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WEEKLY EDITION



Dating with CIIE

By LI Linxu

At the same time and same place, this year's dating with China International Import Expo (CIIE) is on tiptoe of expectation.

As the world's first national-level import expo, CIIE is turning an increasing number of multinational companies into its loyal fans.

Preparations well underway

"We're ready for the expo," Tracy Xie, president of Vale China, told *Science and Technology Daily (S&T Daily)*, adding that Vale attaches great importance to CIIE and has prepared for months for the event.

Vale is an old friend of CIIE, and has participated in all editions of CIIE since its inception in 2018.

"We always choose CIIE as the first platform in China to showcase our new products, new solutions and new initiatives," said Xie, adding that as this year marks the 50th anniversary of its first shipment of iron ore to China, Vale will unveil a Time Tunnel in the exhibition featuring its half a century partnership with China.

Omron is also an old friend of CIIE and this is the sixth consecutive year for the company to join the event.

"Our preparation is well underway," Takashi Higashitani, executive vice president of Omron Healthcare (China), said to *S&T Daily*, adding that Omron will leverage the expo to showcase its 90 years' innovation history as well as its development history in China.

Eyeing New Opportunities

CIIE is an effective platform not only to showcase innovative products, technologies and services, but also to provide opportunities for cooperation and exchanges.

For U.S. pharmaceutical giant Pfizer, this year is its fifth time being on CIIE stage. "We'll have a 1,000 m² booth, one of the largest booths at CIIE," Jean-Christophe Pointeau, president of Pfizer China, also chairman of RDPAC, told *S&T Daily*, revealing that Pfizer will roll out a wide range of innovative products and solutions.

Since the debut at CIIE, seven innovative pharmaceutical products of Pfizer have obtained the regulator's approval to enter the Chinese market, reflecting the expo's spillover effects, said Pointeau, adding that at the expo, Pfizer also reached many cooperative agreements with partners and is looking forward to joining hands with all stakeholders this year. See page 3

WEEKLY REVIEW

Hai Ya wins Hugo Award for Best Novelette

Sci-fi writer Hai Ya's *The Space-Time Painter* won the Hugo Award for Best Novelette on Oct. 21. He became the third Chinese writer to receive the prestigious Hugo Award after Liu Cixin in 2015 and Hao Jingfang in 2016.

Asian Para Games Open with High-tech

Hangzhou, the capital of Zhejiang province in east China, is hosting the 4th Asian Para Games, which opened with a technologically empowered, emotionally engaging ceremony on Oct. 22. The ceremony, themed "Hearts Meet, Dreams Shine", was held at the Hangzhou Olympic Sports Center Stadium.

Most Sampled Rice Genetic Variation Mapped

Chinese scientists have successfully drawn a new rice variation map based on more than 10,000 rice samples. The digital variation map will ensure effective rice breeding. The study was published in recent journal *Nucleic Acids Research*.

China's innovation strengths

According to data released by the National Bureau of Statistics on Oct. 20, the China Innovation Index, a barometer of the country's innovation capability, climbed 5.9 percent compared with the previous year to hit 155.7 in 2022, with an average annual rate of 6.5 percent since 2015.

2023's Major Sci-tech Challenges Unveiled

The China Association for Science and Technology has released a list of confronting problems in the fields of frontier scientific research, engineering technology and industrial technology development on October 22.



Chinese astronauts Tang Hongbo (C), Tang Shengjie (R) and Jiang Xinlin for the upcoming Shenzhou-17 spaceflight mission meet the press at the Jiuquan Satellite Launch Center in northwest China on Oct. 25, 2023. (PHOTO: XINHUA)

Editor's Pick

Largest Synthesis Radiotelescope Advancing Solar Research

By Staff Reporters

It's all systems go for the world's largest synthesis aperture radio telescope. Key testing was successfully completed on September 27, enabling the Daocheng Solar Radio Telescope (DSRT), a solar telescope array in southwest China's Sichuan province, to be officially put into use, according to the Chinese Academy of Sciences (CAS).

The telescope array is a milestone in the country's space environment ground-based comprehensive monitoring network (phase-2 Meridian Project) and will provide high-quality observation data for solar physics and space weather research in China.

Three hundred and thirteen antennas

The sun brings us heat and light, but solar activities also cause space weather on Earth, which can have a seri-

ous impact on high-tech systems in space and on the ground, said Yan Jingye, director of the project from the CAS.

The DSRT is designed to precisely monitor and predict space weather. It is like a "radio camera" taking pictures of the sun, forecasting and giving warnings about space weather, while providing first-hand information for scientific research.

The telescope array consists of 313 six-meter-wide antennas. The antennas are evenly distributed on a one-kilometer-diameter circle, and a 100-meter-high calibration tower at the center sends calibration signals to all the antennas.

The 313 antennas work in collaboration and form a huge, virtual telescope at the frequency range of between 150 to 450 megahertz to achieve high-precision

imaging of solar events. This includes solar eruptions and the process of solar storms entering interstellar space, which helps to predict and assess the impact of solar activities on Earth.

Every day when the sun rises, all antennas aim at and turn with the sun, like gigantic sunflowers. After sunset, the array begins its other tasks, such as the detection of space debris, pulsars and satellites in geostationary orbit, said Yan.

How to meet the challenge

Converting scientific solutions into reality involves a lot of technical and construction issues. In addition, the high altitude of Daocheng and its extreme weather conditions presented major challenges for the equipment design and testing, said Wu Junwei, executive manager of the DSRT.

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Tech for Better Life in China

Technology Protects Biodiversity of Siling Lake

By WANG Xiaoxia & YANG Yuhang

Siling Lake, located at an altitude of approximately 4,500 meters, is the largest saltwater lake in China's Xizang autonomous region, and also a natural habitat of wild animals on the plateau. In recent years, with the application of technologies, the lake has seen improvement in the protection of biodiversity, according to a manager of the lake's nature reserve.

As an important national wildlife reserve, the Siling Lake is home to many wild animals that can only be found in the Xizang-Qinghai Plateau, including the Tibetan antelope, Tibetan wild donkey, lynx, black-necked crane and bar-headed goose. It is so distinctive that the

antelopes living around the lake don't migrate, and the antelope community in Xainza county has a population of nearly 10,000, according to local authority.

Over 40 wildlife conservation patrolers work in the nature reserve, and you can see the scars left on their hands when saving wild animals, said Palbar Tashi, manager of the Siling Lake Nature Reserve, who told *S&T Daily* that technology has been playing a greater role in wildlife protection.

The Chinese Academy of Sciences has provided technological support. With the use of infrared cameras and image identification technology, more than 500 snow leopards have been identified and are monitored, Tashi said.

All the images captured by the cameras and data are transmitted to the terminal monitoring system, where staff members analyze the information to better understand the activities of the animals.

With the improvement of the environment and natural resources, reproduction in the wild animals has gone up. A leopard couple can now give birth to three to four cubs, while in the past they usually gave birth to one cub, Tashi said.

The Siling Lake area was listed as a nature reserve in 1993, and in 2003, upgraded to a national-level one. In 2018, it was included in the list of Wetlands of International Importance designated by the Convention on Wetlands, an inter-governmental treaty.

International Cooperation

New Gwadar Airport Witnesses Takeoff of China-Pakistan Friendship

By Staff Reporters

The Chinese-aided New Gwadar International Airport project in Pakistan, a key project under the framework of the China-Pakistan Economic Corridor (CPEC), is part of a modern transportation network covering the sea, land and air in the region.

It is located 26 kilometers northeast of Gwadar Port that is an endpoint of the CPEC. The new Gwadar International Airport covers an area of about 18 km² and will be the largest civil airport in Pakistan. It also has the potential of benefiting Central Asia, providing the landlocked countries access to international markets through a combination of sea and land routes.

Work under tough conditions

Construction of the airport, which broke ground in 2019, has been arduous. The construction team of the China Railway Group (CRG) had to overcome high temperatures that could reach 55°C, shortage of clean water and other challenges.

Project manager Dai Chunzhuang said it has been so hard in the past three years, many young Chinese workers had been recruited. When they arrived in Pakistan, they had to deal with the high temperature, low oxygen levels, as well as other life inconveniences.

To tackle the high temperature, for example, the project team scheduled carefully the timeslots of the construction process.

They insisted that they should stay on-site every night for two hours and check project progress at the end of each month to ensure all targets were completed well.

In addition, the team had to be ready for floods, the COVID-19 pandemic and even terrorist attacks.

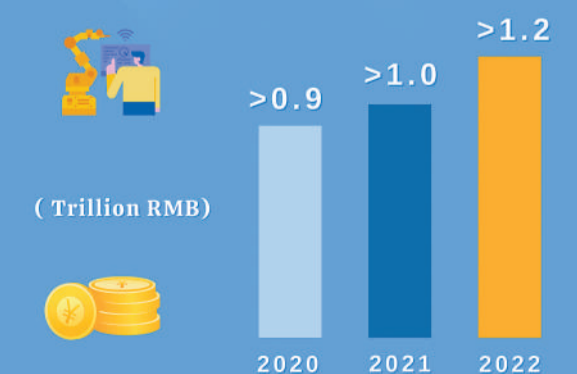
Ou Xiaobing, in charge of purchasing, price negotiations and construction material transportation, said the challenges brought their own reward: "Although life here is challenging... I accumulated a lot of valuable experience and practical knowledge. You grow quickly under pressure."

Dai Chunzhuang left China in September 2020. In these three years, he went back home only once to see his family members.

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New Graphic

CHINA'S INDUSTRIAL INTERNET'S CORE INDUSTRY VALUE



Source: China Academy of Industrial Internet
Designed by SONG Ziyani/S&T Daily

WECHAT ACCOUNT



E-PAPER

