China-U.S. Sci-tech Cooperation Needs Repair, Not Persecution

Comment

Edited by TANG Zhexiao

The APEC 2023 signs in front of the APEC 2023 International Media Center in San Francisco, the United States. (PHOTO: XINHUA)

January 1, 2024 marked the 45th anniversary of the establishment of diplomatic relations between China and the United States. With many highs and lows, the relationship has come a long way over the years.

According to China's Ministry of Foreign Affairs, bilateral trade surged from less than 2.5 billion USD in 1979 to close to 760 billion USD in 2022, two-way investment increased from almost zero to over 260 billion USD, and 284 pairs of sister provinces, states and cities were set up. The two countries have also carried out many instances of useful cooperation on various global issues.

At the summit meeting in San Francisco last November, President Xi Jinping and President Joe Biden reached over 20 deliverables in such areas as political affairs and foreign policy, trade and finance, people-to-people exchange, global governance, and military and security. They advanced a future-oriented San Francisco vision, which points the way forward for bilateral relations.

The Sunnylands Statement on Enhancing Cooperation to Address the Climate Crisis, jointly issued by China and the U.S. in November 2023, committed to implementing the Paris Agreement, tripling renewable energy capacity globally by 2030, implementing respective national methane action plans, implementing technologies and measures to control greenhouse gas emissions and air pollutants, and supporting climate cooperation between states, provinces, and cities in each country.

The deal puts "some wind in the sails for global climate action," according to Alan Yu, the senior vice president for National Security and International Policy at the Center for American Progress.

The governments of China and the U.S. have been cooperating in areas of science and technology for 35 years, under the 1979 China-U.S. Science and Technology Cooperation Agreement.

Over these years, the Agreement has facilitated a complex government-to-government relationship, consisting of some 30 agency-to-agency protocols and more than 40 active sub-agreements and annexes between the technical agencies of the two countries in a wide range of fields including agriculture, energy, environmental protection, and public health.

Jenny Lee, a professor of higher education at the University of Arizona, told *Science Business* that the China-U.S. science and technology agreement is "largely a gesture of goodwill between the two countries to work together on scientific advancement in ways that benefit both countries."

Washington temporarily renewed the deal for six months in 2023, with so-called concerns over research data restrictions and national security threats. Stanford University physicists Steve Kivelson and Peter Michelson argued that the agreement should not lapse. Instead every effort should be made to nurture open and transparent scientific cooperation.

The China-U.S. science cooperation needs repair, not persecution, said the U.S. magazine *Scientific American*, noting that science plays an enormous unseen role in keeping international avenues of contact open. One country's success is an opportunity for the other, and China and the U.S. can help each other succeed and prosper together.

"History shows that the growth of China-U.S. relations not only contributes to the good of the two peoples but also to world peace, stability and development," remarked China's Foreign Ministry spokesperson on January 2.

U.S. Should Change Its Distorted Perception of China

Opinion

By GONG Ting

On January 1, Dutch microchip machine manufacturer ASML said its government, at the request of the U.S., had revoked an export license covering the shipment of some of its equipment to China. This is a clear indication that the U.S. is making the process of global supply chains more ideological.

In recent years, containment in the high-tech field has been at the core of the U.S. strategic competition strategy towards China. In Washington's view, cutting off and restricting China's access to frontier technologies is key to preventing the rise of China's technological and comprehensive national strength.

From decoupling to de-risking, although the U.S. has realized that it is impossible to cut off economic ties with China in a globalized world, it is maintaining and even intensifying a high-tech containment policy towards China.

For instance, the U.S. has been continuously tightening its export control policies towards China. More and more Chinese high-tech enterprises were moved onto a series of export control lists—the entity list, prohibiting them from purchasing many high-tech products, components and services.

The U.S. is also identifying an increasing number of frontier technologies to bring them under the scope of strict restriction, such as semiconductors, artificial intelligence, and quantum tech. All points to its newly published policies in semiconductor export control towards China being extremely hawkish.

However, major U.S. semiconductor giants have expressed their dissatisfaction and opposition to such policies, since China is the world's largest semiconductor market and an extremely important sales market for these companies.

Additionally, the U.S. is also attempting to establish high-tech supply chains aiming at excluding China, especially in areas such as semiconductors, critical minerals, and electric vehicles. It is trying to change the logic of global division of labor in such industries based upon production efficiency, and is working towards so-called friend-shoring among its allies.

Apart from this, a good number of measures hindering bilateral sci-tech exchanges and cooperation used in the Trump administration are being continued in the Biden administration. Such measures have brought about apparent harm to bilateral scientific cooperation projects and personnel exchanges. This is shown by the China Initiative of the U.S. Department of Justice and Federal Investment Bureau, creating a strong sense of fear among scientists, visiting scholars, and international students on both sides of the divide.

Recently, it seems that the U.S. made some adjustments in its policy overtones. Beforehand, the U.S. sent negative signals in regard to renewing the China-U.S. Science and Technology Agreement, which was a milestone in sci-tech cooperation between the two countries. In August 2023, the White House announced a six-month extension of the agreement, in order to negotiate renewal issues with China. Last month, U.S. Ambassador to China Nicholas Burns said he had started talks with Beijing on renewing the cooperation agreement.

In addition, China and the U.S. have also reached a consensus on establishing an intergovernmental dialogue on artificial intelligence in November 2023. These moves may alleviate the tension in the high-tech field between the two sides in the short term.

However, it should be noted that as long as the U.S. government does not change its distorted perception of China, and does not change its strategy centered on competition with China, it will be difficult for the U.S. to make substantial adjustments to its containment policy in high-tech fields against China.

The International Science and Technology Cooperation Initiative put forward by China points out the direction for jointly building a global science and technology community. As human society is facing more and more global challenges, it needs science, technology and innovation cooperation to explore solutions to global issues, rather than artificial obstacle to undermine the common interests of the international community.

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Green Odor Removing Spray Smells like Success

Hi! Tech

By QI Liming

In winter, it is very inconvenient to wash your down jacket and heavy coat frequently to get rid of lingering odors from barbecue and hotpot evenings. Fabric fragrance spray that removes odors and sterilizes garments could be a huge help in solving this and many similar frustrating life situations.

Now, a spray product with a range of floral and fruity aromas is available, using an odor removal factor extracted from plants, which can decompose the odor at its source.

Different from covering the smell with a fragrance, the principle of this spray breaks down odors step by step.

The first step is to release the odor removal factor and effectively cover it, followed by locking up odor molecules, so as to inhibit the diffusion of smell. The third step is to lock in the fresh scent. All these steps can be realized immediately through one single spray.

The spray does not contain alcohol and other stimulating ingredients that harm the clothing material. So it is suitable for removing odors from cotton and hemp fabrics and textiles.

The product's curing factor and quadruple hydrolyzed protein can trigger the vitality of the fabric, effectively reducing instances of sweat and dampness.

In addition, the spray's unique aroma of essential oils softens clothing while reducing fiber friction and removing static electricity. The spray also has a strong anti-bacterial function. It can effectively prevent the re-growth of bacteria, meaning it is also useful in closets and vehicles.

Voice of the World

Big Tourist Number Reflects China's Economic Recovery

Edited by GONG Qian

Robust consumption, especially in the tourism sector, is playing a big role in China's accelerated economic recovery. Thanks to a multitude of supportive policies, the country's tourism market recovered steadily in 2023, and tourist arrivals and spending showed bright results, said *South China Morning Post*.

Unsurprisingly, tourism keeps fueling the economic momentum in 2024. Commenting on the outlook for China in 2024, China's online travel agency Trip.com Group's CEO Sun Jie told *Forbes* that she was upbeat about a continued recovery in China's travel industry this year — both for domestic travel and international inbound and outbound spending.

Results of the just concluded New Year holiday are self-evident, with toursim injecting life back into China's economy at the calender turned over a new page. According to figures by Trip.com, the number of domestic travel orders for the New Year holiday increased by 168 percent year-on-year, while the amount of outbound travel orders increased by 388 percent during this period.

"Travel in China flourished over the three-day New Year's holiday, with 135 million domestic tourist trips, up 155 percent from last year, while domestic tourism revenue rose to 79.73 billion RMB," said Reuters, citing data from China's Ministry of Culture and Tourism. Tourism revenue tripled from the same period in 2022 and was up 5.6 percent from the New Year holiday in 2019.

During the New Year holiday, more than 128 million passenger trips were made on China's transport network, up 78.4 percent from 2023 and 33.1 percent from 2022, said Reuters.

In addition to the boom in domestic tourism and consumption, China has also made concrete efforts to boost cross-border travel in 2023, said *Economy Middle East*. For example, China has improved entry and exit procedures to unilaterally expand the list of countries eligible for visa-free access.

In December 2023, 214,000 people from France, Germany, Italy, the Netherlands, Spain and Malaysia entered China, up 28.5 percent from November, according to China's National Immigration Administration.

The jump followed in the wake of a unilateral visa- free policy for ordinary passport holders from the above six countries, allowing them to enter China for a stay of up to 15 days without a visa, from December 1, 2023, to November 30, 2024. More than 77 percent of the ordinary passport holders via visa-free channels visited China for travel or business activities.

According to The Edge Malaysia, a leading financial news organization in the country, the relaxation of visa entry for tourists from China, India and Middle East countries and better flight connectivity will drive the resurgence in Malaysian tourism.

Apart from easing visa burdens, an increase in airline traffic between China and the U.S. is expected after the two countries' leaders agreed to increase the number of flights.

Starting from January 1, China simplified application documents required for tourist visas (L-visa). Travelers from the U.S. no longer need to submit proof for round-trip air tickets, hotel reservations, their itinerary or an invitation letter to apply for a tourist visa, as confirmed by the Chinese Embassy in the U.S., according to CNN.

"A faster than expected restoration of China-U.S. flights is a key catalyst for the recovery of international flights," Parash Jain, head of transport research for Asia-Pacific at HSBC Holdings, told the *Strait Times*.

With China continuously deepening its opening-up policies, both the country's inbound and outbound tourism will be significant in pushing for its economic growth.

Tourists enjoy ice and snow sports in Harbin, northeast China's Heilongjiang province. (PHOTO: VCG)

U.S. Limitations on Chinese Influence in Academia Risk Backfiring

Research Box

The academic decoupling of the United States and China began a little more than five years ago after U.S. government agencies began to crackdown on academic collaborations, fearing that close ties between American and Chinese universities, scholars, and scientists were threatening the national security of the United States.

Recent research has demonstrated that the Department of Justice's China Initiative curtailed U.S.-China academic collaboration, resulting in fewer publications and patents for U.S.-based scientists, and increased the number of Chinese-born scientists seeking to leave the United States.

Restrictions and guardrails to protect scientific integrity and national security should be applicable to all, not based on ethnicity or national origin. Universities should work in tandem with government agencies to implement rules that are transparent and narrowly tailored to restrict certain types of research.

Mary Gallagher, US Efforts to Limit Chinese Influence in Academia Risk Backfiring, World Politics Review, 26-12-2023.