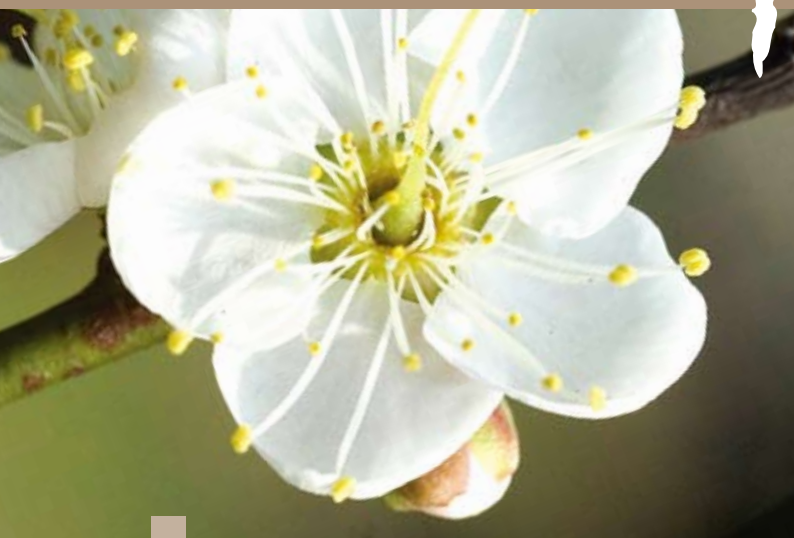




National | Tsing Hua | University



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PRESIDENT CHEN ENCOURAGES NTHU GRADUATE TO BECOME LOCOMOTOR OF SOCIAL DEVELOPMENT

The commencement for Class 2011 took place in the early evening of June 11th and was held on the campus sport field. For the first time, the grand tour of the campus included a passage through the Tsing Hua Gate symbolizing the graduates are entering their future careers as Tsing Hua People, proficient professionals and devoted individuals who are ready to do their best for the common good of our society.

President Lih J. Chen opened the ceremony by congratulating graduating students for having successfully completed their degree requirements. He went on to remind them that having completed their degrees at NTHU is indeed an extraordinary accomplishment and they are now part of the glorious and celebrated Tsing Hua legacy. President Chen also proudly recounted the remarkable improvements that NTHU has achieved in university

rankings, both worldwide and regional. He emphasized the fact that such encouraging successes came from the collective efforts of all faculty and staff members, and students' performance has also been a very important factor in the continuous ascent of NTHU. He proudly pointed out that during the past year students have won many significant awards and recognitions in Taiwan and abroad. For instance, of the eight Presidential Education Awards presented this year nationwide, two were awarded to NTHU students. They are Ms. Ching-Chieh Chuang, a second-year graduate student in the Master Program of the Dept. of Computer Science and Ms. Hsin-Ling Shen a junior in Interdisciplinary Humanities and Social Sciences Program. In addition, Ms. Hsue-Chun Chao, a doctoral student at the Dept. of Chinese Language and Literature won the prestigious Ten Outstanding Female Youth Award for the creative

scripts she wrote to rejuvenate the Peking Opera.

NTHU not only has a group of outstanding faculty and students, we also have a larger group of loyal and devoted alumni whose strong support to their alma mater is clearly exemplified by Dr. Wei-De Li who donated NT\$ 150 million to help the construction of the Low Carbon Energy Technology and Research Building. Mr. Hung-Liang Hsieh who graduated from Dept. of Physics has donated a precious art piece, "The Thinker" by Rodin that is beautifully installed by the new Learning Resource Center. Responses from our alumni to the fund-drive initiated by President Chen to build a multifunctional gymnasium can only be described as phenomenal; more than hundred and seventy alumni gave NT\$ 1 million each toward the project. Furthermore, a group of our alumni from the business sector have jointly raised NT\$ 300 million to establish the



Great Tsing Hua Fund which will invest the capital raised and use profits from such investments to support NTHU on an ongoing base.

We not only have a group of loyal alumni, we also have a group of generous benefactors in the industrial sector. For example, Dr. Earle J. S. Ho, Chairman of Tung Ho Steel donated NT\$ 200 million to establish the Ho Chin Tui Award which will help NTHU to recruit and retain outstanding scholars and researchers in our faculty. Another generous donor is the Chairman of Macronix International Co. Ltd., Dr. Minn Wu. In addition to the NT\$300 million that Macronix donated for the construction of the Learning Resource Center a while ago, Dr. Wu and Macronix have also donated another NT\$ 100 million this year to furnish the new building that is expected to be in service by the end of 2011. An anonymous donor gave NTHU NT\$ 170 million to help with the construction of a new Biomedical and Environmental Sciences Building. The list of our benefactors is long but the above examples demonstrated to us that the public recognizes and appreciates the quality of education and research that NTHU has been

providing and is very willing to provide us with more resources in our quest for excellence.

Dr. Chi Cheng, the commencement keynote speaker told her audience that all successful persons usually possess three characteristics. They are confident, ambitious and they persevere. She said that she came in the last place in the preliminary 80-meter low hurdle race in the 1960 Rome Olympics. Is being the last in a race a shame? She believes not. She would consider, however, shameful if she had then chosen to give up the sport. She persevered and continued with her training and eventually won a Bronze Medal in the same event eight years later in the Mexico Olympics. In addition to her own success story, Dr. Chi went on and shared another story with the graduates. Ms. Ya-Ping Deng, a former Olympic table tennis player retired from competition in 1996 and decided she would like to pursue graduate studies despite of the fact that she really didn't have a strong academic credential. With a strong motivation and perseverance, Ms. Deng is now Dr. Deng for she has earned a Ph.D. in Economics from Cambridge University. This just proves

- a** For the first time, during the graduation campus tour, the students walked through Tsing Hua Gate.
- b** President Chen spoke about his expectation for graduates to abide by the university motto, 'Self-Discipline and Social Commitment.'
- c** President Chen and Dr. Chi led the campus tour.
- d** The commencement of 2011 was held on the university sports field.
- e** President Chen and happy graduates.

that nothing is impossible when one is determine!

Two Mei Yi Chi Medalists, Mr. Hsiang-Yun Chu, graduating from the Dept. of Electrical Engineering and Ms. Hsiao-Yu Fang, Dept. of Life Sciences represented the graduating class and shared their precious experiences at NTHU. Mr. Chu said that he not only worked with his fellow students, he has also learned different values and perspectives from them and how such experiences have enriched his life. Ms. Fang was very appreciative of the training she has received at NTHU. She believes she has learned to take responsibility for her own conducts and she quoted Thomas Edison ---"If we did all the things we are capable of, we would literally astound ourselves," to encourage her fellow graduates to be all they can be.



NTHUCS TEAM WON THE CHAMPIONSHIP OF MICROSOFT IMAGINE CUP

The NTHUCS Team composed of Mr. Shuo-Hung Chen, Ms. Hsiao-Mei Lin, Yi-Cheng Chen and Mr. Che-Yi Hung, all students at the Department of Computer Science won the Taiwan Regional Championship earlier this year and represented our country in a global competition for the Microsoft Imagine Cup held in the U. S. last July. They excelled as the champion in the "Embedded Development Group" competition which included 484 participants from 70 countries around the world.



NTHUCS won the championship with the "Right! This Way" system they designed. It is an intelligent fire escape system using the networking capability of the embedded platform and introduces real-time fire scene detection. By monitoring the concentration of smoke, the amount of floating particles, and other conditions in the fire scene, the system helps fire-fighters gain a better picture of the situation and thus, enabling them to adopt a more effective extinguishing mechanism as well as accelerate the evacuation of individual trapped in the fire. The judges were very impressed with NTHUCS's creativity and design and cited the intelligent fire escape system as "original" and "practical." The Microsoft Imagine Cup could be described as an Olympic tournament for student in scientific and technological fields. It was started in 2003 and has since become the world's premier student technology competition. Annually, it attracted

- a** NTHUCS team members: Ms. Hsiao-Mei Lin, Shuo-Hung Chen, Yi-Cheng Chen and Mr. Che-Yi Hung (left to right).
- b** NTHUCS is the champion of the "Embedded Development Group" at MicroSoft Imagine Cup tournament.
- c** NTHUCS team installing the "Right! This Way" system.

a large number of competitors from many regions of the world. The 2011 competition was held in New York with the theme of "to dream of a world where technology can solve practical problems." Both Tsing Hua University in Beijing and NTHU were among the finalists in this year's competition. While NTHUCS won the championship, the team representing Tsing Hua, Beijing has also won the second place. This result pleases all the participants of the two Tsing Hua teams. Ms. Hsiao-Mei Lin of NTHU was very happy that the two sister universities have done so well in a world-wide competition. Mr. Lin Yang of Tsing Hua, Beijing said that "the result of this competition is an excellent birthday gift from the students of the two Tsing Hua to present it to their University and help with the centennial celebrations that are taking place both in Beijing and Hsinchu."



THE DISCOVERY OF GAMMA RAY EMISSION FROM PSR B1259-63/LS 2883: A MODERN VERSION OF DAVID VS. GOLIATH

Prof. Albert Kwok-Hing Kong, Institute of Astronomy and his Compact Objects Research Group have recently outshined NASA's one hundred seventy three person research team and became the group of astronomers to first observed and captured the "gamma-ray transient phenomena" in the Southern Cross binary star system.

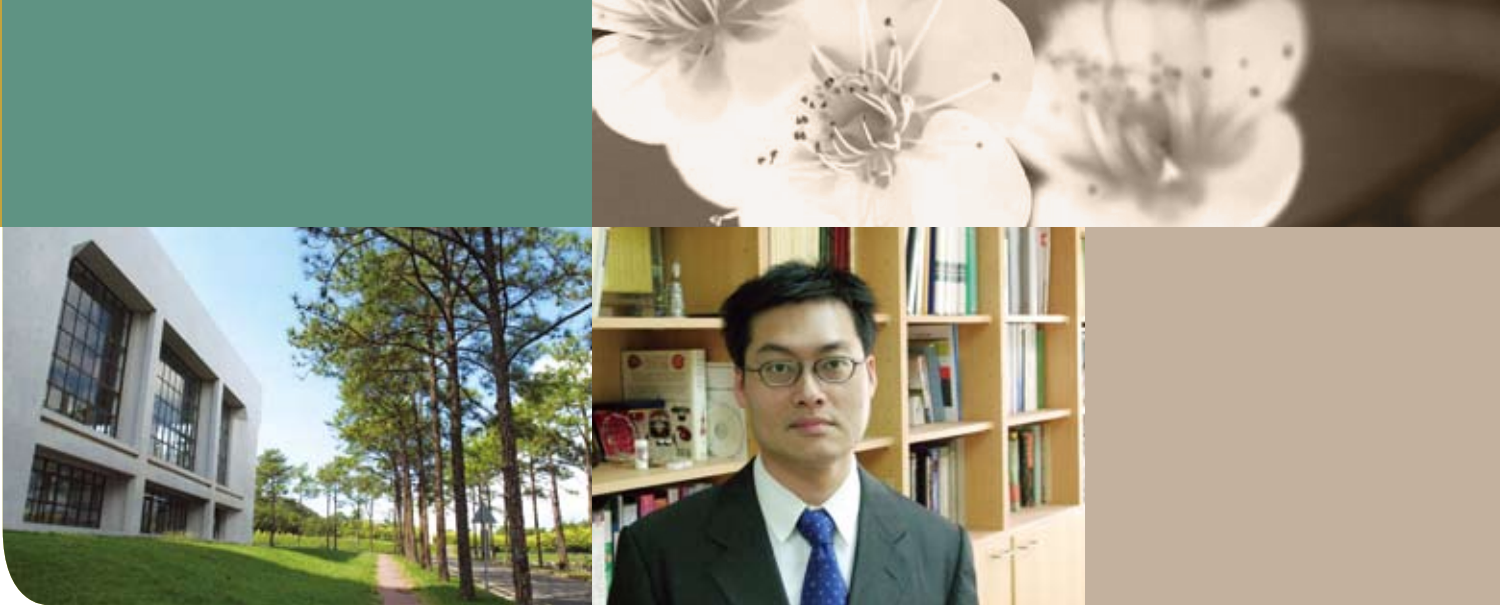
President Lih J. Chen described, at a National Science Council press conference, that the discovery made by Prof. Kong and his research team as an "example of how a small shrimp can sometimes outdo a gigantic whales; or, as a modern version of David defeating Goliath." A member of the Compact Objects Research Group, Dr. P.H.T. Tam was the first astronomer to find the "gamma-ray transient phenomenon" in the Southern Cross binary star system. Since that discovery, Dr. Tam had analyzed the data collected

from "Fermi Gamma-Ray Space Telescope" on a regular basis. Prof. Kong said that "when we first announced this discovery to other astronomers around the world last November, it was questioned by some of our colleagues due to the fact that the signal was rather weak." The Research Group observed the gamma rays again in mid-January this year and they found that the strength was several times greater than what they had observed last time. Prof. Kong said that this is an unprecedented discovery and now there is no generally accepted explanation on this phenomenon. Prof. Kong further pointed out that the space binary star systems are generally composed of two fixed stars, and their size is rather small. But one of this binary star in the Southern Cross is a fixed star with a mass twenty-four times larger than the sun while the other one

- a Prof. Kong explains the binary star phenomenon at the press conference.
- b Dr. P. H. T. Tam, the first to discover emission phenomenon joined the press conference from the campus of Univ. of Hong Kong.
- c Prof. Kong and Prof. Shangjr Gwo, Dean of Research and Development with other team members.

is a pulsar with a size about that of the Hsinchu City. Astronomers around the world are interested in this special pair of stars and the astronomic community has named the pulsar "PSR B1259-63" and predicted that the phenomenon observed occurs once every three years. Prof. Kong also disclosed that the NASA research team, which is made up by 173 scientists internationally, had also discovered the ray but their discovery was made Prof. Kong's research group.





PROF. SHUAN-YI (MICHAEL) HUANG IS RANKED THIRD AMONG THE GLOBAL TOP HUNDRED MATERIALS SCIENTISTS

Prof. Shuan-Yi (Michael) Huang, a top materials scientist worldwide.

Science Watch recently published a ranked list of the world's top hundred materials scientists, and Prof. Shuan-Yi (Michael) Huang of the Dept. of Chemistry was ranked at the third place in this prestigious ranking, making him the best performing scientist in materials science in Asia.

Prof. Huang published a paper on zinc oxide nanolasers in 2010 which has been cited over 4,000 times since its publication. Furthermore, he has published, since 2004 more than 40 research papers with important findings and most of these were published in *the Journal of the American Chemical Society*, a "high impact" international journal.

Prof. Huang's research projects were assisted by a team of more than ten graduate students. Together, they have worked on the morphosynthesis

of gold and palladium nanoparticles, morphosynthesis of cuprous oxide nanocrystals, the growth of ultra-long metal oxide nanowire, the structure of nanopillars in metal nitride, and the synthesis of hollow structure. The morphosynthesis technology of nanoparticle that Prof. Huang and his research team have developed is considered by scientists in this field as a major achievement and will have great impact on the future development of the optoelectronic industry.

The significance of *Science Watch's* ranking is not merely on the number of papers a scientist has published, more importantly; it indicated the impact level of research findings of each scientist ranked. Prof. Huang is 40 year young. He returned to Taiwan from the U.S. in 2002 and joined NTHU upon his return and was promoted to the rank of full professor

at the age of 39. His research accomplishments have been widely recognized both domestically and internationally. He is the proud winner of many prestigious academic awards, including the Wu Ta-You Memorial Award, Academia Sinica's Outstanding Research Award for Junior Researcher and the Chemical Society of Japan's CSJ Award for Young Chemists.



NTHU AND NATIONAL UNIVERSITY OF SINGAPORE ENTERED A PARTNERSHIP OF ACADEMIC COLLABORATION

President Lih J. Chen together with a group of NTHU faculty members visited National University of Singapore (NUS) in early July and signed an agreement to promote academic exchanges and collaboration with President Tan Chorh Chuan of NUS on July 1st. The signing ceremony was held in the Administration Building of NUS and witnessed by Representative Vanessa Yea-Ping Shih of the Taipei Representative Office in Singapore. President Chen, in his address delivered at the signing, praised



NUS as a premier research university known for its excellent programs and research accomplishments. NUS is ranked, according to the QS Asian University Ranking this year, as the third among the best research universities in Asia and NTHU also has a comparable strength in terms of her international ranking as well as research accomplishments. Before the signing of this agreement, there had been many successful collaborations and exchanges between the two sister institutions. The signing of this agreement, President Chen added, will certainly

strengthen and diversify such efforts and create new synergy to further enhance the research and teaching programs of the two partners.

- a President Lih J. Chen and President Tan Chorh Chuan exchanging the signed agreements.
- b NTHU delegates with Representative Vanessa Yea-Ping Shih.

To promote future collaborative researches, a group of NTHU faculty members gave presentations, on their respective research projects following the signing of this agreement to enhance mutual understanding between the two universities and to maximize the possibility of future collaboration. These were Prof. Chia-Wei Li from the Department of Life Science, Prof. Chin Pan of the Institute of Nuclear Engineering and Science, Prof. A. H. Kung of the Institute of Photonics Technologies, Prof. Da-Jeng Yao of the Institute of Nano Engineering and Micro System and Prof. Yi-Wei Liu of the Physics Department and Prof. Pin Chiang of the Institute of Anthropology.



NTHU PROFESSORS WON THE LION'S SHARE OF THE Y. Z. HSU AWARDS

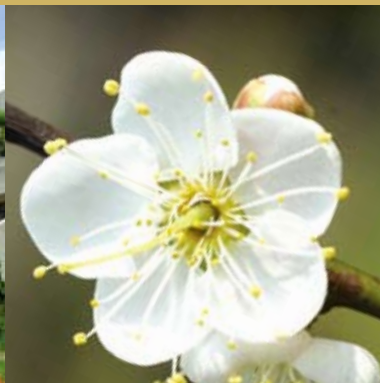
The Far Eastern Y. Z. Hsu Science and Technology Memorial Foundation announced the winner lists of the Y. Z. Hsu Scientific Chair Professor Award and the Y. Z. Hsu Scientific Paper Award recently. Among the winners on the lists, half of them are faculty members of NTHU. Each year, the Foundation honors one outstanding scientist with its Scientific Chair Professor Award in each of the following four categories, i.e., Nano Science and Technology, Communication and Optoelectronics, Bio-medical Technology and Green Technology. Prof. Shangjr Gwo, Dept. of Physics

and Prof. Ching-Tsai Pan of the Dept. of Electrical Engineering are two proud winners of the Nano Science and Technology and Green Technology categories respectively. Both of them received a trophy and a prize of NT\$ 1 million. While they are happy to receive the awards, they are also very thankful to the graduate students and post-doctoral researchers who have contributed in their respective projects. They both indicated that without the assistance of so many talented and devoted people, they would not had been so successful with their researches. The Y. Z. Hsu Scientific Paper Award is also divided into four categories,

- a** Prof. Shangjr Gwo, Dept. of Physics.
- b** Prof. Ching-Tsai Pan (front), Dept. of Electrical Engineering.
- c** Prof. Rong-Ming Ho, Dept. of Chemical Engineering.
- d** Prof. Jer-Liang Yeh, Institute of Nano Engineering and Micro Systems.
- e** Prof. Yao-Win Hong, Institute of Communications Engineering.
- f** Prof. Shiu-Cheng Tang, Dept. of Chemical Engineering.

namely, Nano Science & Technology, Communication & Optoelectronics, Bio-Medical Technology and Green Science and Technology. Among the eight selected winners in these four categories, half of them are also from NTHU. There are: Prof. Rong-Ming Ho, Dept. of Chemical Engineering, Prof. Jer-Liang Yeh, Institute of Nano Engineering and Micro Systems, Prof. Yao-Win Hong of the Institute of Communications Engineering as well as Prof. Shiu-Cheng Tang of the Dept. of Chemical Engineering.





GIGA SOLAR MATERIALS CORP. MADE A HANDSOME DONATION FOR THE CONSTRUCTION OF TSING HUA LABORATORY

Giga Solar Materials Corp. made a generous donation of NT\$ 50 million toward the construction of Tsing Hua Laboratory. This donation is earmarked for the Department of Materials Science and Engineering to set up a two story research facility in the anticipated Tsing Hua Laboratory where an internship program jointly sponsored by Giga and



the Department of Materials Science and Engineering will be housed. President Lih J. Chen said that he came to the donation ceremony with gratitude and pride. He praised Dr. Ji-Ren Chen, the chairman of Gigo Corp., as a remarkable "Triple Tsing Hua Person" since Dr. Chen received his B.S., M.S. as well as doctoral degrees all from the Department of Materials Science and Engineering. Having such a long and significant relationship with NTHU, Dr. Chen has always taken the lead in supporting his alma mater. The total construction cost of the Tsing Hua Lab. is estimated to be around NT\$500 million and the university alone cannot come up with such an amount. NTHU, thus, developed a plan asking the four departments which will be housed in the new lab to seek corporate sponsorships and raise NT\$50 million each for the construction of this new facility. With the generous support

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- a Giga Corp. makes a generous donation toward the construction of Tsing Hua Laboratory.
 - b Dr. Ji-Ren Chen and Dr. Cho-Jen Tsai, Chair of the Department of Materials Science and Engineering jointly placing a model of the building on campus map.
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of Giga Corp., the Department of Materials Science and Engineering is the first to accomplish this task! President Chen also noted that Tsing Hua Laboratory is the first construction project where the University asked user departments to raise matching funds. When completed, different story of the building will be assigned to the Departments of Materials Science and Engineering, Chemistry, Chemical Engineering and Physics to house their respective research laboratories as well as to facilitate cross-disciplinary experiments and research projects. The proximity of different labs will not only allow resource-sharing but also facilitate the cross-fertilization among different disciplines. By inviting corporate sponsorship of the Laboratory, the new facility will also provide a platform for researchers to work with industrialists and create opportunities for students to take part in cutting-edge research projects.



Dr. Ji-Ren Chen indicated that Gigastorage Group and Giga Solar Materials Corp. will continue to invest in R&D in the fields of materials science with special focuses on energy-saving, green energy and energy storage materials. He attributed the success

of Giga Solar to the excellent talents who were trained at NTHU and have been working in his company after their graduation. Dr. Chen believes that cross-disciplinary R&D will remain a key factor in the future development of his company and he sees this

- Ⓒ Happy partners: Dr. Ji-Ren Chen, President Chen and Chairman Tsai (from left to right).
- Ⓓ Representatives of Giga and NTHU at the donation ceremony.

opportunity to collaborate with NTHU as a right move at a right time.

FIVE OF YOUNG NTHU PROFESSORS WON THE WU TA-YOU MEMORIAL AWARD

National Science Council (NSC) recently announced the 2011 Wu Ta-You Memorial Award winners and five of NTHU young faculty members were among the list. They are Dr. Ming-Jer Tsai, Assoc. Professor at the Dept. of Computer Science, Dr. Chuan-Chin Chiao, Assoc. Professor of College of Life Science, Dr. Ray-Kuang Lee, Dr. Yao-Win Hong as well as Dr. Meng-Fan Chang all from the Dept. of Electrical Engineering. Of the four award winners in the category of electrical engineering, it is worth noting, three of them are from NTHU's Department of Electrical Engineering.

Dr. Ming-Jer Tsai's award-winning research focuses on how to allow the nodes in a wireless ad-hoc network to select appropriate route to transmit packets. The ad-hoc network routing scheme that he and his students developed is more energy efficient than previous schemes. Dr. Tsai thanks the University for supporting his project and is very grateful for the invaluable research experiences and suggestion made available to him by his senior colleagues, Professors Cheng-Shang Chang, Chung-Ta Chin, Chien-Ping Hsu and Shih-Chieh Chang. He is also very thankful that he has the opportunity to work with a group of talented students

who provided him with numerous innovative ideas.

Dr. Chuan-Chin Chiao's research scope covers cellular biology to neuroethology; he utilizes different tools to study the evolution and functions of the visual system from the perspectives of comparative biology as well as visual environment and retina physiology. In his research on the retina of mammals, he has discovered many new neural network connections and important factors for retina development. In his research on neuroethology, Dr. Chiao is continuing his long term collaboration with the Wood Hole Oceanographic Institute to study the camouflage and visual mechanism of squids. He has documented the squid's camouflage color and posture under different bottom environments with hyper spectral image photography system.



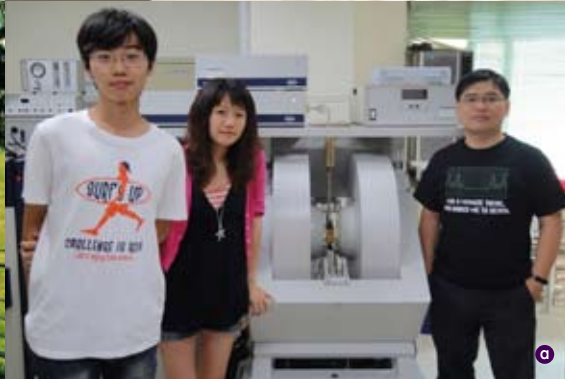
In addition, he also simulated the visual system of the squid's natural enemy and discovered that squids are able to present excellent camouflage colors under circumstance where there is a lack of color vision; this, in turn initiated new research directions. Dr. Ray-Kuang Lee from the Dept. of Electrical Engineering and the Institute of Photonics Technologies specializes in quantum optics and theory analysis. His research results have systematically and stringently demonstrated how to generate non-linear fiber optics light source that also exhibits quantum entanglement characteristics and has laid a firm foundation for novel quantum applications. Dr. Yao-Win Hong of the Dept. of Electrical Engineering and the Institute of Communication Engineering focuses on the design

and performance analysis of multiuser radio communication system, including cross level design, physical layer secure communication for cooperative communication, wireless sensor network and wireless network. These are all important technologies for improving the performance of next generation wireless communication systems. In particular, the cooperative and relay communication technologies play crucial roles in LTE and WiMax system and will have great impacts on the future development of domestic as well as overseas communication industry. Dr. Meng-Fan Chang, Associate Professor of the Dept. of Electrical Engineering has demonstrated outstanding performance in the IC design and research field. He has applied memristor to design the first certified resistor based NVSRAN in the

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- a Dr. Chuan-Chin Chiao from the College of Life Science.
 - b Dr. Ray-Kuang Lee from the Department of Electrical Engineering and Institute of Photonics Technologies.
 - c Dr. Yao-Win Hong from the Department of Electrical Engineering and Institute of Communications Engineering.
 - d Dr. Meng-Fan Chang from the Department of Electrical Engineering.
 - e Dr. Ming-Jer Tsai from the Department of Computer Science.
-

world, which features world-leading fast and low energy consumption non volatile storage and low read/write operating voltage. In addition, Dr. Chang's research accomplishments also include ultra low voltage embedded memory, high speed read/write resistor type memory and quickly detectable small memory cell voltage sense amplifier. Such research results will significantly increase the reading speed of current flash memory and SSDs, making it the first in the world.





DR. CHIANG YUN-WEI'S RECENT RESEARCH WAS PUBLISHED IN THE PRESTIGIOUS *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCE*

The research team led by Dr. Chiang Yun-Wei, an Assistant Professor of the Department of Chemistry, employed the advanced electron spin resonance (ESR) technique to verify the existence of confined space in porous nanomaterials, thus, enabling future researchers to study the interaction between protein and surface water molecule at the molecular level more precisely. Their research will greatly improve the cryopreservation technique of biological tissue and prolong the preservation of important biological samples. The finding of this important research is published in the *Proceedings of the National Academy of Science* in U.S. recently. According to Dr. Chiang and his colleagues, "in nano-confinements, aqueous solutions can be found to remain in a liquid state at

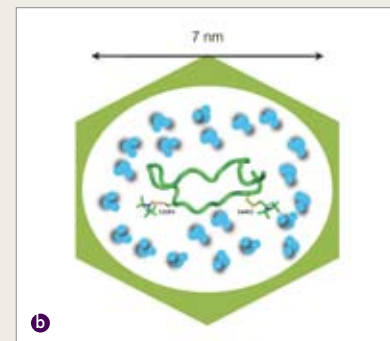
subfreezing temperatures." And, "the finding provides a means of entering into previously inaccessible temperature regions for studying the dynamics and structure of bulk liquid."

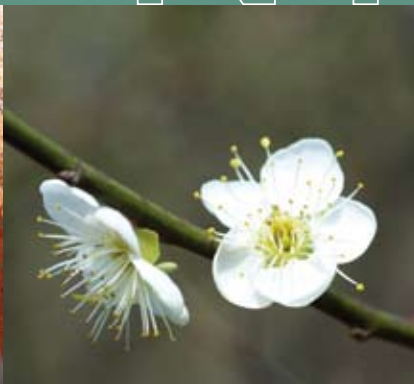
Dr. Chiang observed that "every nano-space of porous materials is large enough to house several protein molecules, but our current research has discovered that every space is occupied only by a single molecule. It seems that there is a natural operation principle existing even in the nano-world.!"

Dr. Chiang also indicated that it is rather rare for a research paper like theirs, which is not the finding made by cross-disciplinary research team nor by a team composed by international researchers, to be published by the U.S. National Academy of science. He encourages his students and colleagues

- a The research Team (from left) Y. C. Lai, J. R. Tsai and Professor Chiang.
- b The illustration of biological molecule in nanomaterial.

to explore the opportunity of cross-disciplinary research both domestically and internationally.





NTHU ESTABLISHED THE FIRST TAIWAN EDUCATION CENTER IN INDIA

President Lih J. Chen and Dean Wei-Chung Wang, Office of International Affairs announced last July that NTHU would establish a Taiwan Education Center (TEC), in cooperation with O.P. Jindal Global University in Delhi, starting on August, 2011.

President Chen said that "as a leading university in Taiwan, we firmly believe that it is our duty to spread the rich Chinese culture wherever and whenever we can." He further elaborated that "because of the recent robust growth of India and China, there is a high demand in India to learn Chinese language and culture. NTHU certainly has the intellectual prowess to provide for this need in India." Assigned by the Ministry of Education and in cooperation with O.P. Jindal Global University, a new and aspiring private university, NTHU has formally established the TEC on August 1, 2011 to provide Indian students with opportunities to learn the traditional

Chinese characters and Mandarin; and to achieve a better understanding of contemporary Taiwan. According to the cooperative agreement signed between NTHU and O.P. Jindal Global University, the former will be responsible for developing teaching curriculum, providing teaching materials as well as instructors; while the latter will provide offices and classrooms for TEC. Initially, there would be two language classes to be offered, enrolling twenty students in each of them.

Currently there are around four hundred Indian students studying in Taiwan. It is anticipated that the establishment of TEC will increase Indian student's Chinese language proficiency and provide them with a better understanding of Taiwanese culture and society and thereby, increase their interest and ability to pursue further study in Taiwan. The establishment of such an unprecedented Center is not without

its challenges. A major challenge, Dean Wang of the Office of International Affairs believed was the recruitment of qualified instructor to staff the Center. Fortunately, preliminary search of such talents proved to be quite successful. Miss Ru-Yu Lin, a graduate student at the Institute of Sociology, NTHU who spent a year at the University of Delhi as an exchange student was available and willing to accept such a position at the newly created Center.

年度國立清華大學傑出導師頒獎暨全校導師
 現今大學教授在教學輔導上所遭遇的困難與解決之
 民國100年6月13日 上午九時三十分至十二時



THE THIRD ANNUAL OUTSTANDING MENTOR AWARD

The 2011 Outstanding Mentor Awards were presented by President Lih J. Chen in a ceremony held on Monday, June 13th. This year's recipients are: Prof. Chung-Chin Lu of the Dept. of Electrical Engineering, Prof. Rong-Shun Chen of the Dept. of Power Mechanical Engineering and Prof. Yung-Hsien Wu of the Dept. of Engineering and System Science. Students quoted an old Chinese saying---"a single conversation with a wise man is better than ten years of book studies," to describe the experience they have had with their mentor, Prof. Chung-Chin Lu. Prof. Lu has high expectations for his students. He believes good students should have the ability to learn and study independently. In addition, they shall be willing to ask for assistance whenever they are faced with difficulty in their studies as well as in their daily life. He encourages

all his students to sharpen their language and communication skills, to broaden their international outlook so that they can communicate their ideas and keep up with emerging global trends. Furthermore, he also pays a great deal of attention to their physical well-being and encourages them to exercise regularly as a way to develop perseverance. Described by many of his students as the "kindest father figure," Prof. Rong-Shun Chen has served as mentor to many students enrolled under the "Points of Thousand Lights Project." In mentoring these students, Prof. Chen not only looks at their academic programs and following up with their progress, he also stresses learning outside of the classroom. He encourages them to actively participate in student clubs and its activities. He also urges them to make good use of public lectures, seminars and concerts that

- a President Chen, Vice President Yeh with three Outstanding Mentors.
- b Prof. Rong-Shun Chen (Department of Power Mechanical Engineering) is presented with the Award.
- c Prof. Yung-Hsien Wu (Department of Engineering and System Science) receiving his Award from President Chen.
- d Prof. Chung-Chin Lu (Department of Electrical Engineering) receiving his Award.

are regularly offered on our campus. He often meets his students for a meal and conversation to hear their plans for the future. He told them that as one learns and grows, one will always face new opportunity and challenge and shall have a plan on what one will do when such opportunity and challenge appear. Prof. Yung-Hsien Wu is described, by his advisees, as their "best friend." Such endearment might have stemmed from the five "core elements" of his mentoring recipe, namely: patient, confidence, empathy, sincerity as well as friendliness. When compared to their peers few generations older, university students in contemporary Taiwan have greater resources at their disposal and seemed to have a better idea of what they want. He, therefore, urges his students to listen



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to their hearts and pursue what really interests them. But, as one pursues one's current interest, one shall never close out other opportunity to explore and learn new things.

He urges them to actively pursue interdisciplinary studies and maintain an active social life by interacting with international students who are studying on our campus and

by participating in international voluntary works.

CHALLENGE AND PROSPECT: A FORUM ON THE DEVELOPMENT OF INTELLIGENT ELECTRONICS INDUSTRY IN TAIWAN

Faced with fierce competition from China and the changing trends of electronics industry, the Office of National Program for Intelligent Electronics (NPIE) and the Hsinchu Science Park Administration jointly sponsored a forum--- "Challenges for the Intelligent Electronics Industry in Taiwan and Its Development" on June 17th. Co-hosted by the Head of NPIE, Prof. Wen-Tsuen Chen and Director General of Hsinchu Science Park, Mr. Tzong-Ming Yen, this forum gathered a group of leading experts on intelligent electronic from the government, universities as well as

industrial sectors. Prof. Chia-Tung Lee, Senior Advisor to the Office of the President emphasized that we need to improve our technical standard to successfully meet the challenges coming across the Strait. Director Stephen Su of the Research Center of Industrial Economics and Knowledge, Industrial Technology Research Institute, on the other hand, advocated that we should focus on cultivating and utilizing our "soft power" so that it will create a more conducive environment for the further development of our S.M.A.R.T. Power. Other speakers and participants

analyzed the current strength and weakness of Taiwan's semiconductor industry from technical as well as human resource perspectives hoping with such a detailed analysis we will be able to gain a clear roadmap for the industry's future development.



NPIE program leader Prof. Wen-Tsuen Chen addressing the audience.



Whilst Taiwan has long enjoyed a leading position in the global market of semiconductor industry, China has shown a rapid growth in recent years, particularly in the IC design. Chinese government has adopted various

policies to support their IC design companies and they have developed specifications for their own communication systems. Such efforts have increased their competitiveness and threaten the leading role that used to be occupied by the Taiwanese companies. Furthermore, recent innovation of services and products such as iPhone, iPad and cloud computing presented further challenges for Taiwanese companies which have traditionally focused on the manufacturing of user equipment and components. NPIE's task, then, is to construct a comprehensive platform upon which the talents from industry, universities and government agencies can be integrated to work in a coordinated fashion to meet the challenges from abroad and maintain the momentum of Taiwan's electronic industry.

- Ⓐ Senior Advisor to the Office of the President, Chia-Tung Lee.
- Ⓑ From left to right: Director Stephen Su from ITRI, Senior Director of Macronix Michael Wang, NPIE program leader Wen-Tsuen Chen, Chair Professor Wei Huang from National Chiao Tung University, Advisor to the Ministry of Education Chauchin Su, and NTHU Distinguished Professor Chen-Fu Chien.
- Ⓒ Director General Tzong-Ming Yen from Hsinchu Science Park addressing the audience.
- Ⓓ Director Stephen Su from ITRI: Usages of intelligent mobile systems to generate new synergy for the Taiwan semiconductor industry.



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