



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

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CAST Newsletter

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2025 WFEO General Assembly





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Headlines

CAST President Wan Gang meets with ISC President Peter Gluckman



CAST President Wan Gang meeting with ISC President Peter Gluckman
Photo credit: Official website of CAST

On October 8, 2023, Wan Gang, President of the China Association for Science and Technology (CAST), held a meeting with Peter Gluckman, President of the International Science Council (ISC), in Beijing.

Wan emphasized CAST's unwavering support for ISC's endeavors, pledging to advance open science and further ISC's initiatives in pursuit of global peace and sustainable progress.

Gluckman acknowledged CAST's vital role within the ISC and expressed hope that the Chinese scientific community would maintain active involvement, increase international collaboration to foster interdisciplinary growth and find solutions to humanity's shared challenges.

(Source: Official website of CAST)

Young Chinese and European scientists discuss opportunities for innovation and cooperation

On October 18, the World Youth Scientist Summit (WYSS) 2023 European Event took place in Belgium's capital Brussels. Jointly hosted by CAST and the Zhejiang Provincial Government, the event drew participation from over 180 delegates from nearly 20 countries and regions. They engaged in in-depth discussions on the growth of young scientists, emerging global challenges, and opportunities for Sino-European innovation partnerships. CAST's Vice President Shu Wei attended.

WYSS strives to foster dialogue, collaboration, and realization of aspirations of young scientists globally. Since its inception in 2019, the summit has been held in Wenzhou, Zhejiang Province, for four consecutive sessions.



The WYSS 2023 European Event
Photo credit: Xinhua News Agency

This year's event focused on the role of youth in shaping the future, balancing innovation with heritage, and interplay between development and responsibility. The discussions emphasized the importance of establishing an inclusive, trustworthy, and synergistic platform within the global scientific and technological community. Goals included fostering enduring international collaboration, guiding the next generation of scientists and innovators, and exploring ways academia can develop entrepreneurship.

A highlight of the gathering was a special session to honor five youth innovation projects. The top accolade went to Louis De Vroede from KU Leuven, Belgium. "Our team is actively seeking partners for the design and production of solar cells," said De Vroede. "We aspire to give our project a global outlook, and this summit has undoubtedly amplified the visibility of our endeavors."

(Sources: Xinhua News Agency and official website of CAST)

CAST delegation attends 50th Conference of CIMUSET in Seoul

On October 23, 2023, Yin Hao, Director of the China

Science and Technology Museum, led a delegation to Seoul, South Korea, in response to a special invitation. They took part in the 50th Conference of CIMUSET, its awards ceremony and parallel forums and conducted official visits.

Established in 1946 as a "Subject Group Committee" of the International Council of Museums (ICOM) for Science and Technology, CIMUSET is a community of global experts and scholars from the science and technology museum sector. The annual gathering rotates hosting among member nations. At one of the conference's parallel sessions, Fu Zijie, an assistant engineer with the China Science and Technology Museum, presented on the topic of "Creating Video Program Innovation in an Accessible Information Environment."

In addition to South Korea, the delegation also visited Singapore

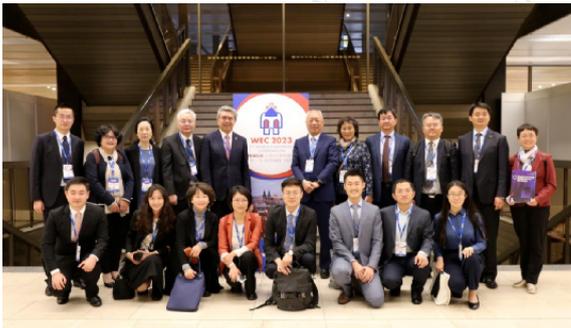
and Japan. There, they met with international and national organizations as well as other science and technology museums with a goal of following up on existing partnership agreements and exploring new avenues of collaboration in science popularization, science education for young people, and science outreach.

(Source: Official website of CAST)



Group photo of the CAST delegation at the conference
Photo credit: Official website of CAST

CAST awarded right to host 2025 WFE0 General Assembly



Group photo of the Chinese delegation at the 2023 WFE0 General Assembly
Photo credit: Official WeChat account of NTCAST

On October 14, at the 2023 World Federation of Engineering Organizations (WFE0) General Assembly held in Prague, Czech Republic, CAST was awarded the right to host the 2025 WFE0 General Assembly in Shanghai, China. The event will serve as an ideal opportunity to bring representatives from engineering organizations in over a hundred countries and regions together to discuss how engineering and technology can better address the challenges of sustainable development.

At the assembly in Prague, CAST Vice President Chen Xuedong and former WFE0 President Gong Ke engaged in extensive and in-depth discussions with representatives from various WFE0 member organizations.

WFE0 holds a prominent position in the global scientific and technological landscape, and China, represented by

CAST, is a member of the organization. Established in 1968 under the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO), WFEO boasts a membership that spans nearly a hundred countries and regions worldwide along with 12 regional international engineering associations. It is one of the largest non-governmental international engineering organizations globally.

(Source: Official WeChat account of NTCAST)

Thematic Forum on People-to-People Connectivity of BRF III shines spotlight on CAST contributions

On October 18, 2023, the Thematic Forum on People-to-People Connectivity, part of the Third Belt and Road Forum for International Cooperation (BRF III), was held in Beijing. The forum showcased

a series of notable achievements that exemplify China's decade-long commitment to promoting international cooperation through people-to-people exchange under the Belt and Road Initiative. Among them, seven contributions from CAST related to science, technology, and cultural exchange received special recognition for their significant impact.

(Source: Official WeChat account of Voice of CAST)

7th Belt and Road Teenager Maker Camp & Teacher Workshop (China-Arab Project) held



The opening ceremony of the 7th Belt and Road Teenager Maker Camp & Teacher Workshop (China-Arab Project)
Photo credit: cn.chinadaily.com.cn

On October 13, 2023, the 7th Belt and Road Teenager Maker Camp & Teacher Workshop (China-Arab Project) took place in Zhongwei, Ningxia Hui Autonomous Region. The event, hosted by CAST and China's Ministry of Science and Technology, featured a range of STEM activities centered on the theme "Embracing Science and Technology for a Greener World," with the goal of promoting scientific exchange and friendship between China and the countries participating in the Belt and Road Initiative.

The camp provided participants an immersive

experience through cultural exhibitions, interactive exchange sessions, engaging digital presentations, and lectures on using wheat straw grids to combat desertification. These activities provided an accessible way for young people to grasp complex topics and research techniques. The camp also organized field trips to explore real-world applications of science and technology, empowering participants to experience the charm of modern technology firsthand.

(Sources: chinanews.com.cn and cn.chinadaily.com.cn)

2023 World Women Scientists Conference held in China



The 2023 World Women Scientists Conference
Photo credit: Official WeChat account of the China Centre for International Science and Technology Exchange

On October 14, the 2023 World Women Scientists Conference (WWSC) kicked off in Shaoxing, Zhejiang Province. Hosted by CAST, the conference was themed “Openness, Trust, Innovation, and Development” under the overarching topic of “Women’s Wisdom and Global Development.” The three-day event attracted more than 600 scientists from over 30 countries, providing an international platform for female science and technology professionals to

collaborate and promote a more inclusive innovation landscape.

The opening ceremony featured congratulatory videos from female scientists from around the world, released survey results on women in scientific and technological innovations in the Asia-Pacific region, launched the Shaoxing Initiative, and included keynote speeches and interdisciplinary discussions led by esteemed female scientists.

The conference organized nine concurrent forums including the China-South Africa Women Scientists Roundtable Summit, the annual forum of the Chinese Women Scientists Association for Innovation and Development, and the Women Marine Scientists Forum. Other highlights included industrial project overviews, outreach initiatives by female scientists in educational institutions, and field trips to local companies to

promote women empowerment.

China-South Africa Women Scientists Roundtable Summit



The panel session of the China-South Africa Women Scientists Roundtable Summit

Photo credit: Official website of CAST

On October 14, the China-South Africa Women Scientists Roundtable Dialogue took place in Shaoxing, Zhejiang Province. The event was jointly hosted by the Chinese Women Scientists Association and the South African Council for Natural Scientific Professions (SACNASP). Themed “Harnessing the Wisdom of Women in China and South Africa for Scientific and Technological Innovation,” the dialogue aimed to leverage the unique capabilities of women scientists to foster extensive scientific and technological exchange and collaboration between the two countries.

Women scientists play an irreplaceable role in advancing scientific and technological progress and societal development. Both in scientific research and daily life, they display exceptional talents and make outstanding contributions. At the dialogue, representatives from both countries delivered keynote

speeches and engaged in high-level discussions to explore the experiences and achievements of women scientists in scientific research. Their interactions promoted collaboration and exchange between female scientists from both countries.

(Sources: Official website of CAST and thepaper.cn)

Academic Exchange

74th International Astronautical Congress kicks off in Azerbaijan

On October 2, 2023, the 74th International Astronautical Congress (IAC) took place in Baku, the capital of Azerbaijan. Hosted by the International Astronautical Federation (IAF), the event centered on the theme “Global Challenges and Opportunities: Give Space a Chance.” It drew over 5,500 scien-

tists, entrepreneurs, and students from the global aerospace sector.

The Chinese Society of Astronautics (CSA) coordinated participation by over 120 Chinese delegates from various realms including the China National Space Administration (CNSA) and its Lunar Exploration and Space Program Center. It also arranged a sprawling 400-square-meter exhibition at the venue, setting a historical record for Chinese delegation members and display area at IAC. The achievement demonstrated China's contribution to the field of space exploration.



President of Azerbaijan paying an official visit to China's space exhibition
Photo credit: Official WeChat account of NTCAST

China's exhibition showcased its recent aerospace milestones including China's space station, the International Lunar Research Station (ILRS), the Chang'e lunar missions, and the Long March rocket series, through physical artifacts, scale models, and multimedia presentations. It was honored with the Best Space Exhibition Award for the 74th IAC by Azerbaijan's Space Agency, and the IAF.

(Source: Official WeChat account of NTCAST)

China Highway & Transportation Society delegation attends XXVIIth World Road Congress

From October 2 to 6, 2023, the XXVIIth World Road Congress was held in Prague, the capital of the Czech Republic. The China Highway & Transportation Society (CHTS) sent a delegation of over 60 representatives to participate in the event.

During the congress, CHTS hosted an open side event titled "Sustainable Development and Innovation of Transport Infrastructure in the Context of Global Climate Change" and curated a special exhibition highlighting China's technological advancements in highway construction. Both events showcased China's progress in the sector, attracting significant interest from international delegates.

Following the congress,

the Chinese delegation visited Budapest, the capital of Hungary. There, they engaged in detailed discussions and signed cooperation agreements with several Hungarian entities including the Hungarian National Transport Authority, Hungarian Public Roads Ltd., the Budapest Transportation Authority, and the Budapest University of Technology and Economics. Discussions focused on infrastructure development, toll road management, and the evolution of intelligent transportation systems.



Group photo of the Chinese delegation at the congress

Photo credit: Official WeChat account of the China Centre for International Science and Technology Exchange

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

International Awards

Former HKIE President Yuen Pak Leung receives 2023 IHEEM Lifetime Achievement Award

On October 9, 2023, at the 80th anniversary celebration of the UK Institute of Healthcare Engineering

& Estates Management (IHEEM) in Manchester, the UK, IHEEM CEO Pete Sellars honored Dr. Yuen Pak Leung with the 2023 Lifetime Achievement Award. Dr. Leung, a representative of the 10th National Congress of CAST and the former President of the Hong Kong Institution of Engineers (HKIE), was recognized for his contributions to energy efficiency and sustainability in hospital and healthcare infrastructure and operations.

Pete Sellars recounted that in February 2020, amidst the unexpected surge of the COVID-19 pandemic, Dr. Leung pioneered the design of the first high-standard negative pressure isolation facility using modular construction techniques. These adaptable facilities were instrumental in curbing the airborne spread of the virus. Dr. Leung generously shared his innovative approach worldwide, lending his expertise to enhance

public health measures. His groundbreaking work caught the attention of global organizations, leading to invitations from the World Health Organization and the United Nations to advise on the establishment of similar facilities across Indonesia. This showcased his unwavering dedication to elevating global standards in healthcare engineering.



Dr. Yuen Pak Leung with the 2023 IHEEM Lifetime Achievement Award
Photo credit: Official WeChat account of the China Centre for International Science and Technology Exchange

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

Vice President of the Chinese Association of Automation Gao Huijun awarded the Norbert Wiener Award

Recently, the Institute of Electrical and Electronics Engineers (IEEE) Systems and the Cybernetics Society (SMCS) named Professor Gao Huijun the

recipient of the 2023 Norbert Wiener Award in Hawaii, USA. Professor Gao, Deputy Secretary General of the Chinese Association of Automation (CAA), a member of Academia Europaea, and a faculty member at the Harbin Institute of Technology (HIT), was so honored in recognition of his exceptional contributions to the theories and practical applications of advanced control systems.



The Norbert Wiener Award certificate for Gao Huijun
Photo credit: Official WeChat account of the China Centre for International Science and Technology Exchange

Established in 1980 to commemorate Norbert Wiener, the founder of cybernetics, the Norbert Wiener Award is funded by SMCS through an endowment administered by the IEEE Foundation. It has become the most esteemed recognition in the domain of systems

and cybernetics and is awarded to only one individual annually.

(Source: Official WeChat account of the China Centre for International

Science and Technology Exchange)

Scientist Profile

Zheng Shouyi' s obsession with foraminifera



Born in 1931, Zheng Shouyi is a distinguished marine biologist and a member of the Chinese Academy of Sciences. She serves as a research fellow at the Institute of Oceanography within the Chinese Academy of Sciences (CAS). For many years, Zheng has specialized in the classification and ecological analysis of modern foraminifera across various marine regions in China. Her work laid a foundation for and greatly advanced the field of modern foraminifera classification and ecology in China. She has received numerous accolades including China's National Model Worker award, the Joseph A. Cushman Award for Foraminiferal Research Excellence, and a Lifetime Achievement Award from the Paleontological Society of China (PSC).

Zheng Shouyi meticulously crafting a foraminifera model
Photo credit: Official website of CAS

Foraminifera are characterized by an “aperture” in their shells. Most have sturdy shells composed of calcium or cement-like materials, allowing them to remain intact in geological strata long after the organisms perish. Due to their

enduring nature, foraminifera play a crucial role in various scientific domains including biostratigraphy, paleoceanography, paleoclimatology, and petroleum exploration.

In 1956, as China formu-

lated its inaugural long-term scientific and technological development plan, the study of modern foraminifera was introduced. Since the 1960s, Zheng had spearheaded foraminifera research, working with fellow experts to estab-

lish China's first modern foraminifera laboratory.

Correcting mistakes in previous research

To stay updated with the most recent developments and methodologies in foraminifera research, Zheng accumulated and thoroughly studied a vast collection of international literature and documents by leveraging her English fluency and overseas family members.

She painstakingly prepared samples collected from diverse monitoring sites across multiple seas. This involved drying, weighing, rinsing, and treating them chemically. Under a binocular microscope, Zheng would then identify the species, detail their physical features, and sketch illustrative representations. Moreover, she carefully counted the various foraminifera specimens, paving the way for a detailed analysis of their

populations and dispersion across different oceanic regions.

Zheng's rigorous studies enabled her to address ambiguities and rectify misunderstandings in prior research. Notably, while analyzing foraminifera samples from the Xisha Islands in 1978, she identified vertical dividers in their compartments. This discovery led her to introduce a new genus, *Septotextularia*. This corrected past misclassification, which had inaccurately labeled foraminifera as *Textularia* due to a supposed absence of dividers in their shells.

Winning recognition from the international community

Zheng's research has gained significant acknowledgment from the global foraminifera research community. Esteemed academic institutions from countries such as France, Switzerland, Germany, and Japan have extended

invitations to her to share her findings, where she has garnered widespread acclaim. Notably, she was the sole international honorary committee member at the 4th International Symposium of Benthic Foraminifera (BENTHOS '90) in Sendai, Japan.

Her books, *Cementation and Porcelaneous Foraminifera in the East China Sea and Modern Foraminifera of the Xisha Islands*, have received widespread commendation. Prominent foraminifera researchers Professor Alfred R. Loeblich Jr. and Professor Helen Niña Tappan Loeblich from the United States lauded her work for its meticulous illustrations and descriptions, calling them indispensable references. "This work is exemplary and is poised to become a classic for years to come," Loeblich commented. "The quality of its morphological and thin section depictions is exceptional."

Age hasn't deterred Zheng's commitment. While many perceive foraminifera research as monotonous, she finds

immense satisfaction in it. Reflecting on her journey, she remarked, "Foraminifera have given me unparalleled

joy, and that's the most fulfilling reward."

(Source: Official WeChat account of Voice of CAST)

Upcoming Conferences

2023 (3rd) International Conference of Non-Ferrous Materials (ICNFM)

 **Dates:** November 17-19, 2023

 **Location:** Nanning, Guangxi Zhuang Autonomous Region, China

 **Host:** Nonferrous Metals Society of China (NFsoc)

 The conference, themed "Collaboration and Innovation for Self-reliance and Strength in Science and Technology," will host over 10 academy members and more than 400 experts from diverse fields. It will offer multiple formats for engagement including keynote speeches, breakout sessions, poster presentations, and exhibitions. Spanning 24 sub-forums, discussions will delve into subjects like environmental materials, structural materials, functional materials, and design, preparation and evaluation of materials.

 **For more information, visit:** <https://member.ysjszk.com:8888/#/signUp/signUpInformation?id=84&modularId=80>

The 5th World Science and Technology Development Forum (WSTDF)

 **Dates:** November 23-25, 2023

 **Location:** Shenzhen, Guangdong Province, China

 **Hosts:** China Association for Science and Technology, Chinese Academy of Sciences, Chinese Academy of Engineering, Guangdong Provincial Government, and Shenzhen Municipal Government.

 The forum, themed “Openness, Trust, and Cooperation,” will address pressing global strategic issues. It aims to foster meaningful interactions that integrate technology with economy, society, and culture. Through these efforts, the forum aspires to make a meaningful contribution to the Global Development Initiative and the building of a global community of shared future.

 **For more information, check out:** <https://www.wstdf.com.cn/>

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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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