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International Science and Technology Cooperation

China-Israel Science and Strategic R&D Fund Expanded

On December 14th of 2015, an agreement to expand the China-Israel Science and Strategic R&D Fund to $6 million was signed by Ofir Akunis, Israeli Minister of Science, Technology and Space and Wan Gang, Chinese Minister of Science and Technology. According to the agreement, Israel will contribute $1 million, while China will put in $5 million.

The Fund mainly supports joint research projects in the fields of brain science, nanotechnology, 3D printing, bio-medicine, renewable energy, computer science, aging,

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and smart city.

In 1995, China and Israel set up the China-Israel Science and Strategic R&D Fund of $2.5 million. The Fund sponsored joint research by both countries. In 2011, the two countries signed a joint statement on strengthening bilateral cooperation in science and technology and launched a two-year cooperation plan of $1 million. By 2014, a total of 30 projects had been supported. The joint research fields involve new materials, agricultural biotechnology, biomedical engineering, water treatment, and nano-materials.

(Source: www.wokeji.com-Science and Technology Daily, December 16, 2015)

China and Macedonia Further Intergovernmental Cooperation

On December 25, 2015, the China-Macedonia Committee on Intergovernmental Cooperation in Science and Technology held its 4th regular meeting in Beijing.

At the meeting, the Chinese side briefed on program management reforms and international cooperation at the current stage and introduced a series of measures unveiled by the Chinese government to support the innovation-driven development strategy. The Macedonian side introduced the innovation development strategy, the talent strategy, the research system, and international cooperation in science and technology in Macedonia. Both sides agreed that as the bilateral cooperation continues to develop, China and Macedonia should strengthen the industrialization of research results, carry research cooperation at a larger scale, and encourage technology enterprises to take part in innovation.

The two sides reviewed the progress since the 3rd Regular Meeting, deliberated on and adopted a new bilateral program on intergovernmental cooperation. Both intend to jointly support 9 projects, including agricultural science, computer science, engineering seismology, civil engineering and other fields. After the meeting, the countries signed the Protocol of the 4th Regular Meeting of the Committee on Science and Technology between the People's Republic of China and the Republic of Macedonia.

(Source: www.cistc.gov.cn, January 12, 2016)

Vice Minister Yin Attends China-Israel Technology, Innovation and Investment Summit

The 2016 China-Israel Technology, Innovation and Investment jointly sponsored by the Israeli Ministry of Economy and the Chinese Ministry of Science and Technology, was successfully held in Beijing from January 4th to 6th .Yin Hejun, Vice Minister of Science and Technology of China, attended the opening ceremony of the Summit on January 5. Yuval Steinitz, Minister of National Infrastructure, Energy and Water of Israel and other foreign representatives took part in the meeting.

In his speech, Vice Minister Yin noted that Israel is one of the most innovative countries in the world and a fertile land for innovation and entrepreneurship. Israel tops the world in terms of start-up numbers, R&D intensity and percentages of scientists and engineers in the national population. China has long regarded Israel as an important partner for cooperation in science, technology, and innovation. Thanks to commitment from leaders of both countries, the innovation cooperation has entered a golden period. In the future, China and Israel will continue to maintain close communication and active cooperation. Under the framework of the China-Israel Joint Committee on Innovation Cooperation and the Action Plan on China-Israel Innovation Cooperation (2015-2017), the two countries should enable more actors

to take part and build new growth engines.

In addition, the Vice Minister also met with Yuval Steinitz, Israeli Minister for National Infrastructure, Energy and Water. They exchanged views and reached a preliminary consensus on strengthening bilateral cooperation in the development and utilization of solar, wind and other clean energy, energy storage, alternative oil, water resources, and network security.

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

China Science and Technology Statistics

In 2014, grants for science and technology in China continued to grow. Both the fiscal spending in science and technology and input of research and development (R&D) have grown, so has the intensity of R&D.

I. R&D spending

In 2014, China put a total of RMB1.30156 trillion into R&D, up by RMB116.9 billion or 9.9% from 2013. The R&D intensity (GERD/GDP) is 2.05%, up by 0.04% from 2013. Per capita spending (calculated by full-time workloads of R&D personnel) stood at RMB 351,000, representing an increase of RMB16,000 over 2013.

From the perspective of research types, basic research spending in China amounted to RMB 61.35 billion, up by 10.6% from 2013, while applied research spending reached RMB139.85 billion, up by 10.2%, and spending on experimental development stood at RMB1.10036 trillion, up by 9.8%. Basic research, applied research, and experimental development respectively accounted for 4.7%, 10.8% and 84.5% of China's gross R&D spending.

In terms of grant sources, spending by enterprises reached RMB1.00606 trillion,up by 10.9% from 2013, while spending by government-affiliated research institutes amounted to RMB192.62 billion, up by 8.1%, and institutions of higher learning spent RMB 89.81 billion, up by 4.8%. Enterprises, research institutes, and institutions of higher learning respectively made up 77.3%, 14.8% and 6.9% of the gross R&D spending in the country.

When it comes to industrial sectors, 7 industries invested more than RMB 50 billion on R&D. These sectors accounted for 61.1% of the R&D funding by all industrial enterprises above designated size (with annual revenue of 20 million yuan or more from their main business operations). There were 10 major sectors which invested more than RMB10 billion on R&D and their R&D intensities (R&D spending/revenues from prime business) are above the average of industries above designated size.

According to regional statistics, the top 6 R&D spenders in China were Jiangsu (12.7%), Guangdong (12.3%), Shandong (10%), Beijing (9.7%), Zhejiang (7%) and Shanghai (6.6%). Eight provinces (including municipalities), namely Beijing, Shanghai, Tianjin, Jiangsu, Guangdong, Zhejiang, Shandong and Shaanxi, reached or exceeded the national average R&D intensity (R&D spending/regional GDP).

II. Fiscal spending on science and technology

In 2014, China's fiscal spending on science and technology stood at RMB 645.45 billion, marking an increase of RMB 26.96 billion or 4.4% from 2013. Fiscal spending on science and technology made up 4.25% of the country's total fiscal expenditure. Of this, fiscal spending on science and technology from the central government reached RMB 289.92 billion, up by 6.3%, accounting for 44.9% of China's gross fiscal spending on science and technology. Local governments' spending amounted to RMB 355.54 billion, up by 2.9%, making up 55.1% of China's spending on science and technology.

(Source: Science and Technology Daily, November 24, 2015)

Allocation, Use and Management of R&D Grants

The year 2014 saw a continuous increase in R&D input in China. Of the RMB 1 trillion research funds spent in the country during the year, enterprises accounted for 77.3%, a record high.

Statistics show that in 2014 enterprises received RMB 42.23 billion of R&D grants from the government, which

made up approximately 4% of their total R&D spending. The percentage was not high. According to the 2014 National Statistics on Grants for Science and Technology, R&D spending in China totaled RMB1.30156 trillion in 2014, RMB116.9 billion more than in 2013. For 2 consecutive years, the R&D intensity has exceeded 2% and is still rising. Expenditure of enterprises, government-affiliated research institutions, and institutions of higher learning respectively accounted for 77.3%, 14.8% and 6.9% of China's total R&D spending. Enterprises' R&D input reached RMB1.00606 trillion, up by 10.9% from 2013, 2.8% and 6.1% higher than that of government-affiliated research institutions and institutions of higher learning. Enterprises contributed 84.2% of the growth of R&D expenditure in the country, up by 4.5% from 2013.

(Source: Science and Technology Daily, January 8, 2016)

Per Capita Grants for Science Popularization up by 37% in 2014

Statistics on science popularization in China released by the Ministry of Science and Technology for the year of 2014 show a clear increase in grants. On a per capita basis, grants for science popularization stood at RMB 4.68, RMB 1.27 more than in 2013.

Data shows that China's science popularization maintained steady development in 2014. The number of SP personnel in the country grew steadily, reaching a total of 2.0123 million in 2014, up by 1.72% from 2013. This meant that there were 14.71 SP personnel among every 10,000 people in China.

Government grants remained the major funding source for science popularization. In 2014, RMB 15.003 billion was raised for science popularization, up by 13.49% from 2013. Of this RMB 15.003 billion, over RMB160 million was obtained from public donation, a big increase of 66.05% year-on-year.

SP venue construction made headway as well. By the end of 2014, there were 409 science halls and 724 scientific and technological museums in China, respectively up by 29 and 46 from 2013. Data also indicates a growing diversity of communication media. SP events have become an important way to raise public awareness.

Statistics also reveal a fall in certain indicators. For example, there were 12,929 SP producers and writers in China, 1,550 down from 2013. There was also a fall from 2013 in the total length of SP programs broadcast by radio and TV stations. Research analysis suggests that the decrease of SP producers and writers had much to do with the increase in part-time and amateur personnel making SP materials, while the reduction of on-air hours was closely related to the growing use of mobile phones, Weibo, WeChat and other new media.

(Source: www.most.gov.cn, December 8, 2015)

National Programs and Grant Management System

According to people in the know in the Chinese Academy of Science and Technology for Development, China will, through a series of institutional reforms, sharpen its focus of grants for science and technology on major national demands for socio-economic development. This will bring the country's S&T grants more in line with the laws of science, technology and innovation. It will also enable efficient resource allocation.

Each year, the central government used to provide grants close to RMB100 billion for some 100 programs and special projects which were administered by almost 40 departments. After the Plan for Furthering Management Reform of Programs (special projects, funds, etc.), funded by the Central Government was released since China has carried out reform and adjustment. To a great extent, such efforts have addressed the issues of fragmentation and

duplication.

China has restructured its science and technology programs into 5 major categories, namely the Natural Science Fund, the Major S&T Projects, the Key R&D Program, the Technology Innovation Fund, and the Research Bases and Personnel Program. All these programs have their own focus. For example, the Natural Science Fund focuses on free explorations. The Major S&T Projects addresses China's national strategic demands. The Key R&D Program supports major research for public wellbeing. The Technology Innovation Fund encourages enterprises to increase their inputs into science and technology and promotes the transfer and commercialization of research results. The Research Bases and Personnel Program builds an enabling environment for the entire research process.

The new system features "one platform, three pillars and one foundation". "One platform" refers to the inter-ministerial meeting mechanism led by the Ministry of Science and Technology, and participated by the Ministry of Finance, the National Development and Reform Commission and other departments. "Three pillars" refer to the committee of strategic consultancy and comprehensive review, professional institutions for project management, and mechanisms for supervision, evaluation and dynamic adjustment. "One foundation" refers to the establishment of an information system for S&T management. This system is expected to improve efficiency in the approval, submission, review and duplication check of project proposals and facilitate the application of research findings.

(Source: Science and Technology Daily, January 7, 2016)