Newsletter of YunTech

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Awards and Commendation

Awarding Ceremony of the 2015 International Design Competition

Design Power of YunTech on Display as YunTech Nicks Outstanding Performances at Both International and Domestic Competitions

The Department of Industrial Design snatched several awards at both international and domestic design competitions. The Ministry of Education (MOE) held the "Press Conference and Awarding Ceremony of the 2015 International Design Competition" on December 18th, 2015. YunTech's team was awarded a scholarship valued at NT. 100,000 at the competition, which aimed at encouraging students to take part in international art and design competitions. YunTech's performance effectively demonstrated the design power and creativity that the brand YunTech Design carries.

The product Fun Pinball, invented by the Department of Industrial Design, snatched a gold medal at the 2014 Great Design contest and also won a Red Dot Design Concept Award in the category of Best of the Best. Led by Lecturer Chang Ching-hsu, the team designed a 'pinball' for kindergarten kids. The design concept behind Fun Pinball is to "free your imagination and pin (pronounced the same as the word "create" in Chinese) your own style." Kids freely use a whiteboard and diverse shapes to create a route. Through playing and making their routes, they not only cultivate their imagination and creativity but

also learn to cooperate with others.

YunTech Snares a Gold and Silver at the 19th Moscow Russia Archimedes International Invention Exhibition and Invention Contest!

The 19th Moscow Russia Archimedes International Invention Exhibition and Invention Contest took place from March 29th to April 1st, 2015, in Moscow, Russia and attracted more than 700 entries from 17 countries. The 2 entries from YunTech snared a gold and silver medal at the contest, showing the innovation and creativity YunTech's faculty members and students.

The gold-awarded invention, A Novel Common-Path and High Precision Displacement Sensor, was invented by students Shu Li-hung, Chang Chung-pin and Shi Hung-da under the instruction of Professor Wang Yung-cheng from the Department of Mechanical Engineering. The invention is a multi-interferometric displacement measurement system with high precision which is also easier to establish and provides anti-ambient interference. The changeable angles of the measurement mirrors increase the measurement scales and allows for measurement of both long and short distances. Moreover, the team was able to reduce the volume of the sensor to 10 mm^3, making it more convenient for the precision machinery industry.

Student Shi Hung-da represents the team in receiving the gold medal

The silver awarded invention, Structures for Efficiency Improvement of Flexible Organic Light-Emitting Diodes, was invented by students Hung Pei-wei and Dong Yu-tong under the instruction of Associate Professor Lin Jian-yang from the Department of Electronic Engineering. The invention adopted the multilayer doping method to produce an organic light-emitting layer. The better quantum effect associated with this method increases luminous efficiency and brightness. Luminous efficiency and brightness can be increased to more than 200% if the flexible organic light-emitting diodes, Spiro-NPB/TBADN:Rubrebe/Alq3/LiF/Al, adopts this structure. The invention is able to meet the needs of green lights with high luminance and the needs of flat panel displays.

Fig. 2. White light emission of the flexible white OLED on PET substrate under forward biasing.

White light emission of the flexible white OLED on PET substrate under forward biasing

iF Design Award 2016 Ranks Product from YunTech Among its 9 Best

The iF Design Award is one of the most famous international design contests. Called the "Oscar Award for Designers," the total prize money is EUR.30000, shared by the inventors of the best 9 products. The design power and creativity of YunTech was in full display at the event that drew 11,000 products from all over the world. YunTech's teams, comprising of faculty and students, clinched 3 awards in the category of student design and 1 in the category of design. The awarded products are listed below:

The product RAINDROP, invented by student Shu Wei-chi under the instruction of Assistant Professor Chiang Chyh-bao from the Department of Visual Communication Design, was chosen as one of the top 9 products. The main aim of the product is to convey the circular destruction of the ecosystem. Raindrops fall from the sky and become resources for all creatures. Then the raindrops penetrate the soil and flow with groundwater,

rivers, the ocean and other water resources. Under a certain temperature, the water evaporates and becomes clouds, and these then break into raindrops again, restarting the entire process The product “RAINDROP,” is a piece of paper board on which water can flow. Due to gravity, the water flows from up to the button. A picture of several factories in an urban area is drawn then. The picture shows the air pollution produced by waste gas and waste materials from the factories; this waste also makes the water unclean. When it rains again, the water droplets combine with heavy metal and become the acid rain which drops to the ground. In the end, the water enters the food system and we drink it. The process continues time after time.

The product RAINDROP invented by the team from the Department of Visual Communication Design

The product PiPlay was invented by students Pan Yun-tsu, Kao Bai-tsu, Chen Chin-wen and Wang Yu-an under the instruction of Associate Professor Hsieh Hsiu-ching from the Department of Creative Design. The objective of the product is to improve on the traditional Tic-Tac-Toe game. The Tic-Tac-Toe game is classical but not interesting enough. It is easy for players to have a drawn game. Also, the easiness of the game makes players not want to play the game often. The product PiPlay uses water pipes with magnets instead of traditional knots and crosses in constructing and completing the game, changing the original game from a two dimensional space into a three dimensional space. While moving chess pieces and cards, players are also competing with their wits. In this way, the challenges become higher, increasing the interest in playing the game.

The product Smart Pet Door, invented by student Cheng Nien-chun, was selected as one of the top 100 products of the year.

The academia-industry product Ratchet Wrench, invented by Professor Cai Desng-chuan from the Department of Industrial Design, was awarded and named the Discipline Product.

The product PiPlay invented by the team from the Department of Creative Design

Academic Exchanges

Inter-Disciplinary Team Wins Gold at the Exhibition of Intelligent Electronics

The Intelligent Space System Platform created by an inter-disciplinary team composed of faculty from different colleges won a gold award at the Exhibition of Intelligent Competition held by the Ministry of Education (MOE.).

YunTech was assigned by the MOE to develop the platform, a project under the authority of the Center for Application Design of Intelligent Electronics, which is run by the MOE’s Comprehensive Human Resources Cultivation for Intelligent Electronics. The project was jointly carried out by Associate Professor Hsueh Ya-hsin and Associate Professor Lien Jenn-kai from the Department of Electronic Engineering and Associate Professor Chang Tsen-yao from the Department of Creative Design. With their different expertise, a platform that offers inter-disciplinary courses was established for YunTech’s students. The main focus of these courses is to develop the newest technology and applications with respect to Visible Light Communications (VLC) in the growing Internet of Things (IoT) field. Teachers

and students use their knowledge in different areas to brainstorm new ideas for creating applications, such as uses of interior space, uses in difference contexts, the outer appearance, and functions.

GPS for Elders

Associate Professor Hsueh Ya-hsin, the project leader,stated that due to the inter-disciplinary cooperation and brainstorming involving students from the Department of Electronic Engineering, Department of Creative Design, and Department of Mechanical Design during the courses, 4 applications with attractive appearances and functions were produced. The 4 applications that were on display were A Robot Serving as a Hotel Staff, Light to Life, Confidential System for Office Files, and GPS for the Elders. All the products invented have their own apps, showing their high practicality. These products accomplished positive responses from audiences at the "Exhibition of Intelligent Electronics."

"The Exhibition of Intelligent Electronics" attracted teams from nearly 40 colleges and universities to take part in it. The product Light to Life was produced by students Wang Shou-hui, Chen Yi-kai, and Gang Bou-fan from the Department of Electronic Engineering and students Liu Chen-yi, Ho Tsai-chen, and Li Chi-chia from the Department of Creative Design under the instructions of Associate Professor Chang Tsen-yao and Associate Professor Hsueh Ya-hsin.

The product was honored with a gold award the exhibition. Integrating several functions, the product can be used in emergency situations in variou ways. It can serve as a wall lamp, reminder, flashlight, or a help buzzer. Also, it can help hotels manage their customers and understand where their customers are fleeing to in emergencies, thus ensuring better control of safety operations.

Light to Life, the gold-awarded product

The Development Center of Cultural and Creative Industries is Playing its Role in Promoting Different Cultural and Creative Designs

The Development Center of Cultural and Creative Industries, established by the College of Design, has been subsidized by the Ministry of Education (MOE) under the "Subsidy Directions for Developing Technological University Paradigms" for 5 year. During these years, the center has helped the cultural and creative industries to develop and benefit in different fields.

Associate Professor Chen Min-sheng from the Department of Industrial Engineering and Management hosting the "Intelligent Agriculture 4.0 Forum for Finding a New Chance for Agriculture"

The Development Center of Cultural and Creative Industries has pursued industry-academia collaborations with local industries and stimulated the cultural and creative industries in the fields of agriculture, religion, tourism and intelligent life design. The total number of industry-academia collaboration cases carried out by the College of Design in 2015 was 132, and they were valued at NT.148 million. Different from the business model in the past characterized by individual operation, the center focused on inter-disciplinary cooperation. The year 2015 saw more than 35 inter-disciplinary teams from YunTech, more than 25 inter-disciplinary teams from nearby industries, and more than 35 organizations of industry-academia collaboration. The roster of teams included teams for Oceanic Cultural and Creative Industries, Salt and Leisure Tourism Cultural and Creative Industries, Food and Agricultural Cultural and Creative Industries, and a host of others. Moreover, the center connected itself to the local industries and pushed forward with a "swarm" collaborative model and horizontal alliances, thus increasing benefits from both R&D and management teams.


Associate Professor Yuan Min-jian introducing the business model of innovative cloud farms.

In the year of 2015, Associate Professor Chang Tsen-yao from the Department of Creative Design led teams in brand designing. The teams under him worked on several aspects. They designed product wrapping and packaging, assisted in display exhibitions, worked on advertising designs, did paintings for gardens, and so forth. The teams held "The Exhibition of the Art of Paper Folding" in 2015. The exhibition was held to show the possibilities and creativity in combining ideas from paper folding with product design. YunTech also signed a Memorandum of Agreement with Rosahill, a rose garden in Gukeng, aimed at building human resources in design at YunTech in an effort to develop a think tank for Rosahill and its partners.

The Oceanic Cultural and Creative Industries team, which has always been led by Assistant Professor Yu from the Department of Industrial Design, cooperated with the National Museum of Marine Biology & Aquarium in holding the "2015 Exhibition of Summer," which was held on November 15th. The products displayed included Icy Whales, Sommelier Crabs, Coral Candles, Seaweed Forest, Whale Waves, Proud Parrots and several others that took the audience by storm. For the year 2016, the team is cooperating with the Life Museum of Penghu and is in the process of planning the "2016 Exhibition of Oceanic Cultural and Creative Industries" in another effort to develop better designs for the Oceanic Cultural and Creative Industries.


Led by Assistant Professor Yu Yuan-lian, the team composed of students Wang Chun-hou (left) and Ho Wei-chia (right) pushed forward with new possibilities in the Oceanic Cultural and Creative Industries. They cooperated with the National Museum of Marine Biology & Aquarium in holding the "2015 Exhibition of Summer."

Outstanding Performance

Event Celebrating 'Most Influential Organizations in Academic Resources' Awards YunTech!

The Library of YunTech achieved 3 awards for its academic resources in the categories of volume, high visibility and knowledge-sharing at the "Statistics of the Most Influential Organizations in Academic Resources" held by the National Central Library. YunTech was invited to join the awarding ceremony for its academic contribution.

The 3 awards honored YunTech for its large volume of theses and dissertations in the 2014 academic year, the click through rate of its theses and dissertations in the 2015 academic year, and the number of downloads of its theses and dissertations in the 2015 academic year.

The "Statistics of the Most Influential Organizations in Academic Resources" was meant to promote the importance of scholarly communication. In this competition, the National Central Library selected and honored the most influential colleges/universities and publishers in the production of academic resources. The statistics were based on data collected from the Taiwan Citation Index-Humanities and Social Sciences, National Digital Library of Theses and Dissertations, and other online databases. The event was hosted by the National Central Library and was jointly run with the Consortium of Digital Library of Theses and Dissertations in Taiwan under instructions from the Ministry of Education (R.O.C.).

Side view of Library of YunTech

Professor Shu Chi-min Awarded Fellow Position by the American Institute of Chemical Engineers (AIChE)!

Professor Shu Chi-min from the Department and Graduate School of Safety Health and Environmental Engineering was awarded a fellow position, the highest membership position, by the American Institute of Chemical Engineers (AIChE) in 2016. . The position is believed to be the highest honor achievable by chemical engineers all over the world.

Professor Shu Chi-min selected as a fellow by AIChE in the year 2016

Founded in 1908, AIChE has 895 members. All the members, who are also elites from both industry and academic sectors, work on improving academic research and education in chemical engineering. Due to the effort and hard work of its members, AIChE is the most famous and academically influential chemical engineering institute in the world.

Professor Shu has spent his whole life doing research on process-safety-related man-induced disasters. Also, Professor Shu has made significant contributions to runaway reactions, thermal stability analysis for reactive materials, and fire and explosion prevention. Since 2000, Professor Shu has published more than 200 SSCI papers and is one of the researchers who has made the most contributions to the field among his peers in both Taiwan and the Mainland China, including 61 Changjiang Scholars and 65 Academicians by the Chinese Academy of Engineering.

The positions of Changjiang Scholar and Academician awarded by the Chinese Academy of Engineering are the highest academic awards for engineers in Mainland China. In the year 2011, Professor Shu was honored with the Award of Chemical Engineering by Taiwan Institute of Chemical Engineering and selected as a fellow by the globally famous North American Thermal Analysis Society (NATAS).

Professor Shu Chi-min receiving the Medal of Fellow by AIChE

Founder of YunTech, Former President Chang Wen-shion, Passed Away.

The founder of YunTech, Former President Chang Wen-shion, passed away at the age of 79 on April 3rd, 2016. All faculty and staff members expressed great sorrow at the news, and many who worked with him or who were affected by his works spoke of his life and contributions.


Founder of YunTech, Former President Chang Wen-shion

Dr. Chang was born in Taipei City on June 10th, 1938. After graduating from the Department of Chemistry, Chung Yuan Christian University, he then went to take up his doctoral studies at the Graduate School of Science and Engineering at Waseda University, Japan. His research interests were varied and focused on applied biotechnology, testing and recruitment in technical and vocational education, and curriculum and evaluation, and he published more than 150 papers in his life.

Dr. Chang was first appointed by the Ministry of Economics as the Director of the Industrial Institute (now the Industrial Technology Research Institute). Thereafter, he was appointed by the Ministry of Education (MOE) to serve as the Dean of Academic Affairs of Taiwan Provincial Kaohsiung Teachers' College (now National Kaohsiung Normal University). In 1978, he was appointed President of Provincial Kaohsiung Institute of Technology (now National Kaohsiung University of Applied Sciences). In 1984, he was appointed the 10th President of National Taipei Institute of Technology (now National Taipei University of Technology). In 1989, Dr. Wen-Shion Chang was appointed Director of the Preparatory Office of National Yunlin Institute of Technology (the former name of YunTech).


Founder of YunTech, Former President Chang Wen-shion, and President Hou Chun-kan

In the process of establishing this new school, Dr. Chang tried to establish a school which would last forever. He hired approximately 100 scholars and experts from universities and the central government to form roughly twenty research teams. It took around one year to finish the research projects on the barren land donated by Taiwan Sugar Corporation. In 1991, National Yunlin Institute of Technology was established. Dr. Chang was then appointed by the Ministry of Education as the first President of YunTech and made a record in establishing a school within the shortest time.

In 1997, National Yunlin Institute of Technology was renamed National Yunlin University of Science and Technology due to its outstanding performances, and became the first institute to become a university in Taiwan. In 2001, Dr. Chang resigned and Dr. Tsong-Ming Lin succeeded him as the president of YunTech.

Dr. Chang adopted a practical way in leading YunTech and was active and positive in pursuing resources from industry, government and academics, thus improving YunTech's competiveness. For example, the Testing Center for Technology and Vocational Education located at YunTech, and the Evaluation of Business and Medicine and Nursing in Technological and Vocational Education were both achievements of Dr. Chang. Everything Dr. Chang did was in order to make YunTech as good and competitive as its peer schools. As a result of his dedication, the location of YunTech has not affected its development.Due to hisefforts, YunTech has been able to make great contributions to technological and vocational education, increasing its reputation and position..

Dr. Chang served as the president of YunTech for 12 years. By the year 2001, there were already 14 departments and 19 graduate schools in 4 departments. The student population was near 7,000. The population of graduates was more than 9,000 and they had already begun making significant contributions to society.

After resigning from YunTech, Dr. Chang was then appointed President of Lunghwa University of Science and Technology and resigned in 2005. Dr. Chang then took the position of Chairman of Board at Jinwen University of Science and Technology in 2005.

He passed away while he was still serving in this position.

Besides leading schools, Dr. Chang made other contributions in innovating technological and vocational education in Taiwan. He was authorized by the MOE to organize the testing and recruitment system for technological and vocational schools and junior colleges, which was the first system separating testing and recruitment. Because of the system, the Testing Center for Technological and Vocational was established. He was also authorized by the MOE to evaluate technological colleges and junior colleges, thus helping these schools to improve their teachers qualifications and quality. Moreover, Dr. Chang put forth academic exchanges with Japan. Every year, teachers from the technological and vocational education field group together to visit universities and the industries in Japan to create further exchanges and cooperation with Japan.

YunTech was founded by Dr. Chang with his hard-work and effort. He was like the father of YunTech, and YunTech was his only child. Even after resigning from YunTech, Dr. Chang still came back every year to join our school's anniversary celebration, where he delivered speeches sharing his life and important experiences in order to encourage YunTech's students. Even when his body was beginning to fail him in his later life, he would call and express his concerns for faculty and staff members. When a heavy earthquake occurred on Chinese New Year's Eve in 2016, Dr. Chang called YunTech to make sure everything was alright with the university. The love and care of Dr. Chang for YunTech is something we should always remember.

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