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2018 NSTW and BSTW Held in Beijing

On May 19, 2018, China's National Science and Technology Week (NSTW) and Beijing Science and Technology Week (BSTW) took place at the main venue of the Military Museum of the Chinese People's Revolution. Since 2001, this annual event has been held for 18 years in a row. It is a popular science event of tremendous social impact with a great number of activities for the public. This year marks the 40th anniversary of reform and opening-up and the National Science Conference. This year's science week is the first large popular science event since the 19th National Congress of the CPC. The theme of Beijing Science and Technology Week in the new era is "innovation in science and technology for a stronger China and Chinese People". For the need of the Chinese people for a better life as the theme of the new era, this event is launched with a new look and new features in the exhibits, design and means of display. Some highlights of the science week 2018 are as follows:

★ Showcase of achievements in military and civil science and technology: the integrated development of science and technology in military and civil spheres was an important decision made on the basis of China's national development and security, which is an important measure to address complicated security threats and win national strategic advantages. Through showcasing of the achievements of innovation in space, aeronautics and deep sea S&T, wide application of information technology and the role of military-civil conversion in promoting growth in economy, science and livelihood, the event encouraged the public to learn about China's strengths in national defense technology, enhances their awareness of national defense, and edifies them to a higher level of confidence and pride in the Chinese nation.

★ Display of STI achievements: major achievements of new technology, new equipment and new products in AI, telecommunication, new material and biology were displayed; the output of major national S&T projects and important R&D facilities, which highlighted the important role of technological innovation in underpinning quality growth, ushering the public into a better understanding of how significant technological innovation is for China's economic growth and social progress.

★ Experience of a better life with science and technology: as the public has diversified needs for science and technology, this event exhibited the

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achievements of high-quality development of science and technology and organized technological programs for the public to participate in, experience and interact. Non-for-profit and interesting programs are to be organized for youngsters, workers, civil servants and army men and women. To better understand some of the popular science topics, experts were invited to explain and demonstrate with experiments in an easy-to-understand way while interactive experience is to be provided. In addition, the event will reach out to places of ethnic minorities, poverty-stricken regions and old revolutionary areas with popular science activities.

★ Better accessibility to public S&T resources: high-end science resources, such as major national science projects, large science facilities, state (key) laboratories, state engineering (technology) centers and key scientific test fields, are to be more accessible to the public and inspire the public, particularly the young, to be more interested in science. Besides, the public should have better access to various scientific research institutions, universities and high-tech enterprises or parks, while a variety of science venues and popular science bases should be open to the public.

★ Science popularization activities: more publicity is to be given to science popularization, with TV and the internet playing an important role in S&T publicity. Innovative and entrepreneurial figures were publicized; scientific culture was upheld. Science literacy of the public was enhanced and people were encouraged to seek truth and explore on new things. Efforts were made to create a scientific atmosphere where the country leads in important programs, activities of different sectors have distinct characteristics, public participation is extensive, various forms of media publicity and coverage of urban and rural areas by science events, so as to pave the way for building a world leader in science and technology.

The organizing committee of the national science and technology week will also organize a number of important demonstration programs for science popularization throughout the year, including a train science tour to Yunnan Province, science evening, national contest of docent for science popularization, national contest of science micro video, opening of research institutions and universities to the public, science ambassadors to communities (schools, countryside, enterprises and army), promotion of excellent science works, science experiment shows, national invention and innovation contest for primary and secondary school students and the national contest for future engineers. During the science week, over 20,000 science activities with local characteristics and advantages are to be carried out all across China, in which more than 300 million people are expected to be involved. The closing ceremony of the national science and technology week will take place on May 26 in Shanghai.

(Source: www.stdaily.com, May 19, 2018)

Minister Wang Zhigang Meets with Japanese Minister of MEXT

On May 4, 2018, Minister Wang Zhigang of the Ministry of Science and Technology met with a delegation led by Yoshimasa Hayashi, President of the Japan-China Friendship Parliamentarians' Union and Minister of Education, Culture, Sports, Science and Technology (MEXT) of Japan. The two sides exchanged views on China-Japan cooperation in science and technology.

Minister Wang Zhigang briefed the Japanese side on China's science and technology plan for the next step which were made at the 19th National Congress of the Communist Party of China and the "Two Sessions" this year. He said that innovation is the primary driving force for development and the strategic support for building a modern economic system and that China now puts science and innovation in a more important position. Science has neither boundaries nor borders. Japan also attaches great importance to science and innovation and has implemented the strategy of nation building through technology. There are broad prospects for China-Japan cooperation in science and innovation. He pointed out that since the signing of the intergovernmental agreement on science and technology cooperation between the two countries in 1980, the two sides have carried out in-depth people-to-people exchanges, research cooperation and platform building. Under new circumstances, the two sides should enable existing mechanisms to facilitate business-academia cooperation, making due contributions to boosting bilateral relations.

Minister Yoshimasa Hayashi expressed his appreciation of the remarks by Minister Wang Zhigang. He pointed out that this year marks the 40th anniversary of the signing of the Treaty of Peace and Friendship between China and Japan and the bilateral relations are warming up, which provides new opportunities for cooperation in science and technology. He noted that Japan is willing to strengthen cooperation with China in the areas of common interest and hoped that the two sides can further expand their people-to-people exchanges and serve the progress of science and technology and the friendship of the two peoples.

(Source: MOST, May 17, 2018)

Vice Minister Huang Wei Attends 4th Science and Technology Ministers' Conference of SCO Member States

On April 18, 2018, the 4th Conference of the Heads of Ministries and Agencies of Science and Technology of the Shanghai Cooperation Organization ("SCO") Member States was held in Moscow, Russia. Huang Wei, Vice Minister of Science and Technology, led a Chinese delegation to the conference and delivered a speech as the representative of the competent department for science and technology of the 2017-2018 rotating presidency of the SCO.

Vice Minister Huang Wei pointed out that since its establishment, the SCO has taken the two documents of the *Charter of the Shanghai Cooperation Organization and the Treaty on Long-Term Good-Neighborliness, Friendship and Cooperation between the Member States of the Shanghai Cooperation Organization* as its cornerstone of thinking and action guide, firmly followed the Shanghai Spirit and made solid steps on the path of building a community of shared future, becoming an exemplar of new international relations of win-win cooperation. China will continue to promote the building of a community of shared future, uphold peace, development, cooperation and win-win cooperation, take the path of peaceful development, pursue an open development strategy of mutual benefit, actively develop a global partnership, and expand the converging points of interests of all countries, including members of the SCO. As the 2017-2018 rotating presidency of the SCO, China will continue to adhere to the Shanghai Spirit which centers on mutual trust, mutual benefit, equality and consultation, work with other member states, enhance mutual trust and unity among the member states, and build a closer SCO community of shared future.

All parties welcomed the expansion of the SCO and the delegations of the Republic of India and the Islamic Republic of Pakistan to participate in the conference, believing that science and technology cooperation of the SCO will develop rapidly within the new organizational framework. All the parties also welcomed the delegation of the Democratic Socialist Republic of Sri Lanka to the conference as a dialogue partner.

At the conference, the parties exchanged information on the policies of science and technology development of their respective countries, and pointed out the consistency in their respective priority directions and mechanisms for the development of science and technology. All the parties agreed to take advantage of this important condition to further deepen and forge closer cooperation in science and technology within the SCO framework. The parties discussed the science and technology cooperation parts of the *Plan for Implementation of the Inter-governmental Agreement on Science and Technology Cooperation between Member States of the Shanghai Cooperation Organization (2016-2020) and the List of Measures for the Further Promotion of Project Cooperation in the Shanghai Cooperation Organization for 2017-2021*. After exchanging views on the agenda item, all the parties pointed out satisfactorily that the outcome of the Third Science and Technology Ministers' Conference has been effectively delivered. Meanwhile, all the parties will focus on the development of science and technology cooperation in the priority areas of mutual interest among member states: natural conservation technology, energy efficiency and energy conservation,

innovative agricultural technologies (including the food industry and food security, biotechnology and bioengineering), and innovative technologies in the fields of nanotechnology and information technology.

In addition, all the parties expressed the need to facilitate exchanges between experts and scientists in the field of science and technology and simplify procedures for experts and science teams to share scientific infrastructures (including mega-science infrastructures in the member states of the SCO) under the precondition of compliance with the law of the member states. The parties agreed convening the Fifth Science and Technology Ministers' Conference of SCO Member States in 2020.

(Source: MOST, May 3, 2018)

Vice Minister Zhang Jianguo Meets South Korean Vice FM

Zhang Jianguo, Vice Minister of Science and Technology and Administrator of the State Administration of Foreign Experts Affairs (SAFEA), met with Cho Hyun, vice-minister of foreign affairs of South Korea, on April 19. And the two sides exchanged in-depth views on implementation of the agreements of both leaders.

Zhang introduced China's work permit system for foreigners and the talent visa system. He said that China will implement a more active, open, and effective talent policy, enhance reform and opening-up, and attract talented people around the world. In recent years, more and more South Korean workers are coming to China, and more high-level South Korean talents are welcome to come to China for innovation and entrepreneurship.

Cho Hyun thanked Zhang for his introduction and spoke highly of China's talent policy. He expressed willingness to strengthen cooperation with China for mutual benefit. The two sides agreed to strengthen exchanges and dialogue, and continue to deepen exchange of talents.

(Source: SAFEA, April 23, 2018)

Guidelines for Development of Industrial Internet Issued by State Council

State Council Promulgates *Guidelines for Furthering the "Internet + Advanced Manufacturing" Model and Developing Industrial Internet*

The Guidelines points out that:

Our goal is to build China into a country strong in manufacturing and internet in accordance with the blueprint mapped out at the 19th National Congress of CPC.

The Guidelines puts forward the objectives for each of the three development stages:

By 2025

industrial internet infrastructures are to be completed, covering all areas and industries;

By 2035

world-leading industrial internet infrastructure and platforms are to be completed;

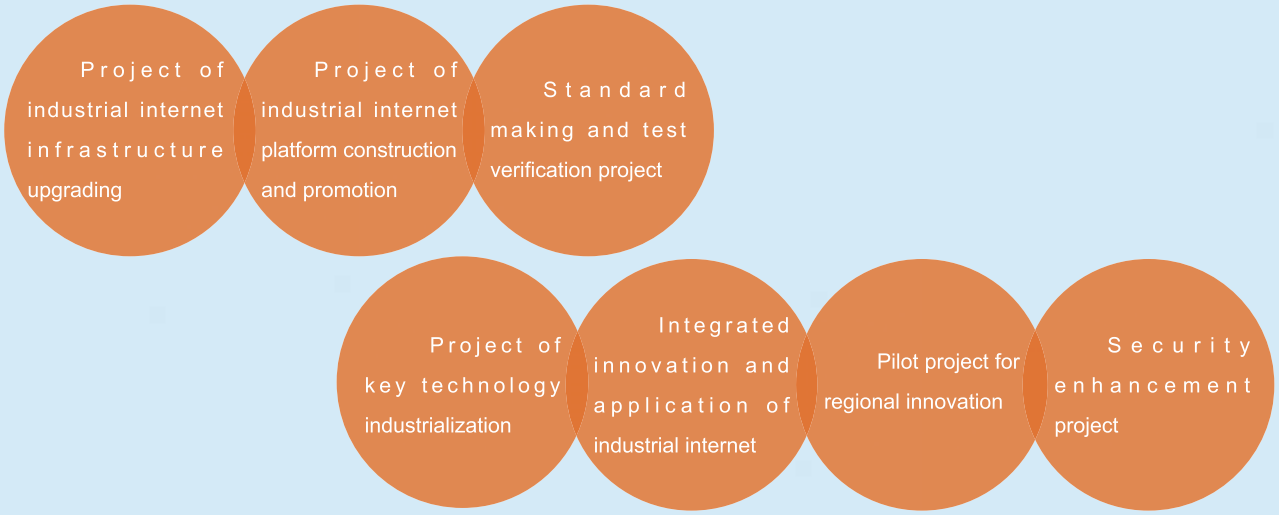
By the middle of the 21st century

China becomes a leading player in the international community with highly innovative industrial internet, world-leading system of technology industry and advanced integrated application.

The Guidelines expressly defines the tasks for building and developing the industrial internet:

1. Consolidating the foundation of internet, accelerating internet upgrading with higher speed and lower cost, and speeding up the building of the identity resolution system;
2. Creating platforms and forming a multi-level and systemic platform development system with enhanced capacity of platform operation, through the categorized application of strategies, synchronous development and dynamic adjustment;
3. Strengthening support for industries and doubling efforts in tackling key and common technical issues, while accelerating the building of a unified, comprehensive and open industrial internet standard system with enhanced ability to supply products and solutions;
4. Facilitating integrated application, improving the innovation and application of industrial internet by large enterprises while accelerating the application and popularization of the industrial internet by small and medium-sized companies;
5. Improving the ecological system, building innovation centers for industrial internet and integrating resources of innovation from universities, research institutions and enterprises; carrying out coordinated innovation between industries, universities and research institutions on industrial internet, building a coordinated development system for enterprises and forming the mechanism where central and local companies coordinate and different regions supplement each other;
6. Enhancing internet security and building data security system while pushing forward the development of security technologies;
7. Furthering open cooperation and encouraging Chinese companies and their foreign counterparts to engage in cross-sector cooperation on the entire industrial chain.

The Guidelines also deploys 7 key projects:



The Guidelines points out that:

1. A legal system should be established and improved;

2. The scope of equal access by market entities should be expanded and inclusive and prudent regulation should be implemented to create a sound market environment;

3. Attention should be given to the building of the network, platform and security system and financial and tax support should be stepped up;

4. Higher percentage of direct financing should be supported and innovation in financial services encouraged;

5. The industrial internet should be supported with a solid foundation of professionals and new ways of talent cultivation;

6. The organizing and implementing mechanism should be improved and the industrial internet should be sped up along with the "Made in China 2025" initiative, so that solid support can be provided for accelerated development of the industrial internet.

(Source: Xinhua News Agency, February 18, 2018)

Great Work Accomplished by NSFC over the Past Five Years

Over the past 5 years, The National Natural Science Foundation of China (NSFC) has financed 159,861 projects of various kinds with about 109.406 billion yuan from the state treasury and approximately 1.756 billion yuan from other sources. These funds have been provided to support basic research and scientific frontier exploration, help with the growth of the scientific personnel, improve China's capacity in original innovation, and make extraordinary achievements to China's science and technology undertakings. (Note: the figures illustrate funding from 2013 to 2016)

Basic research has been comprehensively planned to foster the ability of source innovation. NSFC is committed to balanced, coordinated and sustainable development of all disciplines, while maintaining a stable percentage of funds for curiosity-driven research projects. All researchers are encouraged to come up with their own projects and engage in innovative research activities. A total of 64,837 general projects have been funded with 44.35 billion yuan. In view of the world science frontier, funds have been allocated towards priority domains and leading researchers have been directed and pooled to carry out in-depth and systemic innovative research. One focus of the funding is the important frontier scientific research with the aim of developing the discipline and making breakthroughs in a number of important domains or scientific frontiers. For this purpose, a total of 7.213 billion yuan have been spent on 2,406 key projects. For frontier science development and national needs, with the scientific goals as the guidance, NSFC has encouraged the research of original and exploratory scientific equipment, especially the scientific equipment and devices of originality and significance, which provide new means and tools for scientific research with enhanced support for original innovation and research. In this regard, a total of 3.607 billion yuan have been channeled to 295 such projects.

In line with China's major strategic needs, efforts have been made to promote cross-discipline integration. NSFC has increased its funding for important original innovations and inter-disciplinary domains, where 16 major research projects have been launched with a total funding of 3.16 billion yuan. The integration between disciplines and solution of complicated issues remain consistently as the focus of our strategy, and scientists are encouraged to carry out inter-disciplinary research based on the needs of China and the frontiers of disciplines. A total of 88 major projects have been funded with a total funding of 1.449 billion yuan. NSFC aimed at the international frontiers of disciplines and made arrangements ahead of time, when pilot projects of basic research centers were first implemented in 2016. In relation to this, fundings for three such centers have been approved with a total amount

of 540 million yuan.

The platforms have been well utilized to promote collaborative innovation. Since 2013, a total of 2,524 joint projects have been funded with 3.23 billion yuan. 14 joint funding agreements have been entered into with the central government, local governments, and enterprises, in addition to 14 renewed agreements and 4 supplementary agreements. The total number of the agreements reached 32. 4.04 billion yuan of funding has been pooled from other sources.

Efforts have been made to pool innovative figures and underpin the development of research teams. NSFC has stepped up its support in cultivating young talents and ensuring the supply of talents for basic research teams. 64,055 youth science projects have been funded with a total value of 14.001 billion yuan. More balanced support has been given to science funds in different regions, so that the research professionals in regions with poor basic research could receive stable financial support. 10,949 regional science projects have been funded with a total amount of 4.694 billion yuan. Assistance has been provided for the growth of young science talents, and outstanding figures have been cultivated, where 1,599 youth science projects have been funded with 1.839 billion yuan. Academic leaders have been fostered and 792 national outstanding youth science projects have been funded with 2.524 billion yuan. Since 2014, application for group project of innovation research has been adjusted, so that applicants could file for application by themselves rather than on the basis of departmental recommendation. The amount of initial project funding has increased from 6 million yuan per project to 12 million yuan per project and the term of funding has been extended from 3 years to 6 years. In line with the arrangements of CPC Central Committee for talent recruitment, and according to the plan of the work team for recruiting high-level global experts, NSFC has since 2014 organized the application and review of the youth project of the "One Thousand Talent Program", where 1,821 persons have been selected over the last 3 years.

International cooperation and exchange has been strengthened to integrate into global innovation network. At present, NSFC has signed cooperation agreements or MOUs with 91 science foundations, research institutions or international organizations from 49 countries (regions). It has built a comprehensive, multi-level and extensive cooperation and exchange network and platform with the United States, Canada, Britain, Germany, France, Russia, the European Union and other countries and regions. In Asia, bilateral cooperation with Israel, Japan, South Korea and Singapore, four scientific and technological powers of the continent, has been fully consolidated and deepened. The A3 forward-looking plan jointly initiated by China, Japan and South Korea has become a three-country joint funding program with important implications. Through the Joint Declaration on Supporting Cooperation on Scientific Talents and Creating the Future of Belt and Road Initiative, a clear roadmap has been drawn up for S&T cooperation under the "Belt and Road" initiative. We will continue to promote cooperation with Hong Kong, Macao and Taiwan, strengthen cooperation and exchanges in the areas of concern to Hong Kong, Macao and Taiwan and push forward the development of science and technology in the regions.

(Source:Chinese science newspaper, July 31, 2017)