

# ANNUAL REPORT 2014

## CONCEPT RATIONALE

UTP's Annual Report 2014 is a reflection of the future direction of the university. It is simple, yet bold and captivating, making a statement in itself.

As Malaysia progresses towards the year 2020, UTP is marching forward as a contemporary institution, embracing the changes that come along our way to ensure that what we offer remains relevant to industry and society.

The gold letters of our name against the pristine white background is reflective of our prominence in the education arena. We are bold, we are strong, we are contemporary and we hold firmly to strong corporate and social values.

# **CONTENTS**

#### **Corporate Profile**

University Profile	4
Vision and Mission	E

Ioao Rationale

#### The University Team

• Chancellor	10
Pro Chancellor	12
Vice Chancellor	16
<ul> <li>Board of Directors</li> </ul>	18
<ul> <li>Management Committee</li> </ul>	20
• Senate	22
<ul> <li>Academic Advisory Council</li> </ul>	24
<ul> <li>Research Advisory Council</li> </ul>	25
Student Development Advisory Council	26
<ul> <li>International External Examiners</li> </ul>	27
<ul> <li>Industry Advisory Panel</li> </ul>	28

#### The Reports

<ul> <li>Chairman's Review</li> </ul>	32
<ul> <li>Vice Chancellor's Report</li> </ul>	38
• Academic	62
<ul> <li>Research and Innovation</li> </ul>	76
<ul> <li>Student Affairs and Alumni</li> </ul>	92
Corporate Social Responsibility	104

# CORPORATE PROFILE

- University Profile
- Vision and Mission
- Logo Rationale





# **UNIVERSITY PROFILE**

Universiti Teknologi PETRONAS (UTP) is built on a 400-hectare (1,000 acre) site strategically located 30 km southwest of Ipoh City at Seri Iskandar, Perak, Malaysia. The University is a wholly-owned subsidiary of PETRONAS, the national oil and gas company of Malaysia. The University community comprises students and staff from various countries across the globe. The campus is built on a beautifully landscaped setting, amidst the new township of Seri Iskandar. Its tranquil environment, wide open spaces and abundant lakes make this University an ideal place to study.

Established in 1997, UTP has grown to be one of the most prominent private universities in Malaysia. Offering a wide range of industryrelevant engineering, science and technology programmes at undergraduate and postgraduate levels, UTP has produced more than 10,000 graduates and currently has an enrolment of 6,300 undergraduates and 1,200 postgraduates from over 55 countries around the world. UTP presently sees industry participation from more than 400 companies offering internship placements for its students, including overseas companies. UTP has also invited industry speakers including company CEOs and leading personalities to serve as Adjunct Lecturers or invited speakers in programmes such as its Public Lecture Series.

The University has established an Industry Advisory Panel (IAP) to ensure its educational contents remain relevant to industrial practices. UTP graduates, who are well prepared to face industry challenges, gain employment soon after graduation not only in Malaysia, but in other countries such as the U.K, U.S.A, Canada, Australia, New Zealand and Ireland after Malaysia's inclusion as a full participating member in the Washington Accord in 2009.





UTP is the only private university in Malaysia to be rated a 4 Star institution by Quacquarelli Symonds (QS), with a maximum five-star rating in five areas out of eight, namely employability, facilities, inclusiveness, innovation and internationalisation. UTP is also ranked in the Top 200 in the 2014 QS World University Ranking by subject for Chemical Engineering. UTP is the only private university in Malaysia to be ranked in the top 200 for the 2014 QS Asia University Rankings and ranked at 335 for the QS World University Rankings for its Engineering and Technology Faculty.

UTP continues to provide distinctive educational opportunities for its students with backed by a

Tier-5 (Excellent) rating by the University Rating System for Malaysian Higher Education Institutions (SETARA) and a Tier-5 for D-SETARA Discipline-Based Rating System) in engineering.

UTP also places strong emphasis on Research and Development as it strives to achieve the status of an internationally renowned Research University. The university conducts extensive research activities in collaboration with PETRONAS and other institutions and industries locally and abroad focusing on nine niche areas which are Enhanced Oil Recovery, Carbon Dioxide Management, Deepwater Technology, Nanotechnology, Green Technology, Biomedical Technology, Hybrid Energy Systems, Intelligent Cities and Sustainable Resources. All these activities have earned it a 5 Star rating by Malaysian Research Assessment Instrument (MYRA) for its research, development and commercialisation efforts. VISION To be a Leader in Technology Education and Centre for Creativity and Innovation

# MISSION

UTP is an institute of higher learning. We provide opportunities for the pursuit of knowledge and expertise for the advancement of engineering, science and technology to enhance the nation's competitiveness.

Our objective is to produce well-rounded graduates who are creative and innovative, with the potential to become leaders of industry and the nation.

Our aim is to nurture creativity and innovativeness and expand the frontiers of technology and education for the betterment of society.

# LOGO RATIONALE

Relates to the concept of renaissance, birth and nurturing of the mind for national advancement of the highest order.

Simulates the bloom of a floral bud while injecting a graphic outline of the PETRONAS Twin Towers.

Reflects the beginning of a journey towards new standards in higher education.

Gold to denote light and deep pastel blue to signify peace and tranquility.



UNIVERSITI TEKNOLOGI PETRONAS

# THE UNIVERSITY TEAM

- Chancellor
- Pro Chancellor
- Vice Chancellor
- Board of Directors
- Management Committee
- Senate
- Academic Advisory Council
- Research Advisory Council
- Student Development Advisory Council
- International External Examiners
- Industry Advisory Panel





15-

13

98

### CHANCELLOR Tun Dr. Mahathir bin Mohamad

Tun Dr. Mahathir Mohamad was Prime Minister of Malaysia from 1981 to 2003. During this period he opened the country to foreign investment, reformed taxation, reduced trade barriers, oversaw the privatisation of numerous state-owned enterprises and created world-class physical infrastructure. He also sought to bridge Malaysia's ethnic divides by increasing general prosperity.

In 1991, he launched the New Development Policy, which emphasised industrial and commercial development and the elimination of poverty. Under Tun Dr. Mahathir's leadership, Malaysia developed into one of the most prosperous and dynamic economies in Southeast Asia, with a burgeoning industrial sector, an expanding middle class and enhanced quality of life.

Malaysia also played a more active role in the international arena, acting as the voice for developing nations in Asia and Africa. Always with one eye on the future, Tun Dr. Mahathir Mohamad unveiled Vision 2020 in 1991, a blueprint for Malaysia's journey to becoming a developed economy and a mature democracy by the year 2020.

Despite his retirement, Dr. Mahathir has kept busy with numerous invitations and speaking engagements locally and abroad.

Currently he serves as an Advisor to national entities, namely the Langkawi Island Development Authority, the Tioman Island Development Authority and the highly successful National Oil & Gas company, PETRONAS. He is also the Honorary President of the Perdana Leadership Foundation (PLF), a think-tank set up to preserve, develop and disseminate the intellectual heritage of past leaders; the Chairman of the Kuala Lumpur Foundation to Criminalise War (KLFCW) and President of the Perdana Global Peace Foundation (PGPF). Both KLFCW and PGPF aim to promote global peace and criminalise war. He also serves as Chancellor to Universiti Teknologi PETRONAS and Perdana University.

Tun Dr. Mahathir Mohamad is the current Chairman of car manufacturer Proton Holdings Bhd. He is also Chairman of Proton's whollyowned subsidiary Lotus Plc.

Tun Dr. Mahathir is married to a doctor, Tun Dr. Siti Hasmah Mohd Ali, and they have seven children and sixteen grandchildren.

### **PRO CHANCELLOR** Tan Sri Sidek Hassan

Tan Sri Sidek Hassan is the Chairman of Petroliam Nasional Berhad (PETRONAS), the National Oil & Gas company of Malaysia. He assumed the position in July 2012 pursuant to his appointment as an Independent, Non-Executive Member of the Board.

Prior to joining PETRONAS, Tan Sri Sidek served in the Administrative and Diplomatic Services of the Malaysian Civil Service for 38 years, the last six of which as the 12th Chief Secretary to the Government.

He had an extensive career of close to three decades with the Ministry of International Trade and Industry (MITI), Malaysia, during which time he held numerous positions including those of Secretary-General, Deputy Secretary-General (Trade) and Director of the Multilateral Relations Division. He was also Minister (Economic Affairs) at the Embassy of Malaysia in Washington DC, United States; Malaysian Trade Commissioner in Sydney, Australia and Assistant Trade Commissioner at the Malaysian Embassy in Tokyo, Japan.

He also had a four-year stint at the Implementation Coordination Unit (ICU) of the Prime Minister's Department, where he was Deputy Director at the Unit's Project Analysis Sector and subsequently appointed Deputy Director of Research.

Tan Sri Sidek holds a Masters of Business Administration (MBA) from the New Hampshire College, United States and a Bachelor of Economics (Honours) degree in Public Administration from Universiti Malaya. He also holds an Honorary Doctorate in Public Administration from Universiti Tun Abdul Razak and Honorary Doctorates in Management from Universiti Putra Malaysia and Universiti Teknikal Malaysia Melaka.



### PRO CHANCELLOR Tan Sri Dato' Shamsul Azhar Abbas

Tan Sri Dato' Shamsul Azhar Abbas has been the President and Group Chief Executive of PETRONAS since 10 February 2010. Throughout his career with the company beginning 1975, he has held numerous senior management positions across business divisions, including Logistics and Maritime, Exploration and Production, Oil, as well as Petrochemical.

Tan Sri Dato' Shamsul Azhar holds a Masters of Science (MSc) in Energy Management from the University of Pennsylvania, a Bachelor's degree in Political Science and Economics from Universiti Sains Malaysia as well as a Technical Diploma in Petroleum Economics from the Paris-based Institut Français du Pétrole. He has been conferred several awards by the federal as well as state governments of Malaysia, which include the Darjah Panglima Setia Mahkota (PSM), the second-highest award of the Malaysian Federal Government.

Beyond Malaysian borders, he was conferred the Dato Paduka Seri Laila Jasa Yang Amat Berjasa Darjah Kedua by the Sultan of Brunei, and is also a recipient of the Officier de la Légion d'Honneur from the Government of the French Republic.

### VICE CHANCELLOR Datuk Ir (Dr) Abdul Rahim Hashim

Datuk Ir (Dr) Abdul Rahim Hashim was a graduate in Electronics and Electrical Engineering in 1976 and a recipient of an Honorary Doctorate in Engineering from the University of Birmingham, UK in 2006. As a professional engineer, Datuk was previously on the Board of Engineers Malaysia (BEM) and served for five years, from 2007, as the Chairman of the Engineering Accreditation Council (EAC) Malaysia.

Datuk Abdul Rahim was also the Vice President of Gas Business from 2002 to 2006, Vice President of Human Resource Management from 1998 to 2002, CEO of PETRONAS Penapisan Melaka, 1991 to 1998 and CEO of Malaysian Refinery Company from 1995 to 1998.

He also holds the Chairman's post in various PETRONAS subsidiaries and associated companies such as PETRONAS NGV Sdn Bhd, OGP Technical Services Sdn Bhd, Gas District Cooling (M) Sdn Bhd including Gas District Cooling (UTP) Sdn Bhd, Gas Malaysia Audit Board Committee, ASEAN LNG Trading Company Ltd, PETRONAS Egypt Corporation Ltd (PICL), PETRONAS Gas Berhad (PETGAS) (UK) Ltd, PETRONAS Argentina S.A, Trans-Thai-Malaysia Ltd, P.T. Transportasi Gas Indonesia and Egyptian LNG Co. S.A.E. Datuk Abdul Rahim is currently the Immediate Past President of the Malaysian Gas Association, President of Asia-Pacific Natural Gas Vehicle Association and Immediate Past President of the International Gas Union for the triennium 2012 to 2015. He is also an associate member of the American Institute of Chemical Engineers, a Commissioner of the Energy Commission and a member of the National Science & Research Council.

Datuk Abdul Rahim was elected as Fellow of the Academy of Sciences Malaysia (ASM) during the Academy's 19th Annual General Meeting. He was elected in the discipline of Engineering & Computer Sciences.





### **BOARD OF DIRECTORS**







#### **Chairman** 1. Dato' Raiha Azni Abdul Rahman

#### Members

- 2. Datuk Anuar Ahmad (until 16 April 2014)
- 3. Datuk Mohd Anuar Taib (from 16 April 2014)
- 4. Datuk Wan Zulkiflee Wan Ariffin
- 5. Dato' Wee Yiaw Hin (until 3 October 2014)
- 6. Datuk George Ratilal
- 7. Datuk Ir (Dr) Abdul Rahim Hashim

#### **Company Secretary**

- 8. Halimatun Saadiah Abdul Halim (until 18 November 2014)
- 9. Ahmad Redza Abdul Wahab (from 18 November 2014)

### MANAGEMENT COMMITTEE





#### Chairman

 Datuk Ir (Dr) Abdul Rahim Hashim Vice Chancellor & Managing Director/CEO

#### Members

- 2. Prof Ir Dr. Ahmad Fadzil Mohamad Hani Deputy Vice Chancellor, Academic
- 3. Prof Dr. Abdul Rashid Abd Aziz Deputy Vice Chancellor, Research and Innovation
- 4. Mohamed Noor Rosli Baharom Deputy Vice Chancellor, Student Affairs and Alumni
- 5. Hasbullah Hj Ihsan Chief Financial Officer
- 6. Solihuddin Ahmad Nasarudin Registrar
- 7. Assoc Prof Dr. Hilmi Mukhtar Director, Transformation Office
- 8. Zamri Yusof Senior Manager, Human Resource Management and Administration

#### Secretary

9. Haslina Noor Hasni Manager, Legal Services



## **SENATE**

#### Chairman

1. Datuk Ir (Dr) Abdul Rahim Hashim Vice Chancellor & Managing Director/CEO

#### Members

- 2. Prof Ir Dr. Ahmad Fadzil Mohamad Hani Deputy Vice Chancellor, Academic
- Prof Dr. Abdul Rashid Abdul Aziz Deputy Vice Chancellor, Research and Innovation
- Mohamed Noor Rosli Baharom Deputy Vice Chancellor, Student Affairs and Alumni
- 5. Hasbullah Hj Ihsan Chief Financial Officer

- 6. Assoc Prof Dr. Hilmi Mukhtar Director, Transformation Office
- Assoc Prof Dr. Mohamed Ibrahim Abdul Mutalib Dean, Faculty of Engineering
- Assoc Prof Dr. Ahmad Kamil Mahmood Dean, Faculty of Science & Information Technology
- Assoc Prof Ir Dr. Mohd Shahir Liew Dean, Faculty of Geoscience and Petroleum Engineering
- 10. Assoc Prof Dr. Mohd Fadzil Hassan Dean, Centre for Graduate Studies





- 11. Assoc Prof Dr. Suriati Bt Sufian Head, Chemical Engineering
- Dr. Noor Amila Bt Wan Zawawi Head, Civil Engineering Department Department
- Assoc Prof Dr. Rosdiazli Ibrahim Head, Electrical & Electronics Engineering Department
- Assoc Prof Ir Dr. Masri Baharom Head, Mechanical Engineering Department
- Assoc Prof Dr. Ismail Mohd Saaid Head, Petroleum Engineering Department

- 16. Assoc Prof Dr. A Hadi A Rahman Head, Geoscience Department
- Assoc Prof Dr. Jafreezal Jaafar Head, Computer and Information Sciences Department
- Assoc Prof Dr. Balbir Singh Mahinder Singh Head, Fundamental and Applied Sciences Department
- Assoc Prof Dr. Shahrina Bt Mohd Nordin Head, Management and Humanities Department
- 20. Assoc Prof Ir Dr. Idris Ismail Head, Centre for Student Internship, Mobility and Adjunct Lectureship

Secretary

21. Solihuddin Ahmad Nasarudin Registrar



### ACADEMIC ADVISORY COUNCIL

Acting as a forum for the exchange of ideas between the University and various sectors of society, the Academic Advisory Council first met on 21 February 2003. The council provides guidance and strategic direction for the development of the University, from international collaboration to staff development and consultancy – to be in tandem with the University's vision and mission. Council members are appointed by the University's Board of Directors and meet at least once a year.

#### Chairman

Tun Dr. Mahathir Bin Mohamad

#### Members

Tan Sri Datuk Ir (Dr) Hj Ahmad Zaidee Laidin Vice President Academy of Sciences Malaysia

Tan Sri Zarinah Anwar Former Chairman Securities Commission Malaysia

Prof Lord Kumar Bhattacharyya Founder and Director of Warwick Manufacturing Group, University of Warwick, United Kingdom

Prof Dr. David B Prior Executive Vice Chancellor and Provost Hamad bin Khalifa University, Qatar

Prof Dr. Feng Da Hsuan Senior Vice President National Tsing Hua University, Taiwan

Scientia Prof Dr. Deo Karan Prasad Professor, Faculty of the Built Environment University of New South Wales, Australia Prof Dr. Haruo Takeda Corporate Chief Engineer Hitachi Ltd, Japan

Prof Dr. Jeom Kee Paik President of The Ship and Offshore Research Institute Pusan National University, South Korea

Prof Dr. Shih Choon Fong Former Founding President, King Abdullah University of Science & Technology (KAUST) Kingdom of Saudi Arabia

Dr. Terje Martin Halmo President Risavika Gas Centre DA, Norway

Dato' Raiha Azni Abd Rahman Senior Vice President Group Human Resource Management, PETRONAS

Datuk Ir (Dr) Abdul Rahim Hashim Vice Chancellor & Managing Director/CEO Universiti Teknologi PETRONAS

#### Secretary

Solihuddin Ahmad Nasarudin Registrar Universiti Teknologi PETRONAS

### RESEARCH ADVISORY COUNCIL

The University aspires to become a leader in Research & Development and Consultancy and be recognised internationally as a partner of choice for industries as well as a respected member of scientific communities and an innovation platform for the research fraternity. In its commitment to achieving this vision, the University establishes the Research Advisory Council (RAC) in 2010 that meets annually to deliberate issues and matters concerning the development of the University especially in areas that include research, innovation and commercialisation. RAC's prominent and esteemed members have the important roles of providing guidance and strategic directions to facilitate UTP to enhance its competitiveness through technology and innovation.

#### Chairman

Datuk Ir (Dr) Abdul Rahim Hashim Vice Chancellor & Managing Director/CEO Universiti Teknologi PETRONAS

#### Members

Prof Dr. Abdul Rashid Abdul Aziz Deputy Vice Chancellor Research and Innovation Universiti Teknologi PETRONAS

Ir Elias Ismail Senior General Manager Technology & Innovation Development Sector Construction Industry Development Board

Ir Ahmad Fauzi Hasan Chief Executive Officer Energy Commission Malaysia

Hj Faizoull Ahmad Director General Federal Land Development Authority

Dr. Ir Cheong Kam Hoong Managing Director TNB Research Sdn Bhd

Dr. S. Asmaliza Ismail Head, Secretariat National Institute of Health Ministry of Health Prof Datuk Dr. Halimaton Hamdan Under Secretary National Nanotechnology Directorate Ministry of Science, Technology & Innovation, Malaysia

Prof Dr. Ku Ruhana Ku Mahamud Graduate Department of Computer Science College of Arts and Sciences Universiti Utara Malaysia

Chuah Beng Swee Head, Lab Management PETRONAS Research Sdn Bhd

Dr. Nasir Hj Darman Head of Enhanced Oil Recovery Exploration & Production Technology Centre PETRONAS

Ahmad Nawawi Mohd Yatim General Manager Technical and Facilities Development Division PETRONAS Gas Berhad

Dato' Mash'al Bin Ahmad Managing Director Lynas Malaysia Sdn Bhd

Azhar Abdullah Vice President Testing Services Schlumberger Asia Schlumberger WTA (M) Sdn Bhd Chu Jenn Weng President/Chief Executive Officer Vitrox Corporation, Malaysia

Rao Abdullah Vice President - Central Asia Halliburton Energy Services (M) Sdn Bhd

Prof Saeed M Al-Zahrani Executive Director of SABIC Polymer Research Center, College of Engineering King Saud University Kingdom of Saudi Arabia

Dr. Ioannis Economou Associate Provost for Graduate Studies Professor of Chemical Engineering The Petroleum Institute Abu Dhabi, United Arab Emirates

Dr. Ong See Hong Regional Technical Advisor - Asia Pacific Reservoir Development Services (RDS) Baker Hughes Inc., Australia

Dr. Allan Magee R&D Manager Technip (M) Sdn Bhd

#### Secretary

Haji Mohd Azminuddin Afandi Senior Manager Research & Innovation Office Universiti Teknologi PETRONAS

### STUDENT DEVELOPMENT ADVISORY COUNCIL

The Student Development Advisory Council (SDAC) is a council of industry leaders to advise Universiti Teknologi PETRONAS (UTP) in its quest to produce well-rounded graduates. The main role is to provide industry perspectives on the functions and operations of the various student development initiatives in UTP that can enhance graduate marketability. The SDAC also provides inputs on challenges in meeting the current industry employability requirement. Its inaugural meeting was held on 10 September 2012.

#### Chairman

Datuk Ir (Dr) Abdul Rahim Hashim Vice Chancellor & Managing Director/CEO Universiti Teknologi PETRONAS

#### Members

Dato' Dr. Ismail Alias Vice President Persatuan Kaunseling Malaysia

Jamal A Ainul Chairman Schlumberger WTA Malaysia Sdn Bhd

Dato' Dr. Adnan Alias Chief Executive Officer The Islamic Banking & Finance Institute Malaysia

Mohd Suhaimi Baharudin Director & Senior Vice President Technip, Malaysia

Datin Norela Nuruddin Country Director ENACTUS Malaysia Foundation

Ng Wan Peng Chief Operating Officer Multimedia Development Corporation Wong Siew Hong R&D Engineering Manager Design & Engineering Department Agilent Technologies Malaysia

Datuk Chin Leng Sim @ Marina Chin Principal Bukit Jalil Sports School

Datuk Nur Iskandar Abdul Samad Venture Lead Refinery and Petrochemical Integrated Development

Tan Sri A K Nathan Executive Chairman EVERSENDAI Corporation

#### Secretary

Mohamed Noor Rosli Baharom Deputy Vice Chancellor Student Affairs and Alumni Universiti Teknologi PETRONAS

## INTERNATIONAL EXTERNAL EXAMINERS

Quality assurance is an integral part of the University's education process to ensure its academic programmes are of the highest quality and meet international standards. Established since 1999, the International External Examiners meeting is held annually to deliberate on examination, curriculum development, staff development and facilities, future trends of engineering education and matters pertaining to research and development. The International External Examiners meeting provides invaluable input that contribute towards the realisation of the University's vision and mission in making it a leader in engineering and technology education.

#### Chemical Engineering

Prof Dr. Peter L Douglas Associate Dean of Engineering (Computing) University of Waterloo, United Arab Emirates

#### Civil Engineering

Prof Dr. Chimay J Anumba Department Head and Professor of Architectural Engineering The Pennsylvania State University, United States of America

#### Electrical & Electronic Engineering

Prof Fabrice Meriaudeau Vice President in International Relation Université de Bourgogne, France

#### Mechanical Engineering

Prof Dr. Andrew J Day Ford Professor of Quality Engineering University of Bradford, United Kingdom

#### Petroleum Engineering

Prof Dr. Ir Hasian Parlindungan Septoratno Siregar Professor at the Petroleum Engineering Department and Student Academic Counselor Institut Teknologi Bandung, Indonesia

#### Geosciences

Prof Dr. John G Kaldi Chief Scientist CO2CRC (Chair) of Geosequest University of Adelaide, Australia

#### Business Information Systems

Prof Dr. James YL Thong Chair Professor and Head of Department Hong Kong University of Science and Technology

#### Information & Communication Technology

Prof Dr. Clark Thomborson Deputy Head of Department (Academic) University of Auckland, New Zealand

#### Management & Humanities

Prof John M Luiz University of Cape Town Waterfront South Africa

### INDUSTRY ADVISORY PANEL

The University has taken another step to ensure that its education deliveries remain relevant with industrial practices. In order to further strengthen its relationship with industry players, the Industry Advisory Panel (IAP) was established and held its inaugural meeting on 7 May 2007. The University invited twenty-four panel members consisting senior practitioners from the industry, all with vast experience and expertise in their respective fields, to assist in planning and continuously improving the quality of the programmes offered in UTP. Industrial input from panel members help the University to further enhance its curriculum and to establish academic-industry collaboration. Panel members are required to meet the heads of departments at least once a year to discuss the University's academic curriculum, teaching methodology, facilities and practices to help it stay in tune with the emerging needs of the industry.

#### Chemical Engineering

Ir Johan Alimin Abdul Samad Project Manager Intecsea Sdn Bhd

Julianna Kamarudin General Manager NGC Energy Sdn Bhd

Paul R. Ellis Managing Director Schaefer Kark (Malaysia) Sdn Bhd

Datuk Nur Iskandar Abdul Samad Venture Lead Refinery and Petrochemical Integrated Development (RAPID)

Ir Ong Thean Guan Safety Engineering Manager/ Senior Department Manager Technip Geoproduction (M) Sdn Bhd

#### **Civil Engineering**

Ir Dr. Ch'ng Guan Bee Director IKRAM Centre of Excellence for Engineering Forensic and Consultancy

Dato' Sri Ir Dr. Judin Abdul Karim Chief Executive Construction Industry Development Board (CIDB)

Dato' Ir Dr. Ashaari Mohamad Director ENCEAL Consultant

Azam Abdul Rahman Principal Engineer (Civil Structural) PETRONAS Carigali Sdn Bhd

Muhammad Akhir Othman Managing Director HYDEC Engineering Sdn Bhd

#### Electrical & Electronic Engineering

Dr. Ir Ahmad Jaafar Abd Hamid Chief Engineer Tenaga Nasional Berhad

Yong Lam Wai Chief Technical Officer CARSEM Malaysia

Dr. Shahrul Yazid Yahaya Head of Department Intel Microelectronics (M) Sdn Bhd

Dr. Mazlan Abbas Chief Research Director Wireless Applied Research, MIMOS Berhad

Vivekananda Rajah Harindran Custodian Engineer Instrumentation and Control Group Technical Solution, PETRONAS

#### Mechanical Engineering

Ir Ahmad Khairiri Abdul Ghani Staff Engineer PETRONAS Carigali Sdn Bhd

Azmi Mahamad Chief Operating Officer UZMA Berhad

Dr. John Fuad Edwards Integrity Lead Specialist Llyod's Register Technical Services Sdn Bhd

Ir Dzulaidin Tasrin Othman Head of Department Sapura Kencana Best Wide Sdn Bhd

Ir Ismady Hj Ismail Head of Unit TNB Repair & Maintenance Sdn Bhd

#### Petroleum Engineering

Azman Aris Senior Manager-Well Engineering Vestigo Petroleum Sdn Bhd

Dr. Lim Lay Tiong Senior Production Engineer SPT Group (A Schlumberger Company)

Julmar Shaun S. Toralde Region Engineering Manager – Asia Pacific Well Construction Weatherford (Malaysia) Sdn Bhd

Dr. Fikri J. Kuchuk Fellow & Chief Reservoir Engineer Schlumberger

Dr. Paul Hammonds Technical Manager – Chemical Applications Asia Pacific Baker Hughes

#### Geosciences

Dr. Mazlan Madon Custodian (Basin Analysis) Exploration & Production Technology Centre PETRONAS

Jasmee Zainal Rashid Country Manager/Managing Director Petroleum Geo-Services

Muhamad Kamal Embong General Manager Upstream Malaysia Technical Global

Ahmad Hatta Kamaruzzaman Vice President Global Account Schlumberger Oilfield Services Asia

### Management & Humanities

Md Arif Mahmood Senior Vice President Corporate Strategy and Risk PETRONAS

Dato' Hafsah Hashim Chief Executive Officer SME Corporation Malaysia

Datuk Abdul Jalil Abdul Hamid Group Managing Director The New Straits Times Press (M) Bhd

Rosli Ismail Senior Manager Coporate Communication Permodalan Nasional Berhad

### Computer & Information Sciences

Tan Eng Hoo Senior Manager Talent Development Division Multimedia Development Corporation

Mohd Nizam Abdul Rahim Head, IT Services Sime Darby Global Services Centre Sdn Bhd

William Chau Wei Loong General Manager Applied Technology and Innovation Mesiniaga Bhd

Ritakamal Sadiman Executive Director New Entrepreneur Foundation

Ainuddin Jantan General Manager Corporate ICT Development Unit PETRONAS

Dr. Amirudin Abdul Wahab Chief Executive Officer Cyber Security Malaysia

# THE REPORTS

- Chairman's Review
- Vice Chancellor's Report
- Academic
- Research and Innovation
- Student Affairs and Alumni
- Corporate Social Responsibility





### CHAIRMAN'S REVIEW Dato' Raiha Azni Abd Rahman

When UTP was founded in 1997, the goal was primarily to set up an institution of higher learning with a focus on technology-related courses. Mooted and supported by PETRONAS, one of the objectives was to feed the growing need for engineering related skills and expertise in tandem with the growth and expansion of Malaysia's oil and gas industry.

Today, 18 years on, UTP has made great strides in the field of education, making a name for itself in Malaysia as well as in the international arena. It has become a much sought after university for engineering and technology and is one of the most prominent private universities in Malaysia today. Compared with many other established universities, both in Malaysia and around the world, UTP is still in its infancy. Young as it is, it can most definitely stand tall and take pride in its achievements and the significant milestones it has made to date.

My warmest and sincerest congratulations to UTP and each and every one of its staff and students on the QS 4 Star Overall rating by Quacquarelli Symonds (QS) received last year. This recognition is not easy to come by and attests to UTP's commitment to excellence and continued improvement. Better still is the QS 5 Star rating that was awarded for five areas, namely Employability, Facilities, Inclusiveness, Innovation and Internationalisation. These 5 Star ratings recognise that UTP has met the international standards in these areas and are clear indications that the university is on the right track.

While they are accolades to be proud of, they are also benchmarks by to be used as measures of continued excellence in the areas mentioned. They are also the impetus for UTP to put the wheels in motion towards achieving similar ratings in the other QS areas of Teaching and Research. At home, the Ministry of Education's Tier-5 (Excellent) rating in Teaching and Learning further cemented UTP's position as a premier university of choice. The Tier 5 SETARA rating recognised the excellence of UTP's Overall Undergraduate programmes while the Tier 5 for D-SETARA grading was conferred for the university's engineering discipline.

Meanwhile, UTP's journey towards becoming a globally recognised research university was boosted by another 5 Star rating - for R&D and Commercialisation as rated through the MOE's Malaysia Research Assessment Instrument (MyRA). With this, UTP became the first private university in Malaysia to be bestowed the coveted 5-star recognition, with a grant of RM5 million worth of incentives per year.

The university also continues to create milestones in research and development. Its Centre for Intelligent Signal & Imaging Research (CISIR) has been recognised by the MOE as a National Higher Institution Centre of Excellence (HiCOE). CISIR focuses on the exciting area of Biomedical Image Analysis and Neuro Chemical Imaging, specialties that are expected to open up new frontiers in this area of science.

These awards and recognitions are significant and highly valued, and regarded as outstanding milestones for the university. While we applaud UTP for its great successes, we must realise that these, however, are just the tip of the iceberg in the world of academia and research and should serve as a motivation for UTP to go beyond where they are and to reach for even greater heights.





# Continuing to Meet Demands and Provide for Needs

The success of UTP's graduates in the employment market is another accomplishment that must be brought to attention. In today's highly competitive job market, to continually achieve a 90% employment rate within six months of graduation is most certainly something to shout about.

UTP has always strived hard to ensure that its curriculum content is industry relevant and up-todate. This does not only provide undergraduates with the technical skills and knowledge of their chosen field, but also prepares them to become industry-ready, leading to high industry acceptance of UTP graduates. It also sets the seal on UTP's position as the partner of choice in technology education. Ranked at the top of the pile in talent sourcing, UTP graduates continue to secure positions in major multinational companies such as Siemens, Schlumberger, BASF, Sime Darby, Shell and of course PETRONAS, among many, many more.

On another note, it is with great satisfaction and pride to see that Yayasan UTP's role in promoting, enhancing, facilitating and encouraging education in Malaysia is growing every year since it was established in 2007. Endowing a legacy for the future, the allocation for the YUTP funds channelled towards full scholarships, bursary awards and YUTP-Industry scholarships stood at RM4.8 million for the last year. The increase of RM1.6 million over the previous year meant that the needs of more students were met. In helping to meet the financial needs of students, Yayasan UTP is not only opening up educational opportunities for them, but is also reflecting the university's commitment and culture to give back to society.




### **Moving Forward**

Having set firm foundations these past 18 years, the gateway to the future is wide and the journey is becoming more and more exciting. Right from the outset, UTP had set down firm goals and objectives from which it has never wavered. This concentrated focus is the key ingredient that has brought the university to where it stands today. It is this razor focus that will continue to take it towards the future. While performance so far has superseded and exceeded targets, there is much more work to be done.

Cognisant of and in preparation for this, the university is undertaking expansion plans that will extend its research capacity and redefine and reshape its future. Two new research buildings are expected to be completed in the later part of 2015 and the UTP Gas District Cooling (GDC) plant is also being upgraded. The university is also constantly in search of academic and research staff from all over the world to increase its pool of talent. Another exciting feature in the Development Masterplan is the UTP Research Park. This park will enable the university to be financially sustainable by leveraging on its existing talent, research facilities, operations and land. It will bring about a synergy of resources through anticipated joint projects with industry and also create job opportunities. UTP is looking forward to transforming the oil and gas industry in Malaysia into one of innovation and supply as much as procurement, reshaping the futures of both the university and Malaysia as an oil-producing nation.

With all these plans set in motion and the hard work that is being done to see them come to fruition, I am confident that we can expect much more exciting developments in UTP in the coming years. I look forward to witnessing the university's continued progress and change as well as to see it fulfil its goals and objectives and bring change to Malaysia and perhaps even the world. Once again, congratulations on all achievements and successes of 2014, and my deepest appreciation to everyone on board. Here's to an even better 2015.

Pace

Dato' Raiha Azni Abd Rahman

Annual Report 2014 | 36

### You must dare, and dare again, and then dare a little bit more and go on daring ... Justin Cotillard





# VICE CHANCELLOR'S REPORT

Datuk Ir (Dr) Abdul Rahim Hashim

# **A Year Well Played**

" Coming together is a beginning, keeping together is progress, working together is success."

This quote by industrialist and founder of the Ford Motor Company, Henry Ford is the best way to illustrate the journey of Universiti Teknologi PETRONAS as we enter into our 18th year of educational excellence.

Founded on the strength of core principles, our goal has always been to be a leader in technology education and a centre for creativity and innovation. This Vision, laid out by our founders, has been the fundamental thrust of every step we have taken towards building the university, both as an education centre of excellence and a globally recognised research facility.

This conviction of and firm commitment to our vision has led to increasing successes and accomplishments through the years, and UTP continues to grow from strength to strength as it delves further into the world of academia and research.

UTP came into being through the initiatives of Malaysia's national oil and gas company PETRONAS and the two establishments are inextricably linked; and while oil effectively drives and powers the world today, education is the mother of leadership and progress and it nurtures the seeds of innovation. While first and foremost being an institute of higher education, UTP also plays a pivotal and significant role in working hand-in-hand with industry whose challenges are fully embraced as opportunities for creativity and innovation in the finding of solutions. This is where the pedal meets the metal and challenges the university to up its ante in its drive towards successful research.

With the increasing complexities of the industry and the ever-unfolding global changes and scenarios, we are taking up the baton not only to continue growing in our excellence in the provision of education, but more specifically in the world of research and innovation that will ultimately create solutions and generate benefit for society.









# In Review

It has been said that the only time one should look back is to see how far you have come. For to know where you are headed next, you must first know where you are today.

Looking into the rearview mirror, the 12 months of 2014 have indeed been momentous for UTP and have set the pace for our next steps. The university achieved many "firsts" during the year, crossing national and international borders and has made its presence felt on the global stage of education and research. In the spirit of **kaizen** we forged ahead relentlessly, exploring various pathways and avenues, striving to continually be better than who we already are.

As we head towards success and improvement, each and every step, be it small or large, is important and valuable and every single commendation and award highly coveted and prized.

One of our greatest highlights for the year was being placed within the top 200 universities in the QS Asian University Rankings and also being recognised as the top private university in Malaysia under the International QS Ranking System. This is no mean feat indeed as numerous Asian nations have long carved out their niches within the higher echelons of academia with many of them being home to some of the best and most recognised universities in the world.

Of the 7 universities in Malaysia that made it into this prestigious 200 list, UTP was the only private university in the country to break into the Top 200 QS Asian University Rankings and we are well in the trajectory towards the Top 100 rankings in Asia by 2020. This was our second foray into the QS ranking following our Top 200 QS World Ranking in Chemical Engineering in 2013.

Another feather in our cap was the QS 5-Star ranking that we were awarded for five areas namely Employability, Facilities, Internationalisation, Inclusiveness, and Innovation. Achieving these international standards places us on firmer footing and while the awards in themselves are highly valued credentials, it is the progress we have made that underlines our strength in the commitment towards progressive excellence.

On the home front, our Centre for Intelligent Signal & Imaging Research (CISIR) was recognised as a National Higher Institution Centre of Excellence (HICoE) by the Ministry of Higher Education. Armed with a research grant of more than RM11 million, CISIR which works on Biomedical Image analysis with a focus on Neuro Chemical Imaging, has to date produced 500 research articles and filed 70 patents, with six granted so far.

SETARA and D'SETARA also accorded us Tier 5 excellent ratings for overall undergraduate programmes and our engineering discipline.

# Research and Development

Our nine Mission Oriented Research (MOR) areas and their supporting R&D centres continued to outperform themselves. Two of the R&D centres are now nationally recognised Centres of Excellence (CoE), eight are designated as CoE at the university level while another four are department research centres.

In our R&D efforts, in as much as research is conducted for the expansion of knowledge, the ultimate aim is for the work to be applicable in the real world and for inventions to be the solutions of challenges, current and future. While bringing benefit to society, the patenting and commercialisation of inventions and solutions greatly add to the credibility and the reputation of a research university.

UTP is ever conscious of the imperative need to be in this game. We filed 72 patents in 2014, of which 11 have been granted, bringing our total patents filed to date to 337 with 29 granted since 2009. Three products were also commercialised in 2014. UTP researchers and academicians are also prolific in publications and we have our name on more than 10,000 papers and articles for journals and conferences. As for our medal tally in research and innovation, the number stands at 397. In 2014 itself, we won 85 medals, of which 40 were gold, 33 silver and 12 bronze on top of 10 special mentions/awards. We are also very proud to announce that we were granted our first overseas patent application in the United States pertaining to methodology and apparatus using digital imaging, "A Methodology And Apparatus For Objective Assessment, Non-Invasive And In Vivo Assessment And Rating Of Psoriasis Lesion Scaliness Using Digital Imaging". We have thus broken into the international arena of patents.

UTP understands that the world does not revolve merely on science and technology. Cognisant of this, our R&D efforts today extend to talent management, labour markets, operations, finance and also in teaching and learning. In this last area, we established the Centre for Teaching and Learning (CeTAL) in October 2014, which is dedicated to researching teaching and learning methods to improve the delivery of lessons and knowledge and ultimately students' learning.

Our strength in R&D lies in our cutting-edge research facilities, effective and systematic approach to research and the various supporting features such as designated financing and strong support from both the university and industry. We are well on our way in our journey towards becoming an internationally recognised research university.







### Industry - University Engagement and Collaboration

Another one of UTP's core strengths is our close collaboration with industry which greatly contributes towards adding value to our programmes and graduates. Towards this end, we are very much aware of the need to keep abreast with current world trends, especially in our forte of science and technology. We do this by participating in exhibitions and congresses both local and international.

ESTCON 2014 - the third World Engineering, Science & Technology Congress - was a key global event for us last year. This largest ESTCON event to date was held in Malaysia and was a resounding success, receiving rave reviews and feedback from the delegates. It was an excellent platform for the discussion of ideas, sharing of knowledge and learning about latest inventions and research. In all, 1,026 papers were presented and 3 new innovative ideas attracted interest for commercialisation purposes.

Meanwhile we strengthened our collaboration with industry through our Student Industrial Internship Programme (SIIP). This programme has been recognised by Talent Corporation as the BEST structured internship programme offered by educational institutions in Malaysia.

More than 400 local and international companies came on board with us for internship which still continues to be one of the most highly-valued experiences of our undergraduates. Among the companies are PETRONAS, Shell, ExxonMobil, Schlumberger, Halliburton, Technip, BASF, GE Oil & Gas, Mercedes AMG PETRONAS F1 Team and Hitachi Ltd.

Networking and strategic partnerships also play a significant role and we recently set up the Huawei University Teaching Laboratory in UTP to identify and develop talent and certified professionals in ICT-related areas among UTP undergraduates. This laboratory will also meet the needs to upskill and train the community in the northern part of Perak. This collaboration with the Multimedia Development Corporation (MDeC) and Huawei enables us to contribute to society through training activities.

It is our goal to set up alliances and collaborative efforts with the top 50 universities in the world, because it is only when we play with the big boys that we can grow up and become one of the big boys ourselves. This will also open up avenues for more opportunities for both our students and our research and academic staff.

### Academics and Our Students

UTP's ultimate product is our graduates.

We continuously develop new programmes to increase the educational experience of our students, while improving on existing ones. The students of UTP reflect the world, we are a mini United Nations. This is not only in terms of student enrolment and environment within the university; our students are also ambassadors of Malaysia as they traverse the world via our Student Exchange Programme and Study Abroad Programme, and ultimately as UTP graduates absorbed into multinational companies.

UTP educates the world. We host students from 66 countries and they make up 21% of our student population of more than 7,700 students. We are very proud of the performances and accomplishments of both our graduates and undergraduates who sweeten the name of UTP as they carry their experiences and knowledge to the four corners of the globe. We stand in excellent stead with employers, local and international and UTP graduates continue to be in strong demand for sought-after positions in various companies across the board. The fact that 90% of our graduates secure employment within six months of graduation (a phenomena we have enjoyed since 2000) clearly attests to UTP's success as an institution of higher education.

As of December 2014, UTP graduates number 11,994 in total, with 1,278 having graduated in 2014 alone from 36 programmes (PhD 74, Masters 136 and Bachelors 1,068).





# Giving Back to the Community

Charity begins at home. Through our Yayasan UTP, our students are one of the first beneficiaries of our efforts to give back to community. Yayasan UTP raised more than RM100,000 in addition to the RM1 Million allocation given by ExxonMobil in 2014. These funds went towards financing 133 deserving and eligible students in UTP. We do this to provide opportunities for these students, tapping into their talent and capacity while setting the foundation for their eventual contribution to society.

We also give back to community in the form of social activities that are fully supported by the university students and staff. UTP's Corporate Social Responsibility (CSR) initiatives are carried out in the form of education and socio economic contributions. Although monetary aid is one of the vital and necessary components, we are shifting from the mindset of merely raising funds to encouraging the involvement of communities in income generation. For it is better to teach them to fish than to just give them a fish and this then comes under the purview of our Centre for Social Innovation (CoSI).

The CSR domain encompasses health and wellbeing, capability building for empowerment, access to information and growth through innovation. Our Kampung Aji Project that supports sustainable income for single mothers in partnership with Yayasan Siti Sapura and the most recent MoU with the Forest Research Institute of Malaysia (FRIM) to promote sustain forest management, are some of our CSR efforts embarked upon for the year.





### Looking Ahead with Great Expectations

Finally, we are fully aware that today's progress was yesterday's plan and we thank our predecessors and everyone who has walked ahead of us here at UTP for bringing us to where we are now. However, success is a journey and not a destination and we must continue to be forward thinking in all our endeavours.

Taking a lesson from great civilisations of the world that fell because of complacency and pride, we need to be constantly striving for more and realise that what we know is far outstripped by what we do not know. There is much that is yet to be accomplished. The only constant is change and if one is not in constant improvement, the only other available option by default is stagnation, or worse still, decline. So while we rightly take pride and bask in the successes and accomplishments of 2014, resting on these laurels is not an option. The road ahead is still long and wide. So in as much as it is necessary to stop and smell the roses and pat ourselves for a job well done, we must realise that the past 18 years are just the beginning for UTP and the future is our oyster. I end here with the words of Theodore Roosevelt as food for thought:

"Far better is it to dare mighty things, to win glorious triumphs, even though checkered by failure... than to rank with those poor spirits who neither enjoy nor suffer much, because they live in a gray twilight that knows not victory nor defeat".

Datuk Ir (Dr) Abdul Rahim Hashim

### HIGHLIGHTS

### QS Stars and Ranking

Meeting International Standards of Excellence

One of UTP's greatest accomplishments and achievements in 2014 was achieving an overall rating of 4 Star while the 5 Star rating was accorded to five different specific areas of Employability, Facilities, Inclusiveness, Innovation and Internationalisation.

These are 5 out of the 8 areas that are considered key pillars in the making of a world class university within the QS rating system, a widely accepted benchmark for institutions of higher learning around the world.

UTP is also the only private university in Malaysia to be ranked in the Top 200 within the QS Asian University Rankings. Breaking into this Top 200 exclusive list is the culmination of the efforts from each and every staff member, as well as the collective performance of all our students past and present. As a university primarily offering education in engineering, sciences and technology, we are also honoured to retain our position among the top 200 in the QS World Rankings by subject for Chemical Engineering for the second year running. We stepped into the top 300 for the Environment Sciences sector as well. UTP was also ranked 335 for our Engineering and Technology faculty.

These placements and rankings validate our continuous efforts and further strengthen our mission and goal to continue striving to become better than we are and to stretch even further for higher accomplishments.

Our next target is towards the QS 5 Star Rating for Teaching and Research for 2015.







### **TOP 200**



**Chemical Engineering** 

#### **TOP 300**



### **TOP 335**

**TOP 200** 

**UNIVERSITY** 

RANKINGS



# In-House Action Labs to Take UTP to Greater Heights

UTP's vision is to become a leader in technology education and a centre for creativity and innovation. Simultaneously, we also aim to produce excellent graduates who are creative and innovative. To achieve these gaols, we need to be ever vigilant as to where we stand, the progress we are making and the next step that we plan to take.

This is an endeavour by itself and in as much as scientific research and innovation require analysis, theories, principles, concepts, ideas etc. so does taking UTP to greater heights require equal attention to detail.

Putting to good use our proclivity for research and development we have formed specially focused action labs to create awareness about the university's goals and objectives and also to invite and procure the involvement of staff to participate in and contribute to UTP's journey towards achieving its aspirations. The primary goals of these labs are to develop new aspirations, create new milestones, and to formulate, align and review goals and achievements, all in keeping with our transformation plan to take our existing successes to a greater level and beyond.

In doing so, the activities in our action labs centre around what we call the "Home" concept where we embrace shared values and inculcate a nurturing culture for sustainability. We also hold fast to our principles of integrity, professionalism, cohesiveness and loyalty as we nurture a culture of support, inspiration, contribution and sharing within our university.

- 1. STAR Lab Sustainable Environment for Talent Attraction and Retention
- 2. FAST Lab Financial Agility for a Sustainable Tomorrow
- 3. BRAND Lab Brand that is Relevant, Admirable and Defensible
- 4. BE<sup>2</sup>ST Lab Building an Excellent Ecosystem for Students





## The STAR Lab

Working towards a caring, resilient and high performing culture, the STAR Lab takes on the role as the glue that holds UTP together. Its primary goal is to work out initiatives and features that will grow and nurture the staff of UTP, for without our staff, we cannot function.

First and foremost, it encourages and promotes self-value. Acknowledging that each and every staff member is a valuable asset to the university, one of STAR Lab's priorities is to regularly review the remuneration packages of existing personnel and to design attractive offers to attract international staff. This is to ensure that staff are happy working in UTP and to maintain and retain valuable manpower.

Staff at UTP receive institutional support backed up by strategic talent management endeavours. The university adopts a performance based promotion and reward system that is supported by flexible KPI assessments.

Meanwhile, to ensure that the working environment is conducive to research, and to accelerate and recognise passion, STAR Lab has introduced the flexi-hours initiative. It is also hard at work to ensure that everyone enjoys a good balance of work and off-work time, and is allowed space to grow and nurture their creativity and passion for work and life.

The support of staff who are well-cared for and happy with their work is a vital component in ensuring UTP's success, now and in the future, and it is this that STAR Lab is determined to maintain.

# The FAST Lab

In the FAST Lab, UTP's academic offerings, business direction and financial management constantly go under the microscope. Encompassing five main domains - Academics, Research, Student Experience, Financial Management and Yayasan UTP - the job of the FAST Lab is to take UTP forward as a financially stable university of the future.

The personnel who contribute to and work within the perimeters of the FAST Lab are driven by the goal to position UTP as a forward moving institution, constantly keeping with the times and focusing on the core areas of its goals and targets.

In each of the five domains, various strategies are designed and formulated towards each individual value proposition as listed here:

I) Academics -

To offer market driven academic programmes with global learning experiences and innovative education deliveries

#### II) Research -

To focus in niche OGE research areas and technology innovation

#### III) Student Experience -

To create and maintain a vibrant campus environment that empowers and nourishes students

#### IV) Financial Management -

To be accountable and investment-driven through cost optimisation and income maximisation

#### V) Yayasan UTP -

To invest in premier education and advanced technology for the betterment of society and the nation



# The BRAND Lab

A rose by any other name would smell just as sweet. Be that as it may, branding still plays a very important role. Also for an institution of higher learning, it is not just a name, it is an identity, a reputation, a reflection of what the university stands for and upholds.

So the BRAND Lab was formed to create a relevant, admirable and defensible brand for UTP. This is where the university's Vision, Brand Essence, Brand Promise, Brand Pillars and Brand Personality as well as its Shared Values are redefined and refined. The Lab undertakes the planning of branding and positioning strategies to define who UTP is and who it aims to be.

# The BE<sup>2</sup>ST Lab

A university is not just a place where one attends lectures and classes and finally earns a degree. It is a whole eco-system by itself and it is what life is centred around for the students for the duration of their respective programmes.

3 3 4 3

This being so, the university environment plays a crucial role in the holistic development of the student, from the academic, the social and the spiritual aspects. This is where the BE<sup>2</sup>ST Lab comes in.

Its objective is to develop an excellent ecosystem to facilitate holistic student experiences and to ensure that they develop in all areas and ultimately graduate as Model Global Citizens. Armed with this goal, the Lab's key strategies include providing a value-based educational experience supported by a global outlook, optimising current academic practices and setting up technopreneurship initiatives.

It also looks into establishing a family/home system for the students and empowers and enriches students through the various activities made available to them.

### Preparing for More Action

Not one to rest on our laurels in any endeavour we undertake, we have already drawn up the blueprints for additional action labs to address more areas of development and growth. Some of the things we will be looking into are alumni management, leadership, creating a high performing culture, lab management, Yayasan UTP and funding.

As and when they are established, each one of these action labs will carry and uphold the goals and targets of UTP, strengthening its brand as a premier university of choice.

### UTP Achieves World Class Rating

UTP became the first private university in Malaysia to receive a 4 Star rating by the world varsities rating agency, Quacquarelli Symonds (QS).

We also clinched 5 Star ratings in 5 out of 8 specific areas for Employability, Facilities, Inclusiveness, Innovation and Internationalisation. All these reflect the work that UTP has consistently put in to improve who we are, what we are and what we stand for.

This prestigious QS commendation, a rating system that is widely recognised across the globe, significantly boosts UTP's growing international reputation. With this, we can now benchmark our university with the best educational institutions of the world.

It has also raised UTP's international brand awareness and we can now proudly add this notable achievement to the university's credentials.





### 12th Academic Advisory Council (AAC) Meeting

UTP Academic Advisory Council (AAC) members met to discuss the university's strategic focus on the scholarship of teaching and learning, research innovation and linkages. The theme was "Going Global: Emerging Trends for Sustainable Higher Education".

Established in 2003, the Council is a forum for the exchange of ideas between academicians and the industries, in addition to providing guidance and strategic direction on the university's development.

#### UTP Vice Chancellor Appointed as Fellow of The Academy of Sciences Malaysia (ASM)

UTP Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hj Hashim, FASc, was among the latest of the country's academics elected as Fellow of the Academy of Sciences Malaysia (ASM). He was elected in the discipline of Engineering & Computer Sciences.

Fellows of the Academy are made up of eminent Malaysian scientists, engineers and technologists in various fields. They are appointed based on achievements of extraordinary value.

ASM is a statutory government body formed by the government with the mission to pursue, encourage and enhance excellence in Science, Engineering and Technology. The Academy has helped to direct Malaysia's policies on Science, Technology and Innovation initiatives to support nation building.





#### Placed in the Top 200 QS World University Subject Rankings

We maintained our position among the Top 200 in the Quacquarelli Symonds (QS) World University Rankings by Subject for Chemical Engineering, an achievement that we are very proud of.

This outstanding commendation and recognition is indicative of UTP's excellent programme and course content for Chemical Engineering and is a testimony to our commitment to excel in what we do.

In fact, this recognition came in much earlier than anticipated, six years earlier than our targeted date of 2020. We look forward to working for more such achievements to take UTP further up into the higher echelons of academia.



### Vice Chancellor's Annual Address

Towards a Distinctive Reputation - this was the theme of the 2014 Vice Chancellor's annual address.

Delivered by Datuk Ir (Dr) Abdul Rahim Hj. Hashim to more than 450 UTP staff, it highlighted the university's achievements and overall performance for 2013. The VC also shared his aspirations for the university and the roadmap for 2014.

Held annually since 2009, the event is a platform for reflection, a pat on the back for a job well done, and a renewal of commitment to pursue excellence and progress.

# A Send-off for 2014 Graduates

1,068 graduates and 210 post-graduates were jubilantly sent off at our 14th Convocation.

In the tradition of universities all over the world, the convocation ceremony was filled with pomp and academic solemnity, paying tribute to the efforts of the students who had diligently worked their way to reap the rewards of this significant day. The graduates were from the various fields of specialty offered by UTP, and for the first time ever, we also had a Masters of Science (by research) graduate in the area of Applied Science.

We wish all our graduates a bright future and we look forward to witnessing their success as they go forth to contribute to the world.



### Quality Day 2013

UTP Quality Day for 2013 was held in April and marked its 11th year. The event revolved around the theme "Embrace Quality, Enrich Productivity", with a view and a goal to propel the institution to further excellence.

16 categories of awards were given out in recognition and appreciation to 46 individuals and six teams. A total of 81 staff members were also recognised as long-serving staff of the university.

One of the most coveted awards in the Academic Category – UTP's Academic of the Year – was won by AP Ir Dr. Shaharin Anwar Sulaiman from the Mechanical Engineering Department, which incidentally also emerged as the Outstanding Department of the year.





#### UTP @ PETRONAS F1 SHOWCASE

UTP joined the excitement of the annual Formula 1 Grand Prix with a mini exhibition to recruit potential students at the PETRONAS Malaysia Grand Prix Showcase that was held at the KLCC Esplanade.

Our exhibition, that drew more than 3,000 visitors, promoted UTP's various programmes and also showcased UTP's campus and facilities via virtual tours. Visitors had a chance to see what UTP is all about and to delve further into the higher education opportunities we offer as well as gain insight into the prospects of the oil and gas industry. Annual Report 2014 | 60

### Education is not the learning of facts but the training of the mind to think...

Albert Einstein





### FROM THE DESK OF DEPUTY VICE CHANCELLOR ACADEMIC Prof Ir Dr. Ahmad Fadzil Mohamad Hani

Learning is a lifelong process and education is one of the most sought after commodities in the world today. For its value lies not only in the knowledge that it transfers, but also in the experiences that come along during the entire learning process.

At UTP, we understand that education is a complete package, comprising book learning, lectures and projects, but also the learning of teamwork and getting along with others and exposure to the world outside the perimeters of the university.

These experiences and exposures are vital components of a university education, enriching the student's experience and setting the foundation for his or her entry into the real world after graduation.

UTP is always on the watch for ways and means to add value to the university. These include collaboration with fellow educationists and researchers, partnerships with industry players, enriching student experiences and improving and enhancing its position as a provider of higher education.

New programmes further cement our position as a university of choice, especially in the field of oil and gas.

Firmly committed to academic excellence, we also continuously look for and welcome collaborations that will not only benefit the university as an institution but that will also enrich the knowledge and experience of our students. This is important as it enables us to position ourselves on the international stage as well as increase international networking. These collaborations allow for student exchange programmes, joint supervision for PhD students, internship opportunities, visiting researcher and lecturer programmes and of course, research and development as well.

Such exposure paves the way for a sharing of information and methods, enhances UTP on the world stage and promotes Malaysia as a centre for excellent education. Working in partnership augments results, raises standards and propels us to become better than what and who we already are.





# The Year Behind Us

Every year is an eventful and productive one for us as we work continuously and tirelessly to improve and expand.

Naturally, one of our key focus areas is continued excellence in our academic programmes, both in terms of the number of programmes we offer and the content as well. Our repertoire of academic programmes now stands at 41 from the foundation level right to postgraduate courses over 3 faculties and 8 departments. Our latest offerings to join the fray in 2014 were the MSc in Drilling Engineering, MSc in Offshore Engineering, Bachelor of Science in Applied Chemistry and Bachelor of Science in Applied Physics. Existing programmes are constantly reviewed with industry to ensure relevance and in keeping with trends and changes. We continue to work with Industry Advisory Panels and Adjunct Lecturers to ensure our programme content is fresh and up-to-date.

We ended the year 2014 with 363 academic staff, of which 93 are foreign nationals from 21 countries. Of these 71% are PhD holders who greatly strengthen our academic force. Forging ahead with research, we established the Centre for Excellence in Teaching and Learning (CETaL) in October. This centre looks into teaching methods to improve the delivery of knowledge and ultimately of learning. While contributing towards academics, it is also a part of the university's research portfolio with the potential for further growth.

Continuing our collaborative efforts, we began actual work with more than 400 partners in various arenas. The Korean International Industrial Incubation Internship Programme took off last year with the arrival of 25 young trainees from Korea.

The first batch of UTP's students also found their way to France to continue their progress in the MSc Electronic Systems Engineering. In all, UTP hosted 114 foreign students for research attachments, industrial internships and student exchange programmes in 2014, while 152 of our students were sent overseas for similar programmes.

Meanwhile, we also welcomed 107 adjunct lecturers who shared fresh perspectives on industry matters and enriched our students' learning experiences.

As for our industrial training programme, we now work with more than 400 companies (local & overseas) and our unique 7-month programme continues to be the best and most-valued industrial training available among local institutions of higher learning.

Committed to academic excellence, we are firmly focussed on our goal to produce the best of graduates who in turn will be able to bring leadership and expertise into the marketplace. Towards this end, we will continue in our relentless pursuit of collaborations and partnerships with fellow educationists and researchers the world over to strengthen our position as the premier university in Malaysia.



# Centre for Student Internship, Mobility and Adjunct Lectureship (CSIMAL)



# **Taking UTP Global**

Students at UTP are provided with numerous opportunities to expand their horizons through student exchange programmes and industrial internship tenures with both local and global establishments.

This is orchestrated and coordinated by the Centre for Student Internship, Mobility and Adjunct Lectureship, otherwise known as CSIMAL.

These programmes are made possible through collaborations with various companies and universities to facilitate the movements and attachments of the students as well as teaching staff. Reciprocally, UTP also hosts foreign and visiting students and lecturers in mutually beneficial activities and programmes.

CSIMAL's first major event for 2014 was hosting 25 delegates from 20 foreign universities under the Global Engineering Education programme. This was an effort to promote UTP as a destination university for student exchange.

This year, the Centre held two Summer Educational Programmes (SEP). The SEP with the Far Eastern Federal University of Russia marked the first tieup with a Russian institution. The other SEP was the third event with Japanese varsities. The SEPs exposed students to technical short courses and other cultural exchange activities. As for MoUs, UTP linked up with nine Japanese National Colleges of Technology (KOSEN) an initiative that saw it hosting nine students and three professors in a cultural exchange stint early in the year. In return KOSEN will host 2 groups of students in Japan.

Meanwhile, towards its research endeavours, UTP aims to increase the number of exchange students and CSIMAL is actively promoting the Research Experience for Undergraduates (REU) programme. This is designed to invite and bring in foreign students to contribute towards projects undertaken by UTP's Mission Oriented Research centres and laboratories.

While UTP benefits from the knowledge and contribution of the visiting students, they in turn have the opportunity to work in a different environment within UTP and experience local Malaysian culture and lifestyle.

UTP's well-designed and much-touted industrial internship programme also falls under the jurisdiction of CSIMAL. In the year past, CSIMAL paved the way for internships with the Hitachi Research Laboratory in Japan and with Mercedes AMG PETRONAS F1 in the UK.

Overall, CSIMAL facilitated the movement of 152 UTP students to 10 countries in 2014, while 60 members of our academic staff had the opportunity for attachments with foreign universities. In return UTP hosted 114 students under various programmes from industrial training to short courses and exchange visits while 80 foreign and local lecturers stepped into UTP either for visits or research attachment or the Adjunct Lectureship Programme.

These collaborations between UTP and the various international companies and universities play an important part in the students' experiences and adds much value towards the learning process. These adventures and experiences are not only directed towards technical learning but also aimed at developing soft skills, business acumen, communication skills and adaptability. International exposures like these also make for well-rounded graduates who are better prepared to work in the global field.

# Centre for Teaching and Learning (CETaL)





# Refining the Art of Teaching

The impartation of knowledge - TEACHING - has come a long way from the days of the humble chalk and blackboard.

Today's world of high technology has also bred students who are more avant-garde who have come to expect more innovative methods in the delivery and the absorption of knowledge. With easy access to the infinite world of the internet, information delivery within an institution of higher learning must also evolve and change with the times.

In keeping with its strong emphasis on research and innovation, UTP established the Centre for Teaching and Learning (CETaL) in October 2014. The role of this research centre is to take an indepth look into and study teaching methods in the effort to improve the role of the lecturer in the classroom. The ultimate aim is more effective delivery of course content and better acceptance and learning on the part of the student.

CETaL therefore functions both as a research centre and the creator of knowledge that can be shared and it effectively focusses on two areas the Scholarship of Teaching and Learning (SoTL) and Enabling Technologies.

SoTL's ultimate goal is to create practical and applicable knowledge on teaching and learning methods that can be made public for the consumption and benefit of everyone. This is a scholarly inquiry into teaching methods and student learning capacity using systematic and intentional research methods and procedures.

Enabling Technologies on the other hand looks at how technology can facilitate teaching and learning to better secure the attention of the student and make learning a more interactive and engaging experience. Towards this end, CETaL works on the development of incubators for testing and evaluating the efficacy of technology in the classroom, and assessing the practical applications of said technology.

CETaL is already knee-deep in work on several projects, drawing on the participation of both the lecturers and the students in its research. These research activities in themselves are learning experiences for all participants.

Funded with a grant of RM750,000 from Yayasan UTP, CETaL is also actively promoting its objectives and activities to attract more staff on board. It currently has some 100 associates and additional non-academic affiliate members supporting its activities.

While the research activities of CETaL are perfectly aligned with UTP's focus on research, development and innovation, the activities of this research centre also pave pathways for the lecturers involved to publish work and contribute towards the art of teaching, adding to the science and technology contributions of the university.

The ultimate result would be higher order thinking and students who are critical thinkers and truthseekers who have a love for lifelong learning.

### HIGHLIGHTS ACADEMIC EVENTS



### **ESTCON 2014**

More than 1,000 experts from over 40 countries congregated for the third World Engineering, Science and Technology Congress (ESTCON), with a primary focus on a more sustainable future.

This three-day congress is the only opportunity where industry, academia, the government and the public collectively participate in global business roundtable sessions to discuss ideas, share knowledge, learn about the latest inventions and research and facilitate the commercialisation of ideas that would benefit industry and the economy. The numerous papers, lectures, panel discussions and debates were centred on the theme of "Engineering, Science, Technology and Humanities: Convergence for a Sustainable Future".

It featured 20 parallel sessions and more than 1,500 research and industry papers from around the world, bridging all areas of expertise in research and innovation.

ESTCON 2014 was organised by UTP with the support from the Ministry of Education (MOE), the

Ministry of Science, Technology and Innovation (MOSTI), Agensi Inovasi Malaysia (AIM), KPerak Implementation & Coordination Corporation (KPerak) and Yayasan UTP.

It was held at the Kuala Lumpur Convention Centre.
### Moulding Future Scientists

The annual MRSM Science Camp for 2014 was themed "Scientists for Tomorrow", once again organised by the Fundamental and Applied Sciences Department of the Faculty of Science and Information Technology (FSIT) in collaboration with Majlis Amanah Rakyat (MARA).

This year, 150 students from MRSM schools around the country were exposed to various science-based activities including hands-on lab research, information collation, and report writing.

Targeted to nurture and cultivate interest in science, this annual camp encourages students to delve into their creative, scientific and innovative sides and to open their eyes and minds to the possibilities and potential of science and research.





### Academia Meets Industry

It was a meeting of academia and industry when the UTP scholars from its Master of Business Administration in Energy Management (MBA-EM) programme met with the top brass from PETRONAS in April.

Organised to welcome the MBA-EM's September 2013 and January 2014 cohorts, this networking event provided the scholars a glimpse into the corporate world and encouraged the sharing of ideas and experiences with industry leaders.

Held to welcome the scholars, the gathering was part of the MBA-EM programme's value proposition and holistic educational objective to provide the scholars with a wider world-view of industry.



# UTP Interns and the Formula One Team

Eight UTP interns pitted their wits and skills and became part of the winning team that clinched both the 2014 F1 Constructors and Drivers World Championship awards.

Interning with the Mercedes AMG PETRONAS Formula One Team (MAMGP F1 Team) for 7 months from 30 September 2013 to 17 April 2014 in Brackley, United Kingdom, they put in hard work, dedication and commitment to the task at hand.

Diligently completing all tasks and responsibilities, they worked on the winning Mercedes F1 W05 Hybrid Car, helping to construct and fabricate the vehicle to its optimum performance and capacity.



## Cultural Exchange with Japan

Continuing our ties with international counterparts, UTP welcomed nine students and three lecturers from the Institute of National Colleges of Technology (KOSEN), Japan for the UTP-KOSEN Education and Cultural Exchange Programme.

This exchange programme is part of our efforts to increase collaborations and secure ties with renowned international universities as we pursue our goal of becoming an internationally recognised institution of higher learning.

During their time at UTP, our Japanese friends observed our engineering lectures and classes, joined the English Language lessons and visited laboratories as well. They also participated in UTP's Engineering Team Project (ETP), under the supervision of Dr Hilmi Hussin of the Mechanical Engineering Department.

#### Annual Report 2014 | 73

## Welcoming Our First Adjunct Professor



UTP welcomed and appointed Prof (Adj) Mohd Sapihie Ayob as its first Adjunct Professor early in the year. This appointment was indeed a historic event for the university and is testimony of the university's good relations and collaborative efforts with industry.

Attached to the Civil Engineering Department, Prof (Adj) Mohd Sapihie Ayob is currently a Technical Authority (Structural) at PETRONAS Group Technology Solution (GTS). His first stint with PETRONAS was in 1992 as a Senior Engineer for PETRONAS Research Institute (PRI) (now known as PETRONAS Research Sdn Bhd). A prominent figure in the SKG11 fraternity, he plays a vital role in steering this skill group to greater heights.

Prof (Adj) Mohd Sapihie Ayob's involvement with UTP started in 2007 when he was appointed to the Industry Advisory Panel (IAP) for the Civil Engineering Department. He served as an IAP member for the department until 2011.



### Showcasing Scientific Knowledge and Engineering Skills

More than 500 students brought their science and engineering skills to the table at the 33rd Science and Engineering Design Exhibition (SEDEX 33) held on campus.

Some very interesting and innovating ideas were presented and exhibited, reflecting the innovative spirit that UTP upholds and constantly nurtures among its students and staff.

These included the Automatic Qibla Direction Finder for Blind People (QiBlind), Visual Approach for Educating Autistic Children, Water-LESS Washing Machine, Solar Powered Antimosquito Device and Automated Diagnosis for Supraspinatus Tendon. Learning gives creativity, Creativity leads to thinking, Thinking provides knowledge, Knowledge makes you great ... Abdul Kalam



#### Annual Report 2014 | 76

## DEPUTY VICE CHANCELLOR RESEARCH AND INNOVATION Prof Dr. Abdul Rashid Abd Aziz

UTP is founded with a vision to be a leader in technology education and a centre for creativity and innovation. We have made great strides towards achieving the former, and in fact we are already recognised as a premier university for technology education.

Actively pursuing the latter, research and development continues to be the thrust of UTP, keeping with the university's direction towards becoming a world class research university.

Continued emphasis in this area has led to numerous collaborations with international universities of repute in 2014 and we are happy to say that we are gaining momentum on this ride towards our future.

We have joined hands with several distinguished global institutions in key areas of research and this will propel us further into the world of research and development, with a special emphasis on technology, as per our forte.

One of these is the exciting linkage with Lehigh University of the USA that will see the meeting of great minds from both universities in the arena of construction technology and oil and gas.

This oil and gas research tie-up is especially important as Lehigh has advanced technology that is generally unavailable in Southeast Asia and would be greatly beneficial to our industry at home. Down under, we have linked up with the University of Melbourne on a few areas including gas purification fracking technology, water purification, neuroscience and neural engineering.

Meanwhile with Monash University, we are looking to evaluate the performance of materials during shale gas production and also to investigate corrosion in pipelines. Biomedical signal and imaging work on the brain is another area of interest with this esteemed Australian university.

China is another research partner through the Chinese University of Petroleum Beijing with whom we will be sharing information regarding enhanced oil recovery, petroleum geoscience and drilling engineering.

We must also mention Case Western Reserve University who is working with us on the development of lightweight structures for automotive applications and materials with directionally controlled properties.

These are just some of the collaborations we established during the year, all of which will contribute greatly to the advancement of knowledge and research for both UTP and the institutions we have partnered with.

In total, we signed 20 MoU's in 2014, with 13 universities and 6 industries and research institutions across 4 continents. Each and every one of these alliances, partnerships and associations are crucial to UTP's future as a worldclass research facility and they have a multifold impact for us. The transfer of knowledge and technology will allow us to incorporate industry-relevant and upto-date information into our academic curriculum. This will further enhance our academic positioning as a university that produces industry-ready and industry-relevant graduates.

Research tie-ups also augur well for rankings and ratings, as 40% of international ratings usually comprise peer reviews, especially for the QS rankings which we are gunning for.

Meanwhile, our links with industry places us in a position to access the expertise of industry practitioners, enhancing the opportunities for postgraduate students and graduate career opportunities.



## On the Yellow Brick Road Towards Our Goal

As we look back on the year gone by, one of our greatest milestones was being awarded the 5 Star rating for Innovation by the Quacquarelli Symonds (QS) rating service. This prestigious award is testament that we are on the right path towards our ultimate goal.

Research and development is most certainly one of the core drivers of a university. While churning out new knowledge and products that benefit the world, it is also a hallmark of progress and a measure of prestige for an institution of higher learning.

This said, we must also be aware that innovation and research is not just for prestige or academic exercise. The primary aim is to bring benefit to people. Research then can only be considered successful and beneficial when it creates wealth, either in terms of increased efficiency or productivity or new ways to perform existing tasks. Cognisant of this, UTP is constantly identifying patentable research and we are prolific in our applications for patents. In 2014, we applied for 72 patents, of which 11 were granted. We were also elated and honoured to be granted our very first overseas patent. This was in the United States in the field of Digital Imaging.

The steps we have taken in the area of research and development the past year have taken us further than we have ever been in this arena. The road however is still long and the world of research is infinite.

So while we say "Kudos" to UTP for all the successes of the year we leave behind, let us not rest on our laurels. For to be satisfied is to stop growing and improving; and when we stop growing we start dying.





## Research and Innovation Awards

## 25th International Invention, Innovation & Technology Exhibition 2014 (ITEX 2014), 8 - 10 May 2014

I	NAME	TITLE ACHIEVEMENT	AWARD
1.	Aamir Saeed Malik, Assoc Prof Dr.	Track 3D	Gold
2.	Abd. Rashid Bin Abd. Aziz, Prof Dr.	Free Piston Linear Generator	Gold
3.	Ahmad Majdi Bin Abdul Rani, Assoc Prof Dr.	Sprocket Ring Chain	Gold
4.	Cecilia Devi A/P Wilfred, Assoc Prof Dr.	Amino Acids Polymerized Ionic Liquids (APILS) For CO2 Capture	Gold
5.	Chong Fai Kait, Assoc Prof Dr.	Photo_Des: Deep Desulfurization Photo System	Gold
6.	Dayang Rohaya Binti Awang Rambli, Assoc Prof Dr.	6AR ALPHABEES	Gold
7.	Faiz Ahmad, Assoc Prof Dr.	Nano Ceramic Filler Based Intumescent Fire Retardant Coating For Structures	Gold
8.	Hanita Binti Daud, Dr.	PAMOSYS - T	Gold
9.	Ibrahima Faye, Assoc Prof Dr.	Video Inpainting Based On GLCM	Gold
10.	Irraivan A/L Elamvazuthi, Assoc Prof Dr.	MENSA	Gold
11.	Isa Bin Mohd Tan, Assoc Prof Dr.	FOMAX	Gold
12.	John Ojur Dennis, Assoc Prof Dr.	CMOS Compatible MEMs Magnetometer	Gold
13.	Mohamed Ibrahim Bin Abdul Mutalib, Prof Dr.	IOLI OIL - Upgrading Base Oil From Group I API Class to Group II/III By Liquid Extraction with Ionic Liquid	Gold
14.	Mokhtar Bin Che Ismail, Assoc Prof Ir Dr.	PH Sensor Device for Corrosion Monitoring	Gold
15.	Muhd. Fadhil Bin Nuruddin, Prof Ir Dr.	Flex-RPC	Gold
16.	Nasir Shafiq, Prof Dr.	PETROASH Cement	Gold
17.	Nasir Shafiq, Prof Dr.	POZZO-CEM MK	Gold
18.	Noohul Basheer Bin Zain Ali, Dr.	IRobot & ERobot	Gold
19.	Norani Muti Binti Mohamed, Prof Dr.	Carbon Dioxide (CO2) Ionization-CNT Detector (ICD)	Gold
20.	Salah Elias Zoorob, Assoc Prof Dr.	VEGEBLOCK	Gold
21.	Satirenjit Kaur Johl A/P Pritam Singh, Dr.	MYCGSCORE	Gold
22.	Satirenjit Kaur Johl A/P Pritam Singh, Dr.	MYCGSCORE	Special Award
23.	Suzana Binti Yusup, Assoc Prof Dr.	In-SITU Conversion of Plastic and Agricultural Waste to SYNGAS (W2E)	Gold
24.	Teh Hee Min, Dr.	An Innovative Ocean Wave Suppression System : HFLOAT	Gold
25.	Wan Fatimah Binti Wan Ahmad, Assoc Prof Dr.	MathdsC	Gold
26.	Wong Peng Wen, Assoc Prof Dr.	DR MICROWAVE Filter	Gold
27.	Yoshimitsu Uemura, Prof Dr.	Integrated Methyl Ester Blending System Using Hydrodynamic Cavitation	Gold

### British Invention Show (BIS 2014), 22-25 Oct 2014

NAME TITLE ACHIEVEMENT		AWARD
1. Bashar S. Mohammed, Assoc Prof Dr.	Thermo Eco Rubbercrete Hollow Block	Gold
2. Bashar S. Mohammed, Assoc Prof Dr.	Thermo Eco Rubbercrete Hollow Block	Special Award

### Malaysia Technology Expo (MTE 2014), Kuala Lumpur, 20 - 22 Feb 2014

NAME		AWARD
1. Masri Bin Baharom, Assoc Prof Ir Dr.	Development of a Novel Small Scale Two- Stroke Crank-Rocker Combustion Engine	Special Award
2. Masri Bin Baharom, Assoc Prof Ir Dr.	Development of a Novel Small Scale Two- Stroke Crank-Rocker Combustion Engine	Gold
3. Morgan Raymond Heikal, Prof Dr.	High Pressure Free-Piston Linear Generator	Gold
4. Morgan Raymond Heikal, Prof Dr.	High Pressure Free-Piston Linear Generator	Special Award
5. Nor Hisham Bin Hamid, Assoc Prof Dr.	iRobot & eRobot : Enabling in-Situ Test and Debug of On-Board Integrated Cirucuits	Gold

### International Research and Innovation Expo (IIF2014), 17 - 18 May 2014

NAME	TITLE ACHIEVEMENT	AWARD
1. Hilmi Bin Mukhtar, Assoc Prof Dr.	A Novel Polysufone-Polyethersulfone Blend Membrane For CO2 Separation	Gold
2. Lau Kok Keong, Assoc Prof Dr.	Developing New Process For CO2 Capturing Toward Commercialization of Gas Hydrate Technology	Gold
3. Zakaria Bin Man, Assoc Prof Dr.	Tapstar Gel-Soil Conditioner and Slow Release Fertiliser	Gold

### Invention, Innovation Germany (iENA 2014), 1-Nov-14

NAME	E TITLE ACHIEVEMENT	
1. Fawnizu Azmadi Bin Hussin, Assoc Prof Dr.	Android device based Diabetic Retinopathy Grading System	Gold
2. Mohd Haris Bin Md Khir, Assoc Prof Dr.	CMOS Compatible MEMs Magnetometer	Gold

## The World Exhibition on Invention Research and New Technologies 2014 (INNOVA), Brussels, Belgium, 13 - 15 November 2014

NAME	TITLE ACHIEVEMENT	AWARD
1. Cecilia Devi Wilfred, Assoc Prof Dr.	Amino Acids Polymerized Ionic Liquids (APILS) For CO2 Capture	Europe France
2. Cecilia Devi Wilfred, Assoc Prof Dr.	Amino Acids Polymerized Ionic Liquids (APILS) For CO2 Capture	Gold
3. Ibrahima Faye, Assoc Prof Dr.	MENSA	Gold
4. Ibrahima Faye, Assoc Prof Dr.	MENSA	Special Award-Europe France Inventeur
5. Mohamed Hasnain Isa, Assoc Prof Ir Dr.	Anaerobic Coupled-Integrated Sequential Anoxic Aeobic (An-ISA) Reactor	Gold
6. Mohamed Hasnain Isa, Assoc Prof Ir Dr.	Anaerobic Coupled-Integrated Sequential Anoxic Aeobic (An-ISA) Reactor	Special Award-Europe France Inventeur
7. Mokhtar Che Ismail, Assoc Prof Ir Dr.	Mobile Insitu Corrosion Tool(MiCorr)	Gold
8. Mokhtar Che Ismail, Assoc Prof Ir Dr.	PH Sensor Device For Corrosion Monitoring	Special Award-Europe France Inventeur
9. Mokhtar Che Ismail, Assoc Prof Ir Dr.	Mobile Insitu Corrosion Tool(MiCorr)	Special Award-Russia
10. Nasir Shafiq, Prof Dr.	PETROASH Cement	Gold
11. Nasir Shafiq, Prof Dr.	PETROASH Cement	Special Award-Europe France Inventeur

## Malaysian Road Conference - Invention & Innovation Exhibition (MRC-IIE) 2014, 10 - 12 Nov 2014

NAME	TITLE ACHIEVEMENT	AWARD	
1. Bashar S. Mohammed, Assoc Prof Ir Dr.	Bridge Deck Link Slam Made of Engineered Cementitious Composite	Gold	
2. Khamaruzaman Bin Wan Yusof, Assoc Prof Ir Dr.	Slope Protection Using Neural Network	Gold	

### HIGHLIGHTS

## RESEARCH AND INNOVATION EVENTS



## Setting the Stage for Virtual Reality

Contemporary in its outlook and visionary in its planning, UTP took the first step towards establishing a Centre of Excellence for Virtual Reality (VR) within its campus.

A Memorandum of Understanding was signed with Virtalis Limited and Thames Technology Sdn Bhd, a collaboration that has led to the establishment of a Virtual Reality Lab and GeoVisionary visualisation centre at UTP. The specific objective of this effort is to develop talent and produce certified professionals in the various spheres of VR, as well as to enhance design, training and maintenance procedures in the engineering and oil and gas fields.

This collaboration also enhances university-industry collaboration in driving cutting edge research to meet market demands. Simultaneously it will also support local industries and communities through the joint research efforts between UTP and Virtalis. More possibilities will be explored as available technology is married with industrial standard measurement and testing equipment to support the teaching and R&D activities at UTP.

This brings UTP one step closer to becoming the first university in Asia to establish a Centre of Excellence for Virtual Reality.



### And The Winning Car is....

While hybrid cars are becoming all the rage, UTP has produced a chemical car that emerged as the overall champion in the 3rd Indonesia Chem-E Car Competition held in April. The competition was held at at Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia.

UTP's Chem-E Car named Vermi Energizer 4.0, is powered by Vermi battery and uses hydrogen peroxide decomposition as a stopping mechanism. It can run for 12 hours at a constant speed of 0.28 m/s, and cover a distance of 12.1 km. In terms of performance, it only recorded a 2% margin of error, the lowest in the competition. Cheers to our home team for this commendable effort!

Texas A&M Engineering Experiment Station (TEES) is now a partner of UTP in the area of process safety.

This collaboration will cover various academic and research activities, which include the transfer of technology and the sharing of advanced knowledge. The two establishments will organise staff and student exchange events, conduct joint research projects as well as lectures, symposia and conferences.

UTP also recently established a Centre for Advanced Process Safety (CAPS) to provide support in the advancement of knowledge, research and services to industries in the effort to safeguard the industrial workplace. CAPS is presently working together with the Chemical Engineering Department to introduce the MSc in Process Safety programme in 2015. Strategic linkages and partnership have been established with industries, the government and international institutions to match the programme content with industrial needs.

This strategic collaboration with MKOPSC TEES will further strengthen the scientific and technical capabilities of CAPS UTP in research and academia with reference to advanced process safety.

## Tie Up with TEES in Process Safety



In conjunction with the MOSTI Commercialisation Year 2014, UTP teamed up with NanoMalaysia Bhd to venture further into nanotechnology and explore its various offerings and benefits.

This collaboration will see UTP and NanoMalaysia working to develop technology in this area of science, forming the general framework for the development of new business as well as creating awareness and promoting nanotechnology to industries.

The two partners will also work on researching, inventing and commercialising viable nanotechnology products. The very first project of this collaboration was a work on the coppercarbon nanotubes nano-composite thermal management product which significantly improves heat dissipation. The success of this work will be highly relevant and valuable to many sectors such as electronics, automotive, IT, etc.

## Hosting SCMSM 2014

UTP for the first time ever organised and hosted the 23rd Scientific Conference of Microscopy Society Malaysia (SCMSM 2014).

This was a collaborative effort between Microscopy Society Malaysia and UTP's Centre of Innovative Nanostructures and Nano-devices, the Fundamental & Applied Sciences Department and the Centralised Analytical Laboratory.

This annual event is a gathering of experts and researches who come together to present and discuss the most recent developments in the fundamental and applied aspects of microscopy with a special focus on nanoscience and nanotechnology.

The honour of hosting renowned conferences such as these enhances UTP's branding and networking amongst the public universities, thus propelling us further into the world of academia and research.

## **Expanding Efforts in Nanotechnology**





### The Recipient of MOSTI's Highest Grant



UTP became the recipient of the highest grant awarded by the Ministry of Science, Technology and Innovation (MOSTI) in 2014 when it received RM1.3 million from the TechnoFund for a single project.

The award was for UTP's "Rescue-I Monitoring System" project led by Assoc. Prof Dr. Ahmad Kamil Mahmood, the Dean of the Faculty of Science and Technology. The other key researchers are Dr. Hanita Daud, Assoc. Prof Dr. Jafreezal Jaafar, Ir Dr. Nursyarizal Mohd Nor, Assoc. Prof Dr. Irraivan Elamvazuthi, Azwin Azrina Ahmad and Ruzaini Rahmad. The "Rescue-I Monitoring System" is an IT monitor made up of four components — the physiology monitor integrated transceiver, breathing air level transmitter and portable control unit, all developed by the UTP team. This gadget will be especially useful for monitoring the vital statistics of firefighters in the thick of firefighting action.

The integration of the four components makes for an innovative and novel system and is the first of its kind in Malaysia and ASEAN countries. It was developed with the support of the Perak Fire and Rescue Department (BOMBA) which has played a vital role in providing user requirements, conducting field tests and obtaining international certification. Produced at a competitive price, it has great local and international potential.

The MOSTI TechnoFund is a scheme that aims to stimulate the growth and successful innovation of Malaysian enterprises by increasing R&D levels and commercialisation efforts. The scheme provides funding for technology development, up to the pre- commercialisation stage, with the commercial potential to create new businesses and generate economic wealth for the nation.

### **CISIR Recognised as a HICoE**

One of UTP's Centres of Excellence (CoE), the Centre for Intelligent Signal and Imaging Research (CISIR) was recognised as a National Higher Institution Centre of Excellence (HICoE). This status accorded by the Ministry of Education (MOE) is another feather in our cap and strengthens our position as a research university.

CISIR focuses on biomedical image analysis with neuro-chemical imaging as its research niche area. With this recognition as a national CoE and with MOE's support, CISIR is geared to become a global research centre in biomedical imaging research.

Through its fundamental research, collaboration and networking as well as contribution to human capital development, CISIR aims to produce breakthrough research and innovation that will be highly relevant and impactful to society. This is in accordance with the National Higher Education Strategic Plan and also UTP's mission in the world of research.

CISIR is one of the leading intelligent signal and imaging research groups in Malaysia. It undertakes research in advanced signal and imaging processing techniques and the implementation of real-time embedded systems. CISIR conducts translational research in realworld multi-disciplinary areas such as biomedical engineering, visual surveillance, remote sensing and neuroscience.





Accreditation for UTP's Centralised Analytical Laboratory (CAL) & Control and Instrumentation Laboratory (CAIL) Standards Malaysia recognised UTP's Centralised Analytical Laboratory (CAL) and Control and Instrumentation Laboratory (CALL) for its calibration and testing methods, procedures and equipment.

Both laboratories were deemed as meeting international standards and received the MS ISO/IEC 17025:2005 certification. The laboratories were accredited under the Laboratory Accreditation Scheme of Malaysia (SAMM), as they not only meet both technical and management requirements for testing and calibration competency, but also operate in accordance with MS ISO 9001, Quality Management Systems.

The accreditation also acknowledged the well-trained personnel of both the labs.

It is indeed heartening to know that we are on the right track in these efforts; and meeting international standards deepens and strengthens our foundation in the international arena.



## UTP Sets Up Huawei Lab

UTP, Huawei and Multimedia Development Corporation (MDeC) are now partners. The three parties have set up the UTP-Huawei Communications Laboratory (HUTL) within UTP with a view to accommodate both UTP's and Huawei's training and research needs.

This collaboration led to the offering of the Huawei Certified Datacom Associates (HCDA) certification programme at UTP. Its specific objective is to develop talent and certified professionals in ICT-related areas among UTP undergraduate students. It will also support the need for up-skilling training requirements for the local community in the northern part of Perak.

## Tell me and I forget, Teach me and I remember, Involve me and I learn...

**Benjamin Franklin** 



## FROM THE DESK OF THE DEPUTY VICE CHANCELLOR STUDENT AFFAIRS AND ALUMNI Mohamed Noor Rosli Baharom

As an institution of higher learning, our first and foremost role is the provision of tertiary education for students, without whom we would not be. The relationship between a student and a university is co-dependent and interdependent, one cannot exist without the other. These students are the future of the country, they are the ones who will hold the reigns and drive the economy and the leadership of the future.

The Student Affairs Department aims to facilitate and provide a holistic student experience, to nurture and increase every student's sense of selfworth and to guide their career pathways. The focus is to mould students to become well-rounded graduates through personal and professional development, leadership training and service to others.

At UTP, our wide and varied co-curriculum activities are designed to mould our students into well-rounded individuals. The goal is to produce graduates who are inspired with a desire for lifelong learning and who possess strong critical and thinking abilities; graduates who are solutionoriented, and equipped with business acumen as well as social and communication skills. One of the ways we do this is by ensuring that our students receive all the support they need during the time they spend with us. Firstly, we have two student bodies - the Student Representative Council (SRC) and the Post-Graduate Student Council (PGSC) - and 12 support groups to facilitate this. UTP also has 42 registered clubs and societies. In addition, we also encourage our students to set up Student Interest Groups (SIG) to draw in the participation of more students and cater for their varied interests. To date, 24 SIGs have been initiated by the students themselves.

All these are structured activities on campus that encourage students to take on leadership roles and also work together in teams; and when activities include and involve the local people, they allow the students to interact with the community at large.

Meanwhile, our Academic Enhancement Programme is another effort to ensure our students are wholesome, well-rounded achievers. Under this programme, we divide the students into three groups - the Silver Achievers (CGPA of below 2.0), the Gold Achievers (CGPA of 2.0 -3.49) and Platinum Achievers (CGPA of 3.5 and above). Specially designated counsellors plan, develop and implement academic enhancement programmes and activities for each group according to needs.

For example, the Silver Achievers will be exposed to activities and programmes that focus on improving grades and instilling a passion for learning.

The target here would be to increase their grades. These students would perhaps also benefit from a good dose of motivation and time-management skills to increase their efficiency in learning and studying.

The Gold Achievers, on the other hand, will be guided to have a clearer vision of their dreams and aspirations and to go that extra mile to achieve those goals. As for the Platinum Achievers, the cream of the crop, they will be imbued with leadership and management skills, and taught how to excel further and be role models for others.

# A Complete Learning Opportunity

To enhance employability and strengthen the current and existing partnership between industry and university, four sessions of roundtable discussions were conducted with the industry. They were held in Penang, Ipoh, Johor Bahru, and Kertih. These university-industry roundtable discussions provide us valuable insights about the performance of our graduates and how they fulfil the needs of industry. Through the feedback received, we have a better understanding of issues at hand and are enlightened about competency gaps that need to be closed to ensure our graduates better meet industry requirements.

Supported by our 7-month industrial internship programme that continues to receive much acclaim, we have been able to maintain an excellent employment record for our fresh graduates.

The year 2014 also saw our students bringing home numerous awards across the academic, sports and cultural arenas. UTP brought home the Gold Award in the UTP PETROBOTS Malaysia International Robots Competition, and emerged as overall champion for the third consecutive year in the Sukan MASISWA Zon Utara, and overall champion for the fifth consecutive year in the International Student Sports Carnival. Meanwhile, we also won the champion's trophy for the MASISWA – Rugby 10. Also in August last year, one of our students clinched the bronze medal in the World Taekwando Hammadang Championship held in South Korea.

As such, in sports, UTP is now the top university among all the local private universities and colleges in Malaysia. At the national level, our rugby, volleyball and netball teams are recognised as the top teams. We also produce the best runners for middle distance and long distance running events. While our students bring home fame and glory for UTP, we also encourage them to give back to society through active participation in CSR projects. In 2014, UTP carried out 77 CSR activities. The activities focused on education and socio-economic projects and saw our students contributing their time and effort to improve the education level and lives of the less fortunate people around them.

As a whole, tertiary education with UTP is a complete education about life and everything that one would need to exceed expectations and excel in the business of living. Students walk through the doors as young minds, canvasses waiting to be painted on, and they walk out armed with life skills, knowledge and learning that allow them to hold their own in the competitive environment out there.

The UTP experience is one that strengthens their understanding of the world around them and deepens their respect of each other. It cultivates a global mindset with universal values and teaches them to work effectively for the benefit of society and industry.

It is, as such, a complete learning opportunity that helps to mould worthy global citizens.

Do Good, Do More, Do Better.





# Student Achievements

EVENT/TOURNAMENT	DATE	VENUE	ACHIEVEMENTS
1. UTAR Run 2014	24 Aug	UTAR Kampar	Men : No 5,6 & 8, Women : No. 2
2. We Run Lumut 2014	28 Sept	Lumut, Perak	Previna - No.2 in Women Open Category
3. Run For A Second Chance	4 Oct	Taman Tasik Titiwangsa, KL	1 st Place
4. Allianz Pacesetter 3 x 4 Km	14 Dec	Padang Merbok, KL	1st place
5. Sukan Institusi Pengajian Tinggi Malaysia (SukIPT)	3 - 16 Feb	Shah Alam & Klang Valley	1 Gold & 2 Silver (No. 30/107)
6. Grand Asean Chess Championship (GACC) 2014	22- 28 Jan	Universiti Malaya (UM), KL	No. 6th Overall (No. 2 for Malaysian Team)
7. 9th Malaysia Chess Challenge 2014	14 - 22 Sept	Midvalley Megamall, Kuala Lumpur	3rd Place
8. MASISWA - U Nilai Chess IPT	18 Oct	Nilai University, Nilai, NS	Champion
9. USM Flood Light Cricket Tournament 2014	31 May - 1 June	USM, Penang	Champion
10. KPM - Nilai University Fencing IPT	15 - 17 Aug	Nilai University, Nilai, NS	Quarter Final
11. Liga Bolasepak Peringkat Kelayakan Masiswa Zon Utara 2014	6 - 9 Mar	Albukhary University & Kolej Universiti Insaniah (KUIN)	1st Runner Up
12. Futsal Weekly Champion	15 Jan	Dynamic Futsal, Bota	Quater Final
13. Liga Futsal Perak Tengah 2014	Jan - Feb	Dynamic Futsal, Bota	Champion
14. Silver Fox Tournament Ramadhan	12 July	Silver Fox Futsal Centre, Ipoh	Quater Final
15. Coach Futsal Tournament	28 - 30 Nov	Sports Planet, Ampang, KL	1st Runner Up
16. Pesta Sukan Institusi Pengajian Tinggi Islam Malaysia (IPTIM) 2014	27 Nov	KUISAS, Kuala Kangsar	2nd Runner Up
17. Pesta Hoki Antarabangsa USM 2014	6 - 7 Dec	USM	Semi Final Plate
18. Kejohanan Judo KPM - Nilai University 2014	20 - 23 Mar	Nilai University	1 Gold & 1 Silver
19, 2014 Penang Judo Championship	25 May	YMCA Hall, Penang	1 Silver & 1 Bronze
20. Kayak Festival Kenyir 2014	3 - 6 May	Tasik Kenyir, Terengganu	3rd Runner-Up
21. Kejohanan Bola Jaring Terbuka Masiswa - IKIP 2014	20 - 21 Sept	UIAM, Kuantan, Pahang	1st Runner Up
22. Liga Sukan Untuk Semua - Netball	1 Nov	Parit, Perak	Champion
23. Liga Sukan Untuk Semua Peringkat Negeri Perak	15 Nov	Dewan MPM, Manjung	Quater Final
24. International Pencak Silat Championship Piala TPM	15 - 20 Sept	Mydin Hypermarket, Ipoh	1 Bronze
25. Kejuaraan Pencak Silat Antarabangsa Festival Sukan Kombat 2014	11 - 14 Dec	Kompleks Pencak Silat, Batu Uban, Pulau Pinang	2 Bronze
26. Kejuaraan Pencak Silat UPSI Dan Jemputan Antarabangsa Ke-5, 2014	12 - 16 Mar	UPSI, Tanjung Malim	1 Silver, 4 Bronze

EVENT/TOURNAMENT	DATE	VENUE	ACHIEVEMENTS
27. 14th Labuan Rugby 10, 2014	26 - 30 Sept	Labuan, Sabah	2nd Runner-Up Plate Category
28. Ragbi Super 8 IPT	17 - 19 Oct & 31 Oct - 2 Nov	UPM, Serdang	Semi Final Plate
29. MASISWA - Uniten Rugby 10S	13 - 14 Dec	UKM, Bangi	Champion
30. Kejohanan Wajadiri Nasional Persatuan Seni Silat Cekak Hanafi UMT 2014	17 - 19 Apr	UMT, Terengganu	3 Gold, 4 Silver & 1 Bronze
31. Kejohanan Ping Pong IPT 2014	24 - 29 Sept	UTeM, Melaka	Team Event - Grouping Stage & 1st Runner - Up Stage
32. Kejohanan Tenis Tertutup MAKSAK Perak 2014	18 - 19 Oct	Kompleks Sukan MBI, Ipoh	Quater Final
33. Liga 5 Penjuru KRT 6 Manjung	15 Feb	Stadium MPM Seri Manjung	1 st Runner Up
34. Liga Bola Tampar Jemputan Tronoh VC 2014	21 June	Dewan MPM, Manjung	Champion
35. Kejohanan Bola Tampar Terbuka Sempena Hari Malaysia 2014	13- 14 Sept	SRJK(C) Aulong, Taiping	2nd Runner Up
36. Kejohanan Bola Tampar Manjung Kali Ke-5, 2014	19 - 21 Sept	Gelanggang Astaka, Setiawan, Perak	Male - 2nd Runner - Up & Female - Grouping Stage
37. Kejohanan Kuala Lumpur, Selangor, Perak, Negeri Sembilan Powerful KKCHIA Wudo 2014	l June	Pusat Komuniti Intan Baiduri, Taman Intan Baiduri, Kuala Lumpur	2 Gold, 1 Silver and 3 Bronze
38. National Wu Do Championship	16 - 17 Aug	Kompleks Sukan Titiwangsa, Kuala Lumpur	1 Gold & 4 Bronze
39. Wushu Federation of Federal Territory Kuala Lumpur	13- 14 Sept	SRJK(C) Nan Kai, Kuala Lumpur	1 Gold Medal

## HIGHLIGHTS

## **STUDENT AFFAIRS AND ALUMNI** EVENTS

### Sector Focused Career Fair: Technology, Education and Career



Talent Corporation Malaysia Berhad (TalentCorp) and UTP hosted its Sector Focused Career Fair: Technology, Education and Career (SFCFTEC) focusing on engineering, oil, gas and energy.

It showcased 65 companies such as SapuraKencana Petroleum Berhad, PETRONAS, Shell, Murphy Oil, Schlumberger, Petra Energy, SBM Offshore, Talisman and Scomi Oil Tools.

SFCFTEC also organised a roundtable discussion that brought together over 60 delegates from the oil and gas industry to discuss how graduates could further prepare themselves to meet industry requirements.

Among the activities featured were the Future Scientist Eco-Challenge 2014, designed to educate and inspire young high school students to overcome challenges in tackling energy, water and food issues. Other activities such as the Innovation City Challenge explored entrepreneurship and communications skills among the participants.

These fairs are the initiatives of TalentCorp aimed to introduce and promote career opportunities to graduates. They are also ideal platforms for companies to scout for budding young talent in various fields.

## Syafiq Grabs Gold in Wushu Competition

Muhammad Syafiq Lokman from the UTP Wushu Team clinched a gold medal in the Wushu Federation of Federal Territory Kuala Lumpur Sanshou Competition 2014.

Syafiq, an Electrical and Electronic Engineering student, took part in the Sparring (60.1-65kg) category and was victorious against his opponent from the Selangor Sparring Team in the finals. Despite being the only athlete representing our Wushu Team, Syafiq did not falter and proudly fought on with high spirits and determination to clinch the coveted gold medal.





## UTP Alumni Gathers for Iftar

To celebrate the holy month of Ramadhan, UTP Alumni organised a UTP Iftar Alumni Gathering at KLCC. Everyone was invited, Muslims and non-Muslims, z in the spirit of a united Malaysia.

On another note, UTP Alumni has decided to collaborate with HRM and Human Resource Shared Services Centre (HR SSC) PETRONAS and to create a platform for all UTP alumnus to serve PETRONAS its subsidiaries. This will enable them to give back to their alma through a monthly salary deduction. With this contribution members could:

(i) Contribute to Zakat – Members can pay zakat via salary deductions to UTP as the university has been appointed as the "Amil" for "Majlis Agama Islam Perak".

(ii) Contribute to UTP Alumni – This is to enable members to contribute to the expansion of the UTP Alumni brand. One of the ways would be to conduct activities to enhance its image within its surrounding community. Annual Report 2014 | 100

# Taking UTP Sports to the Highest Level

Pushing limits and crossing boundaries, our athletes reached for the stars and brought home the championship title for the International Student Sports Carnival 2014 (ISSC).

This annual tournament promotes healthy and productive integration among university students, local and international, while encouraging the students to participate in sports as a healthy and beneficial activity.

The tournament was held at Universiti Tenaga Nasional (UNITEN) from 19-21 December 2014, organised in collaboration with the Ministry of Education.





### A Bronze Medal in the World Taekwondo Competition

The UTP Taekwondo Team represented by Muhammad Faisal Redzwan Md. Roslee, Nik Nur Nailini Nik Ab. Rashir, Nurfarah Hanim Abdullah and Aiman Naafiz Shahrul did the university proud when they snatched a bronze medal in the Authorized Poomsae Category at the World Taekwondo Hanmadang 2014. This achievement was a double victory as it was also their debut performance in the international arena.

The Taekwondo Team was the first sports team selected to represent UTP internationally as they had shown outstanding performance in the previous years and in this year's Sukan Institusi Pengajian Tinggi Malaysia (SUKIPT).

## Another Sports Trophy to be Proud of

UTP's participation in the Kejohanan Sukan MASISWA Zon Utara 2014 was a resounding success. This victory was represented by the Overall Champion trophy that our sportsmen and sportswomen clinched right here in our campus grounds.

The event that ran from 7 - 9 November 2014 saw the participation of more than 600 athletes and officials from 8 private education institutions in the Northern Zone. It was fully sponsored by the Ministry of Education and MASISWA.





### Winning Melodies at Red Sonata

The UTP Chinese Orchestra (UTPCO) played beautiful music at the Red Sonata Fiesta 2014. Their melodies made their way into the hearts of the judges who proclaimed them the champion of the competition.

This Red Sonata Fiesta was organised with UTPCO itself in collaboration with the Kedah Chinese Assembly Hall.

## Intelligence + Character = That is the goal of education....

**Martin Luther King Jr** 



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# CORPORATE SOCIAL RESPONSIBILITY Giving Back to Society

UTP's role as an institution of higher learning is not only in the provision of book knowledge and skills for our students. Our activities in the community are also learning experiences while also fulfilling our Corporate Social Responsibilities.

UTP's CSR initiatives are centred around education, the economies of surrounding communities and the environment through smart partnerships with sponsors and relevant agencies. While funds are a much needed resource for this work, the vision is to shift the mindset and move from philanthropy to actually creating sustainable change . This is done through the CSR domains of health & well-being, access to information, growth through innovation and capability building for empowerment.

One of our ongoing CRS projects is the community of Kg Aji whom we have taken under our wing. Collective efforts of students, staff and sponsors are channeled towards building this community and improving lives here not only through services rendered and provisions met. One of the key activities is also empowering the people through education and training and opening up channels for income generation to enable them to be selfreliant and self-sufficient.

Results are now being seen within the community, out of which has come a new chilli sauce factory. Single mothers have learned sewing while young farmers have been trained and assisted, all towards empowering the people to self-sustain their livelihood.

Education wise, UTP reaches down to the grassroots of the surrounding community to improve the academic performances of school students and promote interest in Science, Technology, Engineering and Mathematics (STEM). Both staff and students participate in these activities.

We are also working in collaboration with FRIM in the area of environmental management and sustainability. Within our 400-acre campus there are seven ex-mining ponds that we are rehabilitating while also protecting 4 endemic trees from extinction.

Other activities during the year included the continuation of Convoride with the donation of 200 bicycles to underprivileged children from 17 schools. This is an impressive jump from the 20 in 2012 and 25 in 2013.

Most of our CSR activities are designed and led by the Centre for Social Innovation (COSI) and we are glad to be able to say that UTP leads by example, through our close and direct engagement with society.



## Bringing Smiles to Underprivileged Students

UTP's annual CSR initiative - Menggapai Impian - continued its mission to support the education of underprivileged children. This time around, 100 students received help in cash and kind to set them up for the new school year.

Menggapai Impian, is now in its eight year. Under this CSR programme, UTP Staff sponsors a minimum of RM200 for each child. The money funds school necessities such as uniforms, bags, shoes and stationery. Each student also receives RM100 in the form of a Bank Rakyat savings account and this is contributed by the UTP Alumni Association.

## Convoride

More than 200 bicycles were donated to underprivileged school children from 17 selected schools and one orphanage in Perak, and students at Kg. Aji, Bota Perak during Convoride 2014. The bicycles were sponsored by UTP and PETRONAS staff at RM300 each.

For this event, UTP received sponsorship and donations of more than RM65,000 and 40 per cent of the donations were channelled to the Yayasan UTP bursary fund to provide financial aid for UTP students.



## Iftar for the Less Fortunate

"We would like to spread cheer to the less fortunate in the spirit of togetherness in this holy month of Ramadhan."

These were the words of our Vice-Chancellor, Datuk Ir (Dr) Abdul Rahim Hashim at an Ifar event hosted by UTP.

The guests of honour for the day were the less fortunate folk living around UTP, namely in the areas of Tronoh, Kg. Bali, Taman Maju and Kg. Ayer Denak.





## lftar in Kg Aji

In the spirit of the holy month of Ramadhan we hosted lftar for 90 villagers of Kg Aji. Organised in collaboration with Yayasan Siti Sapura, the event was part of UTP's continuous and extensive CSR efforts encompassing the surrounding communities.

## Hari Raya Cheer

UTP hosted more than 1,000 guests at our Hari Raya Aidilfitri lunch at Casuarina@Meru Hotel, Ipoh. They comprised of government representatives, industry partners, UTP staff, their spouses and children.

This annual Hari Raya event brings UTP staff of all races and diverse backgrounds together in celebration and unity, sharing in the delights of the festive season. The joyous celebration this time round was however kept in moderation in remembrance of the two aviation tragedies of MH370 and MH17.





### UTP Lends a Helping Hand to Flood Victims

UTP raised RM70,000 in cash and in kind to help flood victims of Perak Tengah and the East Coast. The donations came from staff, students and alumni in conjunction with the UTP Flood Donation drive.

About 1,000 volunteers made up of UTP's staff and students were mobilised to clean up floodaffected areas in Perak Tengah such as SK Lambor Kanan, SAR Rimba Raja Lambor Kanan and Teluk Bakong Health Centre Lambor Kanan.

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