



# PingTech Newsletter



## 2013 University Network for Tropical Agriculture, Bogor – Indonesia

This year (2013) the University Network for Tropical Agriculture (UNTA) President's Forum was held on September 3<sup>rd</sup> at Bogor Agricultural University in Indonesia in conjunction with their 50<sup>th</sup> anniversary celebration. UNTA was founded December 13, 2012 as a result of a roundtable discussion held during the 1<sup>st</sup> President's Forum on Agriculture for Leading Universities in Southeast Asia hosted at National Pingtung University of Science and Technology. During its inaugural session, 10 initiating universities, representing six countries took part in the affair. However, in a year's time UNTA has seen considerable growth, with membership increasing by 70%. With its new inductees UNTA now consists of 17 member universities coming from seven different countries. This year's Forum also attracted 200 participants; with representatives of SEAMEO and FAO also in attendance. Expectations are that the event will help



agricultural higher education institutions respond to opportunities and challenges associated with sustainable agriculture development. Discussions on issues related to Food Security and Climate Change were engaging, and should provide a valuable reference for the promotion of government policy. The Forum came to a successful conclusion and it was decided that UNTA 2014 will be held at Kasetsart University in Thailand, UNTA 2015 at Universiti Putra Malaysia (UPM), and UNTA 2016 at Thai Nguyen University (TNU) in Vietnam.



## HSH Prince Bhisatej Rajani receives Honorary Doctorate from NPUST



worked together with Taiwan and other nations to develop attractive new crops for his people and educate farmers in sustainable and effective farming techniques. Plant production centers have been established and work has been undertaken to encourage and motivate farmers and tribespeople to be aware of the need to manage and conserve natural resources. For his work, Prince Bhisatej Rajani was honored with the ICDF's Lifetime Achievement Award in 2002. This summer National Pingtung University of Science and Technology further recognized and affirmed the valuable contributions that Prince Bhisatej Rajani has made by conferring upon His Serene Highness an Honorary Doctorate Degree in Agriculture.

In June NPUST held a special ceremony in appreciation of the contributions that HSH Prince Bhisatej Rajani of the Kingdom of Thailand has made in agricultural development. Prince Bhisatej Rajani has dedicated his time and energy towards the cause of creating a better life for the people of Northern Thailand. His work has involved introducing crop replacement programs designed to move farmers away from their reliance on opium harvesting. As part of this endeavor, Prince Bhisatej Rajani has

### Contents

- ❁ 2013 University Network for Tropical Agriculture, Bogor – Indonesia
- ❁ HSH Prince Bhisatej Rajani receives Honorary Doctorate from NPUST
- ❁ Paradigm Technology University, NPUST takes third spot
- ❁ NPUST Signs MOU with the Mongolian State University of Agriculture
- ❁ PingTech Joins Kaohsiung-Pingtung University Alliance
- ❁ NPUST College of Veterinary Medicine Helps Combat Fish Disease
- ❁ NPUST Opens Center for Agriculture and Aquaculture Product Inspection and Certification
- ❁ Arson Agent Detection Dog
- ❁ NPUST Acquires Nano-scale Microscope

- ❁ Animal Behavior and Ecology Seminar
- ❁ ICDF 2012 Student Paper Competition
- ❁ Gold Medal at 2013 World Skills Competition Germany
- ❁ Russian Invention Show: NPUST wins Gold and Silver
- ❁ NPUST Students Show-off Their Skills
- ❁ NPUST and Silla University Hold Fashion Exhibition
- ❁ NPUST Programs Attract Visitors from Hong Kong
- ❁ Macao Polytechnic Institute Delegation Visits NPUST
- ❁ Jilin Agriculture University Delegation Visits NPUST
- ❁ Important Visitors Underscore NPUST's Strong Links with Thailand





### Paradigm Technology University, NPUST takes third spot



In 2012 NPUST was selected by the Ministry of Education to take part in the Paradigm Technology University Development Pilot Project. In the year that followed, faculty, staff members and students worked hard to try and outshine the majority of the 43 other universities that applied for this esteemed recognition. As a result of concerted efforts, this year NPUST was greatly honored to not only be named one of the twelve 2013-2016 Paradigm Technology Universities, but was also ranked third in the entire nation. NPUST's third place ranking also comes with a yearly government grant of 110 million NTD for the next four years, which will be used by the university to promote continued excellence in research and academics.



### NPUST Signs MOU with the Mongolian State University of Agriculture

NPUST President Yuan-Kuan Guu, traveled to Mongolia on July 5<sup>th</sup> together with the Dean of International Affairs, Dr. Henry Chen to visit Mongolian State University of Agriculture (MSUA) and discuss details regarding future cooperation between the two universities. Areas of focus included teacher and student mobility, joint research, and academic collaboration. During the visit NPUST and MSUA presidents officially signed a Memorandum of Cooperation and hopes are that through this agreement the two universities will be able to benefit in a mutual and meaningful way.



### PingTech Joins Kaohsiung-Pingtung University Alliance

Presidents of five science and technology institutes in the Kaohsiung and Pingtung area met together at NPUST to sign an agreement to form the "Kaohsiung-Pingtung Model Technology University Inter-school Alliance". The Alliance will be based on a four year term and is committed to training talent, integrating industry and academia, and changing the direction of development for vocational schools by adopting a model orientated towards the proliferation of

achievements. The five institutes, which include Pingtung University of Science and Technology, Cheng Shiu University, Kaohsiung University of Applied Sciences, Kaohsiung First University of Science and Technology, and Kaohsiung University of Hospitality and Tourism convened at PingTech to establish the University Alliance and integrate resources of government, industry and academia. The establishment of this resource-sharing mechanism is intended to help meet research, development and training objectives. NPUST's president Guu stated that the universities involved will take responsibility for different areas across Kaohsiung and Pingtung and use a fair, open, innovative and cooperative approach to share and integrate resources with a network of 23 other vocational schools.



### Visit and Exchange to Thailand's Kasetsart University, College of Veterinary Medicine



Both the United States and England have well established national and regional animal blood banks with blood deposits stored for dogs, cats, cows, sheep and pigs. In recent years, India and Thailand have also established blood banks for dogs as they work towards meeting medical treatment requests of pet lovers. The pet upbringing trends in Thailand are similar to Taiwan and recently there has been increased attention brought to the need for animal blood banks. Thailand's Kasetsart University (KU) College of Veterinary Medicine, located in Bangkok, has experience with animal blood banks, promotional education, mobile animal blood donation units and other strategies worth learning from; and so, on August 1<sup>st</sup> NPUST's Department of Veterinary Medicine professor, Yi-Lun Tsai traveled to KU to take part in an exchange. During her stay, she visited four of KU's veterinary education hospitals –Bang Khen, Kamphaeng Saen, Nong Pho, and Hua Hin –to share experience and techniques in veterinary clinical pathology animal blood bank set up. KU and NPUST enjoy a very friendly, sister-school relationship and through this visit, exchange between the two universities' colleges of veterinary medicine has been strengthened and internationalization efforts have been promoted.





### NPUST College of Veterinary Medicine Helps Combat Fish Disease

In the past, when fish cultivators encountered problems with fish disease, due to a lack in available medical treatments and technology, often times they were forced to adopt less reliable practices. In many situations this led to improper use of medicine; a trend that was alarming to consumers. Pingtung's Linbian Township looked to National Pingtung University of Science and Technology to help solve the problem. NPUST responded by helping to establish a service station where professional fish veterinarians can provide tests and information on treatment options for sick fish. Hopes are that this will help fish cultivators to effectively prevent and manage fish disease. The director of the Aquatic Animal Division at NPUST's College of Veterinary Medicine said that "through systemized and coordinated efforts made by academia, government and industry, we provide a service for fish disease and help to alleviate some of the associated losses."



### NPUST Opens Center for Agriculture and Aquaculture Product Inspection and Certification



NPUST officially opened its Center for Agriculture and Aquaculture Product Inspection and Certification. Expectations are that the Center will be able to contribute to the Taiwan people by decreasing inspection costs and improving health standards for food products. PingTech's President Guu stressed the importance of centers like these in light of the recent national incidents that involved food safety. Both government and industry sectors are under a lot of pressure right now and it is difficult to keep up with the type of testing required to maintain public confidence. NPUST aims to use the Center to help improve inspection technology and maintain international quality standards. With a 5 million NTD grant from the Council of Agriculture (COA) and 8 million from school funds, NPUST purchased a high-sensitivity liquid chromatography mass spectrometry system (LC/MSMS) to provide quality inspection services. The Center was

formerly home to the Aquaculture Inspection Service Center, which was established in 1983 and primarily served fish exporters. In order to get in-step with COA and international standards, in 2005 it applied for Taiwan Accreditation Foundation certification, becoming the first in Southern Taiwan and the sixth in the nation to be granted such credentials. In its newest capacity the Center is now operating with an administrative staff which includes the Center director, seven doctoral-level professors, and 28 full-time staff, which include quality managers, R&D managers, test engineers, inspectors, administrative assistants and administrative personnel. The center also has four "A" and "C" Class food analyst panel members who work together with 21 personnel who each hold national food analysis technician licenses; eight members also have received ISO / IEC 17025 certification standards training certificates.



### Arson Agent Detection Dog

The "Arson Agent Detection Dog" from NPUST's Working Dog Training School is able to detect gasses and explosive agents and is also able to sniff-out travelers who are carrying dangerous flammable materials. The fertilizer bomb scare at the High Speed Rail caused a number of people to become alarmed. Discussions followed on how to prevent such occurrences from happening again. NPUST's Working Dog Training School has suggested that Arson Agent Detection Dogs can respond in situations where explosive materials are being carried in luggage. Originally this highly flammable substance detection was used in arson investigations. The dogs, which have sensitive noses trained to pick up the scent of gasses, could be used to help detect explosive materials inside of suitcases.







### NPUST Acquires Nano-scale Microscope

National Pingtung University of Science and Technology has purchased a high resolution field emission scanning electronic microscope (FE-SEM) worth 14 million NTD. The newly acquired instrument is expected to become a valuable contributor to academic and industry research. The microscope has an incomprehensible resolution of 1 nanometer – which is one millionth of a millimeter! This device opens up a new world normally inaccessible to the human eye, as Director of the Graduate Institute of Material Engineering, Wei-Hua Lu, explains: “gold is not the yellow color that we see with our eye, its color, in fact, is white like rice.” The electric microscope has a large thermal field, is highly stable, and has a magnification power of 1 million times.” For matter of comparison; generally, one-thousand-times power is considered quite impressive. This microscope with its incredible power will help researchers gain a deeper understanding in all types of materials. The microscope will also be available for use by professional sectors, providing a useful tool for research in industry materials, biomedical sensors and agricultural biotechnology, with the aim of improving technology and increasing research capabilities.



### Animal Behavior and Ecology Seminar

Congratulations to the students who received recognition for outstanding performances at the 2013 Animal Behavior and Ecology Seminar Thesis Competition. The objective of the seminar was to help spread new ideas related to ecological protection. Four students who received awards for their papers were Jia-zi Gao, under the direction of Associate Prof. Mei-Hsiu Hwang; Ya-Wen Lu under the direction of Prof. Jai-Chyi Pei; and Xiao-yu Hong and Hong-chang Chen, both of whom individually wrote papers under the direction of Prof. Yuan-Hsun Sun. The work of these students has won them the pride of wildlife conservationists and they have found a new source of encouragement to continue passionately pursuing wildlife conservation objectives.



### ICDF 2012 Student Paper Competition

The International Cooperation and Development Fund (ICDF) Student Paper Competition, held annually is designed to “promote the value of international cooperation, attract attention to quality research, enhance interaction between Taiwanese and foreign students, and encourage Taiwan-ICDF scholarship students to evaluate the development of their home countries and the validity of Taiwan-ICDF’s assistance projects.” This year three of National Pingtung University of Science and Technology ICDF students were recognized for their excellent work. NPUST would like to congratulate Second Place Winner: Alejandra Maria Mencia Guevara, under Dr. Mei-Jen Lin, for her paper entitled Fermented Iron-fortified Whey Beverage for School Lunch Programs in Central America; and First Place Winners: Wanvilai Chulaphan and Jorge Fidel Barahona, under Dr. Shwu-En Chen, for their paper on Rice Market Integration under Thailand’s Rice Mortgage Scheme.





### Gold Medal at 2013 World Skills Competition Germany



NPUST's Department of Design and Management student Fu Meihui has dedicated herself to developing exceptional skills in cosmetology – and this year in Germany she had the opportunity to put them to the test. The expectations for the World Skills Competition, Beauty Category are high, and participants are called to demonstrate professional techniques in body, facials, make-up and nails. Although competition was strong, Fu put on an outstanding performance and was able to win the gold medal in her category. Congratulations!!



### Russian Invention Show: NPUST wins Gold and Silver



Prof. Cheng-Fa Tsai and two of his students attended the Archimedes Invention Show in Russia this year and brought home one gold and one silver medal. The gold medal was awarded for optical examination technology which can be installed in a computer or notebook. This new technology is an automated medical eye-sight examination system that will help eye-sight examination personnel perform their work more efficiently. Both You-zhe Wang and his professor, Cheng-Fa Tsai, explained how the invention is a fast and convenient tool that will help busy medical personnel perform eye-sight

examinations. In the Image and Video category, the silver medal was awarded for the Cloud Computing Environment, Smartphone image compression app design and development presented by Cheng-Fa Tsai and his student Zhi-Feng Chen. Zhi-Feng Chen explained that this app can instantly compress pictures taken with an iPhone and simultaneously upload them to the Cloud. The program is comparably faster and of better compression quality than Adobe Photoshop CS5.5 and is compatible with firewall.



### NPUST Students Show-off Their Skills

Congratulations to the NPUST students who demonstrated exceptional skills at the 43rd National Skills Competition. Under the direction of Professor Wen-Tung Chen, students Zhang Feng-xiang and Zeng Ming-hong of NPUST's Department of Hotel and Restaurant Management won 1st place and 2nd place, respectively, in the Culinary Category. Four students from NPUST's Department of Wood Science and Design were also recognized for their outstanding performances. Three students, including Huang Jun-xiang, Wu Ming-xin and Lai Jian-liang each had entries in the Wood Furniture category and came in 1st, 3rd, and 4th, respectively. Xue Li-wei, the fourth student representing NPUST, was also awarded 1st place for his entry in the Paint Decorating Category.



### NPUST and Silla University Hold Fashion Exhibition

NPUST and Korea's Silla University (SU) Department of Fashion Industry recently signed a college-level MOE to promote future cooperation between the two institutions. In conjunction with the agreement signing, SU also made arrangements to exhibit its preliminary works in a joint exhibition. The fashion exhibit was held from September 10th to 15th, 2013 and students had the opportunity to observe the fashion designs and creations displayed in the fashion show that they put on. Students also had the chance to connect with Busan fashion industry representatives.







### Premier of the Republic of China Visits NPUST

On May 24, 2013 Taiwan's Premier, Dr. Yi-Huah Jiang, came to PingTech and visited with technical and vocational education departments, exchanging views with members of professional sectors and technology universities located in the south of Taiwan. He said that the Ministry of Education has developed a new project worth 20.3 billion for technical and vocational education and will conduct an inventory process by July to ensure the greatest utilization of education funds. Premier Jiang listened to a briefing provided by NPUST president, Dr. Yuan-Kuang Guu, to get acquainted with contributions of vocational institutions and the relationship between industry and academia. Academic and industrial sector representatives shared their opinions and President Guu pointed out the need for funds to construct a "Primate Laboratory" to help combat communicable diseases such as SARS. NPUST is the only university currently qualified for such an operation, with plans in the making for more than ten years.



### Delegation Visits from Vietnam General Department of Vocational Training

On July 22<sup>nd</sup> a delegation representing the General Department of Vocational Training, Vietnam visited NPUST. The focus of the visit was to develop cooperation with several of NPUST's departments, including the Department of Hotel and Restaurant Management, Department of Wood Science and Design, Department of Aquaculture and Department of Civil Engineering. There are also plans to hold a 4 month training program. During their stay, visitors were familiarized with the learning environment and equipment at NPUST.



### NPUST Programs Attract Visitors from Hong Kong



Hong Kong has become increasingly interested in a number of programs offered at NPUST, and recent visits have been arranged to help explore future development and cooperation initiatives. First, in March, Haihua Fund Director Lee Chee Man, of the Taipei Economic and Cultural Office led a group of nine media correspondents from Hong Kong on a visit to the NPUST Department of Fashion Design and Management and Department of Veterinary Medicine. In April, a delegation of 23, including the principal, from the Hong Kong Council of the Church of Christ in China Secondary School met with Office of International Affairs Dean, Dr. Henry Chen to discuss cooperation initiatives. In early May a delegation of 41 from Hong Kong's Fanling Kau Yan College also visited NPUST to see the Department of Veterinary Medicine, Animal Hospital and Working Dog Training School.



### Macao Polytechnic Institute Delegation Visits NPUST



Macao Polytechnic Institute Secretary General, Dr. Chan, together with a delegation of five, visited NPUST on April 22. NPUST Vice-president Dr. Chang-Hsien Tai personally hosted the visit which focused on providing the visitors with an understanding of the NPUST learning traceability system. An explanation of the NPUST Computer Center and Office of Academic Affairs was provided, and expectations are that the information system of the university will expand to other schools.



### Jilin Agriculture University Delegation Visits NPUST

A delegation of six, visiting from China's Jilin Agriculture University arrived at NPUST on May 6. The primary objective of the trip was to visit the campus and sign an exchange agreement designed to promote mutual cross-strait academic exchanges and cooperation in the field of agriculture.







### Important Visitors Underscore NPUST's Strong Links with Thailand



PingTech shares strong ties with the Kingdom of Thailand, a fact that has been highlighted by a string of important visits which began at the end of March (27<sup>th</sup>-28<sup>th</sup>) when a delegation visiting from Kasetsart University (KU) came to visit the Center of Agriculture and Aquaculture Product Inspection and Certification at NPUST. During their stay they also visited the Department of Animal Science and attended a roundtable discussion. A month later (April 24<sup>th</sup>) another group of seven from KU traveled to Taiwan to visit the NPUST Department of Biomechanics Engineering as well as local Biotechnology industry representatives (Ku Lin Technology Co., LTD., Daliao; Pingtung Agricultural Biotechnology Park). In May (19<sup>th</sup> ~ 23<sup>th</sup>) a busy schedule was set for a delegation representing Rajamangala University of Technology

Isans. In addition to the campus tour and trips arranged to nearby attractions, important meetings were held with eight of NPUST's departments and the College of Management. The guests from Thailand took the time to meet with eight RMUTI students studying in the Department of Tropical Agricultural and International Cooperation, and also discussed a Dual Degree Program with the Department of Animal Science. A week later (28<sup>th</sup> ~ 31<sup>th</sup>) a delegation from Nakhon Phanom University, Thailand, including NPU President, Assoc. Prof. Suwit Laohasirivong also visited NPUST. The visit was centered on the International Symposium for Agriculture in the Tropics. Prior to the commencement of the Symposium, they toured NPUST's beautiful and spacious campus as well as local scenic areas.



### NPUST Receives Visit from Indonesian Economic and Trade Office Representative

The Indonesian Economic and Trade Office to Taipei is an establishment which is committed to "facilitate relations on economic and trade between Indonesia and Taiwan". This May, Office Representative Ahmad Syafri together with Treasurer Burman Rahman visited NPUST to see facilities and discuss important issues. During their time on campus, the guests held discussions with the Dean of the Office of International Affairs, Dr. Henry Chen, visited Indonesian students and were given a tour of the Department of Aquaculture.



### Taiwan-Thailand Innovation Incubation Intern Project

Along with two other local universities, NPUST had the privilege of taking part in the "Taiwan-Thailand Innovation Incubation Intern Project", and recently received 10 university incubation center personnel coming from Thailand's Chulalongkorn University, Sripatum University, and Rajabhat Mahasarakham University. The guests visited Taiwan from April 25 to May 12, 2013, attending a 15 day training course at National Central University (NCU), National Pingtung University of Science and Technology (NPUST) and Chung Yuan Christian University (CYCU). The objective was to assist in providing participants with a better understanding of the university and incubation center cooperation model used by Taiwan so that Taiwan's successes may help promote the establishment of Thailand university incubation centers. The visitors took part in active observation interning, and, while visiting Southern Taiwan, focus was given to the agriculture and livestock industries, factories, and equipment developers counseled by NPUST. Once the training project came to completion, the Taiwan university incubation center representatives and the 10 Thai personnel held discussions. The Thai personnel expressed appreciation for the training program provided by Taiwan, stating that it helped them to understand Taiwan's incubation merchants, business counseling and technology transfer models. Once returning to Thailand they will use what they have learned to help promote their local university incubation centers.



### Dominican Republic Ministry of Agriculture Visits NPUST



On April 23<sup>th</sup>, 2013 National Pingtung University of Science and Technology welcomed a delegation from the Dominican Republic Ministry of Agriculture. Dominican Republic is an island nation located in the Caribbean, with the second largest economy in the Central American region. The Ministry of Agriculture visitors met with NPUST President Yuan-Kuang Guu to discuss cooperation initiatives. During their time at NPUST they also visited the College of Agriculture Department of Plant Industry; College of International Studies, Asia Pacific Research Center for Tropical Agricultural; the Research Farm for Sustainable Agriculture, and the Tropical Orchard. Agriculture is very important to Dominicans both for employment and domestic consumption.



### Congratulates to the graduates of the class of 2013

On June 8<sup>th</sup> NPUST celebrated the graduation of the Class of 2013 together with graduating students, friends, family and a number of very distinguished foreign guests. This year's graduation ceremony also marked several exciting accomplishments. In addition to the diplomas issued to 24 doctoral students, 920 graduate students and 2256 undergraduate students the university also saw the graduation of 22 students from the Gambia who were enrolled in the four-year Gambia Agricultural Elite Programme. To share in the celebration Mr. Solomon Owens, Minister of Agriculture and Dr. Pap Sey, Permanent Secretary of Ministry of Higher Education, Research, Science and Technology traveled from Gambia to attend the ceremony. Additionally, at this year's graduation, special recognition was given to HSH Prince Bhisatej Rajani with the conferral of an Honorary Doctorate Degree in Agriculture for his contributions in the field. Important guests and academia representatives from all corners of the world were in attendance for this very special occasion.



### Experiencing Indonesia at NPUST: 2013 Festival Rich and Exciting!



The NPUST College of International Studies hosted the Indonesia Festival for the more than 40 Indonesian students who ventured overseas to pursue bachelor's, master's and doctoral degrees at National Pingtung University of Science and Technology. The Festival was rich and exciting and celebrated Indonesian's colorful culture with traditional dancing, dramas, a fashion show, traditional games and delicious Indonesian cuisine. The festival was also a great opportunity for international students and local students to interact and have fun together, unveiling the mystery of Indonesian culture.

### Songkran Celebrated at NPUST with Huge Splash!



40 Thai students held Songkran Festival at NPUST to celebrate the Thai New Year. As part of the customs, students splashed one another with water to signify cleansing and blessing. The Chair of the Thailand Student Society pointed out that this activity provides locals with an opportunity to get familiar with Thailand's New Year celebration. He was also happy to see that the Taiwanese students were as excited about the celebration as the Thais – perhaps even more so! This year is the fifth time the festival was celebrated at NPUST. In past years it had been held at the Department of Tropical Agriculture and International Cooperation, however this year it was moved to the (Shu Yun) Concert Hall to accommodate for more students. In addition to splashing around, there was also traditional Thai dance performances and Thai cuisine.

#### Disclaimer:

**PingTech Newsletter is prepared by:**  
The Information Section, Office of International Affairs, National Pingtung University of Science and Technology.  
The purpose is to disseminate PingTech news and other related information of interest use.  
This is not a university official document.

#### For further information on any article in this edition please contact:

**Publisher:**  
President Dr. Mike Yuan-Kuang Guo  
**Editorial Staff:**  
Dr. Henry Chen  
Miss Shauling Liao  
Mr. Nicholas David Van Heyst

**Office of International Affairs**  
1, Shueh-Fu Rd., Nei-Pu, Pingtung County 912, Taiwan  
Telephone : + 886-8-7703202 ext. 6285  
Facsimile : + 886-8-7740208  
E-mail : international@mail.npu.edu.tw  
Website : www.npu.edu.tw