

Young International Scientists Say Seeking Knowledge and Opportunities in China



By LI Linxu

Seek knowledge even if you have to go as far as China, as an Arabic old saying goes.

For Osama Abdalla Abdelshafy Mohamed, an Egyptian young scientist, his journey in China has not only been about knowledge-seeking but also life-rewarding, reflecting the flourishing talent exchanges between China and Egypt.

Many memorable moments

Over the years, Osama has gone through many memorable moments in China, such as publishing his first Science Citation Index article, receiving his PhD and landing a research job. The newest one was receiving the Chinese Government Friendship Award last year.

"It is an extraordinary honor and a deeply humbling experience," Osama remarked.

"The award symbolizes the warmth, support, and trust I have received from the Chinese, especially in Xinjiang, where I have had the privilege of collaborating with dedicated scientists and embracing a rich, inclusive culture," he added.

He has been working at the Xinjiang Institute of Ecology and Geography (XIEG), the Chinese Academy of Sciences, for almost 10 years, and calls Xinjiang his second home.

Last year, he received his Chinese "green card", China's permanent residence permit, and calls it as a "milestone" in his life, representing his deeper connection to China.

Osama's research focuses on plant-associated microbial communities in arid

land, particularly medicinal plants from arid lands in Xinjiang and Egypt. Together with his teammates, he has developed eco-friendly solutions to support sustainable agriculture and environmental conservation.

"Living and working in Xinjiang has been deeply rewarding," he said, recounting a memorable experience during a research trip to a remote area. "After a long day of fieldwork, a local Uyghur family invited us to dinner. Despite the language barrier, we communicated through gestures and laughter, shared stories, and enjoyed a delicious homemade feast. That moment, where work and life intersected so naturally, left an indelible mark on me."

Two life-changing decisions

"Coming to China to do my PhD study was one of the best decisions I've made," said Osama.

Despite the geographical distance between China and Egypt and the differences in language and culture, he was drawn to China when considering studying abroad. After realizing that about 70 percent of the references in his master's thesis were from Chinese scientists, he was resolved to go to China.

So he applied for a scholarship to the China Scholarship Council and was eventually admitted by the Northwest A&F University in Shaanxi province in 2008.

"China has given me the opportunity to grow both academically and personally. I'm grateful every day for following my heart and seeking knowledge even as far as China," said Osama. He called his PhD study at the university "transformative" in the sense that it shaped both his academic career and his outlook on life.

After graduation, he briefly worked



Osama Abdalla Abdelshafy Mohamed. (COURTESY PHOTO)

in Egypt and Italy, but always felt drawn back to China.

When he learned that there was a chance to work at the XIEG, he immediately applied through a support program initiated by the Ministry of Science and Technology and successfully seized the opportunity.

"I flew directly from Rome to Xinjiang, with only a brief stop in Cairo to change flights and meet my family at the airport," Osama said, calling the journey the beginning of a new chapter in his life.

He applauds a series of programs launched by China to support young scientists from other developing countries to do research in China.

"Such programs empower researchers like myself to access cutting-edge facilities, engage with accomplished mentors, and collaborate on transformative research," he said. "They foster innovation, cultivate scientific expertise, and strengthen international ties between China and participating nations, creating a ripple effect of positive impact on global science and technology."

A bigger dream

Talking about his future plans, Osama is excited about continuing his R&D on sustainable agriculture and environmental conservation solutions, and eager to mentor young scientists, particularly those from developing countries, at the XIEG.

His perseverance in scientific research, passion for life and love of Chinese culture has made a deep impression on his colleagues.

"Osama has encountered many challenges in his work and life in Xinjiang," said Zhang Yuanming, director of the XIEG. "Faced with challenges, he always forged ahead with optimism and hard work."

Through Osama, the XIEG has established a long-term and stable cooperation relationship with Egypt's Arish University, according to Zhang, who commended Osama's "bridging" role in advancing sci-tech cooperation between the two institutions.

"Without Osama, our research on Sinai desert farming systems would have been impossible," Li Wenjun, research fellow at the XIEG and Osama's team leader, said. "He went back to Egypt alone to collect all the samples we need."

"We understand and support each other," Li said, speaking highly of Osama's role in his team.

Now, Osama has an even bigger dream — to establish a China-Africa Joint Center for Agricultural Research in Cairo.

He wants the center to be a hub for scientific innovation, providing advanced research facilities and offering training courses and workshops led by Chinese scientists.

More cooperation opportunities

"Every time I go back to Egypt, I talk about my work and life in China through lectures, workshops and other events," Osama said. "In addition to its natural beauty and cultural richness, China also provides immense opportunities for scientific research and international cooperation."

This year marks the 10th anniversary of the establishment of the China-

Egypt comprehensive strategic partnership, and the two countries have pledged to work together to confront international challenges, such as food security, climate change and desertification.

"Xinjiang, located at the center of the Eurasian continent, is a natural place to study temperate desert ecosystems," Zhang said, who has witnessed an increasing number of young researchers like Osama coming to the XIEG.

In the last five years, the XIEG has signed more than 60 agreements and memorandums with 56 universities, research institutions and international organizations from 23 countries and regions, and has established a number of platforms for joint research and international cooperation, such as the Biodiversity Conservation Alliance for Arid Lands, according to Zhang.

"In our team, we have almost the same number of Chinese and foreign members," Li said. "This illustrates the strong atmosphere for international cooperation at the XIEG."

"In the future, more international young students and researchers will be recruited," said Li. He plans to establish joint labs with countries such as Egypt in the field of microbial resources and utilization in special habitats to support sustainable agriculture. This will provide more opportunities for young talents from developing countries.

"China has provided me with incredible opportunities to develop my scientific skills, especially through my work in Xinjiang," Osama said. "If I were to describe China in a few words, I'd say it is a land of beauty, peace, and opportunity."

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Sci-tech Popularization Law to Be Revised

Policy

By YU Haoyuan

China has picked up pace in toughening up its sci-tech popularization capabilities. On November 4, the 12th meeting of the 14th National People's Congress Standing Committee was convened in Beijing, during which the draft revision of *The Law of the People's Republic of China on the Popularization of Science and Technology* was submitted for deliberation. The current version of this law was promulgated and implemented in 2002, making this the first revision in 22 years.

The significance of upgrading the law

Since its issuance, the current law has played a significant role in pro-

moting science and technology popularization, enhancing citizens' scientific and cultural literacy, and driving innovative development. The proportion of citizens with scientific literacy in China has increased from 1.98 percent in 2003 to 14.14 percent in 2023, and the country's ranking in the Global Innovation Index has risen from 34th in 2012 to 11th in 2024.

Sci-tech popularization is a fundamental task needed to achieve innovative development. Chinese Minister of Science and Technology, Yin Hejun, said the law's draft revision has added two new chapters, "Science Popularization Activities" and "Science Popularization Personnel," totaling 8 chapters and 60 articles.

"China has entered a new stage of development. Although the sci-tech popularization sector has flourished, it is necessary to revise the existing law

as several issues remain," said Yin.

He highlighted some key issues that needed to be addressed, including insufficient recognition of the importance of and the lack of initiative in sci-tech popularization, inadequate supply of high-quality sci-tech popularization products and services, lagging behind in the building of sci-tech popularization teams, and relatively weak relevant infrastructure.

Elevating the importance of sci-tech popularization

The draft focuses on addressing the prominent issues in developing sci-tech popularization to adapt to new situations and requirements. It incorporates the latest reforms and advancements in the field, elevates practical policies and proven practices to legal standards, and optimizes innovation systems and mechanisms.

New articles have also been added to the draft. For example, Article 5 of the draft adds a provision stating that the country places sci-tech popularization on an equal footing with scientific and technological innovation. Article 6 stipulates that science popularization work should promote the scientific spirit and the spirit of scientists, adhere to ethical norms in science and technology, and oppose and resist pseudoscience.

In addition, the draft details the responsibilities of schools, research institutions, enterprises and social organizations, encouraging them to spread sci-tech knowledge to a wider audience.

Enhancing sci-tech popularization activities

As for the promoting of science popularization activities, the draft makes relevant provisions, including:

- Supporting the creation of science popularization content and developing the sci-tech popularization industry.

- Promoting the marketization of public sci-tech popularization services and encouraging the establishment of science popularization enterprises.

- Facilitating the integration of sci-tech popularization with industries such as culture and tourism.

- Strengthening sci-tech popularization in key areas, clarifying that the country promotes the dissemination and application of new technologies and knowledge.

- Enhancing the review and monitoring of sci-tech popularization information, taking timely measures against pseudoscientific and anti-scientific information.

- Strengthening the evaluation of sci-tech popularization work, clarifying that the country improves the evaluation system for sci-tech popularization work and the monitoring and evaluation system for the public's scientific literacy.

Guarantee for sci-tech popularization

Talent is the key to effective sci-tech popularization, and the draft stipulates several regulations to encourage this, including:

- Strengthening the training and exchange of sci-tech popularization staff.

- Supporting qualified universities and vocational schools in setting up and improving disciplines and majors related to sci-tech popularization.

Finally, the draft emphasizes that governments and social departments should strengthen guarantee measures:

- The country should construct an improved, open, and shared national sci-tech popularization resource database and public service platform.

- Research institutions, enterprises, and schools, as well as administrative departments related to science and technology, should establish evaluation standards and institutional mechanisms to promote sci-tech popularization.

- Social forces should be encouraged to set up sci-tech popularization awards.

Green Energy Use Gets Boost

By WANG Jing

Promoting green transition of production and life via the use of renewable energy is the focus of a new plan by the National Development and Reform Commission, China's top economic planner, along with five other departments.

The plan's guidelines put forward several major tasks, including enhancing the renewable energy supply capability and accelerating the application of renewable energy in key areas such as industry, transportation, agriculture and rural areas.

To enhance renewable energy supply, it is necessary to accelerate the construction of large-scale wind and photovoltaic power bases in desert and Gobi areas, promote clustered development of offshore wind power, and develop green fuels and produce hydrogen from renewable energy sources.

Meanwhile, the guidelines say speeding up the construction of supporting infrastructure for renewable energy is also on the agenda. This includes promoting the iteration of advanced technologies such as flexible direct current transmission and hybrid alternating current and direct current distribution grids, and advancing the con-

struction of digital and intelligent grids.

In industrial areas, the guidelines propose to promote green and low-carbon transformation of industrial energy consumption, guide industrial development towards areas with abundant renewable energy resources, and facilitate the construction and application of industrial green microgrids.

It calls for strengthening the construction of charging infrastructure and hydrogen refueling stations to improve the urban and rural charging network system, while more 5G base stations and data centers are expected to be powered with photovoltaic and energy storage.

In addition, the guidelines encourage green energy cooperation with the Belt and Road Initiative (BRI) partner countries, and the establishment of a statistical and analysis platform for international cooperation on clean energy, to promote international cooperation in the R&D of advanced technologies and equipment for renewable energy applications in key areas.

Exchanges with international institutions on green certificates and electricity and joint research and training under the BRI sci-tech innovation action plan will also be supported.



Rows of photovoltaic panels at the Pingjing village, Anqing city, Anhui province on November 16, 2024. (PHOTO: VCG)



Some parents bring their children to observe a spherical robot at the "Universal Gravitation n" exhibition during the 2024 World Young Scientists Summit in Wenzhou, Zhejiang, on November 16, 2024. (PHOTO: VCG)