

# RES NANCE

Inspiring Futures, Nurturing Possibilities



Issue • 49

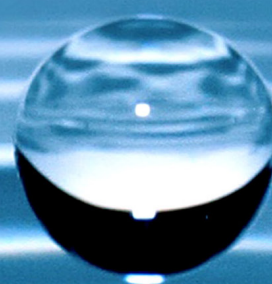
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Universiti Kebangsaan Malaysia is one of Malaysia's premier research university. Its' astounding and renowned presence in the academia is reflected through the various contributions it has made to the society, remarkable research that its researchers take part in and the many cooperation it made with the industry. Flip through Resonance's pages to read about UKM's prestigious achievements in research, publications and student and staff related activities. Happy reading.

Editorial Team



# Message from the **Vice-Chancellor**

In just four years UKM will be celebrating its Golden Jubilee. Looking back, we have so many major achievements to be proud of. More importantly, these achievements are in line with UKM's Key Result Areas (KRA), formulated based on Malaysian Education Development Plan 2015-2025, which emphasizes on graduates, research and innovation, smart partnership, human resource, generating wealth and conducive environment.

UKM is proud to announce that our researchers, Prof. Datuk Ir. Dr. Wan Ramli Wan Daud and Prof. Dr. Siti Kartom Kamarudin, were listed as the Most Influential Scientific Minds in the World by Thomson Reuters for 2015. Our alumni have carved their names locally and internationally, and continuously at the forefront. From renowned television personalities to respected government officers, influential CEOs and high flyers; they helped to steer the country to progress.

Some of them include, YB Dato' Sri Liow Tiong Lai (Transport Minister), Datuk Seri Wong Chun Wai (CEO, Star Publications), Tan Sri Jemilah Mahmood (Chief of the World Humanitarian Summit Secretariat) and Pang Chin Fei (TV3 news presenter).

UKM has also successfully charted its name on the world map. The Hadhari Center at Kyoto University, Japan, the International Office of UKM at the University of Duisburg-Essen, Germany, and IMEN office in South Korea, meanwhile, are just some of UKM's initiatives in spreading its wings internationally.

I hope these achievements in the first quarter of the year will inspire everyone to continuously strive for success. UKM is the place that inspires and nurtures possibilities.

**Prof. Datuk Dr. Noor Azlan Ghazali**





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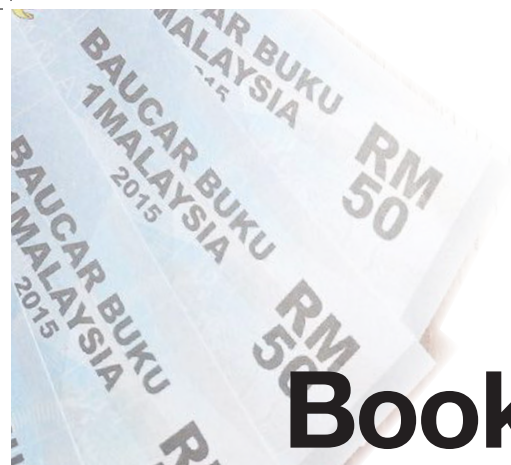
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# 1MALAYSIA Book Voucher Aid Continued



About 1.2 million Malaysian university students will be receiving aids totalling up to RM300 million to help with their university education. The aid consists of RM250 1Malaysia book vouchers and RM100 assistance to under privilege students.

This was revealed by Higher Education Minister Dato' Seri Idris Bin Jusoh during a townhall meeting held between the Higher Education Minister and University Student Councils at The National University of Malaysia (UKM).

Dato' Seri Idris stated the government is sympathetic to the concerns and hardships that students face in dealing with the rising cost of living.

Meanwhile, he said those involved in scams related to the RM250 1Malaysia Book Vouchers (BB1M) may be barred from using them in future. "We will investigate and locate the stores that have abused the vouchers. We will then discuss with Bank Simpanan Nasional (BSN) and will take action against the perpetrators," he said

Among the possible measures to be taken against the profiteering bookstores was to disallow them from receiving and cashing in vouchers in the future. He said action would be taken against the bookstores once enough information had been uncovered by the investigation. Students who take part in the voucher scams could also face action, he said.

"It is not right (for students) to misuse the vouchers, as it is meant for them to purchase books," he added.

Some 2, 000 student leaders from various universities, polytechniques and community colleges took part in the townhall meeting.

Also present were Deputy Higher Education Minister Datuk Mary Yap Kain Ching, Higher Education Ministry Chief Secretary Dato' Seri Ir. Dr. Zaini Bin Ujang and Vice-Chancellor of UKM, Prof. Datuk Dr. Noor Azlan Ghazali and representatives from both public and private universities.



# Nanofiltration and Ultrafiltration Technologies for Water and Wastewater Treatment Won Toray Award

The Faculty of Engineering and Built Environment's (FKAB) research on Nanofiltration and Ultrafiltration Technologies for Water and Wastewater Treatment bagged the Toray Award, a prestigious accolade funded by the Toray Science Foundation of Japan to promote science and technology by supporting the effort undertaken by scientist, young researchers and lecturers in science.

Led by the Dean, Prof. Dato' Dr. Ir. Abdul Wahab Mohammad, the team proposed solutions on how wastewater, which has been treated with nanofiltration and ultrafiltration technologies, can be utilized by the industry. The findings is said to be able to help solve industries water treatment woes.

Prof. Abdul Wahab said the study was first initiated 10 years ago with the cooperation of Indah Water Consortium, Sime Darby and KLK Oleochemicals.

"The project has been successfully executed in Cyberjaya. We studied the performance process and reused domestic water taken from houses and used Nanofiltration and Ultrafiltration Technologies to produce very clean water which can be reused," he explained.

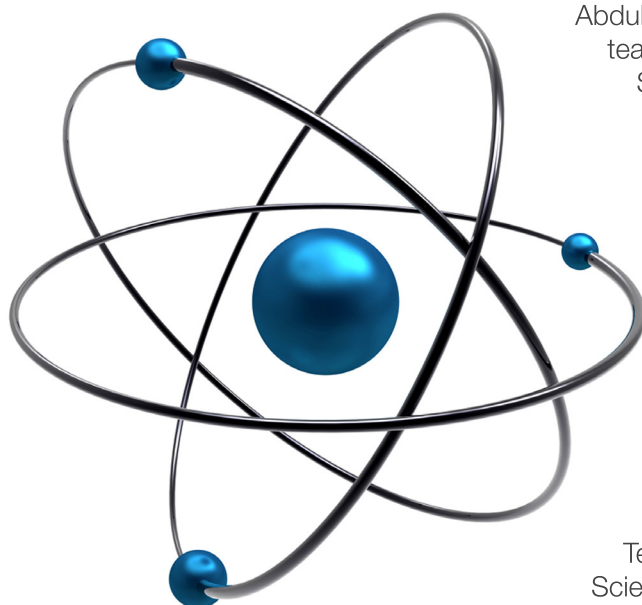
He said the team also researched on the processes and cost effectiveness of the techniques.

"We proposed solutions on how the water produced using these technology can be used by the industry to prevent pollution. This is because, when water that has been used go down the drain, it will flow to the river and cause pollution. When that happens, a more thorough treatment needs to be done on water sourced from rivers before it can be used by the public, which is wasteful," he said.

More than 20 researchers submitted their application for the Toray awards but only four were shortlisted. Two winners, were then selected from the list.

Prof. Dato' Abdul Wahab is the third UKM recipient of this award after Prof .Dato' Abdul Latif in 1996 and Prof. Dato' Dr. Roslan Abdul Shukor in 2005. He and his team - Prof. Ir. Dr. Siti Rozaimah Sheikh Abdullah (UKM), Assoc. Prof. Dr. In Nurul Hasyimah Mohd Amin (MICET, UniKL) and Dr. Hassimi Abu Hasan (UKM) received certificates and RM30,000 cash.

The award was established in 1994 and attracted worldwide attention, involving three annual programmes: Science and Technology Awards, Science and Technology Research Grant and Science Education Award.



# Four Strategies to Generate Income

Academic programmes, expertise, asset and asset monetization have been identified as core areas that can help generate income for National University of Malaysia (UKM) in 2016, said UKM Vice-Chancellor Prof. Datuk Dr. Noor Azlan Ghazali.

"We have high quality post graduate programmes such as Master and PhD that can help generate income," he said to reporters after a prize giving ceremony for successful students of UKM PERMATApintar, an academy for gifted children.

The second strategy, is through UKM's expertise in Health and Wellness. As it is, Hospital

Chancellor Tuanku Muhriz UKM is currently serving many patients. Hence, UKM sees it as an opportunity to expand and build a UKM private hospital to cater to the increasing number of patients and at the same time generate more income for the university.

The third strategy is the lending or renting out of material assets of UKM which are among the best in the country, such as the sports fields for organisations to hold tournaments. This is timely as Sime Darby Foundation recently pledged to build an international cricket stadium in UKM worth RM2 million.

The fourth strategy, meanwhile, is asset monetization of the environment, such as the natural forest in campus, which has facilities for groups to use for field trips.

UKM is also planning to reopen the learning centre in Sabah which was closed following the establishment of Universiti Malaysia Sabah. The learning centres might be modelled based on the research centres at Langkawi, Tasik Chini, Mersing, Teluk Intan and Beranang.





# Effective Response To Fukushima Nuclear Disaster

**S**trong cooperation between the public and private sectors has resulted in an impressive and efficient response during the Fukushima Daiichi nuclear disaster in March 2011. The disaster management teams averted a major prolonged loss in electric power by using robust support systems from the industries.

“The whole nation suffered from power loss where most household areas were dark. Not only did it leave an impact on families, the industrial sector were also seriously affected,” said Prof. Yoshiaki Himeno in his keynote address at the nuclear engineering course at the National University of Malaysia (UKM) sponsored by Tokyo Tech and Hitachi-General Electric.

Prof. Himeno, a professor at the Tokyo Institute of Technology, said that the disaster response teams had started to restore power in stages within days. Damaged roads were fixed within 12 days and telephone lines took about three weeks before it can be fully utilized.

By summer, most of the power had been restored with the use of several new temporary conventional power generating stations set up by the power companies.

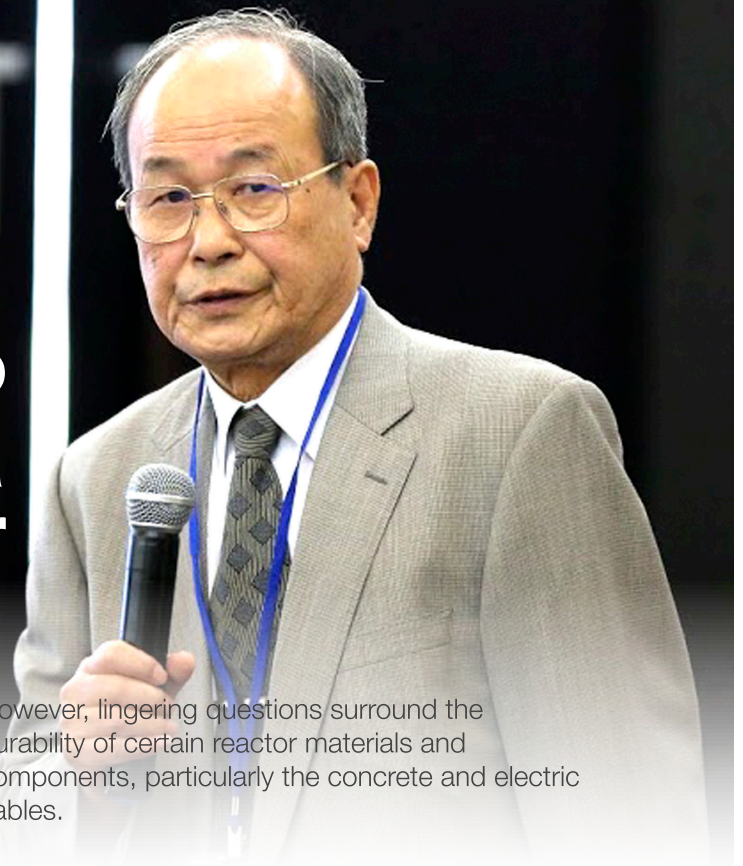
However, lingering questions surround the durability of certain reactor materials and components, particularly the concrete and electric cables.

There's also the lack of a permanent home for spent nuclear fuel, currently stored on site in cooling pools or in dry casks. Nevertheless he stressed that similar to other facilities, power reactors eventually have to be replaced.

While owners refurbish parts and renew the systems, he said, the question is how long they can continue those repairs and renewals from economical and safety points of view.

Prof. Himeno was at the course to speak about the safety and inspection of nuclear plants in Japan in the wake of the Fukushima reactor incident of 2011.

The nuclear engineering course was attended by 30 academics and researchers from five local public universities. Among topics discussed were, the use of Advanced Boiling Water Reactors (ABWR), enhancing human resource development in the field of nuclear engineering and strengthening the network of nuclear scientists and engineers in Malaysia.







# Gala Evening for Tuanku Muhriz's 68th Birthday

A resplendent concert was organised by the National University of Malaysia (UKM) to celebrate the 68<sup>th</sup> birthday of the Yang Di Pertuan Besar Negeri Sembilan Tuanku Muhriz Ibni Almarhum Tuanku Munawir, the Chancellor of UKM.

The concert was organised by the UKM community in appreciation of Tuanku Muhriz's support to the university's events and activities. Also gracing the event were the Tunku Panglima Besar Kedah and UKM Pro-Chancellor, Tan Sri Tunku Puteri Intan Safinaz Tuanku Abdul Halim Mu'adzam Shah, the Chief Minister of Negeri Sembilan Datuk Seri Mohamad Hassan, UKM Vice-Chancellor Prof. Datuk Dr. Noor Azlan Ghazali and UKM's top management.

The lynch-pin of the musical evening was the Kuala Lumpur City Hall Orchestra (OKL) with Principal Fellow at the Cultural Centre, local legend Datuk Dr. Johari Salleh conducting his own arrangements of popular songs.

Tuanku Muhriz's son, Yang Mulia Tunku Zain Al-'Abidin gave a rendition on the piano of a song by the late P.Ramlee and Saloma. In addition, UKM's very own Artisukma, who are made of staff and students, sang and danced while guest artists Bob Yusuf and Atilia added a touch of class to the gala evening.

The concert went off like clockwork thanks to the precision timing ensured by the coordination of the 14 committees working together in synergy to pull off an event that was truly fit for Royalty.

Apart from royalty in attendance, top officials of the University, academicians and students were also among the audience.

Members of the audience were generally happy and thrilled by the performances.

Muhammad Fairuz, a student from the Kuala Lumpur Institute of Industrial Training, said that this was his first time attending a grand concert such as this and was impressed with Artisukma's performances.

"They were good and I am quite surprised to find out that they were from UKM," he said.

Meanwhile, Hidayah Suman, a student of the Faculty of Engineering and Built Environment, said she was glad that she could attend the concert, where she thought the orchestra performed well. She added that the difference between this and other musical events held at UKM was grandeur and class of the Royal Concert.





Bob Yusuf



Atilia

Tunku Zain



# VC Encourages UKM Community to Emulate Alumni



UKM, in its 46 years since inception, has produced many illustrious alumni who made enormous contributions to help develop Malaysia. These includes ambassadors, academicians, scientists, researchers, CEOs, and influential people in various fields whose knowledge and expertise played a significant role in enriching the country's progress.

In his inspiring talk during Bicara Perdana Naib Canselor, Vice-Chancellor Prof. Datuk Dr. Noor Azlan Ghazali advised the UKM community to emulate the alumni and further raise UKM's profile. He also encouraged alumni to return to the university regularly to take part in the various activities and to contribute to the development of the university.

To date, UKM had produced about 176,000 alumni. In relations to that, an alumni council will



be formed to operate as a platform in which the university can connect with the various alumni associations set up by the different faculties and associations.

The event also witnessed the launch of UKM's Corporate Video by Prof. Datuk Noor Azlan.



# UKM To Study Impact of High Tech Sector On Rural Folk

**T**he National University of Malaysia (UKM) and its partners plan to do more research on the impact of technology on rural communities who are living in the vicinity of new industries.

According to UKM Deputy Vice-Chancellor (Research and Innovation) Prof. Datuk Dr. Mazlin Mokhtar more studies should be done to find out if there are negative effects of high technology activities on agricultural communities.

In addition, it is important to find the balance between social needs and scientific development, Prof. Mazlin said after signing a memorandum of understanding (MoU) on behalf of UKM with Aerospace Malaysia Innovation Centre (AMIC) and other stakeholders.

They jointly agreed to study the social-environmental impact of production of sustainable aviation jet fuel with leading aircraft manufacturer The Airbus Group.

The collaboration between scientists and sociologists is part of the Sustainable

Development Goals (SDG) of the United Nations slotted for 2015-2030, he explained.

"We need to find a balance between Science and Technology and Social Sciences. In addition, we are trying to produce more researchers through motivation and mentoring programmes," he said.

However, he noted that Malaysian researchers have their work cut out for them in achieving goals set by the inter-governmental SDG for targets relating to international development, despite the country achieving all the Millennium Development Goals (MDG) 2000-2015.

"Sustainable Development Goals list 17 goals with 169 targets covering a broad range of sustainable development issues. These include ending poverty and hunger, improving health and education, making cities more sustainable, combating climate change, and protecting oceans and forests," he said.

Aside from that, UKM is developing Lembah Beriah in Perak into a technopolis, which is envisaged to contribute the Asia Aerospace City and the Kulim Hi-Tech Park in Kedah.

"The Lembah Beriah Technopolis is to be a green technology centre that will hopefully help boost the agriculture industry. Efficient agriculture systems will be introduced, minimising chemicals and fertilizers while optimizing the use of water. The result is more crops per drop," he elaborated.

He added that with more aggressive research and development, the socio-economic aspects would also have to be looked into, such as providing housing and medical attention.



January - March 2016



**M**ultinationals want employees who are productive with high moral values, said Michaela Dinboeck, President and Managing Director of Novartis Corporation (Malaysia) Sdn. Bhd.

Apart from doing well in studies, students also need to be ethical, said Dinboeck in her lecture as part of the CEO Talk series held at the Faculty of Pharmacy, The National University of Malaysia (UKM).

Dinboeck, who was recently conferred the title Adjunct Professor by UKM, said she is also seeking graduates from different backgrounds such as accounting, corporate communications and other disciplines to work at Novartis although it is a medical-based company.

“We are not necessarily always looking at what you’ve studied. Hence more often than not, we would firstly look at what you have done, she said.

She advised students to seek for experience whether it is an internship or part time job to polish their soft skills, especially in communication.

## MNCs Want Ethical and Productive Employees

Prof. Dinboeck, who started her career in marketing, said the marketing field is a good start for students to brush up their communication skills because they will need to deal with many people and make decisions, while also overcoming nervousness.

Novartis Corporation (Malaysia) Sdn. Bhd. is holding some programmes for university students such as the International Bio Camp that brings local students to the main office at Switzerland for three days for a team-building seminar and exposure to industry, while learning to make good presentations.

The CEO Talk series is a UKM initiative, held for students to receive guidance by established companies on their chosen career path after graduation.

***“We are not necessarily always looking at what you’ve studied”***



The National University of Malaysia (UKM) successfully launched the *Intisari Sejarah Mexico Baharu* (New Compact History of Mexico), a Malay version of *Nueva Historia Minumum De Mexico*, recently.

Higher Education Minister Datuk Seri Idris Jusoh who launched the book, said that the book is an example of a collegiate effort, with multidisciplinary and multilingual approaches. The cooperation between UKM and Mexico is considered as integral in creating links on academic and education between Malaysia and Latin America. UKM's effort and strategy in internationalization of education services in Malaysia, he noted, has contributed to the goal of making the country a node for education in Southeast Asia in Latin America.

Thus, he encouraged more universities to follow suit and form partnership with Mexican universities through collaborations which includes book translations, student mobility programmes and academic partnership.

He said that the UKM Global Mobility programme has been emulated by universities in Mexico and about 100 Mexican students attended exchange visits to Malaysia in 2012 which have strengthen the partnership.

Also present at the book launch was UKM Vice Chancellor, Prof. Datuk Dr. Noor Azlan Ghazali and Ambassador of Mexico to Malaysia, Carlos Isauro Felix Corona.

In his opening remarks at the launch the Vice-Chancellor expressed his appreciation for the support of the Minister in this collaborative effort between Mexican and Malaysian Higher

## UKM Launched *Intisari Sejarah Mexico Baru*

Institutions to promote the history of Mexico and to foster Bahasa Melayu.

Ambassador Corona, meanwhile stressed that Malaysia is an important partner of Mexico, which has become its largest trading partner in Southeast Asia and 5th in Asia, with a value of trade of nearly seven billion dollars. He reiterated that the academic and educational cooperation is a key element of this relationship, and that the relationship with the UKM plays a special role on it.

Ambassador Corona recalled the importance of the first publication of *New Compact History of Mexico* in 1973, and its translation into 15 languages, noting that the version in Bahasa Melayu is an educational tool for the Malaysian public to learn about the origins, development and reality of a modern Mexico.

The Director of the Institute of Ethnic Studies (KITA) at UKM, Distinguished Professor Datuk Dr. Shamsul Amri Baharuddin, said the book will be able to help Malaysians better understand the history of Mexico and debunk myths about the Latin American nation as portrayed by Hollywood.





# Strong Malaysia-Thai Education Links

**T**hailand and Malaysia have the potential to be excellent partners in various sectors, including education, says the Ambassador of the Royal Thai Embassy in Malaysia Damrong Kraikruan.

The Ambassador envisaged even closer cooperation between universities of the two nations following several agreements signed between institutions of both countries in recent years.

“We have been reliable partners then and now, and we have the potential to be excellent partners,” Damrong said in his discourse titled *Thailand-Malaysia Relations: The Way To Move Forward*, at the National University of Malaysia (UKM), recently.

He pointed out the increasing number of Thai students who are studying full time in Malaysia and that more are showing interest in pursuing their postgraduate education in Malaysia.

In the past three years, The Royal Thai Embassy has given out more than RM200,000 worth of grants to UKM as an initiative to foster bilateral ties.

Earlier, in his welcoming remarks Vice-Chancellor Prof. Datuk Dr. Noor Azlan Ghazali said that the grants given has been utilized for research, exchange and mobility of student.

He added that UKM has had good relationship with a number of universities in Thailand which includes Mahidol University, King Mongkut University of Technology, Chulalongkorn University and Prince of Songkla University.





# UKM Bio-based Technology Chosen For Global Commercialisation



**M**y Innovation Hub (MIH), an initiative to link academia with the Government, the Private Sector and the Community, has chosen a platform designed by the National University of Malaysia (UKM) as the sole system that will be supported for commercialisation.

Deputy Vice-Chancellor, Research and Innovation Affairs, Prof. Datuk Dr. Mazlin Mokhtar said UKM has many high quality innovations designed by lecturers and researchers which are marketed overseas.

"We hope MIH can help us realise the plan in making the year 2016 as a year of commercialization of R&D UKM," he said at the Signing of a Memorandum of Understanding (MoU) Ceremony between UKM and MIH here recently.

One of UKM's successful projects is the processing of bio-based polyurethane from palm kernel oil (PKO) to make a variety of trade materials based on biological substances.

"Bioplastic is a future technology which is environmentally friendly and I also understand that the Olympic Games 2020 in Japan will use these materials widely," he said.

Prof. Mazlin hopes in the future there will be more innovation which can be taken by MIH for the benefit of all parties.

"Besides that, it is also capable of generating additional income for the university and opening more job opportunities," he said.

He added UKM can help MIH to fulfil the Key Performance Index in five years, which is creating 100,000 new posts for graduates, the establishment of new companies based on university research results within and outside the country and enhance Malaysia's position on the Global Innovation Index.

At the signing, MIH was represented by its Chairman, Tan Sri Dr Ghauth Jasmon.



# Antarctic-Bound UKM Scientists Study Climate Change At South Pole

**T**wo scientists from The National University of Malaysia (UKM) went to the Antarctic for a 22-day expedition to study the link between Climate Change and the South Pole.

Dr. Goh Thian Lai and Dr. Mohd Shahrul Mohd Nasir are among eight Malaysian researchers from six local universities who set off for Ushuaia, Argentina where they then sailed to the Antarctic on January 18.

Dr. Goh, a geologist said this research is about the relationship between Climate Change and Geology in the South Pole.

"I had to determine whether there is a link between rocks and the gases emitted from them on the depletion of the ozone layer. Dr. Shahrul,

from the Institute of Climate Change, studied the composition of the air to see whether there is an increase in the levels of Carbon Dioxide, which can make the ozone layer thinner," he explained.

Dr. Goh and Dr. Shahrul joined other researchers from Universiti Teknologi Mara (UiTM), Universiti Malaya (UM), Universiti Sains Malaysia (USM), Universiti Malaysia Terengganu (UMT) and International Medical University (IMU).

The rest of the team are Dr. Mohamad Huzaimy Jusoh (UiTM), Dr. Emienour Muzalina Mustafa (UM), Dr. Foong Swee Yeok and Muhammad Hilal Mohd Zainuddin (USM), Dr. Wan Mohd Soon Wan Hussin (UMT), and Aniqah Zulfa Abdul Latif (IMU).

The quest, dubbed the Malaysian Antarctic Research Expedition 2016, was the first ever financed by the Sultan Mizan Antarctic Research Foundation (YPASM), with the cooperation from the Science, Technology and Innovation Ministry (MOSTI).

At Ushuaia, which is the capital of the Terra Del Fuego region of Argentina, the team took a yacht known as the Australis, powered by both sail and diesel engine on January 18 for four days to Antarctica across the Drake's Passage, known as the roughest sea in the world.

From January 22, the scientists, joined three Australian crew members and travelled from coast to coast, with each carrying out his or her own research on the continent.





They explored eight locations on the Antarctic continent; King George Island, Greenwich Island, Deception Island, Davis Coast, Danco Coast, Graham / Loubet Coast, Adelaide Island, and Barry Island.

MOSTI Minister Datuk Seri Panglima Wilfred Madius Tangau bid the team farewell and handed them the Jalur Gemilang for them to fly at their base camp in the Antarctic.



This is the first exploration organised by MOSTI-YPSM that involved the assistance of several international agencies such as the International Center for Space Weather Science and Education (ICSWSE), Kyushu University, Korean Polar Research Institute (COPRA) and the British Antarctic Survey (BAS).



January - March 2016



# Academic and Research Opportunities for MPB and UKM

**T**he National University of Malaysia (UKM) and Malaysian Pepper Board (MPB) recently signed a Memorandum of Understanding and Memorandum of Agreement on Jan 19 which will provide academic and research opportunities between both parties.

MPB employees, for instance, can now pursue their post-graduate studies in a part time mode at The National University of Malaysia (UKM). This initiative will allow them to utilize the data obtained from the various research they conduct in MPB to fulfil the research component for their Masters or PhD.

According to UKM Vice-Chancellor Prof. Datuk Dr. Noor Azlan Ghazali, this is also part of the university's initiative to heed the call by the Higher Education Minister, Dato' Seri Idris Jusoh to provide more flexibility to the public to further their education.

Besides the opportunity for further studies, the MoU and MoA will also see both UKM and MPB further develop Malaysia's pepper industry. This includes initiatives such as enhancing pepper cultivation and developing the goals, policies and national priorities to develop and administer the industry efficiently. Some programmes in the pipeline are training in branding and human resource.

"This industrial network will benefit some 76,000 pepper smallholders in Malaysia. I believe that applications developed by UKM's expertise not only helps in terms of productivity but will also increase digital literacy among smallholders," he added.

The strategic networking and cooperation partnership is led by the Faculty of Science and Technology. Other faculties which are involved are Faculties of Economics and Management, Pharmacy, Engineering and Built Environment, Information Science and Technology, and UKM-Graduate School of Business.







# UKM Among The World's Top 100 Universities According To Subject

The National University of Malaysia (UKM) has improved its standings in the QS World University Rankings by Subject. Four subjects – Architecture and Built Environment, Chemical Engineering, Education and Social Policy and Administration – are listed as top 100 in the world.

Strength in international research has been identified to be one of the key stimulus which helped improved the overall ranking.

The list also showed UKM among the Top 200 for Communication and Media Studies, English Language and Literature, Linguistics, Civil and Structural Engineering, Electrical and Electronic

Engineering, Mechanical, Aeronautical and Manufacturing Engineering, Pharmacy and Pharmacology, Materials Science, Accounting and Finance and Business and Management Studies.

UKM also ranked first in Malaysia for two subjects; Nursing and Social Policy and Administration. Other subjects ranked top five in Malaysia are social policy and administration, english language and literature, engineering-chemical, education and linguistic.

The annual QS World University Rankings by Subject provides an insight into global university performance at the subject level. QS also produces the annual world university rankings.

| QS World University Rankings by Subject 2016 |  |         | UNIVERSITI KEBANGSAAN MALAYSIA |  |
|--|--|---------|--------------------------------|--|
| ARTS & HUMANITIES                            |  |         |                                |  |
|  | Architecture / Built Environment                       | 51-100  |                                |  |
|  | English Language & Literature                          | 101-150 |                                |  |
|  | Linguistics  | 101-150 |                                |  |
| ENGINEERING & TECHNOLOGY                     |  |         |                                |  |
|  | Engineering – Chemical                                 | 51-100  |                                |  |
|  | Engineering – Civil Structure                          | 151-200 |                                |  |
|  | Engineering – Electrical & Electronic                  | 101-150 |                                |  |
|  | Engineering – Mechanical, Aeronautical & Manufacturing | 101-150 |                                |  |
| LIFE SCIENCES & MEDICINE                     |  |         |                                |  |
|  | Pharmacy & Pharmacology                                | 151-200 |                                |  |
| NATURAL SCIENCES                             |  |         |                                |  |
|  | Material Sciences                                      | 151-200 |                                |  |
| SOCIAL SCIENCES & MANAGEMENT                 |  |         |                                |  |
|  | Accounting & Finance                                   | 151-200 |                                |  |
|  | Business & Management Studies                          | 151-200 |                                |  |
|  | Communication & Media Studies                          | 151-200 |                                |  |
|  | Education  | 51-100  |                                |  |
|  | Social Policy & Administration                         | 51-100  |                                |  |



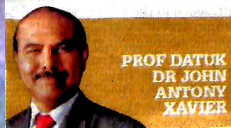
The New Straits Times 30 January 2016

## Well-received people-first measures

**RECALIBRATED:** Government's prudent steps show concern for people's hardships

**B**Y all accounts the budget adjustments announced by the prime minister on Thursday should be well-received as a people's budget. The budget recalibration details a smorgasbord of goodies for the poor, low-income households as well as middle-income earners. These measures extend the initiatives that were rolled out in the 2016 Budget in October last year. The measures are proactive. They offer relief before any further increases of inflation, due to pricier imports of intermediate products for final manufacture as a result of a depreciated ringgit, cause further misery. They are also a palliative, should the oil price refuse to budge, or worse head south, in the months ahead.

**In keeping with our dogma of being a compassionate society, the government has assured that there will be no cuts to its workforce.**



PROF DATUK DR JOHN ANTHONY XAVIER

True to its mantra of "People First, Performance Now", the government has addressed the concerns of the people. It has addressed their hardships following the increased cost of living consequent to inflation from the imposition of the goods and services tax. Profiteering by unscrupulous traders and imported inflation resulting from the ringgit's depreciation have compounded public woes.

The people-centric measures in the readjusted budget, although vaguely alluded to by the government, are a surprise given the strains that public expenditure has to bear as a result of the big hole that the fall in oil prices has burnt in the government coffers.

While some may quibble over the realism of the oil price estimates of

US\$30 to US\$35 (RM125 to RM145) per barrel, the government was transparent about the anticipated revenue shortfall. That will now be in the region of RM6 billion to RM9 billion on account of the 35 per cent drop in the oil price from the original estimate of RM48.

The discipline imposed on public expenditure management is a painful one. It is evinced in the prime minister's assurance to the financial markets that the budget deficit will remain at 3.1 per cent, and there will be no breach to the constitutional limit of 55 per cent of GDP for public borrowing. In keeping with our commitment to an open economy, there will be no capital controls to stanch the outflow of capital. Neither will there be a currency peg to stem any further slide in the ringgit's exchange rate. Fiscal consolidation will continue and monetary policy will keep the economy afloat with liquidity that has been drained by the outflow of capital.

These measures should give a sense of security over the economic affairs of the nation and assuage the fears of investors. They should have a positive impact on financial markets and the ringgit: for they show that the government is confident to take care of both the people economy and the real economy. And confidence, is half the battle won!

To ensure the integrity of the fiscal target, the onus is now on the public service to either increase its revenue or cut its expenditure as there is little wiggle room for public borrowing. The prime minister did not detail measures as to how the revenue shortfall will be made good, plus the other commitments made in the

budget calibration exercise which will require a further RM350 million. He did, however mention that there will be a better collection of arrears in income taxes by doing away with penalties on those who have evaded income tax in the past if they come forward now.

Doubtless, there will be cuts to the operating and development budgets. But, economic growth will not be stunted as infrastructure development will continue apace without any cuts. The public service will have to pursue greater efficiency and productivity to compensate for the cuts in public expenditure without compromising growth or public services.

The government machinery is always on the lookout for efficiencies. Improving public services and plugging mismanagement and waste are ongoing ventures. Highlights of these initiatives would have added heft to the budget-optimisation plan. They might even have offered greater assurance to financial markets. Perhaps, it is too early to announce specific cuts. Ministries and departments have the unenviable task of seeking out savings to patch the RM9 billion revenue shortfall.

What is important is that the government has recorded its commitment to stay the course on budget deficit. How the government is going to meet its commitment is equally important. However, we should give the public service some policy space to trim the budget as the year unfolds. As Frank Knight, an American economist, once said: "Knowledge is more a matter of learning... Learning requires time, and in time the situation dealt with, as well as the learner, undergoes change."

While the budget recalibration is a shot-in-the-arm and meets the exigencies of the day, the government should also have one eye to the future. In keeping with our dogma of being a compassionate society, the government has assured that there will be no cuts to its workforce. This is a noble decision. It will not be in keeping with the people economy otherwise.

Notwithstanding, structural reforms to the public service to rein in its size looms like a brooding omnipresence in the sky. Emoluments constitute a quarter of the annual budget. There is room for consolidation. At roughly RM20 billion, pension payments are another hefty bill that the government has to pay each year. It is time for the government to consider contributory pensions to ease the pressure on the public purse. In line with the prime minister's call for sharing responsibilities, public service unions have to be more accommodating in their stance regarding contributory pensions.

Structural reforms of the private sector should proceed briskly. While the government has thrown a lifeline to industries by agreeing to provide work permits for undocumented labour, the obligation is on the private sector to wean itself of its addiction to unskilled labour. Greater mechanisation of production processes will not only raise labour productivity, it will also boost wages. It will be one sure way to make us a rich nation by 2020.

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## Long dry spell may hit Sabah and Sarawak

By RUBEN SARIO  
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**KOTA KINABALU:** A climatologist has warned of an El Nino phenomenon that could induce a drought over northern Borneo in the next three months.

Universiti Kebangsaan Malaysia (UKM) Climatology and Oceanography Prof Dr Fredolin Tangang (pic) said all signs pointed to a prolonged dry spell in Sabah and northern Sarawak, like what happened between 1997 and 1998.

He said that according to a forecast by the Apec Climate Centre in Busan, South Korea, there was more than an 80% likelihood of below normal rainfall in northern Borneo in the expected period.

Dr Fredolin said the El Nino phenomenon had already resulted in a 3°C above average rise in surface temperatures of the Pacific Ocean.

A 5°C increase in the Pacific Ocean two decades ago resulted in

widespread drought in Sabah, causing massive forest and bush fires as well as crop failures.

The El Nino phenomenon is driven by warm surface water in the eastern Pacific Ocean. Its strength is measured by how much higher temperatures are over three-month averages.

Dr Fredolin, who served as vice-chairman of the United Nations Panel of Climate Change from 2008 until last year, said reports of rivers drying up in northern Sarawak were among the signs that the El Nino-induced drought had set in.

"There has already been reduced rainfall in northern Borneo since this month, with the average in Kota Kinabalu being 85.4mm.

"However, El Nino exacerbates the situation because it reduces the rainfall further.

"In 1998, rainfall between



February and April was only 4.7mm or 5% of the average amount," he said.

Noting that the El Nino phenomenon began in the middle of last year, Dr Fredolin said it was at its decaying stage.

"But it is at this stage that El Nino exerts its strongest effect over northern Borneo," he said, adding that the next few months would be critical for Sabah and northern Sarawak in terms of conservation of water resources, especially in the rural areas.

"The authorities will have to be on the lookout for open burning and forest fires. It will also be hotter during the drought, with temperatures increasing by as much as 2°C above normal in the coming months," he said.

Dr Fredolin said floods and wet

weather in southern parts of Sarawak and in Kalimantan, Indonesia, was also consistent with the typical effect of El Nino in the region from January to April.

Asked about the rain over part of Sabah's west coast during the weekend amid El Nino, he said these were due to cold surges associated with the strengthening of the "Siberian High".

"Due to the high pressure over Siberia, pulses of cold or very cold dry air in the northern hemisphere blow south, collecting moisture over South China and transporting them to our region.

"But these cold surges are temporary," Dr Fredolin added.

He said El Nino was not expected to have a pronounced effect in the peninsula, based on the impact of the phenomenon in the past years.

There was only a 50% likelihood of a drought in the peninsula, with the northern region being more prone, he said.

The Star 17 February 2016



# A book to help the Indian community

## MAJOR RESEARCH:

It covers a whole range of development issues and concerns, says UKM deputy vice-chancellor

**ADRIAN LAI**  
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UNIVERSITI Kebangsaan Malaysia (UKM) achieved another milestone yesterday after it launched a book highlighting the history, issues and challenges of the country's Indian community.

Published by UKM's Institute of Ethnic Studies (KITA), the book, *Contemporary Malaysian Indians — History, Issues, Challenges and Prospects*, is a culmination of two years of work among academics, policymakers and service providers.

"This book is a major piece of research undertaken by 33 writers from academic and social organisations, covering a whole range of developmental issues and concerns," said UKM Deputy Vice-Chancellor Industry and Community Partnerships Prof Dr Imran Ho Abdullah at the launching of the book here yesterday.

Imran described the 639-page book as a lengthy work combining high-quality empirical research and social commitment to promote justice, equity and inclusive development for Malaysians.

He said UKM was serious in studying the issues and challenges facing Indians, especially those displaced from plantations and the urban poor who were living in high-rise flats.

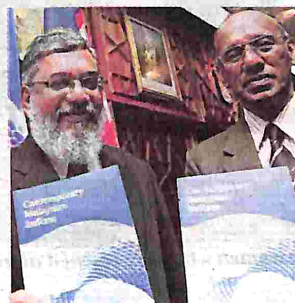
"We believe that studies such as this can help bridge the gap between theory and practice, policy and delivery," he said, adding that others should assist the government in devising policies to improve the lives of the needy and disadvantaged.

He said the area of policy research, especially for minorities on the basis of inclusive development, was the major thrust of the government under the leadership of Prime Minister Datuk Seri Najib Razak.

The publication, edited by KITA Principle Research Fellows Datuk Dr Denison Jayasooria and Prof Dr K.S. Nathan, contains 29 chapters on the major issues facing Indian Malaysians, especially the bottom 40 per cent of the community.

The book also underlines 21 policy recommendations aimed at highlighting the problems of the Indian community's bottom 40 per cent, and the need for the government to move away from ethnic-based policies.

Present during the launch were Social Rehabilitation Foundation



**Datuk Dr Denison Jayasooria** (left) and **Prof Dr K.S. Nathan** showing copies of *'Contemporary Malaysian Indians — History, Issues, Challenges and Prospects'* in Bangi yesterday. Pic by Rosela Ismai

chairman and the book's principal sponsor, Datuk Seri S. Samy Vellu and KITA founder and director Distinguished Prof Datuk Dr Shamsu Amri Baharuddin.

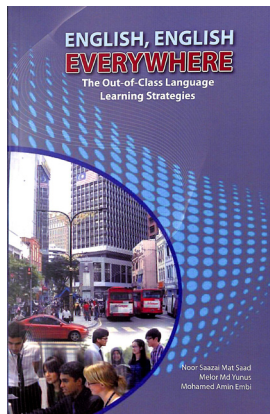
Present were Singapore High Commissioner to Malaysia Van Gopala Menon, Indian High Commissioner to Malaysia Shri T.S. Tirumurti and former Media Prima Bhd chairman Tan Sri Johan Jaaffar.

Shamsul said KITA, in the near future, would conduct similar studies on other ethnic communities living in Malaysia.

"I have no doubt that this book will serve as a useful guide to analysts and researchers on issues involving Malaysian Indians, besides providing valuable input for the formulation of more informed and enlightened policies," he said.



# New Releases



## English, English Everywhere: The Out-of-Class Language Learning Strategies

2015

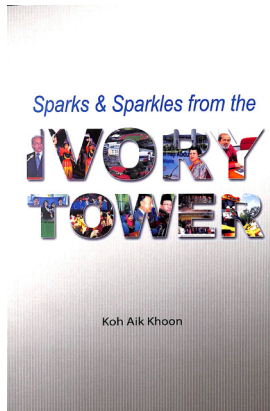
Penerbit UKM

ISBN : 978-967-412-341-2

RM 30.00

Noor Saazai Mat Saad, Melor Md Yunus & Mohamed Amin Embi

This book unearths the out-of-class language learning strategies (OCLLSs) that are employed by a group of international students in UKM. The journeys of nine international students throughout a semester of learning English become the crux of the book. Through their stories which were relayed during interviews and also posted online on Google+, four strategies which they employed outside of their formal English classroom setting were identified.



## Sparks & Sparkles from the Ivory Tower

2015

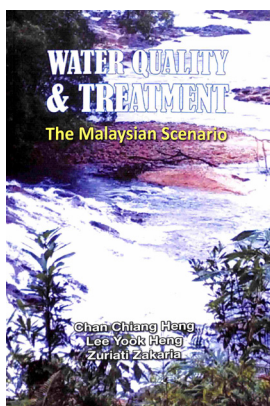
Penerbit UKM

ISBN : 978-967-412-316-1

RM 28.00

Koh Aik Khoon

Koh Aik Khoon has once again come up with a book on 'Ivory Tower' one of his pet subjects. For many years, the premier Malaysian press, *The New Straits Times*, has published his articles which were well-received. His flair in writing makes reading his articles fun and entertaining without missing his messages and thoughts. *Sparks and Sparkles from the Ivory Tower* is of similar complexion.



## Water Quality & Treatment: The Malaysian Scenario

2016

Penerbit UKM

ISBN : 978-967-412-292-8

RM 30.00

Chan Chiang Heng, Lee Yook Heng & Zuriati Zakaria

In Malaysia, water treatment plants are responsible for supplying safe drinking water to 94% of the Malaysia population. Treatment of potable water and distribution require professional operators working with knowledgeable and competent managers. *Water Quality and Treatment: The Malaysia Scenario* is written in a style which could be understood by most. Practical experience in the municipal or potable water supply industry in Malaysia and the results of numerous local studies has been collected and presented in the book.

Published by Centre For Corporate Communications, Universiti Kebangsaan Malaysia © 2016

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