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WEEKLY EDITION

## Xuntian Telescope to Survey Space

By Staff Reporters

The Chinese Survey Space Telescope (CSST), named Xuntian in Chinese, is expected to be launched in 2023 and later conduct sky surveys on a broad scale, doing frontier research on the formation and evolution of the universe, dark matter, dark energy and heavenly bodies within the solar system and extra-solar planets.

About the size of a bus with an aperture of two meters, CSST is as high as a three-story building when erected, according to Liu Jifeng, deputy director of Joint Science Center for China Space Station Telescope.

CSST consists of two parts, a platform and an optical facility. The platform section is like a resource cabin, providing energy for the telescope's space flight and the optical facility carries its main payloads, consisting of five observation modules, which includes the Xuntian module, the terahertz module, the multichannel imager, the integral field spectrograph, and the extra-solar planetary imaging coronagraph.

The key mission of CSST is sky survey, which means observing thousands of galaxies and generating panoramic and high-definition photos of the universe. Such survey could make up about 70 percent of the operation time of CSST, said Zhan Hu, principal scientist of Xuntian optical facility.

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## Beautiful China

Aerial photo shows the spring scenery of Xiling gorge, part of the Three Gorges, in central China's Hubei province. (PHOTO: XINHUA)

## Editor's Pick

## Digital Technology Reshaping Future Education

By WANG Xiaoxia

Digital technology has become a social necessity to ensure education as a basic human right. In recent years, this trend has motivated China to accelerate the digitalization of education to promote educational equity, improve the quality of education, and meet the needs of the labor market.

In a world experiencing more frequent crises and conflicts, promoting education recovery in the post pandemic era and realizing equitable quality education through digital education transformation are now a matter of urgency.

### World's largest digital education platform

In southwest China's Sichuan province, it takes more than three hours to drive from the capital city Chengdu, to Kangding in mountainous western Sichuan. However, with the help of digital technology, it takes less than one minute for a teacher from the renowned Chengdu No. 7 High School to answer a student

from Kangding.

So far, all primary and secondary schools across China have been connected with the Internet, an increase of 75 percent over 2012. More than 75 percent of schools have Wi-Fi coverage, and 99.5 percent of schools have multimedia classrooms.

Digital education platform Smart Education of China was launched on March 28, 2022, and has become the world's largest educational resource database, said the Ministry of Education (MOE) on February 9.

According to the MOE, the platform's primary and secondary education section boasts 44,000 pieces of content; the vocational education section has access to 1,173 national and provincial-level databases; and the higher education section brings together 27,000 online courses and virtual simulation experiments.

To date, the platform has received more than 6.7 billion page views and more than one billion visitors, with users covering more than 200 countries and re-

gions on five continents.

### Empowering the graduates

In a virtual classroom, students from Nanjing University of Aeronautics and Astronautics, Northwestern Polytechnical University and Guizhou Institute of Technology managed to complete the assembly of the C919, China's first domestically developed large passenger jet.

"With digital simulation and virtual reality technology, we can not only move the aircraft assembly site to the class, but also realize interaction between students from different universities through 5G communication," said Tian Wei, professor from Nanjing University of Aeronautics and Astronautics.

From compulsory education to higher education, the application of digital technology has improved the quality of lessons by providing more interesting content and immersive experiences.

Meanwhile, digital tools have upgraded the employment services to empower university graduates during the hiring season. See page 2

## Sci-tech Revolutionizes Agricultural Development

By Staff Reporters

In 2022, the contribution rate of sci-tech progress in China's agriculture reached 62.4 percent, and China has become one of the world leaders in terms of sci-tech innovation in agriculture, said Zeng Yande, chief agronomist of the Ministry of Agriculture and Rural Affairs (MARA), at a recent press conference.

Zeng pointed out that major sci-tech innovation in agriculture was accelerated last year. Programs were initiated to tackle key technological problems in agriculture and much progress has been made in core germplasm resources and

cultivation of new varieties. A batch of top scientists, leading agronomists and young sci-tech talent were cultivated to optimize the China Agriculture Research System.

In addition, a set of innovation systems from national level to county level was established, said Zeng. A MARA laboratory system was formed, with 469 key laboratories from 34 discipline clusters in the field of highly efficient breeding, farmland conservation and intelligent equipment. Together with 60 national agricultural sci-tech innovation alliances, a coordinated innovation mode was built up to solve specialized, indus-

trial and regional major key technological problems.

To guarantee the country's harvest, multiple campaigns were conducted, targeting wheat, soybean and rape respectively. Nearly a million agricultural technicians went to the frontline of agricultural production, offering targeted support for important agricultural products to increase yield per unit and reduce loss, last year.

MARA also sent a sci-tech delegation of 1,557 experts to 160 counties designated as national key counties for receiving assistance for rural revitalization, according to Zeng.

## Science Communication in China Reviewed

By Staff Reporters

In terms of science communication, media outlets are continuously innovating their approaches and methods as they adapt themselves to the changes of the society.

This emerged from a report recently released in Beijing by the Research Center of Science Communication, Chinese Academy of Sciences, offering insights into the changing trends of science communication in China.

Websites, social media like WeChat and Weibo, and mobile clients developed by media have become major platforms for science communication, as they can release news rapidly and cover a broad scale of readers. Much of the sci-tech news and events are first published through WeChat and Weibo, which have the largest influence on sci-tech information in contemporary China.

According to the report, traditional media like newspapers, magazines, books and TV have great advantage in topic selection and content creation, as they have accumulated extensive expertise and collected many experts in science communication, and traditional media also take advantage of integrated development by opening new media platforms.

Government, research institutes and universities also began to release content in science communication on social media platforms.

In addition, science popularization activities attract many citizens, as do seminars, forums and exhibitions, while online sci-tech exchanges have become normal.

Short and micro videos also assist in setting up learning scenarios. The level of science popularization books have also been improved, while science picture books remain best sellers.

To cope with the challenges of science communication, the report made several suggestions, including establishing science popularization brands by technology innovation, disseminating precise knowledge by strengthening content approval, and incentivizing original concepts and products by protecting copyright.

## WEEKLY REVIEW

### Sequencing of Chicken Genome Completed

Chinese scientists have assembled the complete genome sequencing of a local chicken breed, which is expected to improve the understanding of the evolutionary trajectory of vertebrates and benefit molecular breeding of domestic chickens, according to the study published in the *Proceedings of the National Academy of Sciences*.

### AI Computing Center Launched in Beijing

Beijing has launched its first AI computing center, the Beijing Ascend AI Computing Center, to provide computing services, based on Ascend AI hardware and software, for enterprises and research institutions.

### Solar Cell Structure Optimized

Scientists from University of Science and Technology of China have developed a solution to reduce nonradiative recombination and boost power conversion efficiencies in perovskite solar cells, according to the study published in the journal *Science*.

### Space-tracking Ship Sets Sail

China's space-tracking ship Yuanwang-5 departed from a port in east China's Jiangsu province on February 20 to conduct spacecraft monitoring missions. This marks the ship's first ocean voyage in 2023 and the longest one since 2020.

## New Graphic



WECHAT ACCOUNT



E-PAPER

