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## President Xi's Visit Enhances China-Europe Cooperation



A lunar soil sample from Chang'e 5 mission. China gave 1.5 grams lunar soil samples to France in 2023. (PHOTO: VCG)



The Zemun-Borča Bridge in Serbia, a bridge project constructed by a Chinese company in Europe. (PHOTO: XINHUA)



A China-Europe freight train leaves Jinhua, Zhejiang province, for Budapest of Hungary. (PHOTO: VCG)

By LI Linxu & LIANG Yilian

With the successful state visits of Chinese President Xi Jinping to France, Serbia and Hungary, a series of important agreements, ranging from economic, sci-tech cooperation to people-to-people, cultural exchanges, were reached, opening a new chapter in China-Europe cooperation.

### Ushering in a new era in China-France cooperation

During his visit to France, Xi underscored the importance of bolstering cooperative ties between China and France as well as the European Union, particularly amid worldwide changes of a scale unseen in a century.

The two countries reached an array of consensus on bilateral and multilateral cooperation, showcasing the potential and prospects of China-France cooperation.

They issued four joint statements on areas such as AI and global governance, biodiversity and oceans cooperation, and agricultural exchanges and cooperation. Close to 20 bilateral cooperation documents were signed in

such fields as green development, aviation, commerce and people-to-people exchanges.

The two sides should enhance the docking of development strategies, deepen cooperation in traditional areas such as aerospace and aviation, strengthen cooperation in nuclear energy, innovation and finance, and expand cooperation in emerging areas such as green energy, smart manufacturing, and AI, Xi said.

They pledged to take effective measures to strengthen global governance of AI to promote development and use of AI for the common good.

China also looks forward to hosting more than 10,000 French students in the next three years and doubling the number of European youth exchanges in China, Xi said.

### Building a China-Serbia community with a shared future

During Xi's visit, China and Serbia have decided to build a community with a shared future in the new era, making Serbia the first European country to build such a community with China.

The two sides agreed to jointly develop

new quality productive forces in light of local conditions and build high-tech industrial cooperation projects, according to a joint statement between the two countries.

They also agreed to deepen cooperation in space science and technology, and China welcomes Serbia's participation in the International Lunar Research Station.

Both sides believe that deepening sci-tech cooperation holds great significance, vowing to push for more practical results from youth scientist exchanges, poverty alleviation via sci-tech, joint researches, and co-building research platforms.

In the next three years, China will support 50 young Serbian scientists to carry out research exchange visits to China. This is one of the six measures announced by Xi to support the building of a China-Serbia community with a shared future.

### Embarking on a golden voyage in China-Hungary relations

Since the establishment of diplomatic ties 75 years ago, China and Hungary have remained good partners for win-win cooperation.

In recent years, the two sides have seen frequent high-level exchanges, deepening mutual trust, fruitful outcomes in Belt and Road cooperation, and vibrant people-to-people and cultural exchanges.

Today, Hungary is China's top investment destination as well as its important trading partner in Central and Eastern Europe.

China will work with Hungary to forge greater synergy between the Belt and Road Initiative and Hungary's Eastern Opening strategy, and accelerate the construction of the Budapest-Belgrade railway link and other significant cooperation projects, according to Xi's signed article.

"We will strengthen cooperation with Hungary in clean energy, AI, digital economy, green development, and other emerging areas, foster new quality productive forces, and serve our respective high-quality development," Xi said.

China is willing to expand exchanges and cooperation with Hungary in education, culture, tourism, sport, youth, the media and at the subnational level, Xi said, calling for writing new stories of friendship for the two peoples.

## New Quality Productive Forces

## Hydrogen Pegged to Be New Quality Fuel

By YU Haoyuan

The world's first hydrogen-powered intercity train has undergone testing this March in north China's Jilin province, a milestone in hydrogen application. As an increasingly used environmentally friendly option, hydrogen is advancing China's "dual-carbon" goal and helping to develop "new quality productive forces" (NQPFs) at an accelerated pace.

To gain an understanding of how hydrogen energy is speeding up future sustainable development, *Science and Technology Daily* recently interviewed an expert in the field, Professor Wang Cheng from Tsinghua University.

### Multiple uses

Hydrogen energy has many potential applications in multiple fields, including transportation and industrial manufacturing.

For transportation use, Wang pointed out that the hydrogen fuel cell power system might be more advantageous in commercial vehicles. "In some extreme conditions like cold environments, or application scenarios with high power density requirements like heavy truck, hydrogen fuel cell power systems have significant advantages over pure battery systems," said Wang.

Hydrogen also has broad applications in industrial manufacturing. Wang indicated hydrogen can be widely used as an important raw chemical material for hydrogenation such as the production of ammonia and methane. What's more, it also serves as a vital reductant in metal smelting and processing, including welding, cutting, and heat treatment.

"In summary, hydrogen-related technological innovation will help reduce carbon emissions, improve energy efficiency, and play a pivotal role in future sustainable development in a wide range of areas," said Wang.

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## Chang'e-6 Off to Bring Samples from Far Side of the Moon

By Staff Reporters

On May 3, China's robotic lunar exploration mission Chang'e 6 probe was launched for the far side of the Moon, the world's first scientific mission to collect soil and rocks from that region. The launch marked another milestone in China's lunar and space exploration program.

The probe was aboard a Long March 5 rocket sent off from the Wenchang Space Launch Center in South China's Hainan province. It is on a 53-day journey, the destination being the South Pole-Aitken (SPA) basin on the far side of the Moon. The SPA basin, recognized as the largest, oldest and deepest basin on the Moon, is a huge hole about 2,500 km wide and 8 km deep, with complex geology and high scientific value.

Chang'e 6 will conduct topography exploration and geological detection and bring 2 kg of soil and rocks from the landing site to the Earth. These samples will help to further analyze the structure, physical properties and material composition of the lunar soil, boosting research on the genesis and evolution history of the Moon.

As the Moon never faces the Earth due to tidal locking, the Queqiao-2 relay satellite, launched in March, will support the mission by relaying signals between the ground stations and Chang'e-6.

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## WEEKLY REVIEW

### Advancement in Quantum Simulation Technology

Using a self-developed quantum experimental setup, a Chinese research team has realized the fractional quantum anomalous Hall state of photons for the first time. It is anticipated that this breakthrough in quantum simulation technology will boost quantum computing and quantum physics research.

### World's Largest Deinonychosaurus Tracks Found in Fujian

Large two-toed tracks, identified as belonging to deinonychosaurs, have been discovered in Fujian province. Over the years, at least eight types of dinosaur tracks have been found at the same place, 12 of which are didactyl deinonychosaur tracks that fall into two morphologies.

### New Implant Creates Hope for Vision

A Western research team has created an incredibly small implant with electrodes the size of a single neuron. It can remain intact in the human body over time, and holds promise for the blind in future.

### Stretchable E-skin Gives Robots Human-like Sensitivity

Recently, U.S. researchers have developed the first ever stretchy electronic skin. This e-skin is highly elastic and gives robots and other devices softness and touch sensitivity similar to human skin.

## China's Internet Revolution: From Follower to Leader

### Editor's Pick

By LIN Yuchen

This year marks the 30th anniversary of China's full access to the Internet. As one of the greatest inventions of the 20th century, the Internet has propelled human society into the Information Age.

"Network information technology is currently the most concentrated area of global R&D investment, with the most active innovation, widest application, and greatest driving force for global technological innovation," said Sun Ninghui, an academician at the Chinese Academy of Engineering, during a high-level conference held on April 19 at the Computer Network Information Center of the Chinese Academy of Sciences, the birthplace of China's Internet.

He also noted that after 30 years of

development, the Internet in China has evolved from a "follower" to a "peer", and is becoming a "leader."

### A rapidly evolving landscape

In April 1994, China made its Internet debut through a 64K international special line, becoming the 77th member of the global Internet community. Over the next six years, the foundations of Internet infrastructure were established followed by remarkable growth.

By the end of 2000, China had connected over 380,000 registered websites, and its online users had reached 6.2 million.

During this period, the Internet landscape in China evolved rapidly. The establishment of key backbone networks like CSTNET, CHINANET, CERNET, and CHINAGBN facilitated nationwide connectivity. This era saw the transition from dial-up connections to broadband services, marking a significant leap in Internet accessibility and speed.

In the 1990s, characterized by Web 1.0, major Chinese Internet portals like China.com, Sina, Sohu, and NetEase emerged, marking the beginning of the portal era. They presented information in a portal format, capturing people's attention, and many of them went public in the U.S. around the turn of the century.

Simultaneously, instant messaging applications led by Tencent's QQ experienced rapid expansion in China, covering great distances in a short time. The convenience and usability of these apps were unparalleled at the time, with countless users scouring the Internet for potential friends, enjoying the anonymity behind screens to engage widely in social interactions. Around 2000, Alibaba and JD.com were founded. These platforms pioneered online shopping for a vast number of Chinese netizens, laying the foundation for the world's largest online shopping market.

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WECHAT ACCOUNT



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