

Southern Taiwan Science Park 2018 Annual Report

# Table of Contents

04 Message from the Director-General

05 About the STSP

# Growing Industries, Energizing the STSP

- **O7** Industrial Highlights
- **11** Cluster Integration
- **17** Innovation and Incubation
- **21** R&D Cultivation

# LOHAS Life at the STSP

- **24** Diverse Services
- 32 Outstanding Achievements
- **33** Talent Cultivation



# Sustainable Environment for Living, Production, and Ecosystems

- **38** Green Life
- **39** Arts and Culture

# Aiming for the World

**44** Window to the World

**46** Marketing and Promotion

# Position for the Future - the STSP's Vision

**51** Future Prospects

# 2018 Summary

In 2018, the Southern Taiwan Science Park Bureau (STSPB) shouldered many policy responsibilities, and successfully achieved our goals of meeting deadlines and keeping our promises.

As part of these goals, we worked to empower "industrial clusters" and improved the competiveness of the Park enterprises. The TSMC announced the opening of its 3 nanometer wafer manufacturing fab at the STSP, and the Kaohsiung Factory of Windbond Electronics Corporation also began its construction in 2018. On December , 2018 and January 2019, The Environmental Protection Agency's Environmental Impact Assessment (EIA) approved a variance analysis of the Tainan Science Park and the Kaohsiung Science Park, meaning that about 52 hectares of industrial land will be provided. Additionally, "Southern Taiwan Smart Manufacturing Industrial Clusters Promotion Program," and "Technology Upgrade Promotion Program for Aerospace Critical System in Southern Taiwan Science Park" have been promoted to strengthen industries and enhance industrial clusters.

We will deepen the development of "startup ecology" to assist industrial innovation and transformation. We actively promote "AI\_ROBOT Maker Space Programthe" to cultivate interdisciplinary innovative talents. We are also the first Makerspace to acquire an ISO certification and AI robot evaluation system equipment. Furthermore, our first Taiwan AI x Robotics Accelerator (TAIRA) group was selected as part of the top ten elite groups from Taiwan and other countries to work with 14 big enterprises, including the UMC, in value-added and joint application initiatives. Meanwhile, international leaders such as GOOGLE and AMAZON also invested their resources in these initiatives.

We will continue working on a "sustainable environment" by providing an exceptional environment for development. The STSP has received "the International Safety Awards" from the UK National Security Council and is not only the winner for the Awards in Taiwan but also the only winner among governmental agencies in Asia. The STSP was also awarded the Best"Public Participation Awards" and Best"Arts Creation Awards" for the participation of its public arts in the Ministry of Culture's Sixth Public Arts Awards.

Our staff at the STSPB will continue serving you with innovation and a sincere work ethic, and we will work hand in hand with Park enterprises to create magic.

Director-General of the STSPB

Lin Weicheng

About the STSP

The Southern Taiwan Science Park(STSP) consists of the Tainan Science Park and the Kaohsiung Science Park. It was built as part of the "New Establishment of Science Parks" program for the "Six-year National Development Project", proposed by Executive Yuan in 1991. In 1993, an "Economic Revitalization Project" was founded and the proposal to "Establish the Southern Taiwan Science Park" was approved. In May 1995, the STSP Development Plan (Phase 1 Site of the Tainan Science Park) was ratified, making a major stride in the development of the high-tech industry in Southern Taiwan.

In April and September of 2001, the development of Luzhu Science Park (now the Kaohsiung Science Park) and the Phase II site of the Tainan Science Park were ratified respectively.



▲ The TSP transportation map

Located at the border of Xinshi, Shanghua and Anding Districts in Tainan City, the **Tainan Science Park (TSP)** spans 1,043 hectares, and forms the headquarters of the optoelectronics, IC, precision machinery, biotechnology, and green energy industries. Convenient traffic networks connect to the TSP via National Freeway No. 1 or 3, and to the Xinshi Interchange of National Freeway No.8. Furthermore, public transportation users can take Taiwan Rail to the STSP or Shanhua Train Station, or the Taiwan High Speed Rail and then take the free STSP shuttle bus directly to the Park. The STSP has a comprehensively planned, convenient traffic network system.



The KSP transportation map

The Kaohsiung Science Park (KSP) is located on the border of Luzhu, Gangshan, and Yongd Y Districts in Kaohsiung City. It occupies about 567 hectares, and is the home of the optoelectronics, precision machinery, and biotechnology (medical device) industries. The KSP can be accessed by exiting at the Kaohsiung Science Park Interchange of National Freeway No.1. Visitors can take Taiwan Rail and disembark at Luzhu and Gangshan Station and arrive at the KSP via Taiwan Provincial Highway No.1. Alternatively, visitors can get to the KSP by riding on the Red Transit Bus No.67A of the Kaohsiung Mass Rapid Transit (KMRT).

In the future, the KMRT will extend its line to Luzhu in order to improve traffic access. It is about 35 kilometers from the KSP to Xiaogang International Airport, and about 40 kilometers from the KSP to Kaohsiung Port. Hence, the KSP enjoys great geographical advantages in regard to international transportation.





# **Growing Industries, Energizing the STSP**

# Industrial Highlights

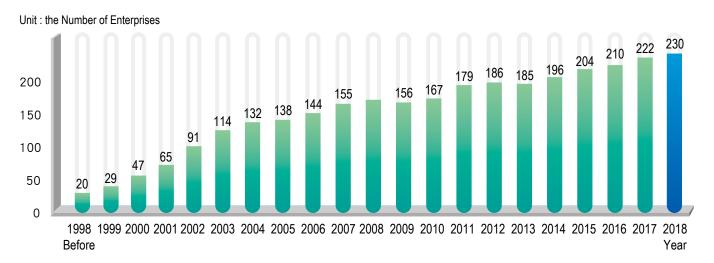
**Cluster Integration** 

Innovation and Incubation

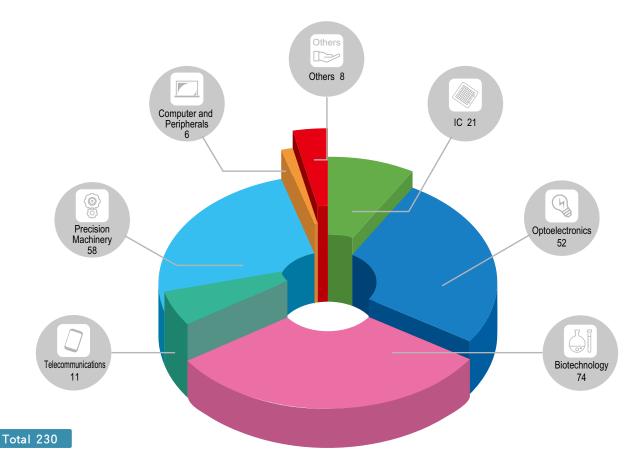
**R&D** Cultivation

# A Superior Environment Attracts Continuous Investment

In recent years, the STSP's superior environment has continuously attracted the investment and presence of leading domestic and international enterprises. In 2018, there were 22 new Park enterprises (with four startups among them) with an investment amount of NTD 4.812 billion, and 11 companies began their construction. By the end of 2018, there were 230 approved Park enterprises, demonstrating the continuous investment rush at the STSP.



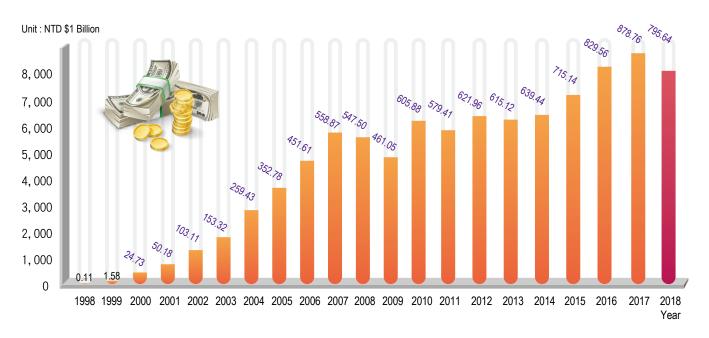
**Total Number of Approved Enterprises by Year** 



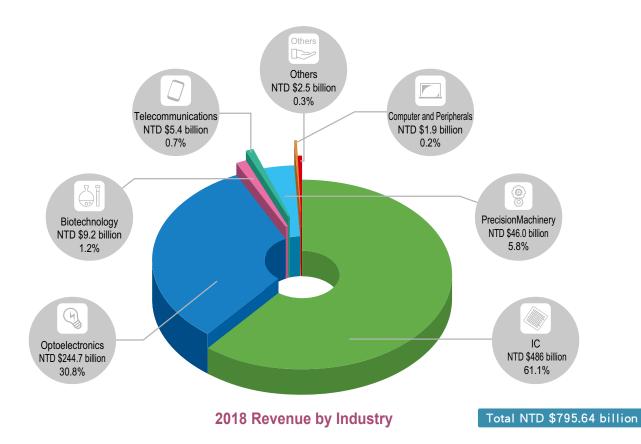
#### Total Number of Approved Enterprises by Industry as of the End of 2018

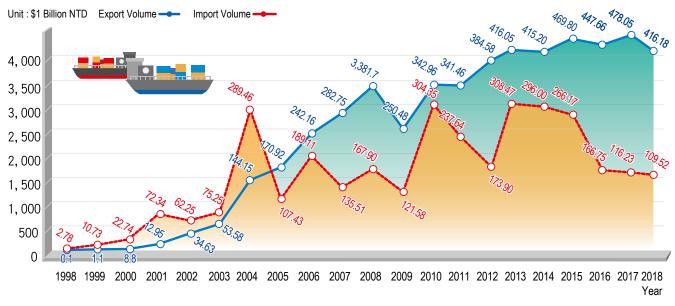
# Soaring Revenue, Stable Trade Volume

In 2018, the revenue of the STSP totaled NTD 795.64 billion, a decline of 9.5% compared to that of 2017; boasting of the comprehensive advanced manufacturing technology and international competitiveness, the IC industry contributed the most to the revenue of the STSP (NTD486 billion), followed by the optoelectronics industry. For growth of revenue, the precision industry took the lead with a growth rate of 13.2% followed by the telecommunication industry with a growth rate of 5.7%.



#### **Revenue by Year**

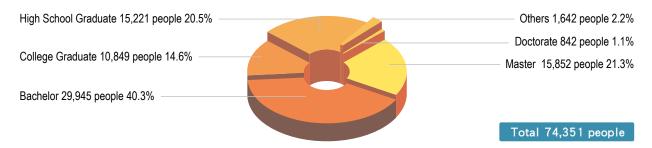




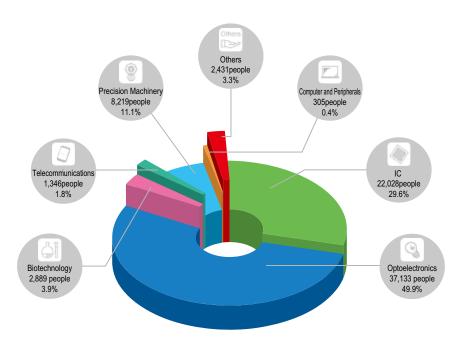
#### Import / Export Volume by Year

# Talent Gathering at the STSP

As of the end of 2018, 74,351 people were working at the STSP, and with booming investments, talent was attracted to the STSP to jointly create a better future.



Education Background of STSP Employees as of the End of 2018



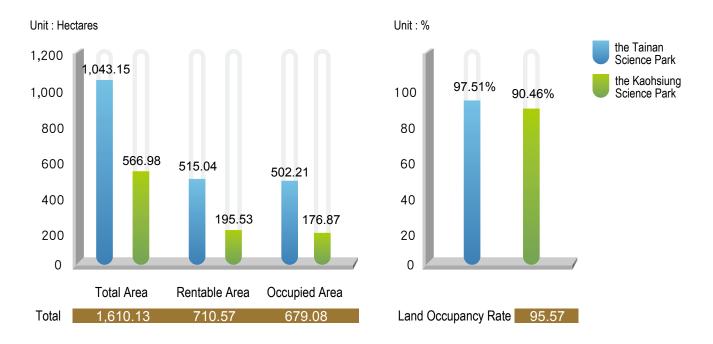
#### Number of STSP Employees by Industry as of the End of 2018



Number of STSP Employees by Year

# Land Occupancy

In 2018, 13 new Park enterprises leased out 53.12 hectares while 19 new Park enterprises rented out 34 factory units. By the end of 2018, the land occupancy rate was 97.51% and 90.46% respectivelyfor the TSP and the KSP, and the total occupancy rate was 95.57%.



#### Land Leased by the End of 2018

# Enhancement of the IC Industrial Cluster



Groundbreaking Ceremony of the TSMC (2018/1/26)

#### Construction Commencement of TSMC's 5-nanometer Advanced Manufacturing Process

On January 26<sup>th</sup>, 2018, the groundbreaking ceremony for Phase I of the New Construction of TSMC's Wafer Factory 18 was organized at the STSP and attended by Morris Chang, TSMC Founder, in person. TSMC Wafer Factory 18 will be the world's first specialized five-nanometer wafer factory in mass production.

Additionally, in order to meet the land requirements for the three-nanometer manufacturing process, the STSPB reviewed the zoning program of land utilization at the Park and EIA variance analysis was approved by the EIA Committee on December 19<sup>th</sup>. In cooperation with infrastructure construction, we satisfied needs for the expansion of industrial land at the TSP.



Remarks Delivered by Morris Chang, TSMC Founder, at the Ceremony (2018/1/26)



Groundbreaking Ceremony at the Kaohsiung Plant of Windbond Electronics (2018/10/3)

#### Windbond Electronics' Presence at the KSP Marked by an Investment of NTD335 Billion

The groundbreaking ceremony at the Kaohsiung Plant of Windbond Electronics was held on October 3<sup>rd</sup>, 2018 and the construction was expected to be completed in 2020 for mass production and operations in 2021. In the future, 25-nanometer manufacturing technology will be introduced with the production of products featuring "specialty DRAM" and "flash memory" that can satisfy the needs of industrial trends including those in the IoT, smart systems, and industrial automation fields.

#### STSP's IC Seminar and Technology and Talent Matching Meeting

In order to expand the industrial cluster effectiveness of the IC supply chain, the STSPB in its current phase actively introduces any IC upstream manufacturing equipment and material supply chains, with an aim to enhance the production efficiency of the IC industry at the Park. With the establishment of the "STSP IC Industrial Cluster Matching Platform" the STSPB surveyed the needs and talents of its manufacturing

technology enterprises.

On December 4<sup>th</sup>, 2018, "The STSP IC Seminar and Technology and Talent Matching Meeting" was organized to match Park enterprises and supply chain providers outside the park and talent from the IT related departments and schools in universities in Southern Taiwan. Additionally, technology and talent databank desired by the IT enterprises in the Park is also develop and in the future, according to needs of Park enterprises, technology supply chain providers and talent can be matched.



Matching of Park Enterprises with Talent Graduates of IC Related Departments of Universities in South Taiwan (2018/12/4)



▲ Remarks Delivered by Deputy Director-General of the STSPB, Su Cheng-Kang (2018/12/4)



Commencement Ceremony for the Global Advanced Dental Education Center at KMUH (2018/3/31)



▲ Tissue Regeneration and Cosmetic Repair Experiential Diagnosis Demonstration Center at KMUH (2018/10/25)



Opening Ceremony for the Biomate International Symposium of Implant Dentistry (2018/11/9)

### Stabilizing the Growth of the Biomedical Industry

#### Link to the World for New Southbound Development

On March 31<sup>st</sup> 2018, "the Global Advanced Dental Education Center" was established at Kaohsiung Medical University Chung-Ho Memorial Hospital (KMUH). The Center featured the utilization of advanced dental products made in Taiwan (MIT) and training from well-known teachers from both domestic and international top universities. Promoting dental products with education provided important assistance to the government's New Southbound Policy. The KMUH also worked closely with the School of Dentistry, Chulalongkorn University in Thailand.

#### More Advanced Wound Care Cooperation between the KMUH and the STSPB for the Development of the Biomedical Industry

In order to provide better wound healing and cosmetic results, on October 25<sup>th</sup>, 2018 the Kaohsiung Medical University Chung-Ho Memorial Hospital established "the Wound Care and Hyperbaric Oxygen Therapy (HBOT) Center and "the Tissue Regeneration and Cosmetic Repair Experiential Diagnosis Demonstration Center" with subsidies from the STSPB. Memorandum signing among Taiwan's top three wound care associations was also facilitated with the aim of achieving optimal wound care results through integrated therapy and exchange of biomedical devices.

Of these two Centers, the KMUH focuses on its HBOT plastic surgery clinics and seven Park enterprises, including Sunmax, Lifefusion, Joy, Arco, Jianxin, Charsire and Taicend, which had their products join the experiential diagnosis line.

#### Biomate International Symposium of Implant Dentistry

The Park enterprise, Biomate, for the first time, organized the International Symposium of Implant Dentistry on November 9<sup>th</sup>, 2018 by inviting 60 dentists and professors from Portland, Malaysia, Indonesia, the Philippines, Egypt, Russia, Jorden, Bangladesh, Ghana, Thailand, and Romania.

At the same time, six manufacturers of dental materials including Poye, Arco, ITRI's 3D Printing Center, SC, and Bomei were invited for on-site demos and product presentations.

#### Active Operation of Dental Experiential Diagnosis Line

On November 21<sup>st</sup>, 2018, Shuang Ho Hospital began operations for the designated areas of experiential diagnosis for MIT dental products and digital navigation systems.

As Vice Superintendent Hu Chaur-Jong has stated, the STSPB has been cultivating its medical device industry for many years, and the STSP is the home of Taiwan's sole and only professional dental industrial cluster.

Production lines at the STSP range from teeth alignment to artificial tooth roots, and the equipment is well developed. Vice Superintendent Hu emphasized that Shuang Ho Hospital is a would-be medical center, and with the establishment of a designated area for the experiential diagnosis line, the public will get to know more about MIT dental materials in a sound medical environment and gain more trust in professional MIT products.





▲ Opening of the Designated Area for Dental Diagnosis at Shuang Ho Hospital (2018/11/21)

Oral Scanning for Denture Making by the Dentist (2018/11/21)



The STSP Dental Products and Matching Forum's Clinical Trial Results (2018/11/25)

#### STSP Dental Products and Matching Forum Clinical Trial Results

On November 25<sup>th</sup>, 2018, the "STSP Dental Products and Matching Forum" was held with cooperation from the Taiwanese Association for the Promotion of Oral Biotechnology and Medical Devices (TAPO). Their aim was to encourage the integration of Park enterprises with the clinical energy and resources of university hospitals for the collection of clinical case data, and the improvement of product reliability and visibility. The STSP Park enterprises, including TISS, Alliance, Arco, LightMed, and Joy, demonstrated the outcome of STSP clinical trial projects on the site. Dentists and Park enterprises also enjoyed good interactions.

Additionally, at the TAPO Member Convention, the STSPB invited honorable guests such as the Director-General of the STSPB, Lin Wei-Cheng, the President of Metal Industries Research & Development Centre (MIRDC), Lin Ren-yi, the Professor of National Taiwan University's Department of Dentistry, Lin Chun-Pin, the President of the KMU, Liu Ching-Kuan, and the Deputy Minister of MOST, Shieh Dar-Bin. Together, they talked about the newest international biomedical trends while Cheng Cheng-Kung, the Professor of National Yang-Ming University, discussed Taiwan's medical device development and promotion status, and with relevant research, he discussed the future trends for product development. Attendees enjoyed a fruitful forum.

# **Entering the Aerospace Market**

#### Inviting International Big Players to Share the Updated Aerospace Industrial Information

Working with MIRDC, on March 7<sup>th</sup>, 2018 the STSPB organized the "Aerospace Business Forum and Technology Seminar" to discuss the newest international business trends and technology of the aerospace industry.

International big players of the aerospace industry including the Raytheon Company, the Aerospace Industrial Development Corporation, and Dassault Systems were invited to share industrial information.

"The Aerospace Business Forum and Technology Seminar" taught domestic manufacturers how to acquire special manufacturing technology or certifications via technology transfer and industrial cooperation projects, to enter the market of international airplane structure, generator systems, and key parts and components. Because Taiwan's aerospace industry now faces global competition with low labor costs and a high level of automation, in the future, domestic manufacturers shall utilize smart manufacturing technology to shorten work hours. From the upstream to the downstream of the supply chain, labor division shall be integrated and strategic alliances between different business sectors shall be developed to improve overall international competiveness. In this Forum, ideas and information were brought to the relevant industrial manufacturers of domestic aerospace, and more contact channels were formed. In the future, more exchanges at business forums and technology seminars will be facilitated.



▲ The Aerospace Business Forum and Technology Seminar (2018/3/7)

#### Aerospace Additive Manufacturing Conference on Entering the Global Aerospace Market

On May 22<sup>nd</sup>, 2018, the STSPB organized the "Aerospace Additive Manufacturing Conference" to share the newest ideas and technologies from the aerospace industry. The National Cheng Kung University (NCKU), Digital-Can Tech (DCT), and the National Chung-Shan Institute of Science and Technology (NCSIST) were invited to share industrial information.

With the application of Additive manufacturing to the aerospace field,

the operating temperature can be raised to increase fuel efficiency, to manufacture more complicated structural work parts, and shorten maintenance time. It is now a trend in industrial manufacturing, and by integrating metal Additive manufacturing value chains, investing in metal powder production, and the R&D of 3D printing manufacturing processes, Taiwan will be able to enter the global aerospace industry in the future.

# **Developing Smart Manufacturing Industrial Clusters**

#### Establishment of the South Taiwan Smart Manufacturing Industrial Cluster Alliance

The STSPB integrated its Park enterprises with neighborhood industrial, academic, and research institutions on January 23<sup>rd</sup>, 2018, and established "the South Taiwan Smart Manufacturing Industrial Cluster Alliance". Its goal was to assist Park enterprises in introducing smart manufacturing models, and through the Alliance, technological specialties and R&D energy helped to consult with Park enterprises to improve automation levels. Additionally, through subsidy programs, enterprises were encouraged to improve automatic manufacturing technologies.



Establishment of "the South Taiwan Smart Manufacturing Industrial Cluster Alliance" by integrating Park Enterprises with the Neighborhood Industrial, Academic, and Research Institutions (2018/1/23)

#### STSP 3D Printing for Smart Manufacturing Presentation

The STSPB used domestic academic R&D to collaborate with the STSP 3D printing industry in order to promote 3D printing for the technological development of materials, manufacturing systems, key parts and components and software applications. Their aim was to cultivate R&D talent, deepen industrialized technologies, and to support the establishment of a "Factory of Intelligent Additive Manufacturing Medical Devices" at the Kaohsiung Science Park. This was carried out by the legal person for the provision of test manufacturing services for the medical device industry, to integrate the abundant R&D energy of the academia to guide the Park enterprises. On December 25<sup>th</sup>, 2018, the STSPB and the Ministry of Science and Technology jointly organized "the STSP 3D Printing for Smart Manufacturing Presentation" to facilitate relevant and potential exchanges between the industry and academia by connecting academic research results and integrated 3D printing industry for the development of 3D competitive products and interdisciplinary cooperation.



STSP 3D Printing for Smart Manufacturing Presentation (2018/12/25)

# **STSP Startup Workshop and Early Startup Services**

As of the end of 2018, the STSP Startup Workshop has advised 134 startup teams, 24 of whom were awarded with IP to IPO (FITI) startup funds from the Ministry of Science and Technology, worth NTD 2 million.

Furthermore, 71 were formally established, 12 joined the science industry, 9 entered the incubator center, 28 were subsidized with various governmental grants, and 7 increased their capital gains with a growth amount of one hundred million dollars. Among them, CHOICE Biotech, GEcoll Biomedical Co., Ltd., Taiwan-ATM, and Ever Radiant Inc. were the leading companies with the most increased capital gains.

#### **Experience Learning and Sharing from Outstanding Entrepreneurs**



▲ Sharing of Outstanding Startup Entrepreneurs; CEO of LiveStrong Biomedical Co., Ltd., CS Liu (1<sup>st</sup> left); General Manager of KriSan Biotech, CD Huang (2<sup>nd</sup> left); CEO of VesCir, Chen Wei-Yu (3<sup>rd</sup> left) and COO and Co-founder of Apollo Medical Optics, David Ma (4<sup>th</sup> left)

In 2018, there were four events organized. Among the invites were the CEO of VesCir, Chen Wei-Yu, the CEO of LiveStrong Biomedical Technology Co. Ltd., CS Liu, the General Manager of KriSan Biotech, CD Huang, and the COO and Co-founder of Apollo Medical Optics, David Ma, all of whom shared their business building experiences and the keys to their success. The STSP welcomes industrial leaders to share their insights with us at the STSP Startup Workshop and in doing so, we aim to help startup teams to find their direction and know their applicable resources better.

#### Initiation of Pre-FITI Training to further Develop Startup Teams

In order to strengthen startup teams, "the Pre-FITI Training Camp" was founded in 2018 to introduce STSP startup resources counselling, and business presentation skills were taught. In the same year, the STSP cultivated three outstanding FITI award winning teams with startup funds worth NTD 2 million (Jen-Wei Biotechnology, Brillant Optronics, and FipWeb) and four Potential Startup Awards winning teams (AQUASEN, SMELL OUT, LUDO, and TFT), demonstrating fruitful results.



▲ Group Photo of the Winning Teams at the STSP Startup Workshop FITI Program of Ministry of Science and Technology (2018/11/26)

▲ Heated Discussion between Mentors and Startup Teams in Pre-training Camp (2018/5/24)

# The STSP Collaborates with Innovative Startup Resources, Assisting Startups in Realizing Their Dreams

The STSP Innovation Oriented Startup Industrial Link Program was successfully introduced to Southern Taiwan in 2017, and up until 2018, 20 startup teams were paired with 9 enterprises. Additionally, two startups received strategic funds of NTD100 million, demonstrating good results.



Successful Collaboration between 6 Enterprises and 12 Startup Teams at the STSP 2018 DEMO Meeting (2018/6/29)



Seminar on STSP Innovation Oriented Startup Industrial Link Program where 7 Enterprises in Southern Taiwan were Invited (2018/5/4)



▲ The Forum for Smart Plants, jointly Organized by the STSP Innovation Oriented Startup Industrial Link Program and DIGITIMES (2018/7/17)



Invitation of Pivotal, FMM, InnoSmart and LIPS to International Interdisciplinary Startup Presentation (2018/11/13)



Crowds at Meet Taipei 2018: "Gathering at the STSP for Innovation Oriented Results" (2018/11/15)



Group Photo of VIPs at Meet Taipei 2018: "Gathering at the STSP for Innovation Oriented Results" (2018/11/15)

The theme of the 2018 STSP Innovation Oriented Startup Industrial Link Program was 'smart production, smart image, and smart finance'; on July 17<sup>th</sup> and November 13<sup>th</sup>, "the D-Forum for Smart Plants" and the "International Interdisciplinary Startup Presentation" were respectively held by inviting domestic and international experts to share their thoughts on business opportunities, innovative solutions, and the introduction of startups to promote industrial transformation. Between November 15<sup>th</sup> and 18<sup>th</sup>, 12 STSP startup teams participated in the 'Meet Taipei' exhibition, demonstrating the incubation and counselling outcomes of the STSP innovation oriented startups.

# Expansion of Al\_ROBOT @ STSP

The Al\_ROBOT @ STSP is of national significance. Boasting scientific research grade facilities and a high-end smart robot testing and training environment, the Al\_ROBOT @ STSP currently has a thousand members and was certified by SGS with an ISO9001:2015.

The advanced development area of smart robots on the site is well equipped and have teams which provide a creative and personalized space for group discussion and brainstorming. Furthermore, the Space developed an online evaluation system for patent smart robot technologies to practically systemize their evaluation methods. Supplemented with the relevant smart robot data, an evaluation report can be quickly generated. An AI big data platform was also constructed to incorporate 15 sub-databases for industrial image analysis processing services.



Commencement Ceremony for the Expansion of the AI\_ROBOT @ STSP (2018/7/18)



A Photo of Director General of the STSPB, Lin Wei-Cheng with Ten TAIRA Winning Teams (2018/6/15)

## Global First Al Startup Matching Contest -TAIRA

"TAIRA Final Pitch" was launched on June 15<sup>th</sup>, 2018. This was the world's first AI startup matching meeting with international leading enterprises, and it attracted the participation of more than 100 domestic and international top AI startup teams. The top 10 teams from Canada, Japan, and Taiwan were selected and among them, LeaderG won the first prize of NTD 3 million. The winning teams were eligible to reside at the AI\_ROBOT @ STSP to work with three business leaders (UMC, E-da Hospital, and King's Town Bank Co., Ltd.) to jointly develop AI innovation technologies.





FRC Fund Matching Meeting, Team Competition, and VIP Photo (2018/12/15)



▲ US TechShop's Talk's Expert on MakerSpace Management (2018/3/29)



▲ "The STSP AI Tool Startup Matching Meeting" between Park Enterprises and Startups (2018/12/19)

# Rooting down- Team Incubation for FRC Competition

The FIRST Robotics Competition (FRC) is one of the world's prominent and most advanced robot competitions for students aged 14-19. Results of the FRC have been used as an important reference for admission to the ivy league. The AI\_ROBOT @ STSP consults with high school teams in Southern Taiwan to enhance their skills. For the participation in the first round of the FRC organized by the Central Taiwan Science Park, the STSP coached the award winning teams NNKIEH and Concordia Middle School, and in doing so set the trend for STEAM education with outstanding performances.

#### **Reaching out for International Connections**

In 2018 the Al\_ROBOT @ STSP invited international experts, including those from the US TechShop (field construction), Japanese SoftBank (service robots), Setsuko Ishii (smart agriculture), French INRIA-Saclay (smart algorithms), and the Singaporean NTU/ IMI (VR application) to Taiwan for public speeches, and exchanged thoughts on the different application fields of Al.

#### **AI Tool Startup Matching Meeting**

On December 19<sup>th</sup>, 2018, the MOST and the STSPB jointly organized "the STSP AI Tool Startup Matching Meeting" to assist enterprises in solving issues in the fields of automation and smart optimization. The MOST has invested abundant resources to construct Taiwan's AI ecological chain, with the aim to boost industrial competiveness via the development of AI.

This event attracted the participation of Park enterprises including UMC, Innolux, HannStar, Finnex Co. Ltd., MEM Dental Technology Co. Ltd., and Streber-Tech CO. Ltd. Additionally, six startup companies and teams including BOVIA, MoBagel, DT42, Memorence, and Singularity Infinity CO. Ltd, also came for matching and exchanges, led by Professor Wang Ching-Wei of the National Taiwan University of Science and Technology. Park enterprises were introduced to the relevant applications and markets for product technology startups, and they also introduced products and AI technology solutions for a mutually beneficial winwin.

#### Industry-Academia Cooperation and Results Sharing

The "STSP Project for Industry-Academia Collaboration on Innovative R&D" was implemented to encourage Park enterprises to work with academia and research institutions for innovative R&D. In 2018, 22 applications were received and NTD20.74 million was subsidized to six applicants. Park enterprises invested NTD36.58 million via self- funding, and hired 104 R&D employees. The STSP facilitated 2 technology transfer projects, and 27 PhDs and masters were recruited. On October 23<sup>rd</sup>, "the Demonstration for the Achievements of the STSP Industry-Academia Collaboration on Innovative R&D Project in 2017" was organized.

#### Professional Empowerment for STSP Practitioners

"Professional and Technical Talent Training, and the Project for the Promotion of Industry-Academia Cooperation" were continuously implemented in 2018 for 144 hours of corporate training and 18 hours of open courses. The STSP online learning platform was set up to provide 95hours of training that is linked to 490 courses for 3,523 trainees.

The "Questions to Seniors" events were organized respectively on May 14th, August 7<sup>th</sup>, September 6<sup>th</sup> and October 3<sup>rd</sup>, 2018, to provide a platform for direct interaction between 5 Park enterprises and 151 students from 12 universities. This taught students about the future industrial trends and practical operations of Park enterprises, and prospective employees were introduced to Park enterprises. The forum on "Accountability" was held by the inviting Professor Hsu Yu-Jen who used table games to teach high-ranking HR directors of Park enterprises how to shape new corporate cultures via flipped learning. Furthermore, to enable diverse learning, the STSPB constructed an online learning platform and on October 9<sup>th</sup>, 2018, a seminar was organized to connect physical and online learning environments. Participants in AISG were specially invited to interact through online streaming to allow real-time learning.



The Demonstration for the Achievements of the STSP Industry-Academia Collaboration on Innovative R&D Project in 2017" (2018/10/23)(1<sup>st</sup> left) President of TAICEND Technology Co. Ltd., Chu Gor-Don; (2<sup>nd</sup> left)General Manager of LUKE Branch, ThinTech Materials Technology Co. Ltd., Lin Jin-Fu; (3<sup>rd</sup> left) General Manager of KAOHSIVNG Branch, Kuang Tai Metal Industrial Co. Ltd, Cho I-Ching; (4<sup>th</sup> left) Deputy Director, UMC, Liu Kuan-Yi





Photo of Students and Park Enterprise Representatives in the "Questions to Seniors" Event (2018/8/7)

# **Subsidized Talent Cultivation Courses**

The "Talent Cultivation Subsidy Program" has been continuously implemented to encourage the module courses offered by schools to link up with industries. In 2018, 17 applications were received and NTD 9 million were subsidized to benefit more than 1,000 trainees.



Photo of Highlights Project Leaders from three Science Parks and the Chief Secretary of MOST, Chen Tzong-Chyuan (2018/8/20)

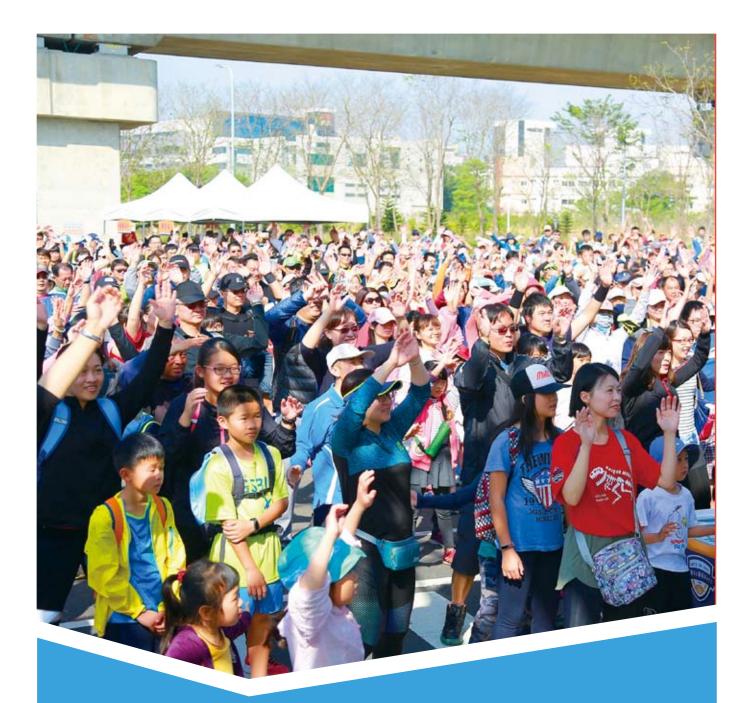


A Photo of the Chief Secretary of MOST, Chen Tzong-Chyuan, Director-general, Lin Wei-Cheng, and Leaders of Projects Granted by the STSP (2018/8/20)

On August 20<sup>th</sup>, three science parks organized "the 2017 Talent Cultivation Grant Program -Result Demonstration and Special Project Exhibitions". It was hosted by highlights project leaders of three science parks (STSP: Professor Wang Na-Fu, Cheng Shiu University; HSP: Associate Professor Lo Jung-Hua, Fo Guang University; CTSP: Professor Ou Chung-Ren, Hsiuping University) in order to share results of implementation. Top ranking officials were invited to exhibitions, and through students' special dynamic exhibitions, the innovative results of the university-industry cooperation were demonstrated.



Introduction of Solar Powered Mobile Car to VIPs by Associate Professor Tsai Yu-Jen of Cheng Shiu University (2018/8/20)



# **LOHAS Life at the STSP**

Diverse Services Outstanding Achievements Talent Cultivation

SOUTHERN TAIWAN SCIENCE PARK | 23 |

# "The STSP: The Promised Land-" The 15<sup>th</sup> STSPB Anniversary Celebration and the 14<sup>th</sup> Group Wedding

On February 4<sup>th</sup>, 2018, at the northern square of TSP's Administration Building, the STSPB organized the 15<sup>th</sup> STSPB Anniversary Celebration and the 14<sup>th</sup> Group Wedding, based on the theme of "the Promised Land". In 2018, 24 newly weds joined in matrimony to share their joy and happiness. In total, 364 couples joined group weddings organized by the STSPB. Most notably, the STSP's Jimmy Theme Park aka "the Blessing Baby" arrived at the site to give the best wishes to the newly weds. The "Blessing Baby" delivered the message of happiness to the newly weds to wish them a prosperous future for their future families.



▲ 'Seed of Hope' Planted by VIPs in the STSPB Anniversary Celebration to Wish for a Promising Future (2018/2/4)



▲ The 14<sup>th</sup> STSP Group Wedding (2018/2/4)



▲ The STSP Traffic Control Center (2018/2/9)

# A Healthy 2018: the STSP's First Sports Year

The "A Healthy 2018: the STSP's First Sports Year" event was organized on March 24<sup>th</sup>, 2018, and the current world's No.1 badminton player, Tai Tzu-Yin and Minister of the MOST, Chen Liang-Gee were both invited to serve as the endosers. For the first time in its history, this event involved cooperation between governmental agencies such as the Occupational Safety and Health Administration, the Ministry of Labor (MOL), the Health Promotion Administration, the Ministry of Health and Wealth (MOWH), the Sports Administration, MOE, Tainan City Government, and Park enterprises to jointly promote health businesses, certification for businesses that encourage sports, and healthy workplaces. Since March, 2018, every first Wednesday a night time fun run by Yingxi Lake has been organized for employees of Park enterprises, for the benefit of employee health. The STSP is expected to become the benchmark for healthy science parks by constructing a friendly, healthy, and safe workplace and creating high quality startups and employment opportunities, to attract more people to join the STSP big family.

# **Completed Construction of the STSP Traffic Control Center**

Phase I construction of STSP Traffic Control Center (hardware and traffic control network facility) was completed in February, 2018, and Phase II construction of the STSP Traffic Control Center will continue in 2019 to build roadside facilities needed for traffic control and monitoring. Construction is expected to be completed in June, 2019. Through the collection of e-traffic data, the STSP Traffic Control Center is able to conduct real-time traffic control and monitoring, implement relevant strategies, and release traffic information to shorten response and management time.



A Healthy 2018: the STSP's First Sports Year (2018/3/24)



▲ Friendly Match between the Minister of the MOST, Chen Liang-Gee, and the World's No. 1 badminton player, Tai Tzi-Yin (2018/3/24)



Commencement Ceremony for "A Healthy 2018: the STSP's First Sports Year" (2018/3/24)



▲ STSP Fun Run (2018/3/7)

# **Career Fair- the TSP**

In order to help citizens of Tainan and the Park enterprises at the TSP find suitable jobs and employees, the STSPB and the Tainan City Government jointly held "the 2018 Living and Working in Tainan Career Fair." The event had the participation of 100 enterprises including TSMC, UMC and Innolux Corporation, creating 6,599 job opportunities and was estimated to attract nearly 3,000 job seekers.



▲ The 2018 Living and Working in Tainan Career Fair (2018/3/17)



▲ 'Love to Work in Kaohsiung' Career Fair (2018/8/11)

### **Career Fair-the KSP**

To improve industrial development and employment opportunities in Kaohsiung, the STSPB worked with the Kaohsiung City Government to organize the "2018 Career Fair" which attracted the participation of 50 enterprises and offered 1,600 job opportunities.



▲ The "Inline Block" Lucky Symbol (2018/4/8)

# One Day Tour of Local Taiwan for Japanese Park Laborers

In order to introduce Japanese Park practitioners to the local culture and architecture of Kaohsiung, on April 8<sup>th</sup> 2018, a trip to Kaohsiung Fongyi Tutorial Academy was organized, to experience the civil servant examination system in the Qing Dynasty. Visitors were also presented with a performance of "the Song of Luohenmen" created by Shih Chien University for the Neimen Song Jiang Battle Ritual, and were treated to five-star outdoor banquet dishes. A charismatic boy in the group even participated in the traditional activity of throwing divining blocks.



Visit of Japanese Managers, Practitioners, and their Family Members to Kaohsiung Fongyi Tutorial Academy (2018/4/8)



▲ STSP Recognition Award Ceremony and Music Concert for Outstanding Laborers (2018/5/12)

# **Recognition Award Ceremony and Music Concert for Outstanding Laborers**

In order to show respect for its talent, the STSPB has organized the STSP Recognition Award and Music Concert for Outstanding Laborers at the Tree Valley Park Music Hall over the past three years. In 2018, 62 outstanding laborers and 7 Park enterprises were awarded for promoting workplace equality. Executives of the award winning Park enterprises attended the event and congratulated their outstanding laborers to demonstrate their focus and careful management of talent cultivation.

# Free Trial at the Gym of Wellness Center STSP

In order to develop Park practitioners' exercise habits, promoting health for relaxation and stress relief, and respond to the STSP's First Sports Year, every Thursday night between July and September in 2018, the STSP Wellness Center provided free trials at the gym. These included body combat class, spinning, and fitness facility trials to allow participants to become familiar with the high quality fitness equipment. This is vital for the development of fitness and the exercise habits of Park practitioners and community residents, to help them relax, relieve stress, and maintain health.



▲ Gym at Wellness Center STSP



Body Combat Class Taught by Professional Instructor



Spinning Class Taught by Professional Instructor

# Assisting Park Enterprise in Complying with the GDPR

The EU General Data Protection Regulation (GDPR) was put into effect on May 25<sup>th</sup>, 2018. This regulation does not only protect personal rights but also changes the rules of the global market. On June 19th, 2018, the STSPB invited the Managing Attorney of DaVinci Personal Data and High-Tech Law Firm, Yeh Chi-Hsing, to analyze and share his expertise in depth, to help Park enterprises fully understand GDPR and respond to it. At the site, questions were answered immediately and representatives of Park enterprises all enjoyed a fruitful seminar with helpful insights and sound information. Topics included management measures and relevant operational procedures for expanding EU businesses, and how to reduce the risk of receiving a high amount of penalties.



GDPR Promotion Seminar (2018/6/19)



KSP's Multifunctional Sports Park (2018/7/27)

### **KSP's Multifunctional Sports Park**

The KSP's Gong 2 Public Park occupies an area of 5.43 hectares. It includes a sports theme park consisting of a softball field, 3 basketball courts, 3 tennis courts, 1 speed skating ring (200 meters), children's playground facilities, and a multiple sports and recreational space for Park practitioners.



To let students learn about the current situation of industries in the STSP and encourage them to work in the STSP after graduation, in the summer of 2018 the STSPB organized "Southern Taiwan Science Park Summer Camp" Free shuttle services were offered at Nanke Train Station for students coming to the Summer Camp to the highlighted Park enterprises (TSMC, UMC, Innolux Corporation, HannStar, and Corning). STSP guided tours were offered and 248 students from 40 colleges and universities in northern, central, and southern Taiwan and offshore islands participated in the camp.



"Southern Taiwan Science Park Summer Camp" for College and University Students (2018/7/26)



Series of Events on Industrial Safety, and Environmental Protection Month- Running for the Opening Ceremony (2018/10/15)

#### Industrial Safety and Environmental Protection Month

The STSPB organized various events during the "2018 STSP Industrial Safety and Environmental Protection Month" between October 1<sup>st</sup> and November 17<sup>th</sup>. In addition to the participation of scholars and experts discussing new information regarding occupational safety and environmental protection laws, training camps on friendly working environments and health management at work were offered to relieve stress at work and to improve the awareness of Park employees towards workplace safety and environmental protection, with the aim to build a sustainable and healthy working environment.

# The STSP Community Spirit Ball Games

The 19<sup>th</sup> STSP Community Spirit Ball Games began on September 29<sup>th</sup>, 2018. They featured table tennis, badminton, volleyball, and softball competitions. Each year, the Games attract the participation of many teams of sports lovers from the Park enterprises and neighborhood areas, and create a healthy image for the STSP. This year's event attracted the participation of 193 teams, demonstrating the healthy and active image of the STSP.



▲ The STSP Community Spirit Softball Games (2018/10/22)



Track Speed Competition for Solar Powered Model Cars (2018/11/3)

#### 2018 Nanke Solar fun in sun

On November 3<sup>rd</sup>, the STSPB worked with the National Kaohsiung University of Science and Technology (NKUST), and the Southern Solar School to jointly organize "the STSP's 2018 Nanke Solar fun in sun Camp", with the participation of more than 1,000 children, parents, and grandparents at the square in front of the STSPB. From games and competitions, scientific knowledge of solar energy and airplanes were taught and learned. At the site, participants became completely immersed in the activities.

The 2018 Program offered rich content.

In addition to the track contest for solar powered model cars, an AI model car demo contest, a competition for model cars

Assembled with recycled materials, classes for the elderly to assemble solar powered model cars, a self-assembled hand launch glider's "flight duration" contest, there were fun games, lucky draws, a reflective exhibition, an interactive performance of the Hyperkids Children Troupe's "Yo-Kai Watch Jibanyan," and a test ride of the Apollo Generation 8 Solar Powered Car, which has been continuously researched and developed by NKUST.

In addition to fostering the development of Taiwan's high-tech industry, the STSP also supports the promotion of popular science education, allowing friends, regardless of their ages, to learn scientific knowledge through practice. The event was highly praised due to its both educational and entertaining functions.



A Hand Launch DIY Glider Contest by Student (2018/11/3)

# Corporate Tax Credits for Taiwanese Businessmen to Return and Invest in Taiwan

On November 6<sup>th</sup>, 2018, the Director-General of the STSPB, Lin Wei-Cheng, the Director-General for National Taxation Bureau of the Southern Area, Lu Jen-Hsiu, and the Director-General of Finance and the Local Tax Bureau, Shen Ying-Ru jointly formed the task force "Corporate Tax Credits for Taiwanese Businessmen" to encourage Taiwanese businessmen to come back to Taiwan and to invest with the provision of one-stop services. Through seminars, Park enterprises are discussed in relation to corporate tax credits for customized investment services, and Taiwanese businessmen are able to enjoy "corporate tax credits" for a better market performance.





Seminar on "Corporate Tax Credits for Taiwanese Businesspersons to Return and Invest in Taiwan" (2018/11/6)

▲ Attendance of Director-general of the STSP, Lin Wei-Chen, Director-general, Lu Jen-Hsiu, Director-general, Shen Ying-Ju, and Representatives of Industrial Alliance and Accountants to Serve Park enterprises (2018/11/6)



▲ STSP Christmas Lighting Banquet (2018/12/21)

## **STSP Christmas Candle Lighting Banquet**

On December 21<sup>st</sup>, the 2018 STSP Christmas Lighting Banquet was held at Puxin Park. In addition to a wonderful performance and beautiful lighting decoration, free hot dishes were provided for the warm night. After the Banquet, the public was able to enjoy the unique Christmas decorations at multiple sites at the STSP which were displayed until the Eve of Lantern Festival.

# UK Merit International Safety Award for Recognized Labor Safety Performance

The STSPB is devoted to the building of an environment that is safe, healthy, and suitable for realizing dreams, working, and living. Our achievements in occupational safety and health management were recognized and awarded on March 12<sup>th</sup>, 2018 with a Merit at the UK International Safety Awards (ISA) from the British Safety Council. The Award aims to acknowledge management units that care for the health, safety, and welfare of its workers, and it has been widely recognized internationally.

In 2018, around the world, there were 623 applications and the STSPB was the only one from Taiwan to receive an honorable Merit Award and was also the only governmental agency from the Asian region. It is indeed a special honor for the STSPB to receive the international organization for its safe occupational environment.

### Continuous Recognition Three Years in a Row for Autonomous Management of Diesel Vehicle Emissions

Adopting Tainan City Government's promotion policy for diesel vehicles to acquire an autonomous management label, the STSPB assisted Park enterprises in acquiring labels and demonstrate a good performance. The Tainan City Government awarded the STSPB with "Outstanding Units for Environmental Protection Label for the Autonomous Management of Diesel Vehicle Emissions."

# Grade A for Public Safety Inspection Affairs

For the 2018 public safety inspection affairs, the TSP and the KSP were given a Grade A rating by the Ministry of the Interior under the category "Relevant Affairs for Public Safety Inspection of Buildings in Special Municipalities, Counties (Cities), and under Special Administration," due to their provision of high quality and safe work environments.

# **Special Honor Received for STSP Building Construction Management**



Awarded by the Bureau of Environmental Protection, Tainan City Government; Photo of Deputy Secretary General, Li Hsien-wei (left) and Deputy Director-general of the STSPB, He Jin-Cang (right) (2018/11/15)

For the 2018 building construction management affairs, the TSP and the KSP were awarded with a special honor by the Ministry of the Interior under the category of "2018 Building Construction Management Affairs", that ensured construction quality, safety, and the environmental health of buildings in the Park.

# STSP : Winner of the 2018 Units of Outstanding Performance for its Environmental Education Facilities

The STSPB participated in the 2018 evaluation of its environmental education facilities, and passed strict two-phase documentary and on-site evaluations. The STSPB outperformed its counterparts in the public and private industrial environmental education facilities around Taiwan. It was ranked as a Unit of Outstanding Performance, being the only winner of this special honor among science parks and industrial parks in Taiwan.

In the future, the STSP will continuously build itself into a Park that considers production, the ecosystem, and living conditions. More diverse environmentally friendly concepts and measures will be introduced with local cultural features for building a sustainable green science technology park.



Recognition for the STSPB by the Minister of the Environmental Protection Agency, Lee Yingyuan(2018/11/13)



Receiving Merit Award at the 2018 International Safety Awards (ISA)

#### **Talent Cultivation**

# The Amazing Achievements of the AI Technology Curriculum

To comply with the AI robot maker education promoted by the government, the STSPB supported the NNKIEH Senior High Department's team, led by Mr. Tsai Wen-Hong and Ms. Liu Yun-Shang, in the world's largest robotics competition in the FRC in Australia. The team won 9<sup>th</sup> place. In 2018, Japanese RoboRAVE, Wu Dong-Yu from NNKIEH Senior High Department, and students from Beimen Senior High School, Deguang Catholic High School, and Jian Sing Junior High School, formed the "mystery" alliance team. They claimed first place in the 'line following robot' category, and second place in both Robot-Sumo and Robot Design Creativity, while the Junior High Department won third place for Robot Design Creativity, the third and fourth place for Robotext, and the fifth and sixth place in the Maze Contest. In the 2018 Junior Montréal RoboCup in Canada, Yeh Cheng-Feng from the Junior High Department was the champion of "the Maze Rescue Superteam."



▲ 3<sup>rd</sup> Place in Robotext for Junior High Group 'RoboRAVE' (2018/11/11)



▲ FRC in Australia(2018/3/8)

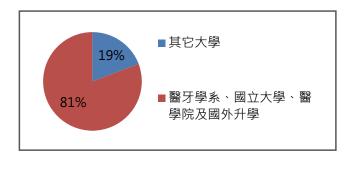


▲ FRC Scene in Australia (2018/3/8)

▲ NKIEH Students' University Admission

# **Outstanding performance of University Admissions**

In the 2018 university admissionunder the Star Plan, 13 NNKIEH graduates were admitted to national universities, hitting a historic high. For scores of college entrance exams, 15% of NNKIEH students reached the top standard and 55% met the precursor standard, coming to the top 25%; 90% of NNKIEH students had scores higher than the national average standard.





Percentage Distribution of the Five Standards of NNKIEH Students' University Entrance Exam Scores in 2018

# 100% Completion of Teachers' Professional Development Appraisal and Teachers' Professional Social Group Accreditation

NNKIEH teachers formed the "Cultural and Historical Teachers' Professional Social Group" and the "Math and Science Teachers' Professional Group," and through social group events, teachers cultivated their professionalism and social networking skills. 100% of teachers who participated in the professional development appraisal of the MOE acquired initial accreditation, and 8 acquired advanced accreditation, accounting for 36% of formal teachers. The participation of teachers in professional development appraisal helps NNKIEH to address the need for professional growth of teachers and planning for feature courses. Teachers can be assisted with the provision of professional learning social groups and internal and external on-the-job training, for the building of a comprehensive teachers' professional growth system.

#### Forward-Looking Projects NNKIEH's Continuing Honors and Excellence Awards

Following its remarkable performance in 2017, in 2018 the NNKIEH was again evaluated as a school with Phase 3 excellence, with a high admission rate to colleges and universities. The NNKIEH's Forward-Looking Projects and presentation to students on "Yamanotesen Technology" received the Honor Award while the Teachers' Group of the Senior High School and Student Result Group both received Distinguished Honor Awards.



The NNKIEH Teachers' Participation in the Annual Meeting for the Tainan City Curriculum Professional Evaluation on Joint Learning (2018/11/24)



Photo of NNKEIH Teachers and Students in the 2017 Phase 3 'Forward-Looking' Projects(2018/7/20)

# Fruitful Results in Music Talent Cultivation

The NNKIEH Elementary Department Choir participated in the 2018 contests of the Fifth Singapore International Choral Festival, and received a gold medal for mixed chorus and a silver medal for folk song chorus. In 2017, the NNKIEH Symphony Orchestra won the title of four times champions for the ensemble of Senior High, Junior High, and Elementary Department. Furthermore, the Brass Quintet won the Distinguished Honors Award in Group B of the Symphony Orchestra Ensemble in the National Student Music Competition six years in a row. Between 2016 and 2018, the Elementary Department received the Distinguished Honors Award for "Mixed Chorus" in the Tainan City Music Competition, and from 2017 to 2018 it won top place in the Distinguished Honor Award for "Mixed Chorus" in the National Student Music Competition. Between 2016 and 2018, the NNKIEH Flute Ensemble received an Honors Award in the Tainan City Music Competition.



Singapore International Choral Festival (2018/7/18)



▲ The Symphony Orchestra 10<sup>th</sup> Anniversary Presentation (2018/6/10)



▲ Exchanges at the French Arts Festival (2018/7/3)



Exchange Event between the NNKIEH Flute Team and those from Dawan Elementary School and Sangu Elementary School (2018/5/9)



▲ The First Gold Medal for the Junior High Schoolis Male Group in the 2018 National High School Sports Tournament (2018/4/24)



▲ Repeat Champions in the Doubles Tennis Group, Huang Yu-Hsiang and Tang Cheng, in 2017 and 2018 (2018/4/24)

# Promotion of the 12-year Integrated AI Robot Curriculum

### National High School Sports Tournament Gold Medal Won by Tennis Team

In 2017 and 2018, the NNKIEH demonstrated a breakthrough performance in sports.

The high school tennis team continuously won gold Medals in the junior high school doubles championship, and sixth place in the senior high school group competition in the National High School Sports Tournament of 2017 and 2018. For the first time, the NNKIEH Junior High boys' tennis team received the gold medal.

NNKIEH's academic and sporting achievements have been well recognized, which showcases the positive results of diverse development and feature management.

# **Advancement of the NNKIEH's Teaching Environment**

The NNKIEH continued its deep involvement in the 12-year integrated green technology based curriculum, from its Senior High Department down to its Elementary Department. Since 2017, it has actively promoted green technology based curriculums in each field; the Elementary Department began its energy technology educational program based on the future 2019 curriculum guidelines. Cooperating with Tainan National University of the Arts and Motech Industries, Inc., the NNKIEH developed its curriculum based on solar power, and utilized solar power to facilitate the establishment of five teaching fields.

Since the School Year of 2017, the NNKIEH has included AI Robot Technology in its curriculum planning for senior high schools, junior high schools, and elementary schools. In elementary schools, through hands-on experience with robot building, students are motivated to continue to learn about AI when they enter junior high schools.

Here, the AI robot maker concept is incorporated into the life technology curriculum, and students are taught to learn simple programming.

From high school onward, AI robot technology is integrated into research method courses, and via participation in international large-scale robot competitions, the international horizons of students are broadened. Additionally, high schools in Central and Southern Taiwan have also been invited to join the AI talent cultivation program, establishing a research and learning environment, and develop a maker based curriculum.

The NNKIEH signed a strategic alliance MOU with 22 schools, including Tainan First Senior High School, to use the NNKIEH as a satellite base. The aim is to extend the STSP AI-ROBOT MakerSpace to senior high school education, and to build an AI robot learning environment in Southern Taiwan.



MOU Signing Ceremony for AI Robot Strategic Alliance, for 24 Schools in Central Taiwan (2017/10/5)



# Sustainable Environment for Living, Production, and Ecosystems

Green Life

Arts and Culture



▲ Green Land No.13 at the KSP (2018/5/29)



Contract Signing between Innolux and Tai-Kang Organic Agriculture Plantation for the Provision of Corporate Meals(2018/2/6)



Chinese Water Color Exhibition for Wang Tzi-Yin's Individual Peony Flower Paintings(2018/11/10)



The 20<sup>th</sup> Graduation Arts Exhibition at Xinshi Junior High School-"Artists of Summer" (2018/6/16)

### Walking at the KSP Diverse Plantations

In order to build plantation features at the KSP, Green Land No.13 adjacent to Taiwan Provincial Highway No.1 was selected to be used as an ecological hill. Slopes were then added to two sides for a visual diversification of the banks of the pond where golden shower trees, Taxodium, and water willows are planted in spring and autumn, and the interchange of yellow and red creates a soothing atmosphere.

# Promotion of Local Produce with the Cooperation of Innolux

In 2018, the Innolux Corporation cooperated with "Local Organic Produce," an organic agriculture renaissance promoted by Tainan City Government. Introduced by the STSPB, Innolux signed the organic corporate meal contract with the Tai-Kang Organic Agriculture Plantation. Through this contract signing, more Park enterprises have now been encouraged to take part in promoting a sustainable green in STSP. Additionally, in 2018, four events, both informative and fun, were organized to introduce Tainan's fresh and natural local produce to enable STSP practitioners to eat healthy and safe foods, and to educate more people about the goals of the STSPB for promoting local produce and low-carbon lifestyles.

#### Xingang Temple Integration of Art, Culture, and Religion

At Xingang Temple, the first floor serves as the Local Cultural Center, while the second floor is dedicated to worshipping Marshal Zhanggang. Since its completion on September 29<sup>th</sup>, 2006, the Temple has gradually become the religious folk center in the STSP and Tree Valley Park. In 2018, the Center held six exhibitions for famous artists, arts groups, and arts classes from Xinshi Junior High School and Elementary School, including oil paintings, water color paintings, Chinese art paintings, brush paintings, western style paintings, and geometrical sculptures, attracting many visitors.

# **Spring Arts Festival**

Each year during spring blossom season in March and April, music, arts and cultural performances are held for six continuous weeks as part of the "STSP Spring Arts Festival."

The event is designed to relieve stress, promote the arts and encourage community interaction.









Art Events at the KSP



▲ One Plant One Feature Piece / Yellow Electronic Lighting Beetle (2018/3/10)

### **Completion of the KSP's Phase 2 Public Artworks**

Public artworks at the KSP were made to create a "fun future technology art town" and its Phase 2 artworks were all completed in 2018. Public artworks in this phase include one piece of landmark artwork, three pieces that use Park enterprise materials and technologies to promote the ideals of Park enterprises, four scattered street furniture works, one indicative arts identification piece, three fun and interactive works, and public participatory artworks totaling 12. As of the end of 2018, there were 49 and 23 pieces of public artworks installed respectively at the TSP and the KSP.



Landmark Artworks / "Flying Starting from the Same Point" (2018/5/10)



Street Furniture / "Time and Space Transformation –Traveling with Archimedes and Plato" (2017/7/13)





Arts Identification / 'Civilization Mark 3' (2018/1/1)



#### Innovative Combination of Technology and Arts -Winning of Public Participation and Arts Creation Awards

The STSP outperformed others with 243 art pieces and won the Best "Public Participation Award" and Best "Arts Creation Award" in the 6<sup>th</sup> Public Awards organized by the Ministry of Culture. LandMark Optoelectronics won the "Public Art Award Organized by the Private Sector," a second-time win after its 2014 victory.

This year the "One Plant One Feature" Project at the KSP was specially recognized by the judges; artists good at composite media were invited to cooperate with "AUO" "Tongtai Machine and Tool," "YB Biotech," and "United Orthopedic Cooperation" and use industrial elements and corporate spirit as their source of inspiration. Park enterprises provided materials and technologies for artists to create new public compositions of art and technology that showcase their industrial highlights.

Public artworks at the TSP titled "the Future Prospects of the STSP" were based on the concept of professional artists mentoring and cultivating young students.

Innovative ideas were integrated into the Park environment and buildings, bringing young and creative thinking that revitalize the atmosphere.

After Bay Zu Precision Corporation's victory in the 4<sup>th</sup> Public Art Awards Organized by the Private Sector, LandMark Optoelectronics was again recognized by the Ministry of Culture. In addition to financing, a corporate spirit was integrated into the artwork and the site environment, and arts and creativity helped build a unique technology plant.



Winning of the Public Art Awards (2018/12/14)



One Plant One Feature / "One Heart Tarning the Future" (2018/3/10)



One Plant One Feature / "The Line of the Wind" (2018/3/10)



▲ Visiting Modern Pre-historical Remains – "The Bone Collector" (2018/5/2)



Visiting Modern Pre-historical Remains – "The Bone Collector" Presentation (2018/5/4)

### **Visiting Modern Pre-historical Remains**

In order to promote the archaeological cultural contents of the STSP, in 2018, the National Museum of Prehistory was entrusted to take charge of the campus promotion event "Visiting Modern Prehistorical Remains."

Starting from the neighborhood schools of the STSP that feature interactive and interesting tools to attract children, students were introduced to the diversity of cultural assets, basic archeological knowledge, and the remaining sites at the STSP and the STSP Prehistorical Museum. By working with nearby schools, an archaeological learning network was built to facilitate more understanding.



Visiting Modern Pre-historical Remains – Pottery Making (2018/4/11)



▲ Visiting Modern Pre-historical Remains – Event Photo (2018/5/11)



# Aiming for the World

Window to the World Marketing and Promotion



Mr. Ikuro Sugawara and Mrs. Sugawara (2<sup>nd</sup> and 3<sup>rd</sup> left), and the Deputy Director of the Kaohsiung Branch of the Japan-Taiwan Exchange Association, Mr. Fumio Yamashita (4<sup>th</sup> right) greeted by the Deputy Director-General of the STSPB, Su Cheng-Kang(4<sup>th</sup> left) (2018/5/17)

# Friends from Afar Witnessing the Strength of the STSP

In 2018, the STSPB greeted 110 domestic and international groups of visitors, with a total of 3,446 persons, including visitors from the former Vice-Minister of Economy,Trade and Industry, Mr. Ikuro Sugawara; the Manufacturing and Engineering Department of International Enterprise in Singapore; the US Argonne National Laboratory; Davao City, the Philippines; the Japan-Taiwan Exchange Association; the Thailand Trade and Economic Office; the Vietnam Economic and Cultural Office in Taipei; the MOST Delegates of Taiwan, Latvia, and Lithuania and the National University of Kaohsiung.



▲ The CEO of the Manufacturing and Engineering Department of International Enterprise in Singapore, Mr. Edwin Chow (4<sup>th</sup> left) and his Delegates to the STSP AI\_ROBOT MakerSpace greeted by the Deputy Director-General of the STSPB, Su Cheng-Kang (5<sup>th</sup> left) (2018/6/11)



Dr. Norman D. Peterson of the US Argonne National Laboratory (2<sup>nd</sup> left) to the STSP AI\_ROBOT MakerSpace greeted by the Deputy Director-General of the STSPB, Su Cheng-Kang (2018/6/12)



The "Davao City Delegation from the Philippines" led by Deputy Mayor Dr. Bernard E. Al-ag (5<sup>th</sup> left), and Chairman of the Center for Southeast Asian Studies of NSYSU, Tsai Hong-Chen (3<sup>rd</sup> left) Greeted by the Deputy Director-General of the STSPB, He Jin-Cang (4<sup>th</sup> left) (2018/8/10)



▲ The Deputy Director of the Kaohsiung Branch of the "Japan-Taiwan Exchange Association," Mr. Iwakura (right),greeted by the Director-General of the STSPB, Lin Wei-Cheng (2018/8/21)



▲ The "Thailand Trade and Economic Delegation" led by the Representative of the Taipei Office, Mr. Thongchai Chasawath (4<sup>th</sup> left), greeted by the Deputy Director-General of the STSPB, Su Cheng-Kang (3<sup>rd</sup> right)(2018/8/23)



The "Vietnam Economic and Cultural Office in Taipei" led by Director, Mr. Nguyen Anh Dung (5th left), greeted by the Director-General of the STSB, Lin Wei-Cheng (4th left) (2018/10/26)



The "MOST Delegates of Taiwan, Latvia, and Lithuania and National University of Kaohsiung", greeted by the Director-General of the STSB, Lin Wei-Cheng (1<sup>st</sup> right) (2018/11/9)

# Signing MOU with the Hoa Lac Hi-tech Park (HHTP), Vietnam

In response to the New Southbound Policy and the MOST Project for the "Overseas Extension of Science Parks to Lead Industrial Drive," the STSPB assisted Taiwanese business persons to position their markets in Southbound countries, to provide production sites for industrial transformation, to cooperate with others, and to remove investment barriers to make the HHTP in Vietnam the number one park to cooperate with according to industrial needs and overall evaluation.

Because the STSPB signed MOU with the HHTP Bureau, in the future, a piece of land will be provided as the base for Taiwanese enterprises that meet with HHTP investment standards and requirements. Both sides exchanged opinions on the management of high-tech industries and parks.



MOU Signing between the STSPB and HHTP Bureau, Vietnam (2018/12/4)



Photo of International Cooperation between Taiwan and Vietnam (2018/12/4)



Photo of Enterprise Representatives at the Dental South China Tnternational Expo in front of the STSP Pavilion (2018/4/2)

#### STSP's Participation in World Expos-The Medical Device Industry The 2018 Dental South China Tnternational Expo

Between April 2<sup>nd</sup> and 5<sup>th</sup>, 2018, the STSPB led eight Park enterprises including Huang Liang Biomedical Technology, ACRO, Kuang Yeu Medial, EPED Inc., Codent Technical Industry, GBC, Hung Chun, and Toshi precision Technology Inc., and also organized the Taiwan Image Pavilion. Serval buyers placed their orders at the site. During the Expo, visits were also paid to SINOPHARM (Guangzhou), Dongguan Changan Zhong Yuan Clinic, and SPRINGSEED Health Service Technology Co. Ltd.

#### Positioning within the International Market; Demonstrating the Strength of Medical Devices CMEF Spring 2018

On April 12<sup>th</sup>, 2018, the STSPB worked with the Taiwan Medical and Biotech Industry Association (TMBIA) and the Taiwan Medical Care Assistive Technologies Association (TMCATA), to organize a summit of the China Medical Equipment Fair CMEF at Shanghai National Exhibition and Convention Center. They invited six enterprises and organizations including Whale Teq, Bionime, TMCATA, Alliance, Bioteqy, and Taicend, to showcase the development of Taiwan's smart medical and biotechnology industry and product R&D. An in-depth introduction to the STSP Smart Biomedical Industrial Cluster was also given to gain opportunities for international cooperation.



Product Introduction Given by the General Manager of Kuang Yeu , Mr. Huang Qi-Ming (1<sup>st</sup> right) at the Dental South China Tnternational Expo (2018/4/2)



Speech Delivered by the President of TMCATA, Formosa Lu at CMEF Summit (2018/4/12)

#### Ten-year Cultivation of the STSP Biomedical Industry

At "the 2018 Kaohsiung Biomedical Expo" on May 30<sup>th</sup>, 13 STSP Park enterprises including Lightmed Dental, EPED Inc. and Comdek took part to exhibiting MIT's newest smart medical technologies and products. These included dental surgical products, the most advanced brain surgical navigation devices, and biological sensing tools, thus demonstrating both smart surgery and remote sensing and caring technologies.

"The 2018 Taiwan Bio" - one of Asia's key exhibitions - was also launched between July 19<sup>th</sup> and 22<sup>nd</sup> at Taipei Nangang Exhibition Hall.

MOST worked with the HSP, the CTSP, and the STSP to jointly organize a pavilion to exhibit Taiwan's high-end smart medical technologies and products. Among them, the STSP enterprise, Excelsius's Small Incision Lenticule Extraction (SMILE) and EPED Inc.'s surgical navigation system were awarded a Gold Award for Innovative Technology and an Award of Excellence at "the 2018 Taipei Bio Awards" respectively.



STSP Partners in the STSP Pavilion at "the 2018 Taiwan Bio" (2018/7/19)



STSP Biotech Enterprises at "the 2018 Kaohsiung Biomedical Expo" (2018/5/30)

#### Dreams of Doctors Starting at the STSP IADR General Session in the UK, 2018

The STSPB worked with MEM Dental Technology, Codent, EPED Inc. and ACRO to participate and exhibit products at one of the world's biggest dental events, the General Session of International Association for Dental Research (IADR) in the UK. During the session, Dentist Wang C.Y. from National Taiwan University Hospital (NTUH) delivered his speech entitled "A Dentist's Dream Plant" to talk about the technological strengths and products of the STSP Park enterprises from a dentist's perspective. During this trip, MEM Dental Technology signed the MOU with a European manufacturer, Ortho Partner, and Wamtek signed the MOU with Professor Gu Yu Chun of Aston University. In addition, visits to the smart assistance device manufacturer, Accora Ltd., Arlington Manor Care Center, University College Hospital (London's biggest university hospital) and Aston University were made to exchange useful ideas.



The STSP Booth at "the 2018 IADR, UK" (2018/7/25)

#### OPTO Taiwan 2018 STSP's Remarkable Achievements

OPTO Taiwan 2018 was launched between August 29<sup>th</sup> and 31<sup>st</sup> at Taipei World Trade Center's Nangang Exhibition Hall, and this time, five exhibitions were jointly organized featuring more than 2,500 booths. This large event was a vitally important annual gathering and the best platform from which to market Taiwan's optoelectronic products.

In response to the 2018 optoelectronic event, the STSPB worked with important Park optoelectronic manufacturers including LiveStrong Optoelectronics, MH GoPower, Coalition Technology Co., and TTMC to jointly present the STSP Pavilion.

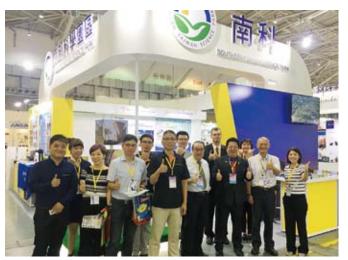


Photo of Park Enterprises at "OPTO Taiwan 2018" (2018/8/29)

### Participation of the STSP's 'Five Tigers' in "the 2018 Tainan International Biotechnology and Green Energy Expo"

"The 2018 Tainan International Biotechnology and Green Energy Expo" (TIBGEE) was organized in October, 2018 at the Commercial Exhibition Center, Tainan (CECT) and the STSPB worked with five Park enterprises to set up the STSP Pavilion, exhibiting diverse biotechnological products of international standards and attracting many visitors. The five Park enterprises were GenMont, Jianxin Biomedical Technology, Kaiwood, Charsire Biotechnology, and MesoPhase.



▲ Park Enterprises and Chief Secretary of the STSPB, Cheng Hsiu-Jung (4<sup>th</sup> right) at "the 2018 TBGEE" in front of the Pavilion (2018/10/5)

# Improving Domestic and International Product Reliability, at the 2018 China Dental Exhibition

To assist the STSP medical device manufacturers in expanding their international markets, between October 19th and 21st, October, 2018 the STSPB organized "The 21st General Sessions for the Republic of China and National Dental Device Exhibition, hosting members of the Association for Dental Science at Kaohsiung Exhibition Center. Prominent dental experts from Southeast Asia, Japan, and the US were invited to share the newest knowledge and medical technology with the dental field, while distinguished guests from various countries were also invited to attend the exhibition. Events included treatment of tooth decay, modern therapy and restorative dentistry, oral laser technology, family dentistry, and the STSP's International Oral Biomedical Industrial Forum. Additionally, international masters were invited to visit



Photo of VIPs at Dental Industrial Forum (2018/10/20)

the KSP to learn about the industrial ecosystem and to improve reliability. At present, Tokyo Medical and Dental University is interested in products made at the KSP, and the STSPB has actively facilitated this cooperation.

# The Mayor Dental Device Event: the 2018 DenTech China in Shanghai

"The 2018 DenTech China in Shanghai" was held from October 31<sup>st</sup> to November 3<sup>rd</sup>, and four Park enterprises, EPED Inc. from Kuang Yeu, HL Biotechnology, ACRO and the STSPB were present at the Taiwan Image Pavilion.

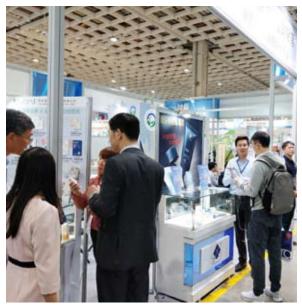
This trip also included visits to the Shanghai Alliance Implant, which was set up by the Park enterprise Alliance in Shanghai and local dental device channel operator, Shanghai Man Qiu Xin Trading Co., Ltd. The visit was designed to increase knowledge of the local dental device market, marketing methods, market operational mechanisms, and medical device product certification procedures. The Park enterprises were also introduced to the advantages and disadvantages of investing in China as a reference for future expansion into the Chinese market.

#### Catching the Smart Medical Industry Trends The 2018 Taiwan Healthcare + Expo

"The 2018 Taiwan Healthcare + Expo" was organized from November 29<sup>th</sup> to December 2<sup>nd</sup> at Nangang Exhibition Hall; based on the most relevant medical technology and information and telecommunication technology, the Expo worked with major hospitals to promote the headquarters of the smart biomedical industry at the STSP. The STSPB worked with the Taiwan healthcare technology expo to set up a "designated area for the Southern Taiwan Smart Biomedical Industrial Cluster" to present various products in the clinical space by working with 15 Park enterprises to promote the Cluster. Additionally, the STSPB organized "the Exchange and Matching Meeting for the STSP Smart Biomedical Industrial Cluster", to promote modern therapy techniques such as new production technology and the R&D strategy of tissue engineering and regenevative mediane, innovative materials of precision wound care, a DNA extraction platform and molecular tests.



Product Introduction and Actual Demo Given by Douglas Huang (1<sup>st</sup> left), Chairman of EPED Inc. (2018/10/31)



Designated Area of STSP Industrial Cluster Products(2018/11/29)

# Position for the Future - the STSP's Vision

#### Improving Industrial Strength and Growing Industrial Clusters

The STSPB incorporates industrial innovative development with the world's digitalized smart trends, to strengthen industrial key R&D technology and lead the way for industrial transformation and upgrading. By targeting specific recruitment goals, the STSPB works to bridge the gap between the supply chains of the IC and the medical device and aerospace industries, to continuously boost the competitiveness of industrial clusters at the STSP.

### **Stabilizing STSP Resources for Sustainable Operations**

It is time to review whether we shall expand or establish a new science park to ensure the supply of industrial land. In the meantime, the STSPB has added new tap water resources and introduced recycled water to gradually complete power supply strategies for the short term and long term. This will ensure a stable water and power supply, so as to attract the presence of high-tech industries , create economic value and job opportunities, and to achieve the vision of sustainable operations at the STSP.

### A Sustainable Environment for Ecology, Life, and Living

To ensure the safety of relief workers, the STSPB will develop indoor positioning, telecommunication, and VR/AR technical applications to integrate disaster relief fields into its science parks. Environmental policies including water and energy conservation, green energy, and large tree transplantation will be continuously implemented to reduce the impact of production and development on the ecological environment. Public art will be promoted through cooperation with local cultural and public education groups to connect the STSP with the public. The STSPB aims to build a high quality industrial environment filled with cultural elements.

# **2018 Summary**

10 <sup>th</sup>	Firefly Recovery on Wetland at the TSP and completion of Dike Bridge Landscape Project
18 <sup>th</sup>	Reunion of STSP Startup Workshop
23 <sup>rd</sup>	Establishment of "the STSP Southern Taiwan Smart Manufacturing Industrial Cluster Alliance"

$4^{\text{th}}$	Seminar on the STSP Innovation Oriented Startup Industrial Link Program
12 <sup>th</sup>	Recognition Award Ceremony and Music Concert for Outstanding Laborers at the STSP
$14^{\text{th}}$	The "Questions to Seniors" Event (1)
16 <sup>th</sup>	STSP Startup Workshop Team's Participation in the 2018 Taiwan BIG DEMO Spring Event
17 <sup>th</sup>	Visit to the STSP Mr. Ikuro Sugawara and Mrs. Sugawara and the Deputy Director of the Kaohsiung Branch of the Japan-Taiwan Exchange Association, Mr. Furnio Yamashita
22 <sup>nd</sup>	Aerospace Laminated Manufacturing Conference
29 <sup>th</sup>	Completed Construction of Multi-level Planting at the Boundary Green Land of the KSP(L26)
30 <sup>th</sup>	Participation in "the 2018 Kaohsiung Biomedical Expo"

6 <sup>th</sup>	STSP Top 100 Innovation Contest for the AI_ROBOT MakerSpace- STSPTAIRA Awards in Singapore
7 <sup>th</sup>	The Aerospace Business Forum and Technology Seminar
7 <sup>th</sup>	STSP Fun Run
10 th-April 20 th	STSP Spring Arts Festival
17 <sup>th</sup>	Career Fair- the TSP
24 <sup>th</sup>	A Healthy STSP: 2018 - the STSP's First Sports Year
31 <sup>st</sup>	Establishment of "the Global Advanced Dental Education Center"
31 <sup>st</sup>	Founding of the STSP AI_ROBOT MakerSpace Social Alliance



March

## February

# April

15<sup>th</sup>-1

May

4 <sup>th</sup>	The 15 <sup>th</sup> STSPB Anniversary Celebration and Community Events		
6 <sup>th</sup>	Contract Signing between Innolux and Tai-Kang Organic Agriculture Plantation for Organic Corporate Meals		
9 <sup>th</sup>	Completed Construction of the STSP Traffic Control Center		
27 <sup>th</sup>	Completed Construction of the Earthwork Filling Allotment (IV) (T37) at the KSP		
-			
		April-June	Visiting Modern Pre-historical Remains
-		2 <sup>nd</sup>	Participation in "the 2018 Dental Expo in South China"
		2 <sup>nd</sup>	The "Tsengwen River Water Treatment Facotry Expansion Project" of Taiwan Water Cor[poration with Ratified Funds Provided by Executive Yuan
			Subsidies Ratified by Executive Yuan for Tainan City Government to Proceed with the "STSP Change of Land Utilization Project" (Permanent Detention Pond outside the STSP Construction Operations)
		8 <sup>th</sup>	2018 Tour of Local Taiwanese Culture for Japanese Park Practitioners
		10 <sup>th</sup>	Participation in the World's Largest Professional Aerospace Industrial Exhibition, "the 2018 Aircraft Interiors Expo"
-	-	12 <sup>th</sup>	Participation in the "CMEF Smart Healthcare and Biotechnology Industry Summit"

1 <sup>st</sup>	Completed Construction of the Phase III Landfill at Tainan Science Park Resource Recycling Center
7 <sup>th</sup>	STSP Startup Workshop Team's Particiation in InnoVEX (Frontier Tech, Akubic)
1 <sup>th</sup>	STSP's Entrepreneur Lecture on Startup Workshops by the CEO of LiveStrong Biomedical Technology Co., Ltd., CS Liu
1 <sup>th</sup>	Visit from the CEO of the Manufacturing and Engineering Department of International Enterprise in Singapore, Mr. Edwin Chow and his Delegates to the STSP AI_ROBOT MakerSpace
2 <sup>th</sup>	Visit from Dr. Norman D. Peterson of the US Argonne National Laboratory to the STSP AI_ROBOT MakerSpace
5 <sup>th</sup>	TAIRA's Final Pitch at the Al_ROBOT @ STSP
6 <sup>th</sup>	Series of Events at the 2018 STSP [ai] Makers' Festival
20 <sup>th</sup>	The First Session of Seminar on the Promotion of Business Integnty and Trade Act in 2018(the Tsp)
26 <sup>th</sup>	Participation of the STSP Startup Workshop Team in the first round of FITI and the award winning teams with startup funds worth 2 million NT dollars, Jen-Wei Biotechnology and NSYSU LCD as well as Potential Startup Awards winning teams, AQUASEN and SMELL OUT
29 <sup>th</sup>	Demo and Matching Meeting for the STSP's Innovation Oriented Startup Industrial Link Program

	6 <sup>th</sup>	The "Questions to Seniors" Event (3)	3 <sup>rd</sup>	The STSP's 13 <sup>th</sup> Solar-powered Model Car Family Camp" in 2018
	29 <sup>th</sup> -November 10 <sup>th</sup>	The STSP Community Spirit Ball Games	9 <sup>th</sup>	Participation in Biomate International Symposium of Implant Dent
	29 -November 10	The STSF Community Spint ban dames	9 <sup>th</sup>	Visit from the "MOST Delegates of Taiwan, Latvia, and Lithuania the National University of Kaohsiung" to the STSP
July-September	Free Trial at the STSP's Wellness Center	Gym	12 <sup>th</sup>	Participation of the STSP Startup Workshop Team in the 2018 Taiwan DEMO-International Exhibition Meeting for Technical Teams and Angle Fi
2 <sup>nd</sup>	The Second Session of Seminar on th	e Promotion of Business Integnty	13 <sup>th</sup>	Interdisciplinary Innovation Presentation for the STSP Innova Oriented Startup Industrial Link Program
17 "	and Trade Act in 2018(the Tsp) D Forum 2018 on Smart Factories in Tai	nan	13 <sup>th</sup>	STSP: Winner of the 2018 Units of Outstanding Performance for Environmental Education Facilities in 2018
18 th	Expansion of the STSP AI_ ROBOT Ma TRIRA Teams		15 <sup>th</sup>	Recognition for the 2018 Autonomous Management of Di Vehicle Emissions by Environmental Protection Bureau of Tainan Government
19 <sup>th</sup>			15 <sup>th</sup> -17 <sup>th</sup>	Participation of the STSP Startup Workshop Team and Innova Oriented Startup Industrial Link Program Team in 'Meet Taipei'
25 <sup>th</sup>	Participation in the IADR General Sessio	n in the LIK	19 <sup>th</sup>	Completed Construction of STSP's 2018 Landscape Improveme
20 <sup>th</sup>	Completed Construction of Gong 2 Park		21 <sup>st</sup>	Participation in the "Active Operation of the Dental Experie Diagnosis Line in Shuang Ho Hospital"
LI	at the STSP (L15)		25 <sup>th</sup>	Clinical Trial Results Presentation and Matching Meeting for ST Dental Products
			25 <sup>th</sup>	Annual Meeting of the Al_ROBOT @ STSP
	and a		26 <sup>th</sup>	Participation of the STSP Workshop Startup Team in the Final Rc of FITI.Flipweb awarded with the Outstanding Business Awar the amount of 2 million NT dollars, and the Potential Startup Aw winning teams LUDO and TFT
-	Constanting The Constant		29 <sup>th</sup>	Completed Contract Signing of Yongkang Recycled Water Use
10			29 <sup>th</sup>	Participation in "the 2018 Taiwan Healthcare + Expo"
In Land of	CER Al Brais			
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The "Questions to Seniors" Event (2)
Visit from the "Davao City Delegation from the Philippines" led by Deputy Mayor Dr. Bernard E. Al-ag and Chairman of the Center for Southeast Asian Studies of NSYSU, Tsai Hong- Chen, to the STSP
Drainage Proposal for "the TSP Land Utilization Project Change", Ratified by the Water Resource Agency,MOEA
"Love to Work in Kaohsiung" Job Fair
The 2017 Talent Cultivation Grant Program -Results Demonstration and Special Project Exhibitions

Visit from the Deputy Director of the Kaohsiung Branch of the "Japan-Taiwan Exchange Association," Mr. Iwakura and his Delegation to the

Delegation of the "Thailand Trade and Economic Office" led by the Representative of the Taipei Office, Mr. Thongchai Chasawath to the

Participation in "OPTO Taiwan 2018"

 $7^{\text{th}}$ 

 $10^{\text{th}}$ 

 $10^{\text{th}}$ 

11 <sup>th</sup>

 $20^{\text{th}}$ 

21 st

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STSP

STSP

July

August

Sector and the sector of the s	
3 <sup>rd</sup>	The "Questions to Seniors" Event (4)
5 <sup>th</sup>	Participation in "the TIBGEE"
9 <sup>th</sup>	Seminar on Sharing of "the 2018 Professional and Technical Talents Training and Promotion for Industry-University Cooperation Program"
12 <sup>th</sup>	Startup Growth Camp for the STSP's Innovation Oriented Startup Industrial Link Program
15 <sup>th</sup>	Commencement Running Event for Industrial Safety and Environmental Protection Month
19 <sup>th</sup>	The 21 <sup>st</sup> and 22 <sup>nd</sup> General Sessions for the Republic of China and National Dental Device Exhibition
22 <sup>nd</sup>	Acquisition of Renewable Energy Certificate for Parking Tower
23 <sup>rd</sup>	Outcome Presentation for the 2017 STSP R&D and innovation- based Industry-Academia Collaboration Project
25 <sup>th</sup>	Establishment of "the HBOT Center'' and "the Tissue Regeneration and Cosmetic Repair Experiential Diagnosis Demonstration Center" by the Kaohsiung Medical University Chung-Ho Memorial Hospital
26 <sup>th</sup>	Visit from the "Vietnam Economic and Cultural Office in Taipei", led by Director, Mr. Nguyen Anh Dung to the STSP
27 <sup>th</sup> -28 <sup>th</sup>	Outcome Presentation for the AI_ROBOT @ STSP
27 <sup>th</sup> -29 <sup>th</sup>	TAIRA Outcome Presentation and Cqanching Ceremony of Cooperation with IBM
31 <sup>st</sup>	Participation in "2018 DenTech China in Shanghai"

September

October

$4^{\text{th}}$	The STSP IC Industrial Seminar and Technology and Talent Matching Meeting
4 <sup>th</sup>	Completed Leasing of PV Panel's Distribution Reservoir
4 <sup>th</sup>	MOU Signing between the STSPB and the HHTP Bureau, Vietnam
12 <sup>th</sup>	IEEE AVIR Experts' Visit to the AI_ ROBOT@STSP
14 <sup>th</sup>	Participation in the Ministry of Culture's Sixth Public Arts Awards and winning of the "Public Participation Awards" and "Arts Creation Awards"
19 <sup>th</sup>	STSP Startup AI Tool Matching Meeting
21 <sup>st</sup>	STSP Christmas Candle Lighting Banquet
25 <sup>th</sup>	Presentation of STSP 3D Printing and Smart Manufataring
26 <sup>th</sup>	Press Conference for the Commencement of the Fourth STSP Love Month - "Love Starting from the STSP"
31 <sup>st</sup>	Completed Construction of the 2018 Facilities and Road Improvement Project at the KSP

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December

November

### Southern Taiwan Science Park 2017 Annual Report

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#### Editors-in-Chief :

Su Cheng-Kang; Cheng Hsiu-Jung; Chen Jui-Huan; Lin Hsiu-Chen; Li Kuo-Hung; Tung Chun-Te; Kuan Chia-Ming; Chang Hsiu-Min; Li Hsin-Chang; Lin Shu-Yuan; Kuo Hsiu-Pen; Wang Feng-I; Tseng Jung-Chieh; Chyn Wen-Jyh

#### Editors :

Chao Chih-Pao ; Liang Yu-Lin ; Huang Chuan-Fa ; Su Hung-Yi ; Lai Yang-Chi; Lin Lung-Fa; Chen Yu-Cheng; Wu Su-Shun; Huang Ming-Hui

**Executive Editors :** Tsai Yu-Tsai; Chen Yi-Chun

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TSMC's Fab 18 will be the world's first specialized fab for five-nanometer production procedures. As the Chairman of the TSMC, Mr. Morris Chang pointed out, the opening of Fab 18 at the STSP will lead to investing in long-term technology development, maintaining a 5% growth rate for of future revenue, and cultivating Taiwan's industries-a promise that the TSMC made to Tainan and the STSP.



Southern Taiwan Science Park Bureau, Ministry of Science and Technology

No.22,Nanke 3<sup>rd</sup> Rd.,Xinshi Dist., Tainan City 74147, Taiwan (R.O.C.) Tel : +886-6-505-1001 Fax : +886-6-505-5812 http://www.stsp.gov.tw

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