbanization which holds people's interests the most valued.
- (8) Advanced, effective, safe and convenient healthcare technologies will be developed to cope with the challenges of major diseases and population aging.
- (9) Modern service technologies will be developed to support innovations in business models towards a more advanced pattern of economic growth.
- (10) Disruptive technologies enabling industrial transformation will be further developed to create new industries and job opportunities.

2. Stimulate original innovation to increase sources of supply

It is crucial to study and plan for scientific issues of overarching importance in line with national strategic needs and the purposes of scientific exploration, enhance the capability of original innovation to improve China's performance in scientific discovery, technological invention and innovations in products and industries, support industrial transformation and ensure national security.

- (1) Basic, frontier and high-tech researches will be progressed consistent with national strategic needs.
- (2) Curiosity-driven exploration into basic research will be positively sponsored.
- (3) Infrastructure and platforms for high-end innovation will be set up.

3. Improve the planning of regional innovation to forge local growth poles

To boost an overall increase of innovation capability and competitiveness of various regions, it is important to draw up sound plans on regional development so as to develop a balanced industrial structure through the clustering and flow of innovation factors.

- (1) Innovation will be location specific.
- (2) Innovation resources will be integrated across regions.

(3) Regional innovation demonstration will be conducted to cast innovation high grounds.

4. Deepen military-civilian integration and interactive innovation

In light of the military-civilian integration strategy, the important role of defense-relevant technological innovation will be fully leveraged and speed up establishing and improving an innovation system based on military-civilian integration in a new layout profoundly combining all factors of military-civilian technologies across multiple sectors and with high efficiency.

- (1) The macro coordinative mechanism will be improved.
- (2)Collaborative military-civilian innovation will be conducted.
- (3)Compatibility of fundamental factors of militarycivilian technologies will be furthered.
- (4)Mutual technology transfer and translation will be bolstered.

5. Empower innovation actors to steer development

The functions and positions of various innovation actors at different links along the innovation chain will be clarified so that the actors can be effectively motivated and upgrade their own innovation capabilities systematically for a solidified foundation of innovative development.

- (1) World-class innovative enterprises will be developed.
- (2) Universities and disciplines will be developed according to world-class standards.

- (3) Research institutes will be held to world-class standards.
 - (4) Market-oriented R&D agencies will be developed.
- (5) A service system for technology transfer will be established.

6. Implement major programs and projects to leapfrog in key areas

Major programs and projects will be drawn up to advance science and technology in key areas influencing national security and long-term development.

- 7. Build teams of high-caliber professionals to nourish the root of innovation
- 8. Promote innovation making and businesses starting to stimulate the creativity of the whole society

China will build up and improve the carriers of innovation and entrepreneurship, develop a maker economy, and create a lively situation enabling the public to participate in starting businesses and make innovations.

(Source: Science and Technology Daily, May 31,2016)