

# Sci-Tech Self-reliance and Self-strengthening Promote International Cooperation

By Staff Reporters

Scientific and technological innovation has always played an important role in development and human progress, and its role has been becoming increasingly more prominent in current years.

The CPC Central Committee's (CPCCC) proposals for formulating the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035, were adopted at the fifth plenary session. It is the first time the suggestion to prioritize innovation in China's overall modernization drive, and to regard self-reliance and self-strengthening of science and technology as the pillars of national development strategy, placing it at the top of all planning tasks with specific arrangements, according to a recent interview with Wang Zhigang, Minister

of Science and Technology of China.

Wang noted that the important positioning and arrangements need to fully play S&T innovation's role as the key variable in the once-in-a-hundred-year change and as the pillar and leading role in the great rejuvenation strategy.

China's scientific and technological strength is now moving from seeking accumulation in quantitative terms to taking great leaps forward in quality, and from individual breakthroughs to achieving systematic progress, laying a solid foundation for economic growth and improvement of people's livelihood.

"The self-reliance and self-strengthening in S&T are also in line with the self-reliance and independent innovation that we have always attached great importance to, which do not contradict openness and cooperation; instead, they form a dialectical unity," said Wang.

Open for cooperation is what the self-innovation path with Chinese characteristics is supposed to lead to, whereas self-reliance and self-strengthening are the premise and basis for it to be realized in a mutually equal and respected manner.

"The innovation that China seeks is open innovation. China's S&T innovation has never been, and will never be, conducted behind closed doors," said Wang.

He added that for more than 40 years, openness, cooperation, exchanges and mutual learning have played important roles in promoting China's scientific and technological innovation. China has always emphasized that it should make scientific and technological innovation plans with a global perspective and actively integrate ourselves into the global innovation network.

At present, China cannot pursue innovation and development in isolation

from the world, and the world needs China for global scientific and technological progress. China needs to improve its ability of independent innovation and run its own affairs well, while hoping to learn more advanced experiences from the rest of the world and contribute more Chinese wisdom to tackle global challenges, he said.

"Looking ahead, China will make greater strides in S&T opening-up and cooperation. We are ready to carry out dialogues and exchanges with other countries in regard to S&T policies, development plans, research ethics, and fields of common concern in S&T as well as innovation," said Wang.

In addition, China will seek common ground while reserving differences in opening up and cooperation and strive to reach more consensus on international science and technology governance.

At the same time, Wang noted

that China will focus on global issues such as climate change, energy and resources, and public health, and set up a scientific research fund to support joint research with countries across the world.

In addition, great efforts will be made to improve the legal and policy

environment for S&T innovation in China, strengthen the protection of intellectual property rights, provide equal opportunities and convenient conditions for overseas talents to work and start businesses in China, and make the country a favorable destination for global innovators and entrepreneurs.



The Baihetan Hydropower Station, the world's largest under construction, was officially put into operation on June 28, 2021. (PHOTO: Harbin Electric Corporation)

## Hubei Embraces a Smart Future

Sci-tech Exchanges Serve as a Bridge for China-foreign Cooperation in the New Era

By FANG Linlin and LONG Yun

Half a century ago, a delegation of Soviet engineers, led by bridge expert Konstantin Sergeevich Silin, traveled to Hubei and assisted the Chinese with the design and construction of the Wuhan Yangtze River Bridge, the First Yangtze Bridge. Chairman Mao Zedong once wrote in a poem, "A bridge will fly to span the north and south, turning a deep chasm into a thoroughfare," which is a vivid portrayal of the important role of Wuhan Yangtze River Bridge.

Today, Hubei, which has won the fight against the pandemic, retakes center stage in the world. As a Chinese saying goes, the ocean is vast because it rejects no rivers. With a greater emphasis on win-win cooperation with foreign countries, Hubei is becoming more open to the outside world. Driven by the goal of building the key strategic fulcrum of the rise in Central China, Hubei is marching rapidly toward a sci-tech powerhouse.

**Hubei at the frontline of the COVID-19 fightback**

The use of extracorporeal membrane oxygenation (ECMO) provides an important support to medical staff from all over the world participating in the treatment of severe COVID-19 patients.

The first experts to propose the use of ECMO include Professor Zhao Yan, a French Chinese who is the director of the Emergency Center of Zhongnan Hospital of Wuhan University. As a member of the anti-epidemic scientific research expert group in Hubei Province, he successfully treated the first critical COVID-19 patient with this technology, which played an important role in reassuring people at the early stage of the pandemic. The strategy of "clinical classification of COVID-19 patients and different treatment methods by severity" proposed by Zhao has been widely used.

On behalf of the French government, Laurent Bili, French ambassador to China, presented Zhao with the *Golden Medal of Honor for Diplomacy of the French Republic* at a special ceremony held at the residence of the French Embassy in Beijing on April 26, 2021, in recognition of his outstanding contribution to the fight against the pandemic in China and France.

On April 12, Mr. Ying Yong, Secretary of the CPC Hubei Provincial Committee and Director of the Standing Committee of the Hubei Provincial People's Congress, said in a speech with the title "Heroic Hubei: Reborn for New Glories" given at the Presenting Hubei Province to the World - Special Event of the Ministry of Foreign Af-



Wuhan Yangtze River Bridge in China's Hubei is the first major bridge across the country's busiest and longest waterway of Yangtze. (PHOTO: XINHUA)

fairs, that over the past year, under the personal command and deployment of President Xi Jinping and under the strong leadership of the CPC Central Committee with Comrade Xi Jinping at its core, China put people and lives first, as the country raced against time, fought a thrilling and arduous battle against the pandemic, and achieved decisive results in defending Wuhan and Hubei in about three months.

Ying noted that 77 countries and 12 international organizations provided China with assistance during the pandemic. After the situation stabilized in Hubei, China sent medical supplies to more than 150 countries and more than 10 international organizations and shared its experience in fighting the virus. According to Ying Yong, relatives and friends become closer if they visit each other more and China will uphold the concept of a community with a shared future for mankind, unswervingly expand opening-up, and continue to create a market-oriented, legalized and international business environment. He said China warmly welcomes friends from all over the world to learn more about Hubei, promote Hubei, invest in Hubei, carry out all-round exchanges and cooperation in the fields of industry, economy and trade, science and education, environmental protection, culture and tourism, share development opportunities, and create a better future.

**Building friendship bridges between China and Africa in Wuhan**

On the way from Tianhe Airport to the Optics Valley, people are amazed at the bridges in Wuhan, noting their beauty in massive dimensions. Hubei is in fact at the forefront of benefiting the African people with increased Chinese technologies.

At present, the China Railway Major Bridge Engineering Group Co., Ltd. has built more than 40 bridges in more than 20 countries and regions including South Africa, Tanzania, and Morocco. The Mohammed VI Bridge in Morocco, the largest cable-stayed bridge, in Africa was called Dream Bridge locally.

Since the beginning of 2021, Hubei has taken a line of cooperation measures, including the China-Africa Innovation Cooperation Center, which was unveiled at the Hubei Science and Technology Innovation Conference in February 2021. The center is established with the aim of building a number of sub-centers for scientific research and bases for international science and technology cooperation.

**Easier business access to Hubei via innovation stimulus**

To energize the innovation efforts of more foreigners in China, introduce more outstanding talents, and improve the convenience of foreigners to work in Hubei, the Department of Science and Technology of Hubei Province recently formulated and issued the Measures for Continuously Optimizing the Business Environment in the Field of Science and Technology based on the Demands of Innovative Subjects.

For example, on May 28, the East Lake High-Tech Development Zone announced the Nine Articles of Optics Valley to Relax Restrictions on Market Access, focusing on the three key points that enterprises are most concerned about: relaxing market access, reducing start-up costs and improving the mechanism of market exit. Currently, the number of Fortune 500 companies that have invested in Hubei has reached 320, the number of high-tech enterprises in Hubei has increased to 10,400, and the number of enterprises

included in the national technology-based SMEs database has reached 7,439.

**China's Optics Valley ushers in new opportunities with global benefits**

One of the joint laboratories built in the Optics Valley aims to better implement the Belt and Road Initiatives and contribute to the Belt and Road construction, according to Fan Zhiqiang, Vice President of FiberHome, the leader in the domestic information and communications industry.

FiberHome, hopes to develop ICT technologies and products that cater to local needs through the joint laboratory, thus promoting unhindered trade and involvement in local ICT infrastructure construction, as well as achieving digital infrastructure connectivity and people-to-people connectivity.

An example of that connectivity was shown at a China-Chile ICT Belt and Road joint laboratory initiative, approved by the Ministry of Science and Technology in September 2020 and led by FiberHome, which assisted the region of Lago General Carrera along the Chilean border in upgrading communication links. The Hubei Laboratory project was unveiled at the Science and Technology Innovation Conference on February 18 this year and the Optics Valley Science and Technology Innovation Corridor launched.

The Optics Valley Science and Technology Innovation Corridor acts as a color ribbon in southeastern Hubei. "This is a major opportunity similar to the launch of China's Optics Valley 20 years ago. We must grasp it firmly," said Wang Xiangwang, member of the Standing Committee of the Wuhan Municipal Party Committee.

Source: Department of Science and Technology of Hubei Province, Hubei Daily.

## Column

### Global Innovation to Speed Up Establishing Hubei Province as a Sci-Tech Power

By WANG Wei

The white clouds and yellow cranes last through the ages, and talent and ability hope to meet people who can really appreciate them.

Hubei has played an important role in the development process of the Yangtze River basin and the Chinese nation. In ancient times, Shennong, the Emperor Yan, turned a new page of Chinese civilization in the region. Then, more than two thousand years ago, the Jing-Chu Culture, represented by its unique chime-bells music and dance, was a shining light in the land of ancient China, while more recently the "Made in Hanyang" brand and Jiangnan Cruise have helped Hubei Province become a pioneer of industry in modern China.

As one of the earliest regions in the country that opened its ports to the outside world in modern times, Hubei is a province with some of the greatest development advantages and potential in China. With so many colleges and universities and the gathering of talents, 73 academicians, 129 colleges and universities, and 1.79 million college and university students in Hubei exert great potential for innovation. Wuhan, the provincial capital, ranks 4th in China and 13th in the world in the index of global science cities, and ranks 3rd among the national science and technology central cities in the 2020 National Central City Index Report issued by the Chinese Academy of Social Sciences, while East Lake High-tech Zone ranks first for knowledge innovation and technological creation ability among the national high-tech zones.

As the birthplace of the modern industrial civilization in China, through early development and complete industrial system, Hubei has witnessed the prosperous development of 17 industries, which are expected to generate an output value of nearly 100 billion yuan, including automobile manufacturing, electronic information, and biomedicine, and the great momentum of "Optical, Core, Display, Terminal, Network" and other emerging industry clusters. The 51020 modern industrial system is being built, and five pillar industries valued at RMB 1 trillion, 10 advantage industries valued at RMB 500 billion, and 20 characteristic industrial clusters valued RMB 100 billion are being cultivated and expanded.

Boasting a vast market, Hubei is located at the geographical center of China's economy and is the domestic transportation hub of the country, and has always been a key industrial center of China. The important state pillars in-

clude the Wuhan Iron and Steel (Group) Company, Dongfeng Motor Corporation, and the Three Gorges Dam have cemented the significant status of Hubei in China.

According to the national development blueprint in the "14th Five-Year Plan", Hubei is an important intersection and area for major national strategies, such as joint construction of the Belt and Road Initiative, comprehensive development of the Yangtze River Economic Belt, promotion of the rapid rise of the central region and coordinated development of urban agglomeration in the middle reaches of the Yangtze River, aiming to become an important node of big domestic circulation and the strategic link between the national and international dual circulation.

At present, Hubei is expediting the implementation of the "Four Beams and Eight Pillars (the basic main frame)" in order to become a scientific and technological power, and is striving to create a science and technology innovation center with national influence, along with a comprehensive national science center, in order to build East Lake Science City into a world-class smart park with a core competitiveness.

The park will feature prominent scientific characteristics, an agglomeration of innovation factors, outstanding initial innovation capabilities, and accelerated construction of the Optics Valley Science and Technology Innovation Corridor with East Lake Science City as the core.

Hubei is casting a wide net globally to recruit the best candidates to resolve its technical challenges, aiming to create a quality R&D team to provide the best solutions. By attracting talented personnel with an open vision and converging global innovation resources of technologies, funds, talents, platforms, we are actively building a collaborative innovation community consisting of the urban agglomeration in the middle reaches of the Yangtze River in Hubei, Hunan and Jiangxi, to assist in contributing to China's ranking among the forefront of innovation-based countries and building a world-class scientific and technological power.

Looking ahead, the scientific and technological innovation in Hubei progresses with each passing day. We are looking forward to the participation and contribution of talents from all over the world to assist in accelerating the pace of building Hubei Province into a scientific and technological power!

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