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China, Russia Jointly Issue Intl Lunar Research Station Roadmap

By Staff Reporters

The vast universe sparks the exploration dream of humankind. As the closest celestial body to the Earth, the Moon has always been the most important objective for those exploring the universe, and is the first step of the humans when venturing to deep space. With the deepening of exploration, the Moon has shown its great potential value in scientific research.

Many countries have released their own plans for lunar exploration. International cooperation in lunar exploration

tion is beneficial to humankind.

Considering the fruitful experience from the People's Republic of China and the Russian Federation in the areas of space technology, space science and space application, the China National Space Administration (CNSA) and the State Space Corporation (ROS-COSMOS) jointly initiated the International Lunar Research Station (ILRS) based on their existing lunar exploration plans.

During the Global Space Exploration Conference 2021, CNSA and ROS-COSMOS jointly hosted the Global Net-

work Forum on the roadmap for the creation of International Lunar Research Station (ILRS) on June 16.

The two sides jointly released two documents titled International Lunar Research Station Roadmap (V1.0) and International Lunar Research Station (ILRS) Guide for Partnership (V1.0). In these two documents, the definition, scientific areas, cooperation domain, and collaborative opportunities of ILRS were introduced, which will help the international partners to participate in the ILRS's project planning, development, operation and future scientific re-

search.

International partners are welcomed by China and Russia to participate in the project cooperation at all stages and levels.

China and Russia will release updated versions of a Roadmap and Guidelines for Partnership to further clarify the milestones of the ILRS project in each stage, and release the procedures for the participation of partners in due course to ensure the steady progress of the project.

Source: China National Space Administration

Table 5 Opportunities for Future Missions by China, Russia and Partners					
Mission	ILRS-1	ILRS-2	ILRS-3	ILRS-4	ILRS-5
Cat. A	Mission coordination and/or joint development	Mission coordination and/or joint development	Mission coordination and/or joint development	Mission coordination and/or joint development	Mission coordination and/or joint development
Cat. B	System cooperation and/or joint development	System cooperation and/or joint development	System cooperation and/or joint development	System cooperation and/or joint development	System cooperation and/or joint development
Cat. C	Joint development	Joint development	Joint development	Joint development	Joint development
Cat. D	Joint development	Joint development	Joint development	Joint development	Joint development
Cat. E	Data analysis & sharing	Data analysis & sharing	Data analysis & sharing	Data analysis & sharing	Data analysis & sharing

Opportunities for Future Missions by China, Russia and Partners. (PHOTO: China National Space Administration)

Guangxi: A Magnet for Global Sci-tech Experts

By FANG Linlin
HUANG Zhaoquan
LONG Yun

As a coastal and border province, Guangxi Zhuang Autonomous Region has the unique geographical advantage offered by a gulf. It has facilitated interactions between the east and the west and has become China's frontier and bridgehead to the ASEAN nations in terms of opening-up.

Guangxi has implemented the Science and Technology People-to-People Exchange Initiative - ASEAN Talented Young Scientist Program of Guangxi, as part of China's Belt and Road Initiative.

The carefully crafted new model of gathering and cultivating international young and innovative talents individuals is beginning to make a difference, especially during the fight against COVID-19, demonstrating its effectiveness in international cooperation and exchange.

As a landmark project of the Belt and Road Initiative, the Science and Technology People-To-People Exchange Initiative is designed to build an international talent pool.

In just one year, 40-year-old Malaysian Dr. Goh Hui Hwang, (PhD in Electrical Engineering), published four Science Citation Index papers. As a winner of the "Ten Outstanding Young Malaysians Award" and a member of the "ASEAN Talented Young Scientist Program of Guangxi" (ATYSP), he had a successful academic year at Guangxi University in 2020.

Hired as a professor at the School of Electrical Engineering of Guangxi University, he was active in facilitating the preliminary intention of cooperation among the School, the ASEAN Centre for Energy and the Indonesian Academy of Sciences.

Nguyen Trong Thang, an expert from the Vietnam National University of Agriculture, also benefits from the ATYSP policy. He focuses on "Research on Postharvest Senescence and the Deterioration Mechanism of Subtropical Fruits and Vegetables, and Development and Integration of Key Technologies for Biological Preservation of Subtropical Fruits and Vegetables" at Guangxi Academy of Agricultural Sciences, and has already made some achievements.

Since its implementation, ATYSP has been widely supported and attended by ASEAN countries, with the goal of mutual benefit in scientific research and innovation.

At the 8th Forum on China-ASEAN Technology Transfer and Collaborative Innovation last year, senior science and technology officials from six ASEAN countries affirmed the new model of "talent + project + technology" integration developed by the ATYSP, and looked forward to deeper future cooperation.

To engage more outstanding young foreign scientists in scientific and technological innovation through the ATYSP, the Science and Technology Department of Guangxi optimized and upgraded the Implementation Guide of



Guangxi Medcial University is one of the first eight medical colleges in China to admit students from outside the Chinese Mainland. (PHOTO: Guangxi Medcial University)

ATYSP on January 19, 2021. The wider range of preferential policies and flexibility are the highlights of the upgraded ATYSP.

Upon its release, the upgraded program attracted wide attention from young scientists from well-known universities and scientific research institutions in ASEAN countries such as Malaysia, Thailand and Singapore, who have applied for work in Guangxi.

With research projects open to foreign scientists, elite universities in Guangxi are becoming the hubs of cooperation and exchange among Belt and Road Initiative countries.

Vu Huy Hoang, once a doctoral student in stomatology, founded the "Nha Koa Smile Care" dental clinic in Hanoi, Vietnam.

Since its establishment in 2010, the clinic has provided good medical services for more than 8,000 patients and made outstanding contributions to the development of local medical and health services.

Mohammed Ahmed Saad AL-MAN-SOB, a Yemeni medical expert, is currently the director of the Department of Cardiology, Royal Hospital of Saudi Arabia. He published a monograph in Arabic to introduce China to the Arab world, and he is called an expert on China in the Arab world.

Both experts are alumni of Guangxi Medical University. This university is one of the first eight medical colleges in China to admit students from Hong Kong, Macao and Taiwan and overseas Chinese students.

Up to now, a total of 1,188 international students from more than 70 countries and regions have been trained there, of which 48 percent are from ASEAN countries and 20 countries along the Belt and Road Initiative.

Experts coming to China are gaining a sense of belonging, and scientists working overseas are also obtaining a

sense of participation in scientific research projects.

In August 2020, Guangxi started the pilot initiative of government-supported science and technology projects led by the scientists from outside the Chinese mainland, and encouraged such scientists to lead and participate in major science and technology projects, key R&D projects, science and technology bases and talent projects in Guangxi.

While keeping the existing management system of sci-tech programs and taking into account the special needs of scientists from outside the Chinese mainland, Guangxi has come up with a novel practice of Chinese partners taking over all the paperwork, allowing scientists to focus on the scientific research work without distraction.

It is worth mentioning that a comprehensive evaluation mechanism has been opened for major projects applied for by top international scientists, such as Nobel Prize winners and foreign academicians.

Active efforts have been made on international cooperation against the pandemic as part of efforts to build a "community of common health for humankind".

After the outbreak of COVID-19, the First Affiliated Hospital of Guangxi Medical University, as one of the ten designated hospitals of the State Council's joint disease prevention and control mechanism (medical treatment group) for international cooperation, shared its experience in pandemic prevention and control with foreign countries through multiple platforms.

The hospital produced timely pandemic prevention materials, including the English version handbook of the "COVID-19 Prevention and Control Experience" released to the world, and the multi-language versions of "Operations of Throat Swab Collection and In-

activation for Nucleic Acid Testing" and "The Tertiary Preventions for Medical Staff Working in the COVID-19 Isolation Ward" videos produced and released free of charge to ASEAN countries and other parts of the world.

The hospital organized many video conferences on international cooperation in pandemic prevention. Specifically, it attended seven remote video conferences on COVID-19 response with Cambodia, Vietnam and other countries; organized and gave lectures on more than 10 international video conferences on COVID-19 response, with almost 800,000 audience from over 20 countries watching the live broadcast in a single session.

To reduce the impact of COVID-19 pandemic on traditional ways of introducing talents, the Science and Technology Department of Guangxi Zhuang Autonomous Region urgently needs to explore a new Internet-based model.

For example, the automobile manufacturing industry, a key industry, has been selected to explore its demand for talent introduction through the professional Internet platform, providing accurate matching of experts and online real-time connection.

At present, the page views of this platform are close to 130,000, and more than 80 domestic and international experts in relevant fields have signed up, along with well-known foreign universities and research institutions such as Fraunhofer-Gesellschaft of Germany.

After via online video conferences, many top experts are finding Guangxi an attractive place for career development.

Source: Department of Science and Technology of Guangxi Zhuang Autonomous Region, Guangxi Medical University and Guangxi Daily

Column

Building a New ASEAN-Oriented Platform to Attract Science and Innovation Talents

By CAO Kunhua

It has long been thought that the strength of a country depends on its talents. In January 2021, Wang Zhigang, Minister of Science and Technology, emphasized in his speech at the National Science and Technology Work Conference, that Shanghai and other cities should be supported to set up International Talent Special Zones (ITSZ), the first pilot ITSZ project at the national level, so as to build a more accessible talent system at a global level.

In the post-pandemic era, there is an increasing need to embrace reform and innovation, learn advanced experience and successes of others, seize the new opportunity of pilot projects construction for the national rollout of ITSZs, take the initiative to participate in the global talent competition, and strive to forge a road to gather global talented individuals.

To carry out this initiative requires attention in four areas of operation.

Firstly, we should maximize our advantages and build an international talent special zone to connect with the Association of Southeast Asian Nations (ASEAN).

Guangxi is the most convenient gateway for this goal and empowered by the new mission of "Three Orientations" of the central government to be competitive and establish a talent introduction foundation to bring together high-level talents from ASEAN countries and beyond.

We will make use of Guangxi's favorable conditions, using China-ASEAN innovation cooperation and the establishment of the China-ASEAN Science City as an opportunity to build a talent gathering platform with high-end talents, rich innovation elements and international exchanges and cooperation for ASEAN and even Regional Comprehensive Economic Partnership (RCEP) countries, offering preferential policies and a special environment.

Secondly, we need to build an internationally competitive system to introduce talent. This should focus on the needs of scientific and technological innovation and industrial revitalization, to constantly improve the platform and channel construction of talent introduction projects.

We should support employers to attract outstanding young scientists from ASEAN countries and countries along the Belt and Road Initiative, as well as other high-level international experts in a targeted way, and jointly train leading talents in science and technology. We should also establish foreign talent platforms such as an *International Talent Pool of Guangxi* and *Guangxi Welcomes All Talents*, accurately match project management and international talent resources by means of big data, create an online window for attracting overseas talents in Guangxi, and build a convenient and efficient bridge for the employment and development of foreign talents in Guangxi.

Thirdly, the environment of international talent, entrepreneurship and innovation need to be optimized.

We aim to create an open and inclusive environment for innovative and entrepreneurial talents by multiple measures and cooperation. For example, we should deepen the implementation of the work permit system for foreigners in China and the visa system for foreign talents; make full use of the combination model of "government + translation + technology" to jointly build a Guangxi foreign expert bookstore to enhance foreign talents' understanding of Guangxi and China; and further promote the construction of a foreigner-friendly hospital in Guangxi for foreign experts working in the region.

Finally, we should create a new pattern of talent development.

We should firmly grasp the major opportunities brought by deepening the construction of the Belt and Road, promoting the development of the China's western region in the new era to form a new pattern, accelerating the development of the Guangdong-Hong Kong-Macao Greater Bay Area.

In addition, the construction of new land and sea passages in the western region are to be supported, so as to actively integrate into the "dual circulation" based on major national-level open platforms in Guangxi, and provide strong support for building one or more regional innovation centers that coordinate national resources and cooperate with ASEAN in each industry.

As the frontier between China and ASEAN, Guangxi has accelerated its opening-up, thus attracting more foreign scholars to initiate their innovation and entrepreneurship, who have played an active role in various businesses and become an indispensable part of Guangxi's scientific and technological innovation. Since 2020, scientists from outside the Chinese mainland are encouraged to participate in the process assisted by domestic and foreign independent legal entities registered in the region. They are able to undertake R&D tasks through fair competition in major scientific and technological projects in Guangxi, special projects in Guangxi's key research and development plans, and in Guangxi science and technology bases and special projects.

Those experts from outside the Chinese mainland are motivated to lead or participate in Guangxi's research programs involving science and technology and to participate in scientific and technological innovation. Currently, the high-quality development of Guangxi's economy and society requires the support of scientific and technological innovation. Guangxi therefore needs and calls for talented experts from across the world, now more than ever.

CAO Kunhua is Secretary of the Leading Party Group and Director of Department of Science and Technology of Guangxi Zhuang Autonomous Region.