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WEEKLY EDITION

International Cooperation

2023 ZGC Forum: Cooperation for Shared Future

By LU Zijian & TANG Zhexiao

The 2023 Zhongguancun (ZGC) Forum opened on May 25 in Beijing, adopting a theme of "Open Cooperation for a Shared Future." This year's ZGC Forum not only shone a spotlight on the importance of international cooperation, but also released and displayed a large number of sci-tech achievements.

International cooperation promoted

The ZGC Forum has always been a crucial platform for international exchanges and cooperation on sci-tech since its establishment in 2007.

Wang Zhigang, China's minister of science and technology, said at the plenary meeting that China will implement a more open, inclusive, reciprocal and shared strategy for international sci-tech cooperation. He noted that China is willing to join hands with other countries to focus on optimizing an open innovation ecology, strengthen joint research in key areas and actively engage in the global sci-tech innovation governance.

Renowned experts, entrepreneurs and investors from over 80 countries and regions, met virtually or in person to exchange views and discuss the future of sci-tech innovation, in particular regarding digital economy, AI, life and health, carbon peaking and neutrality.

At the International Forum on Basic Sciences, STI and Sustainable Development, a parallel forum of the 2023 ZGC Forum, Adrian Smith, president of The Royal Society, UK, said that science is fundamentally a global endeavor, requiring cooperation cross borders, and that scientists always find ways to work together whatever the global environment.

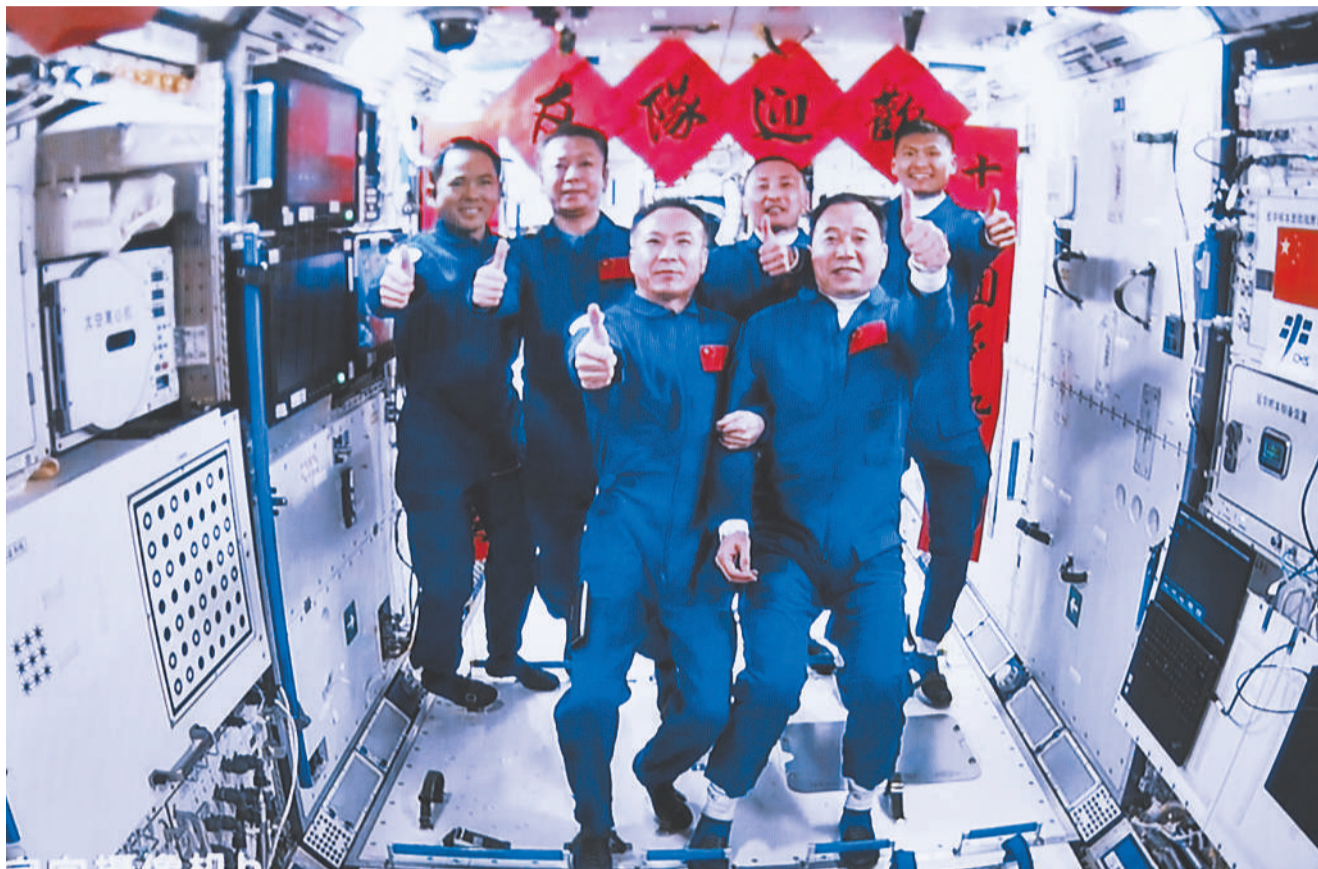
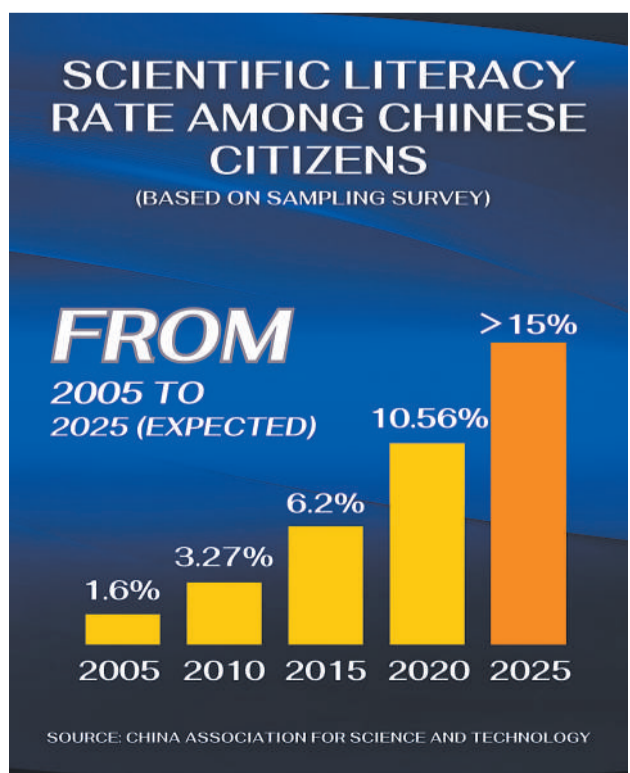
This was echoed by Wang Meng, deputy director of international cooperation office, Aerospace Information Research Institute of Chinese Academy of Sciences, who told *Science and Technology Daily* that issues like climate change and environment pollution facing the entire planet must be solved through international cooperation.

An international sci-tech innovation center

At the opening ceremony of ZGC forum, an assessment report on construction of the Beijing International Center for Science and Technology was released, suggesting that Beijing has preliminarily established a sci-tech innovation center of global influence. Wu Hequan, academician at the Chinese Academy of Engineering, said that notable achievements have been made in the construction of the center, and it has become a crucial force in the global innovation network.

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New Graphic



China sends a flight engineer and payload specialist into space for the first time via the Shenzhou-16 mission. This screen image captured at Beijing Aerospace Control Center on May 30, 2023, shows the Shenzhou-15 and Shenzhou-16 crew taking group pictures inside the core module Tianhe of China's space station. (PHOTO: XINHUA)

Editor's Pick

Scientific Expedition to Protect Roof of the World

By Staff Reporters

On the Qinghai-Tibet Plateau, 8,830 meters above sea level, stands the world's highest weather station. Set up in May 2022 by Chinese scientists a few steps away from Mount Qomolangma, the world's highest peak, the station had its first visit from a scientific expedition on May 23, to gather information and conduct maintenance.

This year's Mt. Qomolangma scientific expedition is part of the second comprehensive scientific expedition on the Qinghai-Tibet Plateau, which was launched in 2017, focusing on water, ecology and human activities to reveal the mechanisms of environmental change, and optimize the ecological systems on the plateau.

Decoding climate change

The Qinghai-Tibet Plateau is known as the "roof of the world" and the "water tower of Asia." The impact of global warming on the glacier of Mt. Qomolangma is of great concern to researchers and the public at large.

The team drilled a new ice core sam-

ple from Mt. Qomolangma at 6,500 meters, which will provide abundant information for the research of climate change history in the region. Moreover, records of ice cores drilled by Chinese scientists show that the amount of heavy metals and persistent organic pollutants from human activities in the atmosphere of Mt. Qomolangma has increased since the Industrial Revolution.

"Climate and environment changes on the Qinghai-Tibet Plateau are closely linked to other parts of the world," said Yao Tandong, academician of the Chinese Academy of Sciences (CAS) and team leader of the second expedition to the Qinghai-Tibet Plateau, adding that advanced instruments such as the "Jimu-1" III-type aerostat, radar to measure glacial ice thickness and atmospheric turbulence observation systems have greatly improved the monitoring accuracy.

The vertical distribution of carbon dioxide and methane in the Qomolangma region has been measured for the first time using a helicopter and aerostat platform. CAS Academician Piao Shilong explained that continuous research on

greenhouse gas changes in the Qomolangma region will provide a more comprehensive understanding of the plateau ecological and environmental changes and their linkage with global environmental changes, thus helping to optimize the plateau ecological barrier system.

From the altitude of 5,200 meters to 8,830 meters, there are eight weather stations to observe mainly air pollutants. New batteries developed in collaboration with the lunar exploration project will provide a reliable energy supply for the operation of instruments and equipment in the extreme environment near the summit, said An Baosheng, on-site commander of the Mt. Qomolangma expedition.

Unravel evolution mystery

During March and April of 2023, the team also discovered new fossils of *Himalayasaurus*, an extinct genus of ichthyosaur. Ichthyosaurs are extinct Mesozoic Marine reptiles that dominated the ocean long before dinosaurs dominated the land.

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China's Contributions to Global Health

By Staff Reporters

The Chinese delegation to the World Health Assembly (WHA) held a media briefing in Geneva on May 20, saying that it will fully participate in the deliberations on more than 70 topics this year, including prevention and response to public health emergencies, universal health coverage, non-communicable diseases, and the 2024-2025 planning and budgeting programme.

This year marks the 60th anniversary of the dispatch of Chinese medical teams to foreign countries. Over the past 60 years, China has sent 30,000 medical

team members to 76 countries and regions around the world, treating more than 290 million patients.

Cao Xuetao, deputy director of National Health Commission of China, said that China and the international community are working together to fight infectious disease epidemics and safeguard human health. To combat epidemics, for example, during 2014 and 2015, China sent more than 1,200 clinical and public health experts to assist West African countries in controlling the Ebola epidemic.

Since the outbreak of COVID-19, Cao said China has maintained close

communication with WHO and relevant countries and regions, timeously and openly shared information on the epidemic, conducted in-depth technical exchanges on the prevention and control of the epidemic, and shared its experience in fighting the epidemic with all parties without reservation.

China has vigorously developed its health and wellness programs, and life expectancy per capita has increased from 35 years at the founding of the People's Republic of China in 1949 to 78.2 years in 2021. It has eradicated infectious diseases such as smallpox, polio and malaria.

Ramping up Sci-tech Popularity

By Staff Reporters

China's 29th National Science and Technology Week ran from May 20 to 31 across the country. It featured China's major sci-tech achievements in recent years including a series of activities such as science popularization events, by liaising with relevant departments and localities.

Such sci-tech achievements as SegGPT by Beijing Academy of Artificial Intelligence were exhibited, which can accurately identify and locate vehicles, pedestrians, traffic signs, obstacles and other targets, so as to support driverless vehicles and robotics.

Other features included ChatGLM, developed by Beijing Zhipu Huazhang Technology Corporation. It is a conversational language model that 369 institutions in 53 countries have applied to use.

Multiple science popularization events were designed across Beijing. For example, nearly 20 science popularization events were held in Dongcheng district, and science knowledge competitions for primary and secondary school students were held simultaneously.

Cloud exhibition halls, online live broadcasts and other forms of multi-channel dissemination of scientific knowledge were also set up. Targeting young people, these were aimed at sparking their imagination and curiosity at an early age.

Relevant departments are currently working on synchronizing the financial science and technology week, agricultural science and technology week, food and material reserves science and technology week, vocational education week and other specialist activities, organizing science and technology workers in farm fields, factories, communities and rural areas including primary and secondary schools, to carry out a variety of forms of science and technology activities.

Since the first National Science and Technology Week was held in 2001, more than two billion people have participated in relevant activities and events.

WEEKLY REVIEW

C919 Jetliner Goes into Commercial Operation

The C919, China's self-developed large passenger aircraft, successfully completed its first commercial flight from Shanghai to Beijing with 128 passengers on board on May 28, marking its official entry into the civil aviation market.

Manned Lunar Landing to Be Realized by 2030

China has recently initiated the lunar landing phase of its manned lunar exploration program. The overall goal is to achieve China's first manned landing on the moon by 2030 and carry out lunar scientific exploration and related technological experiments, announced the China Manned Space Agency (CMSA) on Monday.

New Technique to Produce Flexible Solar Cells

Chinese scientists have proposed a edge-blunting technique for fabricating large-scale, foldable silicon wafers and manufacturing flexible solar cells, which can be rolled similarly to a sheet of paper. The study was published in the journal *Nature* on May 24.

China International Big Data Industry Expo Held

The China International Big Data Industry Expo 2023 concluded on May 28 in Guiyang, the capital of Guizhou province, with a contractual investment worth 61.3 billion RMB (about 8.7 billion USD) signed during the three-day event.

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