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Minister Wan Meets U.S. Ambassador to China

Wan Gang, Minister of Science and Technology, met with a U.S. delegation led by Max Baucus, U.S. Ambassador to China on December 12th 2016.

Minister Wan reviewed the fruitful outcomes of China-U.S. cooperation in clean energy, fossil fuel, environment, healthcare, agriculture, basic research, and people-to-people exchanges, and applauded the progress of bilateral cooperation in science, technology and innovation. He answered questions about China's reform of R&D project management and hoped that in the next stage, the two sides could continue to consolidate existing cooperation, focus on key areas, expand areas of cooperation and contribute to the progress of science and technology and the well-being of people.

Ambassador Baucus appreciated the Minister's remarks. He noted the vital importance of China-U.S.

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relations and the profound impact of bilateral cooperation in science, technology and innovation. He said that the U.S. is willing to work with the Chinese side to address various global challenges and push forward scientific and technological cooperation in areas of shared interest to the benefit of the two peoples.

(Source: www.cistc.gov.cn,December 15, 2016)

Vice Minister Yin Meets Swedish State Secretary of Environment and Energy

Yin Hejun, Vice Minister of Science and Technology, met with visiting State Secretary Nils Vikmång of the Swedish Ministry of Environment and Energy in Beijing on December 8th, 2016. The two sides exchanged views on China-Sweden cooperation in science, technology and innovation (STI), areas of common interest in energy, and the 8th Clean Energy Ministerial (CEM8) to be held in Beijing next year.

Vice Minister Yin welcomed the State Secretary, briefly reviewed China-Sweden cooperation in STI, and introduced the overall development of STI and the innovation-driven development strategy of China. He also talked about plans on developing clean energy in the country's 13th Five-Year Plan. State Secretary Nils Vikmång commended China's achievements in STI and clean energy and briefed the Chinese side on Sweden's main priorities and technological strengths in clean energy. He expressed the hope that Sweden and China would work together to implement Mission Innovation and deepen cooperation in energy.

The Vice Minister provided an update on the preparation for CEM8 and the second Mission Innovation Ministerial and extended an invitation to the Swedish delegation. The State Secretary said that Sweden is willing to actively work with China on the preparation and play an active role in these meetings. The two sides also exchanged views on other topics such as legal frameworks to stimulate innovation in energy, public participation and information transparency.

(Source: www.cistc.gov.cn, December 15, 2016)

Vice Minister Li Meets Bulgarian Deputy Ministers

Li Meng, Vice Minister of Science and Technology met with Ivan Dimov, Deputy Minister of the Bulgarian Ministry of Education and Science; and Lyuben Petrov, Bulgarian Deputy Minister of Economy, in Sofia, the Capital of Bulgaria on November 24, 2016. They exchanged views and reached consensus on deepening cooperation in science, technology and innovation (STI). Vice Minister Li stressed that Bulgaria is a major country along the "Belt and Road", and that his Ministry is committed to promoting STI cooperation with Bulgaria on the basis of mutual benefits and reciprocity.

When meeting Deputy Minister Dimov, Li introduced China's Innovation-driven development strategy, especially development of the innovation system and practices of driving economic growth with science and technology. He said that since the Chinese and Bulgarian governments signed an agreement on scientific and technological cooperation in 1955, the two sides have engaged in close and productive exchanges in agriculture, ICT and medical science. The implementation of the "Belt & Road" Initiative provides a new opportunity for China and Bulgaria to further enhance S&T cooperation. Li suggested that the two sides should further strengthen top-level design, expand people-to-people exchanges and pragmatic project cooperation, explore the possibility of building long-term cooperation platforms, so as to make new progress in bilateral cooperation. Deputy Minister Dimov echoed Vice Minister Li's views and said that while the European Union is Bulgaria's main partner for international cooperation in science and technology

at present, the Bulgarian side is closely following the development of science and technology in China and is eager to expand exchanges and cooperation with the Chinese side, especially in the fields of aerospace, climate change and big data.

When meeting Deputy Minister Petrov, Vice Minister Li said that Bulgaria is China's traditional partner of science and technology cooperation in Central and Eastern Europe. In view of specific needs in both countries, the two sides should expand their cooperation from science and technology to innovation. He introduced China's innovation-driven development strategy and measures taken to facilitate innovative development. Li suggested that the two sides should focus on supporting youth innovation and entrepreneurship, promoting technological cooperation between businesses and establishing industrial cooperation platforms, and work together to promote the transfer and translation of R&D findings to serve economic development in both countries. Deputy Minister Petrov agreed with the Vice Minister. He said that the meeting was important as it was the first held at vice ministerial-level between the Bulgarian Ministry of Economy and the Chinese Ministry of Science and Technology. He noted that the Bulgarian side is willing to work with Chinese counterparts to expand bilateral cooperation in STI in an effort to boost two-way investment and trade. Geographically, Bulgaria enjoys a strategic position as a gateway to Europe and fast economic growth with advantages of labor supply. He wished to promote more bilateral cooperation in innovation and entrepreneurship and welcomed Chinese high-tech companies' investment in Bulgaria.

Vice Minister Li led a Chinese delegation to visit Bulgaria from 23 to 25 November. During the visit, he also met with President of the Bulgarian Academy of Science, President of the Sofia University, and Rector of the University of National and World Economy. He exchanged views with Bulgarian counterparts on deepening STI cooperation and expanded bilateral STI cooperation into new areas.

(Source: www.cistc.gov.cn, December 19, 2016)

7th Meeting of China-Hungary Committee on S&T Cooperation Held in Budapest

The 7th Session of China-Hungary Intergovernmental Committee on Science & Technology Cooperation was held in Budapest, the capital of Hungary on December 5th, 2016. The meeting was jointly presided over by Yin Hejun, Chinese Chairman of the Committee and Vice Minister of Science and Technology, and József Pálinkás, Hungarian Chairman of the Committee and President of National Research, Development and Innovation Office of Hungary.

The Chinese side briefed on China's latest progress in science, technology and innovation (STI) as well as the reform of R&D project management, the integration of economic growth with science and technology and China's engagement in international S&T cooperation, especially the success of the first China-Central and Eastern European Countries (CEEC) Conference on Innovation Cooperation and the G20 Science, Technology and Innovation Ministers Meeting. The Hungarian side introduced its research management system, STI policies, R&D activities, rankings of innovation index, future priorities and development goals, its international S&T cooperation, especially Hungary's engagement in the EU's Horizon 2020 and the building of large research facilities.

Through in-depth exchanges, the two sides agreed that they should fully leverage the Intergovernmental Committee and the China-CEEC cooperation platform, seize the opportunity of the "Belt & Road" Initiative, strengthen strategic dialogue and top-level design for S&T cooperation, explore such methods as "regular committee meetings + workshops" to better work with other relevant government departments, research institutions, universities and local authorities in both countries within the framework of the Intergovernmental Committee.

The two sides also agreed to expand people-to-people exchanges in the S&T field, deepen bilateral R&D cooperation, build joint research centers and laboratories in physics, medicine and other fields of shared interest, and establish platforms for bilateral S&T cooperation.

The two sides reviewed progress of project implementation since the previous session and approved four intergovernmental R&D projects and ten people-to-people exchanges programs on agriculture and food technologies, ICT, environmental protection and material science.

After the meeting, the two sides signed the Protocol of the 7th Meeting of China-Hungary Intergovernmental Committee on Science & Technology Cooperation.

(Source: www.cistc.gov.cn, December 22, 2016)

Finance for S&T in China in 2016

Finance for science and technology refers to financial activities that encourage S&T innovation, nurtures entrepreneurship and facilitates business operation. It works through direct and indirect investment of public finance, favorable policies for science, technology and innovation (STI), tax policies, etc. Examples include venture capital, R&D loans and insurance, etc.

In 2013, budget allocated to SMEs from the central government totaled 15 billion yuan, an increase by nearly two folds compared with that five years ago. The reform in 2014 channeled funding from the central government in three ways: first, national SME guidance fund; second, guidance fund for investment in emerging industries; third, guidance fund for commercialization of R&D findings. These three funds, with extensive coverage, provide direct access to state funds for companies. The new mechanism also encouraged the role of non-governmental funds through public-private partnerships (PPP). Take the national SME guidance fund as an example, its initial capital in 2013 was only 15 billion yuan, yet with the contribution of non-governmental funds from financial institutions and large SOEs, the total increased to 60 billion yuan.

According to statistics, there were 1,771 venture capital institutions in China in 2015 with a total fund of 640 billion yuan. The last two years has witnessed substantial increase in the amount of venture capital investment with an annual growth of over 100 billion yuan. This shows the vitality of entrepreneurial activities and the keen interest of private capital. There are two distinctive features in this process: first, rapid growth in angel funds which used to be totally owned by individuals. Between 2006 and 2015, organized angel investment has grown rapidly. Newly established angel funds have outnumbered all those founded before 2006. Second, new forms of business incubators emerged, including various kinds of online incubators, offline accelerators, start-up cafes, as well as new research institutions with integrated functions of R&D and business incubation.

In recent years, small and medium-sized banks revamped internal mechanisms and add S&T finance as a new business content. In 2009, two S&T banks were open in Chengdu. Later, the SPD Silicon Valley Bank started operation in Shanghai and now it has obtained license to run the whole product line of RMB business. According to statistics in 2013, there were 100 banks engaged in S&T finance business.

The same is happening in the capital market. R&D outcomes are getting increased attention. A new terminology is coined in the capital market called R&D findings as an investment for stock, a mechanism through which R&D findings can be exchanged for shares. Generally speaking, S&T shares are more active in the secondary market.

After 2006, a group of new S&T insurance schemes have emerged to provide guarantee for S&T financing.

(Source: Science and Technology in China, Issue No.8, 2016)

Statistics of National R&D Expenditure Published in 2016

The National Bureau of Statistics, the Ministry of Science and Technology and the Ministry of Finance jointly released Statistics of National R&D Expenditure in 2015 on November 10th 2016. The report showed that the national expenditure registered continued growth in 2015, featuring further increase in both R&D expenditure and fiscal spending on science and technology as well as growing R&D intensity.

1. Total R&D expenditure

In 2015, China's R&D expenditure totaled 1416.99 billion yuan, up by 115.43 billion yuan or 8.9% over the previous year. The intensity of R&D input (as a share of GDP) was 2.07%, 0.05 percentage points higher year on year. Per capita R&D expenditure based on the number of R&D personnel (full-time equivalent) was 377,000 yuan, up by 26,000 yuan over 2014.

2. R&D expenditure by category

71.61 billion yuan was spent on basic research, up 16.7% year on year; 152.87 billion yuan on applied research, up 9.3%; 1,192.51 billion yuan on test and development, up 8.4%. Expenditure on basic research, applied research, test and development each accounted for 5.1%, 10.8% and 84.1% of the total.

3. Funded bodies

R&D expenditure of the business sector totaled 1,088.13 billion yuan, up 8.2% year on year. 213.65 billion yuan was spent by government-affiliated R&D institutions, up 10.9%; 99.86 billion yuan was spent by institutes of higher learning, up 11.2%. Business sector, government-affiliated R&D institutions and institutes of higher learning respectively accounted for 76.8%, 15.1% and 7.0% of the total R&D expenditure.

4. Distribution

There are seven industrial sectors with R&D expenditure of over 50 billion yuan or 60.8% of the total R&D expenditure from industrial enterprises with annual revenue of 20 million yuan or more from their main business operations. There are nine industrial sectors whose R&D expenditure exceeded 10 billion yuan, above the average R&D intensity (R&D spending proportional to income from main business operations) of industrial enterprises with annual revenue of 20 million yuan or more from their main business operations.

In geographical terms, there are five provinces (municipalities) whose R&D expenditure exceeded 100 billion yuan. They are Jiangsu (12.7% of national total), Guangdong (12.7%), Shandong (10.1%), Beijing (9.8%) and Zhejiang (7.1%). There are also eight provinces (municipalities) whose R&D intensity (R&D spending as a share of GDP) exceeded the national average. They are Beijing, Shanghai, Tianjin, Jiangsu, Guangdong, Zhejiang, Shandong and Shaanxi.

5. Fiscal spending on science and technology

In 2015, China's fiscal spending on science and technology totaled 700.58 billion yuan, up by 55.13 billion yuan or 8.5% year on year, accounting for 3.98% of the total fiscal spending of the year. Of the fiscal spending on science and technology, 301.21 billion yuan came from the central government, up 3.9% year on year, accounting for 43.0% of the total; 399.37 billion yuan came from local governments, up 12.3% year on year and made up 57% of the total.

(Source: Science and Technology Daily, November 16, 2016)