UTM co-hosts 4th QS WorldClass in internationalisation efforts

Internationalisation is one of Universiti Teknologi Malaysia’s (UTM) main agenda to enhance international relations, cooperation and collaboration towards improved global standing. Some of the steps taken include establishing academic and research collaboration, networking and strategic engagements with established and renowned universities and institutions around the world towards a more focused programme in enhancing international presence while moving in tandem with Malaysia’s goal towards a high-income, sustainable and developed nation, said its Vice-Chancellor/President Prof Zaini Ujang.

He said some key strategies to boost UTM’s global recognition included engagement with renowned institutions in niche areas of mutual interest, such as with MIT in industrial biotechnology, Oxford University in industrial mathematics, Harvard University in adopting its case studies in teaching and learning activities, and Cambridge University in green technology for automobile and aeronautical industries.

To further boost its globalisation efforts, UTM had established satellite offices in Tokyo, Qatar, Boston and Madinah to enhance strategic ties and forge collaborative engagements in academic, innovation and research development with nearby universities, added Prof Ujang.

Highlighting a critical problem, he revealed: “Malaysian universities still lag behind most nations when it comes to publication and citation, resulting in abysmal performance in terms of ranking under the citation criteria. This is due to the lack of research involvement and undertakings, which have affected other academic activities such as publication, citation and commercialisation. “UTM strongly believes that cooperation between industry and academia is crucial and needs to be continuously enhanced to ensure that research and development as well as academic programmes at the university remain relevant and purposeful while meeting industry needs and expectations. “

Various steps have been taken to engage industry and these include the appointment of industry experts and professionals as adjunct professors, to ensure that students are continuously exposed to the latest developments in their specialised fields. Prof Ujang added that the establishment of the Institute of Engineers’ branch office on UTM campus would bring practitioners closer to students and faculty members, and create a platform for them to gain exposure and share insights with professionals.

We look forward to serving you better with this innovative newsletter

We have conceived this new quarterly newsletter to provide public relations support to universities, by helping them to gain worldwide publicity and global recognition through a QS-branded product at no cost to them. QS News-2-WOW-U will publicise the latest university news, views and pictures from Asia, Middle East and Africa that have international relevance and appeal for our target audience of international higher education leaders and professionals.

Besides featuring news to ‘WOW’ readers, future issues of QS News-2-WOW-U will also have a pictorial page that will spotlight universities’ official and social events. In addition, it will include a diary of events to highlight our clients’ important activities.

This new initiative will be highly sought after because of its interesting content that is contributed by YOU!

The inaugural edition that you hold in your hands was launched at the 4th QS WorldClass globalisation seminar on 1-3 April 2011 in Kota Kinabalu, Malaysia. We hope that you find it informative and useful.

Copies are also posted to leaders of over 4,500 universities in Asia, Middle East and Africa, and distributed at QS events globally. The online edition will be emailed to our database of 100,000 university faculty and administrators worldwide.

We invite you to send your university’s news, views and pictures for possible publication in the next issue, which will be published in July 2011. They can feature your institution/faculty/students’ academic/research achievements and other unusual, outstanding or extraordinary developments. We can also interview you for exclusive stories.

We saw a need and hope to fill it with QS News-2-WOW-U. It is a publication for universities by QS Asia. Together, we can make it a compelling and engaging read for the international academic community.

We would very much like to express our heartfelt thanks and appreciation to our many clients for their strong support over the years, and look forward to serving you even better with this newsletter.

Mandy Mok
Managing Director
QS Asia Quacquarelli Symonds

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The Best Incubator for Elite in the 21st Century

Prof Dato’ Ir Dr Zaini Bin Ujang
Vice-Chancellor/President
Universiti Teknologi Malaysia (UTM)
NTU opens Asia’s first solar fuels laboratory to develop new energy sources

Singapore: Asia’s first solar fuels laboratory at Nanyang Technological University (NTU), set up in February 2011, aims to create efficient and sustainable sources of solar fuel by developing a device that can extract large amounts of hydrogen from water using sunlight. When perfected, this “artificial leaf” technology can reduce dependence on crude oil and help to ease problems caused by global warming and climate change.

To develop solar-driven technology that is commercially viable, the researchers need to find suitable combinations of chemical catalysts that can speed up the artificial photosynthesis process using minimal energy. That will enable the large-scale production of fuel to be carried out in a cost-effective and efficient manner.

“Nature has lots of wonderful ways to renew itself. We can learn a lot from Nature, if we look hard enough, to find sustainable solutions to some of the world’s most pressing problems. Inspired by the way leaves use sunlight to produce energy, we can mimic Nature and perfect water-splitting technology. This will allow for the separation of water into hydrogen and oxygen. We can then convert solar energy into hydrogen in large quantities in a clean and sustainable manner,” explained Prof Bertil Andersson, NTU’s President-Designate and an internationally-renowned biochemist.

“The Solar Fuels Lab is an initiative in support of Sustainable Earth, one of NTU’s Five Peaks of Excellence,” said Prof Freddy Boey, NTU’s Provost-Designate, who was the previous Chair of the School of Materials Science and Engineering.

The laboratory will be jointly managed by NTU’s School of Materials Science and Engineering and the Energy Research Institute @ NTU (ERI@N).

City U students’ business plans to market fish technology win top international awards

Hong Kong: Three students from different faculties at City University of Hong Kong (CityU) have created an award-winning business plan aimed at marketing transgenic fish technology developed by scientists at CityU.

The technology detects estrogen disruptors in food, pharmaceuticals, cosmetics and plastics in an efficient, cost-effective way. Estrogen disruptors are substances that interfere with the hormonal system in the body, a growing concern worldwide. The CityU researchers had found that their new testing mechanism was around 60% more efficient compared to existing chemical tests.

The three students — from the departments of marketing, manufacturing engineering and engineering management, and accountancy — formulated their business plan by drawing on their interdisciplinary knowledge, experience and learning to design a conceptual framework for manufacturers of food and healthcare products.

The CityU team beat more than 250 undergraduate teams to win the Hong Kong competition of the HSBC Young Entrepreneur Awards in April 2010, and a few months later secured the Best of the Best Award at the HSBC Young Entrepreneur Regional Awards in Malaysia, beating more than 1,000 teams from Bangladesh, Brunei, Hong Kong, Malaysia, Philippines and Thailand. In addition, two of the team members came in third with a similar proposal in the 5th Lee Kuan Yew Global Business Plan Competition organised by Singapore Management University last July, competing with over 800 tertiary students from 40 countries.

The young entrepreneurs now intend to start their own business in Hong Kong and China, providing testing services on estrogen disrupters and other toxic materials.
YONSEI-INDEX Design to Improve Life Summer School offers unique and life-long learning experience

1 – 29 July 2011
Yonsei International Campus, Incheon, South Korea

The YONSEI-INDEX Design To Improve Life Summer School (YIDSS) is designed to give each student a unique and life-long learning experience that fosters engagement, creativity and courage, so that they will play a crucial role in the future.

This new four-week program will commence in 2011 at the Yonsei International Campus in Incheon. Yonsei University, one of South Korea’s top institutions, and INDEX Design to Improve Life, a world's top design organization, are jointly offering the YIDSS. It will be taught by leading faculty and practitioners from Europe, Africa, Asia and the US.

Students and professionals will learn to look at the entire design process from a uniquely different perspective – how individual and collective designs can improve the human condition by matching them with the UN Millennium Development Goals.

The program comprises the following courses:
- Design to Improve Life Legacy Course
- Elective Courses relating to Design to Improve Life
- Inspiring field trips
- Friday evening lectures by internationally renowned speakers

YIDSS students will have the opportunity to participate in the courses led by a high-profile international cross-disciplinary team of teachers. They will also gain: reflective collaboration; knowledge and understanding; methods and tools; knowledge and experience; creative and visual competencies; and process understanding.

For more information, please visit http://indexdesignsummer.yonsei.ac.kr.

To enquire, please email to designssummer@yonsei.ac.kr.

“Design is the human capacity to shape and make our environments in ways that satisfy our needs and give meaning to our lives.”
- Professor John Heskett, INDEX jury member
POSTECH research team achieves breakthrough in extracting membrane proteins

South Korea: A research team that includes Prof Kim Ki-Moon of the Department of Chemistry, Lee Don-Wook (PhD candidate), Prof Ryu Sung-Ho of the Division of Molecular and Life Science at POSTECH and NOVACELL Technology has succeeded in separating membrane proteins from a cell using ‘cucurbituril’, a pumpkin-shaped coreless compound. The result was published in the online edition of ‘Nature Chemistry’.

The study found that using cucurbituril had many advantages over the commonly used avidin-biotin pair system in extracting plasma membrane proteins for disease analysis. The new method developed by the POSTECH team uses the cucurbituril-ferrocene pair system to selectively isolate plasma membrane proteins from their cells. It was shown to be more efficient in capturing membrane proteins with a much lower possibility of potential contamination.

Prof Kim revealed: “This research breakthrough proves that a pumpkin-shaped coreless compound can be used not only for basic biological research but also for various areas such as disease treatment and diagnosis.” In particular, this new method is expected to change the paradigm in biotechnology, as it can not only analyse disease but also cure patients without any side effects.

As is often the case with major scientific achievements, the research team had to overcome numerous trials and errors. “We will continue to advance our research in different fields and to work with the biology department to develop new medicine.”

Aalto and Nagoya U achieve world’s first in thin-film technology

Japan: Prof Yutaka Ohno from Nagoya University in Japan and Prof Esko I. Kauppinen from Aalto University of Finland and their research team have developed a fast and simple method of producing high-performance thin-film transistors on plastic substrate.

The inventors believe that the technology for producing semiconducting carbon nanotube plastic substrates will make it possible to manufacture flexible electronic products, such as electronic paper, at a low cost. They used the new technology to produce the world’s first sequential logic circuits based on carbon nanotubes.

Light and flexible devices such as flexible mobile phones and e-paper require flexible electronic components that can be manufactured inexpensively and quickly on a plastic substrate.

The new method involves growing the nanotubes in atmospheric pressure gas and collecting them with a filter. The resulting thin film is then transferred from the filter onto plastic, which provides a very clean film of uniform quality in just a few seconds. This process is being developed as a technology for high-speed roll-to-roll (R2R) manufacturing.

The research was financed by the New Energy and Industrial Technology Development Organisation (NEDO), Japan and Aalto University’s Multidisciplinary Institute of Digitalisation and Energy (MIDE) research programme.

UPM student wins international architecture competition in building design

Malaysia: A former student of the Faculty of Design and Architecture at Universiti Putra Malaysia (UPM), Mohd Ramadan Shahabudin, has clinched an award in the Metal & Glass category (student) for the design of buildings at the SAIE Selection 10, an international competition open to young designers working on the theme of sustainability with innovative solutions, materials and technologies.

Out of 36 participants, he was the only Asian representative in this prestigious competition dominated by European countries, including host Italy, Denmark, Poland, Romania and Ireland.

Ramadan’s design intrigued the jury because of its futuristic concept and application of green technology with design to ensure a quality working environment that helps to conserve energy and reduce greenhouse effects.

Although most architecture students are bound to scientific principles that might limit their creativity, Ramadan revealed that he initially designed with aesthetic values in mind before modifying his proposal according to scientific standards to show the design realistically.
Which Asian universities shine in QS world rankings for engineering and technology?

Last year, the University of Tokyo (7th), Nanyang University of Singapore (9th), Tsinghua University (11th), Kyoto University (17th), Tokyo Institute of Technology (23rd), Korea Advanced Institute of Science & Technology (24th) and Hong Kong University of Science & Technology (26th) were the Asian universities in the top 30 for engineering and IT in the QS World University Rankings.

Come April, find out if these Asian universities will rank higher this year and if more Asian institutions will join the top 30. In previous years, QS ranked universities in five broad subject areas: Arts and humanities; engineering and IT; natural sciences; life sciences and medicine; and social sciences. From 2011, the rankings will cover over 30 individual subjects, thus offering the most wide-ranging comparison at the departmental level.

This year's results for engineering and technology, to be released on 2 April 2011, will rank universities in computer science and these engineering disciplines - chemical, electrical and electronic, civil and structural, mechanical, aeronautical and manufacturing.

The new subject rankings will be based on established QS rankings methodology and on a combination of research citation and survey data from academics and graduate employers across the world.

KAIST professor wins prestigious Korea Engineering Award

South Korea: Prof Kang Suk-Joong of KAIST’s Department of Materials Science and Engineering has won the Korea Engineering Award from South Korea’s Ministry of Education, Science and Technology and the Korea Research Foundation. The award is given to those who have done world-class research.

Prof Kang has potentially redirected research on microstructure of materials by elucidating the fundamental principles behind how the microstructure of polycrystalline materials evolves. He applied the results of his findings in the manufacture of new materials and has made significant contributions to the Korean materials engineering industry.

A renowned authority in materials engineering, Prof Kang has published more than 200 papers in top-tier international journals since he started his academic career at KAIST in 1980. He was appointed KAIST Distinguished Professor last year in recognition of his research achievements. He attributed his success to KAIST, which has provided him with an environment where he could devote himself to research.

The Korea Engineering Award was established in 1994. To date, 24 recipients have been recognised in various fields.
50 Indonesian universities first to sign up for QS Stars rating

A good number of Indonesian universities show their pioneering spirit by being among the first to register for the new QS Stars rating system.

University rankings have their limitations since they often provide an oversimplified view of institutional strengths. As specialist strengths of a university are often overlooked, rankings are usually biased towards fully comprehensive institutions.

The QS Stars system is based on a rating method, which measures university performance against preset thresholds for a more thorough evaluation of each participating institution. It awards up to a maximum of five Stars.

Of the 50 Indonesian universities that have signed up, 17 have received an institutional report that details their results as measured by a comprehensive QS proprietary analysis. The rest will receive their reports by the middle of this year.

HKBU launches Hong Kong’s first internationally recognised professional development series for faculty

To upgrade teaching and learning quality and to enhance Hong Kong Baptist University’s (HKBU) quality assurance mechanism, its Centre for Holistic Teaching and Learning (CHTL) launched the Faculty Professional Development Series (FPDS), Hong Kong’s first internationally recognised professional development series for the university’s teaching staff, in February 2011.

The FPDS is open to full-time and part-time faculty members, teaching assistants, postgraduate students with teaching responsibilities and academic administrators. It will comprise 10 workshops, covering a wide range of areas, including outcome-based teaching and learning, using electronic platforms in teaching and assessment, learning theories and motivating student learning.

Upon completion of the series, teaching staff will be able to adopt practical pedagogies that will help them provide students with HKBU graduate attributes. They will also be able to make use of electronic platforms and technologies in teaching and the design of assessment strategies.

The FPDS will lead to an internationally recognised pathway for further study in education. Participants who have successfully completed eight workshops out of 10 and the final assessment will be eligible for exemption from six credits of the Graduate Diploma in Professional Studies or the Master in Education offered by the University of Western Australia (UWA).

How Korean universities can internationalise their campuses to survive

Korean higher education institutions are facing serious challenges, such as difficulty in filling government’s annual freshman quotas. There is also the great imbalance between the number of foreign students coming to study in Korea and the number of Korean students going overseas.

With the opening of the Korean education market, they now need to internationalise their campuses for future survival, according to Mr Insoo Cho, Director of Administration & Strategic Planning at Yonsei University.

In his book “Internationalisation of the Campus: The case of two major Korean private universities”, he noted that internationalisation was a complex and comprehensive procedure involving many different stakeholders and offices, and huge financial resources.

“Such complex characteristics can cause uncertainty and disintegration within an institution. Successful results require a well-woven strategic plan, which can save time, capital and energy. It can also lead the institution’s internationalisation efforts in the right direction,” he added.

From his research on Yonsei and Korea Universities, he found that internationalisation at these two institutions was overly programme-focused and lacked proper organisational strategies. He also noted that programme-oriented internationalisation involved mainly students, with very limited participation by departments. “It is therefore important to include all constituencies and departments through a comprehensive institution-wide process,” Mr Cho commented in his book.
Former TMU President becomes Taiwan’s new Minister of Health

Dr Wen-ta Chiu, most recently President of Taipei Medical University (TMU), was appointed Taiwan’s new Minister of Health in February.

Dr Chiu is a highly distinguished neurosurgeon, medical researcher, academic leader and public health advocate. He served as TMU President from 2008 to 2011.

He is best known to the public for promoting legislation on motorcycle helmets, which prevented an estimated 30,000 deaths since its enactment in the 1990s.

As President of TMU, he led the successful growth of a world-class medical university and hospital, including doubling the size of the hospital to 3,000 beds. At the same time, he also served as Superintendent of Shuang Ho Hospital and as a professor in TMU’s College of Medicine and College of Public Health and Nutrition. In addition, he was Superintendent of Wan Fang Hospital, Chief of Neurosurgery, Director of the Biomedical Informatics Center and Dean of the School of Public Health.

As the new Health Minister, Dr Chiu will focus on the second-generation health plan, which was passed as an amendment to the National Health Insurance Act by the legislature in January 2011.

Directories of world’s great achievers recognise Chung-Ang academic

South Korea: Prof Jung Young-Bok of Chung-Ang University has been listed on all three directories of the world’s most noteworthy high achievers. He was included in the ‘Top 100 Health Professionals 2010’ named by the International Biographical Center, ‘Marquis Who’s Who’ published by News Communications of the US and ‘Great Minds of the 21st Century’ compiled by the American Biographical Institute.

He attributed his accomplishments to his wife. “Thanks to her, I could continue to work in a university,” he disclosed. He teaches at the Medical School of Chung-Ang University and serves in the Department of Orthopedic Surgery at Chung-Ang University Hospital.

A renowned authority in knee joint and cruciate ligament treatment, Prof Jung is also an ardent researcher and has been speaking on the subject at a symposium for the past 10 years. He is also acclaimed for performing highly complex surgery assisted by arthroscopy and computer navigation system, including artificial joint replacement.
Asia’s oldest university celebrates 400th anniversary with fireworks display

Philippines: The University of Santo Tomas celebrated its 400th anniversary in January this year, starting with a formal Eucharistic celebration. This was preceded by a week of festivities and culminated with a dazzling fireworks display.

The papal legate, nearly 200 cardinals, archbishops, bishops, more than 700 priests as well as dozens of government officials, university presidents, about 75,000 students and alumni from all over the world attended the celebrations.

The 400-year-old institution’s Rector, Rev Fr Rolando V. de la Rosa, OP, became the youngest-ever rector of UST when he was elected in 1990 at the age of 37.

As part of its celebration, UST formed probably the largest living rosary in the world with over 20,000 students, faculty members, administrators and employees participating. On Ash Wednesday in March this year, UST mobilised about 24,000 people to form a black-and-white Dominican cross in front of the UST chapel and grandstand (picture).

KFUPM, Stanford and Saudi Aramco to collaborate on research in petroleum engineering and geosciences

Saudi Arabia: King Fahd University of Petroleum and Minerals (KFUPM), Stanford University and Saudi Aramco have entered into a trilateral strategic partnership in education and research in petroleum engineering and geosciences.

They will establish sustainable research and development programmes in selected areas of the upstream oil and gas industry. Joint workshops were conducted to define the scope of work and these had identified key areas and outlined the best framework for collaboration.

“This new strategic partnership provides our faculty and students with yet another vehicle to share best practices in education and to engage in collaborative research that is closely aligned with the interests of Saudi Aramco and the kingdom,” said KFUPM Rector Dr Khaled S. Al-Sultan.

The university-industry partnership will involve the exchange of faculty, graduate students and researchers through sabbaticals, workshops, lecture series, continuing professional education and short courses.