A Political Pact Cannot Put Brakes on Global AI Cooperation

Clear Voice

By LIANG Yilian & ZHANG Mengran

The United States and nine other participants in the Pax Silica initiative recently signed the "San Francisco Declaration on the Secure Foundations of Enduring Prosperity," which proposes to step up coordination on sensitive technologies, critical infrastructure and supply chain security.

The *Financial Times* described the agreement as an effort to "protect AI supply chains from China." In response, China's Foreign Ministry reiterated that AI is a common asset of humanity. Ideological lines should not be drawn in this field, nor should exclusive blocs be formed.

At a time when the world expects major powers to work together to improve AI governance and ensure that technological advances benefit all, such bloc-based maneuvering runs counter to both the nature of technological development and the shared expectations of the international community. At its core, it politicizes and ideologizes AI supply chains, attaching geopolitical labels to industrial divisions and political conditions to technological cooperation. Supply chains that should serve innovation are instead being turned into instruments of strategic competition.

Can a declaration built around bloc politics really reverse the global trend toward an interconnected AI industry? An article published on November 16 by Shattered, a technology news outlet, said that efforts to build AI supply chains exclusively around U.S. allies could increase costs. In an analysis of the initial Pax Silica initiative published in January, Spain's Elcano Royal Institute also examined its political significance, noting that the initiative is "a declaration of shared principles — still without an implementation mechanism — on which future cooperation will be based."



People interact at an exhibition during the Africa Tech Festival 2026 in Cape Town, South Africa, November 17, 2026. (PHOTO: XINHUA)

Such "principles" appear feeble in the face of the deep globalization of today's AI industry. The global nature of AI development is already evident. Advances in algorithms rely on open-source collaboration among developers worldwide; hardware manufacturing depends on coordinated industrial supply chains across multiple countries; and commercial applications need diverse markets to flourish. A mature AI system may bring together algorithmic frameworks from North America, manufacturing capabilities from East Asia, governance expertise from Europe and application scenarios from emerging markets. This is an industrial ecosystem shaped by market forces, not something that can easily be dismantled through political maneuvering.

Forcing China's decoupling from global supply chains would not only drive up costs and lengthen technology development cycles, but also deprive companies in other countries of important markets and application opportunities. It is no guarantee of security but a constraint on development.

From proposing the Global AI Governance Initiative to promoting inclusive and mutually beneficial cooperation in the digital economy, China has consistently championed openness and win- win cooperation. The growth of China's AI industry has been driven not only by sustained investment in innovation but also by its deep integration into global industrial networks. Meanwhile, China's vast market and diverse application scenarios have provided significant impetus for global AI advancement.

In the face of external restrictions, China will neither shut its doors because others are building walls nor surrender control over critical technologies and capabilities to others. An AP report in June said U.S. export controls had helped accelerate the growth of China's domestic chipmakers while weakening Nvidia's position in China's advanced AI chip market. Attempts to contain China thus underestimate both the resilience of its innovation ecosystem and the underlying logic of global industrial specialization.

AI governance is a shared challenge that will shape the future of all humanity. Participation in this process should not become a privilege granted by a handful of countries, much less a yardstick for distinguishing friends from outsiders. A September report by the Center for Strategic and International Studies said many middle powers are not choosing sides in the global AI regulation debate but are joining everything.

The United States cannot sustain its technological leadership through exclusion. Ultimately, the appeal of any set of rules must be tested through their implementation and acceptance by countries around the world. The stronger a country's technological capabilities, the greater its responsibility to provide open, stable and predictable public goods, rather than turn its advantages into barriers to the development of others.

Only by abandoning the mindset of exclusive blocs and embracing broader, open cooperation can the development of AI remain on a steady and sustainable course.

Jointly Creating Bright Future for the Asia-Pacific

Voice of the World

By QI Liming

As China hosted the 33rd Asia-Pacific Economic Cooperation (APEC) Economic Leaders' Meeting in Shenzhen on November 18 and 19, the eyes of the world were on the event for several reasons.

One was the host itself. China has transformed from a "participant" to a "contributor" that sets the agenda and advances practical action, and then to a "navigator" and a "driving force" charting the blueprint for development and steering the course forward.

Australian think tank Lowy Institute said the Shenzhen meeting attracted unaccustomed attention because it was the venue for another instalment of what has long been APEC's most consequential "deliverable": the leaders' meetings.

Denis Simon, senior fellow at American foreign policy think tank Quincy Institute for Responsible Statecraft, said in an interview with *Science and Technology Daily* that the meeting could be a significant marker in the evolution of the new international order. The emerging international landscape is characterized by pluralistic co- governance, and China is playing an increasingly vital role in advancing regional economic integration and improving global governance.

All eyes were on the meeting of the Chinese, Russian and U.S. presidents in Shenzhen, the first face-to-face meeting in history of the top leaders of the three countries. Lyle Goldstein, the director of Washington- based think tank Defense Priorities Asia, told CBS News, "This is the first time ever that you have this trilateral format for Russia, China, and the U.S. So I would like to see this continue."

In Simon's view, what truly warranted attention was whether China and the U.S. can strengthen cooperation within an international system where collaborative coexistence is essential for a well-functioning global order.

Host city Shenzhen was in the limelight as well and science and technology emerged as a highlight.

Shenzhen is the epitome of China's reform and opening up. As one of the first four special economic zones established in China, Shenzhen has been a testing ground for reform and opening-up policies with impressive high-tech industries, strong entrepreneurial atmosphere, dynamic human resources, and innovative urban governance.

"My first visit to Shenzhen was 20 years ago. The city that was striving to implement its development plan back then has now risen to become the globally renowned 'City of Innovation.' This transformation itself is the most vivid illustration of China's reform and opening- up policy as well as its strategy of mutual benefit and win- win cooperation," former Chilean Ambassador to China Fernando Reyes Matta said.

Robert Lawrence Kuhn, chairman of the Kuhn Foundation in the U.S., has visited Shenzhen many times. "Shenzhen is a microcosm of China's development journey. Every time I come here, I can feel how dynamic this city is," he said.

"Shenzhen is one of the most important symbols of China's reform and opening up through its strong global role in trade, manufacturing, and innovation," Gary Ng, senior economist for Asia Pacific at French bank Natixis, told AP.

Science fiction is becoming reality. Shenzhen shows the Chinese speed, and also Chinese efficiency and innovation to the world. From robots "working in the factory" to quadruped robot dogs "engaging in agriculture production", and then to autonomous driving and drone delivery services, the new generation of information technologies represented by AI is witnessing accelerated evolution here.

Once- science fiction scenarios are increasingly becoming a part of people's daily lives — from food, clothing, housing and transportation to communication.

Francesco Faiola, an Italian researcher at the Research Center for Eco-Environmental Sciences of the Chinese Academy of Sciences, said that in areas such as stem cell research and global AI governance, China's role has shifted from a "participant" to an important "contributor."

He added that the 33rd APEC Economic Leaders' Meeting reinforced his view that China will continue to create more space for international cooperation in frontier science and industrial innovation, and will provide better conditions for Chinese and foreign scientists to jointly carry out major international scientific cooperation projects.

Chinese Companies Help UAE's Green Transition

From page 1

In the desert south of Dubai, the fourth and fifth phases of the Mohammed bin Rashid Al Maktoum Solar Park, built with the participation of Shanghai Electric Group, demonstrate different technological paths for utilizing solar energy. The two phases together can reduce carbon emissions by about 2.78 million tons annually.

Besides solar power, the UAE's first utility- scale wind power project, the UAE Wind Power Demonstration Project, contracted by PowerChina, was completed in 2023. The project is distributed across islands, mountainous areas and semi-desert areas in Abu Dhabi and Fujairah. Its annual power generation can meet the demand of more than 23,000 households and reduce carbon emissions by about 120,000 tons per year, accumulating practical experience for local wind energy development.

China-UAE new energy cooperation is also extending to combining PV with energy storage.

In Abu Dhabi, the UAE RTC PV and energy storage project built with PowerChina is in progress. The northern block under Chinese responsibility includes 2.1 GW of direct- current- side installed PV capacity and a 7.75 GWh energy storage system. It will provide round-the-clock clean electricity through the coordinated operation of solar power generation and large-scale energy storage, and is expected to reduce carbon emissions by about 5.7 million tons per year.

Francesco La Camera, director-general of the International Renewable Energy Agency, said in an interview with Xinhua that China has made important contributions to the global energy transition and carbon emission reduction by promoting technological progress and lowering the cost of clean energy equipment.

Strengthening cooperation in technology, financing and infrastructure will enable more countries to benefit from falling renewable energy costs and accelerate global emission reduction, La Camera added.

Opinion

China's Sci-tech Has Seen Substantive and Sustained Development

By LONG Yun & FANG Linlin

"Over the past 20 years, we have witnessed the tremendous progress China has made in scientific research," said Bar Veinstein, president of Academia & Government at Clarivate, in a recent written interview with *Science and Technology Daily*.

Veinstein served as president of Ex Libris before joining Clarivate in 2023. His assessment draws on the citation databases his organization maintains.

A measurable leap

According to Clarivate's annual Highly Cited Researchers list, which recognizes scholars whose work has demonstrated broad and significant influence in their fields, the Chinese mainland accounted for 1,423 awards last year, 20 percent of the world's total, up from eight percent in 2018. The Chinese Academy of Sciences (CAS) led all institutions worldwide with 258 Highly Cited Researcher awards, while Tsinghua University ranked fourth with 91.

According to Veinstein, China produced more than 10,000 Highly Cited Papers each year from 2022 to 2025. In 2025 alone, the figure reached nearly 15,000, making China number one in the world.

The qualitative shift is equally evident in Clarivate's Citation Laureates program, which identifies researchers whose work is of Nobel quality.

In 2025, Zhang Tao, a CAS academician and professor at the Dalian Institute of Chemical Physics, became the first Citation Laureate based in the Chinese mainland, recognized for pioneering work in single- atom catalysis. In 2026, Xue Qikun, a CAS academician, president of the Southern University of Science and Technology and professor at Tsinghua University, became the second, honored for his experimental observation of the quantum anomalous Hall effect.

Every year, Clarivate and CAS also release the *Research Fronts* report. Last year's edition identified 128 Research Fronts, including 110 "hot" fronts and 18 "emerging" fronts. An accompanying analysis assessed the research activities of the world's major countries and regions across those fronts, finding that China scored highest in six of the 11 research areas, including agricultural, plant and animal sciences; ecology and environmental science; chemistry and material science; physics; information science; and economics, psychology and other social sciences, and second in three others.

Strength across research frontiers

In recent years, China's basic research has produced notable results, including the High Energy Photon Source coming online and the first realization of two- dimensional metals at the angstrom thickness limit. Veinstein offered a data-based assessment of each.

The 2025 *Nature* paper on two-dimensional metals at the angstrom thickness limit has been cited by 103 other papers, including 76 from China, with the remaining citations from the United States, Singapore, Japan, France and Germany, among others.

On the High Energy Photon Source, Clarivate identified two related papers in the Web of Science Core Collection, published in the *Journal of Synchrotron Radiation* and *Radiation Detection Technology and Methods*. Approximately 90 percent of the citations for these two papers come from authors in China.

In the AI field, Veinstein noted the development quality signals in China's AI research. "China has 16 organizations in the Clarivate AI50, accounting for nearly one-third of the total 50 organizations," he said, referring to a data-driven benchmark released in April. "This shows China's strong position in shaping the AI era through high



Bar Veinstein. (COURTESY PHOTO)

strength inventions."

Clarivate's annual *Engineering Fronts* report, released with the Chinese Academy of Engineering (CAE), points in the same direction.

"AI is no longer a standalone technology but has become a core empowering engine for all engineering fields," Veinstein said. "In many of these AI- enabled engineering fields, China is among the top- performing countries in the world in research and development."

He cited one emerging frontier in particular: AI- powered scientific research automation systems, or AIRA. "China accounts for approximately 75 percent of the global total number of published core patents, demonstrating the country's strong research interest in this domain," Veinstein said.

Open science and research integrity

Veinstein offered his perspective on how China's approach to open science differs from Western models.

Veinstein said Clarivate supports the goals of open research, believing it is the best way to accelerate and strengthen the discovery process and make it more transparent. He noted that China's approach to open science differs from Western models primarily in its top- down governance. "Our data and analysis reveal a massive expansion in China's research volume and quality, alongside a distinct path toward open access."

He also acknowledged the challenges facing the global research ecosystem. "A rise in fraudulent behavior and the proliferation of entities such as paper-mills means that no journal can be completely safe from research integrity issues," he said.

In this context, Veinstein saw an opening: "China has an opportunity to take a leading role in the global research community by championing coordinated action on research integrity and promoting incentives that support a fairer, more transparent and trusted research system."

Looking ahead

Over the past two decades, Clarivate has built an extensive network of partnerships in China. The ISTIC-Clarivate Joint Lab for scientometrics research was founded in 2008. The *Research Fronts* report, launched in 2013 with CAS, is now in its 12th year. *The Engineering Fronts* report, launched in 2017 with CAE, is now in its ninth year.

Looking forward, Veinstein said: "We would like to serve as a trusted intelligence partner that helps China's universities, research institutions, innovators and policymakers navigate an increasingly complex global research landscape. By combining the trusted data, advanced analytics, AI capabilities and long- standing partnerships we have in China, Clarivate is committed to playing a meaningful role in advancing scientific discovery, innovation excellence and international collaboration in China."