



COP<sub>15</sub>: EXPLORING THE PATH TO BIODIVERSITY PROTECTION

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DAVID FERGUSON: AN EXPERT DECODING CHINA'S STORIES

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# Science and Technology Daily

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### **WEEKLY EDITION**

By Staff Reporters

**Ecological Philosophy** 

Gains Global Recognition

Over 5,000 representatives from

governments, international organiza-

tions, research institutes and enterprises attended the first part of the 15th meet-

ing of the Conference of the Parties to

the UN Convention on Biological Diversi-

ty (COP15) held from October 11 to 15 in

Kunming, southwest China's Yunnan

convened by the UN to highlight ecologi-

cal civilization, a philosophy proposed

Building a Shared Future for All Life on Earth," the conference was held to draw a blueprint for future biodiversity con-

servation, facilitating the international

community to join hands to protect

ered a keynote speech via video link on

October 12, announcing a series of new,

concrete initiatives, and calling for a

pooling of strength to build a communi-

ty of all life on Earth, joining forces and

starting a new journey of high - quality

development of humanity. See page 4

Chinese President Xi Jinping deliv-

their common future.

COP15 is the first global conference

Themed "Ecological Civilization:

# Xi Stresses Advancing Global Transport Cooperation

Chinese President Xi Jinping on October 14 called for advancing global transport cooperation and writing a new chapter featuring connectivity of infrastructure, unfettered flows of trade and investment, and interactions between civilizations, while he addressed the opening ceremony of the Second United Nations Global Sustainable Transport Conference via video link in Beijing.

Xi said that we need to uphold an innovation-driven approach and create more drivers for development. More should be done to develop smart transport and smart logistics and promote deep integration of new technologies

like big data, the Internet, artificial intelligence and blockchain with the transport sector, to ensure easier movement of people and smoother flow of goods.

Xi also noted that we need to uphold ecological conservation as a priority and pursue green and low - carbon development. More efforts are needed to foster a green and low - carbon way of transport, step up green infrastructural development, promote new energy, smart, digital and light-weight transport equipment, and encourage and advocate green travel, to make transport and travel more environment-friendly and low-carbon. *See page 2* 

# China's First Solar Exploration Satellite in Space

IAEA, China Further Collaborate on Nuclear Waste Disposal

By Staff Reporters

Xihe, China's first solar exploration satellite, was successfully sent into designated orbit from the Taiyuan Satellite Launch Center in north China at 6:51 pm Beijing time on October 14, marking China's entry into the era of the sun's observation.

The satellite was named after the goddess of sun Xihe in China's ancient mythology, who was said to be in charge of time and the calendar.

It will conduct observations of the solar H-alpha band spectral imaging for the first time in the world. Through the analysis of data gained from the observation, the dynamic process and physical mechanism of the solar eruption can be studied.

Operating in a sun-synchronous orbit at an altitude of 517 km, the satellite will be able to observe the sun for 24 consecutive hours, according to Zhao Jian, director of Earth Observation Sys-

The International Atomic Energy

Agency (IAEA) has established the

world's first collaborating center for the

geological disposal of high level radioac-

tive waste (HLW) in China, according to

the China Atomic Energy Authority

and IAEA Director General Rafael Maria-

no Grossi had a meeting via video link

on October 12, and witnessed the sign-

ing of the agreement between IAEA and

Beijing Research Institute of Uranium

Geology (BRIUG) of China National Nu-

laborating Center for Geological Dispos-

logical disposal center established by

IAEA. The center will promote interna-

tional academic exchanges, strengthen

joint research and personnel training in

the research and development of geolog-

ical disposal technology of HLW and the

design and construction of underground

laboratories, so as to facilitate the global

research and development process in

Safe disposal of HLW concerns the

BRIUG was designated as IAEA Col-

This is the world's first HLW geo-

clear Corporation (CNNC).

al of HLW.

Zhang Kejian, chairman of CAEA,

By WANG Xiaoxia

tem and Data Center, China National Space Administration. Compared with traditional satellite platforms, this version's pointing accuracy and attitude stability are both increased by two orders of magnitude, said Zhao.

The major scientific payload of Xihe is a solar space telescope. The separation of the platform cabin and the payload cabin, a new design for the satellite, ensures the stable and precise observation of the telescope.

Due to the separation, traditional power supply cannot reach the telescope. A new technology was used to realize magnetic coupling wireless energy transmission. This is the first time that energy transmission technology with high power, high reliability and high efficiency is applied in a satellite.

The satellite set up a 5G high-speed communication channel for information transfer by using lasers and microwaves. Both wireless communication approaches can act as a backup for each other.

Kejian said that CAEA should further strengthen exchanges and cooperation

with other countries in the geological

disposal of HLW, improve the disposal

technology, promote the safe and sus-

tainable development of the nuclear in-

dustry, and share China's experience

and proposals on the building of a com-

munity with a shared future for man-

general and head of the Department of

Nuclear Energy of IAEA, said that the

safe disposal of HLW is a major issue af-

fecting environmental protection and

the sustainable development of nuclear

energy, and it requires the joint efforts

of scientists from all countries to solve

hundreds of thousands of years. The in-

ternationally accepted solution for its

safe and secure long term management

is geological disposal in a facility several

first underground research laboratory

for HLW disposal in the Beishan region

of Gansu province, to determine the ar-

ea's suitability for future geological dis-

posal of HLW, which will be the world's

largest underground laboratory with the

hundred meters underground.

HLW could remain radioactive for

China has begun constructing its

the problem.

Mikhail Chudakov, deputy director

# 9 五台摄像机 b

The photo shows three Chinese astronauts, Zhai Zhigang (C), Wang Yaping (R) and Ye Guangfu, waving after entering the space station core module Tianhe. (PHOTO: XINHUA)

# Shenzhou-13 Launches First Long-duration Crew

Edited by TANG Zhexiao

The Shenzhou-13 crewed spacecraft was successfully launched by a Long March-2F carrier rocket at 00:23 Beijing time on October 16 from the Jiuquan Satellite Launch Center in northwest China.

After a successful launch to the new Chinese Space Station in June, the spacecraft and its three astronauts Zhai Zhigang, Wang Yaping and Ye Guangfu, headed for Tianhe, the core module of the Tiangong space station that China is building in low Earth orbit.

Shenzhou- 13 is the eighth crewed flight of China's space program. Zhai is the country's first astronaut to take a spacewalk, Wang is China's second female astronaut to participate in a spaceflight, and Ye will be making his first journey to space.

After entering orbit, the spacecraft will conduct a wide range of tasks, including performing two or three spacewalks to install a small robotic arm onto a larger one and verifying key proce-

dures and technologies, according to Lin Xiqiang, deputy director of the China Manned Space Agency. Scientific experiments and technology demonstrations in space medicine, microgravity physics and other fields will also be conducted.

Shenzhou-13 docked with the space station Tiangong on the morning of October 16 and three astronauts entered the country's space station core module Tianhe. The astronauts will stay in the orbit for six months, the longest ever duration for the Chinese astronauts.

# WEEKLY REVIEW

New Record for Third-Generation Hybrid Rice Annual Yield

Developed by the late Yuan Longping and his team, the hybrid rice planted in Central China's Hunan province yielded over 1,600 kg per mu (about 0.067 hectares) in two growing seasons in one year, breaking the record made in 2020.

Largest Gas Storage Cluster in

North China Starts Operation

With a capacity of 10.03 billion cubic meters, the largest underground natural gas storage cluster in north China officially began operation on October 18.

130th Canton Fair Opens with Smart Products

Themed "Canton Fair, Global Share," the 130th China Import and Export Fair (Canton Fair) was held from October 15 to October 19 in Guangzhou, Guangdong province. The Fair attracted around 8,000 companies from many fields.

### FAST Creates New Record of Detecting 1,652 Independent Bursts

Using Five-hundred-meter Aperture Spherical radio Telescope (FAST) in Guizhou province, China, an international team of researchers detected 1,652 independent fast radio bursts in 59.5 hours over 47 days from a source about 3 billion light years away. The findings are published in the journal *Nature* on October 13.

### **Editor's Pick**

# New and High Tech Industrialization Shines

By LU Zijian

After more than 30 years, national hi-tech zones have become hubs for innovation, industries, talent and openness, making huge contributions to China's economic rise. In 2020, the GDP of 169 national hi-tech zones reached 13.6 trillion RMB, accounting for about

13 percent of the country's GDP.

There are many shining examples that indicate how small start-ups evolve into business giants in national hi-tech zones.

Hi - tech zones become cluster for transformation of sci-tech achievements

The research and development (R&D) investment of enterprises in na-



A cryofree dilution refrigerator displayed at the Zhongguancun Forum exhibition in Beijing. (PHOTO: XINHUA)

tional hi-tech zones comprises half of that of companies all around China. Every 10,000 employees in national hitech zones own 388 invention patents, more than ten times higher than the national average.

Both the investment and the output show that national hi-tech zones are clusters of innovation.

As China's first hi-tech zone and first national innovation demonstration zone, Zhongguancun (ZGC) has made significant achievements in terms of transformation of sci-tech achievements.

At the opening ceremony of the 2021 International Technology Trade Fair on ZGC Forum on September 27, Xu Qiang, director of Administrative Commission of Zhongguancun Science Park, said that ZGC harbors around 10 percent of national hi-tech enterprises.

The total revenue of the companies in ZGC reaches 7.2 trillion RMB, making up one-sixth of enterprises in all national high-tech zones. The added value of ZGC hit 1.04 trillion RMB, consisting 29.4 percent of Beijing's GDP.

These achievements were well supported by the central and local governments.

See page 2

S&T DAILY WECHAT ACCOUNT (EN)



health and safety of humankind. Zhang most comprehensive functions. Jing. (PHOTO: XINHUA)

FOCUS 2

# Elevating Standardization Levels High on Agenda

By LI Linxu

China's carbon peaking and carbon neutrality standards are to be established and improved, according to a new outline jointly issued by the Central Committee of the Communist Party of China and the State Council on October 10.

The document, titled *National Standardization Development Outline*, details the country's standardization goals to promote standards development.

By 2025, the level of standardization will see a big boost, according to the goals set by the outline, adding that more than 50 percent of generic key technologies and applied technologies planned programs should produce standards research results, and the average development period of national standards should be shortened within 18 months.

By then, the standards system promoting high quality development will be basically established, with all economic

sectors, such as agriculture, industry and services, covered by industry standards

Meanwhile, the opening-up and international cooperation on standardization work will be deepened extensively, notes the outline, proposing that the consistency degree between national standards and international standards will be elevated significantly, and the conversion rate of international standards will exceed 85 percent.

At present in China, the effective supply of standards is inadequate, the implementation and application of standards is not sufficient, and the technology and internationalization level of standards is not high, said Tian Shihong, vice minister of the State Administration for Market Regulation (SAMR) and administrator of the Standardization Administration of China (SAC).

Therefore, to implement the outline is an urgent need for the historical transformation of the country's standardization work, a major decision to promote high quality economic and social development, and a necessity to boost high level self-reliance and selfstrengthening, said Tian.

Aside from setting the goals for the next five years, the outline has also set the goals for the next 15 years. By 2035, as the standardization management system with Chinese characteristics becomes more completive, a market -driven, government-guided, and enterprise-oriented standardization pattern will fully take shape, featuring mass participation, opening-up and integration.

To achieve these goals, the outline puts forward a series of tasks and measures for the standardization work, such as promoting mutual development of standardization and sci-tech innovation, boosting the level of industrial standardization, improving the standardization guarantee for green development, and elevating the level of opening-up and international cooperation.

The standards research in key technology sectors, such as artificial intelligence, quantum information, and pharmaceutical technologies, will be enhanced, according to the outline.

In technology sectors with promising application prospects, such as a new generation of information technologies, big data, blockchain, new energy and new materials, technology R&D, standards development and industrialization promotion will be carried out simultaneously.

In addition, the standardization upgrade project for carbon peaking and carbon neutrality will be implemented.

The updating and upgrading of energy conservation standards is to be accelerated, mandatory national standards of energy efficiency will be revised, the standards of energy calculation, testing and certification will be improved, and the standards of ecological carbon sink, and carbon capture, utilization and storage will be established, says the outline.



A bird's-eye view of Shanghai from the Oriental Pearl Tower. (PHOTO: VCG)

# Shanghai Strives to Be a Global Sci-tech Innovation Center

By CHEN Chunyou

Shanghai, as one of the three international sci-tech innovation centers in China, has always played a leading role in building an innovative nation.

By the end of 2020, the basic framework for Shanghai to be a sci-tech innovation center had been established, and the preset targets had been achieved.

For example, academic papers published in 2020 by Shanghai's researchers in the world-leading academic journals, such as *Nature*, *Science* and *Cell* accounted for 32 percent of the country's total.

Many major breakthroughs were also made, such as the etching machine technology for chip-making, a new drug named GV-971 for Alzheimer's disease, and advanced molecular imaging equipment for medical treatment.

Shanghai—innovation magnet

According to the 2021 Global Innovation Index, released by the World Intellectual Property Organization on September 20, Shanghai ranked eighth among the top 100 global science and technology clusters.

Recently, Shanghai released a plan to accelerate the building of a sci-tech innovation hub during the 14th Five-Year Plan period.

According to the plan, Shanghai aims to achieve the target of becoming an important source of new scientific discoveries, technological inventions, industrial directions and development concepts by 2025.

Shanghai will have 4.5 percent of its GDP devoted to research and development(R&D), and the investment in basic research will account for about 12 percent of the total social R&D expenditure, according to the plan.

Lin Nianxiu, vice chairman of the National Development and Reform Commission (NDRC), said that Zhangjiang Comprehensive National Science Center is the core pillar for Shanghai's development into an international sci-tech innovation center, and its ability will be further improved. NDRC will continue to lay out comprehensive sci - tech infrastructure, especially in the fields of photonics and life sciences, and promote the formation of a cluster of well-equipped facilities.

Integrated circuits, biomedicine

and artificial intelligence will be the focus of building Shanghai into a sci-tech innovation center, said Lin.

Wu Qing, vice mayor of Shanghai, said the added value of strategic emerging industries will account for more than 20 percent of the city's GDP by 2025, exceeding one trillion RMB, through which the leading function of high-end industries in Shanghai can be strengthened.

Shanghai will increase its openingup to the outside world, support wellknown international sci-tech organizations and institutes to set up branches in the city, and encourage foreign investors to set up R&D centers, said Wu.

By the end of this August, there were about 500 foreign - funded R&D centers in Shanghai, and the number is expected to reach 560 by 2025. To achieve this goal, foreign-funded enterprises and local R&D institutions are encouraged to form R&D alliances, and the development of sci-tech start-up enterprises will be supported, said Wu.

Shanghai—a reference for other

Li Meng, vice minister of the Ministry of Science and Technology (MOST), said Shanghai will be taken as the leader to strengthen the establishment of a scitech innovation community in the Yangtze River Delta region and create a new engine for future industries.

Li said that MOST will support Shanghai to undertake research projects in brain sciences, quantum communication, and quantum computing.

Shanghai will be granted greater autonomy in attracting overseas talent to work in the city. For the urgently needed foreign experts, the application for work permits will be opened, and the restrictions on the age and education background will be eased. Also, Shanghai is supported to take the lead in reforming systems and mechanisms and carrying out policy experiments for sci-tech talent development, which will be the references for other cities and regions in future said Li

Shanghai needs to maintain its global outlook and uphold global standards, and make efforts to be a key hub for global innovation, a gathering place of innovation achievements, and a main market for technology exchange, said Li.

# Olympic Flame, Welcome to Beijing









The Olympic flame that will be burning for the Beijing 2022 Winter Games started its journey after being ignited at the birthplace of the Games in Ancient Olympia, Greece on Oct. 18 during a traditional lighting ceremony. ①Greek actress Xanthi Georgiou in the role of an ancient Greek High Priestess used a concave mirror to focus the sun's rays and light the torch before the 2,500-year-old Temple of Hera, in Ancient Olympia, Greece, Oct. 18. ②Greece's Water Polo Olympic Champion Evi Moraitidou (Left) passed the flame torch to China's Olympic Skiing Champion Li Nina during the Olympic flame handover ceremony at Panathinean stadium in Athens, Greece, Oct. 19. ③A welcome ceremony for the Olympic flame for the Beijing 2022 Winter Games was held at the Beijing Olympic Tower, in Beijing, Oct. 20. ④Actresses performed during the Olympic flame lighting ceremony for the Beijing 2022 Winter Games in Ancient Olympia, Greece, Oct. 18. (PHOTO①④: XINHUA; PHOTO②③: VCG)

### New and High Tech Industrialization Shines

### From page 1

### Support from central government

China has been working on improving the transformation and commercialization of sci-tech achievements by creating laws and regulations and offering financial assistance.

As early as 1996, China issued a law on promoting the transformation of scientific and technological achievements. A revised version of the law was enacted in 2015, with two corresponding regulations issued the following year. The trio greatly helped to improve the transformation of scientific and technological achievements by encouraging R&D institutes and institutions of higher education to transfer sci-tech achievements to enterprises or other organizations, incentivizing sci - tech personnel to start businesses, and creating a good environment for the transformation and transfer of sci-tech achievements.

Financial assistance is also provid-

ed by the government.

According to Enterprise Income Tax Law of the People's Republic of China, the enterprise income tax rate shall be reduced to 15 percent for state-encouraged high-tech enterprises; the enterprise income tax may be exempted from or reduced for incomes gained from the transfer of technologies, which meets the relevant requirements.

In 2015, the National Fund for Technology Transfer and Commercialization was jointly launched by the Ministry of Science and Technology and the Ministry of Finance, aiming to accelerate the transformation and application of scitech achievements. Since its foundation, the fund has set up more than 30 venture capital sub-funds with almost 50 billion RMB, which has grown more than four-fold from the original amount.

All the measures taken have contributed to the progress made concerning transformation of sci-tech achievenents.

### Promoting indigenous features

Local governments at all levels also issued regulations to promote such transformation with specific features unique to the place.

In 2018, Guangxi Zhuang Autonomous Region revised the local regulations for transformation of sci-tech achievements. The new version of the regulations specifically mentioned the cooperation between China and ASEAN countries, where Guangxi has an advantage. Thanks to the China-ASEAN Technology Transfer Center, which is located in Nanning, capital of Guangxi, the activities of transformation of sci-tech achievements between China and ASEAN countries are frequent and effective.

Article 13 of the newly revised regulations noted that the joint working group and information exchange platform targeting ASEAN countries need to be improved to promote mutual technol-

ogy transfer and transformation of scitech achievements.

Yunnan Province, on the other hand, shed light on the transformation of sci-tech achievements for the public good. Many achievements have been made in new species of crops and new technologies of agricultural production and promoted to peasants in the province. Previously, there was no reward for R&D personnel from such transformation, which was not good for the stability of research talent and further research work.

The new regulations propose several approaches to support transformation projects for the public good, which can not only drive the incentive of institutions and people that own the sci-tech achievements to transform, but also encourages more transformation of scitech achievements to be applied for the public good.

Compared with that of developed countries, the transformation rate of scitech achievements in China is still not ideal, but the country is catching up.

### Xi Stresses Advancing Global Transport Cooperation

### From page

Xi said, today, we are redoubling our efforts to build a country with great transport strength. Convinced that transport should come first, we have built the world's largest high - speed railway network, expressway network and worldclass port clusters. We have opened air and sea routes that reach all parts of the world. We have set up an integrated transport network exceeding six million kilometers. Convinced of the need for innovation, we have achieved major breakthroughs in equipment manufacturing like high-speed trains and large aircraft. We have more than half of the world's new energy vehicles. Mega transport projects like the Hong Kong-Zhuhai-Macao Bridge and Beijing Daxing International Airport have been completed and

put into operation. Transport has become a frontier in China's modernization drive. Convinced of the importance of global connectivity, we have become the economy best connected to the global shipping network and with the highest volume of trade in goods. During the COVID-19 pandemic, the China-Europe Railway Express and ocean-going cargo vessels have been running day and night to keep global industrial and supply chains stable, showcasing China's sense of responsibility in the global community.

Xi also announced that China will set up a Global Innovation and Knowledge Center for Sustainable Transport, as a contribution to global transport development.

Source: XINHUA

# **INSIGHTS**

# COP15: Exploring the Path to Biodiversity Protection

### Voice of the World

Edited by QI Liming

The 15th meeting of the Conference of the Parties to the Convention on Biological Diversity, known as COP15, took place from October 11 to 15 in Kunming, Yunnan province.

The meeting, which has drawn much attention from the international community, is the first global conference convened by the United Nations (UN) on the topic of ecological civilization, a philosophy proposed by China.

The fate of humanity is linked to the fate of all living creatures. Awareness is growing of the critical state of biodiversity loss, and of the need to protect biodiversity if we are to safeguard our future.

Experts, diplomats and scientists from around the world attended the conference online and offline, showing the urgent concern for the sustainable development of the human society and nature.

Ecological civilization and Biodiversity

David Gosset, founder of the

China- Europe- America Global Initiative talked about ecological civilization and a community with a shared future for humankind on the Erhai Forum (COP15 relevant forum) online.

"As much as one can feel the depth of the crisis we are confronted with, one can also apprehend with great clarity and confidence that a virtuous circle can be initiated: while the vision of a shared future for humankind presupposes an ecological civilization, a renewed sense of ecology is a generator of unity."

Gosset said technologies have been entering our lives in an unprecedented manner. It is only if it remains under the guidance of human wisdom that technology can lead to the advancement of humankind in harmony with nature.

Meanwhile, Chinese environment officials and scientists discussed the potential for change from COP15 on Nature. com.

"Biodiversity is a basic necessity for human survival and a strategic resource for sustainable social and economic development. Safeguarding it is vital to national ecological security," said Huang Runqiu, Minister of Ecology and Environment of China.

Since China signed up to the Biodiversity Convention in 1992, the country



Kunming Dianchi Lake International Convention and Exhibition Centre. (PHOTO: VCG)

has made considerable inroads in tackling biodiversity loss through key governmental actions and measures.

Vice President of the Chinese Academy of Sciences (CAS), Zhang Yaping, has had an extensive career in conservation biology and helped establish the first wild animal genetic resource bank in the country.

"Research teams have systematical-

ly examined the genetic diversity of native animals, including giant pandas and giant salamanders, with results directly informing species regeneration projects,

"Other projects have provided data to guide conservation action; we have a Biological Resources Program (BRP CAS) that has gathered more than 29 million biological records for Chinese plant and wildlife species, of which 7.35 million are now digitally available as open - access files. The botanical gardens of CAS have conserved more than 20,000 plant species: about 60 percent of China's native plants, accounting for 90 percent of the conserved species in China, and protected 39 percent of the threatened plants in China."

### Pinning Hopes on COP15

According to the *South China Morning Post*, conservationists and diplomats have hopes for the biodiversity conference in Kunming, including ambitious biodiversity conservation targets and practical mechanisms to reach those targets.

"COP15 is probably the most important Conference of the Parties because we are preparing very important decisions," said Thomas Ostrup Moller, Danish ambassador to China, adding that the conference would be the first step for countries to alter the curve of biodiversity loss.

"I hope we get an overlooking political declaration at the end of COP15. The Chinese government is really eager to set the course, so we can actually make some changes here," said Moller.

Signe Brudeset, Norwegian ambas-

sador to China, said she'd like to see countries engaged in Kunming. "We do hope there will be a declaration from the Kunming meetings," she said, "It is also very important that even in this pandemic period, the meeting is actually happening and the countries are really engaged."

### Meeting future challenges

According to the opinions on Nature.com, considerable challenges remain for COP15. Equal access to digital and genetic databases is a relatively new issue to be discussed, with the dawn of novel technologies and big data observation strategies advancing biodiversity protection. Safeguarding the world's oceans is crucial, with many regions failing to meet fishing sustainability targets. There is also much work to be done on the monumental task of reducing plastic pollution.

Socio - economic issues are inextricably tied to biodiversity discussions. There is a growing call for the focus to be on encouraging local, regional and national sustainable supply chains of production and consumption, with incentives to every country to protect and restore biodiversity and ecosystems and develop resilient, biodiversity- friendly business models.

### **Kunming Declaration Adopted to Boost Biodiversity**

By TANG Zhexiao

More than 100 countries have chosen to protect biodiversity by adopting Kunming Declaration on October 13, at the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity held in China's Kunming.

In order to "Building a Shared Future for All Life on Earth," the declaration stated that putting biodiversity on a path to recovery is a defining challenge of this decade.

The declaration made a reference to the "30x30" target, a call proposed by the United Nations for countries to protect and conserve 30 percent of their land and maritime territory by 2030.

One of the measures suggested by the declaration is to increase the provision of financial, technological and capacity building support to developing countries, as well as to create more sustainable and environmentally friendy supply chains

The pledge also committed to ensure the development, adoption and implementation of an effective post-2020 global biodiversity framework, towards the full realization of the 2050 Vision of "Living in Harmony with Nature."

Ecological civilization is a philosophy proposed by China. The declaration sends a powerful signal, showing the world to solve the problem of biodiversity loss.

There was a declaration made in Japan's Aichi in 2010, setting similar targets for the year 2020, none of which were met.

The signed Kunming Declaration will be submitted to the General Assembly of the United Nations, the 2022 High - Level Political Forum on Sustainable Development, and the United Nations Environment Assembly at the second part of the ongoing session in Kunming, China from April 25 to May 8 in 2022.

# Hopeful Responses to the Kunming Declaration

Edited by QI Liming

The Kunming Declaration was adopted at COP15 in Kunming on October 13. Chinese Minister of Ecology and Environment, Huang Runqiu, announced the adoption of the declaration at the High-Level Segment of the first part of COP15.

"The declaration will send a powerful signal, showing the world our determination to solve the problem of biodiversity loss, and our stronger actions on the issues discussed at this high-level meeting," Huang said.

Major international organizations, like United Nations (UN) and European Union (EU), World Wide Fund for Nature (WWF), the Campaign for Nature, and Greenpeace, have expressed their views from different perspectives.

Comments from the UN According to the UN official web-



Elizabeth Maruma Mrema (PHOTO: VCG)

site, the Kunming Declaration calls on the State's Parties to act urgently on biodiversity protection in decision-making and recognize the importance of conservation in protecting human health, adding greater impetus to the development of a new global biodiversity framework.

"The adoption of the Kunming Declaration is a clear indication of the worldwide support for the level of ambi-

tion that needs to be reflected in the post-2020 global biodiversity framework to be finalized next spring in Kunming," said Executive Secretary of the Convention on Biological Diversity Elizabeth Maruma Mrema.

EU Council Presidency welcomes Kunming Declaration



Joze Bavcon

(PHOTO: Screenshot from Internet)

Slovenia, current holder of the rotating Presidency of the Council of the EU welcomed the Kunming Declaration.

"We believe that the adoption of the Kunming Declaration is a step in the right direction," Jasmina Spahalic, a spokesperson for the Slovenian EU Presidency, told Xinhua.

Slovenian experts also welcomed the declaration, saying that this declaration is a "very good response to COVID-19, which showed that people need nature and all living things around them," Joze Bavcon, head of the Botanic Gardens of the Ljubljana University, told Xinhua.

WWF reaction to the Kunming Dec-

WWF welcomed the combination of measures contained in the Kunming Declaration, which includes both conservation actions and action to address unsustainable production and consumption. Both are essential to the success in securing a nature - positive world this decade.

Commenting on the declaration,



Lin Li (PHOTO: Twitter)

Lin Li, Director of Global Policy and Advocacy at WWF International, said, "The Kunming Declaration is a show of political will and adds much - needed momentum by clearly signaling the direction of travel to address biodiversity loss. While it is highly significant that it recognizes the aim of the framework should be to put nature on a path to recovery by 2030, its impacts will lie in how it is put into action. It is still critical for governments to turn these words into reality."

Feedback from the Campaign for



Brian O'Donnell (PHOTO: Twitter)

The Campaign for Nature is a partnership of the Wyss Campaign for Nature, National Geographic Society, and a growing coalition of more than 100 conservation organizations around the world.

Brian O'Donnell, the Director of the Campaign for Nature, said, "It is clear that transformative action and commitments are necessary and China is uniquely positioned to take the lead. China has made great progress on nature protection within its borders and the country has indicated it is on course to protect nearly 30 percent of its lands. As the lead and host of the biodiversity talks, China has an important role to play in rallying global support for 30x30 land and ocean, a key component of the draft biodiversity treaty."

Voice from non-governmental environmental organization



An Lambrechts (PHOTO: Twitter)

Greenpeace, a non-governmental environmental organization, put forward some reflections on the Kunming Declaration.

An Lambrechts, Senior Campaign Strategist, Greenpeace International, said on the Greenpeace website, "The Kunming Declaration offers a preview of what's to come in 2022 and makes modest attempts in some areas."

Lambrechts mentioned that while ambitious targets such as protecting at least 30 percent of terrestrial and marine areas by 2030 are important, implementation strategies and the real means to deliver those targets are critical.

# China's Experience of Building Ecological Civilization is Worth Sharing

"We need to improve global environmental governance, actively respond to climate change and create a community of life for man and nature. We need to accelerate transition to a green and low-carbon economy and achieve green recovery and development."

---- President Xi Jinping stressed the importance of staying committed to harmony between man and nature during the general debate of the 76th session of the United Nations (UN) General Assembly.

China has called on the world to make joint efforts in building a global ecological civilization.

A.China's experience is worth sharing

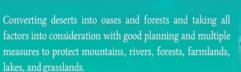
Speeding up the development of ecological civilization and building a beautiful

Making ecological progress and incorporating this idea into all aspects of life, as well as the whole process of advancing economic, political, cultural, and social progress.

### B.China's model is worth spreading

To win the battle of preventing and controlling pollution.

Continuing the campaign to prevent and control air pollution and make the skies blue again.





# China's environmental governance reflected in different parts.

Water Governance

Eight landmark achievements have been achieved, including the whole process control system and application for the water pollution in the key industries. Established three technological systems of water pollution treatment in river basins, the water environment management in river basins, and guaranteed the safety of drinking water.

Sail Damadiation

Demonstrative restoration projects have been put in place for the land plots with neavy metal pollution (chromium and arsenic).

C Ecological Conservation

Appropriate delimitation of the scope and functional zones of nature reserves have been put in place to accelerate their integration and optimization.

# LIFE IN CHINA

# David Ferguson: An Expert Decoding China's Stories

By FANG Linlin & LONG Yun

On September 30, 2021, David Ferguson, a senior translation editor from Foreign Languages Press of China International Publishing Group (CIPG), received the Chinese Government Friendship Award, the highest award given by China to honor outstanding foreign experts working in China.

In early September this year, Ferguson won the Special Book Award of China for his contribution to translating and publishing Chinese books and promoting Chinese culture.

Ferguson summed up his feelings as "an honor, a surprise, a pleasure" when presented with the Friendship Award. "I was so proud to be a part of two eminent groups of experts who have

made tremendous contributions to promoting communications and exchanges between China and the world," he told Science and Technology Daily recently.

Confronting rumors with an objective perspective

Ferguson has been covering most of major events, such as the Wenchuan Earthquake, the Beijing Olympic Games, and the Shanghai World Expo, since he worked for CIPG in 2008,

The reason that made him decide to take up the offer of a job as a journalist and editor with China.com.cn, the online news and information provider, was an incident of the violent riots in Lhasa, Xizang Autonomous Region, on March 14, 2008. "I could see in the documentary and video evidence of what was going on in Lhasa. However, the stories that

the Western media showed were just completely different and had nothing to do with the truth. So, I accepted the job offer. Because somebody should at least try to present a more honest version of what is happening in China," he said.

At that time Ferguson did not speak much Chinese, so he took his own approach to confronting the fabrications of the Western media.

"I wasn't in a position to read what the Chinese were saying. So, I started from the perspective of what the Western media were saying and analyzed that. This way it was much easier for me to demonstrate how false the Western

In addition, he has a natural-born sense of justice, and always respects his wife's home country, which makes him notice the sharp contrast between the real China and China portrayed in the

For example, when encountering fake news about 1.5 million Beijing residents being evicted from their homes to make way for the Olympics, he was angry about the Western media's attitude. "They did not check the source [of the information], and they simply copied their reports from each other," Ferguson said.

As an objective witness living in Beijing, he did a lot of research and checked the source of every story, then wrote what he found to be true.

"Unlike some Western media, there was no any limit for the readers to make comments on my articles. I was confident in what I was writing about," he

Being a good information communicator

Ferguson likes to argue with people on Twitter, often about China. But he finds it is not always easy to convince people about what is happening in China because negative messages about the country have been circulating for so many years in Western countries.

He has written and translated a se-

ries of articles and books, presenting an optimistic, pragmatic, and open China to the world.

Noting the increasing need for China to deliver the truth to the international community, Ferguson highlighted the role of soft power, such as films. He applauded the approach adopted by the film My People and My Country in telling stories about significant events. The anthology is made up of seven short stories based on seven critical moments since the founding of People's Republic of China

He is convinced that telling a story through ordinary people's eyes resonates much more with an audience. He advised writers, media and other language practitioners in China to take ordinary people as narrators and tell the story of an important event through their experiences. The reason why soft power is so valuable is that narrators have direct access to the audience in the international community, which cannot be filtered and twisted by the Western me-

Another reason soft power is so important said Ferguson, is that the storytelling process is not just mechanical

He emphasized the significance of being an objective- driven information communicator, while also voicing his thoughts in terms of news reporting in the sci-tech field. "When we try to tell sci-tech stories to the international community, the writers or the translators should avoid using formulaic statements, as these make the words and expressions they use sound as if they were algebra," he said.

As a Chinese - English language editor, Ferguson has worked and lived in China for a long time and has a deep understanding of China's development philosophy and goals, enabling him to better tell the country's stories to the international community. His views highlight what efforts should be made in information communication.

### Letter to the Editor

# Experiencing China's Rapid Development

By James Elroy Edginton

As a keen futurologist, and amateur science technology hobbyist since childhood, my last 12 years of living in China have witnessed its incredible, worldleading leaps forward in once-futuristic cutting-edge technologies in multiple areas, ranging from mobile phones and 3Dprinting, to renewable energy sources and infrastructure.

My Chinese wife and I had the honor of attending the 70th anniversary celebration of the founding of the People's Republic of China in 2019, at the Great Hall of the People in Beijing. At an award ceremony in Changsha, I attended a ceremony for Science & Technology Creative Communication, during which I was supposed to meet up with the intellectual giant Yuan Longping, but unfortunately he could not attend due to ill

Working at the Hunan University of Arts and Science as a foreign teacher, I have had many opportunities to converse with a wide range of academic colleagues from diverse disciplines, such as economics, philosophy and nuclear physics, which has been both exciting and challenging. Meanwhile, I was invited to travel to Guangdong with a group of foreign experts, visiting various installations including the world - leading China Spallation Netron Source facility. I have helped professionals such as specialist medical doctors, as well as those working on new types of nuclear power plants with translations on research, along with high-level public officials and a language expert from Tsinghua

It is of immense interest and with great enthusiasm that, as an amateur keen on technologies, rather than a specialist, I could help people as I bring my own type of expertise into play. This is something I find unique to China, since such opportunities just didn't exist for me in the UK. Part of the reason for this is the open and rapidly advancing nature of the Chinese system, which I fully embrace. Having worked in the UK in several sectors of the economy, including the Civil Service as well as the National Health Service, I have found that successful assessment, planning, implementation and evaluation/re-evaluation are key to the ongoing process of advancement, and so it mustn't be forgotten that China is a place where 100 year plans of such a nature are the norm.

In my time in China, I have kept track of the country's cutting-edge technologies, as well as monitored its successes in desert greening, food self-sustainability and renewable energy production and transmission, such as developing high-yield and salt-tolerant strains, and synthesizing starch from CO2 at the Tianjin Institute of Industrial Biotechnology. Such ground-breaking projects are just a few examples providing further proof that China has become a world player in the field of science and tech-

Other examples could include China's prowess regarding "clean meat" or lab- grown meat technology acquisition & adoption, infrastructure projects, such as record-breaking rail networks to Xizang, and the world's largest HEP Dam at 3- Gorges in Hubei, space research, such as crop-growing in space, China's own Space Station, the world's largest Radio Telescope, FAST in Guizhou, landing of a Mars Rover, Zhurong, the world's first 3D - printed homes & cars, CRISPR gene-editing technology, the world's deepest submersible, the Jiaolong, coupled with a permanent undersea research facility in the South China Sea, as well as restructuring coral reefs using artificial alternatives, and the list goes on.

There are certainly challenges ahead, such as combating China's plastic pollution problem, marine habitat loss, an aging population, spreading and deepening China's soft-power and the necessary future transition from the traditional "factory" to the localized on-demand 3D- print. However, given the heart-warming nature of China's political system, under the great leadership and guidance of President Xi Jinping and the CPC, as well as its successes (rice crops grown in salt-water in Heilongjiang, former deserts in Inner Mongolia, such as Mu Us Desert, have now disappeared and been transformed into green oases and so on), and willingness to share, these challenges are sure to be conquered with the same successful determination as those that went before.

I feel so emotionally proud of China, with all its successes, following all its struggles, on a daily basis. This year, China succeeded in eliminating absolute poverty throughout the country, and all across China people are responding favorably to the course on which China is set — the CPC is the most popular party in the world, and if there were such a contest, President Xi would surely be the most popular and successful leader on the planet!

(James Elroy Edginton is now a teacher at Hunan University of Arts and Science, who comes from Britain.)



James Elroy Edginton (PHOTO provided by the author)

### David Ferguson, a senior translation editor from Foreign Languages Press of CIPG. (COURTESY PHOTO)

# Chengdu, A Dynamic City: Korean Entrepreneur

By SHENG Li

Having lived in the city of Chengdu for nearly 20 years, Park Weon-seo, a 57year-old entrepreneur from the Republic of Korea (ROK), has been a witness to the cultural exchanges between China and South Korea, and seen endless possibilities for the development of Korean enterprises in Chengdu.

On September 28, a delegation of Appreciating the Charm of Chengdu visited the China-ROK Innovation and Entrepreneurship Park in Chengdu. As a qualified storyteller, Park shared a story on innovation and entrepreneurship with the delegation.

The China-ROK Innovation and Entrepreneurship Park emerged after the sixth China-Japan-ROK leaders' meeting held in 2015, leaders from China and the ROK proposed to build two cooperation platforms for youth innovation and entrepreneurship.

In 2017, based at the China -ROK Innovation and Entrepreneurship Park, the China -ROK Future Incubator was established at Jingrong Inno-Hub in Chengdu, which has been playing the role of a communication platform for Chinese and ROK science and technology innovation enterprises.

Park spoke highly of the role the China - ROK Innovation and Entrepreneurship Park played during these years. "We have service capabilities that closely match the needs of enterprises, universities and research institutes on both sides, and the park has natural advantages in promoting the exchange of entrepreneurship and innovation resources between the two countries," he added.

Since its establishment, the China-ROK Innovation and Entrepreneurship

During this period, the Chengdu Hi-Tech Industrial Development Zone and Korea Investment Partners, a leading venture capital and private equity, signed the Strategic Cooperation Agreements to set up a 870 million RMB China - ROK innovation and entrepreneurship Industry fund in Chengdu.

On September 27, the ROK Pavilion in Chengdu was opened, aiming to provide all-round and one-stop services for institutions, enterprises and experts.

"It will not only provide a one-stop service for small and medium enterprises to showcase Korean products, but also promote cultural exchanges." Park believes that the integration of resources and technologies from China and Korea will facilitate the development of enterprises in the two countries as well as deepening the Sino-Korea exchanges.

The ROK - China Culture Association (Chengdu), where Park works as the chairman, strives to promote bilateral communication in education, culture and economic fields.

Park began working in Beijing, Dalian and Qingdao as a foreign expert dispatched by the LG group since 1994 and he moved to Chengdu in 1996 for work. Chengdu has become his second hometown. "The rapid development of Chengdu does impress me a lot, " he said.

Major industrial parks and fashion landmarks make him truly feel the pulse of the rapid development of Chengdu. Aside from work, Park is passionate about promoting Chengdu to his Korean friends. Because of his promotion work, people have come to Chengdu for investment and business while others found Chengdu a charming travel destination.

### **Traditional Eastern Wisdom**

# Sanxingdui: New Discovery of Chinese Civilization

BY WEN Haoting

The Sanxingdui Ruins is one of the greatest archaeological discoveries of the 20th century in the world. It is lo-



The gold mask found at the Sanxingdui Ruins. (PHOTO: XINHUA)

cated near the Yazihe River at Guanghan City, Sichuan Province and as Sichuan is where the ancient state of Shu was located, it is believed that Sanxingdui was the capital of the ancient "Shu culture." This particular discovery will

The site was originally discovered in the 1920s by a farmer. A huge surprise came in 1986 when two sacrificial pits filled with more than 1,000 cultural relics, including gold masks, bronze sacred trees, bronze ware, jade ware and ivory, were discovered by local workers

On March 20, 2021, officials an-

nounced that they had discovered six new sacrificial pits at the Sanxingdui Ruins site and have found nearly 500 important cultural relics to date. The finding quickly gained attentions worldwide.

During about a year of hard work, nearly 2,000 cultural relics, including gold, bronze, jade and ivory, were unearthed in these six newly discovered sacrificial pits. In September, officials held another media briefing and announced the discovery of 1,771 cultural relics from the number three and number four pits, of which 557 relics were relatively intact and the rest are fragments. Among the items, the gold

mask is most impressive.

The gold mask was found in June. After restoration, it turned out to be the biggest complete gold mask found at the site, with fine texture and quality.

Three bronze figures, with their palms pressed together and their heads twisted to the right, were also a unique find among Sanxingdui items in terms of their shape and decorative pattern.

Experts emphasized that these new discoveries provided further material for studying the bronze casting technology of the Shu people as well as their art, religious beliefs, social system and cultural exchanges with surrounding areas.

# **Ecological Philosophy Gains Global Recognition**

From page 1

China will establish the Kunming Biodiversity Fund to support biodiversity protection in developing countries, taking the lead by investing 1.5 billion RMB (about 233 million USD). It will move faster to establish a protected- areas system with national parks as the mainstay. The country will also put in place a "1+N" policy framework for carbon peak and carbon neutrality.

Elizabeth Maruma Mrema, executive secretary of the Convention on Biological Diversity, said that China's restoration efforts over recent decades clearly represent a good model for future work,

which other countries can also emulate and learn from.

The Kunming Declaration was adopted at COP15 on October 13, sending a powerful signal that shows the world China's determination to solve the problem of biodiversity loss, and its stronger actions on the issues discussed at this high-level meeting, according to Chinese Minister of Ecology and Environment Huang Runqiu.

which is expected to be held next year, will review and make a decision on the "post- 2020 global biodiversity framework" on which the international society pins great hopes.

The second part of the meeting,

rewrite China's history.

excavating clay for bricks.