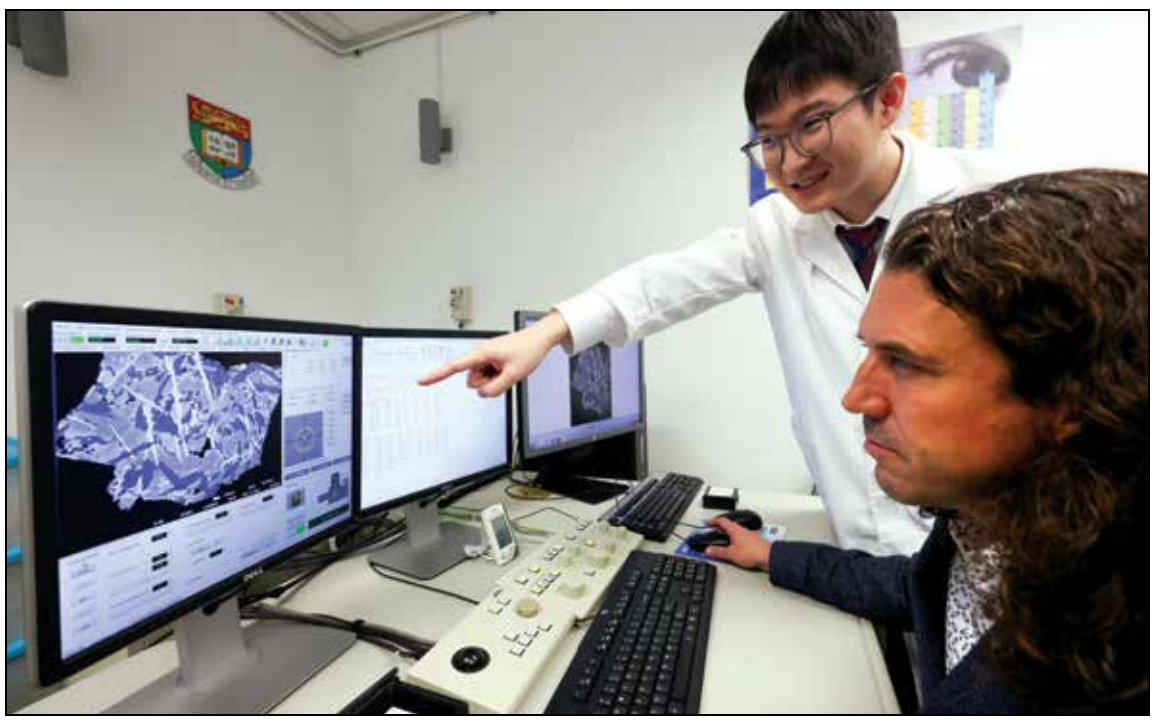
HONG KONG

HK scientists to analyze lunar soil samples

By **OASIS HU** in Hong Kong
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Assistant Professor Joseph Michalski (front) and Postdoctoral Fellow Qian Yuqi of HKU's Department of Earth Sciences study images of the lunar samples as captured at HKU laboratory. CALVIN NG / CHINA DAILY

Geologists at the University of Hong Kong have become the city's first to participate in the analysis of lunar soil through their research conducted on lunar soil samples received from a national center.

The samples were collected by the Chinese lunar probe Chang'e 5 in 2020 and made available to the HKU geologists by the Lunar Exploration and Space Program Center under the China National Space Administration in Beijing.

During a media briefing on Monday, Qian Yuqi, a postdoctoral fellow from the Department of Earth Sciences at the Faculty of Science at HKU, and his supervisor, Assistant Professor Joseph Michalski, said they plan to use the samples to expand scientific knowledge of lunar basalts and to investigate the longstanding mystery surrounding the more recent volcanic activity on the moon.

The geologists believe that researching these lunar samples will accelerate lunar and planetary science development in Hong Kong, enhance deep space innovation, deepen ties between Hong Kong and the Chinese mainland in deep space exploration, and boost more collaborations.

Qian, who led the successful application for the samples, said, "This is a dream come true for us and for Hong Kong's space science community." He added that he was excited and honored to have obtained the samples and was eager to analyze them.

When Qian learned that applications to access the sixth batch of lunar research samples collected by Chang'e 5 had opened earlier this year, he swiftly formed a team to apply for the samples, which included some renowned geologists, geochemists, and astrobiologists at HKU. This became HKU's first lunar research team.

The team's application was approved by the China National Space Administration. At the end of July, Qian traveled to Beijing and brought the samples, weighing 822.6 milligrams, to Hong Kong.

The lunar samples have great potential to reveal the moon's volcanic history and provide valuable insights into the moon's geological history as well as its connection to the formation and evolution of planetary bodies in the solar system, Qian said.

The samples can also provide insights into early conditions on Earth and the planet's subsequent evolution, since the early environments on the moon and on Earth were similar, he added.

In addition, Qian believes this research will lay the foundations for studying samples from future lunar missions over the next decade. Chang'e 6, 7 and 8 are scheduled to be launched around 2024, 2026 and 2028 respectively, and are expected to collect more lunar samples.

Qian vowed that the team will conduct its study promptly and will handle these valuable samples with utmost care, to ensure that they can be properly preserved, recycled and utilized for future research.

The lunar samples will be stored at HKU for one year before they are returned to Beijing.

Previously, Qian garnered attention in the field of planetary geology for his exceptional research into Chang'e 5's landing site.

Before the mission, Qian hypothesized that the eastern part of the selected landing region contains one of the youngest mare basalts caused by volcanic eruptions on the moon, a discovery that was later confirmed by the collected sample and helped reshape human understanding of lunar history.

Chang'e 5 was China's first attempt to collect lunar soil samples. In December 2020, the probe brought a lunar soil sample weighing 1,731 grams to Earth, marking the first such mission in over 40 years, since the Soviet Union's lunar program in 1976.

Region sees improved air quality

By **PHILIP TUBEZA** in Hong Kong
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Air quality in the Pearl River Delta region has continued to improve, with the average annual concentration of suspended particulates dropping by 52 percent since 2006, according to an annual government report released on Monday.

The report, jointly released by Guangdong province and the Hong Kong and Macao special administrative regions, showed that levels of two air pollutants — sulfur dioxide and nitrogen dioxide — also decreased in 2022 by 86 percent and 45 percent respectively compared with 2006, a year after the regional air quality monitoring network began operations.

Compared with 2015, the average annual concentration levels of carbon monoxide and fine suspended particulates dropped last year by 16 percent and 38 percent respectively, according to the report released under the Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Quality Monitoring Network.

Meanwhile, the 2022 average annual ozone concentration level increased by 39 percent when compared with that in 2006, indicating that further alleviation of this pollution is required, the report added.

To further improve regional air quality, the HKSAR government and the Guangdong provincial government have long been committed to reducing emissions of air pollutants from major emission sources.

The two governments completed a study on post-2020 regional air pollutant emission reduction targets and concentration levels, setting the direction for collaboration in addressing ozone issues, according to an HKSAR government statement.

There is also an ongoing study that aims to understand the origins of ozone precursors and ozone formation mechanisms in the Greater Bay Area to provide a scientific basis for formulating ozone control strategies.

The governments of Guangdong, Hong Kong and Macao are exploring the incorporation of routine monitoring of volatile organic compounds (VOCs) into the regional air quality monitoring network, according to the statement.

The HKSAR government is also preparing to set up a supersite for a GBA air quality laboratory and meteorology monitoring in Hong Kong to provide regional air pollution and meteorological monitoring and forecasting services, it added.

The HKSAR government has implemented various air pollutant emission control measures on marine and land transport, power plants and non-road mobile machinery to enhance air quality, the statement said.

It also announced a line of action plans, setting out a variety of measures to achieve zero vehicular emissions and carbon neutrality in Hong Kong before 2050.

The HKSAR government is also preparing to amend its laws to tighten the VOC content limits of 22 types of regulated architectural paints and to extend the VOC control to cleaning products.

Ceramicist breathes life into floral sculptures

With over 10 manufacturing processes and firing at a temperature of 1,300 degrees Celsius, after 12 hours of heating and 12 hours of cooling, a vivid clay peony flower "blooms" under the skillful hands of Leo Wong, a Hong Kong ceramicist.

In July, Wong showcased his creations at a Hong Kong cultural event, the French May Arts Festival. His exhibition, titled *Chinoiserie: Enduring Allure of the Far East*, was hugely popular.

"As a lover of flowers, I am on a quest to employ modern techniques in recreating the everlasting beauty of flowers with clay," said Wong.

Wong's penchant for ceramic art traces back to his childhood. He more or less grew up in his grandparents' garden, which sprawled over nearly 3,000 square feet in Hong Kong's New Territories.

"I fondly remember searching for duck eggs with my grandma along the trails and harvesting vegetables every week," he recalled. Playing in the mud and sculpting various shapes with clay became his favorite pastime.

After completing his university education, fueled by his deep fascination with the intricacies of nature, Wong pursued a career as a landscape designer.

During an overseas exchange program, he was bewitched by a ceramic flower adorning a vase in a European castle. This encounter rekindled his joyful memories of sculpting figures with clay as a child.

Contemplating the exquisite craftsmanship of traditional ceramic flowers, Wong pondered how modern technology could be leveraged to make the ceramic flower petals thinner and non-reflective, allowing them to appear not only beautiful but also lifelike.

After returning to Hong Kong, Wong sought an apprenticeship and immersed himself in the study of Lingnan ceramic culture. He researched ancient and contemporary ceramic literature extensively while experimenting with various techniques and formulas.

Through his exploration, he discovered that the traditional method of glazing ceramics resulted in thick and reflective petals. To overcome this challenge, he incorporated ceramic glaze directly into the clay for flower-making. This innovative approach rendered the ceramic petals thinner and translucent, infusing each petal with a lifelike essence.

Using porcelain clay enriched with kaolin, fired at up to 1,300 degrees Celsius, comparable to volcanic magma temperatures, Wong achieved a crystalline and translucent texture in his ceramic flowers.

Out of thousands of flowers, the peony holds a special place in Wong's heart. However, due to Hong Kong's hot and humid climate, peonies, which thrive in cooler temperatures, struggle to grow in the region. Consequently, many Hong Kong residents have limited opportunities to appreciate the majestic beauty of peonies.

To better capture the beauty of the peony, Wong often seeks inspiration from the poetry of Tang and Song dynasties. "The peony has been popular since the Tang Dynasty (618-907), and numerous poets have woven their words into enchanting verse to extol the flower," Wong said.

Leo Wong examines a piece of his ceramic flower sculptures. PHOTO / FACEBOOK ACCOUNT OF LEO WONG

When coloring and shaping the form of ceramic peonies, Wong finds that ancient poetry's imagery constantly serves as a wellspring of inspiration.

His devotion to his craft has not gone unnoticed. His works have been displayed in Belgium, the Netherlands, the Czech Republic, Croatia, Singapore and Japan, finding their way into the collections of renowned art connoisseurs.

"Whenever I showcase my works at international exhibitions, many viewers find it difficult to distinguish between real flowers and my ceramic creations, lavishly praising the artistry of Chinese ceramic aesthetics," said Wong.

As a ceramicist, his aspirations go beyond exhibitions. "I also dream of making ceramic peonies accessible to ordinary households, allowing people from all walks of life to appreciate their beauty," he said.

To fulfill this vision, Wong conducts workshops, sharing his techniques and knowledge with enthusiastic fans eager to explore the art of ceramic flower-making.

These workshops have consistently attracted a full house; over 3,000 participants, including many foreigners, have already benefited from his guidance.

"Don't worry about whether your creation looks like a peony or not, because there are countless species of peonies. No matter how it turns out, it will resemble one of them." During his workshops, Wong always encourages participants to unleash their creativity with a humorous tone.

His passion for ceramics extends far beyond the workshop walls. "Through my artistry, I endeavor to bridge cultures and foster a deeper appreciation for the beauty that lies in diversity," Wong said.

XINHUA

Medical center to boost GBA integration

New initiatives to improve healthcare services to residents, cultivate talents

By **ATLAS SHAO** in Hong Kong
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Medical experts on Monday revealed that an innovative medical exchange center will be set up in Dongguan next month to promote medical integration into the Guangdong-Hong Kong-Macao Greater Bay Area, and they proposed a series of new initiatives to boost the integration.

The center's functions will include setting up a drug information exchange center to provide the latest information about drugs, especially Hong Kong drugs; facilitating Hong Kong drugs' use in mainland hospitals, and promoting Chinese drugs in overseas markets under the Belt and Road Initiative.

The center will also assist Hong Kong medical specialists applying for mainland-practice qualification certificates, and in purchasing practice liability insurance in the mainland cities of the GBA, said Eric Siu Ying-kit, founding president of the Greater Bay Area Medical Professional Development Association, at a local medical forum on Monday.

The association will operate the center. In addition to the Dongguan site, more such centers will be established in Shenzhen and other regions.

Ko Wing-man, honorary president of the association, said that there currently are hundreds of thousands of Hong Kong people living in mainland GBA cities, creating a desperate need for Hong Kong-style medical services.

He encouraged more Hong Kong medical practitioners to join in exchange activities in mainland GBA cities and offer training to local counterparts. He said he also hopes more top mainland hospitals can offer Hong Kong-style medical services to address the demands of Hong Kong people.

He told reporters after the event that he learned that over 30 Hong Kong doctors have expressed an interest in practicing on the Chinese mainland. Half of them are general practitioners, while the others specialized in fields like cardiology, respiratory medicine, and oncology.

Hong Kong lawmaker David Lam Tzit-yuen, who represents the medical sector, also proposed multiple measures at the event to benefit Hong Kong residents living on the mainland.

He said he hopes Hong Kong residents' elderly health care vouchers can be used in more places on the mainland, and the Hospital Authority will procure more medical services on the mainland, including specialist follow-up consultations and rehabilitation after discharge, to offer more convenience to Hong Kong residents.

He also envisioned establishing a cross-border tele-medical platform to allow both private and public Hong Kong doctors to provide pharmaceutical and medical services through approved online platforms to residents living on the mainland.

Raymond Yip Chak-yan, chief liaison officer of the Guangzhou Nansha Service Center in Hong Kong, shared the latest medical developments taking place in the Nansha district of Guangzhou.

Yip said Nansha is aiming to become a world-class medical innovation hub. The district is attracting more and more medical companies, and has cultivated an increasing number of professionals to provide Hong Kong-style medical services.

On Sept 16, Ko will lead medical sector representatives in a visit to Dongguan, the Panyu district of Guangzhou, and other places to communicate with local government officials and medical institutions on the collaboration of medical services.

Appeal: Judiciary must not focus on technical aspects

From page 1

Moreover, the court considered there can be little doubt that the song was used effectively by people who intended to incite secession and sedition, and was designed to arouse anti-establishment sentiment and belief in separating the Hong Kong Special Administrative Region from the nation, said the spokesperson.

The court also considered there are reasonable grounds to believe that it was the online videos erroneously playing the song as Hong Kong's "national anthem" that led to the blunders at various international sports events.

The DOJ spokesperson continued that the court hopes that its decision may serve to remedy the misconception that conducting the relevant acts does not constitute a crime.

"The secretary for justice considered it necessary to appeal to put forward views and request the Court of Appeal to consider granting the interim injunction," the spokesperson said.

The DOJ applied for a court injunction in early June to prohibit four illegal acts related to the song, such as disseminating it with intent to incite others to commit secession, or intent to insult the national anthem.

On July 28, the CFI refused to grant an injunction on this issue. In his judgment, High Court Judge Anthony Chan Kin-keung said that the court was not satisfied that the injunction would be of real utility under the city's robust criminal regime.

Eunice Yung Hoi-yan, a Hong Kong barrister and lawmaker, said the court's decision solely focused on technical aspects of law enforcement, neglecting the significance of the National Security Law for Hong Kong.

Yung pointed out that the ruling indicated that some residents in Hong Kong lacked sufficient understanding regarding the importance of protecting national security, failing to fully and accurately implement the National Security Law and the Basic Law.

She urged the Hong Kong SAR government to conduct a thorough review of the National Security Law's implementation and consider the necessity for judicial reform.

Additionally, Yung proposed that Chief Executive John Lee Ka-chiu issue an executive order imposing a complete ban on the dissemination of the song. This action would enable the government to better fulfill its constitutional responsibility of safeguarding national security, Yung added.

Lawmaker Erik Yim Kong said he supports the DOJ's appeal, emphasizing that safeguarding national sovereignty, security, and development interests remains the utmost priority in upholding the principle of "one country, two systems".

It is the Judiciary's responsibility to effectively prevent, halt, and mete out appropriate punishment for acts and activities that pose a threat to national security, Yim added.

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