

# Newsletter of YunTech

National Yunlin University of Science & Technology

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## Contents

-  The Gold and Copper Awards of the “First National Toy Figurine Design Contest for University Students” Go to National Yunlin University of Science and Technology 1
-  “Mother’s Day Gift Green Packaging Design Contest 2009” Held by the Environmental Protection Administration of Executive Yuan 2
-  National Yunlin University of Science and Technology Stands Out at the “2009 National Project Contest for Technological University Students” 3
-  Professor Jet-chau Wen at the Department of Safety Health and Environment Engineering Is Honored with the “Water Conservancy Contribution Award” 4
-  International Conference of CAADRIA 2009 4
-  Conference on the Restoration of Historical Monuments and Constructions –Traditional Mortar Application and Treatment 5
-  A Return to Original Purity and Simplicity – Cultural and Heritage Symposium 5
-  The 2009 International Conference on Creative Life Design 6
-  Design Festival of the College of Design 7
-  YunTech Serves as the Cradle of Talents for Electronic Technology 7



## Awards and Commendation



Gold-awarded toy figurine by Shiou-shian Ju

## The Gold and Copper Awards of the “First National Toy Figurine Design Contest for University Students” Go to National Yunlin University of Science and Technology

Financially supported by the Ministry of Education, Southern Taiwan University conducted the first “National Toy Figurine Design Contest for University Students”, and had the winner list announced on May 22. It was required as the main criterion that all the works should be created based on the traditional image of Tainan City. Standing out from the 585 competitive works submitted by 26 universities around Taiwan, the works designed by the freshmen of the Department of Creative Design of National Yunlin University of Science and Technology (hereafter called YunTech) won various prizes, including the gold-awarded work of Shiou-shian Ju, the copper-awarded work of Shin-chi Tsao and other works elected as good creations of Jiun-han Dai, Ming-kuang Cheng and Hao-fu Chien.

Designed by shaped-like noodles, shrimps and bean

sprouts, the “Dan-tsu Grandma” of Shiou-shian Ju appears as vividly as lively. Accompanied with a natural posture and appearance, the smile of Dan-tsu Grandma conveys entirely the typical spirit of the people of Tainan City who always bear hardship without complaining. The other work titled “Yi-Wu Tainan” created by Shin-chi Tsao was inspired by the Pa Yi dance, known as Eight-Row dance, which is usually performed to celebrate the birthday of a great Chinese thinker and social philosopher, Confucius. This work of her is a typical one that converts traditional culture into modern design. Professor I-hsiung Chou and Professor Vince Yu as the instructors of the above prize-winners felt proud of their notable performances. This glorious success also shined upon the Department of Creative Design whose curriculum involves “Culture and Creative Industry” as its main focus and characteristics.

### **“Mother’s Day Gift Green Packaging Design Contest 2009” Held by the Environmental Protection Administration of Executive Yuan**

Taking part in EPA’s “2009 Mother’s Day Gift Green Packing Design Contest”, the College of Design of YunTech stood out above the rest and won the best three prizes and other seven awards for excellent work. By following the criteria of the contest, all the participants were expected to design a packaging that is recyclable, resource-saving and able to reduce pollution. Besides these green concepts, the degree of creativity and aesthetic expression also became part of the requirements that the contest judging committee took into account when choosing the best works. The gifts that are packaged with all these elements not only can transmit one’s deep gratitude for the devotion of his/her mother, but also can avoid possible waste that comes of buying the over-packaged gifts from the market.

The first-prize awarded work titled “Shih Chin” is a design by graduate student Ying-jr Wang from YunTech’s Department of Creative Design. In order to meet the green requirements and help reduce the environmental burden, Ying-jr Wang chose plastic materials that can be decomposed as the main materials and used silk scarves as the other element to complete the work. In addition to being applied for

packaging purposes, the silk scarves can be hung in wardrobes so that users can easily choose the one that most fits their dressing. Such a single and multiple uses of silk scarves have successfully enhanced the value of packaging. Inspired by carp streamers and latex gloves, the “Variegated Carp Gloves” designed by doctoral student Yi-fang Kao from the Graduate School of Design won one of the second prizes. According to the Japanese culture, a carp streamer is the message and medium through which parents pray to God in the hope that their newborn babies will grow up healthy and strong. The red carp, therefore, has become the one that signifies mother, and Yi-fang Kao incorporated this significance into her creation. She applied the visual beauty of carp’s head and its scales and combined the finger parts of latex gloves, giving a new interpretation to the product packaging. The other second prize awarded work “Home” was designed by Yi-jen Wu who is also a doctoral student of the Graduate School of Design. She combined the all-in-one idea and reduced the needs for packaging materials under the condition of that such a packaging does not diminish its protection to the product inside. Made of recyclable materials and a reducing degree of printing ink, “Home” is a design that entirely meets the requirements of the new green era.

The EPA of Executive Yuan publicly commended the winners for their remarkable works on Tuesday, May 5, and awarded the postal gift coupons of NT\$ 6,000 plus one trophy to the winners of the best three prizes and one trophy for the prizewinners whose works were crowned with excellent work award. From then on to May 24, 2009, all the awarded works were displayed in the Office of Environmental Protection Administration of Executive Yuan.



Prizewinners of Green Packaging Design Contest along with their creative works



## National Yunlin University of Science and Technology Stands Out at the “2009 National Project Contest for Technological University Students”

As the contest sponsor, the Ministry of Education announced the list of winners of the “2009 National Project Contest for Technological University Students” on June 28. From the works submitted by YunTech, six of them were chosen for the final competition, and five of which were awarded a prize. Valued by such a great performance, YunTech undoubtedly became the biggest winner of the contest.

Guided by Professor Ching-hsu Chang, the team that was made up of students Te-lun Meng and Chang-wei Chen from the Department of Industrial Design defeated the 427 competitive works of other technological universities and successfully had their work “Bike Blog” crowned with the first prize for the “Art and Design Section.” They chose advanced bicyclists as the main targets and gave rising to the brand new concept of GPS by combining MSN communication system with bicycle activities. By logging in to the instant messenger of “Bike Blog”, bicyclists can search for other partners nearby and instantly start mutual communication so as to acquire prompt and exact traffic information.

For the “Electrical Engineering Section”, the undergraduate students of the Department and Institute of Electronic Engineering, Ru-cheng Yang, Chih-hung Chang, Ming-wei Huang and Ho-shun Chen, followed the instructions of Professor Kuo-lan Su and won the second prize for “Group Robot System.” Characterized by being “low cost” and easy for assembly and repair, this “Group Robot System” is a small robot that not only possesses significance for both education and research, but serves as a production created for recreational purposes as well. This invention has been granted a patent by the Taiwan Patent Office.

In respect of the “Electronics Section”, the undergraduate of the Department of Electronic Engineering, Chi-hua Li, won the third prize by the project “Study on Non-ideal and Interference Ion Effects of Calcium Ion Array Sensors based on Separative Extended Gate Field Effect Transistor Fabricated by Screen-printed Technology” under the instructions

of Professor Jung-chuan Chou. In this project, the screen-printed technology that was studied and applied to a separative extended gate field effect transistor is possessed of the quality of microminiaturization and characterized by being low-cost and easy to be manufactured.

Led by Professor Ming-jian Yuan at the Department of Industrial Engineering & Management, the representative team of YunTech for the “Management Section” was consisted of four undergraduates, Che-yun Cheng, Hsin-chi Yeh, Hui-wen Sung and Kai-chun Chen and gained the third prize for the research on “The Design and Development of Product Tracing for Enterprise Resource Planning System - A Food Industry Example.” Regarding the substandard milk powder event happening in China, the team strongly believed that the authorities faced difficulties in tracing the ingredients used for each brand’s milk powder and failed to investigate if melamine was added to such products. These difficulties affected the government’s power of judgment and resulted in inconsistent decisions that negatively impacted the market and disabled consumers to tell which milk powder is safe enough. Accordingly, the team developed a product tracing system and hope that it could be connected to the ERP System of enterprises so as to grant more protection to the consumer rights. Through this cooperation, the quality of products could also be proven and enhanced.

In the contests of the past years, both the faculty and students of YunTech performed outstandingly and demonstrated their research potential and practicum. The prize winning victory this time has been a great recognition again to the efforts that YunTech teachers and students have been devoted to.



Te-lun Meng and Chang-wei Chen at the Department of Industrial Design designed “Bike Blog” and won the first prize for the “Art and Design Section”

## Professor Jet-chau Wen at the Department of Safety Health and Environment Engineering Is Honored with the “Water Conservancy Contribution Award”

At an awarding ceremony of the “2009 National Water Conservation Festival and Water Conservancy Contribution Award” held by the Water Resources Agency of Ministry of Economic Affairs, those representing industries, organizations and government were commended for their contributions to water conservancy. The awards included “Lifetime Achievement Award”, “Ta-yu Award”, “Water Conservancy Contribution Award” and “Award of Outstanding Performance on Water Conservancy.” The ceremony drew nearly one thousand people to enjoy the most honorable and joyful moment.

Honorably granted the “Water Conservancy Contribution Award”, Dr. Jet-chau Wen not only forms part of the prominent faculty of YunTech’s Department of Safety Health and Environment Engineering, but also serves as the director of the Research Center for Soil & Water Resources and Natural Disaster Prevention. Beginning in 2000, Professor Wen has been devoted himself to the study on the prevention of land subsidence and investigated how the groundwater in Yunlin County has been used. He has been eager to help the development of regional water resources and improved the water distribution in Yunlin County so as to efficiently slow down the occurrence of land subsidence. Every time when a typhoon accompanied with torrential rain threatened Yunlin County, he always went to visit the low-lying or flooded areas and proposed solutions to enhance the flood prevention in these areas.

Thanks to his efforts, the land subsidence and flood prevention in Yunlin County has been strengthened. What he has been devoted to has truly contributed to the regional development and the right of the people in this area. Crowned with the honorable award, Professor Wen unquestionably became the glory of the citizens of Yunlin County.



## Academic Exchanges

### International Conference of CAADRIA 2009

Held by the College of Design of YunTech, the “2009 International Conference of CAADRIA” took place from Tuesday, April 22 to Saturday, April 25. At the opening ceremony, President Yeong-bin Yang passed along the most sincere greetings and welcome to the distinguished scholars and guests.

As the biggest digital design conference in Asia, the International Conference of CAADRIA attracted professionals in the design realm from 25 countries around the world, including Australia, the Netherlands, Sweden, the United States and other countries in Asia. Several well-known professors were invited to deliver speeches focusing on “Between Man and Machine.” Those included Professor Ramesh Krishnamurti at Carnegie Mellon University, U.S.A., Professor Masahiko INAKAGE of Keio University, Japan, Professor Yong Tsui Lee of Nanyang Technological University, Singapore and Professor Rob Woodbury from Simon Fraser University, Canada. In addition to the invited speeches, there were 81 papers successfully presented during this three-day conference. Lightened by the participation of prominent professionals and guests, the International Conference of CAADRIA turned out to be a success.



Professor Marc Aurel Schnabe, the chairperson of 2009 International Conference of CAADRIA



A design exhibition of the College of Design was held at the same time when the conference was in process. It not only displayed entirely the innovation that has been involved in YunTech's digital design, but also transmitted the message of its future prospect. The moment when the digital design research of Taiwan was connected to the world was witnessed and approved through the close and mutual communication between all the conference and exhibition participants.

### **Conference on the Restoration of Historical Monuments and Constructions –Traditional Mortar Application and Treatment**

The mortar application has been the part that is the hardest to be controlled during the restoration of historical monuments and constructions in Taiwan. Due to wrong concepts, craftsmen and labors always add inappropriate materials into mortar, change proportion of each substance, and shorten the time for mortar production. All of these are the reasons why the quality of the façade consisted of mortar has been unsatisfactory and weak to efficiently resist outside force or influence. As a result, the restoration is required every three or five years, and such a requirement keeps growing as a vicious circle.

Accordingly, the Department of Cultural Heritage Conservation of YunTech held a conference on mortar and restoration on May 18, 2009 in the hope of improving the restoration quality of Taiwan's historical monuments and constructions. The main focus of the conference was placed on the problems that often emerge during the mortar restoration, with which several topics were brought up for discussion, such as the analysis of mortar components, Japan's mortar composition and Taiwan's mortar composition as well as the application experience. Besides, the scholars who are specialized in mortar research and experienced craftsmen were invited to share their experiences. It was expected that through the discussion at the conference a solution could be found to improve the quality of mortar restoration.



Professor Chung-his Lin and master craftsman Zhi-de Liao

### **A Return to Original Purity and Simplicity – Cultural and Heritage Symposium**

Held once a year, the "Cultural and Heritage Symposium" for this year took place from May 15 to May 16. The coordinator, Professor Hui-min Hsu, indicated that in addition to having a discussion on the issues related to the conservation of cultural heritage, the symposium attendees from the industrial, governmental and academic sectors established a mutual communicative platform. Through this platform, various precious suggestions about the development of cultural heritage were proposed.

The concept of cultural heritage conservation has been increasingly emphasized in recent years and began to gain further attention after the dismantling and destruction of Miao-Li Kiln and Losheng Sanatorium happening few years ago. This has reflected that the conservation of cultural heritage needs more consideration and improvement. According to Professor Wan-fu Lien at the Department of Cultural Heritage Conservation of YunTech, it was expected that through the symposium more and more cultural heritage could be kept and protected and that the heritage regeneration could become possible and meaningful. He urged that people from all realms should recognize the importance of cultural heritage and make efforts to protect it.

He pointed out at the same time that by following the symposium focus "A Return to Original Purity and Simplicity", the attendees completed a discussion on

“Heritage Conservation Technology”, “Historical Culture and Folk Culture”, “Management of Industrial Culture and Cultural Industry” and “Conservation of Historical Constructions and Industrial Relics.” He expected that along with the enthusiastic participation of professionals from all the sectors, the discussion regarding cultural heritage and its follow-up development could continue to expand in both breadth and depth.

### The 2009 International Conference on Creative Life Design

Conducted by the Department of Creative Design of YunTech, the “2009 International Conference on Creative Life Design” took place on campus from June 5 to June 6. Two well-known designers, Mr. Masayuki Kurokawa from Japan and Mr. Korakot Aromdee from Thailand, were invited to deliver keynote speeches and to share their experiences of design.

For the first day’s session, the known Thai designer, Mr. Korakot Aromdee, was invited to be the keynote speaker. Born in a traditional fishing village in Thailand, Mr. Korakot Aromdee started his own design career in 2004 after graduating from the Faculty of Arts of Silpakorn University in Thailand. Recognized by various outstanding awards, from the “First Thailand OTOP Design Award” to the “2008 DFA SPECIAL AWARD”, he created his own brand “BIG & BIH” and has professionally employed natural materials to

show the organic quality of his products. Mr. Korakot Aromdee has combined his ideas with the weaving techniques common used in the traditional villages of Thailand, gifting his products, such as furniture, lamps and lanterns, with rich Thai traditional style. Also, he has granted a brand new style and feature to the Thai handiwork by the application of modern techniques. Through the speech, Mr. Korakot Aromdee presented his design research and development, thus arousing more ideas for creativity.

The second keynote speech was delivered by Mr. Masayuki Kurokawa, a very important designer in the recent history of Japanese design. Influenced by his family, Mr. Masayuki Kurokawa has not only shown his talent for architecture and interior design, but also been devoted to product design and metalworking design. His aptitude has earned himself an excellent reputation, and been called the “Da Vinci of the Japanese Design Circle.” His speech on “The Thoughts and Design of Masayuki Kurokawa” conveyed a thorough idea about Japan’s concepts of aesthetic design. The thirteen rhetorics in design proposed by Mr. Masayuki Kurokawa transmit his concern about Japan’s society, and such a concern is presented on his designed works. Valued by this soft attention, his works become a mix of the features of both culture and aesthetics, and from all of them people can re-experience the life and re-define culture and creativity.

In the afternoon session, there were thirty-nine papers presented by people from Taiwan’s design-related departments or design industries. The topics included “Cultural and Creative Expression in Digital Era”, “Cultural and Creative Products and Brands” and “Creative Industries and Sustainable Design.” Through the presentation of the above research papers, an enthusiastic discussion was established and successfully completed.

On the second day a design workshop entitled “LOHAS Craft” was arranged. The honorable designer Korakot Aromdee was invited to serve as the instructor, and by applying natural materials imparted basic weaving skills to the participants. It was expected that after one-day practice, the workshop participants could learn more about natural materials and weaving application so as to create their own design. After the workshop, all the designed works were displayed in the Building of



Japanese designer, Mr. Masayuki Kurokawa, delivered a speech



Design III of YunTech.

The conference like the one of this year has become an academic activity that the Department of Creative Design aims to conduct annually. In the future, the department will keep inviting professionals in the realm of creative design from across the world to share their experience and help others catch up with the current tendency of design.



## Outstanding Performance

### Design Festival of the College of Design

Held by the four departments of YunTech, i.e. Visual Communication Design, Industrial Design, Architecture & Interior Design and Digital Media Design, the “2009 Joint Graduation Exhibition” (also called Design Festival) took place in YunTech’s Art Center and auditorium corridor from April 21 to 24, 2009.

As the tradition of the College of Design, the graduation exhibition is where students display their ideas and studies in the previous year. By exhibiting their works, students not only can perform their design ideas, but also can learn how to work as a team member. The exhibition itself serves as a step to make a perfect ending to their studies in the university.

After the four-day exhibition from Tuesday, April 21 to Friday April 24, the “Design Festival” was moved to the International Trade Building of Taipei World Trade



“City\_Dragonfly” designed by Po-hao Huang and Wen-cheng Lai of the Department of Industrial Design

Center, and took part with all the design departments of Taiwan’s universities in the “2009 Young Designer’s Exhibition” from Thursday, May 14 to Sunday, May 17.

According to Professor Shing-sheng Guan, the dean of the College of Design, as a “designer”, one should always have energy for life-long learning, and be capable of problem solving, self-management and group cooperation. He expected that the graduates of this year could become excellent designers and infuse fresh vitality into the design circle.



“Red Beauty-Red Beans Store” designed by Yu-hui Wang (left), Shu-yi Li (middle) and Pei-ting Lin of the Department of Visual Communication Design

### YunTech Serves as the Cradle of Talents for Electronic Technology

The Department and Institute of Electronic Engineering of YunTech held an “Exhibition of Faculty Research Achievements” on June 18. As one of the 18 researches that have been implemented in recent years, the “System of Biosensor Semiconductor and Ion Selective Device” is a worldwide recognized production of Professor Jung-chuan Chou. It is a fast and minute electronic monitoring device that Professor Chou invented by combining electronic, chemical and biological technologies. Such a device can be employed in investigating water quality, testing food components and examining diseases. This research was ever crowned with three golds and three silvers at the “2009 IENA International Exhibition Ideas-Inventions-New Products, Nuremberg Germany” and earned one gold as well as two bronze medals at the “Taipei International Invention Show & Technomart.” Because of this remarkable invention, Professor Chou

was chosen and honorably won the “Taiwan golden-brain award.”

Financially supported by the Three-Year National Si-Soft Project of the National Science Council, another outstanding invention titled “Low-Cost Wireless Remote Video Monitoring and Security System” was developed by a group made up of six members who are students and professors specialized in IC design, wireless communication, embedded system and digital video processing. Professor Ching-lung Su as the project director indicated that this monitoring system is possessed of intelligent image recognition functions and able to convey a warning message to a cellular phone, PDA, notebook, high definition television or other apparatus when an emergent accident occurs. This device can be extensively applied to inspecting home safety, monitoring tunnel accidents and supervising

factory production line so as to reduce the demand for manpower and avoid possible man-made carelessness and erroneous judgment.

The director of Department and Institute of Electronic Engineering, Professor Ming-hwa Sheu, pointed out that even though there are only 21 teachers as the department faculty, the average funding that each teacher receives from projects is NT\$1,250,000 per year. In the past years, they filed 37 patent applications on their most recent inventions and presented 155 research papers. Such a notable performance has proven that the Department and Institute of Electronic Engineering of YunTech is qualified to foster technology professionals and become a true cradle of technology talents.



“System of Biosensor Semiconductor and Ion Selective Device” invented by Professor Jung-chuan Chou



Professor Ching-lung Su and his students invented “Low-Cost Wireless Remote Video Monitoring and Security System”

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