



中国科学技术协会
China Association for Science and Technology

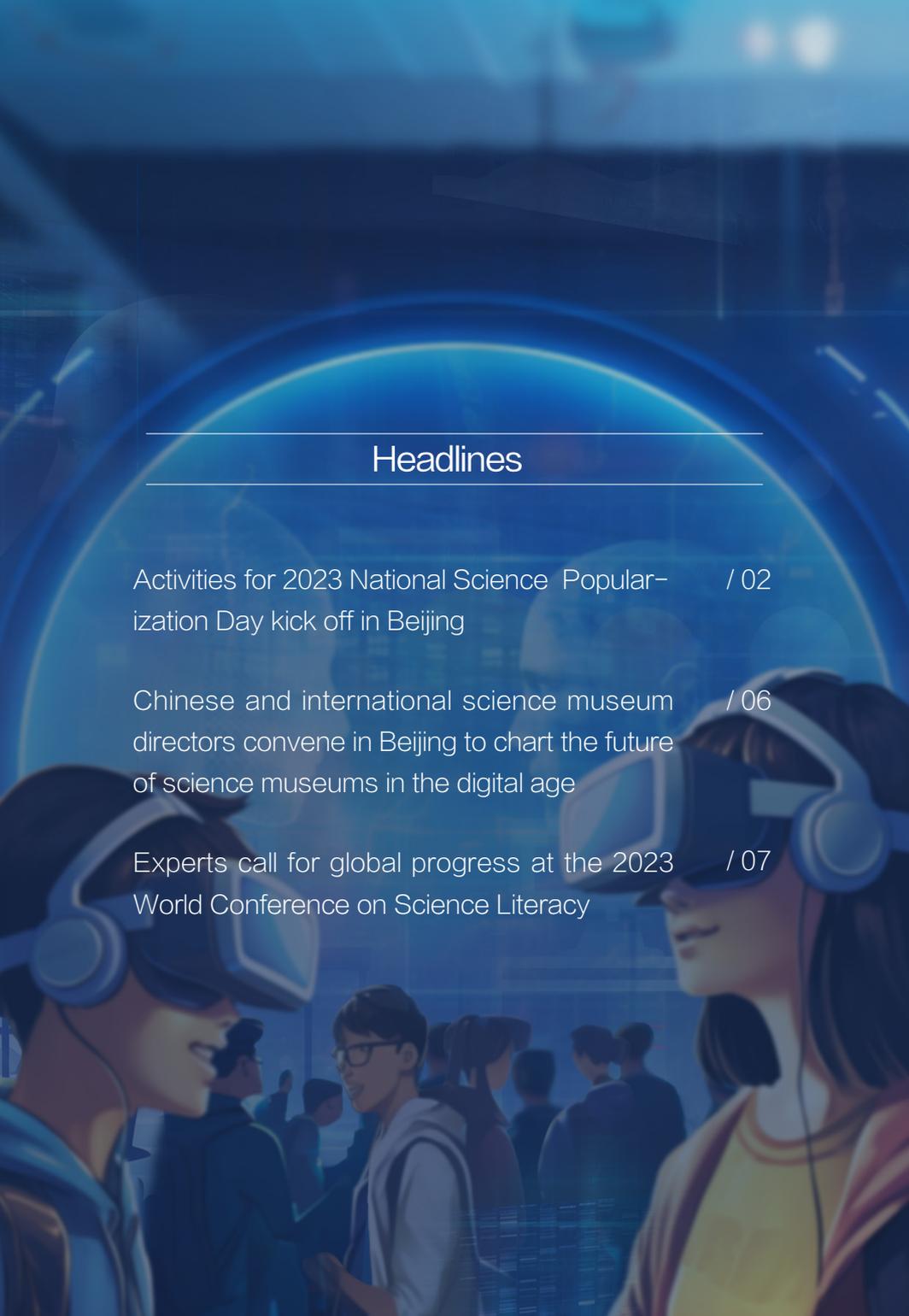
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CAST Newsletter

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Special Issue

2023 World Conference on Science
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A Look into China's National Science Popularization Day



全国科普日

Logo of National Science Popularization Day
Photo credit: Official website of China Science Communication

On June 29, 2002, China adopted the *Law of the People's Republic of China on Popularization of Science and Technology*. To mark this significant advancement in science popularization, the China Association for Science and Technology (CAST) launched nationwide activities in June 2003 to coincide with the first anniversary of the law's passage. In 2004, this initiative was formally designated "National Science Popularization Day."

Since 2005, the day has become an annual event observed during the third week of September.

History of China's National Science Popularization Day

◎ In 2002, China passed the *Law of the People's Republic of China on Popularization of Science and Technology* on June 29.

◎ To enhance the impact of the law, CAST organized various science outreach events nationwide in 2003.

◎ In 2004, the initiative officially became known as "National Science Popularization Day."

◎ In 2005, observation of National Science Popularization Day was moved from June to the third public holiday in September to engage a broader audience, especially students.

◎ From September 14 to 20, 2019, National

Science Popularization Day was celebrated nationwide under the theme "Salute the PRC, Lead a Smart New Life."

◎ In 2020, celebrations for National Science Popularization Day took place from September 19 to 25 throughout the country, focusing on the theme "Securing a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Promoting Public Good with Science and Technology."

◎ In 2021, activities marking the National Science Popularization Day were held from September 11 to 17 and focused on "Building Self-reliance and Strength in Science and Technology for the Next 100 Years."

◎ In 2022, observed from September 15 to 21, National Science Popularization Day highlighted the theme "the 20th National Congress of the Communist Party

of China and Science Popularization toward the Future,” with main activities occurring in Beijing.

Activities for 2023 National Science Popularization Day kick off in Beijing



Two elementary school students admire an intelligent EMU train model designed for the Beijing 2022 Olympic Winter Games
Photo credit: *Science and Technology Daily*

From September 16 to 24, 2023, activities for the 2023 National Science Popularization Day were held at Shougang Park in Beijing. Jointly hosted by CAST and 21 other collaborating departments, the event featured 360 exhibits and activities presented by 104 organizations from all over China.

Centered on the theme “Enhancing the Science Literacy of the Whole Nation and Promoting Self-reliance and Self-strengthening in Science and Technology,” the exhibition was segmented into five sections: “Charting a Glorious Course,” “Confidence, Self-Reliance, and the Dream of a Strong Nation,” “Science and Technology Benefiting People’s Lives,” “Science Popularization Carnival,” and “Adding up to Science Education.” The exhibition sprawled across more than 20 themed areas featuring topics such as “Smart Manufacturing for a Strong Nation,” “China’s Lunar Exploration Program,” and “Improving People’s Well-being Through Science and Technology.” Nota-

ble exhibits included an authentic model of the Mars landing platform, the reentry capsule of the Chang’e-5 mission, a sample of lunar soil, and SparkDesk, a large-scale AI model.

National Science Popularization Day, which began in 2004, has steadily grown in influence and is now one of China’s most prominent science outreach events. In 2022 alone, it facilitated the organization of more than 74,000 science outreach activities, engaging approximately 320 million participants.

(Source: Official WeChat account of Voice of CAST)

Events in Focus

The 2023 World Conference on Science Literacy held in Beijing

From September 19 to 20, the 2023 World Conference on Science

Literacy was held at Shougang Park in Beijing under the theme “Improving Science Literacy and Building a Prosperous World: Joining Hands on the Path towards Modernization.” It brought around 700 representatives from 13 international organizations and 29 countries together. They engaged in discussions and exchanges on empowering modernization through science literacy, improving people’s well-being, and addressing common concerns in science popularization and public science literacy development. The conference also aimed to strengthen international collaboration on science literacy and create an environment of openness, trust, and cooperation to advance the United Nations Sustainable Development Goals (SDGs) and build a global community of shared future.



Opening ceremony of the 2023 World Conference on Science Literacy
Photo credit: Official website of CAST

The conference was structured into five segments: an opening ceremony, a keynote session, a summit forum, specialized forums, and a closing ceremony. CAST President Wan Gang attended the opening ceremony and delivered a speech. The ceremony was presided over by He Junke, CAST Vice President in charge of daily work and and Chief Executive Secretary of the CAST Secretariat.

In his address, Wan Gang emphasized that the ultimate goal of modernization is comprehensive human

development and freedom. Achieving this goal requires improving science literacy, which is a fundamental requirement, and enhancing public science literacy is a shared responsibility for all nations. To this end, he proposed three key initiatives: first, deepen consensus and highlight the people-centered nature of science literacy development; second, promote inclusivity and expand the reach of science literacy development; and third, strengthen cooperation to ensure the sustainability of science literacy development.

The World Conference on Science Literacy, organized and hosted by CAST since 2018, marked its fifth year with this event. The conference is dedicated to establishing a global, comprehensive, and high-level platform for exchange and cooperation in science communication. Its goals include building effective collab-

oration mechanisms, facilitating the worldwide dissemination of science and technology, bridging gaps in science literacy, and promoting global sustainable development.

(Sources: Official website of CAST, Program of the 2023 World Conference on Science Literacy, and news.cn)

A Glimpse into Beijing' s activities for 2023 National Science Popularization Day

2023 National Science Popularization Day in Beijing unfolded as a vibrant spectacle featuring physical exhibits, interactive simulations, hands-on experiments, and expert lectures. The event was primarily designed to highlight China's recent strides in fundamental research and technological infrastructure as well as technologies that enhance daily life. It clearly captivated young minds with enthralling scientific explorations.

Spotlight on moon soil from China' s lunar program



The lunar soil displayed in transparent container
Photo credit: *The Beijing News*

The “Chinese Lunar Exploration Program” exhibition area displayed lunar soil retrieved by the Chang’e-5 mission. The mission, a crucial part of China’s third lunar exploration phase, brought back 1,731 grams of lunar soil to the earth, with a 100-milligram sample showcased at the event.

Encased in a transparent container inspired by the bronze vessels at the National Museum of China, the soil exhibits a gray-black powdered appearance, akin to the earth’s soil. The container’s dimensions and features are highly symbolic. It stands at a height of 38.44 centimeters, symbolizing the average distance of 384,400 kilometers separating the earth and the moon. Its width, measuring 22.89 centimeters, mirrors the 22.89 days it took for Chang’e-5 to journey from launch to return. Its interior features intricate shapes representing the earth, a map of China, and the moon. At its core lies a spherical compartment cradling the lunar soil, symbolizing the moon itself. The lower portion of the earth-shaped design allows light to penetrate, illuminating the map of China—a symbol of the enduring connection

between the Chinese people and the moon. The 9.9-centimeter gap between the earth and the moon is reminiscent of the “Nine Skies” mentioned in ancient Chinese texts and signifies China’s lunar exploration’s triumph to reach beyond space boundaries.

Terra-Cotta warriors undergo digital “health checkup”

In the “Science + Culture” exhibition area, a display titled “Giving Terra-Cotta Warriors a ‘Health Checkup’” was particularly captivating. Professor Zhu Lei of the Beijing University of Civil Engineering and Architecture (BUCEA) shed light on the process. “Upon excavation, many terra-cotta warriors were found in pieces, posing a formidable challenge for manual restoration,” he said. “To overcome this hurdle, we employ cutting-edge laser technology to conduct three-dimensional

scans of these fragments. We then input these scan results into a computer, employing a combination of computer algorithms and manual craftsmanship to recreate complete terra-cotta warrior models. We are also able to precisely determine the areas where these warriors undergo the most stress and deformation due to external forces. To fortify them, we create tailor-made supports to ensure they ‘stand firm’ and ‘stand steady’.”

A virtual dive into the animal kingdom



A giant panda’s daily life displayed through 3D glasses
Photo credit: *The Beijing News*

The “Beautiful China” exhibition area, presented by the Chinese Academy of Forestry (CAF), charmed young visitors with vivid displays of butterflies, insects, and seed specimens. Using 3D glasses, they were virtually transported into the habitat of giant pandas. Interactive touch screens facilitated an exploratory journey through a rich tapestry of animal images and sounds, offering true immersion in the earth’s diverse terrestrial ecosystems. The area also provided young people opportunities to assemble wooden animal puzzles and craft wish bottles with plant specimens.

Exploring the realm of artificial intelligence



A child synchronizes her hand movement with a robotic hand
Photo credit: news.cn

In the “Artificial Intelligence” exhibition area, visitors were treated to a dazzling showcase of the latest AI applications across education, healthcare, daily living, and office environments. These interactive experiences allowed participants to creatively engage with AI, crafting Van Gogh-style paintings, composing acrostic poems, and assessing Mandarin proficiency through on-site recitations.

The China Science and Technology Museum utilized cutting-edge technology to create an engrossing science popularization exhibition, inviting people of all ages to delve into the world of artificial intelligence and explore its myriad applications in daily life.

(Sources: Official WeChat account of Voice of CAST, news.cn, and *Science and Technology Daily*)

Chinese and international science museum directors convene in Beijing to chart the future of science museums in the digital age

On September 17, 2023, the Beijing Association for Science and Technology (BAST) hosted the 2023 Beijing International Science Museum Directors

Dialogue in Beijing. The event brought directors from nearly 20 Chinese and international museums and related institutions together. Representing countries like Pakistan, Thailand, Brunei, Malta, Croatia, and regions including Shanghai, Guangdong, Inner Mongolia, and Henan, the experts sat to discuss the development path of science and technology museums in the digital age.

This dialogue embraced the concept of “global perspective, international standards, and high-level positioning” and featured the theme of “Cooperation for Joint Development.” A significant moment during the event was an inter-museum signing ceremony, during which the Beijing Science Center inked a strategic cooperation agreement with the Guangdong Science Center and the Macao Science Center. Such inter-museum collaborations serve as a catalyst for fostering diverse innovation in

science education.

The organizers arranged two high-level dialogues on the topics “How can science museums contribute to improving digital education levels among young people?” and “How can science museums create high-quality digital resources and provide services tailored to different audiences?”



High-end Dialogue 1 of the Beijing International Science Museum Directors Dialogue
Photo credit: Xinhua News Agency

The Beijing International Science Museum Directors Dialogue, which has held two sessions to date, aims to build a platform that fosters comprehensive collaboration. It unites professionals worldwide to engage in meaningful discussions and spearhead the digital transformation of science museums and high-quality development of popular science content.

(Source: Xinhua News Agency)

Expert Voices

Experts call for global progress at the 2023 World Conference on Science Literacy

On September 19, during the opening ceremony of

the 2023 World Conference on Science Literacy, influential experts from around the world discussed pivotal facets of science literacy including strengthening international cooperation on science literacy and fostering a deeper public appreciation for science. Director Hu Shaofeng from UNESCO’s Division of Science Policy and Capacity Building, Natural Sciences Sector, highlighted the global challenges humanity faces including building trust in science, combating misinformation, making informed scientific decisions, and improving the quality of scientific communication at both international and national levels. Addressing these challenges requires concerted efforts from governments, the scientific community, educational institutions, media, and all stakeholders.

Vice President Chang Jin of the Chinese Academy of Sciences emphasized

that technology workers, as primary creators of scientific knowledge, play a pivotal role in raising public science literacy. He noted that the Chinese Academy of Sciences recently celebrated its 20th-anniversary with a conference themed “Science and China” and launched the “Thousand Academicians, Thousand Popular Science Programs” initiative. This initiative encourages academy members to lead popularization of science nationwide, contribute to the development of intellectual culture within society, set standards for high-quality science communication, and promote international cooperation. The Chinese Academy of Sciences aims to unite more members and experts to foster fertile ground for scientific innovation through high-quality popular science and become a cornerstone of knowledge dissemination.



Director Hu Shaofeng from UNESCO's Division of Science Policy and Capacity Building, Natural Sciences Sector, delivers a speech
Photo credit: Official website of the 2023 World Conference on Science Literacy

Lidia Arthur Brito, Acting Assistant Director-General for Natural Sciences at UNESCO, stressed the vital role of science literacy in addressing global challenges such as climate change and biodiversity loss. She also emphasized the need to establish effective global science communication governance structures and utilize various platforms, including schools, community science centers, and museums. In conclusion, she underscored the importance of international cooperation in promoting science communication, bridging divisions, and building consensus among nations.

(Source: Official WeChat account of NTCAST)

Upcoming Conferences



6th World Laureates Forum



Dates: November 6-8, 2023



Location: Lingang New Area, Shanghai, China



Organizers: The World Laureates Association (WLA) and the China Association for Science and Technology (CAST)



The 6th World Laureates Forum, themed “Science Leading Transformation,” is set to bring roughly 300 scientists from various corners of the globe together. Attendees will include members of the Chinese Academy of Sciences and the Chinese Academy of Engineering, prominent global scientists, and young talent from both China and abroad. This gathering, acting as a vital conduit, seeks to foster international collaboration and drive scientific advancement through dialogue and exchange.



For more information, visit: <https://en.wlaforum.com/>



ICG Annual Meeting 2023



Dates: November 12-15, 2023



Location: Hangzhou, Zhejiang Province, China



Organizer: Chinese Ceramic Society (CCS)



The annual meeting, themed “Glass for a Brighter Future,” is set to feature leading scholars and experts from the global glass industry. Anticipate keynote speeches on innovative glass materials and more. The organizing committee warmly invites experts, scholars, graduate students, and technical professionals worldwide to join this academic event.



For more information, visit: <https://icg2023.ceramsoc.com/Special/Index/index/meetingid/15/1/en-us.do>

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CAST is the largest non-governmental organization of scientific and technological professionals in the world. Through its 215 member societies and local branches all over the country, CAST maintains close ties with millions of Chinese scientists, engineers, and other professionals working in fields of science and technology.

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