



Bimonthly Newsletter

2 Taipei Tech 111th Anniversary

Taipei Tech Celebrates 111 Years, Conferring Honorary Alumnus to Taiwan Vice President and Honorary Degree to Entrepreneur Alumnus

3 Renovated Underpass Now Incorporates Public Art Space, Showcasing Taipei Tech's Past and Present

4 Talents

At New College Unveiling Ceremony, President Tsai Commends Taipei Tech for Strengthening Taiwan's Competitiveness

5 Excellence

Taoyuan Mayor Cheng Wen-tsan Awarded Taipei Tech Distinguished Honorary Alumnus

6 Global

Taipei Tech Restarts International Visits to Strengthen International Partnerships

7 American Instructors Embedded in Taipei Tech EMI Courses through Fulbright Taiwan

8 SDGs Special Report

Eco-friendly Oyster Shell Brick Earns Certification



Taipei Tech Post

National Taipei University of Technology



Conferring Honorary Alumnus to Taiwan Vice President and Honorary Degree to Entrepreneur Alumnus



At the celebration ceremony, Taiwan Vice President Lai Ching-te was declared a distinguished honorary alumnus of Taipei Tech



Lin Bao-zhang, founder and Chief Strategy Officer of INTAI Technology Corp., was conferred an honorary doctorate degree to honor his contribution to Taipei Tech and to Taiwan's precision metalworking industry

Taipei Tech celebrated its 111th anniversary on October 29th. At the celebration ceremony, Taiwan Vice President Lai Ching-te was declared a distinguished honorary alumnus of Taipei Tech as an appreciation for his contribution to Taiwan's technological and vocational education and overall national development.

Wang Sea-fue, Taipei Tech President, indicated that the university is very honored to make Vice President Lai one of its distinguished alumni. "With so many great leaders and talents supporting Taipei Tech," said Wang, "we will continue to thrive and strive for excellence and sustainable growth."

In his address, Lai indicated that Taipei Tech has nurtured many talents and facilitated industry development for over a century. He pointed out that Taipei Tech has been on the list of the top 500 global universities and the top 100 Asian universities for three consecutive years. Taipei Tech faculty members have also been awarded the National Award for Distinguished Contribution to Industry-Academic Cooperation for four consecutive years. "These outstanding achievements show Taipei Tech's restless endeavor to pursue greatness," Lai asserted. "I missed the chance to be one of the students of Taipei Tech, but now I can finally declare that I am also a part of this big and outstanding family."

At the ceremony, Lin Bao-zhang, founder and Chief Strategy Officer of INTAI Technology Corp., was conferred an honorary doctorate degree to honor his contribution to Taipei Tech and to Taiwan's precision metalworking industry. Lin graduated from the two-year mechanical engineering program at the Provincial Taipei Institute of Technology (predecessor of Taipei Tech) in 1973. In 2004, he founded INTAI Technology Corp. The company is a manufacturer of precision metal parts for domestic medical equipment; it is one of the top five suppliers of metal processing products in the world. Through INTAI, Lin regularly donates teaching equipment to Taipei Tech, and he has contributed significantly to school development funds and scholarships. Due to Lin's leadership, Taipei Tech also has an internship program with INTAI.



Renovated Underpass Now Incorporates Public Art Space, Showcasing Taipei Tech's Past and Present

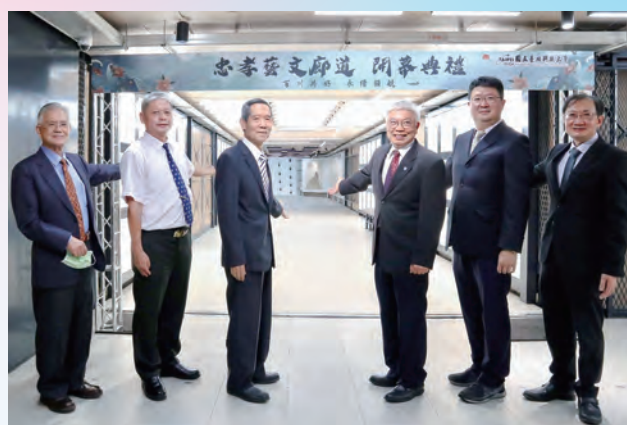
The renovation and extension of the underpass underneath Zhongxiao East Road, connecting Taipei Tech's main campus to the new Pioneer International R&D Building, has recently been completed. In addition to serving as a passageway, the underpass has also been transformed into an art display space, showcasing the history and prospects of Taipei Tech.

The unveiling ceremony of the underpass took place on October 27. Alumni and representatives from neighboring communities gathered to celebrate this special occasion.

Wang Sea-fue, Taipei Tech President, indicated that the university made great efforts to seek the building permit from the Taipei City Government for this project, especially on extending the underpass. "By connecting the new Pioneer International R&D Building and the Administration Building," said Wang, "we hope to provide a safer and more convenient passageway for our students and faculty members."

Wang noted that the school's sports field was originally located in the place which is now Zhongxiao East Road, and the Pioneer International R&D Building location was previously occupied by a student dormitory. In the 1970s, the Taipei City Government built Zhongxiao East Road over the sports fields and therefore divided the Taipei Tech campus.

To keep the memory of the old campus and to document the changes caused by Zhongxiao East Road, Chen Han-hsiu, professor of the Department of Cultural Vocation Development, and a group of students curated a photography exhibition, juxtaposing old and new photos of the campus through montage and collage. Many of the winning photos of Taipei Tech's "A Big Corner: University Anniversary Photos Contest" are also exhibited in the new underpass. Wang indicated that the underpass encompasses the historical, cultural, and innovative aspects of Taipei Tech, and it is now a space for students and faculty to display their latest projects.



Alumni and representatives from neighboring communities gathered to participate in the unveiling ceremony of the underpass

President Tsai indicated that iFIRST College has secured resources from sixteen industry partners, making it one of the most resourceful interdisciplinary colleges in Taiwan



At New College Unveiling Ceremony, President Tsai Commends Taipei Tech for Strengthening Taiwan's Competitiveness

Taipei Tech held the unveiling ceremony of its new iFIRST College on September 27th. President Tsai Ing-wen attended and gave remarks at the ceremony. iFIRST is the education branch of the newly established Frontier Institute of Research for Science and Technology (FIRST). The goal of iFIRST is to allow innovative ideas to flourish by providing interdisciplinary programs.

Other guests present at the ceremony included Yen Chih-fa, Senior Advisor to the President; Yao Leehter, Examination Yuan Minister without Portfolio; Lio Mon-chi, Deputy Minister of Education; Chiueh Herming, Deputy Minister of Digital Affairs; Hwa Yu-chien, Deputy Minister of National Development Council; and Chen Tzong-chyuan, Deputy Minister of National Science and Technology Council.

In her address, President Tsai indicated that Taipei Tech is one of Taiwan's most prestigious technological universities, and she praised Taipei Tech's endeavors in talent cultivation and advancing Taiwan's economy and industrial development. She further commented that iFIRST College has secured resources from sixteen industry partners, making it one of the most resourceful interdisciplinary colleges in Taiwan. Tsai believes that the collaboration between Taipei Tech and its partners will strengthen the competitiveness of Taiwan's key industries.

Wang Sea-fue, Taipei Tech President, noted that the iFIRST College will take advantage of FIRST's industry-university cooperative platform to provide education programs that teach high-demand, high-mobility skills. "The new college will focus on the key areas of Taipei Tech, such as artificial intelligence and semiconductors," said Wang, "and we plan to roll out master's and PhD programs in artificial intelligence and information security and credit programs in semiconductor technology. We will also keep program materials up-to-date to attract outstanding students to join the programs."

Su Chao-chin, Dean of the iFIRST College, indicated that the new college puts great emphasis on hands-on training, internship, and practical problem-solving skills. "Through working with ELAN Microelectronics, AU Optronics Corporation (AUO), Delta Electronics, Chicony Electronics, Fwusow, Sunbird, and many more renowned enterprises, students will be able to acquire skills in high demand and stay current with the evolving market trend," said Su.



President Tsai Ing-wen and honorable guests attended the iFIRST College unveiling ceremony



Taoyuan Mayor Cheng Wen-tsan was awarded Distinguished Honorary Alumnus of Taipei Tech at a ceremony held on October 13

Taoyuan Mayor Cheng Wen-tsan Awarded Taipei Tech Distinguished Honorary Alumnus

Taoyuan Mayor Cheng Wen-tsan has been one of the greatest supporters of Taipei Tech. He has contributed to the successful affiliation between Taipei Tech and Taoyuan Agricultural & Industrial Senior High School, the establishment of Taipei Tech Taoyuan EMBA program, and Taipei Tech's collaboration with Taoyuan City Government on Hutoushan Innovation Hub and the Smart and Green Industry Base.

To honor his contributions, Cheng was awarded Distinguished Honorary Alumnus of Taipei Tech at a ceremony held on October 13. Guests present at the ceremony included Yen Chih-fa, Senior Advisor to the President; Yang Yu-huei, Director-general of the Ministry of Education Department of Technological and Vocational Education; Wang Shih-hsiung, T&T Industries Corporation Chairperson; Chang Jui-mei, Taipei Tech Alumni Association President; and Paul SL Peng, AU Optonics Corporation Chairperson.

Taipei Tech President Wang Sea-fue indicated that Cheng has been very supportive of Taipei Tech and is already an honorary alumnus of the Taipei Tech EMBA program. "Mayor Cheng facilitated many academia-industry cooperation and talent-cultivation projects between Taoyuan City Government and Taipei Tech," said Wang, "making Taipei Tech a member of the Asia Silicon Valley Development Plan." Mayor Cheng's endeavor enables Taipei Tech to expand its influence and to educate more students.

Cheng noted that, although Taipei Tech does not have a large campus, its alumni have nevertheless contributed greatly to the economic growth of Taiwan. "The Taoyuan City Government will continue to be a supportive partner of Taipei Tech on promoting university social responsibility, innovative research and development, industry and academia cooperation, and sustainable growth."

The ceremony also unveiled the new auditorium recently rebuilt with a generous donation made by Wang Shih-hsiung, Taipei Tech alumnus and T&T Industries Corporation Chairperson. Wang is also a great supporter of Taipei Tech. He has been providing scholarships for Taipei Tech students and regularly donates to upgrade campus infrastructure.

Taipei Tech Restarts International Visits to Strengthen International Partnerships

After nearly three years of travel restrictions, Taipei Tech has recently loosened the regulations and allowed for more international visits. Delegations of university management have recently visited global partners in Japan and the US, strengthening international relationships and securing more opportunities for students and faculty members.

In early October, Taipei Tech President Wang Sea-fue, Vice President Yang Shih-hsuan, and Dean of Research and Development Chuang Ho-chiao visited Japan to discuss future cooperative strategies. They met with representatives from Tohoku University, Kyushu University, and Osaka Institute of Technology (OIT), all with positive feedback.

President Wang indicated that Tohoku University, Kyushu University, and OIT have been long-term partners with Taipei Tech. "Both President Hideo Ohno of Tohoku University and I shared the same sense of excitement and joy as it was the first time after three years that we were able to meet in person," said Wang.

Tohoku University and Taipei Tech are now planning for more joint research projects and are co-hosting a joint symposium in November. Kyushu University and Taipei Tech will broaden cooperation in the fields of design, sustainability, artificial intelligence, material science, and energy, aiming to establish a stronger partnership and a closer exchange network. With OIT, Taipei Tech will continue cooperating on the Problem-Based Learning (PBL) program, which has provided students a competition platform for cross-field, cross-disciplinary, and cross-border learning.

On October 16th, President Wang, Vice President Thomas C.K. Yang, and Dean Chuang, visited The Pennsylvania State University (Penn State), to discuss joint research and education programs in the fields of energy and semiconductors. During this visit, Neeli Bendapudi, President of Penn State, and Wang also signed MOUs of dual degree programs in computer science & information engineering and interaction design. The Taipei Tech delegation paid a visit to Penn State's most pivotal research institute—the Three-Dimensional Ferroelectric Microelectronics (3DFeM) and Materials Research Institute.

President Wang mentioned that, as an alumnus of both Penn State and Taipei Tech, he has been actively seeking collaboration opportunities between the two universities for years. "Taipei Tech and Penn State will continue to offer various dual-degree programs and provide fundings to support faculty's joint research projects," said Wang.

The US National Science Foundation has funded both universities to implement a student exchange program. Sixteen graduate students from Penn State will come to Taipei Tech to learn about developing next-generation displays and to participate in an internship program at AU Optronics (AUO), the world-renowned panel manufacturer.



To promote bilingual education and EMI (English-medium instruction) programs, Taipei Tech and the Ministry of Education are working with the Foundation for Scholarly Exchange (Fulbright Taiwan) to bring in native English speakers with professional knowledge to campus. Five American instructors who participate in this Fulbright program will be staying at Taipei Tech and helping in various courses where English is the medium of instruction.

Yang Shih-hsuan, Taipei Tech Vice President, indicated that the university has been taking initiatives to increase the number of English-based graduate programs since 2016, even before MOE rolled out the Bilingual Education Program. "Currently, our College of Engineering and College of Management provide more English-taught courses than what MOE requires," said Yang, "Taipei Tech is aiming to become one of the model universities that widely implements EMI."

The MOE Bilingual Education Program allows Taiwanese universities to apply for funding to invite professional native English speakers to their campus.

America's flagship international exchange program, the prestigious Fulbright program is managed globally in collaboration with 49 binational Fulbright Commissions and more than 100 U.S. embassies in 160 countries.

Kelly Chang, Director of Fulbright Taiwan English Language Teaching Programs, indicated that there are eighty-one Fulbright English language teaching projects throughout the world, and Taiwan has the largest number of them. Fulbright Taiwan has held eight workshops with Taipei Tech, and the Fulbright English instructors at Taipei Tech will provide consulting services and additional English learning workshops, hoping to engage more students and faculty in an English-speaking environment.

Hwang Yuh-shyan, the Taipei Tech Provost and the Director of Bilingual Learning Center, noted that, through the Fulbright program, Taipei Tech will be sending ten faculty members for intensive EMI training at the University of California San Diego next winter. Taipei Tech has also been working with Penn State to improve and innovate teaching materials and methods. "We actively work toward Taiwan's bilingual education goal, hoping to establish the best practice of EMI teacher training," said Hwang.

American Instructors Embedded in Taipei Tech EMI Courses through Fulbright Taiwan





From left, National Taipei University of Technology associate professor Shao Wen-cheng, professor Cheng Ta-wei and assistant professor Lee Wei-hao hold a brick made from oyster shells and furnace slag



Eco-friendly Oyster Shell Brick Earns Certification

Article courtesy *Taipei Times* (Staff writer, with CNA), Oct 02, 2022

An eco-friendly brick made from oyster shells and furnace slag that was the brainchild of academics at National Taipei University of Technology has earned Cradle to Cradle (C2C) certification for being safe, circular and responsibly made.

The brick was an innovation of Shao Wen-cheng, a lecturer in the university's Innovative Green Building Materials Research and Promotion Center, and Cheng Ta-wui and Lee Wei-hao, who teach in the Institute of Mineral Resources Engineering, the university said in a news release on Friday.

They mix powdered oyster shells, slag from a steel plant's blast furnace and lye, and put the mixture in a mold to produce the bricks, the research team said.

It is one of the first times anywhere in the world that a patented university product has gained C2C certification, the university said.

During a visit to Makung Junior High School in Penghu County in 2019 to raise awareness of circular economy concepts, Shao discovered piles of oyster shells abandoned by local oyster farmers outside the campus, he told reporters in a telephone interview.

Chuang hao-chih, the junior-high school's director of general affairs who was guiding Shao during his visit, said that the shells were trash, but the professor saw value in them, Shao said.

"To me, those shells were not garbage. They were actually building materials," he said.

To demonstrate how the circular economy works, Shao asked

Chuang to send him the shells, from which the team made bricks and sent them back to Chuang to use at the school.

Shao had other bricks from the project evaluated by organizations that specialize in sustainability, including the Green Building Materials Mark and the Taiwan branch of the Environmental Protection Encouragement Agency.

It was their positive feedback and the support of Kuo Yang Construction that encouraged the team to apply for top-tier C2C certification, he said.

C2C assesses the safety, circularity and responsible use of materials across five categories: Material health, product circularity, clean air and climate protection, water and soil stewardship, and social fairness, the Cradle to Cradle Products Innovation Institute's Web site says.

The brick was awarded a bronze label, the fourth-highest on a five-tier scale of overall circularity.

Compared with conventional bricks, which require a lot of electricity in a process that is carbon emissions heavy, the shell brick stood out because it takes much less water, power and carbon to produce, the team said.

A downside is that the shell brick costs more than a standard brick to produce, but the team said the cost gap would narrow if it is mass produced.

Taiwan produces more than 100,000 tonnes of waste oyster shells a year that could be used to make the eco-friendly bricks, the university said.

