

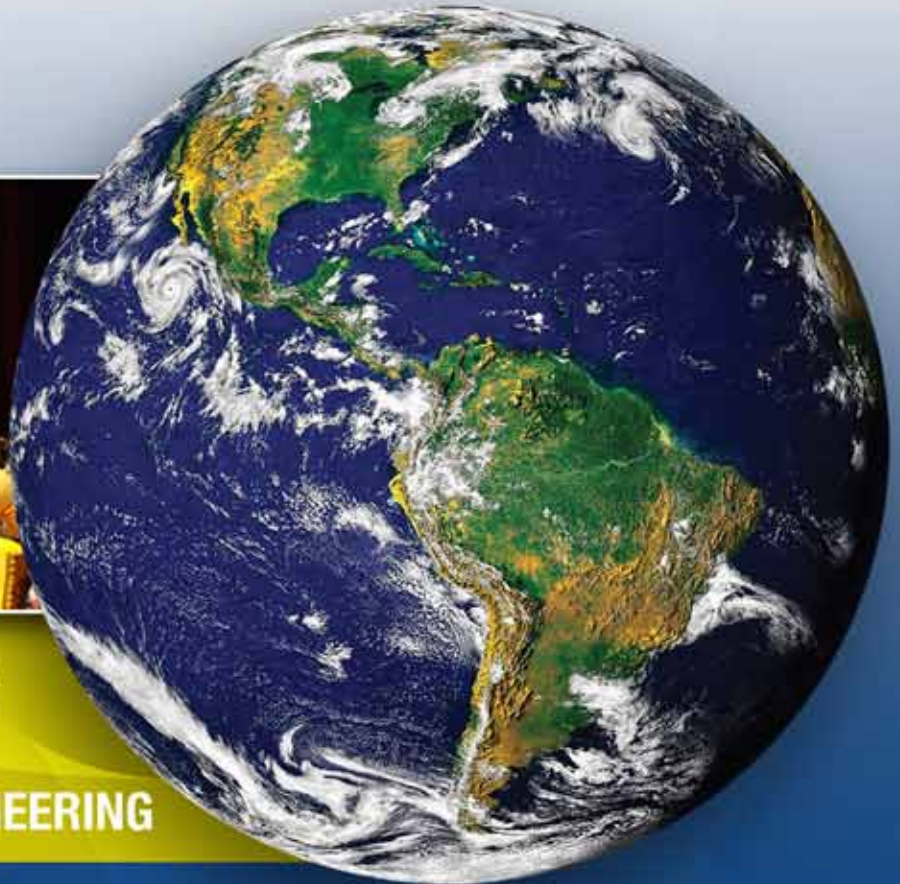
# PEKAN REVIEW

Education & Information Magazine | Vol. 1

Bridging Universiti Malaysia Pahang to the world community



**SULTAN OF PAHANG  
CONFERRED HONORARY  
DOCTORATE IN CIVIL ENGINEERING**



**PERODUA CONTRIBUTES  
RM2.6M WORTH OF  
ROBOTS TO UMP**





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Malaysia  
PAHANG**  
Engineering • Technology • Creativity

# Aspiring To Be The First Choice, World Class And Branded University

**Universiti Malaysia Pahang (UMP)**

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# FROM THE EDITOR'S DESK

WARM GREETINGS TO OUR "PEKAN REVIEW" READERS.

## Finally, *Pekan Review* makes its debut!

The editorial team trusts our readers will find this magazine has been worth the wait. Illustrating another triumph in realizing the university's aspiration to *Create* an English medium to communicate Universiti Malaysia Pahang's bountiful successes to the rest of the world.

Get quickly acquainted with this half-yearly magazine because there's more to come!

Contrary to *Create*, this new publication is more multinational in characteristic, striving to bridge the hiatus between UMP and local and international industries. In fact, by the same token, Innovation will be our stepping stone to promote and trademark UMP to the world as the "University of Choice".

In this introductory issue, *Pekan Review* is here to exhibit the many international accomplishments our esteemed university coveted last year – two of which were achieved through the

British Invention Show in London, UK; and Seoul International Invention Fair in South Korea. The awards won just goes to show that our research products are among the best, and have been accredited internationally.

2009 was also a testament to the excellent rapport UMP has established with local and international industries. The RM2.6 million worth of contribution of robots from Perodua Sdn. Bhd. was seen as the dawning of a new era in the university-industry relationship and the industry-driven tertiary education system.

May 2010 be a more promising year for *Pekan Review* in spreading its wings beyond our national borders and in commissioning a strong foundation to fortify the name and image of UMP.

**Abd Rahman Haji Safie**

# VICE-CHANCELLOR

## VOICE

Professor Dato' Dr  
Daing Nasir Ibrahim

# CHANCELLOR'S

***Pekan Review* rolls out! And there's no stopping its advance!**

**Assalamualaikum and a very good day to all,**

Foremost, is our humblest gratitude to the Almighty, for the successful publication of the first issue of *Pekan Review*.

Secondly, a big round of applause for a job well done to the Editorial Team – who labored for months to realize the dreams of Universiti Malaysia Pahang (UMP) to publish an English conduit to communicate our aspirations to the world. It is our hope that *Pekan Review* will be the catalyst to foster a stronger bond with our international communities.

In this debut issue, I believe it is only befitting that we pay tribute to the accomplishments documented by our revered university in the last eight years.

Historically, UMP was founded as the state campus of University of Technology Malaysia in Pahang. Gradually, UMP grounded a firmer foothold in the academia, and was subsequently declared the country's 16<sup>th</sup> Public Institution of Higher Learning on February 16, 2001; and renamed Kolej Universiti Kejuruteraan & Teknologi Malaysia (KUKTEM). Five years on, the Government acknowledged the pivotal roles UMP played, and endorsed its conversion into a full-fledge university in 2006, with the current name.

With the birth of *Pekan Review*, the flourishing evolution of our university can now be inscribed in English – a commendable transformation in the capacity of our university publications. This transformation – of having only a single vernacular magazine (*Create* in Malay) into a dual language one – is not only a step in the right direction, but an actual materialization of the idea kindled

at last year's Vice-Chancellor Commissioning Address.

The keyword then, and here, is “transformation”. “Transformation” is the vehicle to elevate UMP to a distinguished standing of unrivalled excellence. Transformation is seen not only in our publications, but is also evident in the management and administration of the university. These transforming initiatives must continue.

A fine paradigm in the engendering of UMP's transformation agenda is the recognition of the contributions made in promoting the good name of the university to the world. This prominent acknowledgment – known as the Cendekia Bitara Award – is hoped to inspire our researchers and staff to maximize and optimize their unexplored potentials.

The pinnacle of last year's transformation was the 4<sup>th</sup> & Commemorative Convocation in October, when the university inaugurated the conferment of an honorary degree – Doctor of Philosophy in Civil Engineering – to His Royal Highness, The Sultan of Pahang, in a prestigious ceremony.

That was last year. This year demands us to be more resilient and simultaneously productive, to meet the many challenges of the day. The biggest one at hand is to effectively discharge our 2008-2010 Strategic Plans. The transformation ideas outlined last year should be our guiding light to achieve a triumphant implementation of the strategic planning.

My parting words as I pen off, “Let us transform”.

I wish you all a happy reading, and look forward to the next issue of *Pekan Review*.



# UMP CHAIRMAN: TALL ORDER, BUT ACHIEVABLE

“Universiti Malaysia  
Pahang has all it takes  
to become world class  
competency-based technical  
university”

By: Mohd R Jamaludin

“It may be a tall order, but definitely achievable,” remarked Dato’ Mohd Hilmey Mohd Taib, the Chairman of the Board of Directors (BoD) of Universiti Malaysia Pahang (UMP), in a recent exclusive personal interview with the Publication & Graphics Unit of the university’s Vice-Chancellor’s Office.

The Chairman’s statement of confidence was in reference to UMP’s aspiration to be a world class competency-based technical university, but at the same time, he also opined that the apex conditional ranking should be realized in gradual stages.

“It is not going to be easy to achieve such a distinguished standing, but... marked my words, it is neither utterly impossible.

“The immediate ranking we have to set our sights on would be to become “the university of

choice” for tertiary education in the East Coast of the Peninsular,” said Dato’ Mohd Hilmey, as he unwind with a group of three interviewers, sipping cups of tea at a homestay village not far from the country’s world renowned highland resort, Genting Highlands.

“The subsequent target is an obvious one – we need to be on par with the long-established public institutions of higher learning in the country. Preferably, in the level playing field with the ones which have made it to world ranking – I believe you know which ones I mean,” he added.

In order to accomplish these aspired rankings, Dato’ Mohd Hilmey emphasized that foremost, all the academic and non-academic staff of the university has to work collectively as a team and contribute undivided supportive roles to UMP senior management in steering the university







towards its long-term goals.

Breaking this first obstacle down, he pointed out that UMP has to embark on the primary step to procure the prerequisite number and strength in human resources – especially quality ones, who have exemplarily driven the other local universities to excellence.

On that same note, he also acknowledged that the personality make-up of each staff is rather unique – individually they have different characteristics, traits, principles and values. And hence, “to obtain the optimum and quality output of a workforce, the senior management team is taken to task on how to inspire these individuals to cooperate and work cohesively”, stressed Dato’ Mohd Hilmey.

“On the same token, the BoD has to play the pivotal role of consistently monitoring and

ensuring that the management team adheres to the plans and policies set out to “shape the university”, which are coherent to the ones envisioned by the Ministry of Higher Education. Going in parallel, the BoD also has to quickly identify any pitfalls and remedy them to prevent needless obstructions to the execution and implementation of the university’s plans.

“Really... Without these important ingredients in the recipe to success, I foresee difficulties in attaining our long-term goals.

“But, if and when every one of us becomes a team-player, rest assured the benefits to reap are limitless,” said the Chairman convincingly.

When questioned on his high confidence of the achievable goals, Dato’ Mohd Hilmey responded that the evolutionary years subsequent to the



*“UMP academic and non-academic staff has to work collectively as a team and play undivided supportive roles to senior management in steering the university towards achieving its aspirations”*

university’s inception has, to date, witnessed the cumulative progress UMP has made to ascertain that the necessary preconditions are securely in place.

Infrastructure-wise, the university is already standing on strong grounds, he attested. “The two UMP campuses in Gambang and Pekan are well-equipped, as any full-fledge university could – lecture halls, laboratories, machinery and equipment, students’ hostels et al.

“The Gambang campus can fully accommodate to house all UMP students there. And that’s quite a rare provision in today’s higher learning institutions. Such housing arrangement leads to one less cumbersome worry and instead, creates a better ambience for students to fully concentrate on the quality of their studies.

“Speaking of students, UMP graduates are among those well sought-after in the employment market. Why, you may ask... Well, the niche industry-

based teaching and learning system is the core attribute. Furthermore, the close collaboration with various industries to moderate practical industrial training has boosted the graduates’ employability due mainly to their hands-on experience.

“And of course, the many faculties of academicians, or professional teaching staff, are the backbone of the university. Presently, UMP exhibits the appropriate ratio of lecturer to students – undergraduates all the way to doctoral postgraduates – to enable a more favourable learning environment.

“With all that I have mentioned, UMP is poised to move forward, and at best, in quantum leaps, to achieve its unimaginable potentials.

“As the chief of BoD, the vision and mission under my stewardship is simply to spearhead UMP to a level of unrivalled excellence,” quipped Dato’ Mohd Hilmey as his parting words at the conclusion of the hour-long interview.

# [Factbox]

Dato' Mohd Hilmey Mohd Taib is presently the Executive Chairman of HeiTech Padu Bhd – a public-listed company on the main board of Bursa Malaysia Securities Bhd. The company is a leading player in the information & communications technology industry, and provides system integration and development services to the public and private sectors.

A chartered accountant by qualification, Dato' Mohd Hilmey also serves as a director in several private limited companies, including Royal Mint Exchange Sdn Bhd, KIC Oil & Gas (Labuan) Ltd and Electronic Multimedia Airtime Services Sdn Bhd.

His 22 colourful years career-span includes names like Malayan Banking Bhd, Amanah Saham Nasional Bhd and Permodalan Nasional Bhd.

Dato' Mohd Hilmey was a graduate from the University of Malaya with a Bachelor in Economics in 1976, and since then, has added on a Master in Business Administration from Cranfield Institute of Technology and a Master in Management & Strategic Entrepreneurship from The Nottingham Trent University – both of which were in the United Kingdom – to his academic vitae.

Together with his wife, Datin Salbiah Hussain, they were blessed with five children and now live in Bukit Damansara, Kuala Lumpur.



*The writer was a former Journalist with The Business Times (Malaysia) and a Sub-Editor with The Borneo Bulletin (Brunei Darussalam). The above article is an English extraction of the interview conducted by Safriza Baharuddin of the Publication & Graphics Unit of the Vice-Chancellor's Office of Universiti Malaysia Pahang – which the writer was privileged to attend and participate.*



# SULTAN OF PAHANG

## CONFERRED HONORARY DOCTORATE IN CIVIL ENGINEERING

*“Nothing pleases me more than to see the people of Pahang living in peace, harmony and unity”*

**H**is Royal Highness (HRH), the Sultan of Pahang, Sultan Ahmad Shah Al-Musta'in Billah Ibni Al-Marhum Sultan Abu Bakar Ri'ayatuddin Al-Mu'adzam Shah, was conferred an Honorary Doctor of Philosophy Degree in Civil Engineering by Universiti Malaysia Pahang (UMP) at the university's Commemorative and 4<sup>th</sup> Convocation ceremonies held at UMP's Sports Complex on October 3 last year.

The prestigious ceremony, full of convocation traditions, was graced by UMP's Chancellor, HRH the Crown Prince of Pahang, Tengku Abdullah Al-Haj Ibni Sultan Ahmad

Shah Al-Musta'in Billah.

In an address, HRH Sultan Ahmad Shah expressed his gratitude for the conferment and said such an honor has boosted his goodwill to reign and lead the people and state into becoming a united, progressive, dynamic and resilient community.

“Nothing pleases me more than to see the people of Pahang living in peace, harmony and unity,” remarked HRH.

In introducing HRH as the honorary doctorate recipient,



UMP's Vice-Chancellor, Professor Dato' Dr. Daing Nasir Ibrahim, said, "Sultan Ahmad Shah is a ruler, builder and engineer, who has brought invaluable progress and development to the state of Pahang, in his 35 years on the throne.

"Several academic project developments were introduced during his reign, including UMP's main and permanent campus in Kuala Pahang, Pekan, where HRH was gracious to lay down its foundation on November 2, 2002.

"UMP's main campus, which is expected to be completed

in 2015, will be the symbol of HRH's colourful and glorious rule.

"The strength in Sultan Ahmad Shah's leadership lies in the effective role HRH plays in uniting the people of Pahang when listening attentively to their grievances.

"As personally expressed by Malaysia's Prime Minister, Dato' Sri Mohd Najib Tun Abdul Razak, HRH's presence is felt close in the heart and soul of the common people, which evolved into the strength of the State of Pahang," concluded the Vice-Chancellor.



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# UMP LAUNCHES BOOK IN APPRECIATION OF SULTAN OF PAHANG:

## THE RULER, THE BUILDER, THE ENGINEER

*“In reality, this coffee-table book is an inadequate presentation of appreciation of the many valuable contributions HRH has made”*



In appreciation of the contributions made by His Royal Highness (HRH), The Sultan of Pahang, Sultan Ahmad Shah Al-Musta'in Billah Ibni Al-Marhum Sultan Abu Bakar Ri'ayatuddin Al-Mu'adzam Shah, Universiti Malaysia Pahang (UMP) launched a coffee-table book entitled *“His Royal Highness Sultan Ahmad Shah: The Ruler, The Builder, The Engineer”* at the Hyatt Regency Resort Hotel in Kuantan on October 2 last year.

The book launch preceded the conferment of an Honorary Doctor of Philosophy Degree in Civil Engineering on HRH Sultan Ahmad Shah the following day, which was in conjunction with UMP's Commemorative and 4<sup>th</sup> Convocation ceremonies.

The 92-pages book was a picturesque display of various historic moments

during HRH's reign as the admirable Ruler, Builder and Engineer of the people of Pahang Darul Makmur.

According to UMP's Vice-Chancellor, Professor Dato' Dr Daing Nasir Ibrahim, 2009 marked the 35<sup>th</sup> anniversary of HRH coming to the throne, showering the people of Pahang with a rule full of just and care.

“Development projects came in droves, from both State and Federal governments during HRH's reign. Needless to mention, one of them was the establishment of our university, the only public institution of higher learning operating fully in the state of Pahang,” said Professor Dato' Dr. Daing Nasir.

“HRH was also deeply concerned with the economic imbalance between the urban

and rural areas. He took upon himself to help eradicate such imbalance, and thus, elevating the living standards of the people of Pahang.

“In reality, this coffee-table book is an inadequate presentation of appreciation of the many valuable contributions HRH has made.

Present to witness the book launch was HRH Sultan Ahmad Shah and his consort, Sultanah Pahang, Sultanah Kalsom; UMP's Chancellor, HRH the Crown Prince of Pahang, Tengku Abdullah Sultan Ahmad Shah, and his consort, HRH Tunku Azizah Aminah Maimunah Iskandariah Sultan Iskandar; Menteri Besar of Pahang, Dato' Sri Adnan Yaakob; Minister of Higher Education, Dato' Seri Mohamed Khaled Nordin, and his deputy, Dato' Saifuddin Abdullah.

# 15,000 through National Higher Education Carnival at UMP

About 15,000 people thronged the East-Coast National Higher Education Carnival, held at the Sports Complex of Universiti Malaysia Pahang (UMP) on February 28 and March 1 this year.

The carnival was organized by UMP to promote and disseminate information on the various programmes offered by the Public Institutions of Higher Learning, as well as to educate interested students and the public at large on how to apply for admission into the universities via online.

The two-day carnival was officiated by Prime Minister, Dato' Sri Mohd Najib Tun Abdul Razak in the presence of Pahang Menteri Besar, Dato' Sri Adnan Yaakob; Minister of Higher Learning, Dato' Seri Mohamed Khaled Nordin; Chairman of UMP's Board of Directors, Dato' Mohd Hilmey Mohd Taib; and UMP Vice-Chancellor, Professor Dato' Dr. Daing Nasir Ibrahim.

In his official address, Dato' Sri Mohd Najib not only touched the aspect of education, but especially

highlighted the economic crisis riddling the nation. In line with this, the Prime Minister hoped that future graduates will not only excel academically, but will also be skillfully equipped to take on bigger challenges, like how to manage the global economic downturn affecting the country.

Dato' Sri Mohd Najib further stated that he took pride in UMP's achievements and expressed hope that the university will continue to innovate in its researches and also lend its hands to community services to forge greater communal relationships.

He added that the university has the power to exert positive changes and the ability to demonstrate its aspirations to be on par with renowned international universities.

Aside from the academic interests, visitors to the carnival were also invited to listen to talks on the subject of aerospace by national astronaut Major Dr. Faiz Khaleed.





*The carnival was organized by UMP to promote and disseminate information on the various programmes offered by the Public Institutions of Higher Learning...*





## UMP publishes book on indigenous Semai tribe

Universiti Malaysia Pahang (UMP) officially launched its newly-published book entitled “Haknuk”, during the university’s Women Entrepreneurs Carnival at its Chancellery Square on June 16 last year.

Present to grace and officiate the double event was Her Royal Highness Tengku Puan Pahang Tengku Hajah Azizah Aminah Maimunah Iskandariah Sultan Iskandar.

Haknuk was the product of UMP’s

strenuous efforts to record the historical and cultural backgrounds as well as the economic activities of the indigenous Semai tribe – found residing in Kampung Kuala Boh in Pahang’s world-renowned tea plantations and highland resort, Cameron Highlands – for communal references.

In her official address, Tengku Azizah boldly suggested that the derogatory-sounding term “Orang Asli”, be permanently changed to “Orang Kita”, whenever a reference to indigenous tribe is made orally

and verbally.

According to Her Royal Highness, the term “Orang Kita” sounded more pleasant and courteous, as compared with the perceivedly degrading term “Orang Asli”.

In support of Tengku Azizah’s call, the Kuala Boh’s Semai tribal chief, Nordin Abu Bakar, said the new term “Orang Kita” was more appropriate as it will better reflect the common roots of the indigenous tribe and the majority Malays in the country.



Nordin added that the new term of reference will positively bridge the gap that has long existed and caused undue prejudice among the many races and tribes in Malaysia.

“We cannot allow this indigenous tribe to leave in isolation, when as a matter of fact, they were here first,” emphasized Tengku Azizah. “And, they are also certainly skillful in producing beautiful and unique artworks,” she added, with a smile.

Haknuk was the aspiration of UMP’s sole Semai student, Maslinda Samad, who hoped that the publication of the book will result in unveiling both the diverse and common grounds of the Semai’s lifestyle, in relation to

other races in the country.

Haknuk means “love” in Semai’s vernacular language. In that same token and spirit, the book was also published to record the journey of life experienced by UMP’s students in their “Sowing the seeds of Love” project with the indigenous Semai families in Kampung Kuala Boh last October.

In conjunction with the book launch, UMP also held a carnival to promote various products by the university’s women entrepreneurs. Furthermore, the carnival received royal support from Pusat Pengembangan Tenun Diraja Pahang to exhibit the State’s precious artworks and treasures.



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*“With these 13 industrial robots, Perodua has given UMP’s Faculty of Manufacturing Engineering the privilege to offer four new related and relevant courses – Robots for Engineers; Computer-aided Manufacturing; Computer-controlled Manufacturing System; and Drive & Sensory System”*

Last year, the second national carmaker, Perusahaan Otomobil Kedua Sdn Bhd (Perodua), contributed 13 robots, collectively valued at RM2.6 million, to Universiti Malaysia Pahang (UMP) – reflecting one of the many efforts adopted by both industry and university to assimilate practical teaching and learning tools based on industrial requirement.

According to the Deputy Minister of Higher Education, Dato’ Saifuddin Abdullah, the industries are the natural subsequent destination for university graduates – who are ultimately the stakeholders in the efforts to realize the national development’s objective and agenda.

“The working relationship between the industry and the university should be given greater emphasis as the two parties are in need of each other, and they would

definitely benefit from such mutual cooperation and collaboration.

“The contribution of 13 robots, collectively valued at RM2.6 million, by Perodua to UMP, reflected one of the many efforts to assimilate practical teaching and learning tools based on industrial requirement.

“Industrial expertise, experience and technological know-how should be shared to foster a collaboration that will benefit the two parties,” said the deputy minister’s speech text, which was read out by the Chairman of UMP’s board of directors, Dato’ Mohd Hilmey Mohd Taib, at the robots handover ceremony at the university’s Faculty of Manufacturing Engineering’s laboratory on December 29, 2009.

On hand to receive the robots from Perodua Managing Director, Datuk Syed Abdul Hafiz



Syed Abu Bakar, was UMP’s Vice-Chancellor, Profesor Dato’ Dr Daing Nasir Ibrahim. Also present to witness the ceremony were Perodua’s new Managing Director (effective January 1, 2010), Aminar Rashid Salleh, and the carmaker’s Managing Director of Manufacturing, Osamu Oaki.

The 13 industrial robots were previously used in assembling Perodua vehicle models of Kenari, Kancil and Kelisa – which have

# PERODUA CONTRIBUTES RM2.6M WORTH OF ROBOTS TO UMP



since ceased production – and have been replaced with newer robots to assemble the latest vehicle models of Viva and Alza.

“With these robots, the undergraduates will get the necessary exposures on learning how to use the equipment and machineries installed in many factories,” stressed Dato’ Saifuddin.

UMP’s Professor Dato’ Dr Daing Nasir couldn’t agree more, saying that 11 of the robots will be used for industrial simulations while the other two for research intent.

Furthermore, according to the Vice-Chancellor, learning becomes more effective when it involves the application and innovation of modern technology in robotic manufacturing.

“With these 13 industrial robots, Perodua has given UMP’s Faculty of Manufacturing Engineering the privilege to offer four new related and relevant courses – namely Robots for Engineers; Computer-aided Manufacturing; Computer-controlled Manufacturing System; and Drive & Sensory System.”

At the ceremony, Perodua also took the opportunity to exhibit its latest model, the Alza, whilst UMP displayed the university’s many research products, which have coveted prestigious awards at both national and international levels.

Strategic cooperation and collaboration between industries and higher learning institutions is an important aspect in ensuring dynamic growth in the nation’s tertiary education sector.

# UMP VC appointed Guest Professor to China's University Hebei



**T**he Vice-Chancellor (VC) of Universiti Malaysia Pahang (UMP), Professor Dato' Dr. Daing Nasir Ibrahim, was honored by China's University Hebei when he was recently appointed as its Guest Professor.

University Hebei's Deputy President, Professor Wang Jun Xiang, announced the appointment on January 1 this

year at a signing ceremony of a Memorandum of Understanding (MoU) to jointly promote the quality of tertiary education at the respective universities.

The appointment was a tribute to Professor Dato' Dr. Daing Mohd Nasir's distinguished display of international academic relations with several foreign universities in his dynamic pursuit to foster stronger ties and joint cooperation

in the fields of research and academic.

According to Professor Dato' Dr. Daing Mohd Nasir, the appointment was both a privilege and recognition to UMP.

"It is a symbol of long-term cooperation between our two universities," remarked the VC on the sideline of the signing ceremony and dinner at the Pan



*We will not stop at this juncture, but will continue to explore other mutually beneficial avenues and possibilities from the signing of this cooperation - UMP VC*

Pacific Hotel, across the KL International Airport in Kuala Lumpur.

The MoU outlined various forms of mutual cooperation, among which include exchange programmes of both students and academic staff; focus on potential research activities, especially in the fields of management, engineering and technology; and sharing of academic know-how

and expertise.

“We will not stop at this juncture, but will continue to explore other mutually beneficial avenues and possibilities from the signing of this cooperation,” Professor Dato’ Dr. Daing Mohd Nasir reassured.

Also present to witness the ceremony were UMP’s Deputy VC (Academic & International Affairs), Professor Dato’ Dr.

Sabaruddin Mohd; Deputy VC of Research & Innovation, Professor Dato’ Dr Rosli Mohd Yunus; University Hebei’s Dean of School of Communications, Professor Bai Gui; Deputy Dean of School of International Studies, Dr. Cheng Enqing; and Managing Director of DHB Education Training & Services Center Sdn. Bhd., Musa Li Yanlong.

# UMP RESEARCHERS BAG 5 AWARDS AT BRITISH INVENTION SHOW 2009

*UMP's Vice-Chancellor Professor Dato' Dr Daing Nasir Ibrahim says it is not easy to win international medals and awards, but such an achievement is indeed a credible display that the world recognizes and certifies the research and development projects carried out at UMP*

Two researchers from University Malaysia Pahang (UMP) did the university proud when they collectively bagged three gold medals and two special awards at an international level innovative competition – the British Invention Show (BIS 2009) – in London, United Kingdom, last year.



Norashikin Mohd Zain from the Faculty of Chemical Engineering & Natural Resources (FKKSA) won one of the three gold medals, and individually bagged the two special awards – namely, the Natural Earth Diamond Award and the Consumer Platinum Award – for her research entitled “*The Potential of Natural Wastes for Production of Economical and Environmental Friendly Biodegradable Film (From Waste to Wealth)*”.

According to Norashikin, her extensive research resulted in a new technique being developed, capable of producing biodegradable plastic films, which are both non-toxic and safe to use, from agricultural wastes.

“Winning the gold medal at BIS 2009 means this newfound technique is now internationally recognized and certified. It will certainly help spearhead resolutions to our country’s plastic waste management issues,” she exclaimed joyfully.

With the same research project, Norashikin also won a gold medal at the International Invention, Innovation &





Technology Exhibition 2009 held at the Kuala Lumpur Convention Centre in May last year, and a special award called the “Henry Goh Award” for the Best Invention in Environment Innovation.

Meanwhile, Zamzuri Hamedon from the Faculty of Manufacturing Engineering & Technology Management (FKPPT) won the other two gold medals for inventing the non-surgical treatment for joints, called “*Universal External Hinge Fixator (UniHF)*” and the “*Multi-Purpose Spring Activated Pole (SAP)*”.

The UniHF is a simple technique designed to be used for treating joint contractions without open surgery and produces effective result, while the SAP is a multipurpose unit which deploys compressed springs to provide

mechanical force to function.

Celebrating the two researchers’ accomplishments at the university’s Banquet Hall last October 23, UMP’s Vice-Chancellor Professor Dato’ Dr Daing Nasir Ibrahim said it was not easy to win international medals and awards, but such an achievement was indeed a credible display that the world recognized and certified the research and development projects carried out at UMP.

Also present at the ceremony to honor the university’s success were UMP Registrar, Mustafa Ibrahim; Dean of FKKSA, Associate Professor Zulkafli Hassan; and Deputy Dean (Academic) of FKPPT, Associate Professor Dr Wan Azhar Wan Yusoff.

# UMP GARNERS 6 MORE MEDALS AT SIIF 2009 TO CLOSE THE YEAR

*These six medals are an incredible display of attainable success at the international level, where all of UMP's R&D projects were duly recognized and accredited by world class professional juries*

UMP submitted six research and development (R&D) projects to the Seoul International Invention Fair (SIIF2009), held in Seoul, Korea, on December 3 to 7 – all of which won one gold medal, four silver and one bronze – leading up to a 100 percent medal achievement at the world class competition late last year.

A total of 500 R&D projects were submitted from countries like Australia, German, Indonesia, Iran, Poland, Russia and Thailand, including 58 from Malaysia alone.

Dr Hayder A Abdul Bari from the Faculty of Chemical Engineering & Natural Resources took home the sole gold medal for UMP through his R&D project entitled “*Extraction of New Natural Polymeric Drag Reducing Agent Mucilage from*

*Cocoa Fruits Waste (From Waste to Wealth)*”.

Meanwhile, all three projects from the Faculty of Industrial Science & Technology coveted three of the four silver medals – namely, “*Column Switching Ion Chromatography: A New Design for Environmental Monitoring*” by Dr Muhammad Amin; “*Effective and Affordable Natural Repellent Against Mosquitoes (REPELL)*” by Dr Azhari Hamid Nour; and “*Valuable Perfumery Material: Cheap & Simple Preparation of Methyl Isoeugenol using Polymer Base Catalyst*” by Dr Benjamin Lukas.

Dr Muhammad Nubli Abdul Wahab’s “*Biofeedback: A New Training Technology for Human Operator’s*” from the university’s Centre of Modern Language & Social Science

brought back the fourth silver medal. UMP single bronze medal was the successful result of Mohammad Affendy Oardin’s project entitled “*Arterial (An Integrated Domestic Waste Water Blockage Removal System)*”. Mohammad Affendy hailed from the Faculty of Civil Engineering & Earth Resources.

These six medals were an incredible display of attainable success at the international level, where all of UMP’s R&D projects were duly recognized and accredited by world class professional juries.

Such global exposure has also led the participating lecturers and researchers to receiving a multitude of positive input from other international participants, in their efforts to enhance the R&D products for worldwide commercialization.





The table shows the list of UMP's award-winning researchers:

Item	Project Title	Head of Project	Faculty
1.	<i>Formulation of High Performance, Multipurpose Grease Using Gypsum from Titanium Dioxide Manufacturing Wastes (From Waste to Wealth)</i>	Dr. Hayder A. Abdul Bari	Faculty of Chemical Engineering & Natural Resources
2.	<i>ZapIt (Motorized Cutter for Harvesting Palm Fruit)</i>	Zamzuri Hamedon	Faculty of Mechanical Engineering
3.	<i>Multi-patient DSP Based Arrhythmias Monitoring System using a Reliable Wireless Sensor Protocol</i>	Dr. Ahmed N. Abdella	Faculty of Electrical & Electronic Engineering
4.	<i>A Sustainable Drinking Water Supply from Rain Water Harvesting by A Submerged Bio-Membrane Reactor (MEMRAIN)</i>	Dr. Zularisam Abdul Wahid	Faculty of Civil Engineering & Earth Resources
5.	<i>A New Technique for Reducing the Pumping Power Losses in Pipelines Carrying High Temperature Liquids Using Minute Quantities of Suspended Solids</i>	Dr. Hayder A. Abdul Bari	Faculty of Chemical Engineering & Natural Resources
6.	<i>Refurbishment Fa'ade Treatment System (RFTS)</i>	Mohammad Affendy Oardin	Faculty of Civil Engineering & Earth Resources

The double awards received at the Malaysia Technology Expo 2009 (MTE) held on February 19-21 last year, at the Putra World Trade Centre, spoke volume of the capability and capacity of the researchers from University Malaysia Pahang (UMP) to compete with their counterparts from other local universities and private agencies.

UMP bagged the Special Award and Gold Medal for the research project on industrial waste and multipurpose grease formulation – *“Formulation of High Performance, Multipurpose Grease Using Gypsum from Titanium Dioxide Manufacturing Wastes (From Waste to Wealth”* – by Dr Hayder A Abdul Bari from the university’s Faculty of Chemical Engineering & Natural Resources.

Both awards were the university’s firsts since its initial participation in the MTE. This year, UMP submitted 13 research projects from its seven faculties, and 12 of them took home three gold, two silver and seven bronze medals.

The two gold were a recognition of achievements by Dr Ahmed N Abdella from the Faculty of Electrical & Electronic Engineering for his research project on *Multi-patient DSP-based Arrhythmias Monitoring System using a Reliable Wireless Sensor Protocol* and by Zamzuri Hamedon from the Faculty of Mechanical Engineering on *ZapIt (Motorized Cutter for Harvesting Palm Fruit)*.

UMP also came out top in the *Bare Space* exhibition booth category. These awards – both on research projects and exhibition booth – were evident of the highly-regarded recognitions received from the professional jury, as well as support from the visitors who flocked UMP’s booth.

UMP will apply for patents on the research projects, and will commercialize them for the university’s long-term benefits.

Sixty-five-gold, 135 silver and 200 bronze medals were awarded to selected research projects from the 460 that took part in this year’s MTE.

# UMP BAGS MTE 2009 SPECIAL AWARD

Award	Item	Project Title	Head of Project	Faculty	Award
<b>GOLD BEST AWARD</b>	7.	<i>Sustainable Production Of Natural Dyes for Textile Product Via Submex</i>	Dr. Mimi Sakinah Abd Munaim	Faculty of Chemical Engineering & Natural Resources	<b>BRONZE</b>
<b>GOLD</b>	8.	<i>Smart Electricity Control System for Lighting/ Air-Conditioners/ Fan (SmECS)</i>	Mohammad Fadhil Abas	Faculty of Electrical & Electronic Engineering	<b>BRONZE</b>
<b>GOLD</b>	9.	<i>Wireless Queue Management System (Wi-QMS)</i>	Mohd Zamri Ibrahim	Faculty of Electrical & Electronic Engineering	<b>BRONZE</b>
<b>SILVER</b>	10.	<i>UMP Genetic Algorithms Software for Machining of Blow Mould</i>	Kumaran s/o Kadirgama	Faculty of Mechanical Engineering	<b>BRONZE</b>
<b>SILVER</b>	11.	<i>LITTER MANTIS: Short Mobility Electric Scooter Development</i>	Gan Leong Ming	Faculty of Mechanical Engineering	<b>BRONZE</b>
<b>BRONZE</b>	12.	<i>Development of New Demulsifiers for Oil Production</i>	Dr. Abdurahman Hamid Nour	Faculty of Chemical Engineering & Natural Resources	<b>BRONZE</b>



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## **UMP RESEARCH PRODUCTS WON 5 MEDALS AT BIOMALAYSIA 2009**

*UMP hopes this proud achievement will stimulate more innovative researches*



University Malaysia Pahang’s (UMP) participation in the BioMalaysia Conference & Exhibition 2009, held at the Kuala Lumpur Convention Centre on November 17-19 last year, bore fruits when the university successfully brought home two gold and three bronze medals for its research and development products.

Innovative technological products by Dr Chin Sim Yea – *Process for the Production of Biodiesel with Glycerol Acetyl Additive* – and by Dr Hayder A Abdul Bari from the Faculty of Chemical Engineering & Natural Resources – *Aloe Vera Mucilage as new Flow Improving Agent in Pipelines Carrying Liquids in Turbulent Mode* – took home the gold, while a bronze each was won by Dr Mimi Sakinah Abdul Munaim (*Production of Commercial Bio Preservative for Food Industry Using Green Technology*), Dr Abdurahman H Nour (*Production & Demulsification of Virgin Coconut Oil by Microwave Heating Technology*)

and Auditya Puwandini Sutarto (*Biofeedback Learning Kit for Operator’s Cognitive Performance*).

Themed “Accelerating the Commercial Value of Biotechnology”, BioMalaysia 2009 attracted almost 8,000 participants, including exhibitors from Public Institutions of Higher Learning and conference attendees from various industries. The conference and exhibition were officiated by Prime Minister Dato’ Sri Mohd Najib Tun Abdul Razak.

In his exhibition tour, the Prime Minister took the opportunity to stop by UMP’s booth to view for himself the many products innovated by UMP’s researchers.

UMP hopes this proud achievement will stimulate more innovative researches.



Universiti Malaysia Pahang (UMP) marked another milestone when it sealed a Memorandum of Understanding (MOU) with six universities from Egypt and Ireland, at a signing ceremony at the Hyatt Regency Hotel in Kuantan, on January 23 this year.

Vice-Chancellor (VC) Professor Dato' Dr Daing Nasir Ibrahim signed for UMP while Egypt's Alexandria University was represented by Professor Dr Essam Ahmed Elkordi and Professor Dr Mohammed Rizk; and MISR University of Science & Technology by Khaled M Althouky.

Four others from Ireland were Institutes of Technology each at Dundalk, Athlone, Tallaght and Carlow. Tallaght's was represented by Dermot Douglas and Pat Coman, while Carlow's by Daivid Deniffe.

- The signing ceremony was witnessed by the Chairman of UMP's Board of Directors, Dato' Mohd Hilmey Mohd Taib.
- According to Professor Dato' Dr Daing Nasir, the MOU is part of UMP's 2008-2010 Strategic



# UMP seals cooperation with 6 universities in Egypt, Ireland



*“Strategic international academic and research co-operations are the bridge for UMP to elevate academic excellence and boost the efforts to promote the university as an international education hub”*

Planning activities in promoting the university internationally. “Internationalization is important in charting the course for a university to be recognized and ranked globally.

“Strategic international academic and research co-operations are the bridge for UMP to elevate academic excellence and boost the efforts to promote the university as an international education hub,” the VC further explained.

Some of these co-operations may be in the form of visiting professors; external consultants for academic management; students exchange in industrial training; transfer of credit hours as well as cultural and academic staff exchanges.

“These co-operations will benefit both parties to the MOU with the sharing of knowledge and experience in the various fields of expertise.”

Professor Dato’ Dr Daing Nasir expressed his hopes that such cooperation will lead to producing a more competent and competitive graduates in every aspect.



## Another milestone for UMP's IT development

University Malaysia Pahang (UMP) continues to record success in the field of information technology (IT) with the signing of another Memorandum of Understanding (MOU) by its wholly-owned subsidiary, UMP Holdings Sdn Bhd (UMPH), with six selected software suppliers at the

university's Banquet Hall on January 29 last year.

UMPH Chairman, Dato' Sri Abdul Aziz Abdul Rahman, signed for the company while the six software suppliers were represented by their directors – Mejar (R) Ahmad Tahir Mohd Said (Encoral Digital Solutions Sdn Bhd); Azman Hussin (Maxima

Systems Consultants Sdn Bhd); Khir Azizan Abdul Rahman (Fifway System Sdn Bhd); Mohd Fazmir Othman (MH Equal Management); Mohd Akob Ahmad (Century Software Sdn Bhd) and Casa Inovasi Sdn Bhd.

With the MOU, UMP will develop and commercialize an electronic management

system called "*e-Management Enterprise Solution*" with the objective of increasing an organization's operation efficiency through the cost-savings of minimal use of paperwork and printouts.

This system, developed by a group of UMP's IT experts a few years ago, would be the starting point



to strengthen the working relationships between UMP and the software suppliers in support of microelectronic development.

The e-Management Enterprise Solution has been recognized and endorsed when it won the Prime Minister's Award at a competition organized by Malaysian Administrative

Modernization and Management Planning Unit in 2004.

The system will be a milestone in the history of the country's IT industry as it will markedly save the use of papers. Its application will also help corporations operate in a more consistent, organized and efficient manner.

## UMP SEALS MOU WITH PASDEC, HICOM TO COOPERATE ON ACADEMIC, RESEARCH, HUMAN CAPITAL DEVELOPMENT



Universiti Malaysia Pahang (UMP) sealed a Memorandum of Understanding (MOU) with Pasdec Holdings Bhd and Hicom Automotive Manufacturers Sdn Bhd



at a signing ceremony during the official opening of the East Coast National Higher Education Carnival at the Chancellery Square on February 28 last year.

Present to witness the event were then-Deputy Prime Minister, Dato' Sri Mohd Najib Tun Abdul Razak; Minister of Higher Education, Dato' Seri Mohamed Khaled Nordin; and Pahang Menteri Besar, Dato' Sri Adnan Yaakob.

UMP was represented by Vice-Chancellor Professor Dato' Dr Daing Nasir Ibrahim and Deputy Vice-Chancellor (Research & Innovation), Professor Dr Rosli Mohd Yunus; while Dato' Sri Adnan and Dato' Lias Mohd Noor represented Pasdec as chairman and director, respectively.

The MOU with Pasdec emphasized on cooperation and consultation on human capital and real estate developments at UMP's upcoming permanent campus in Kuala Pahang, Pekan.

Meanwhile, the MOU with Hicom - represented by its Chairman, Dato' Syed Mohamed Syed Murtaza, and Chief Executive Officer, Abdul Rashid Musa - focused on cooperation in the fields of academic, research and human capital development.

## UMP, LKPP Corp venture into palm frond-based biotechnology

*The MOU expects to open up doors of opportunity in technological advancement, human capital development, sharing and transfer of knowledge and expertise, as well as product commercialization*

On July 9 last year, University Malaysia Pahang's (UMP) Faculty of Chemical Engineering & Natural Resources sealed a joint-venture with LKPP Corporation Sdn Bhd to cooperate on palm frond-based biotechnological undertakings.

Signing the Memorandum of Understanding for UMP was the university's Vice-Chancellor, Professor Dato' Dr Daing Nasir Ibrahim, whilst LKPP Corp was represented by its Managing Director, Dato' Md Adnan Sulaiman.

The MOU was expected to open up doors of opportunity in technological advancement, human capital development, sharing and transfer of knowledge and expertise, as well as product commercialization.

The MOU spelled out various important aspects relevant to UMP's expertise



in biotechnology, including a research and development (R&D) project on a pilot plan to produce crystallized micro-cellulose, as well as agricultural and dairy R&D.

Potential discoveries and innovations arising out of this joint-venture will subsequently be patented and later commercialized.

As a higher learning institution located and operating in Pahang, UMP is ever-ready to lend

a helping hand to the State Government and its agencies, including LKPP Corp. Reciprocating likewise, LKPP Corp will open its doors to UMP's researchers and students to conduct R&D at its palm tree plantations and industrial sites.

The cooperation with LKPP Corp, among others, will further entail the sharing of resources to facilitate the university's teaching and learning activities, R&D, as well as staff's and students'

development. There will also be programmes on student's exchange and placement for internship and research, as well as on academic and expertise development.

This cooperation is significant to UMP as LKPP is known to be a modern, dynamic and progressive agro-based and industrious agency, with productive and competitive activities in the agricultural and several other economic sectors.



## UMP, Lubri-Loy to jointly produce high-quality lubricant

University Malaysia Pahang (UMP) took another bold step forward in its research and development (R&D) activities when it sealed a cooperation with an American company, Lubri-Loy, to jointly produce high-quality lubricant for both local and international markets.

The joint production was announced by Lubri-Loy's Chief Executive Officer (CEO), David Graham, at the company's product launch, held at the Hyatt Regency Hotel in Kuantan on July 17 last year.

UMP's Deputy Vice-Chancellor (Research & Innovation), Professor Dr Rosli Mohd Yunus; Urban Environmental Industries Sdn Bhd's CEO, Thomas Thang; Commercial Affairs Counselor at the American Embassy in Kuala Lumpur,

Nasir Abbasi; and Pahang MCA's Cultural Bureau Chief, Senator Ng Fook Heng, were among those present at the event.

Vide three-way cooperation, Lubri-Loy agreed to share and impart its lubricant technological know-how and in return, UMP and Urban will cooperate to jointly produce high-technology lubricant for the competitive domestic market.

This cooperation is hardcopy proof of UMP's success in building its credibility with an international company to collaborate on the university's R&D activities, as well as to catapult UMP's good name internationally.

# UMP, Sapura seal JV in human capital development





Universiti Malaysia Pahang (UMP) sealed a joint venture (JV) with automotive components and spare parts manufacturer, Sapura Industrial Bhd (SIB), to enhance the two-party collaboration on human capital development, when it signed a Memorandum of Agreement (MoA) in Bandar Baru Bangi, Selangor, last November.

The JV would cover various aspects, including areas of research and development (R&D), academic programmes development, students' placement for industrial training and research, capacity building, as well as sharing of manpower expertise to help boost the overall national economy and cultivate new technology for mutual benefits.

At the signing ceremony, UMP's Vice-Chancellor (VC), Professor Dato' Dr Daing Nasir Ibrahim represented the university, whilst SIB Chief Executive Officer, Mohamad Razali Osman, signed on behalf of the company.

Also in attendance were UMP Deputy VC (Research & Innovation), Professor Dato' Dr. Rosli Mohd Yunus, and officers from both signatories.

In his ceremonial address, Professor Dato' Dr. Daing Mohd Nasir said the JV was timely relevant as the university has developed expertise in the field of R&D and with collective resources, he believed the joint cooperation would be forceful in nature.

Aside from R&D, the VC added that opportunities were also abound in areas of technology escalation, knowledge partnership and product commercialization.

"Furthermore, as a public institution of higher learning, UMP is ever ready to share and take on the industrial challenges faced by SIB, as part of our research activities. We will share our knowledge and expertise in the field of technology, research and innovation, to benefit SIB's higher-quality production, whilst simultaneously, the company could open its doors to our researchers in the field of automotive product design and manufacturing skills, its principles and techniques," emphasized Professor Dato' Dr Daing Mohd Nasir.

"Through this JV, SIB's staff could, moreover, grab the opportunity to pursue their postgraduate studies in the relevant fields.

"It is our hope that this MoA will continue to forge ahead with more strategic collaborations in education, research and entrepreneurship," concluded the VC.



# UMP CONTINUES TO OPERATE GAMBANG CAMPUS

Universiti Malaysia Pahang (UMP) can now confidently continue to operate its campus in Gambang after a significant real estate deal is sealed recently between its wholly owned subsidiary, UMP Holdings Sdn Bhd (UMPH), and landowners Frontier Bond (M) Sdn Bhd and MEC Industrial Park Sdn Bhd.

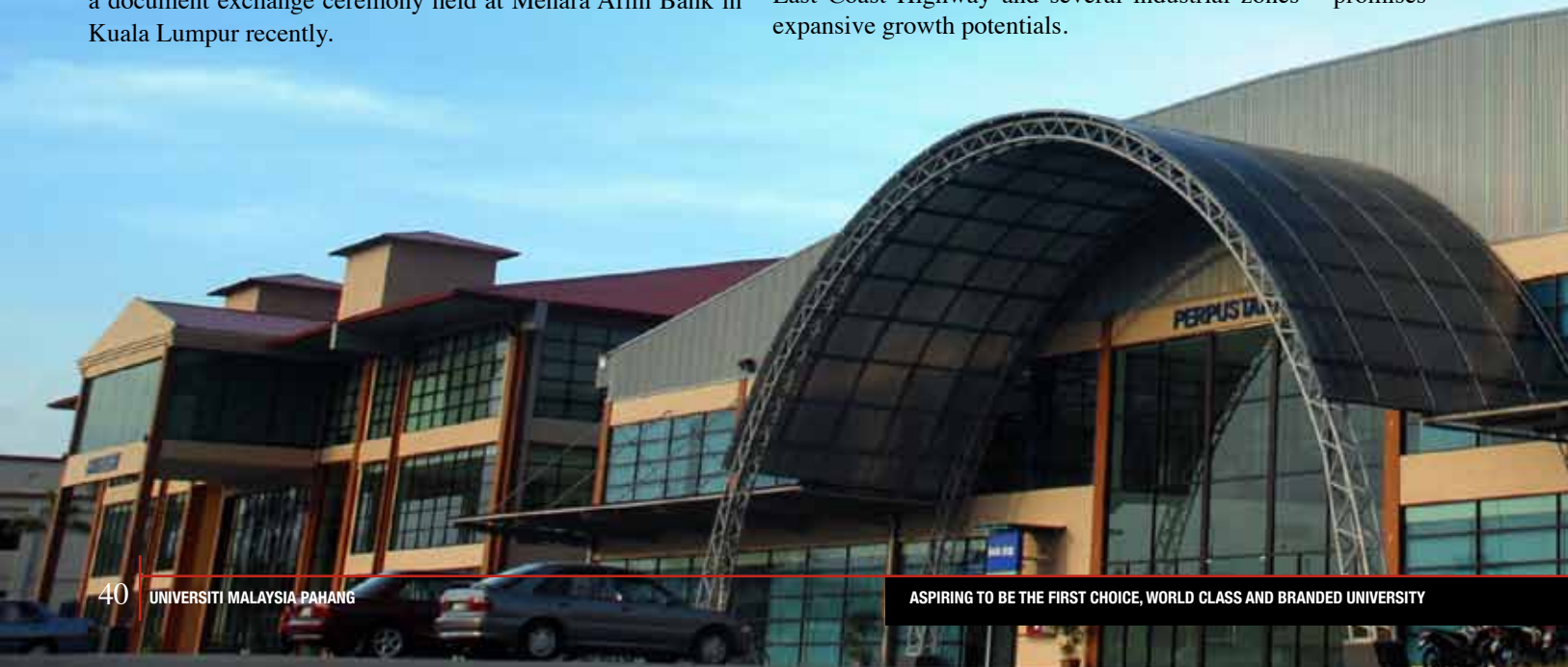
The land ownership exchange deal is being fully financed by Affin Islamic Bank Bhd.

UMPH Chairman, Dato' Sri Abdul Aziz Abdul Rahman, signed the Sales & Purchase Agreement (SPA) for the holding company, while Frontier Bond was represented by Director Ir Kee Book Heed, and MEC Industrial by Managing Director Eddie Yoe, at a document exchange ceremony held at Menara Affin Bank in Kuala Lumpur recently.

Also in attendance to witness the ceremony were the Minister of Higher Education, Datuk Seri Mohamed Khaled Nordin; Affin Bank Bhd Group Chairman, Tan Sri Ismail Omar; Affin Bank and Affin Islamic Bank chief executive officers; UMPH General Manager, Nazri Musir; and UMP Bursar, Zainuddin Othman.

Under the RM137.70 million SPA, UMP now owns acreage covering the university's Main Administration Complex, engineering laboratories, students' dormitories, mosque and the Undergraduate Service Complex, including laboratories at blocks X, Y and Z.

According to the university's Vice-Chancellor, Professor Dato' Dr. Daing Mohd Nasir Daing Ibrahim, the strategic location of UMP's campus in Gambang – within the vicinity of the East Coast Highway and several industrial zones – promises expansive growth potentials.





Vide the SPA, he added, the deal will further pave the way for future three-way strategic joint-ventures and moreover, boost efforts to turn Gambang into Pahang’s educational hub.

“With the two campuses – Gambang and Pekan – we hope to see dynamic growth in the number of students enrolling for the engineering courses at UMP. Such growth will eventually help mould the country’s future phases of development.

“And, this dream would not have been possible without the pivotal roles played by UMPH,” emphasized the Vice-Chancellor.

UMP’s main and permanent campus in Kuala Pahang, Pekan, is currently housing its Faculty of Electrical & Electronics Engineering and the Faculty of Mechanical Engineering. The two faculties started operations since July last year.



# CENDEKIA BITARA



The Cendekia Bitara Award was established by University Malaysia Pahang (UMP) to recognise and honour its staff for their excellent contributions and achievements.

The word “Cendekia” is defined as a person or a group of persons who are intellectual and scholarly, while the word “Bitara” means remarkable, extraordinary or exceptional. Hence, put together, the words “Cendekia Bitara” award would aptly mean recognition of a remarkable scholarly work.

The Cendekia Bitara Award is also similar to the appreciation awards conferred on UMP researchers and

writers at the UMP’s Aspiration Night in 2008.

On July 24 last year, UMP Chancellor, His Royal Highness (HRH) Crown Prince of Pahang, Tengku Abdullah Al-Haj Ibn Sultan Haji Ahmad Shah Al-Musta’in Billah, consented to grace the Cendekia Bitara Award Dinner at the Hyatt Regency Hotel in Kuantan. Themed “Technological Creation from a Forest of Wealth”, HRH the Crown Prince consented to presenting the Cendekia Bitara awards to the winning recipients.

HRH urged the university’s academic staff to ensure that researches and publications produced are of high-impact and could be use

universally. “The Cendekia Bitara Award Night itself could serve as a major stimulus to inculcate this culture of research and high-impact publications.

“UMP’s academic and non-academic staff should strive to take constructive and proactive actions to improve and upgrade the university’s status and ranking. Research and its publication should not only aspire to win competitions, but more importantly, should prove beneficial to the local communities,” emphasised the Crown Prince.

Meanwhile, UMP’s Vice-Chancellor, Professor Dato’ Dr Daing Nasir Ibrahim, explained that the

# TARA AWARD



Cendekia Bitara Dinner is both significant and meaningful particularly because it is a night to remember when the university acknowledges and awards its contributors.

"The Cendekia Bitara Award is a prestigious recognition, and a true reflection of unrivalled excellence in research, publication, innovation and creativity," said the Vice-Chancellor.

"As many as 80 recipients, comprising both individuals and departments, have been identified to have fulfilled the criteria to receive the Cendekia Bitara and Appreciation awards, at a

prestigious ceremony, second only to the annual Convocation.

"Nothing is more precious to a university than a display of intellectual prowess and excellence of its academicians," stressed UMP's Vice-Chancellor.

Cendekia Bitara winners who shone at the national level received RM3,000 cash prize and a certificate each, while those at the international level took home RM5,000 cash prize and a certificate.

Seven categories were contested for the Cendekia Bitara and six for the Appreciation Award – among them were for Publication (one each

for journal and book), Research Product, Creativity, Quality and Patent.

Among the winners were Abdul Shukor Abd Razak, a lecturer from the Faculty of Civil Engineering & Earth Resources, who took home RM19,500 worth of cash prizes and certificates; Dr Mimi Sakinah Ab Munaim, a lecturer from the Faculty of Chemical Engineering & Natural Resources (RM10,000); Professor Dr Rosli Mohd Yunus, Deputy Vice-Chancellor (Research & Innovation) (RM9,500); and Mohd Zaki Ahmad, Officer at the Department of Students Affairs & Alumni (RM5,000).

# NATURAL PRODUCTS R&D

## GETS INTERNATIONAL RECOGNITION



Over 50 research and development (R&D) activities on natural products carried out by various universities and industries have been recognized and applied at both the national and international levels a strong and apparent evident that researches by local scientists can generate commercial value as well as economic revenue for the country.

According to the Chairman of Malaysian National Products Society (MNPS), Professor Dato' Dr. Ikram M Said, local scientists have participated in such activities for almost 50 years now, and the outcome of these researches have

contributed significantly to the country.

"R&D on natural products encompasses a wide scope of activities and the outcome has been known to benefit mankind," said Professor Dato' Dr. Ikram at the official opening of the Malaysian Natural Products International Seminar 2009 (MNPIS2009) held at the M.S. Garden Hotel in Kuantan recently.

Themed " Natural Products R&D: Leads from Nature", the two-day seminar was organized by the Faculty of Industrial Science & Technology (FIST) of Universiti Malaysia Pahang (UMP) in

collaboration with MNPS, on November 23-24.

In conjunction with MNPS' Silver Jubilee celebration, the seminar also acted as a platform for young scientists and field experts to converge and exchange views, and to identify opportunities and challenges in enhancing R&D in natural products.

"Advancements made in science and technology has benefitted not only researchers, but the country as well," emphasized Professor Dato' Dr Ikram.

"As many as 214 participants are attending the seminar, 150 working



*“R&D on natural resources has been the catalyst for the mushrooming of several industries, like healthcare, beauty, food, fuel and many more.”*

papers on various subjects of R&D to be tabled and 90 exhibition posters being contested by locals and foreigners alike,” he added.

Among the foreign participants were six each from Indonesia and Japan; two each from Australia and Sudan; and one each from Africa, France, Pakistan and Singapore.

Also present at the seminar were President of Asian Phytochemistry Society, Professor Dr Yoshinori Asakawa - the seminar’s Cannon Debate keynote speaker; and senior officers from UMP.

Professor Dr Asakawa, 65, from the University of Tokushima Bunri

in Japan, is 2009’s recipient of MNPS’ Gold Award. He is revered among the R&D fraternity and has contributed to the region’s natural products R&D, including Malaysia, for over 30 years.

Over the years, according to the Dean of UMP’s FIST and the Chairman of MNPIS2009 Organizing Committee, Professor Dr. Mashitah Mohd Yusoff, various species from nature, like the flora and fauna, as well as land and marine microorganisms, have been the sources of many important and valuable researches.

“Findings from natural products R&D, ranging from anti-oxidant,

anti-cancer, anti-diabetes and mosquitoes’ pheromones all the way to energy savings, have proven to benefit various parties,” she said on the sideline of MNPIS2009 official opening ceremony.

Professor Dr Mashitah added that pharmaceutical products manufactured from natural resources have also been tried and tested to be both effective and safe to consume.

“R&D on natural resources has been the catalyst for the mushrooming of several industries, like healthcare, beauty, food, fuel and many more.”



# 200 INTELLECTUALS CONVERGE ON 'HUMAN CAPITAL DEVELOPMENT'

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For the first time, University Malaysia Pahang (UMP) conducted a gathering of 200 intellectuals in 35 parallel sessions in an International Conference on Human Capital Development (ICONHCD 2009) held at the Swiss Garden Resort & Spa in Kuantan from May 25 to 27 last year.

The conference was officiated by the Deputy Minister from the Ministry of Human Resources, Senator Datuk Maznah Mazlan.

In her keynote address, Datuk Maznah said the international conference, themed *"Enhancing Human Capital Development*

*Through Different Roles & Perspectives"*, was timely held as the world was undergoing a tumultuous global economic crisis.

"This is such an opportune time to get together and find practical solutions to policy restructuring in order to overcome the many weaknesses, as well as to highlight the variety of prospects, of staying competitive in an everchanging economic scenario," said the Deputy Minister.

"Speaking of which, the Ministry of Human Resources has, to date, established 80 more branches of Labor Department and 22 local

service centres to help displaced and retrenched workers find new employment," she added.

On that same note, according to UMP Vice-Chancellor – who also chaired the last day of ICONHCD 2009 – Professor Dato' Dr Daing Nasir Ibrahim, the international conference was the best medium for field experts and intellectuals from various professions, locally and internationally, to table their ideas and share their opinions on human capital development (HCD).

The Vice-Chancellor further shared that UMP has made efforts to emphasize HCD initiatives in its



2008-2010 Strategic Plans, which were principally translated to be *value-based, strategy-focused* and *performance-driven*.

"In addition, our HCD initiatives were carved in line with and in response to the national concept of 1Malaysia – *People First Performance Now and Excellence, Glory & Distinction*," said Professor Dato' Dr Daing Nasir.

"Furthermore, UMP was established with the objective of becoming a world class competency-based technical university, with a niche offering in engineering and technology. Such competency, coupled with our tagline of "*Engineering, Creativity, Technology*", could only hold

water if we are able to *engineer* HCD methodologies, which consequently could affect positively on our political, social and financial well-being.

"UMP will strive to find that right recipe with regards to HCD and social interactions to become the university we aspire to be," remarked the Vice-Chancellor as he concluded his conference address.

Among other guest speakers at the ICONHCD 2009 were Michael A Potter, an international consultant and expert on HCD from the UK; Associate Professor Dr Diana Kelly, Chairman of the Senate Committee from the University of Wollongong, Australia; Professor Dato'

Dr Aminah Ayob, Vice-Chancellor of Sultan Idris Education University (UPSI); and Professor Dr Azimi Hamzah from University Putra Malaysia.

Meanwhile, the audience comprised university management teams and participants from 29 countries, including Malaysia, Algeria, Australia, Brunei Darussalam, Canada, Germany, Greece, India, Indonesia, Iran, Japan, Nepal, Nigeria, Oman, Pakistan, Romania, Thailand, United Arab Emirates, United Kingdom, United States of America and Vietnam.

# UMP WELCOMES 1<sup>ST</sup> BATCH OF UNDERGRADUATES FROM CHINA



Map of China

University Malaysia Pahang (UMP) opened its doors to the first batch of 37 international undergraduates from China, who enrolled for the six-month English Incentive Preparatory Programme at the university, on January 12 last year.

At a subsequent “Reception with the Vice-Chancellor (VC)”, the undergraduates were introduced to the VC, Professor Dato’ Dr Daing Nasir Ibrahim, the Deans of Faculty and the Heads of Department at UMP.

In his welcoming speech, Professor Dato’ Dr Daing Nasir expressed his hopes that this first batch will help attract many more international students to pursue their tertiary education at UMP. To date, foreign academic staff and postgraduate students at the university number over 90 people.

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*We wish you all the best throughout the duration of your stay and studies at the university, and in the country - UMP Vice-Chancellor*

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“UMP is committed to raise its statistic of international community, in support of the Ministry of Higher Education’s effort to promote Malaysia as a global tertiary education hub.

“It is also hoped that this first batch of undergraduates from China will help catapult UMP into the international scene.

“We wished you all the best throughout the duration of your stay and studies at the university, and in the country,” said Professor Dato’ Dr Daing Nasir as he concluded his speech.

During the reception, the undergraduates were said to have communicated their joy and appreciation to the VC for being chosen to be the pioneering intake from China to pursue their studies at UMP.





In conjunction with its Academic Carnival and ExpoConvo'09, University Malaysia Pahang (UMP) held an "International Night" on September 30 last year, to

Sudan, Uzbekistan and Yemen

Organized for the first time ever, the International Night saw campus community experiencing and enjoying the uniqueness of the various cultural activities presented, such as traditional attires exhibition and dance routines, as well as food tasting.

## International Night: A presentation of cultural & traditional event

"From the positive feedback we've been receiving, we hope this unique International Night will be an annual event, held with every convocation ceremony"

encourage positive manifestation of the various cultures and traditions of the university's 150 international students.

The event, held at UMP's Chancellery Square, saw active participation of international students sharing and presenting their cultures from countries like China, Indonesia, Iraq, Pakistan,

According to the Senior Assistant Registrar of the International Office, Arman A Rahim, the International Night was intended not only to present the various foreign cultures and traditions, but more importantly, to bridge any gap permeating between the local and international students at UMP.

"From the positive feedback we've been receiving, we hope this unique International Night will be an annual event, held with every convocation ceremony."



# UMP STUDENTS SHINE IN PERODUA ECO-CHALLENGE



Universiti Malaysia Pahang (UMP) recorded another milestone when students from the university's chapter of Society of Automotive Engineers (SAE) took second spot in the Perodua Eco-Challenge's Manual Transmission (M/T) category, bringing home a cash prize of RM10,000.

The winning just went to prove that UMP's students could excel in fields where other well established public institutions of higher learning have long dominated.

UMP was represented by 17 students from the Faculty of Mechanical Engineering, who completed the Perodua Myvi 1.3 (M/T) Engine Modification (Fuel-Saving) category with 23.1 kilometre (km) per litre at the end of the race, just one notch behind the team from Politeknik Ungku Omar (PUO), who recorded a mileage of 25km per litre.

"Each team was given a Perodua Myvi 1.3L car and a RM10,000 grant to invent

a fuel-saving technique or gadget," said Gan Leong Ming, a lecturer at UMP's Faculty of Mechanical Engineering. "A jury's decision is then based on the team's ability to exceed the average fuel consumption of 23.1km per litre."

Perodua Eco-Challenge was jointly organized by Perusahaan Otomobil Kedua Sdn Bhd (Perodua) and Petroliaam Nasional Bhd (Petronas), at the Speedway Plus Circuit on the ELITE Highway near Subang Jaya, Selangor, on June 18-20 last year.

Present to officiate the event was Perodua Chief Executive Officer, Datuk Syed Abdul Hafiz Syed Abu Bakar, who is also a member of UMP's board of directors, and Perodua's Managing Director of Research and Development, Mr Ooki.

UMP, PUO, International Islamic University Malaysia, University of Malaya, Universiti Industri Selangor, Universiti Teknologi MARA, Universiti Teknologi Malaysia, Universiti Tun Hussein Onn Malaysia, Universiti

## FINAL RESULTS OF THE PERODUA ECO-CHALLENGE RACE 2009

### Manual Transmission Category

Winner: Politeknik Ungku Omar (25.+ km/L)  
 Runner-up: Universiti Malaysia Pahang (23.1 km/L)  
 2<sup>nd</sup> Runner-up: Universiti Industri Selangor (22.+ km/L)

### Automatic Transmission Category

Winner: Universiti Sains Malaysia (23.5 km/L)  
 Runner-up: Universiti Tenaga Nasional (20 km/L)  
 2<sup>nd</sup> Runner-up: Universiti Teknologi MARA (19.7 km/L)

### Design & Engineering Presentation Category

Winner : Universiti Sains Malaysia  
 Runner-up: Universiti Teknologi MARA  
 2<sup>nd</sup> Runner-up: Universiti Tenaga Nasional

Teknologi Petronas, Universiti Tenaga Nasional and Universiti Sains Malaysia were among the participating universities.

The challenge was organized especially for engineering students from the various institutions of higher learning to produce efficient fuel consumption. It was also intended to expose these students to vehicle development, specifically in the areas of weight reduction, aerodynamics and engine performance.

# CENFED spearheads Professional Development Programmes in the East Coast

The training programmes offered by CENFED are truly unique and interesting – they come complete with a favourable training environment, accredited courses and financial assistance

The Centre for Continuing Education & Professional Development (CENFED) of University Malaysia Pahang (UMP) was founded for the main purpose of delivering training and re-training programmes, as well as continuing education, to the industries and professionals, in particular, and to the public at large, in general. And since its establishment, CENFED has trained more than 4,000 individuals nationwide.

CENFED's training programmes comprise various professional development programmes, such as short-term courses, Executive Diploma and Part-Time Diploma, as well as franchised programmes. These programmes have been accredited by the Department of Occupational Safety & Health (OSH) of the Ministry of Human Resources, the Ministry of Works and the Construction Industry Development Board (CIDB).

CENFED is also a registered Class 'A' Training Provider with the Human

Resources Development Fund (HRDF), and is eligible for financial grants under several schemes, such as Training Grant, Special Training Grant and Approved Programmes Grant, for which all training fees are 100 percent borne by HRDF.

Malaysia's Small & Medium Enterprise Corporation (SME Corp Malaysia) has also appointed CENFED as the Professional Training Provider, to train employees from small and medium industries (SMIs) in their efforts to upgrade their knowledge and skills set.

In addition to the accredited programmes facilitated by training experts from UMP, SME Corp Malaysia will bear the cost of 80 percent of the training fees. Participants will only have to pay from as low as RM80 to attend any of the programmes offered. These subsidized training fees include training facilities, course notes and meals.

To date, 34 programmes on various subjects, such as entrepreneurship,

financial management, marketing and OSH have been approved for interested SMIs.

CENFED utilizes various facilities made available at UMP in its training programmes. They include lecture halls, training rooms, computer laboratories, library and Sports Complex, to name a few. With wireless Internet connection available at every nooks and crannies of the university, training participants have easy access to multiplex of information.

Nevertheless, CENFED is responsive and accommodative to its clientele's requirements – hence, training may also be conducted "in-house" at the clients' premises.

Last year was an exceptional year for CENFED. The Centre received close to RM1 million worth of grants from several government agencies to conduct various training programmes. A rather large amount of allocation was provided by SME Corp Malaysia (*under the special allocation on labor requirement*





for the economic development of the Eastern Corridor Economic Region); followed by the Labor Department of the Ministry of Human Resources for its “Train & Place” programme; and CIDB, to train registered contractors nationwide.

For this year, a maturing CENFED has taken bold steps to explore several unexplored dimensions in lining up new training activities for professional development and continuing education. With over 117 short-term courses currently available, the Centre is now offering eight new programmes in its Executive Diploma, and one in Part-Time Diploma in Chemical Engineering (*with an emphasis in industrial process*).

The Executive Diploma programme is being categorically developed in collaboration with UMP and professionals in the related fields. These programmes are being offered especially to the working class to enhance their skills set for

their career progression. The eight programmes are:

- Oil & Gas
- Project Management
- Industrial Technology Management
- Plantation Technology & Management
- Business Management & Entrepreneurship
- Manufacturing Industrial Management
- Manufacturing Engineering Management
- Occupational Safety, Industrial Hygiene & Environmental

Prerequisites to enroll in the enhanced Executive Diploma Programme are Malaysian Certificate of Education and two years working experience in the related field.

Although the Centre is fairly new in the training arena, in comparison to other long-standing public institutions of higher learning, but with die-hard commitment and

hardwork based on systematic long-term planning, CENFED is targeting to train more than 2,000 participants this year.

These participants will include local individuals and international ones, under the new conceptualized programme called “Edu Tourism”. The Edu Tourism concept combines both training and tourism under a single package. Participants will not only get to attend training programmes, but will also be taken on a tour to popular destinations in the country.

The training programmes offered by CENFED are truly unique and interesting – they come complete with a favourable training environment, accredited courses and financial assistance. For more information, please contact Mr Zainal Bahari of CENFED’s Marketing Division at 09-549 2086/ 2652/ 2658, or you may browse the Centre’s website at [www.cenfed.ump.edu.my](http://www.cenfed.ump.edu.my)

A photograph of a young woman with long dark hair and glasses, wearing a white short-sleeved shirt and a blue lanyard, sitting on a white plastic chair in a library. She is holding an open book and looking down at it. The library has blue bookshelves filled with books. In the background, another person is visible, reaching for a book on a higher shelf.

# New programmes introduced to mould students with futuristic mindset

*These new developmental programmes, especially at the undergraduate level, will not only be accredited, relevant and up-to-date, but will also come with their own unique characteristics, in line with the university's tagline of Engineering, Technology, Creativity*

By: MOHD HAFIS SAHARI



Last year was a monumental year for Universiti Malaysia Pahang (UMP) in its efforts to establish various new programmes to develop and mould graduates with a new and futuristic mindset, coupled with high standard of ethics and integrity, and equipped to explore new boundaries to compete at the international level upon graduation.

These new developmental programmes, especially at the undergraduate level, will not only be accredited, relevant and up-to-date, but will also come with their own unique characteristics, in line with the university's tagline of *Engineering, Technology, Creativity*.

In order to achieve the objective of producing graduates who are capable of fulfilling market needs and industrial demands, the university has to plan and develop new programmes that will consequently attract the targeted industries to employ UMP graduates.

Among the critical programmes in question are Marine Engineering, Architectural Engineering, Pharmaceutical Engineering and Creative Technology. These programmes are slated to play pivotal roles and support to the university's academic developmental growth – in addition to its existing 21 undergraduate degree programmes.

Programmes of such nature are presently being worked upon with the collaboration of international institutions of higher learning. For instance, the Pharmaceutical Engineering programme has garnered interest and cooperation of fellow institutions from Ireland and Egypt.

These collaborative efforts are seen not only as an activity to catapult UMP into the international tertiary education arena, but are also hoped to attract foreign students to pursue their undergraduate and postgraduate studies here at the university.

Leaning on UMP's root foundation as a competency-based technical university, these new programmes are hoped to produce graduates who will be highly competent through the teaching and learning methods based not only lectures, but as well as industrial training.

Students at UMP, who are enlisted for industrial training, are also given the hands-on exposure in utilizing simulative equipment and other supportive learning methods, which are further enhanced with the university's practical concept of "Student-Centered Learning".

Before these programmes can be offered, UMP has to vet through several processes, and these would include doing market research, field experts' panel discussion, curricular development, as well as obtaining approval from the Ministry of Higher Education, the university's Senate and Malaysian Qualifications Agency.

Ultimately, to fulfill such vetting procedures, it would obviously require a strong joint cooperation between UMP's various faculties and the Department of Academic & International Affairs, to ensure that such new programmes can be successfully offered to attract an increase in students enrollment.



# FACILITIES PROMOTES SOCIAL ACT

## UMP INVENTS FRACTURED BONE STABILIZER

*MAFE helps alleviate patient's discomfort by allowing the movement of joints near the affected area and prevents deformation of the fractured bone.*

A big number of the cases of fractured bones, to date, is treated using cement cast and steel implant at the affected area.

These forms of treatments not only limit a patient's movement, but also may cause permanent disability due to bacterial infection and muscle contraction, as a result of poor coordination of soft tissues redevelopment.

Research by lecturers from University Malaysia Pahang's (UMP) Faculty of Manufacturing Engineering – Zamzuri Hemedon, Badrul Akmal Hisham Md Yusoff and Khairul Azha Abd Jalal – has resulted in the development of an equipment called Multi-Axial Fixing Elements (MAFE), which helps stabilize fractured bones during recovery, through proper bridging of steel and aluminium.

MAFE helps alleviate patient's discomfort by allowing the movement

of joints near the affected area and prevents deformation of the fractured bone.

Explaining the principle behind the invention, Zamzuri said, a bone injury should not prevent a patient from moving his limb, which would otherwise help smooth blood-flow and redevelopment of soft tissues during recuperation.

The research and development of MAFE – in collaboration with orthopaedic surgeon Dr Badrul Akmal Hisham Md Yusoff from the Allianze College of Medical School, who shared his expertise and knowledge on fractured bones therapy – was in line with the efforts to boost invention of many more bio-medical equipments required by the medical industry.

MAFE has been given its due recognition when it bagged the Silver Award at the International Institutes of Higher Education's Research & Invention Expo 2009 and the Gold Medal at the British Invention Show in Alexandria Palace, London, recently.

It just goes to show that MAFE has been accepted globally and is marketable internationally.



By: Mohammad Affendy Omardin,  
Lecturer, Faculty of Civil Engineering & Earth Resources, Universiti Malaysia Pahang



# MANAGEMENT IN CAMPUS

## INTELLECTUAL AND

## ACTIVITIES



*A well-established campus building must create a quality environment through the provision of modern facilities and adequate spaces. This is to ensure the safety of its occupants as well offering attractive landscaping for ease of mind and relaxing feeling*

**I**t is essential to integrate facilities management in the campus in order to encourage intellectual and social activities. Facilities management (FM) is the integration of multi-disciplinary activities within the built environment and the management of their impact upon people and the work place (*British Institute of Facilities Management*).

The area of FM is relatively a new dynamic innovative profession which requires an insight and holistic approach to the management and coordination of the buildings, services and related workforce of an organization.

In other words, FM is not maintenance management. It is also not property management or cost accounting, but deals with all of these aspects and more. FM highly requires a team effort, and certain types of organisations may require more technical expertise than others. For example, FM for students' residential of a university differs from FM for an airport, hospital or township. The vital ingredients are to know the business and be able to manage it and blend them well.

The strength of FM is the process; in which an organisation ensures its buildings, equipment, services, systems

and related workforce to provide effective support to the core business operations and contribute to achieving the strategic objectives of the organisation.

A campus, on the converse, is a place to bring together diverse intellects and ideas in an environment that creates potential intellectual and social exchange. While the physical character and quality of a campus is defined by both its buildings and its open spaces. It is the latter that has the greatest potential in unifying and equalising the shared space of the campus. It can promote a sense of community derived from actively shared spaces, and as a platform for enriching experiences of both planned and chance encounters.



To start, a campus building entrances should be visible to those arriving, as well as contribute to the life and activities of academicians and researchers. It is because they are frequently becoming the meeting or gathering places of those utilizing the buildings. Thus, it should be designed to encourage sense of interaction and openness. The buildings that face public streets should be the public entrances because of its attractive location – an open and streetscape facing the street.

The success of FM depends on the ongoing process of the team management. The duty of facilities management covers from task analysis which emphasises on how people fit into an organization, environment satisfaction including prior visit to the premises in order to familiarize personnel with the geography of the building and how

they are and fitted out, and physical environment which covers the work surrounding, interiors to enhance the organisation to be more responsive and innovative.

Building recorded data such as documentation must be kept as-built plans to justify occupied space at present and to enable people to work in range of locations. Space standards within space requirements should be recorded for all proposed areas. For instance, moving instructions should be issued to all affected of the relocation and communication system during and after the move. Furniture and equipment inventory should be labelled, arranged and coded.

## Guidelines for facilities improvement on selected aspects:



- **Landscape, Streetscape and Signage-Structures** should be sited and designed to form safe and secure public ways. It should be under surveillance day and night. This is to provide spaces that are usable and defensible.
  - **Commitment to Accessibility** means the buildings must commit to provide equal access to all including those with disabilities, and to do so in a dignified manner. Accessibility for disable people includes vertical transportation lifts, ramps, stairs and sanitary distribution.
  - **Functional and Mechanical Facilities** are areas devoted exclusively to building loading services. From removal of trash or mechanical equipment, it should be designed with minimal visibility from public areas including walkways. Rooftop of mechanical equipment should be enclosed in structures that are integrated into the building design.
  - **Architectural Style** like the campus buildings, landscaping and public spaces reflect many styles. The essential quality of campus buildings should be able to speak in their own voice of their purposes and the era in which they were built. With respect to cultural resources, each existing structures on campus should have local, regional or national historic significance, and are included in corresponding registers of historic structures.
  - **Responsible Use of Energy and Natural Resources** connotes using landscape design to create healthy and ecologically appropriate spaces such as
    - providing pleasant outdoor environments and reducing exterior lighting demand
    - Reducing energy consumption of building and site systems (HVAC, hot water, and lighting) through the use of appropriate mechanical and construction technology (natural cooling, light recovery, passive solar design, etc.) The construction, as well as the design and process should also respect these goals.
  - **Responsible Renovation and Upgrades to Existing Buildings** signifies that any renovation project should include an investigation of all aspects including systems and features affected by the specific intervention. Conditions discovered during project evaluation, design or construction that need improvement cannot be ignored. Even in cases where budgetary or schedule constraints necessitate only a partial remediation, any building deficiency brought to light are to be examined and documented so that they can be addressed in the future.
  - **Fire protection** link should be within means of escape, such as fire fighting installations and equipment, spread of flame prevention and fire sprinkler system.
  - **Lighting** is everything related with natural and artificial lighting requirements like emergency lighting or display lighting. Windows for instance, not only should be placed to light and provide views to internal spaces, also to give walks and streets the security and richness that derives from the visibility of adjacent activity.
  - **Energy demands** such as solar energy requirements, standby systems and services required.
  - **Acoustics** covers on sound insulations to the internal building especially at lecture rooms, offices, and laboratories. Acoustic mitigation is required to ensure the quality of the lecture environment.
  - **Maintenance needs** based on the quality of structure, materials and installations. Loading requirements such as wind loads and superimposed loads.
  - **Security** also is one of the most complex elements of a building. Specifically, it includes active and passive security, perimeters, fittings, alarms and surveillance.
  - **Building services** include air conditioning and ventilation system, water supply drainage/gas points, electricity telephone and telecommunication.
- Through these FM guidelines, a university inspires and take a leading role in an environmentally sensitive design that demands innovation, creativity and helping to educate the community at large. Thus, a well-managed building represents a campus life that possesses practical and intelligent integration in providing a high standard service to the users.

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