[International cooperation in science and technology]
Sino-British S&T Cooperation Ushers in New Chapter for Further Bilateral Cooperation
Sino-British S&T Cooperation Ushers in New Chapter for Further Bilateral Cooperation
3rd Meeting of Vice-premier-level People-to-people Exchange Mechanism Between China and Indonesia Held in Indonesia
China-Laos Inter-governmental S&T Cooperation Agreement Signed in Vientiane
International Technology Transfer Convention 2017 Held in China
China-Ukraine STI Exhibition Kicks off in Kiev
1st Sino-French Innovation Conference Held in Beijing
Framework Agreement and Implementing Agreement on Nuclear Joint Research Center Signed by China and France
2017 China (Dongguan) International S&T Cooperation Week and Science & Research Institution Innovation Achievements Fair Held Successfully

[Important Programs]
STI Plan in Resource Area during 13th Five-year Period Published
STI Plan in Environmental Area during 13th Five-year Period Published
Sino-British S&T Cooperation Ushers in New Chapter for Further Bilateral Cooperation

On the occasion of the Fifth Meeting of UK-China High-Level People-to-People Dialogue in London on December 6, 2017, Wang Zhigang, Secretary of the CPC Leading Group and Vice Minister of MOST and Jo Johnson, Minister of State for Universities, Science, Research and Innovation, signed the inter-departmental Memorandum of Understanding on Science, Technology and Innovation Cooperation and launched the UK-China Joint Strategy for Science, Technology and Innovation Cooperation under the witness of Liu Yandong, Vice-premier of the State Council, and Prince Andrew, Duke of York. This is the first bilateral strategy for STI cooperation jointly formulated by China and another country marking a new stage of cooperation on the basis of nearly 40 years of engagement in science and technology.

Wang Zhigang, Vice Minister of MOST said that the Chinese government attaches great importance to Sino-British cooperation on science, technology and innovation. In the past 40 years or so, the cooperation in science and technology between the two countries has been deepening and the achievements in innovation cooperation have been enriched. The new strategy will further expand the level and scope of cooperation on science, technology and innovation and support the development in the Golden Era of China-UK cooperation. In line with the principle of mutual benefit and win-win outcomes, we will work harder on open innovation and promote economic prosperity of China and other countries through the bilateral and multilateral STI cooperation to build a community of shared destiny for mankind.

Science Minister Jo Johnson pointed out that the cooperation between UK and China has been fruitful. Both sides are exploring ways to continuously strengthen this cooperative relationship. The new strategy is an important part of the China-UK bilateral relationship and provides support for both sides to work together for economic growth and against global challenges. International cooperation in science and technology between China and UK is also one of the examples we are pushing the UK to lead the global industrial innovation in the future.

China and the United Kingdom have strong foundations in STI cooperation. Since 2014, the two sides have jointly carried out 460 cooperation projects under the framework of UK-China Research Innovation Partnership Fund. The new China-UK strategy sets the framework for the future cooperation in science and technology between China and the United Kingdom. In the coming decade, both sides will extensively cooperate in areas from research and innovation to industrialization of new technologies, so as to jointly tackle global challenges and promote economic development. The strategy covers a wide range of priority areas including life sciences, food safety, renewable energy and environmental technologies. It also outlines new mechanisms for future cooperation, including the annual Flagship Challenge Programme. The annual Flagship Challenge Programme for agricultural science and technology will be launched in 2018. In the China-UK strategy, both sides have explicitly stated that they will abide by the relevant provisions of intellectual property in research and innovation cooperation, strengthen the intellectual property protection and promote innovation and trade exchanges between the two countries.
During the Fifth Meeting of UK-China High-Level People to People Dialogue in early December, the Ministry of Science and Technology of China and the Department for Business, Energy and Industrial Strategy of the U.K. jointly organized the China-UK cooperation on STI serial activities, including the exhibition of China-UK STI cooperation outcomes, China-UK Forum on Green Ocean Science and Technology Innovation, the conference on China-UK Industry Academia Partnership Programme (IAPP) jointly organized by the Chinese Academy of Engineering and the Royal Academy of Engineering and China-UK Innovation and Entrepreneurship Camp. These activities have made important contributions to the fifth meeting of the dialogue.

(Source: Ministry of Science and Technology, December 12, 2017)
3rd Meeting of Vice-premier-level People-to-people Exchange Mechanism Between China and Indonesia held in Indonesia

On November 28, 2017, the third meeting of the Vice-premier-level people-to-people exchange mechanism between China and Indonesia was held in Surakarta, Indonesia. The meeting was co-chaired by Liu Yandong, Vice-premier of the State Council and Puan Maharani, Coordinating Minister for Human Development and Culture. Wang Zhigang, Secretary of the CPC Leading Group and Vice Minister of MOST attended the meeting.

Secretary Wang Zhigang and Muhammad Nasir, Minister of Research, Technology and Higher Education jointly signed three cooperation agreements, including Three-year Action Plan on Science and Technology Innovation Cooperation between Ministry of Science and Technology and Ministry of Research, Technology and Higher Education (2018-2020), Implementation Agreement on Science Park, Cooperation and Implementation Agreement on Co-constructing the Joint Research Center for China-Indonesia Port Construction and Disaster Prevention. Thanks to these three agreements, the two sides jointly determined the direction and key contents of bilateral scientific and technological cooperation in the next three years, opened up a new key area for science and technology parks and expanded the construction of joint laboratories in new fields.

(Source: Ministry of Science and Technology, December 1, 2017)

China-Laos Inter-governmental S&T Cooperation Agreement Signed in Vientiane

On November 13, 2017, the China-Laos Intergovernmental Science and Technology Cooperation Agreement was signed in Vientiane under the witness of Xi Jinping, General Secretary of the CPC Central Committee and President of the People’s Republic of China, and Bounnhang Vorachith, General Secretary of the Lao People’s Revolutionary Party and President of Laos. According to the agreement, the two sides will set up a joint committee on science and technology cooperation to promote STI cooperation in various forms between the science communities of both countries in priority areas jointly identified, including the exchange of scientists and researchers, joint research projects, organization and participation of symposiums and technology training.

(Source: Ministry of Science and Technology, December 1, 2017)
International Technology Transfer Convention 2017 Held in China

The 2017 China (Beijing) International Technology Transfer Convention sponsored by the Ministry of Science and Technology and the People’s Government of Beijing Municipality and organized by the Beijing Municipal Science & Technology Commission was held at the Beijing International Convention Center from November 27 to November 29. This convention themes on "Global Wisdom, Joint Innovation Development", exhibiting science and technology projects from China and over 40 countries and regions.

At the opening ceremony, projects like the inauguration ceremony of incubation union for Belt and Road and the signing ceremony of International STI Cooperation Project were held. In addition, more than 1,500 projects were matched. It is estimated that over 600 cooperation projects will be reached among participating members.

The China (Beijing) International Technology Transfer Convention has been successfully held for six times in a row. It helped achieve more than 6,600 transnational technology project matchmakings, reach intent for cooperation on over 1,600 projects and sign on 175 projects. It effectively gave play to Beijing’s role as national center of technological innovation and international exchange center, enhanced Beijing’s influence to all provinces and cities in the country, provided an important international platform for boosting innovation-driven development and accelerating economic restructuring and upgrading. The convention reflects Beijing's pivotal position in the international cooperation in technology transfer and innovation.

The 2017 China (Beijing) International Technology Transfer Convention Kunming Summit sponsored by Kunming Municipal Government was held in Kunming from November 29 to December 2. International guests from nearly 20 countries, Chinese science diplomats in foreign countries, representatives from universities, research institutes and businesses attended the event, which helped achieve more than 500 project matchmakings and more than 100 cooperation intentions.


The 2017 China (Beijing) International Technology Transfer Convention Tianjin Summit was successfully held in Tianjin on November 30. It was featured by rich content and various forms. Fruitful results have been made, as more than 160 times of technical needs and supply were matched and the intent for cooperation was reached on 50 projects, 10 memorandums of cooperation were signed.

(Source: Ministry of Science and Technology, December 1, 2017)
China-Ukraine STI Exhibition Kicks off in Kiev

On November 21, 2017, the opening ceremony of China-Ukraine Science, Technology and Innovation Exhibition was held in Kiev, the capital of Ukraine. Attending the meeting were Li Meng, Vice Minister of Science and Technology who delivered a speech, Stepan Kubiv, First Deputy Prime Minister of Ukraine and Minister of Economic Development & Trade, Du Wei, Ambassador of China in Ukraine, Maksym Strikha, Vice Minister of Education and Science of Ukraine and nearly 800 delegates of both Chinese and Ukrainian government, research institutes, universities, enterprises and media.

Vice Minister Li Meng pointed out in his speech that China and Ukraine are highly complementary in science and technology and have great potential for cooperation. The scientific and technological cooperation between China and Ukraine has made contributions to the development of science and technology in both countries. China is ready to work with Ukraine to follow the principles of mutual benefit and win-win outcomes, deepen cooperation in the field of science and technology innovation, take full account of Ukraine concerns in the cooperation, open up new points of cooperation and promote in-depth development of our cooperation.

Stepan Kubiv, Deputy Prime Minister said in his speech that Ukraine attaches great importance to scientific and technological innovation cooperation with China and both sides having a clear plan of innovative cooperation. He believes that the key to cooperation lies in people. Holding this exhibition will effectively promote people-to-people exchanges in science and technology between the two sides and continuously promote cooperation to a higher level.

(Source: Ministry of Science and Technology, November 30, 2017)
1st Sino-French Innovation Conference Held in Beijing

The first Sino-French Innovation Conference was successfully held in Beijing on November 24. The conference is one of the important activities of the fourth meeting of the high-level cultural exchange mechanism between China and France. Ye Dongbai, Director-General of Department of International Cooperation of MOST, and Director General of the Department for International and European Affairs of the French Ministry of Higher Education, Research and Innovation, attended the opening ceremony and delivered speeches.

Ye Dongbai pointed out that both China and France have been committed to strengthening the cooperation in projects, talents and bases, especially the support of joint laboratories, and have promoted long-term and stable exchange of projects and personnel, which has greatly promoted the cooperation between the two countries in the advantageous fields of scientific and technological innovation. The future will be based on the strategic positioning of Sino-French cooperation, focus on the overall situation. Efforts will be made to continuously innovate on ways of cooperation, expand cooperation areas, gather innovative resources and promote the high-level scientific and technological innovation cooperation in various fields and in all dimensions.

The French DG said that France has always regarded China as the most important partner in the field of scientific research and is willing to push science and technology innovation cooperation to a higher level on the basis of equality and mutual benefit.

At the opening ceremony, the launching ceremony of the First Sino-French Talented Young Scientist Exchange Program was held. In 2017, China and France funded a total of 40 young Chinese and French researchers in areas such as mathematics, physics, medicine and biomedicine to conduct people-to-people and STI exchange. In order to promote science and technology innovation cooperation between China and France, the conference set up the Forum of Talented Young Scientist Exchanges between China and France and the Sino-French Joint Laboratory Cooperation Forum.

(Source: Ministry of Science and Technology, November 29, 2017)
Framework Agreement and Implementing Agreement on Nuclear Joint Research Center Signed by China and France

On the Fourth Meeting of Sino-French High-level People-to-people Exchange Mechanism held in Beijing on November 24, MOST and CEA signed the framework agreement on Sino-French Nuclear Fusion Joint Research Center under the witness of Vice-premier Liu Yandong and French Foreign Minister Le Drian. To further the pragmatic cooperation of bilateral nuclear fusion cooperation, an implementing agreement was signed by four member entities of the joint research center, namely ITER China DA, CAS Institute of Plasma Physics, Southwestern Institute of Physics and CEA. At the signing ceremony, both sides highly commended the fruitful outcomes in fusion cooperation and appreciated the efforts for facilitating the signing of the implementing agreement. Both sides decided to conduct pragmatic cooperation in ITER procurement package performance testing and operation & debugging, key parts and technologies of magnetic confinement fusion device, fusion science and plasma physics research and next-generation fusion reactor device.

(Source: Ministry of Science and Technology, November 29, 2017)
2017 China (Dongguan) International Science & Technology Cooperation Week and Science & Research Institution Innovation Achievements Fair Held Successfully

Jointly sponsored by the Ministry of Science and Technology and the People’s Government of Guangdong Province, 2017 China (Dongguan) International Science & Technology Cooperation Week and Science & Research Institution Innovation Achievements Fair (hereinafter referred to as Cooperation Week and Science Innovation Meeting) were held in Dongguan from December 8 to December 10. The event included a series of science and technology activities including six themed exhibitions and 18 science and technology forums, attracting representatives of the government, research institutions, business in more than 30 countries and regions including the United States, Japan, Germany, Russia, Poland, the United Kingdom, Ukraine, and Israel. At the science innovation meeting, there were 10 major science and technology projects signed, 10 major scientific and technological achievements auctioned and 10 major technical problems tendered. In the auction, the price of the 11 latest research achievements was 25,078,000 yuan. This conference set up an international platform for scientific research institutes and enterprises both at home and abroad to highlight trade in innovation achievements and promote the marketability and facilitation of scientific research achievements. As an important part of the Cooperation Week and Science Innovation Meeting, the 2nd China Science & Technology Innovation Forum was held in the same period. The forum explored and exchanged ideas on the frontiers of global science and technology innovation and the future of China's scientific and technological innovation.

(Source: S&T Daily, December 13, 2017)
STI Plan in Resource Area during 13th Five-year Period Published

To identify the development guidelines, goals, major technology development orientation, main missions and safeguards of STI Plan in resource areas during the 13th Five-year Plan period, MOST, Ministry of Land and Resources and Ministry of Water Resources jointly published the STI Plan in Resource Area during 13th Five-year Period (hereinafter referred to as the Plan).

The general guideline of the Plan is

- Innovation-driven growth
- Green development
- Intensive utilization
- Reliable safeguards

The specific goals are:

- In comprehensive use of water resources, increase the water use rate in demonstration zones to over 15%, create an equivalent benefit of 5 billion cubic meters of water resources, markedly enhance the S&T capability in ensuring water safety in major demonstration zones of Beijing-Tianjin-Hebei and Silk Road Economic Belt and realize the control of red line in water resource management;

- In safe use of land resources, identify the resource red line needed to be controlled and set up land resource safety project through soil protection and safe use and theory, technology and standard system of sustainable land resource development;
-- In resource exploitation, develop a batch of urgently needed equipment for deep mineral resource exploitation and replace the foreign products that are used as major devices, elevate market share to over 80%; build up capacity in 3000m- and 5000m-exploration and resource evaluation and form a technology system of deep mineral resource exploitation with our own IPR;

-- In gas and unconventional oil and gas, develop a batch of highly efficient automatic drilling and logging and oil recovery technologies and equipment, replace over 60% of the foreign products that are used as major equipment, set up a system of efficient and safe oil and gas collection, transportation and storage and build demonstration zones; make breakthroughs in deep and complex oil and gas and nonconventional oil and gas exploitation technologies and increase the S&T contribution rate to over 60% in oil and gas storage and yield;

-- In green development of coal, basically remove the S&T bottlenecks of eco-protection and green development in major coal bases and further enhance the intensive use of coal; comprehensively enhance coal purity, increase commercial coal purity to over 50% and get rid of or use cleanly over 80% of low-quality coal;

-- In clean development of metal resources, make breakthroughs in 1500m deep-well exploitation technologies and equipment, build a theory and technology system of green, smart and efficient development of mineral resources, set up a system of integrated green selection, mineral eco-system restoration and protection and realize green development in mineral resources;

-- In major non-metal resource development, realize the green and efficient development and high-value utilization of large and associated non-metal mineral resources and salt lake resources;

-- In resource recycling, make breakthroughs in recycling use technology of large industrial solid waste, set up a system of recycling technology of sold mineral waste, increase the resource comprehensive use rate to over 50% and build an industrial chain of recycled use of construction rubbish and road waste;
-- In comprehensive resource planning, set up a theory, technology and standard system of environmental bearing capacity, optimized land development and comprehensive land management and establish a big data platform of resources;

-- In talent cultivation and base construction, give play to the demonstration role of talents home and abroad, pool innovation forces, foster around 10 world top-notch resource STI teams and facilitate inter-disciplinary development; establish around 50 national-level platforms of resource S&T R&D and outcome transformation and facilitate the enhancement of innovation capacity in different fields, industries and regions;

-- In international cooperation, establish international exchange platforms of talent, technology and resource, coordinate to use S&T resources home and abroad, promote pragmatic joint research and foster an open innovation environment for scientists to be better involved in international and regional science cooperation; develop both domestic and overseas markets and create a mutually reinforcing and complementary system of two markets and two resources.

(Source: Ministry of Science and Technology, May 18, 2017)
STI Plan in Environmental Area during 13th Five-year Period Published

To facilitate S&T development in environmental protection, sustain and enhance the support of S&T for ecological progress, constantly improve the environment through STI, solve major environmental issues and meet demand in S&T, MOST, The Ministry of Environmental Protection (MEP), the Ministry of Housing and Urban-Rural Development (MOHURD), State Forestry Administration (SFA) and China Meteorological Administration (CMA) jointly published the *STI Plan in Environmental Area during 13th Five-year Plan Period* (hereinafter referred to as the Plan).

The Plan sets three basic principles:

1. Integrate strategic and forward-looking development;
2. Integrate orientation to problems and innovation-driven development;
3. Integrate STI with institutional innovation.

The Plan puts forward 12 missions:

1. Causes and overall control of air pollution;
2. Water quality improvement and ecological restoration;
3. Soil pollution prevention and safeguards;
4. Ecological restoration and eco-security adjustment;
<table>
<thead>
<tr>
<th></th>
<th>Plan Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Management control of wastes and green and recycled utilization;</td>
</tr>
<tr>
<td>6</td>
<td>Chemical product risk control and environmental health;</td>
</tr>
<tr>
<td>7</td>
<td>Adherence to international environment conventions;</td>
</tr>
<tr>
<td>8</td>
<td>Nuclear and proliferation security monitoring;</td>
</tr>
<tr>
<td>9</td>
<td>Environmental benchmark and standard system;</td>
</tr>
<tr>
<td>10</td>
<td>Comprehensive governance of eco-environment in major regions;</td>
</tr>
<tr>
<td>11</td>
<td>Innovation base construction and talent production;</td>
</tr>
<tr>
<td>12</td>
<td>Establishment of international cooperation network.</td>
</tr>
</tbody>
</table>

(Source: Ministry of Science and Technology, May 18, 2017)