

GREATS

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THAMMASAT
UNIVERSITY
THAILAND



TRANSFORMING YOU INTO
GREATS
GLOBAL MINDSET • RESPONSIBILITY • ELOQUENCE
AESTHETIC APPRECIATION • TEAM LEADER • SPIRIT OF THAMMASAT



GLOBAL MINDSET

THAMMASAT
- AIT WIND
TUNNEL TESTING
OF HIGH-RISE
BUILDING

Severe storms can damage building and other structures especially if they are poorly designed. The impact of strong winds on buildings can be prevented by calculating wind pressures under specific conditions and this will help determine the appropriate wind load design specifications for different types of buildings.

There are three types of strong winds in Thailand which can damage buildings, these are as follows:

1. Thunderstorms are a small scale wind that is short - lived (lasting approximately 5 - 30 minutes), with a 1 to 2 km circumference.
2. Summer Storms are likely to happen between mid-February – mid-May, causing damage to poorly-designed buildings and structures.
3. Tropical Cyclones are categorized by their force into 3 types including tropical depressions, tropical storms and typhoons. These storms are dangerous and can cause significant damage over large areas as they can range in size to over 100 km. while the center of a cyclone is the area where the most damage

occurs. Among the most significant storms that impacted Thailand were Tropical Cyclone Harriet which struck Nakhon Si Thammarat in 1962, Typhoon Gay that hit Chumporn in 1989 and Tropical Storm Linda, which hit Nakhon Si Thammarat in 1997.

Wind-related damage risk reduction can be executed through the use of the DPT Standard 1311-50 for wind load and building design. This includes the main structures of buildings ranging from posts and columns, beams, shear walls as well as supporting structures ranging from external walls and roofs. Construction must meet the DPT standard, ensuring safety and the amount of time and cost spent on maintenance and repairs due to the effects of strong winds. In addition to the three types of strong wind that can cause significant damage, it recommends that the design of high-rise buildings and long-span bridges be tested by creating scale models and measuring the effects of wind using a wind tunnel.

Associate Professor Dr. Virote Boonyapinyo from the Department of Civil Engineering, Thammasat University who has expertise in Structural Dynamics as well as Wind Effects on Structures said, “The wind tunnel test procedure will appropriately determine the structural safety of a building and it’s economical. This is because the wind tunnel test considers the actual shape of studied buildings in the actual surrounding buildings. In addition to the measurement of wind forces, it can be calculated the vibration of high-rise buildings correctly under wind loads for comfort assessment of people inside the building.”

Among the buildings that should be tested for



Associate Professor Dr. Virote Boonyapinyo, Thammasat University at the TU - AIT Wind Tunnel.

wind loading are 1) Irregular-shaped buildings, 2) High-rise and very flexible buildings which calculate from the height divided by the narrow of the building over 6, and long-span and very flexible bridges, such as cable-stayed bridges and suspension bridges, and 3) Buildings that are surrounded by many high-rise buildings.

The TU - AIT Wind Tunnel Laboratory has been built through the collaboration of Thammasat University (TU) and the Asian Institute of Technology (AIT). It is located at the Faculty of Engineering, Thammasat University, Rangsit campus. The wind tunnel itself has the cross section of 2.5x2.5 m with a length of 25.5 m. Wind speeds can range from 0 to 20 m/s. At one time the TU-AIT Wind Tunnel was the largest wind tunnel in South East Asia.

The TU - AIT Wind Tunnel Laboratory contributes to the ongoing development of structural engineering research by providing useful data on the impact of winds on various types of buildings and bridges. This in turn helps to reduce the use of foreign technologies and total costs of construction.

TEAM LEADER

MOBILITY AND BORDER HEALTH SUMMER
PROGRAM SCHOOL OF GLOBAL STUDIES
THAMMASAT UNIVERSITY

Migration and population movements across national and regional borders constitute one of the important and challenging issues of the 21st Century. Almost daily, there are news stories of illustrating humanitarian, economic and security challenges facing National and Regional responsible Governance in almost every region in the world today. While often host countries strive to ensure education, health services, and social justice that may be guaranteed in policy, practice often falls short of providing migrants the services they are entitled to. In recognition of the challenges facing

migrants and the complex and dynamic reasons for migration, the School of Global Studies, Thammasat University is forging new academic frontiers on this issue. Opening a summer course on “Mobility and Border Health” to international students from the University of California’s Education Abroad Program, the School of Global Studies aims to build a program offering practical research and project implementation for the benefit of the migrant community, as well as increase awareness and knowledge with global partners.

During the School of Global Studies Summer “Mobility and Border Health” program, students spend seven weeks exploring various issues arising for populations along the Thai Myanmar border which include, but are not limited to, Health Realities and Border Population Classes, Transnational Geopolitics in Populations in Transition, and Field Work within Myanmar migrant communities in Thai land. Differentiating itself from other programs, the School of Global Studies takes an interactive approach to learning about border health issues allowing students the chance to observe, interact, and problem solve with migrant community members equipping them with real life experience. Such social discourse combined with the process of critical thinking provides the opportunity for students and stakeholders to create positive social changes to enhance the wellbeing of border communities and provide a platform for migrant people to tell their stories.

As the School of Global Studies looks to the year ahead, it continues to develop innovative courses, diverse networks, and strong community relationships to propel education. Most importantly, the “Mobility and Border Health” Summer Program provides greater opportunity and increased wellbeing for Thailand’s Myanmar migrant.

RESPONSIBILITY

ADVANCEMENTS IN THE FIELD OF NURSING FROM THAMMASAT UNIVERSITY WORK TOWARDS ESTABLISHING A HEALTH NETWORK FOR UNIVERSITIES IN THE MEKONG REGION

Recently, the Faculty of Nursing at Thammasat University has established numerous activities for the development of a health network for Universities in the Mekong Region. This region includes Laos PDR, Cambodia, and Myanmar.

Cooperation with Laos PDR

Academic exchanges between faculties affiliated with the Faculty of Medicine, and the Thammasat University Hospital have just opened a new optometry program for the 2015 academic year. The program accepted two students from Laos PDR, Miss Latsamee Saiyapanya from the Eye Department of Mahosot Hospital, Vientiane, and Miss Nanthida Thammathong from the Ophthalmology Center, Vientiane. Once the students have completed their courses, they intend to return and work in their specialized field back in Vientiane.

Cooperation with Cambodia

The Faculty of Nursing has begun offering an international Ph.D. in nursing for the 2015 academic year. The head of the Nursing Department and President of Life University Alumni Association Life University nominated one of his

students to join the program. This student is Mr. Manndy Nget who is receiving a scholarship from Thammasat University. In addition, the faculty is establishing a scholarship program for project funding, and joint ventures for both instructors and students.

This commitment has also resulted in building a network and strengthening the relations between the nursing faculties of Cambodia through Mr. Koy Virya, Chenla University, Cambodia.

Cooperation with Myanmar

Signing a letter of agreement with Prof. Dr. Mar Lar Win, Rector of University of Nursing at Mandalay in the creation of new exchange programs for students and instructors; as well as the organization of regular academic conferences in the ASEAN region.

Signing a letter of agreement with Prof. Dr. Nwe Nwe Oo, Rector, University of Nursing, Yangon in the foundation of new exchange programs between the ASEAN countries for students wanting to continue their education at Thammasat University, as well as an exchange program for

professors and new academic conferences.

The development of such networks combined with a commitment to academic exchange has allowed for the establishment of new international conferences. One such conference is "The Co-op GMS Conference 2015", which will feature Universities from the Mekong region, Korea, and Japan in a round table discussion. The speakers at the conference will include the deans, associate deans, and the researchers of health science from The National University, Laos and Chenla University, Cambodia. The goal of the conference will be to strengthen both international networks as well as academic research. Other topics that will be discussed include: economics, social sciences, and environmental sciences. The next conference is slated for 2016, in the Republic of Korea

This development of both international relations, and academic networks has allowed the Faculty of Nursing at Thammasat to exhibit its abilities on the international stage in its support of the ASEAN region.



GLOBAL MINDSET

THAMMASAT AT THE 43rd INTERNATIONAL EXHIBITION OF INVENTIONS OF GENEVA

This year, Thammasat teams put forth a very impressive showing at the 43rd International Exhibition of Inventions of Geneva, the largest international exhibition dedicated primarily to invention in the world. With 3 inventions taking home the Gold Medal of Honor, Thammasat conveyed its longstanding commitment to being for the people, promoting internationalism, and its strong emphasis on research.

The first of the three inventions was the 'Spacer Mold for Mobile Spacer in Infected Total Knee Arthroplasty' by: Assoc. Prof. MD. Piya Pinsornsak and colleagues from the Faculty of Medicine at TU, a new treatment method involving a temporary artificial hip implant. The implant, which is made from a kind of concrete mixed with antibiotics from an adjustable, reusable spacer mold, allows patients to move around with a temporary prosthesis while simultaneously treating their infection. It also gives the doctors time to prepare the permanent prosthesis without worrying about the hip area experiencing contraction and requiring further surgery. The invention, which has been in development for the last 4-5 years, is a landmark in orthopedics. It serves in reducing patient suffering, while improving their treatment. This invention was



awarded the Gold Medal of Honor in recognition for the impact it would have in the world of medicine.

The second invention was the 'Automated Simplification System for Multiple Thai Documents' by: Prof. Dr. Thanarak Theeramongk and colleagues from the Sirindhorn International Institute of Technology, TU. This automatic system allows the user to easily collect information from a number of document sources and display a simple summary. It can also be used to quickly summarize feedback and input from a very large number of people. The system works by analyzing parts of speech, named entities, and key words to decide on what happened, where, when, to who and why. In addition, it can easily spot outlying information, and discrepancies which can be invaluable to a researcher. While this powerful data collection and display system is currently designed for Thai documents only, it can always be expanded to work with other languages as well.

The third was the 'Transcranial Doppler Ultrasound' by: Assoc. Prof. Jaturong Thantibundit

from the Faculty of Engineering, TU, an automatic system for screening patients for signs of stroke. Strokes are accountable for 6,000,000 deaths a year. They can be caused by stress, poor diet, lack of exercise and smoking. If not treated immediately, strokes can be responsible for leaving a patient with permanent physical and mental damage, and in the worst cases, death. Therefore, this invention that can automatically detect signs of stroke can allow doctors to treat patients instantly, greatly increasing their chance of success and saving a lot of lives. The invention works by using a TCD signal to monitor blood flow in the brain and was designed so that it could be easily integrated into any hospital. It can be an invaluable asset to both large hospitals, and smaller clinics that lack stroke specialists alike.

With these inventions, these visionary teams from Thammasat may very well have played an important role in making a positive difference in people's lives around the world. It is this opportunity, and ultimately this responsibility to society that Thammasat has had such dedication in promoting research and development and will continue to do so in the years to come.

TEAM LEADER THAMMASAT PERFORMS ADMIRABLY ON THE INTERNATIONAL STAGE



Thammasat University has, once again, proven that it is a strong international competitor in the field of academic research and innovation. This comes with an unprecedented 6 major awards in addition to numerous other special honors received in two of the most distinguished invention arenas: ‘The Taipei International Invention Show & Technosmart (INST 2015)’ and the ‘International Convention on Rehabilitation Engineering

and Assistive Technology (i-CREATe 2015)’ in Singapore.

The INST 2015 is a very prestigious event held annually in Taipei, Taiwan. This year, the event was held on October 1st – October 3rd and featured 39 inventions from researchers at various universities. Thammasat was very well represented with an impressive 5 different inventions with 3 of them taking home awards and the other two winning the Special Prize. The ‘Baby Breath Safe’, a device that measures and assists breathing in infants and young children won the Platinum Award, the highest award given at the event. Taking home the silver medal was the ‘Multi-Functional Stove’, an efficient machine capable of frying, boiling, and steaming all at the same time. The bronze medal went to the ‘Save Energy Steam Cooker Device’ which can make sticky rice in just 15 minutes.

The i-CREATe 2015 is an important platform for exhibiting innovations from students in the area of technology, applications, equipment and techniques in the field of rehabilitation. It is a great opportunity for the international exchange of ideas, and features a wide range of workshops and presentations that work toward assisting the daily lives of the disabled. The event was graced by the presence of Her

Royal Highness Princess Maha Chakri Sirindhorn. This year, Thammasat teams won 3 awards. 2 Inventions received the Merit Award. These were the ‘I-Walk’, a walking assistance device for patients with hemiplegia, and the ‘CP-Stepper v2.0’, another walking assistance device, this one designed for mentally disabled children. The third award, the Peer’s Choice Award, went to the ‘Electric Repositioning Bed’ an electric bed capable of both twisting and bending.

The well-earned results of all the diligence and dedication of everyone involved on the various inventions this year from Thammasat are testimony to the university’s commitment to research in the field of technology, and its desire to strive for international standards. In both of these exhibitions, as well as in many of the other international events this year, Thammasat teams have shown that they can stand toe to toe with some of the best minds in the world. More importantly however, they were able to create outstanding inventions that will undoubtedly make a real difference in many people’s lives. This, more than anything, is what the students and faculty who worked so hard on these amazing projects should feel pride for because being ‘for the people’ is what Thammasat is all about.

THAMMASAT UNIVERSITY OFFERS INDIVIDUALS AN OPPORTUNITY TO STUDY THAI LAW IN ENGLISH- A FIRST FOR THAILAND

Bachelor of Laws Program in Business Law (International program),

Thailand’s First Bachelor of Laws Program in Business Law Entirely Taught in English

Dr. Munin Pongsapan, Director of International Programs, Faculty of Law, Thammasat University disclosed that the Faculty of Law is offering interested individuals ‘a very unique opportunity’ to study Thai law in English through its international LL.B. Program in Business Law. The Program, a first for Thailand, will prepare participants to practice Thai law in English locally, regionally, and internationally. Thailand’s next generation of Thai lawyers must be able to practise law in English. Without this ability, some may find meeting the unique legal needs of their clients in global marketplace a challenge.

“With our ever increasing levels of global economic interdependence propelled by international trade and investment, English is becoming the “lingua franca” or common language adopted by native speakers of different languages to communicate. English will play an important role in assisting ASEAN Member States fulfill their AEC aspirations. The prospect of our domestic business landscape shifting towards a regional or international orientation based on the AEC raises concerns that language may be the next trade barrier facing Thai business lawyers. For the Thai legal practitioner preparing to catch the ASEAN ‘wave’, a quality legal education grounded in international business



Dr. Munin Pongsapan, Director of International Programs, Faculty of Law, Thammasat University

law and English may be the best asset available,” said Dr. Munin.

Thammasat Faculty of Law is the oldest continuously operating law school in Thailand. The faculty has a rich tradition in legal education and public service. The faculty has a teaching staff that is a blend of academics and legal professionals who are exceptionally qualified and highly-regarded in their legal practice areas. Many of the faculty have trained abroad, and Thammasat also attracts international lecturers who come to the Faculty to

undertake research and give seminars. This mix of legal scholars, practicing lawyers, and foreign experts ensures that Thammasat’s students receive an enriching, stimulating study experience. The faculty realizes that the quality of our legal education determines whether our students establish an excellent legal foundation that prepares them to meet the complex legal challenges in a global marketplace. In addition to Thammasat’s many on-campus learning experiences, the faculty encourages its students to spend their final year abroad at highly respected international law schools. The faculty also encourages its students to participate in local, regional, and international academic activities, seminars, and moot court competitions that occur throughout the academic year.

“There is a wide range of professional opportunities for graduates from our LL.B. Program in Business Law. Many of our law graduates find challenging and rewarding careers as judges, public prosecutors, and attorneys in the private and public sectors. Several of our past law graduates are law academics and legal researchers at local law schools while others have joined international organizations as legal consultants,” Dr. Munin concluded.

For more information about the Program, please visit HYPERLINK “<http://interllb.law.tu.ac.th>”<http://interllb.law.tu.ac.th> or contact HYPERLINK “mailto:interllb@tu.ac.th”interllb@tu.ac.th or call +6626132973.