

2020

Production, Living, Ecology, Lives



Central Taiwan Science Park Annual Report



Public art at Taichung Park

Window View of Life – On Top of the Tree of Butterflies

By David Gerstein (2015 / stainless steel, fluorocarbon paint)

A white tree with hand-painted butterflies epitomizes the bio-diversity and the rhythm of Dadu Mountain's ecology, symbolizing the coexistence of production and ecology while echoing CTSP's goal of maintaining a balance between the four elements of production, living, ecology, and lives.



2020





AN INCLUSIVE, CREATIVE AND SUSTAINABLE CTSP

In early 2020, Central Taiwan Science Park moved into a new era after it relaxed restrictions on types of enterprises and the word "industrial" was removed from its official Chinese name.

During the same year, global trade plummeted due to the enormous impact of the coronavirus pandemic. Yet, Taiwan's very successful containment of the virus has provided great opportunities for the nation's economy to grow. The Park's annual revenues reached NT\$936 billion, a 17.4% increase from 2019, and it now has 219 tenant companies with a total investment of over NT\$2 trillion and employing more than 50,000 people—all record-high figures. For tenants businesses that have been negatively impacted by the crisis, we have also implemented rescue plans in line with the government's policy to tide them over.

In 2020, the Biomedical Industry Innovation Program, From IP to IPO (FITI) Program, Strengthening Regional Cooperation - Promoting Smart Machinery and Aerospace Industry Upgrade Program, and AI Robotics Hub Program were implemented to coach startup teams, upgrade cutting-edge technologies within industrial supply chains at the Park, and continue creating intelligent technology applications.

In 2020, CTSP's Taichung Park was certified as Taiwan's fifth Diamond-Grade ecological community with green buildings. Our corporate social responsibility report received the Platinum Taiwan Corporate Sustainability Award (TCSA), a supreme honor. Information about the ecology at the campus was also published in the book *The Book of Butterflies, Dragonflies, and Birds Hovering Science Park*. All of these achievements showcase CTSP's long-term commitment to environmental protection, social benefits and sustainability.

In anticipation of 2021, CTSP will help industries upgrade key technologies, facilitate industry-university cooperation, develop talent, and foster innovation, entrepreneurship and industrial transformation in a sustainable way under six core strategic industrial policies. At the same time, it will accelerate business recruitment and development in Erlin Park to create an industrial cluster effect at the Park and move toward a sustainable CTSP.

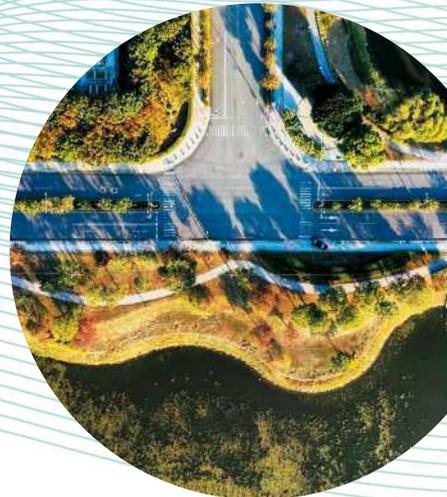
Director-General, CTSP Bureau
March, 2021

Maw-Shin Hsu



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FIGHT AGAINST AND DEFEAT THE PANDEMIC

Upgrading and Transforming for a New Start

In response to the latest high-tech industry developments, the Organization Act of the Central Taiwan Science Park Bureau, Ministry of Science and Technology was amended according to a Ministry of Science and Technology (MOST) proposal, with the word "industrial" removed from the Chinese titles of Taiwan's science parks in an effort to upgrade and transform these parks into places where next-generation innovations can be made possible. That means these science parks are no longer production-oriented but, rather, oriented towards science, innovation, forward-looking technology and value. They are meant to attract various innovation and research entities in order to form bases for innovation and startups, helping upgrade and transform Taiwan's technology industries. On Feb. 5, 2020, Director-General Maw-Shin Hsu of the CTSP Bureau (hereinafter referred to as "the Bureau") and former Allied Association for Science Park Industries Chairman Kuo-Jung Shen unveiled the Park's new sign, which symbolizes efforts to become a NT\$ trillion science park, attracting a wide range of innovation and research-based institutes to become a high-tech hub.



The CTSP Bureau Director-General Maw-Shin Hsu (sixth from left), former Allied Association for Science Park Industries Chairman Kuo-Jung Shen (sixth from right) and Vice Chairman Kuo-Chou Tsai (fifth from left) unveils the Park's sign

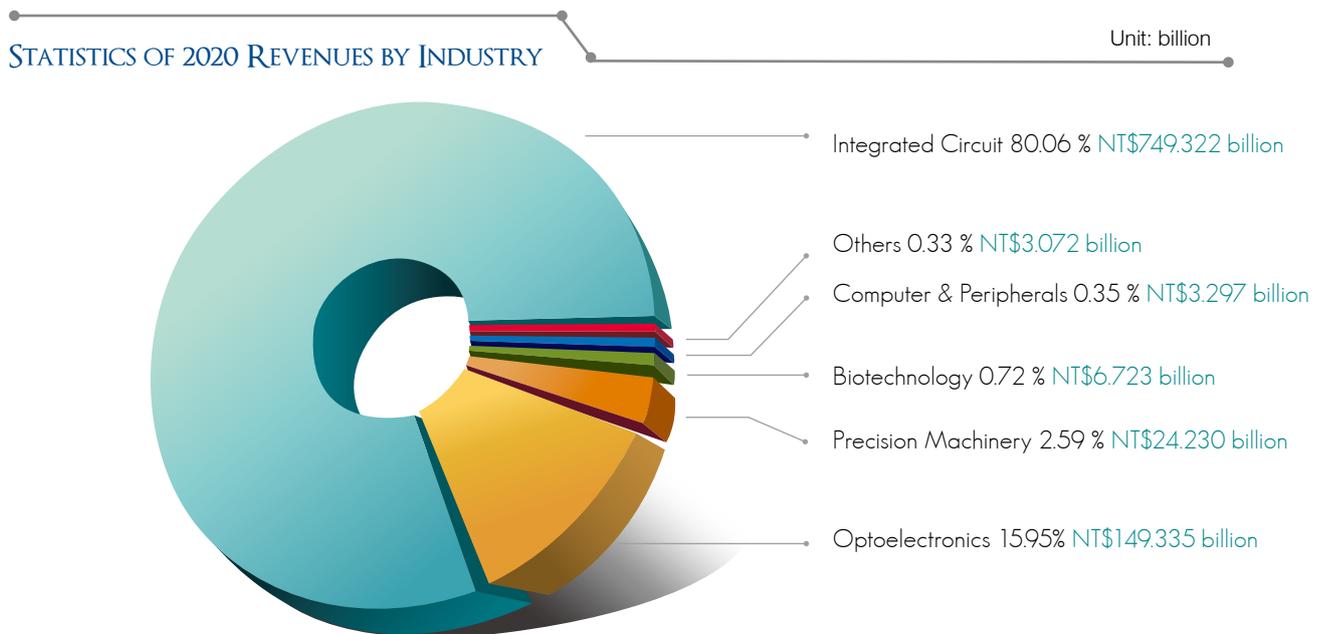
Another Record High in Revenues

Total 2020 revenues generated by all Park tenants hit another record high of NT\$935.979 billion, a 17.40% growth from 2019's NT\$797.232 billion. This was mainly attributed to the growing demand for 5G, artificial intelligence (AI), high-performance computing, automotive electronics, mobile devices, and servers. A steady flow of incoming orders for high-end chips also boosted the revenues of tenants in the semiconductor supply chain, from wafer foundries and memory manufacturers to packaging and testing services providers, thereby boosting Park revenues.

The IC industry contributed the largest share of 2020 Park revenues, generating approximately NT\$749.322 billion (80.06%), followed by the optoelectronics industry with approximately NT\$149.335 billion (15.95%), precision machinery industry with approximately NT\$24.230 billion (2.59%), and other industries with approximately NT\$13.092 billion.



The CTSP Bureau Building



STATISTICS OF CTSP EXPORTS & IMPORTS IN THE LAST TWO YEARS BY INDUSTRY.

Unit: billion

Industry	Exports		Growth rate (%)	Imports		Growth rate (%)
	2019	2020		2019	2020	
Integrated Circuit	313.46	400.80	27.86	134.67	127.24	-5.52
Optoelectronics	111.62	115.46	3.44	9.82	8.90	-9.32
Precision Machinery	16.30	15.57	-4.48	2.54	6.63	161.24
Computer & Peripherals	2.74	2.61	-4.96	0.53	0.87	64.00
Biotechnology	2.86	3.02	5.75	0.28	0.48	70.42
Others	0	0.05	0	0.25	0.09	-64.73
Grand total	446.99	537.52	20.25	148.11	144.24	-2.62

STATISTICS OF CTSP EXPORTS & IMPORTS IN THE LAST TWO YEARS BY COUNTRY.

Country	Exports		Growth rate (%)	Imports		Growth rate (%)
	2019	2020		2019	2020	
China (Including Hong Kong)	229.58	298.32	29.94	10.37	15.66	50.96
Singapore	144.32	147.96	2.52	19.60	16.12	-17.73
South Korea	22.16	33.58	51.51	18.80	41.70	121.81
United States	9.12	12.01	31.73	43.27	24.95	-42.34
Japan	10.23	11.38	11.24	30.41	27.19	-10.57
Others	31.56	34.25	8.54	25.64	18.59	-27.50
Grand total	446.99	537.52	20.25	148.11	144.24	-2.62

Park Trade Volume Keeps Growing Under Pandemic

In 2020, CTSP's total imports and exports reached NT\$681.766 billion, a 14.56% growth from 2019. Exports were approximately NT\$537.526 billion, a growth of 20.25% from 2019, while imports reached approximately NT\$144.24 billion in a 2.62% decrease from a year earlier. In 2020, exports exceeded imports by NT\$393.286 billion.

Major export partners were China (including Hong Kong) (55.5%), Singapore (27.53%) and South Korea (6.25%), while the major import partners were South Korea (28.91%), Japan (18.85%) and the United States (17.3%).

Despite the huge impacts of COVID-19 and the US-China trade war on the global economy in 2020, the work-from-home economy continued to expand. The Park's semiconductor supply chain experienced a growing demand for advanced key process applications and operated at full capacity with an abundance of incoming orders waiting to be filled. The relatively high value and competitive edge created by the supply chain, plus the need for remote applications and 5G equipment, kept orders coming in. Looking to 2021, the growing need for emerging technology applications, technology tenants' development of various products, and the expansion of global markets

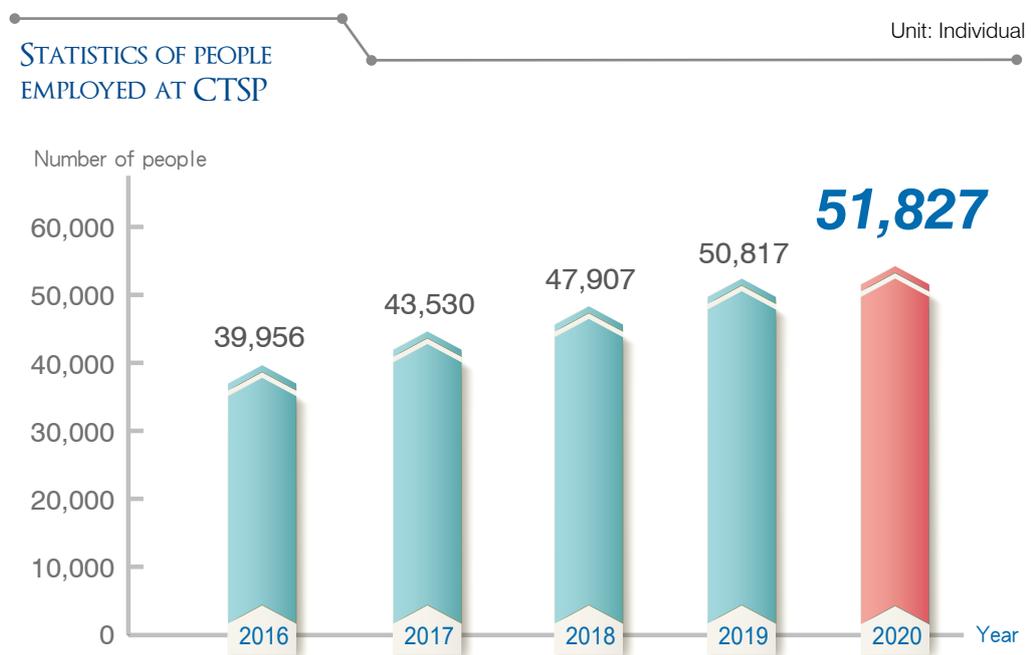
are expected to push up exports and keep the Park's trade volume growing at a steady pace.

Steady Growth in the Number of Tenants and Employees

As of 2020, CTSP had approved a total of 219 tenant firms, with 148 of these having registered for operation. Among these tenants, 37 companies are involved in optoelectronics, 92 in precision machinery, 43 in biotechnology, nine in integrated circuits, 17 in computers and peripherals, two in communications and digital content, and 19 in other park services. Consequently, highly competitive industrial clusters have taken shape in

the Park. Moreover, 14 research institutes and incubators have also moved in to provide an abundant industrial research and development capacity.

The number of people employed in the Park keeps growing and reached 51,827 in December, 2020 for an increase of 1,010 (1.99%) from 2019. Analyzing by industry, those involved in semiconductors account for the largest share 40.23%, of the Park's workforce followed by those working in optoelectronics (35.92%). By education, up to 77.05% of employees have a bachelor's or higher degree. When it comes to gender, males and females respectively make up 65.62% and 34.38% of the workforce.





Visiting Consumer Electronics Show (CEC) in the U.S.



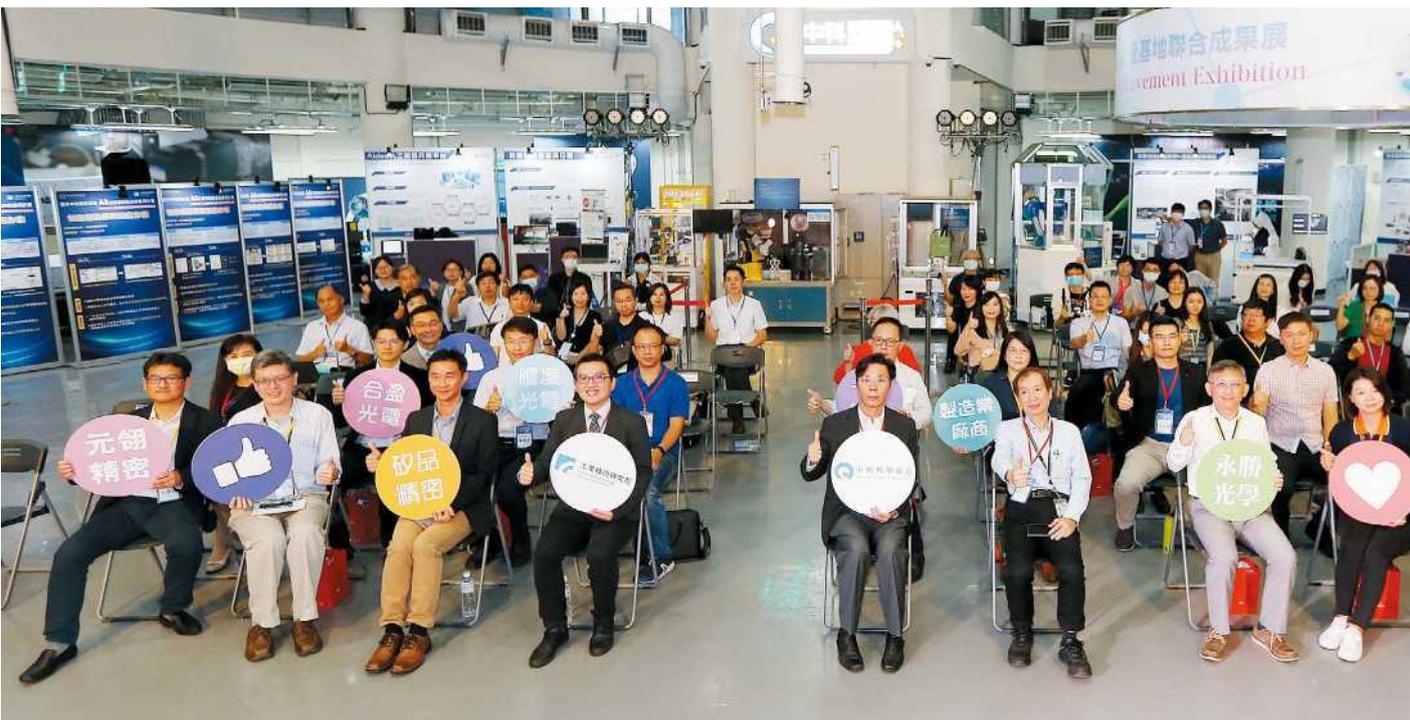
Explaining how to implement CTSP Smart Manufacturing Program

Seizing Opportunities and Attracting Businesses in US CES

CTSP participated in the world's largest tech event, Consumer Electronics Show (CES) in Las Vegas, Nevada on Jan. 7-10, 2020, together with its Startup Accelerator, tenant companies and startup teams in order to exhibit the Park's R&D strengths and advantages in technology. A joint business recruitment session was held at the event by Taiwan's science parks to attract foreign businesses by presenting the advantages Taiwan offers. Thanks to the briefing, the Industrial Technology Research Institute (ITRI), the implementation team of the Startup Accelerator at CTSP, signed a memorandum of cooperation with American accelerator 10X Innovation Lab in a bid to exploit international resources for startups and pave the way for Taiwanese startups to enter the U.S. market.

Smart Manufacturing R&D and Applications

To assist smart machinery makers in central Taiwan to upgrade and transform capabilities to become more competitive internationally and present what has been achieved in smart manufacturing, a seminar focusing on CTSP smart manufacturing was organized on November 20, 2020 with seven AI and smart manufacturing models developed by seven major manufacturers, including SPIL, H.P.B. Optoelectronics, Yung Sheng Optical, Chenfull International, Raystar Optronics, and Mosa.



Photograph of participants at the CTSP Smart Manufacturing seminar

Contest of Technology for Epidemic Prevention

To improve pandemic prevention measures, a robot competition was organized by CTSP on September 26, 2020 with a pandemic prevention theme. Students from schools and manufacturers specializing in mechanical arms, innovation and development, and the Internet of Things (IoT), were invited to join the event, including AI Academy, National Taipei University of Technology, Chaoyang University of Technology, and National Chiao Tung University. Park tenants like Delta, AU Optronics, Taiwan Fanuc, and Kingly Robot were also present to exchange ideas.

With the brainstorming of talents from different fields, the innovation of technology for epidemic prevention was able to be evoked. It also helped companies understand how and where to apply mechanical arm technology to pandemic prevention efforts. Hopefully, this event will have contribution to prevention measures in the post-pandemic era while building a stage for tech talent to shine.

FRC Science Park Taichung 5G Pilot Regional Sets a Precedent

Despite the Covid-19 pandemic, CTSP hosted the "2020 FRC Science Park Taichung 5G Pilot Regional" on November 7 and 8. It was the only FRC competition in the world that used 5G technology to overcome the pandemic and distance barriers. During the event, participants' self-made robots were required to complete



7632-An Kang High School and 7526-Kaohsiung Senior High School completed the designated mission--to suspend a machine in the air at the 2020 FRC Science Park Taichung 5G Pilot Regional

tasks with directions given via a control panel while others shouted and waved flags to boost the morale of their teams. Thanks to 5G, signal equipment and other technology provided by Chunghwa Telecom, the two-day event was broadcast live online to a global audience of about 20,000, allowing the world to see the perseverance and endurance of Taiwanese students.

Kaohsiung Municipal Chung-Cheng Industrial High School, National Nanke International Experimental High School, National Experimental High School (NEHS) at CTSP, New Taipei Municipal An Kang High School, Concordia Middle School, and Kaohsiung Municipal Kaohsiung Senior High School received Champion League Awards under different



Guests and participating groups at the CTSP Anti-Epidemic Robot Competition finale



Photograph of Acer Group founder and Honorary Chairman Stan Shih (first from left), Director-General of Department of Foresight and Innovation Policies, MOST, Kuo-Liang Chen (first from right) and the Excellent Entrepreneurship Award winning team AIDirect

categories. The enthusiasm of the participated teams had impressed the domestic and foreign judges, and the results from the efforts that CTSP made on the 3-year talent cultivation was able to be recognized.

Five Young Startups Win Excellent Entrepreneurship Awards

In 2020, CTSP coached 45 startup teams for the MOST-organized FITI competition had brought brilliant results 23 and 22 of these respectively came from the first and second batches in 2020. Five teams, including AIDirect, received the Excellent Entrepreneurship Award and a prize of NT\$2 million per team, while another eight teams, including Racclean Biotech, received the Entrepreneurship Potential Award and a prize of NT\$250,000 each 20 groups had started business. Moreover, 9 startups were introduced to the FITI space, and one of them had become the tenant of CTSP. CTSP had coached 31 teams for entrepreneurship contests, and those either received

awards or be elected to the government subsidy program. The Bureau also helped organize 15 startup matching sessions and helped startup teams raise the funds of over NT\$55 million.

At the FITI space, the Bureau provides all the elements needed for startups, including maker space, customized mentoring for business model planning, fund raising, industrial collaboration, and marketing. It is hoped such measures will allow innovations to drive industry to transform and fulfill the government's vision of Innovation, Inclusive and Sustainability.

AI Robotics Hub Smart Fire Fighting Robot Exhibition

The human centered AI Robotics Hub at CTSP was built to bring makers together and turn their creative ideas into reality with a focus on smart robots. Specifically, the



AI Robotics Hub at CTSP





Smart Fire Fighting Robot -- the AI-based water cannon system with a nozzle that automatically swings back and forth

Hub is intended to integrate robot hardware with software and innovative applications and nurture multidisciplinary robot talent as an incubation accelerator to accomplish four missions—Industrial Upgrades, Industrial Collaboration, Incubation & Acceleration, and Talent Development.

At the Smart Fire Fighting Robot Exhibition on September 21, 2020, one of the highlights was its lightweight feature, simple and intuitive user interface, which allows users to quickly adopt the right sensor to detect toxic gas at fire scene timely. AI visual recognition and remote control enhancement were introduced to automatically detect and track fire origin under low visibility so that fires can be extinguished accurately with high-pressure water jets. In the near future, the risk of injury of

the frontline firefighters will be reduced when applying this machine in the line of duty.

Result Presentation of Innovations in Precision Medicine

Targeting opportunities in precision medicine, CTSP actively assists and encourages its tenants to invest in research and development in this field with the goal of enhancing their strengths in developing high-end manufacturing and technology. During the press conference on August 25, 2020, GeneReach Biotechnology and Remax share their R&D results. GeneReach Biotechnology briefed their coronavirus testing kit as well as their exclusive automatic nucleic acid analyzer, which can deliver results in just 85 minutes. The product not only has been certified with in vitro diagnostic medical device in the European Union (CE-IVD), it is also the first nucleic acid detection kit in Taiwan that received approval from Ministry of Health and Welfare(MOHW) to carry out its production. Remax Medical Corp. develops their second generation Anatas spine surgery navigation systems that includes portable machines and mechanical arms, etc. The AI path planning and cloud data analysis will contribute a breakthrough on spinal surgery. This company has long been committed to the combination of medical manufacturing and robotics.



CTSP Director-General Maw-Shin Hsu (third from right), GeneReach Biotechnology Director Chuan-Fu Tsai(second from left) and Remax Director His-Chang Chiang (second from right) are presenting their achievements in precision medicine

INDUSTRY, GOVERNMENT, ACADEMIA AND RESEARCH SECTORS WORK TOGETHER FOR MORE INNOVATION

Strengthening Regional Cooperation— Promoting Smart Machinery and Aerospace Industry Upgrade Program

In line with Executive Yuan's policies, the Bureau implements the Smart Machinery Industry Program by providing R&D grants and coaching resources to the Park's tenants and those in supply chains, with the goal of encouraging various machinery and equipment manufacturers to invest in smart machinery and aerospace R&D. In 2020, a total of 62 companies visit the demonstration production lines installed under the program.. Six companies signed letters of intent for cooperation with research Institutes and 12 tenant companies were coached on technological upgrades. A total of NT\$42,085,000 (including NT\$10 million approved by Taichung City Government) was granted in six subsidies (including two R&D projects, three innovation projects and one local collaboration project), prompting the tenant firms to invest NT\$53,915,000 in R&D.



Distinguished guests at the industry-academia matching exchange conference



The winning team from NYUST was presented the prize by CTSP Deputy Director-General Wen-Fang Shih (second from left)

Accelerating Biomedical Industry Innovation Program

To promote the Biomedical Industry Innovation Program (BIIP) as directed by the Executive Yuan, the Bureau advocates the development of central Taiwan's biomedical industry, assists the industrial sector in exploring international markets, and encourages industry, academia, research and medical sectors to jointly invest in innovation and R&D through product and system development, market exploration grant, coaching and technology matching. In 2020, a total of NT\$32,206,000 was granted to 11 projects in the fields of smart assistive devices, minimally invasive surgery, and precision medicine. CTSP successfully coached three companies in establishing a presence in the Park, prompting its tenants to invest NT\$58,609,000 in R&D. 16 patent applications were filed and 315 employees received training.

CTSP Intelligent FITI Competition

The competition was held on May 30, 2020, centering

at smart machinery, smart medicine, and artificial intelligence. With the imagination and creativity of student teams from the invited universities, the ideas for innovative technology, products or services were therefore able to be explored. Through cultivating start-up teams new generation, we were able to bridge schools and industries to develop new technologies. By employing the strategy of "veterans lead cadets" to substantially fostered a new ecosystem of start-ups. The team from National Yunlin University of Science and Technology (NYUST) won the first place with the thermoplastic material which could be applied on designing pneumatically elastic clamping actuators.

To develop startup teams new generation, the 2020 CTSP FITI Competition was held on Oct. 31, 2020 as the second time with 17 teams passing the first trial. In the finals, the first place was awarded to MeansGood Agri-biotechnology, a company specializing in smart lighting products for plants which can identify growth of crops, monitor plant's health, and automatically control the lighting to reduce electricity expenses while improving crop quality and yields.

From IP to IPO (FITI) Program

Under the FITI program, 10 winning teams are selected every half year from 40 shortlisted teams after three rounds of competition to receive the Excellent Entrepreneurship Award with a prize of NT\$2 million for entrepreneurship, or the Entrepreneurship Potential Award with a prize of NT\$250,000 per winner. CTSP implements the program in line with MOST policies by providing startups with all of the necessary elements, including space, customized mentoring for business model planning, fund raising, industrial collaboration, and marketing, in the hope that innovations will prompt industrial transformation and help fulfill the government's vision of Innovation, Inclusive and Sustainability.

Photograph of CTSP Bureau Deputy Director-General Wen-Fang Shih (middle, front row) and the winning teams coached by CTSP





Photograph of CTSP Bureau Director-General Maw-Shin Hsu (fifth from right, front row), NCHU President Fu-Sheng Hsueh (fifth from left, front row), forum speakers, and distinguished guests from the industrial, academic and research sectors

CTSP Technology Forum and Association of the Industry, Academia and Training of Central Taiwan Science Park (AIATCTSP)

CTSP Innovative Technology Forum, focusing on smart machinery and innovative application development was organized on Sept. 18, 2020, with renowned smart machinery, related experts, and scholars from universities in Central Taiwan, including National Formosa University, National Changhua University of Education, National Chin-Yi University of Technology (NCUT), National Chung Hsing University (NCHU), National Yunlin University of Science & Technology, Tunghai University (THU), and Chaoyang University of Technology. Those institutions were invited to share their innovations and R&D results. Tachyon Intelligence Robot Company and Precision Machinery Research & Development Center shared their practical experience in smart machinery and innovative applications with participants, offering an understanding of various innovative smart manufacturing applications.

As one of the most important platforms to promote collaboration between industries, academia, and training institutes in Central Taiwan, the Association of Industry, Academia, and Training of Central Taiwan Science Park (AIATCTSP) has regularly organized forums, academic lectures, and large job fairs since its establishment in 2008. In recent years, it has united research resources among Central Taiwan industries, government, academia, and research institutes to continue facilitating industrial development in the region, and has joined innovation

activities hosted by industries and academia. In such ways, it indirectly promotes collaboration between academia and industries, integrates resources, and strengthens the competitiveness of high-tech industries in the region.

On Aug. 6, 2020, (CTSP Symposium on Development and Opportunities for Industry Transformation in the Post-Pandemic Era) was hosted with a focus on the impact of the pandemic and development of various industries in the Park. In-depth insights and perspectives from industry, government, academia and research sectors were shared, highlighting the challenges and opportunities facing the Park's tenants in the post-pandemic era.

General Director Meng-Zong Su of ITRI's Industry, Science & Technology International Strategy Center (ISTI) reported on industrial transformation, development and regional resource integration in the post-pandemic era, and put forward valuable suggestions regarding technological upgrades, development of tech talent, and regional industrial innovation and development for the Park's tenants. As the host of the forum, NCHU President Fu-Sheng Hsueh talked about the crisis and challenges that park manufacturers are encountering due to the pandemic, and how to respond and integrate resources within the park.

On Oct. 21, 2020, an industry-academia matching exchange conference themed on smart machinery innovation and applications was held, with representatives from the Footwear & Recreation Technology Research Institute, ITRI Intelligent Machinery Technology Center, and Taiwan Instrument Research Institute were invited to give a



Heated discussions at the industry-academia matching exchange conference titled Smart Machinery Innovation and Applications

presentation of their research capacity and technological resources. Smart machinery experts and scholars from Central Taiwan universities such as NCUT, NCHU, Hsiuping University of Science and Technology and THU were also present to showcase their R&D results in innovation, making this event an R&D matching platform for the academic and industrial communities. Many innovative technologies and practical experiences were shared, in addition to matching and exchanges between the two communities. It is hoped that such events promote industrial innovations and applications and technological upgrades in the Park, particularly in smart machinery, and facilitate talent development so that a virtuous circle be created through industry-university cooperation and the Park's tenants can gear up for smart manufacturing.

Connecting Biomedical & Optoelectronics Related Resources from Industry, Academia, and Research Institutes to Boost Commercialization

On Oct. 30, 2020, CTSP hosted an industry-academia matching exchange conference with representatives from

the National Center for High-Performance Computing (NCHC), Plastics Industry Development Center (PIDC), and ITRI's Electronic and Optoelectronic Research Labs were invited to give a description of their research capacity and technological resources. The winner of the Excellent Entrepreneurship Award under the 2020 From IP to IPO (FITI) Program Turing Certs was also invited to present blockchain technology. In addition, biomedical and optoelectronics experts and scholars from Central Taiwan universities such as NCHU, NCUT, National Chi Nan University and Feng Chia University were invited to publish their innovations and research results.

CEO Master Class

In order to facilitate exchanges among tenant companies and advance the development of smart machinery, the 2020 CTSP CEO Master Class Forum was held on Sept. 2, 2020, with DIGITIMES President Colley Hwang and Sunengine President Sheng-Fa Yeh invited to share their decades of experience in the industry. Using his own experience as a reference, Hwang talked about how to research, develop and apply technologies and start a business. He also shared his insights regarding business success and industrial trends, novel technologies, and the latest developments in global markets with a focus on smart machinery and smart manufacturing. Yeh shared various advanced manufacturing technologies, successful business experience, explore trends of smart machinery industry and how to instill new elements of smart manufacturing to facilitate the industrial upgrade. Both speakers offered their views on AI, smart manufacturing, digital transformation and changes in global industrial chains in the post pandemic, challenges and opportunities of Taiwan's industry, Taiwan industrial trends, and exchanged ideas with participants. More than 80 CEOs and representatives from tenant companies participated in the event and provided positive feedbacks.

Sunengine President Sheng-Fa Yeh (first from left), DIGITIMES President Colley Hwang (middle) and NCHU President Fu-Sheng Hsueh exchanges ideas with participants



CTSP Bureau Director-General Maw-Shin Hsu (middle), AIDC Vice President Shu-Yuan Huang (second from right), Shuz Tung Machinery President Tien-Tsai Chuang (second from left), Hantop Intelligence Tech. CEO De-Ming Liao (first from right), and Tan Kong Precision Tech Vice President Ya-Chen Hsu (first from left) sign a strategic alliance agreement for cooperation



CTSP-AIDC Strategic Alliance Creates New Landscape in Aerospace

The US-China trade war and coronavirus pandemic had brought great impacts on global supply chains and offered new blue ocean opportunities for the technology industry. In order to promote the Strengthening Regional Cooperation—Promoting Smart Machinery and Aerospace Industry Upgrade Program, CTSP encourages precision machinery and aerospace industries to upgrade technologies for key components and equipment modules through industry-academia collaboration. Since Aerospace Industrial Development Corporation (AIDC) and CTSP

are adjacent to each other. They introduces experience to advance the manufacturing and technology of aerospace and precision machinery relevant tenants and their supply chains through strategic alliance. An Aerospace Industry Development Strategic Alliance's letter of intent was signed by CTSP and AIDC on Dec. 11, 2020, creating a new roadmap for cross-field innovations.

NEHS Cultivates Scholarly Tech Talents

National Experimental High School (NEHS) at CTSP has come to its 11th year, which is a public experimental school that consists of Senior High Department, Junior High



Opening of the exhibition titled 2020 Transformation and Promotion of Cutting-edge Technology



Department, Elementary Education Department, Bilingual Department, Kindergarten Department and Babysitting Center. The Bilingual Department, is expected to start recruiting students from grade one to grade six in August, 2021.

Looking towards the future, the school hopes to emphasize on both technology and culture, immerse its students in the Park's innovative spirit, and teach them innovative concepts and methods as well as an appreciation for the arts. Adhering to the spirit of the 2019 Curriculum Guidelines of 12-Year Basic Education, NEHS aims to create an international, cultural, innovative and technological oriented learning environment and strives to be a green school of "Intelligence, Ecology, and Sustainability" that makes the development of tech talent with a cultural mindset its ultimate goal.

When it comes to Taiwan General Scholastic Ability Test (GSAT) performance, up to 80% of last year's 119 senior high graduates were among the nation's top 25% performers (47 score or higher). New students' registration rate of Senior High Department for test-free admissions was 100%, with half of incoming students performing well enough to be admitted to top high schools, a 7% growth from a year earlier. NEHS students also performed brilliantly in various ways:

1. Second Place at the Science Edge 2020, an international science fair hosted by University of Tsukuba, Japan
2. Full marks (990) on the TOEIC test
3. Full marks for a GSAT English essay (selected as an outstanding essay nationally)

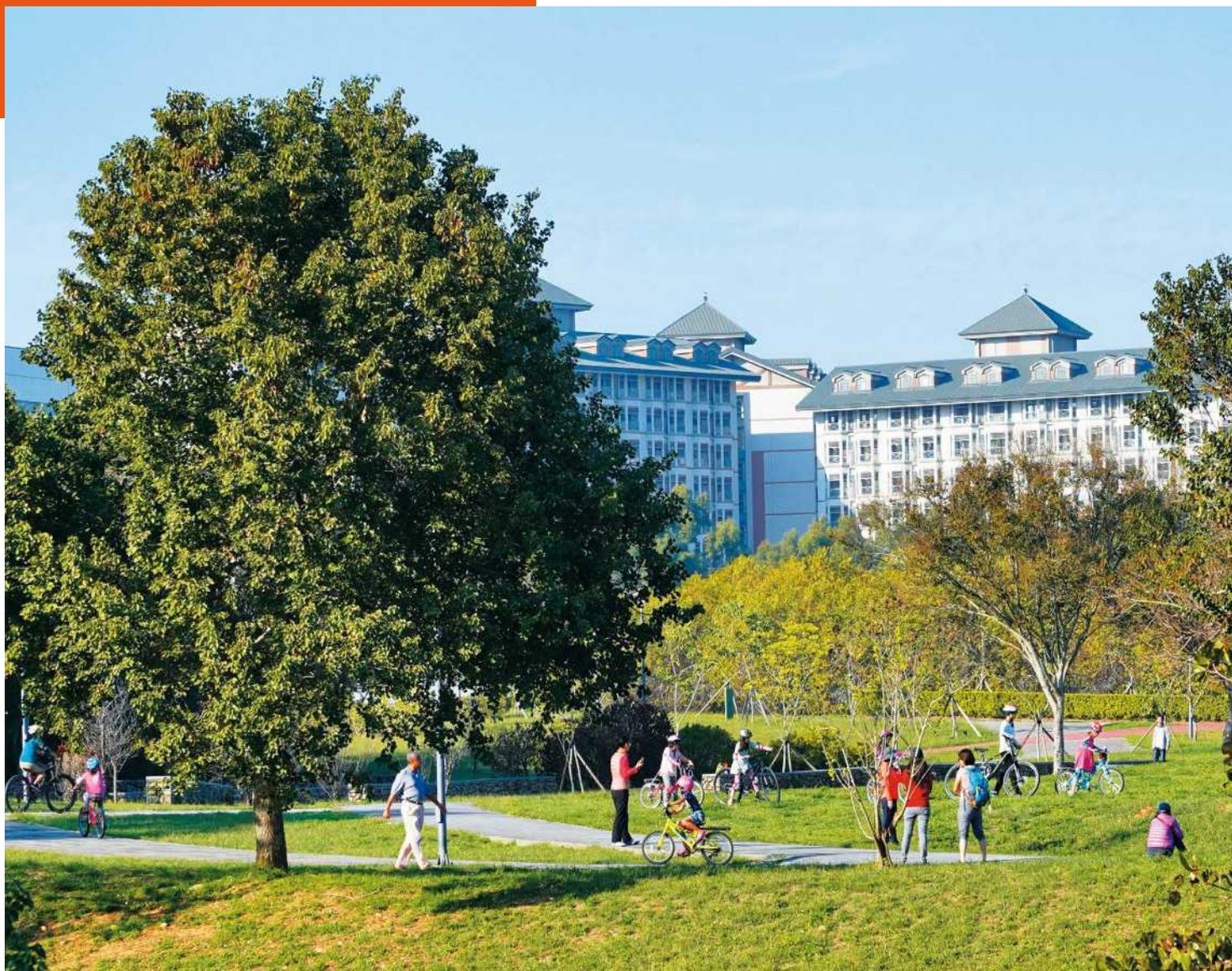
1. NEHS students admitted to universities through the Star Program
2. NEHS students visit a science comic exhibition
3. NEHS students wins fourth place at the National Biology Olympiad contest
4. Excellence Awards for violin solo and sheng instrument solo at National Student Music Competition
5. 2020 FRC Dean's List Award, the highest honor from the global FRC Headquarters
6. Fourth Place at International Biology Olympiad (qualifying for semi-finals)
7. Excellent performance at Taichung Primary and Secondary School Science Fair semi-finals with grants and training received

A FRIENDLY PARK WITH TECHNOLOGY- BASED SERVICES

Implementing Comprehensive COVID-19 Prevention Protocols in Line with Central Government Policy

In response to the coronavirus pandemic, CTSP implements COVID-19 prevention protocols in line with Central Epidemic Command Center (CECC) policies, as follows:

1. Implementing anti-coronavirus measures and business continuity planning: An emergency response panel was formed to convene all anti-COVID meetings, implement all preventive measures, and be connected to Taiwan Centers for Disease Control (CDC), Ministry of Health and Welfare and local department of health to communicate the latest developments and pandemic-related inquiries in real-time. The CTSP Administration Building, Industrial and Commercial Building, all public places, facilities and dormitories are thoroughly cleaned and disinfected, with anti-COVID preventive measures posted. Non-urgent or unnecessary face-



The body temperature detection system is installed at the hallway in the CTSP Bureau Building to automatically monitor people and employees passing by



to-face meetings are avoided or held via a conference call. Employees are required to manage their own health and take their temperature on a daily basis, with results recorded and reported by every unit. In addition, those traveling abroad are required to report and accept tracking. In the meantime, employees are required to work in different places and in different shifts. An inventory of core business, alternative places and relevant information, and security requirements are made.

2. Enhancing anti-COVID measures and providing COVID-19 updates internally and externally: An anti-COVID zone was established on the CTSP website to actively promote coronavirus preventive measures, the Park's medical hotline and the standard operating procedure for medical treatment, with a link to the website of CDC, MOHW. Furthermore, pandemic and precautions related information is actively provided to Park tenants via emails and the LINE app's Labor Safety Family community, made up of the CTSP Bureau and tenants.
3. Assisting tenants with coronavirus prevention and business continuity planning: A one-stop service has been put in place to assist communications and reports, assisting the tenants with responses.

A management mechanism was established by the tenants to provide personnel with coronavirus prevention education. Any confirmed case should be reported to CTSP, which will be reported to the MOST in accordance with regulations.

Tide Tenants over with a Rescue Plan

To alleviate the financial burden of tenants struggling to continue operations due to the COVID-19 pandemic, the Financial Rescue Plan for Science Park Companies to Counter COVID-19 was launched by MOST. This plan includes four parts—deferring or reducing land lease fees and plant rentals, deferring management fees, deferring wastewater fees, and reducing rents (royalties) for the service industry—in an effort to keep tenants afloat and continue industrial development at the Park.

Deferrals of wastewater fees can be applied from June

1, 2020 to June 20, 2021 (deferrals should be applied on a quarterly basis when fees are due). Payable fees can be deferred for a year and the payment can be divided into 12 quarters over three years from the end of deferment with no interest incurred. During the deferment and period when fees are paid in installments, no belated surcharges or interest will be incurred. Between Q2 and Q4 2020, applications for 23 fee deferrals were made (by eight businesses) with the deferred amount totaling NT\$124,015,000.

Deferrals of management fees can be applied from March 1, 2020 to June 30, 2021. For tenants whose revenue during the period decreases by more than 15% year on year, the management fee for the period can be deferred for a year by application. Payable fees can be deferred for a year and then paid in equal installments within a year after the deferment ends with no interest incurred. During the deferment and the period when the fees are paid in installments, no belated surcharges or interest will be incurred. Between March and December in 2020, 13 tenants applied for deferrals with the deferred amount totaling NT\$31,574,000.

In accordance with regulations concerning rent (royalty) reduction for service industry businesses as specified in the plan, catering businesses, and the personnel clinic whose operations were affected by the COVID-19 pandemic from January to June in 2020 are entitled to apply for a 50% reduction in rents (royalties) for up to four months. A total of one application was filed by one business, with the reduced amount totaling NT\$67,000.

CTSP has provided rent deferrals or reductions to tenants eligible for the Rescue Plan since the Regulations for Rent and Cost of Science Park Land took effect on May 29, 2020. As of the end of December, 2020, the number and value of applications was as noted below:

Deferral or Deduction of Land Lease Fees and Plant Rentals	Number of Applications	Amount Applied (NT\$ thousand)
Reduction by 20%	74	53,221
Deferment of 1 Year	3	6,216



1. The CTSP Bureau Director-General Maw-Shin Hsu (first from right) and Taichung City Government Labor Affairs Bureau Deputy Director Chun-Mu Luo (second from right) are inspecting the booths
 2. Business recruitment event at Chung Hsing Park (July 29, 2020)

Joint Recruitment through Face-to-Face and Video Interviews

To fill vacancies in the Park and among tenants, a joint CTSP job fair was co-hosted by CTSP and Taichung City Employment Services Office on Aug. 1, 2020 for over 700 job vacancies at 20 tenants, including AU Optronics, Taiwan Semiconductor Manufacturing Company (TSMC), and Micron Taiwan. Nearly 900 job seekers attended the event and the preliminary matching rate was almost 50%. Due to the COVID-19 pandemic, both face-to-face and video interviews were held by the tenants for recruitment. Moreover, resume health checks and career consultation services were offered at the event to help job seekers explore their career options and improve their chances of finding a job.

Strengthening Information Security

Being risk management oriented, CTSP's information security is governed on a rolling basis through the PDCA cycle for improvement. Information and communication security policies and regulations are modified annually based on risk assessment reports. Internal and external audits are implemented regularly with inspections

conducted by the competent authority, with third-party certifications (ISO 27001 / BS10012 certifications, still valid) obtained to provide good protection of personal information privacy.

In order to improve overall information security, protection mechanisms such as web/network firewalls, intrusion detection/defense equipment, anti-virus gateways, and government configuration benchmarks (GCB) were introduced, with security inspections, information security health checks, and threat management and monitoring performed to prevent network security loopholes and ensure the security of network communication.

Drill to restore an existing system with daily backups are performed for the sake of emergency response and business continuity. All employees are also educated and trained in information security to raise their awareness of information security and personal information protection. Afterwards, tests are given to assess the effectiveness of such education and training.

In response to new types of hacker attacks, an endpoint detection, and response mechanism will be installed in the future, assisting the organization in detecting and



Business recruitment event at Erlin Park



The newly-built plant of Yong Ju Precision Technology (Erlin Park)

responding to threats and intrusions in a timely manner, thereby minimizing the damage.

Attracting Excellent Businesses

Erlin Park focuses on precision machinery that consumes less water and emits fewer greenhouse gases. On Oct. 27, 2020, a business recruitment event was organized at Yuanlin by CTSP to invite businesses to Erlin Park, with over 100 potential tenants joining in the event. Bureau Director-General Maw-Shin Hsu, Executive Yuan Central Taiwan Joint Services Center Deputy Chief Executive Tsung-Yi Hung, Changhua County Deputy Mayor Rong-Zhang Hung, and Erlin Township Mayor Shih-Chieh Tsai also attended the event.

With over 100 hectares of land readily available, Erlin Park offers the most land for factories in Central Taiwan

at the lowest prices among Taiwan's three science parks, undoubtedly making it a top option for businesses.

Located at Nantou County's Chung Hsing New Village, once the seat of Taiwan Provincial Government, Chung Hsing Park is positioned as a park dedicated to "pure research with no mass production". Some research institutes, such as ITRI, Institute for Information Industry (III) and CH Biotech R&D, have been established here. On July 29, 2020, an event was held by CTSP to recruit businesses for the Park. Information on how to apply for entry and applicable incentives was provided to help potential tenants understand entry application and plant construction times. In 2020, Chung Hsing Park welcomed Chiao Kuo Energy Technology, which specializes in lightweight photovoltaic modules. Several other potential tenants are now also planning on entering the park.



Healthcare Expo with 18 Participating Biotechnology and Medical Materials Manufacturers

Eleven of the Park's tenants participated in the 2020 Taiwan Healthcare + Expo, held at Taipei Nangang Exhibition Center on Dec. 3-6, 2020. These tenants exhibited Central Taiwan's state-of-the-art medical technologies, including EPED with Retina, a stereotactic surgery navigation system; MedicalTek with MonoStereo 3D/4K system; CatchGene with iCatcher, an automated nucleic acid purification system; and LifeOS Genomics with QLoc md1000 analyzer, an automated multiple quantitative nucleic analyzer. Among these, FREE Bionics and LifeOS Genomics won 2020 National Innovation Awards and MedicalTek received the 2020 National Excellence Award. Moreover, seven



Science and Technology Minister Tsung-Tsong Wu (fifth from right, front row), CTSP Bureau Director-General Maw-Shin Hsu (fourth from right, front row) and CTSP exhibitors at the 2020 Taiwan Healthcare + Expo

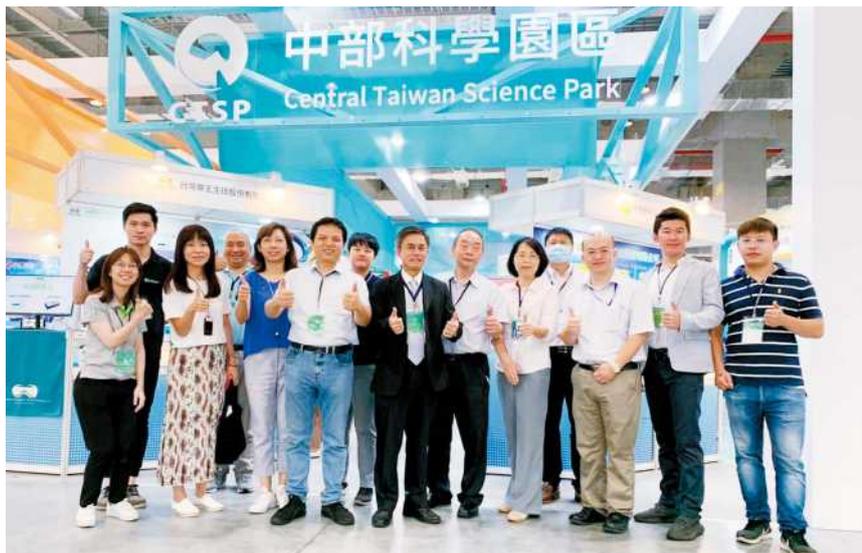
manufacturers—AU Optronics, HIWIN, Darwin, Delta, Sunder, GeneReach Biotechnology and PharmaEssentia—exhibited cutting-edge technologies such as minimally invasive medical materials and smart assistive devices.

Presenting Competence at Bio Expo

CTSP led 18 of its tenants, including those receiving grants under the Biomedical Industry Innovation Program and those coached by the CTSP Startup Accelerator, to participate in Taiwan's first large exhibition since the coronavirus outbreak, 2020 BIO Asia-Taiwan, at Taipei Nangang Exhibition Center from July 23, 2020. These tenants jointly exhibited their products, including precision medicine, new biological drugs, innovative medicine, medical materials, and smart automation under the theme of "CTSP Biomedicine Cluster with Smart Medicine as Navigator". CTSP tenants CH Biotech R&D and INTAL were awarded the annual Taiwan BIO Awards by President Ing-Wen Tsai. All these participants represented the fruition of a new innovative medical ecosystem, arising out of the integration between the Park's advanced biotechnology industry and central Taiwan's precision machinery industry.

A New Pattern of Opto Taiwan Broadens Our Perspective

Under the umbrella of a CTSP Theme Pavilion, four of the Park's tenants participated in Opto Taiwan held Oct.



Photograph of CTSP Bureau Director-General Maw-Shin Hsu (seventh from right) and CTSP exhibitors at BIO Asia-Taiwan

21-23, 2020. Another two tenants joined the exhibition independently but were marketed together to share joint exhibition benefits. The pavilion not only showcased CTSP's abundant research capacity in forward-looking innovations, but also demonstrated that Taiwan's optoelectronics industry is gradually differentiating itself from the competition and appealing to a unique and high-end niche market.

Natural and Toxic Chemical Disaster Prevention Drills

In 2020, the Bureau organized a total of 12 occupational safety, health and disaster prevention related briefings, plus



CTSP exhibitors who join CTSP Theme Pavilion and CTSP Bureau Chief Secretary Li-Chun Peng



Smart disaster prevention drill -- the emergency response team is decontaminating personnel



CTSP Bureau Director-General Maw-Shin Hsu(third from right), the Allied Association for Science Park Industries Deputy Chairman Kuo-Chou Tsai (third from left) and CTSP Occupational Safety and Health Promotion Association kick off the seminar by touching a plasma globe declaring CTSP's commitment to labor safety and creating a friendly and happy workplace.

32 expert visits to factories to give advice, two general training sessions, and one operational training session to strengthen the response skills of tenants' toxic chemical disaster responsible personnel.

The emergency response drills were held on Oct. 30, 2020 and aimed to practically and jointly review the toxic chemical leak response procedure, as well as establish disaster rescue units and tenants' adequate coordination and communication mechanisms

that will improve the overall safety and responsiveness of the Park and create a safe environment for tenants.

Occupational Accidence Prevention— Safety and Health Seminar with Themed Exhibition

The 2020 Occupational Safety and Health Seminar with AIoT and VR Application Themed Exhibition was held on Nov. 4, 2020 to promote technology labor safety and smart disaster prevention, express a determination to maintain occupational safety and create a friendly workplace. Representatives from Institute of Labor, Occupational Safety, and Health, Ministry of Labor and labor safety-related smart technology manufacturers were invited to explain and demonstrate how to apply AIoT and VR to occupational safety and health and share their R&D results at 20 exhibition venues, guiding and assisting the Park's tenants in future usage to prevent occupational disasters and build a smart park.

Police Force Deployed to Erlin Park

To meet a growing need in the developing Erlin Park, a temporary police office was built next to the original Erlin construction office. CTSP Director-General Mao-Shin Hsu and General Commander Chang-Yuan Liu of the National Police Agency's Second Special Police Corps jointly unveiled the sign for the Erlin Second Police Squad at CTSP on May 13, 2020 to mark police deployment to the Park to improve traffic controls and public security for Erlin Park tenants.



The sign-unveiling ceremony for the deployment of Erlin Police Squad



AUO and Micron Taiwan are vying for the trophy at the CTSP Cup Softball Games (Houli Park)



CH Biotech's COFFEELAND at the Industrial and Commercial Building in Taichung Park

Diverse Industrial and Commercial Services with Smart Technologies

With an occupancy rate of 98.86%, the Industrial and Commercial Service Building is providing diversified services with 31 companies in different industries, including finance, healthcare, employment, postal services, transportation, catering, accounting firms and law firms. A smart cloud-based 7-Eleven vending machine was installed at the building and collects big data by analyzing the customer preferences to meet the need for diversified products. It automatically informs personnel to refill the machine when it detects out-of-stock items and supports multiple payment methods.

Improving Bonded Business Managing System

The CTSP Bureau has improved the bonding management system for better effectiveness in accordance with the amended Regulations Governing the Bonding Operations in Science Parks, promulgated on June 4. Not only are e-services being made available for all bonding applications, but applications are also being simplified in accordance with the amended regulations. For example, if a tenant needs to bring any bonded goods out of the bonded area for testing, assembly testing, out-of-park demonstrations, and out-of-park repairs, it can simply apply online in advance by just ticking several boxes. The system will then determine where to send the application for approval—either to the Bureau or Customs—saving a lot of time. In addition, tenants may make online appointments for scrapping bonded goods. This optimized bonding management system and simplified processes help the tenants improve their competitive edge.



Diverse Recreational Activities for Employees

To promote healthy leisure activities, develop harmonious labor relations and facilitate communication between tenants and nearby communities, a host of recreational activities were held in 2020, including 20 movie showings, CTSP Cup basketball and softball games, and a Mid-Autumn Festival sale.

Launch of iBike Micron Taiwan Station in Houli Park

On Aug. 7, 2020, the iBike Micron Taiwan Station was inaugurated by Taichung City Government and Micron Taiwan, which is the first company to apply for and complete the donation of an iBike station since the Guidelines for Taichung City Government Transportation Bureau to Accept Privately-Donated Public Bicycle Stations launched in 2019.



SPIL is feeding the post and scoring in a game against TSMC at the CTSP Cup Basketball Games!



Taichung City Government Transportation Bureau Deputy Director Yu-Cheng Chen (middle), CTSP Bureau Director-General Maw-Shin Hsu (second from right), Micron Taiwan Plant Manager Chien-Hua Chu (second from left), and Director Feng-Wei Ku (first from left) attended the inauguration of the iBike Micron Taiwan Station

HUMANITY ALONG WITH TECHNOLOGY

Diamond-Level EEWH-EC Ecology Certification

To encourage the development of green buildings and form eco-friendly communities and cities, the Executive Yuan launched its "Green Building Promotion Program" to promote eco community concepts. However, due to strict requirements, not many communities in Taiwan are certified as eco communities. On Feb. 14, 2020, after years of planning and continuous efforts, Taichung Park was certified as a Diamond-Level EEWH-EC eco community, receiving full marks



The Eco-community Assessment Committee and concerned personnel of the Bureau are visiting Dongda Park



CTSP's Corporate Social Responsibility Report received the Platinum Taiwan Corporate Sustainability Award (TCSA). (On the left is Taiwan Institute for Sustainable Energy Chairman Eugene Chien, and on the right is CTSP Bureau Director-General Maw-Shin Hsu)



for ecologically friendly, energy-saving, and waste-reducing items. This certification also recognized CTSP's efforts to improve the environment.

A Supreme Honor: 2020 Platinum Taiwan Corporate Sustainability Award

CTSP received the supreme honor of the 2020 Platinum Taiwan Corporate Sustainability Award (TCSA) from Taiwan Institute for Sustainable Energy for its corporate social responsibility (CSR) report on Nov. 18, 2020, making it the only winner of Platinum Award in the government and NGO category. The award affirms the Park's commitment to sustainability, environmental friendliness, and public welfare. Looking forward, CTSP aspires to be

a model science park that values global trend, promoting the development of the economy, environment, and society in a sustainable manner.

The CSR report details how CTSP employs its core capabilities to achieve 15 out of the 17 sustainable development goals defined by the United Nations in order to shoulder its responsibility as a member of the global village, and how the Bureau reviews potential threats in all aspects on a rolling basis, actively accepts the challenges and opportunities caused by climate change, responds to the latest global developments, and stays connected to the world.

Real-Time Environmental Monitoring

Various environmental factors, including air quality, noise and vibration, effluent quality, runoff (groundwater) quality, bottom mud, soil, ecology, traffic, and cultural heritage, are monitored annually at all parks of CTSP in accordance with the environmental monitoring plan specified in environmental impact assessment documentation. All monitoring results and data are released on the "e-in CTSP Environmental Information Integration" website (<https://ein.ctsp.gov.tw/index/index2.aspx>).

Environmental supervisor meetings are held annually in Taichung, Houli and Erlin parks, with a total of eight such meetings organized



Monitoring air quality



Seventeen distinguished guests and executives are playing the drum together to wish a great future for CTSP

with yellow sand to a pleasant location with lush vegetation. In addition to regular hardware maintenance and management conducted by the maintenance team, some employees who care about the environment and ecology have dedicated spare time and efforts to nurturing a rich natural ecology within the Park over a long period of time. Such efforts came to fruition in 2020 with the publication of the book, *Butterflies, Dragonflies and Birds Hovering Science Park*. Featuring descriptions of common low-elevation species in the Park, including 60 types of butterflies, 26 types of dragonflies, and 85 different birds, the book reveals the Park's delicate, amazing, and mysterious ecology that few people are aware of, making it a must-have guide to the Park's ecology.

Presenting the Park's ecology in the form of biological calendars, the book records every touching moment of the unique animals or plants here through a series of detailed photographs. Much like the Park's outstanding tenant companies, some of these creatures are indigenous to Taiwan while others arrive from different parts of the world. Together, they live healthy and happy lives in CTSP, a rich and diverse science park.

(Thanks to retired employee Shao-Bin Tsai for assisting with this compilation and to team member Da-Ming Chen for the ecology photos.)

Sustainable CTSP 17th Anniversary Celebrations

On Aug. 21, 2020, 17 guests were invited to inaugurate a series of 17th anniversary celebrations with powerful



CTSP Bureau Director-General Maw-Shin Hsu is honking the horn to start the road running event

drums, symbolizing CTSP's determination to blaze a trail in technological innovations, create a vision for sustainable innovation, and produce another "legend beneath Dadu Mountain". Innovative Product Awards and Industry Contribution Awards were also presented in addition to other awards to outstanding tenants coached by the Park's entrepreneurial (innovation) incubation center and those performing brilliantly to save energy and water. In addition, an AUO club known as A-Team was invited to give a dance performance and a Houli saxophone club performed music as part of the anniversary celebrations.

A road running event was organized at Shuikutou Park in Taichung Park on Sept. 19, 2020 as part of the CTSP's 17th anniversary celebrations, with almost 500 CTSP employees and their relatives participating in the event. The race officially started when the Bureau Director-General Maw-Shin Hsu fired the starter pistol and was intended to

encourage employees to do outdoor activities in their spare time to relax and release work-related stress.

The 2020 Environmental Protection Seminar took place on Oct. 5, 2020, as part of the CTSP's anniversary celebrations. A Taiwanese expert was invited to give a lecture on sludge energy applications and air quality analysis. A former director of Taichung City Government Environmental Protection Bureau was also invited to deliver a speech on Taichung City climate change governance, providing practical expertise to Park tenants, teachers and students from neighboring colleges and universities, and CTSP Bureau employees.

On Sept. 23, 2020, an eco event was organized to introduce the Park's ecology and bird watching as part of the CTSP's anniversary celebrations. With parks and green fields planned with environmental and ecological consideration, Taichung Park contains five green parks—Dongda Park, Shuikutou Park, Lintsou Park, Tongshan Park

and Hengshan Park. With diverse bird species found on the Park, raptors, endemic species and subspecies, as well as Class II and III protected species have all been spotted here.

The Opening of AUO Museum of Sidadun Kiln

In 2003, the Park's first tenant, AUO, discovered a small but unusual mound on its site during construction. Despite its tight schedule, AUO still suspended construction and sought professional advice. The mound was determined by experts to be a kiln used to produce daily wares used by Han Taiwanese 200 years ago, making it a very rare discovery for Taiwan. Later, it was registered by Taichung City Government as a historic site.

AUO moved the AUO Micro Gallery—an exhibit built for Taichung World Flora Exposition in 2018—to the AUO site in Taichung Park, disassembling it after the expo ended and reassembling it at the Park site in combination with the Sidadun kiln to create the AUO Museum of Sidadun Kiln.



An eco event was organized to introduce the Park's ecology and bird watching as part of the CTSP's 17th anniversary celebrations (at Dongda Park in Taichung Park)



Taichung City Mayor Shioh-Yen Lu (middle), AUO President Paul SL Peng (second from left) and CTSP Bureau Deputy Director-General Jeng-Tsong Hsu(first from left) are visiting the AUO Museum of Sidadun Kiln



Giant's Cycling Culture Museum with a VR road bike simulator

Featuring a description of the gallery and unearthed relics as well as interactive games, the museum is currently open for visits by prior reservation.

The Opening of Cycling Culture Museum

Officially opening on July 2, 2020, Giant Manufacturing's Cycling Culture Museum in Taichung Park is Taiwan's first venue dedicated to offering a combination of interactive technology and experiences related to the craftsmanship and aesthetics of bicycles. Based on Giant's five decades of experience with bicycles, this museum provides a brief history of bicycles and spotlights various types of bikes and a wide range of related information, as well as virtual reality (VR) cycling simulator, which allows visitors to experience what it is like to cycle as fast as a professional cyclist. The museum is open for group reservations.

2020 MILESTONES

Jan.3-11

Bureau Deputy Director-General Wen-Fang Shih leads a delegation to attend the US Consumer Electronics Show (CES) with a business recruitment session jointly held by Taiwan's science parks at the event. The Industrial Technology Research Institute, the implementation team of CTSP Startup Accelerator signed a memorandum of cooperation with U.S. accelerator 10X Innovation Lab.

Jan.22

Inauguration of the "Kenan Aegean Bridge", crossing over Provincial Highway No. 74 and connecting Zhongke Road, which leads from Taichung Park to the downtown area and Shuinan Trade and Economic Park.

Feb.5

Former Allied Association for Science Park Industries Chairman Kuo-Jung Shen, tenant representatives and the CTSP executives are invited to the unveiling of the Park's new sign.

Feb.14

Taichung Park is certified as a Diamond-Level green building with full marks for ecology, and energy-saving, and waste reduction items at an eco-community assessment meeting convened by Taiwan Architecture & Building Center.

March 11

The "Environmental Impact Comparative Analysis Report for Houli Park" is reviewed and approved at an environmental assessment meeting convened by the Environmental Protection Administration, Executive Yuan.

April 22

The Financial Rescue Plan for Science Park Companies to Counter COVID-19 is launched to help science park tenants struggling to survive the coronavirus pandemic stay afloat, and to maintain the Park's industrial development.

May 13

CTSP Bureau Director-General Maw-Shin Hsu and National Police Agency Second Special Police Corps General Commander Chang-Yuan Liu co-host a sign-unveiling ceremony marking the deployment of the Erlin Second Police Squad to CTSP.

June 7

During his visit to CTSP, Science and Technology Minister

Tsung-Tsong Wu communicates instructions regarding the importance of information security and effective support for startups, as well as a desire to provide the best services to Park tenants so it will experience sustainable development in every aspect.

July 3

CTSP-coached "Better Chip" and Turing Certs teams each receive the Excellent Entrepreneurship Award and NT\$2 million for their entrepreneurship and respective chip and blockchain technologies at the first FITI competition held by MOST in 2020.

July 29

A business recruitment briefing is given in Chung Hsing Park with CTSP Director-General Maw-Shin Hsu as host. It is attended by more than 100 participants, including concerned officials from Nantou and Changhua county governments and executives of numerous potential tenants from Taiwan and abroad.

Aug.1

A joint 2020 CTSP job fair is held and attracts 882 job seekers. Among these, 830 join face-to-face interviews at the event and 52 make an appointment for video interviews. A total of 1,351 resumes are received with a nearly 50% matching rate.

Aug.7

The first iBike station—Micron Taiwan Station—in CTSP's Houli Park is inaugurated with CTSP Bureau Director-General Maw-Shin Hsu invited to deliver a welcome speech. The station is also Taichung City's first iBike station donated by an enterprise to the government.

Aug.21

The CTSP's 17th anniversary celebrations are attended by the Allied Association for Science Park Industries Deputy Chairman Kuo-Chou Tsai, Association of the Industry, Academia and Training of Central Taiwan Science Park (AIATCTSP) Chairman Fu-Sheng Hsueh, Legislators Chiung-Ying Yang, Hsin-Chun Ho and Kuo-Shu Huang and guests from over 100 tenants.

Sep.2

The 2020 CEO Master Class is organized with Director-General Maw-Shin Hsu as host, Sunengine President Sheng-Fa Yeh and DIGITIMES President Colley

Hwang are invited to deliver a speech on AI and smart manufacturing. The event is attended by over 80 CEOs and tenant representatives.

Sep.11

The 2020 Business Service Operations Observation Symposium is held with Director-General Maw-Shin Hsu as host. Representatives from the Park's business services providers, such as the Allied Association for Science Park Industries, the Park's Customs, bank, and post office, are invited to the event.

Sep.21

A press conference is held for a startup that launched a smart firefighting robot, with Deputy Director-General Wen-Fang Shih as host. As the first product customized to the individual requirements of one of the Park's tenants, the AI-based firefighting robot was developed at CTSP's AI Robotics Hub and verified in the field by AUO.

Sep.30

An amendment to the NEHS expansion plan is approved by the Executive Yuan.

Oct.27

A business recruitment briefing is held for Erlin Park in Yuanlin City, Changhua County, in partnership with the Central Taiwan Joint Services Center, Executive Yuan. Hosted by Director-General Maw-Shin Hsu, the event is joined by over 100 potential tenants.

Nov.01

The CTSP-published book, (Butterflies, Dragonflies, and Birds Hovering Science Park) shows how the Park has been committed to environmental friendliness for the last 17 years with brilliant results.

Nov.7-8

With comprehensive coronavirus protection measures and technologies in place, CTSP hosts the world's first 2020 FRC Science Park Taichung 5G Pilot Regional with 28 teams from high schools across the island participating in the event. The competition is broadcast live online to nearly 20,000 global viewers.

Nov.18

The CTSP Bureau receives the highest honor of the

2020 Taiwan Sustainable Corporate Award Platinum Award and is the only agency to receive such an award in government and NGO category. CTSP Bureau Deputy Director-General Jeng-Tsong Hsu receives the award on behalf of the Bureau.

Nov.27

Eight out of the 25 startup teams coached by CTSP join the top 10 for the second batch FITI competition organized by MOST in 2020. AIDirect, Tellurium, and Pingyi Biotech each receive the Excellent Entrepreneurship Award and NT\$2 million for entrepreneurship.

Dec.9

The "Environmental Impact Comparative Analysis Report and Review Conclusion Changes for the CTSP Taichung Park's Land Development Plan for Expansion (for a third-time change in items and quantity of chemicals)" is reviewed and approved with modifications in the 388th Environmental Impact Assessment Committee meeting, convened by the EPA, Executive Yuan.

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Technology-Centered Central Taiwan Science Park

The Guardian of Miracles



Houli Park
*The Optoelectronics and
Semiconductor Hub*

Including the Houli and Chising sites, the 255-hectare campus focuses on optoelectronics, semiconductor and precision machinery industries.



Taichung Park
An Industrial Powerhouse

Covering 466 hectares, the campus focuses on optoelectronics and semiconductor industries. With the Taichung Metropolitan Park, Taichung International Airport and the Taiwan High Speed Rail (THSR) Taichung Station nearby, Taichung Park is located at an important transportation crossroads and has brought prosperity to the region.



Erlin Park
*The Park of Technology and
Ecology*

Covering 631 hectares, this park centers at industries with low water consumption and carbon dioxide emission due to the features of industries in Central Taiwan.



Huwei Park
*The Pioneer of Biotechnology
The Spearheading Biotechnology
Cluster*

Covering an area of 97 hectares, the park borders the THSR Yunlin Station in the east. Most tenants are involved in the biotechnology industry, with others working in optoelectronics and communications. This site, together with the nearby HSR-designated area and National Taiwan University (NTU) Yunlin Campus drive the overall development in Yunlin County.



Chung Hsing Park
The Centerpiece for R&D endeavors

Located in the south Nelu in Chung Hsing New Village, the 36-hectare Chung Hsing Park focuses on research and development instead of manufacturing (cultural innovation industry excluded).



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