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## Xi Replies to Letter from Kenyan Students, Alumni at BJTU

Chinese President Xi Jinping has replied to a letter from representatives of Kenyan students and alumni at Beijing Jiaotong University (BJTU), encouraging them to continue contributing to the friendship between China and Kenya and between China and Africa.

In his reply on January 17, Xi noted that China and Kenya enjoy a time-honored friendship. The Belt and Road Initiative has turned the ideals of development and revitalization of China and Kenya into reality, and closely linked the well-being of the two peoples. The Mombasa-Nairobi Standard Gauge Railway is a flagship project and a successful example of China-Kenya Belt and Road cooperation, Xi said.

"I am glad to see that you have bonded with China through this road to happiness. You have witnessed and benefited from the China-Kenya and China-Africa friendship and cooperation, and you have helped build and spread the friendly cooperation between China and Kenya and between China and Africa," Xi said.

Looking ahead, the magnificent picture of the Belt and Road Initiative and the grand blueprint of the China-Kenya comprehensive strategic cooperative partnership need more promising young people to realize, Xi stressed.

"It is hoped that you can learn professional knowledge well, continue the traditional friendship, devote yourself to bilateral cooperation, tell well stories of China-Africa friendship, and make greater contributions to the building of a high-level China-Africa community with a shared future," Xi said.

Recently, representatives of Kenyan students and alumni at BJTU wrote a letter to Xi, expressing their great pleasure in coming to China to learn railway operation and management knowledge.

They also expressed their hope to serve as a bridge of friendship between Kenya and China and contribute to enhancing friendship and cooperation between the two countries and building a community with a shared future for mankind.

Source: XINHUA

## WEEKLY REVIEW

### Commercial Carrier Rocket Lijian-1 Y3 Launched

China launched the Lijian-1 Y3 carrier rocket with five satellites from the Jiuquan Satellite Launch Center in its northwest on January 23. The satellites, successfully sent into their planned orbits, are meant for disaster and environment monitoring, land and sea mapping and other functions.

### New-generation Large Language Model Released

A new-generation large language model, InternLM2, capable of accepting and processing about 300,000 Chinese characters at a time, was released in Shanghai on January 17. The Shanghai Artificial Intelligence Laboratory said it will license InternLM2 for free commercial use.

### 5,000-year-old Stone Processing Art Discovered

Two archaeological sites have been unearthed in Hangzhou city in Zhejiang province, which display stone processing dating back to around 5,000 years ago, according to a meeting on Zhejiang's archaeological work that concluded on January 21.

### Xuelong-2 Icebreaker Completes Oceanic Survey

Research icebreaker Xuelong-2 concluded a comprehensive cross-section ocean survey tasks in the Amundsen Sea and surrounding areas on January 23. This is China's 40th Antarctic expedition that started on December 28, 2023. Since then, the expedition team has conducted comprehensive multidisciplinary investigations.



The 7th China Picture Competition Collection Exhibition, themed "Jointly building the Belt and Road for a better future," opens on January 20 at the National Museum of China in Beijing. It will run till March 20. (PHOTO: HONG Xing / Science and Technology Daily)

## Editor's Pick

## 'Smart Mines' Herald One-person Coal Mining

By LIN Yuchen

Professor Lu Xinming is bringing his vision of "Smart Mines" to reality. As an expert in digital mine, his work at Shandong University of Science and Technology is revolutionizing China's mining industry.

### Innovation at the core

Smart Mines, hailed as a new path for mining transformation in China, integrates technologies such as cloud computing, big data and AI into mining operations, aiming for a future of unmanned or minimally manned mining.

After introducing the concept of Smart Mines domestically and elevating the "General Technical Specifications for Smart Mine Information Systems" to national standards, Lu's team received accolades such as the Second Prize of the State Scientific and Technological Progress Award for their work on "Software Key Technologies and Applications for

Digitized Mining."

Lu began his entrepreneurial journey as a university professor in the 1990s. The results of his research, including Smart Mines, found applications in over 400 mines owned by enterprises like Shandong Energy Group, CHN Energy, and China Coal Group.

### Making the impossible possible

Digging deep into the earth for coal, a process that spans exploration, tunneling, underground mining, transportation, screening and cleaning, requires intricate coordination. After over 40 years of dedicated work in the mining sector, Lu has identified the critical need to adopt suitable methods and advanced processes for safe and efficient coal extraction at mining faces.

One significant challenge is underground mining with issues like extensive tunneling, low coal yield, and challenging ventilation conditions. Lu's team, over 25 years, tackled these areas of con-

cern, gradually providing solutions up to a national scale.

Ventilation systems, akin to a mine's respiratory system, are crucial for diluting and expelling toxic gases and dust while preventing coal and gas explosions. Lu, with a background in computational mathematics, developed 14 key technologies for this purpose, focusing on adaptive ventilation optimization, pressure regulation, and directional adjustments. The result was a fully intelligent mine ventilation system with four-tier architecture, driven by computer software technology.

"Developing an intelligent underground ventilation system was challenging, and many people thought it was impossible before," said Lu. But with determination and innovation, he proved his detractors wrong, emphasizing that with the right direction and perseverance, success is inevitable.

See page 3

## Tech for Better Life in China

## Development Promotes Human Rights Progress

By WANG Xiaoxia

China has achieved great progress in protecting and improving human rights through its development, and made positive contributions to global human rights governance, according to experts from the China Society for Human Rights Studies and global representatives attending the United Nations Human Rights Council's Universal Periodic Review (UPR) in Geneva.

From January 22 to February 2, the UPR Working Group is examining the human rights records of 14 states, including China. It is the fourth time for China to be reviewed. The first, second and third UPR reviews took place in February 2009, October 2013 and November 2018

respectively.

At the UPR meeting on January 23, more than 120 countries spoke positively of China's progress in protecting and improving human rights and fully recognized China's efforts.

They said China has successfully charted a path of human rights development, which suits its national conditions and conforms to the aspirations of the people. It provides a new choice for other countries, especially developing countries, to independently explore the path of human rights development.

China attaches great importance to ensuring and improving people's livelihood in the course of development, constantly promotes economic and social development, and enhances people's

well-being. It realizes all-round human development, ensures that the fruits of development are shared by the people, and strives to promote comprehensive and coordinated development of economic, social and cultural rights and civil and political rights, according to the panelists at a side event in Geneva on January 23.

China has not only made remarkable achievements in the protection of its own economic, social and cultural rights, but also provided strong support to other developing countries through international cooperation and capacity building, said Greisy Cordero Suarez, third secretary of Cuba's Permanent Mission to the UN, Geneva.

See page 2

## Tianzhou-7 Delivers Experiment Kits to Tiangong Space Station

By Staff Reporters

China launched cargo spacecraft Tianzhou-7 from the Wenchang Spacecraft Launch Site in the southern island province of Hainan on January 17 to deliver supplies to its orbiting space station Tiangong.

The spacecraft completed its status setting and docked with the space station on January 18, the China Manned Space Agency (CMSA) said.

Tianzhou 7, designed and built by the China Academy of Space Technology in Beijing, is the 12th spacecraft to visit Tiangong. It has the largest carrying capacity and the highest transportation efficiency in its category in the world, according to the mission planners.

With the Tianzhou-7 mission, the space application system sent 16 standard cargo packages, one set of cell life support devices, and one set of 4°C microfluidic chips to the space station. In total, there are 61 sets of products, weighing approximately 473 kilograms, according to Liu Wei, chief designer of the space application system for the Tianzhou-7 mission.

"They have been put together by 18 domestic universities and institutes, and will be used in 33 experiments involving life and material sciences, microgravity fluid physics and combustion research," Liu said.

They also contain human bone cells, which will be observed and analyzed for changes in the microgravity environment in space, according to Shang Peng, a professor at Northwestern Polytechnical University's School of Life Sciences.

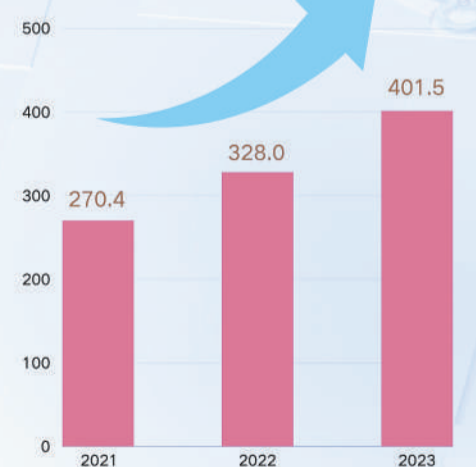
The results will help scientists better understand conditions such as bone density loss and muscle atrophy, and work out solutions to improve the health of astronauts in space as well as people on Earth, Shang added.

China will launch the Tianzhou-8 cargo spacecraft from the Wenchang Spacecraft Launch Site this year.

## New Graphic

## The Number of China's Valid Invention Patents

(ten thousand pieces)



Number of valid invention patents in China (excluding Hong Kong, Macao and Taiwan)

Source: National Intellectual Property Administration, PRC  
Designed by YAO Yilu / Science and Technology Daily

WECHAT ACCOUNT



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