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China Co-organizes Side Events at 2026 Global Conference of International Decade of Sciences for Sustainable Development





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Headlines

China co-organizes side events at 2026 Global Conference of International Decade of Sciences for Sustainable Development

From July 15 to 17, the UNESCO hosted the 2026 Global Conference of the International Decade of Sciences for Sustainable Development (IDSSD) in Paris. During the conference, two thematic side events co-organized by Chinese institutions brought together experts to discuss open knowledge sharing and the application of digital technologies. Participants also released joint action recommendations and signed a cooperation agreement, highlighting China's solutions and contributions to advancing the UN Sustainable Development Goals (SDGs).

At the side event “Fostering Global Open Science Infrastructure Sharing

Network: Open Knowledge and Data for the Science Decade,” leading Chinese and international experts, including Yang Wei, a member of the Chinese Academy of Sciences and Chair of the CAST-UN Consultative Committee on Open Science and Global Partnership (CCOS), discussed technological pathways for global open science knowledge sharing, the development of alliances for open science infrastructure, and applications across diverse scenarios. The event also launched the *Paris Call for Joint Action on Knowledge Sharing and Dissemination*, which calls for enhanced resource sharing, harmonized standards, capacity building, and phased monitoring and evaluation, while placing particular emphasis on the development needs of countries in the Global South.



Participants at the side event “Digital Technologies Driving Global Sustainable Development”

The side event “Digital Technologies Driving Global Sustainable Development” was co-organized by the International Research Center of Big Data for Sustainable Development Goals (CBAS), UNESCO, and other partners. Discussions focused on leveraging big data, artificial intelligence, and Earth observation technologies to strengthen monitoring and assessment in biodiversity conservation, food and energy

security, climate action, and disaster risk reduction. Participants also explored ways to advance international data standards, develop public data products, and improve global data governance. During the event, CBAS and UNESCO signed a cooperation agreement on the Digital Sustainable Development Goals Programme (DSP).

“Looking ahead, CAST will encourage closer collaboration between CBAS and the International Society for Digital Earth, enabling them to leverage their respective strengths and advance the DSP to deliver high-quality digital public services to UNESCO member states and support sustainable development efforts, particularly in countries of the Global South,” said Luo Hui, head of the CAST delegation.

(Source: Xinhua News Agency)

Commemoration marking 100th anniversary of Gu Fangzhou's birth held at UNESCO Headquarters



Launch ceremony of the centennial commemoration of Gu Fangzhou

On July 16, 2026, local time, the launch ceremony for the centennial commemoration of Gu Fangzhou, titled “A Century of Legacy, A Future of Shared

Prosperity,” was held at UNESCO Headquarters in Paris. The event was jointly organized by CAST, the Chinese National Commission for UNESCO, and the Permanent Delegation of the People's Republic of China to UNESCO. More than 100 representatives attended, including officials from UNESCO, representatives from the permanent delegations of countries such as Cambodia and Italy, the Institut Pasteur in France, the Accademia Nazionale dei Lincei in Italy, as well as leading universities and public health research institutions in China and around the world.

Gu Fangzhou was a renowned Chinese virologist best known for leading the development of China's oral attenuated poliovirus vaccine (OPV), widely known as the “sugar pill.” His work protected hundreds of millions of Chinese children from poliomyelitis, earning him the affectionate nickname

“Grandpa Sugar Pill.” Under his leadership, China achieved its goal of becoming polio-free in 2000. He also helped share China’s experience in large-scale immunization and low-cost vaccine technologies with developing countries, providing a model for South-South cooperation in public health.

In her remarks, Luo Hui, Director-General of the CAST Department of International Affairs, said that CAST, as the world’s largest organization of science and technology professionals, co-organized the commemorative event with UNESCO to highlight the enduring legacy of Gu Fangzhou’s life and work. She noted that his contributions offer valuable lessons for the world today: the value of scientific innovation lies in serving humanity; scientific achievements require integrity and perseverance; scientific exploration must be guided by the principle of “science for good”;

and the advancement of human civilization depends on international exchange and mutual learning.

Abou Amani, Assistant Director-General for Sciences ad interim at UNESCO, said that Gu Fangzhou’s story inspires young people to cultivate curiosity, scientific ambition, and a passion for discovery. UNESCO looks forward to continuing its cooperation with CAST and other partners in areas such as science communication, scientific literacy, and STEM education, while jointly developing platforms and organizing exhibitions to bring science closer to the public and encourage greater youth engagement in science.

In December 2025, the 43rd session of the UNESCO General Conference officially included the centenary of Gu Fangzhou’s birth in UNESCO’s 2026-2027 celebrations of anniversaries.

The commemoration not only reflects the international community’s high regard for Gu Fangzhou’s scientific achievements and humanitarian spirit, but also provides an important platform for promoting international exchange and mutual learning in global public health.

(Source: Official WeChat account of the China Centre for International Science and Technology Exchange)

Academic Exchange

Chinese Society for Geodesy Photogrammetry and Cartography delegation participates in 25th ISPRS Congress

From July 5 to 11, 2026, the 25th International Congress of the International Society for Photogrammetry and Remote Sensing (XXV

ISPRS Congress) was held in Toronto, Canada. The Chinese Society for Geodesy Photogrammetry and Cartography (CSGPC) delegation participated in the congress, engaging extensively in academic exchange, technical exhibitions, the ISPRS General Assembly, elections for the next Council and Technical Commissions, and other activities. The delegation also attended the award ceremony for prizes sponsored by CSGPC.



CSGPC delegation at the voting session of the ISPRS General Assembly

Following a vote by ISPRS members, Professor Jiang Jie from Beijing University of Civil Engineering and Architecture was elected Vice President of the ISPRS Council; Professor Wang Cheng from Xiamen University was elected President of ISPRS Technical Commission I (Sensor Systems); and Senior Engineer Wu Hao (professor rank) from the National Geomatics Center of China was elected Vice President of ISPRS Technical Commission IV (Spatial Information Science). Their terms will run from July 2026 to July 2030.

During the congress, ISPRS presented its prestigious quadrennial awards, including the Wang Zhizhuo Award and the Li Deren Award, both sponsored by CSGPC. Established in memory of Professor Wang Zhizhuo, the

Wang Zhizhuo Award is one of ISPRS's major honors. It recognizes researchers who have made significant achievements or innovative contributions in the field of spatial information science, with their work having been successfully applied within the two to twelve years preceding the congress. The recipient of this year's award was Professor Peter van Oosterom from Delft University of Technology in the Netherlands. The Li Deren Award, newly established in 2026, is presented every four years during the ISPRS Congress to recognize individuals who have made outstanding achievements or innovative contributions in spatiotemporal intelligence. The inaugural recipient was Steve Chien, Senior Research Scientist at the Jet Propulsion Laboratory of the California Institute of Technology in the United States.

Founded to promote the

advancement, application, and international collaboration of photogrammetry, remote sensing, and spatial information science and technologies, ISPRS has members from nearly 200 countries and regions. With a long history of academic activities, broad international participation, and significant global influence, the ISPRS holds its congress every four years.

(Source: Official website of CSGPC)

Dialogue on Young Scientists and AI Governance held at UNESCO Headquarters



Participants at the dialogue

Recently, the Dialogue on Young Scientists and AI Governance, jointly organized by the World Association of Young Scientists (WAYS) and the Global Youth Development Alliance (GYDA), was held at UNESCO Headquarters in Paris, France. Experts from UNESCO and European academic institutions, together with representatives of young scientists, engaged in discussions on topics including the role of youth in advancing AI ethics frameworks, pathways for responsible innovation, and alignment between AI governance and the Sustainable Development Goals (SDGs).

Mariagrazia Squicciari, Chief Researcher at UNESCO's Science Sector, provided a comprehensive overview of the global implementation of the *UNESCO Recommendation on the Ethics of Artificial Intelligence*. She emphasized that young scientists are a key driving force in translating AI ethics from principles into practice and called for ethical review mechanisms to be deeply integrated throughout the entire life-cycle of AI development. During the session themed "AI Ethics and Youth Empowerment," speakers, including François Taddei, UNESCO Chair in Learning Sciences, and Emmanuel Goffi, Professor at the Institut Supérieur de l'Électronique de Paris (ISEP), discussed topics such as how young scientists can play a leading role in AI governance and how technology companies can advance responsible innovation. Participants agreed that young researchers are not only

creators of cutting-edge technologies but also shapers of future governance frameworks and should play an active role in developing and implementing AI ethics standards.

The dialogue saw the release of the *Youth Scientists and AI Ethics Action Initiative*, which outlines four key areas of consensus and proposes five actions, including establishing a global network of young AI ethics scholars and bridging gaps in AI ethics capacity building worldwide. WAYS and GYDA also signed a Memorandum of Cooperation, pledging to strengthen strategic collaboration in areas such as young scientific talent development, international research cooperation, and AI ethics governance.

(Source: Official WeChat account of WAYS)

International Awards

Chinese scientists receive Nuclear Scientist Award and Young Nuclear Scientist Award at INST 2026



Du Yingchao receives the Nuclear Scientist Award

From July 13 to 14, the 2026 International Nuclear Science and Technology Conference (INST 2026), hosted by the Thailand Institute of Nuclear Technology (TINT), was held in Bangkok. The conference established two prestigious individual academic awards open to nuclear science and technology researchers worldwide, regardless of nationality, gender, or research field, to recognize scientists who have made outstanding contributions to nuclear science and technology. The two awards include the Nuclear Scientist Award (NSA), which honors senior scholars with a long-standing commitment to nuclear science and significant research achievements, and the Young Nuclear Scientist Award (YNSA), which recognizes promising young researchers and encourages innovation in frontier research. Two experts recommended by the Chinese Nuclear Society (CNS) received these

awards and were invited to attend the conference and deliver presentations.

Du Yingchao, Associate Professor at the Department of Engineering Physics of Tsinghua University, received the Nuclear Scientist Award for his achievements in the development and application of very-high-frequency continuous-wave photocathode microwave electron guns. His research

focuses on high-gradient photocathode radio-frequency electron guns, the generation of ultra-short electron beams, and the development of inverse Compton (Thomson) scattering X-ray and gamma-ray sources.

Wang Zhipeng, a council member of the CNS Actinide Physics and Chemistry Division and Associate Research Fellow at the Institute of Nuclear and New

Energy Technology (INET) of Tsinghua University, received the Young Nuclear Scientist Award for his outstanding contributions to nuclear waste treatment and resource recovery and utilization. His work centers on fundamental and applied studies related to nuclear waste management.

(Source: Official website of CNS)



Wang Zhipeng receives the Young Nuclear Scientist Award

Scientist Profile

Pan Jianwei addresses century-old scientific debate with quantum breakthroughs



Pan Jianwei is a Doctor of Experimental Physics, Professor at the University of Science and Technology of China (USTC), member of the Chinese Academy of Sciences (CAS), fellow of the World Academy of Sciences (TWAS), and foreign member of the Austrian Academy of Sciences. He currently serves as President of the CAS Institute of Quantum Information and Quantum Technology Innovation. His research focuses on quantum optics, quantum information, and experimental tests of the foundations of quantum mechanics. As one of the world's leading pioneers in experimental quantum information research, Pan Jianwei has made systematic and groundbreaking contributions to quantum communication, quantum computing, and multi-photon entanglement manipulation. His work has helped establish experimental quantum information science as one of the fastest-growing fields in physics in recent years.

In December 2025, an experimental study conducted by Pan Jianwei's team provided new insights into the century-old debate between Albert Einstein and Niels Bohr over the wave-particle duality of light, which dates to the 1927 Solvay Conference. The experiment verified the complementarity principle at the Heisenberg limit and fully reproduced Einstein's classic thought experi-

ment. It also overcame major technical challenges in frontier areas, including high-precision single-atom manipulation and single-atom and single-photon entanglement interference, laying an important experimental foundation for research on neutral atom arrays, quantum error correction, and the boundary between quantum and classical physics. As a pioneer in experimental quantum

information science, Pan Jianwei has devoted decades to quantum physics research, continuously expanding the humanity's understanding of the microscopic world through groundbreaking experiments.

Opening the door to quantum information science

In 1996, seeking to further his research in

frontier science, Pan Jianwei went to the University of Innsbruck in Austria, one of the centers where modern quantum physics developed, to study under renowned quantum physicist Anton Zeilinger. During his studies abroad, Pan demonstrated exceptional scientific insight and experimental capabilities. In 1997, he published the paper “Experimental Quantum Teleportation” in *Nature* as the second author. The study achieved the first experimental realization of quantum-state teleportation and was widely recognized as a pioneering milestone in experimental quantum information science, being selected as one of the “Top Ten Scientific and Technological Advances of the Year.” After returning to China in 2001, Pan Jianwei devoted himself to advancing research in this field.

Undeterred by challenges, he pursued sustained

innovation and produced a series of high-impact achievements. The quantum teleportation experiment to which he contributed was later selected by *Nature* as one of the “21 Classic Physics Papers of the Past Century.”

Building a solid foundation for quantum future

Pan Jianwei understands that major breakthroughs in frontier science cannot be achieved through individual efforts alone. To this end, he has actively established a specialized and interdisciplinary team, fostering an environment that encourages exploration, embraces trial and error, and promotes cross-disciplinary collaboration. This collaborative atmosphere has provided strong support for sustained innovation.

During the development of the Micius quantum science experimental satellite, Pan Jianwei’s

team encountered major technological bottlenecks. Pan once vividly described the immense challenge through an analogy: “The satellite travels through space at nearly 8 kilometers per second, like a high-speed train racing forward. Meanwhile, about one kilometer away, there is a spinning container with an opening as narrow as the edge of a coin. Our task is to accurately guide the ‘coin’—that is, a photon—into the tiny opening of this constantly moving container, again and again, with absolute precision.” Guided by a commitment to independent innovation and persistent scientific exploration, Pan Jianwei led his team in successfully developing a compound-axis tracking and pointing system with fully independent intellectual property rights. The system improved tracking accuracy to 0.1 arcseconds, overcoming a globally recognized technological challenge.

Advancing frontiers and continuously pushing technological boundaries

Under Pan Jianwei's leadership, his team has achieved a series of pioneering breakthroughs, transforming theoretical concepts into practical applications. In 2016, the Micius satellite was successfully launched and achieved three major scientific objectives, including two-way satellite-to-ground quantum entanglement distribution over a distance of more than 1,000 kilometers, marking a decisive step forward for China in the

field of space-based quantum communication. In 2017, the Beijing-Shanghai Backbone Network (BSBN), a long-distance quantum-secured communication route, was officially put into operation. Since then, the Jiuzhang photonic quantum computer prototype and the Zuchongzhi superconducting quantum computer prototype have been successively developed.

Today, Pan Jianwei's team continues to advance cutting-edge projects, including medium- and high-orbit quantum satellites, next-genera-

tion quantum computing prototypes, and quantum micro- and nanosatellite constellations, further expanding the frontiers of quantum science and its applications. Meanwhile, Pan actively promotes international academic exchange and builds platforms for collaboration, advancing interdisciplinary and cross-border research cooperation and facilitating the application of scientific achievements, thereby contributing to the continued development of the global quantum science ecosystem.

(Source: *Overseas Students*)

Upcoming Conferences

2026 World Robot Conference to convene in Beijing



The 2026 World Robot Conference (WRC 2026), jointly organized by the Chinese Institute of Electronics (CIE) and the World Robot Cooperation Organization (WRCO), will be held from August 19 to 23 at the Beiren Etrong International Exhibition & Convention Center in the Beijing Economic-Technological Development Area. Under the theme “Human-Robot Symbiosis, Production-Demand

Convergence,” the conference will be held concurrently with the World Robot Expo and the World Robot Contest, offering a comprehensive showcase of the latest trends, cutting-edge technologies, and innovative achievements in the global robotics sector. The conference’s thematic forums will bring together representatives from leading users and application sectors in robotics and

embodied intelligence to share high-value application scenarios and practical cases, providing technology developers and suppliers with a clear understanding of market needs.

For more information, please visit the official conference website: <https://www.worldrobot-conference.com/en/>

(Source: Official WeChat account of NTCAST)

 For more information about the *CAST Newsletter*, please visit <https://voc-gj.cast.org.cn/>.

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