Chinese President Urges Innovation in Science and Technology

The importance of developing science and technology (S&T) was reiterated by Chinese President HU Jintao during the National Conference on S&T Innovation which was held in Beijing on July 6 and 7, 2012. Hailing S&T innovation as the key to "pushing forward China's reform and opening-up policy and building a moderately prosperous society," HU called for increasing the investment in the research and development sector from 1.83 percent of GDP in 2011 to more than 2.5 percent in 2020. He also proposed six suggestions to accelerate the making of an innovative nation, including promoting innovation-driven development, improving self-innovation capacity and system for cultivating talented people, deepening reforms of the S&T system, optimizing environment for innovation, and expanding international cooperation. According to HU, by the year 2020, a national innovation system should be generally established in China.

China to Support More Homegrown Talents

In September 2012, the Chinese government initiated a new talent recruitment plan called the "Ten Thousand Talents Program" to show its determination to support homegrown talents. As an extension of and supplement to the on-going recruitment programs including the "Hundred Talents Program" and "Thousand Talents Program", both of which are focused on pooling overseas Chinese scientists to return China, the new program will mainly fund the massive outstanding scientists, entrepreneurs and educators in China, both in the field of natural and social sciences, who are largely under the age of 50. According to government officials in charge, the grant for the winners of the "Ten Thousand Talents Program" will be equivalent to that of the other two programs.

TWAS General Meeting Convenes in Tianjin

Under the theme of "Science and Sustainability", the 12th General Conference and 23rd General Meeting of the academy of sciences for the developing world (TWAS) were convened in Tianjin, a major northern China city next to Beijing, from September 17 to 21, 2012. Hundreds of TWAS Members, Young Affiliates and officials from nearly 70 countries attended the meeting. Chinese President HU Jintao addressed the opening ceremony and announced that China would contribute 1.5 million US dollars to TWAS.

The General Meeting elected BAI Chunli, President of the Chinese Academy of Sciences, to be the new President of TWAS. He is the first Chinese to serve as TWAS President and will take office next January. The Meeting also approved TWAS Council's suggestion to change the academy's name to "The World Academy of Sciences for the advancement of science in developing countries" (TWAS).

It was the third time China had hosted the TWAS General Meeting, the previous two being held in Beijing in 1987 and 2003, respectively.

The 11th CTWF Workshop Convenes in Beijing

The 11th International Workshop of the CAS-TWAS-WMO Forum (CTWF) on "Terrestrial Ecosystems under the Changing Climate" was held in Beijing from September 2 to 5, 2012. Over 70 experts from around the world, including Pakistan, Mongolia, Sudan, Ghana, Jordan, Turkey, Ethiopia and Nepal attended the meeting to exchange their latest findings on the topic. The workshop focused on two aspects: the structure, function, and diversity of ecosystems, and the biophysical and biogeochemical processes in terrestrial ecosystems.

The CTWF was jointly initiated by the Chinese Academy of Sciences (CAS), the academy of sciences for the developing world (TWAS) and World Meteorological Organization (WMO) in 2000. It has been regularly funded by CAS. So far, 11 international symposia or workshops have been successfully organized under the Forum.

Oceanology Institute to Use a New Research Vessel

The "Science", China's most advanced ship by far for scientific investigation, was handed over to its operator – the CAS Institute of Oceanology – by its manufacturer (the Wuchang Shipbuilding Industry Co, Ltd.) on September 29, 2012 in east China's portal city Qingdao. About 100 meters long and 18 meters wide, the 88 million dollar worth of vessel has a cruising capacity of 15,000 nautical miles with a top speed of 15 knots, designed as a major tool for China's exploration into the oceans, especially the deep ocean in the next decade or two. Compared with other research vessels in China, the "Science" features higher stability, better maneuverability and a much larger laboratory space onboard. It will be used as a platform for multifold research purposes by oceanological scientists across the country.

Sino-Danish College Inaugurated at UCAS

On September 10, 2012, visiting Danish Prime Minister Helle Thorning-Schmidt and CAS President BAI Chunli spoke in front of more than 100 students from China and Europe who are going to start their graduate programs at the newly established Sino-Danish College at the University of CAS (UCAS) in Beijing.

In her speech, Thorning-Schmidt expressed high hopes for the College. She encouraged the Danish students to work hard and make good use of this opportunity to experience the nation.

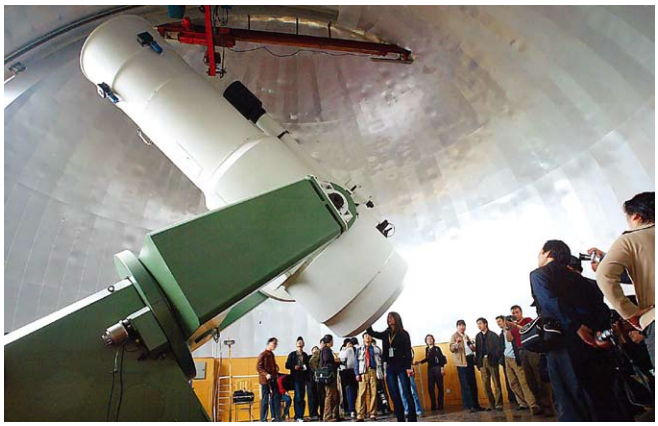
BAI, who is also UCAS President, said that he was happy to see young talents from different nations and cultures to work together and learn from each other. He believed that after two or three years of study, each student would be able to obtain not only a globally recognized academic degree but also an international outlook and competitiveness.

This year, the Sino-Danish College welcomed 66 Chinese and 74 European students, mainly from Denmark, to study in five scientific domains including life sciences, nanoscience and nanotechnology, renewable energy research, water and environment research, and social sciences.

The Sino-Danish College was launched last September

to implement a joint education and research project between CAS and eight Danish universities and the Danish Ministry of Science, Technology and Innovation.

Happy 90th Birthday to Chinese Astronomical Society



Over 200 experts and officials from across the country celebrated the 90th anniversary of the Chinese Astronomical Society in Nanjing on October 30, 2012. CUI Xiangqun, the Society's President, reviewed China's major achievements in the field of astronomy in the past ten years, including the completion of the Large Sky Area Multi-Object Fiber Spectroscopy Telescope (LAMOST) in north China and the advancements of Antarctic astronomy, and looked into future development in the coming decade.

A number of awards were also given out during the meeting, including the 90th Anniversary's Top Honor Award on Profs. WANG Shouguan, YE Shuhua and QU Qinyue for their pioneering contributions to the Chinese astronomy.

The Chinese Astronomical Society was founded on October 30, 1929 in Beijing and moved to Nanjing in 1932. At present, it has more than 2,000 members and 23 member organizations. It joined the International Astronomical Union in 1935, and successfully organized the Union's 28th General Assembly in Beijing in August 2012.

World Astronomers Celebrate their "Olympics" in Beijing

Nearly 3,000 astronomers from around the globe celebrated their "Olympics" for a fortnight from August 20 to 31, 2012 in China. During the 28th General Assembly of the International Astronomical Union (IAU), which was held at the China National Conference Center in the Olympic Green of Beijing, the astronomers enjoyed eight symposia, seven joint discussions and 18 special sessions on frontline astronomy topics. The meeting also witnessed the outset of new international collaborations, including the signing of a MoU between China and Australia for joint astronomical research in the Antarctica.

Chinese Vice President XI Jinping addressed the opening ceremony with a speech "Exploring the vast universe hand in hand, Working together toward a better future for humankind".

Since 1922, the triennial IAU General Assembly has been the most important conference for the international astronomical community. The Beijing meeting is one of the largest IAU General Assemblies ever organized. It is also the first time for China to host such a meeting since it joined the organization in 1935. The meeting was organized by the Chinese Astronomical Society, which was to celebrate its 90th birthday in October 2012.

Shanghai Unveils Large Steerable Radio Telescope

A silvery white 65m radio telescope was completed and unveiled at the Sheshan Station of Shanghai Astronomical Observatory, Chinese Academy of Sciences on October 28, 2012. Standing more than 70 meters high and weighing 2,650 tons with the size of nine basketball courts, it features full steering, excellent surface accuracy and a celestial observation distance of over 10 billion light years. Hopefully, the telescope will soon be fully operational and used for China's upcoming lunar exploration in 2013.

The Shanghai 65m Radio Telescope is by far the largest of its kind in Asia and the fourth largest in the world. China also plans to build an antenna system for a 110-meter-diameter radio telescope in west China's Xinjiang Uyghur Autonomous Region while a 500-meter-diameter radio telescope is now under construction in southwest China.

"Olympics of Mechanics" Held in Beijng

From August 20 to 24, 2012, more than 1,500 mechanical scientists and students from over 60 countries gathered in Beijing to attend the 23rd International Congress of Theoretical and Applied Mechanics (ICTAM). The congress comprised four general assembly lectures, six mini-symposia and 46 sessions covering nearly all aspects of current mechanical research, application and education.

Known as the "Olympics of Mechanics", ICTAM is the most important meeting for the mechanical community in the world. It has been held every four years almost without interruptions since the 1920s. It is the first time that the meeting was held in China. In terms of number of participants and the coverage of topics, the Beijing meeting is one of the largest in ICTAM history.

Happy 80th Birthday to Chinese Physical Society

On August 25, over 500 physicists and students from across China gathered at Tsinghua University to commemorate the 80th birthday of the Chinese Physical Society (CPS). The participants included Nobel Prize Laureate Chen-Ning Yang, State Supreme S&T Award winner XIE Jialin as well as 40-odd academicians of CAS and CAE. Distinguished guests from the physical societies of the US, Europe and Japan also joined the celebration.

Founded in 1932, CPS now has about 40,000 members and convenes its national congress every four years. It has been a member of the International Union of Pure and Applied Physics (IUPAP) since 1984, and enjoys extensive relations in the international physical community.

A Major Research Project on New Generation Information Technologies Kicks Off

A new strategic priority research project named "Study on the New Generation Information Technologies for Sensing China" was officially kicked off at CAS on August 14, 2012. According to YIN Hejun, CAS Vice President and head of the project, the study aims at developing revolutionary scientific and technological innovations (such as the Internet of Things and cloud computing) to address the four main challenges in today's information systems, namely the scalability of terminals, the performance of mass data, energy consumption, and data security, so as to help fulfill the "Sensing China" strategy proposed by Premier WEN Jiabao in 2009, and promote the modernization of the nation as a whole.

The project, as a joint effort of CAS and other domestic research units and enterprises, will be led by the CAS Institute of Information Engineering (IEE). IEE is a new institute approved for establishment in 2011 and founded on the basis of the State Key Laboratory of Information Security, the National Engineering Laboratory for Information Security Technologies, the National Engineering Research Center for Information Security, the Data Assurance and Communication Security Research Center, etc. By August, 2012, it had 26 research professors and 45 associate researchers as well as more than 400 graduate students working in the fields of intelligent information processing, data security, cryptography theories and security protocols, and communication and electromagnetic safety and so on.

CAS Scientist Receives Corwin Hansch Award

WANG Renxiao, a professor at the State Key Laboratory of Bioorganic Chemistry, Shanghai Institute of Organic Chemistry (SIOC) of CAS, received the 13th Corwin Hansch Award from the Cheminformatics and QSAR Society recently for his contributions to "the development of the de novo ligand design, the validation, evaluation and applications of scoring functions, and the improvement in property-prediction techniques".

Prof. WANG obtained his PhD from Peking University in 1999. Afterwards, he did postdoctoral training at the University of California Los Angeles and worked for the University of Michigan Medical School. He returned China to join SIOC as a "One-Hundred Talent" principal investigator in 2005. His current research focuses on understanding how small organic molecules regulate their biological targets through molecular modeling approaches, and the development and application of computational approaches to drug discovery.

The Corwin Hansch Award, named after the pioneer of the interdisciplinary science of quantitative structure-activity relationships (QSAR), Prof. Corwin Hansch, recognizes one researcher under the age of 40 who has made significant contributions to the field of QSAR and computer-aided drug design each year since 2000. It is the first time that this award went to a scientist working in China or the entire Asia.

CAS and NSFC Strengthen Partnership in Strategy Studies

On April 5, 2012, CAS and the National Natural Science Foundation of China (NSFC) signed a cooperative framework agreement on the strategic research of academic disciplinary development at the launching ceremony of the book series *China's Discipline Development Strategy in the Next Ten Years* at the CAS Headquarters in Beijing. CAS President BAI Chunli and NSFC President CHEN Yiyu attended the ceremony and delivered speeches. Vice President of NSFC SUN Jiaguang and Vice President of CAS LI Jinghai signed the agreement on behalf of their organizations. The ceremony was presided over by Prof. ZHU Daoben, Chair of the Committee for Consultation and Evaluation of the CAS Academic Divisions. LIN Peng, Managing Director of Science Press, introduced the book series at the ceremony.

Shanghai Sets up an Institute to Develop Antibody Drugs

A new institute for immunochemical studies was unveiled in Shanghai on October 12, 2012. The ShanghaiTech University – Shanghai Institute for Advanced Immunochemical Studies, jointly sponsored by ShanghaiTech University and the Shanghai Advanced Research Institute of CAS, will carry out interdisciplinary studies to develop novel antibody drugs for treating cancers, infectious diseases, autoimmune conditions and many other severe illnesses. Prof. Richard A. Lerner from the United States will work as the first director of the institute. He is a pioneer in immunochemical theories and former President of the Scripps Research Institute.

CAS to Boost Technology Transfer and Enterprise Innovation

In October, CAS signed a strategic cooperation agreement with the State-owned Assets Supervision and Administration (SASAC) to join hands in boosting technology transfer and innovation at state enterprises. According to the agreement, CAS will further share research resources with and provide systematic solutions to enterprises in strategically important industries such

as biology, information technology, high-end equipment manufacturing and new energies and new materials. CAS will also help the enterprises to cultivate and recruit top-notch talents. In fact, CAS and China's state-owned enterprises have carried out extensive collaborations since long ago in major scientific projects including manned space flight, lunar and deep sea exploration, as well as the development of alternative energy resources.

A New Institute for Deep Sea Research in Southernmost China

On September 27, 2012, the groundbreaking ceremony for the Sanya Institute of Deep-sea Science and Engineering, Chinese Academy of Sciences was held in Sanya, one of China's southernmost cities and a popular tourist destination. CAS President BAI Chunli and local government officials participated in the ceremony. Jointly sponsored by CAS, the provincial government of Hainan and the municipal government of Sanya, the new institute will strive to study and develop the technologies as well as equipment needed for China's deep sea exploration. With an investment of about 38 million US dollars, the construction involves a 60-thousand-square-meter campus comprising a research building, a deep-sea engineering lab, a marine biological lab and a base for pilot tests and industrialization, to be completed in early 2014 according to plan. It is also the first CAS institute on the South China Sea coast.

China to Host the Next International Congress on Catalysis

The Chinese Chemical Society has successfully won the bid to host the 16th International Congress on Catalysis (ICC), according to a news release of the Dalian Institute of Chemical Physics, Chinese Academy of Sciences on July 26. The Congress, which has been regarded as the most important get-together for the international catalysis community, is going to be held from July 3 to 8, 2016 in Beijing and hopefully attract more than 3,000 experts from all over the world. It is the first time that China won the bid to host an ICC since it first joined the meeting in 1980. The Secretariat of the 16th ICC will be located at the Dalian Institute of Chemical Physics.