

# ANNUAL REPORT



UNIVERSITI  
TEKNOLOGI  
PETRONAS

2013

# Concept Rationale

## Towards Distinctive Reputation

The cover for the University's Annual Report 2013 features gold and bold stripes. The gold and bold stripes signify the distinctiveness of the University's reputation.

Building a reputation is driven by having discerning insights and vision and seeing them through with integrity. And the University's performance in 2013 had testified exactly that.

# Contents

## Corporate Profile

- 04 Vision, Mission and University Profile
- 05 Logo Rationale

## The University Team

- 08 Chancellor
- 10 Pro Chancellor
- 12 Vice Chancellor
- 14 Board of Directors
- 16 Management Committee
- 18 Senate
- 20 Academic Advisory Council
- 21 Industry Advisory Panel
- 23 International External Examiners
- 25 Research Advisory Council
- 27 Student Development Advisory Council

## The Report

- 30 Chairman's Review
- 34 Vice Chancellor's Report

## Highlights

- 44 Overview
- 45 Academic Positioning
- 47 R&D Stewardship
- 48 Industry Engagement
- 49 Students' Achievements

## The Annual Review

- 52 Main Events
- 74 Academic Overview
- 76 Research & Development
- 90 Student Achievements and Activities

# Corporate Profile

- **Vision, Mission and University Profile**
- **Logo Rationale**





# Vision, Mission and University Profile

## Vision

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 nations 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.

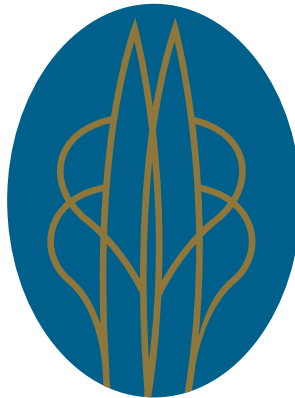
## University Profile

UTP which was established in 1997, has grown to be one of the most prominent private universities in Malaysia. Offering a wide range of industry-relevant engineering and technology programmes at undergraduate and postgraduate levels, UTP has produced more than 10,500 graduates and currently has an enrolment of 5,800 undergraduates and 1,500 postgraduates from over 50 countries around the world. UTP complements its engineering and technology programmes with quality education in the areas of management and the humanities, with the aim of producing well-rounded graduates exhibiting excellent leadership qualities and communication abilities.

Rated as Tier 5 (Excellent) University for the year 2011 Rating System for the Malaysian Higher Education Institutions (SETARA '11) and achieved the Tier 5 for 2011 D-SETARA (Discipline-Based Rating System) in engineering, UTP continues to provide distinctive educational opportunities to its students.

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 Enhanced Oil Recovery, Carbon Dioxide Management, Deepwater Technology, Nanotechnology, Green Technology, Biomedical Technology, Hybrid Energy Systems, Intelligent City and Sustainable Resources. This is evident when UTP was awarded a 5-star excellent rating by Malaysian Research Assessment Instrument (MyRA) for its research, development and commercialisation efforts recently.

# Logo Rationale



UNIVERSITI  
TEKNOLOGI  
PETRONAS

- 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.

# The University Team

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







# Chancellor

Tun Dr Mahathir bin Mohamad



Born on 20 December 1925 in Kampung Seberang Perak, Alor Setar, Tun Dr Mahathir bin Mohamad started school at Sekolah Melayu Seberang Perak in 1930. He was there for two years, before continuing his education at the Government English School (now known as the Sultan Abdul Hamid College) in Alor Setar. During the Japanese Occupation from 1941 to 1945, he stopped school. After the Japanese surrender, Tun Mahathir resumed his education and received the Senior Cambridge Certificate the same year.

Upon completing his secondary education in 1947, Tun Mahathir received a partial scholarship from the Government to study medicine at the King Edward VII Medical College – the forerunner of the University of Malaya – in Singapore. In 1953, Tun received his MBBS degree from the University of Malaya and immediately began housemanship in Penang. From 1954 to 1957, Tun served the Government as Medical Officer in Alor Setar, Langkawi and Perlis. In June 1957, Tun went into private practice. Later that year, he opened his own MAHA Clinic in Jalan Tunku Ibrahim, Alor Setar – the first Bumiputera private clinic in the state.

Tun's political involvement began in 1945, when he joined various organisations like Kesatuan Melayu Kedah, Seberkas and Kesatuan Pemuda Melayu Kedah. Whilst still at school, he was also actively involved in the anti-Malayan Union campaign. In 1946 he became a member of the United Malays National Organisation (UMNO). In 1964, Tun contested in the General Elections, won the Kota Setar Selatan constituency and became a Member of Parliament. It was when he became the Chairman of Food Industries of Malaysia (FIMA) in 1973 that he honed his administrative capabilities.

In 1974, Tun was appointed Minister of Education in Tun Razak's cabinet. In March 1976, Tun was named Deputy Prime Minister by Tun Hussein Onn. On 16 July 1981, Mahathir became the fourth Prime Minister of Malaysia, a position he held for 22 years. He retired on 31 October 2003.

Under the stewardship of Tun, Malaysia has witnessed unprecedented economic growth especially in manufacturing, infrastructure, information technology and oil and gas.

In recognition of his outstanding contributions to nation building, Tun received numerous prestigious fellowships, awards and honours from universities and academic institutions, both locally and internationally. Honorary Member, Academy of Medicine (1983); Honorary Member, Malaysian Medical Association (1984); Honorary Fellowship of the Royal College of Surgeons, Ireland (1991); Honorary Fellowship, Academy of Sciences Malaysia (1996); Honorary Fellowship, Royal College of Physicians of Edinburgh (1997); Honorary Professor, Kyrgyz University (1996); Honorary Doctorate in Humanities, National University of Mongolia (1997); and Honorary Doctorate of Literature and Al-Azhar University (1998), to name a few.

In 2001, in recognition of his dedication to promoting human resource development in Malaysia through educational and technological exchange with global perspective, Tun was awarded the Honorary Doctorate by Meiji University, one of the most prestigious universities in Japan. After his retirement, he continued to receive various honours. These include an Honorary Doctorate in the field of management and engineering from Universiti Teknologi Malaysia (2003), and the Honorary Degree of the Doctor of Letters, Universiti Islam Antarabangsa (2003) for his distinguished contributions as a Muslim writer and an outstanding intellectual.

# Pro Chancellor

## Tan Sri Sidek Hassan



Tan Sri Sidek Hassan is the Chairman of Petroliaam 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 served 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 is 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 with 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 the 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 had served for five years, since 2007, as the Chairman of the Engineering Accreditation Council (EAC) Malaysia.

Datuk Abdul Rahim has been attached with PETRONAS for more than 32 years and held a number of high profile positions. He first reported duty with PETRONAS in 1976 with his last position as the Vice President of Research and Technology Division, from 2006 to 2008.

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.

Datuk Abdul Rahim is also holding a position as Chairman 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.

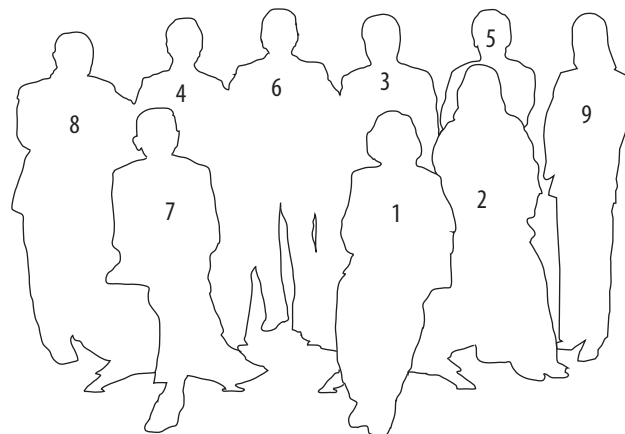
Throughout his career with PETRONAS, Datuk Abdul Rahim has shown tremendous industry leadership and incredible innovativeness resulting in many great achievements. He has successfully implemented, amongst others, the first PETRONAS' Voluntary Separation Scheme (VSS), introduced the Human Resource dual career approach for staff, the development of INSTEP which involves restructuring of facilities and curriculum and PETRONAS Second Refinery in Malacca consisting of 100,000 BPSD (Barrel per Stream Day) hydroskimming refinery.

Datuk Abdul Rahim was bestowed with Pingat Jasa Kebaktian (PJK) from the Sultan of Terengganu in 1990 and Pingat Panglima Jasa Negara (PJN) from the government of Malaysia in June 2004.



## Board of Directors





## Chairman

- 1. Juniwati Rahmat Hussin**  
(until 30 November 2013)
- 2. Raiha Azni Abdul Rahman**  
(from 1 December 2013)  
Member (until 30 November 2013)

## Members

- 3. Datuk Anuar Ahmad**
- 4. Datuk Wan Zulkiflee Wan Ariffin**
- 5. Dato' Wee Yiau Hin**
- 6. Datuk George Ratilal**
- 7. Datuk Ir (Dr) Abdul Rahim Hashim**

## Company Secretary

- 8. Ahmad Nabil Azizan**  
(until 31 May 2013)
- 9. Halimatun Saadiah Abdul Halim**  
(from 1 June 2013)

# Management Committee





## 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
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

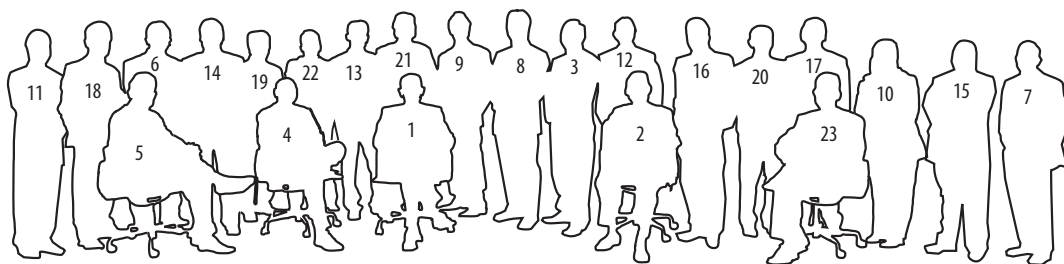
## Chairman

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
3. **Prof Dr Abdul Rashid Abdul Aziz**  
Deputy Vice Chancellor, Research and Innovation
4. **Mohamed Noor Rosli Baharum**  
Deputy Vice Chancellor, Student Affairs and Alumni
5. **Hasbullah Hj Ihsan**  
Chief Financial Officer
6. **Assoc Prof Dr Hilmi Mukhtar**  
Director, Transformation Office
7. **Prof Ir Dr Muhd Fadhil Nuruddin**  
Dean, Faculty of Engineering  
(until 30 June 2013)
8. **Assoc Prof Dr Mohamed Ibrahim Abdul Mutalib**  
Dean, Faculty of Engineering  
(from 1 July 2013)
9. **Prof Dr Manuel Pubellier**  
Dean, Faculty of Geosciences & Petroleum Engineering
10. **Prof Dr Noorhana Yahya**  
Dean, Faculty of Science & Information Technology (until 30 June 2013)
11. **Assoc Prof Dr Ahmad Kamil Mahmood**  
Dean, Faculty of Science & Information Technology (from 1 July 2013)
12. **Assoc Prof Dr Mohd Fadzil Hassan**  
Dean, Centre for Graduate Studies





**13. Assoc Prof Dr Mohamad Azmi Bustam @ Khalil**  
Head, Chemical Engineering Department

**14. Assoc Prof Dr Rosdiazli Ibrahim**  
Head, Electrical & Electronics Engineering Department

**15. Assoc Prof Ir Dr Masri Baharom**  
Head, Mechanical Engineering Department

**16. Assoc Prof Ir Dr Mohd Shahir Liew**  
Head, Civil Engineering Department

**17. Assoc Prof Dr A Hadi A Rahman**  
Head, Geoscience Department

**18. Assoc Prof Dr Ismail Mohd Saaid**  
Head, Petroleum Engineering Department

**19. Dr Jafreezal Jaafar**  
Head, Computer and Information Sciences Department

**20. Assoc Prof Dr Azrai Abdullah**  
Head, Management and Humanities Department

**21. Assoc Prof Dr Balbir Singh Mahinder Singh**  
Head, Fundamental and Applied Sciences Department

**22. Assoc Prof Ir Dr Idris Ismail**  
Head, Centre for Student Internship, Mobility and  
Adjunct Lectureship

## Secretary

**23. 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**

## Prof Dr Jeom Kee Paik

President of The Ship and Offshore Research Institute, Pusan National University, Korea

## Members

### **Datuk Ir (Dr) Hj Ahmad Zaidee Laidin**

Vice President  
Academy of Science Malaysia

### **Prof Dr Shih Choon Fong**

Former Founding President  
King Abdullah University of Science & Technology (KAUST)  
Kingdom of Saudi Arabia

### **Tan Sri Zarinah Anwar**

Former Chairman  
Securities Commission Malaysia

### **Dr Terje Martin Halmo**

President  
Risavika Gas Centre DA, Norway

### **Prof Lord Kumar Bhattacharyya**

Founder and Director of Warwick Manufacturing Group  
University of Warwick, United Kingdom

### **Juniwati Rahmat Hussin**

Vice President and Venture Director  
Pengerang Integrated Complex, Johor

### **Prof Dr David B Prior**

Executive Vice Chancellor and Provost  
Hamad bin Khalifa University, Qatar

### **Raiha Azni Abd Rahman**

Vice President  
Human Resource Management, PETRONAS

### **Prof Dr Feng Da Hsuan**

Senior Vice President  
National Tsing Hua University, Taiwan

### **Datuk Ir (Dr) Abdul Rahim Hashim**

Vice Chancellor & Managing Director/CEO  
Universiti Teknologi PETRONAS

### **Prof Dr Deo Karan Prasad**

Professor, Faculty of the Built Environment  
University of New South Wales, Australia

## Secretary

### **Solihuddin Ahmad Nasarudin**

Registrar  
Universiti Teknologi PETRONAS

### **Prof Dr Haruo Takeda**

Corporate Chief Engineer  
Hitachi Ltd, Japan



# 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

### **Kamarul Ariffin Tajul A'mar**

Head of Centralised Services Division  
PETRONAS Chemicals Group Berhad

### **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)

### **Ir Dr Lim Char Ching**

Senior Principal Assistant Director  
Public Works Department of Malaysia

### **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

### **Dr Hon Hock Woon**

Principal Researcher  
MIMOS Berhad

### **Saifol Mualim Ahmad Yahaya**

General Manager  
Group Technology Solutions  
PETRONAS

**Dr Shahrul Yazid Yahaya**

Head of Department  
Intel Microelectronics (M) Sdn Bhd

**Dr Mazlan B Abbas**

Chief Research Director  
Wireless Applied Research  
MIMOS Berhad

## Mechanical Engineering

**Ir Ahmad Khairi Abdul Ghani**

Staff Engineer  
PETRONAS Carigali Sdn Bhd

**Azmi B Mahamad**

Chief Operating Officer  
UZMA Berhad

**Dr John Fuad Edwards**

Integrity Lead Specialist  
Llyod's Register Technical Services  
Sdn Bhd

**Ir Dzulaiddin 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

**Erwin Ariyanto**

Training Advisor/Team Leader  
Scomi Oiltools 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 B Madon**

Custodian (Basin Analysis)  
Exploration & Production Technology  
Centre, PETRONAS

**Jasmee Zainal Rashid**

Country Manager/Managing Director  
Petroleum Geo-Services

## 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**

Chief Executive Officer  
E2B Consulting Sdn Bhd

**Ainuddin Jantan**

General Manager  
Corporate ICT Development Unit  
PETRONAS

**Dr Amirudin Abdul Wahab**

Under Secretary  
ICT Policy Division  
Ministry of Science, Technology and  
Innovation (MOSTI)

## Management & Humanities

**Emeritus Prof Datuk Dr Osman Bakar**

Deputy Chief Executive Officer  
International Institute of Advanced  
Islamic Studies Malaysia

# 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, International External Examiners conference 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 conference provides invaluable input that will 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 Dept/  
Student Academic Counselor  
Institut Teknologi Bandung, Indonesia

## Geosciences

**Prof Dr John G Kaldi**

Chief Scientist CO<sub>2</sub>CRC (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 Dr Kathryn N Kearins**

Professor of Management  
Auckland University of Technology  
New Zealand

# 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 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  
(CIDB)

**Ir Ahmad Fauzi Hasan**  
Chief Executive Officer  
Energy Commission Malaysia

**Hj Faizoull Ahmad**  
Director General  
Federal Land Development Authority (FELDA)

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

**Dr S Asmaliza Ismail**  
Head, Secretariat  
National Institute of Health (NIH)  
Ministry of Health Malaysia

**Prof Dr Halimaton Hamdan**  
Under Secretary, National Nanotechnology  
Directorate  
Ministry of Science, Technology & Innovation,  
Malaysia (MOSTI)

**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 (EOR)  
Exploration & Production Technology Centre  
PETRONAS

**Ahmad Nawawi Mohd Yatim**

General Manager  
Technical and Facilities Development  
Division  
PETRONAS Gas Berhad, Malaysia

**Dato' Mash'al Bin Ahmad**

Managing Director  
Lynas Malaysia Sdn Bhd, Malaysia

**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

## In Attendance

**Prof Dr Richard Paul Major**

UTP Shell Chair

**Prof Dr Mustafa Onur**

UTP Schlumberger Chair

**Prof Dr Yoshimitsu Uemura**

UTP Mitsubishi Chair

**Dr Allan Magee**

UTP Technip Chair

**Dr Aamir Saeed Malik**

UTP MOR Director – Biomedical  
Technology

**Prof Dr Norani Muti Mohamed**

UTP MOR Director – Nanotechnology

**Assoc Prof Dr Suzana Yusup**

UTP MOR Director – Green Technology

**Assoc Prof Fakhruddin M Hashim**

UTP MOR Director – Deepwater  
Technology

**Prof Dr Azmi Mohd Shariff**

UTP MOR Director – CO<sub>2</sub> Management

**Prof Dr Mariyamni Awang**

UTP MOR Director – Enhanced Oil  
Recovery

**Assoc Prof Ir Dr Shaharin Anwar  
Sulaiman**

UTP MOR Director – Hybrid Energy  
System

**Prof Khairun Azizi Azizli**

UTP MOR Director – Sustainable  
Resources

**Assoc Prof Dr Halabi Hasbullah**

UTP MOR Director – Intelligent City

## Secretary

**Hj 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**  
Director General  
Public Service Department  
(Vice President, Persatuan Kaunseling  
Malaysia)

**Jamal A Ainul**  
Chairman,  
Schlumberger Group of Companies, Asia  
Schlumberger WTA Malaysia Sdn Bhd

**Dato' Dr Adnan Alias**  
Chief Executive Officer  
The Islamic Banking & Finance  
Institute Malaysia (IBFIM)  
(Chairman, Education Malaysia Global  
Services)

**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 Head  
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 (RAPID)

**Tan Sri A K Nathan**  
Executive Chairman  
EVERSENDAL Corporation

## Secretary

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



# The Report

- **Chairman's Review**
- **Vice Chancellor's Report**



## Chairman's Review



Universiti Teknologi PETRONAS (UTP) and PETRONAS' past, present and future have always been inextricably interwoven and intertwined, like the delicate silver and golden threads intricately patterned in a traditional Malay 'Songket'. As in a songket, the beauty of it can only be told by the delicate and laborious weaving of the threads, telling a sublime tale enriched with art, passion, tradition and identity. So too is the story of UTP and PETRONAS.

PETRONAS came into being in 1974 and twenty three years later on 10 January 1997, to be precise, UTP was born, and like the beauty and uniqueness of a Songket that never fails to impress every time it is worn, so too the sublime achievements of both organisations continue to be outstanding. The success of one complements the other, "ibarat irama dan lagu, takkan mungkin dapat dipisahkan." Each organisation's successes in their respective fields lay the foundation for the success of the other as both PETRONAS and UTP share the uniqueness of being keepers of Malaysia's most precious resources; petroleum and the young leaders of Malaysia.

From its 'birth' PETRONAS' varied business operations in oil and gas value chains – from exploration, extraction, production, refining to trading and marketing requires it to have multiple-pronged approaches in building the learning and capabilities of its people, so as to meet the demands and challenges in its business and operations. Ranked 75 among the world's largest corporations in 2012 with a revenue of \$94.3 billion, PETRONAS was the 19th most profitable firm with net proceeds of \$16 billion according to the 2013 Fortune Global 500 survey. The same survey places PETRONAS as the sixth most profitable company of 2012 after Exxon Mobil Corporation, OAO Gazprom, Royal Dutch Shell plc., Chevron Corporation and China National Petroleum Corporation.

All these accolades and successes however means little if the organisation does not invest in the future and the development of another of Malaysia's most valuable resource; its people. Throughout the years PETRONAS has put in place a structured learning and capability development framework to sustainably produce capable resources to support its business imperatives. INSTEP, a technical centre to prepare and develop operators and technicians for PETRONAS' facilities, PERMATA later renamed PETRONAS Leadership Centre (PLC) that offers a wide range of management skills training and an Education Sponsorship Unit to manage scholarships for qualified secondary school students to pursue undergraduate studies in local and international top universities are among PETRONAS' initiatives. PETRONAS' passion in developing professional and skilled workforce specifically for oil, gas and related industries led to the invitation to set up a private university by the Ministry of Education, Malaysia. So it was that UTP was set-up in 1997 with the main objective to produce creative and innovative leaders for the industry.

I am proud to note that UTP has grown to be one of the most prominent private universities in Malaysia today. Offering a wide range of industry-relevant engineering and technology programmes at both undergraduate and postgraduate levels, UTP has to date produced more than 10,000 graduates and currently has an enrolment over 6,000 undergraduates and 1,200

I am proud to note that UTP has grown to be one of the most prominent private universities in Malaysia today. Offering a wide range of industry-relevant engineering and technology programmes at both undergraduate and postgraduate levels.



postgraduates from more than 50 countries from around the world. Among the achievements UTP has chalked includes being rated as a Tier 5 (Excellent) University for the year 2011 Rating System for the Malaysian Higher Education Institutions (SETARA '11) and being accorded a Tier 5 for 2011 D-SETARA (Discipline-Based Rating System) in engineering. UTP was also rated 3-Star for Excellence in the Quacquarelli Symonds (QS) World University rating for 2013, and listed among the Top 200 Universities under the QS World in Chemical Engineering 2013.

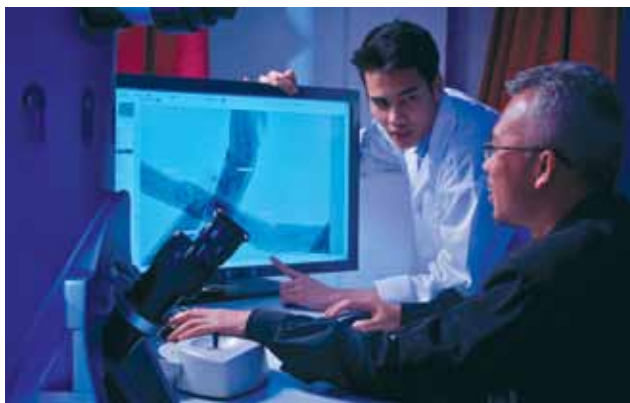
UTP's teaching and capabilities development are indeed comprehensive. UTP-ians are not just expected to be the best in their studies but they are also exposed to co-curricular activities and short courses to develop their soft skill competencies and make them well rounded and holistic individuals. The UTP Performing Arts Group did us proud when they walked away with awards for the Best Costume, Best International Street Parade and the ultimate First Prize for the 10th Cheonan World Dance Festival, held at Cheonan Samgeori Park, Cheonan City, Korea. UTP has also charted successes in many major national sporting events and International Invention competitions too have seen UTP triumph.

The academic faculty members too are expected to continually upgrade themselves and keep abreast of the latest developments and technologies in the industry through UTP's close engagement with the industry. Under our Research and Development (R&D) Stewardship for example, UTP has two nationally recognised Center of Excellence; the Center of Excellence in Subsurface Seismic Imaging and Hydrocarbon Prediction and Centre of Excellence in Enhanced Oil Recovery which aims to produce exploitable knowledge that can be commercialised to make a difference in the people's quality of life. We were awarded

a 5-star rating by Malaysian Research Assessment Instrument (MyRA) for our research, development and commercialisation efforts, and we are the first private university in Malaysia to achieve such recognition.

The University's capabilities in research and innovation have quantum leaped in the span of just a few years. UTP now boasts facilities and equipment that could ease industries to find optimised solutions for their issues and concerns. Shared commitment between UTP and its learning partners, the likes of Halliburton, Sapura Kencana, Baker Hughes, Hitachi and several others have resulted in astounding results. These collaborations include knowledge transfer to continuously enhance UTP's value propositions, capability development through on-the-job-attachment opportunities, research and development, industry attachments and student sponsorships and internships as well as alliances in related projects of domestic and overseas productions.

UTP has also secured commitment from established companies to sponsor Professorial chairs; e.g. the Shell Chair in Petroleum Geoscience, Schlumberger Chair in Petroleum Engineering, Mitsubishi Chair in Green Technology and Technip Geoproduction Chair in Deepwater and Subsea Technology. For 2013, 2 new Professorial Chairs were established: PETRONAS Carigali Professorial Chair in Enhanced Oil Recovery (EOR) and Sapura Kencana Professorial Chair in Integrated Deepwater Construction and Drilling. All these developments bode well not just for the university and its students, but also for PETRONAS and the oil and gas industry at large. As the future workforce, UTP-ians are already poised to take on the challenges and chances accomplishable to them.



The future for both are indeed intertwined and the future is dawning clear and sunny for both. PETRONAS intends to intensify the capabilities of its workforce in frontier technologies such as Floating LNG, Shale Gas and Coal Bed Methane among others. UTP-ians will have the opportunity to not only be pioneers in these new technologies but also leaders in the field. To do that UTP has to be ready to respond speedily and efficiently not only to PETRONAS' new developments and ventures but also to what other premier organisations in the industry is venturing into. UTP has to be robust enough to calibrate with the evolution of the industry requirements.

For UTP, there are three important levers identified to meet the industry's demands in 2014; namely Academic Positioning, R&D Stewardship and Industry Engagement. Academic Positioning focuses on ensuring that UTP has an accomplished teaching faculty, world class learning facilities and industry and government's recognition. For R&D Stewardship, it is critical for UTP to continue to have a close interaction with the industry to ensure relevance of research, clear research themes as well as excellent research test bedding facilities and strong commercialisation support. Finally industry engagement will look at UTP establishing effective synergy between academia and industry for mutual benefits and gains. These three levers will form the bedrock for UTP to take another quantum leap into the future, by continuing to develop and produce cutting-edge, highly capable, multi-talented and holistic UTP-ians; ready to take on the industry's challenges and chances.

I have no doubt that UTP and PETRONAS will continue to forge and discover new frontiers in the year ahead, claiming many more accolades and awards, Insha'Allah. Like the creation of the songket which is believed to cultivate virtues of diligence and patience, each thread of color weaves a philosophical tale of life and is worn proudly during life's most important moments. PETRONAS is the gold complimenting the silver threads of UTP, and together we will weave a legacy to be remembered.

On behalf of the Board, I would like to record my sincerest appreciation to YABhg Tun Dr Mahathir bin Mohamad, the University's Chancellor, Pro Chancellors YBhg Tan Sri Sidek Hassan and YBhg Tan Sri Dato' Shamsul Azhar Abbas, and the distinguished members of the Academic Advisory Council for their support, guidance and counsel. My heartfelt gratitude also goes to the PETRONAS and ITPSB Board for making this year productive and successful.

I am grateful for the opportunities I have been given to work with and grow with UTP over the years. Your successes and achievements have been a source of unbridled pride for me, and you will always remain close in my heart. To my beloved UTP-ians, allow me to leave you with these parting words, from author Paulo Coelho; *"Be brave. Take risks. Nothing can substitute experience."*

Thank you.

Warm regards,



Juniwati Rahmat Hussin  
Chairman

## Vice Chancellor's Report





## A Distinctive Reputation

Universiti Teknologi PETRONAS' discerning vision of being a leader in technology education and centre for creativity and innovation is supported by its judicious mission statements that being an institute of higher learning, the University provides opportunities for the pursuit of knowledge and expertise for the advancement of engineering, science and technology to enhance the nation's competitiveness. It has the specific objective to produce well-rounded graduates who are creative and innovative with the potential to become leaders of industry and the nation. The University also aims to nurture creativity and innovativeness and expand the frontiers of technology and education for the betterment of society.

In realising the vision and mission, a long-range plan or journey has been designed mindful of several fronts: global challenges, industry outlook, education scenarios and local policies and trends.

Globally, the challenges may appear daunting but not unexpected. Asian financial crisis, sub-prime mortgage crisis, Euro zone crisis, Arab spring and China becoming world's second largest economy all intimated grave impacts on world economy and politics.

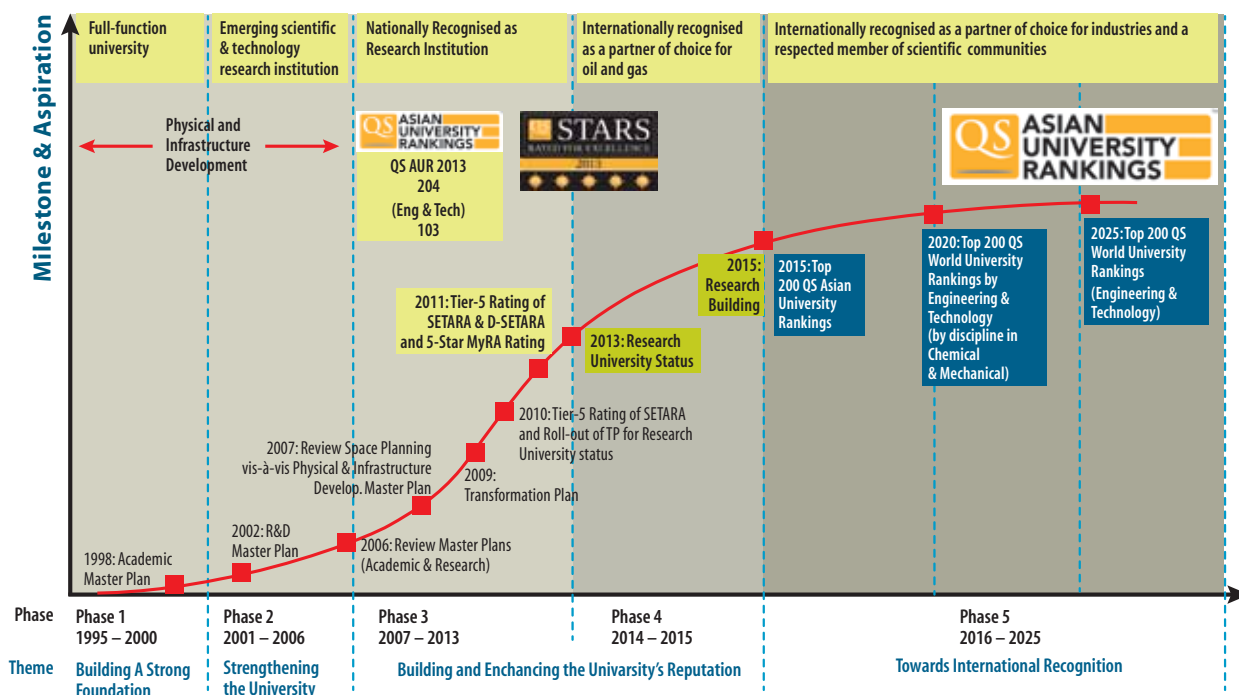
Within the oil, gas and petroleum sector, there are issues and challenges affecting the industry. To name a few, one of the more pressing issues is the access to significant quantities of economically recoverable oil and gas resources. Others include cost of services, talent tussle and innovative technologies acquisition. There are also predictive trends that should not be ignored. Oil and gas companies may need to focus on resiliency within the global energy supply chain. In gaining competitive edge, companies need to concentrate on innovation for sustainability. Since safety will forever more be a major concern for oil and gas companies, safety and accountability will frame relationships between owners and service companies.

Closer at home, the future outlook carries promising insights. According to a report in Economic Transformation Programme, by 2020, Malaysia will have a more diversified oil, gas and energy sector that remains vital to local development, and that builds on the nation's competitive advantages. The key thrusts would be to intensify exploration and enhance production from domestic reserves and develop a strong regional oilfield services and equipment hub, and a stronger presence in the regional midstream logistics and downstream markets. The industry has abundant potential to grow alternative energy sources such as nuclear, solar and hydro to overcome decline in natural gas production. The National Key Economic Area (NKEA) has identified that oil and gas sector is expected to generate RM131.4 billion in Gross National Income by 2020, (5% annual growth) in the period from 2010 to 2020. Also, there were 12 entry point projects (EPPs) anchoring on four themes sustaining oil and gas production, enhancing growth in downstream, making Malaysia the number one Asian hub for oil field services, especially deepwater and building a sustainable energy platform for growth.

Our challenges are not only critical to us, but to the world as well. A developing country's ability to achieve economic growth and raise the standard of living greatly depends on its access to affordable, reliable energy – and this is where the University plays the pivotal role.

Since the University's inception in 1997, programmes, initiatives and activities have been orchestrated meticulously and guided by the vision and mission statements. A long-range plan has been drawn up to chart specific key performance indicators and key milestones. The purpose of the long-range plan or journey is to direct strategic actions that would yield demonstrable outcomes and progress in support of the commitments of realising the vision and mission statements.

Taking into consideration the global challenges, industry outlook, education scenarios and local policies and trends, the University has designed its journey until 2025.



The momentum is fast gaining since Phase 1 where then the focus was on building strong foundation for this newly established institution. The University has surpassed targets and expectations when efforts have begun to manifest commendable results. The University found its footing in SETARA, D-SETARA, MyRA and Asian University Rankings. Such achievements have indeed provided the leverage for the University to solidify its reputation while continuing its journey to be internationally recognised.

The University takes pride in its efforts and initiatives in realising its vision and missions by building deep relationships around the world, with businesses large and small, with industries, with civic society, with governments and NGOs, and with students, researchers and other academic institutions. The faculty, staff and associates convene a critical mass of expertise that spans national borders and crosses the boundaries of academic disciplines. Significantly, they are also designed to speed up the translation of research into practice and commercialisation because, as with much of what the University does, ultimately the benefits have to be apparent, useful and sustainable for the society – local, national and global.

Thus, it is my honour to present the Annual Report of Universiti Teknologi PETRONAS (UTP) for the financial year ended 31 December 2013 summarising challenges and accomplishments in our journey towards becoming a distinctive research and academic institution.

## Performance Review 2013

This review looks into the University's performance, challenges and accomplishments in four aspects: academic positioning, R&D stewardship, industry engagement and effectiveness and efficiency.

### Academic Positioning

From the very outset, the University's academic positioning has set the highest aspirations and expectations. UTP's academic positioning is guided by several criteria:

- percentage of international students
- percentage of international faculty
- percentage of professors
- number of new niche taught programmes offered

Though the assessment for SETARA and D-SETARA will only be conducted in 2014, preparation for the assessment is already in place. Programmes that are relevant and important to the oil, gas and petroleum industry were introduced. In September 2013, the University has successfully launched its MBA in Energy Management. Both MSc in Drilling Engineering and MSc in Offshore Engineering programmes have been submitted to Malaysian Qualification Agency (MQA) for approval.

Highlight	Objective	Performance Indicator	2013	
✓ Assessment for SETARA & D-SETARA will only be conducted in 2014			Target	Actual
✓ MBA in Energy Management (Offered in September 2013)	Academic Positioning	SETARA and D-SETARA Index	6/6	n/a
✓ MSc in Drilling Engineering: (Submitted to MQA for new programme application in Nov 2013)		% of International Students	23	23
✓ MSc in Offshore Engineering: (Submitted to MQA for new programme application in Nov 2013)		% of International Faculty	23	24
		% of Professors (Cumulative)	12	7
		No of niche taught programmes offered (New)	1	1

## R&D Stewardship

Cutting-edge researches and innovation should be able to take products and services beyond the lab with commensurate financing, lean manufacturing, and effective and systematic commercialisation. R&D stewardship now includes understanding of labour markets, talent management, operations and finance. The goal of balancing science and business offers new terrain and playing fields for the University's research teams.

The University's research teams documented a commendable performance with 90 new patents filed and 9 granted including 8 new products that were commercialised. New areas that entered commercialisation phase exceeded by 7 from the original target of only 1. The efforts and results have surpassed MyRA's Score Research University (RU) target of 100. The University was awarded with MyRA 5 – Star with a grant worth RM5 milion.

As in previous years, the academic faculty members were active in testing and pitching their research products and services at various national and international competitive ground. A total of 151 gold, 167 silver and 79 bronze medals were won in FY2013 at various expositions. The University has developed a strong research culture which is characterised not just by the quality of the research, but by the relationships among the researchers. There is mutual respect across the majority of the researchers at the University where they genuinely care about the success of their colleagues and seek to elevate and advocate the research of their colleagues. This is further enhanced by the cross-disciplinary researches undertaken at various Mission Oriented Researches (MORs) and Centres of Excellence (CoEs).

And it was through such concerted effort that the University became the first private university to be accredited with the Universal Testing Machine Laboratory by STANDARDS Malaysia.

Highlight	Objective	Performance Indicator	2013	
<p>✓ The RU site visit was conducted at UTP on 18-19 Nov 2013</p> <hr/> <p>✓ 90 new patents filed, 9 granted including 8 new commercialized:-</p> <ul style="list-style-type: none"> <li>• <b>Mobile Hajj-G</b> (AP Dr Wan Fatimah, et all)</li> <li>• <b>Conversion of waste</b> polyethylene, polyethylene terephthalate and lignocellulose mixtures to syngas using catalytic steam gasification process (AP Dr Suzana bt Yusup)</li> <li>• <b>ALAM 3.0 and ALAM MINI-Portable</b> Generator (Prof Dr Abdul Rashid b Abd Aziz)</li> <li>• <b>Hollow Fiber Membrane Prediction Programme</b> (Prof Dr Azmi b Mohd Shariff &amp; Dr Lau Kok Keong)</li> </ul>			Target	Actual
	<b>R&amp;D Stewardship</b>	MyRA Score (RU)	100	112
		Average no of publication per Faculty member	2.6	2.5
		Research Grant (New) (in RM mil)	20	26.5
		No of Commercialisation (New)	1	8
		National COE (Cumulative)	2	2

## Industry Engagement

From the design of curriculum to applied research, the University works with domestic and international partners to equip the faculty members, students and researchers with the state-of-the-art knowledge and skills that enable them to excel in their respective roles. Engagement with industry is unassumingly important. UTP solicits advice and input from industry leaders in order to provide value in the many areas of engagement: skill development, work placements, applied research, consultancies and more. UTP's partners include sectoral industry households such as Halliburton, Shell, Schlumberger and Hitachi, just to name a few.

Amongst the highlights in industry engagement for FY2013 include the establishment of 2 new chairs: PETRONAS Carigali Professorial Chair in Enhanced Oil Recovery (EOR) and Sapura Kencana Professorial Chair in Integrated Deepwater Construction and Drilling. Currently the University has 6 professorial chairs, 4 others being Schlumberger, Shell, Mitsubishi and Technip. Long standing relationship with the industry has benefited the University when the University received OMEGA software including training costs worth RM3 million.

Highlight	Objective	Performance Indicator	2013	
			Target	Actual
<ul style="list-style-type: none"> <li>✓ 2 new Chairs i.e. PETRONAS Carigali Professorial Chair in Enhanced Oil Recovery and Sapura Kencana Professorial Chair in Integrated Deepwater Construction and Drilling</li> <li>✓ Received OMEGA software including training costs worth RM 3 mil</li> </ul>	Industry Engagement	Endowment from Industry (in RM mil)	3	3.4
		Software Gifts from Industry (in RM mil)	20	4
		No of Professorial Chairs (Cumulative)	4	6
		No of Projects from Collaborations (New)	5	8

## Effectiveness and Efficiency

The strength of the higher education sector comes from its ability to adapt and exhibit an acute understanding to operate efficiently. UTP is mindful of the need to manage responsibly which are not only impacting on savings, and on managing resources but also on enhancing the effectiveness of what the University in delivering across all of its activities.

Despite the progress, there are still available opportunities for improvement. Shared services are often heralded as the solution to efficiency in higher education, and there is certainly scope to do better in this area.

One of the highlights in FY2013 was the increase in students' fees. The step described the University's efforts in building, investing, improving and adapting what it does to give to the students the best possible higher education, and future opportunities. Students and sponsors understandably would want to know that they are getting value for money. This has led the University to take noticeable changes and efforts in the way it is optimising on its resources.

Highlight	Objective	Performance Indicator	2013	
			Target	Actual
<b>✓ Approval to increase fee for new students effective Jan 2014</b> <hr/> <b>✓ Cost optimization and business improvements</b> <ul style="list-style-type: none"> <li>• The introduction of Travelling Management System (TVM)</li> <li>• The migration of SAP Software from PINTAS to ECC6.</li> <li>• The P-Card (Purchase Credit Card) for participating vendors to expedite procurement process</li> <li>• The integration of UTP A&amp;R functions to PETRONAS Group under FS2.</li> </ul>		Revenue (in RM mil)	96.5	91.7
	<b>Effectiveness &amp; Efficiency</b>	% of OPEX Optimisation	95	92
		% of CAPEX Utilisation	100	100
		LTA / LTI	0	0

In summary, the University's cohesive and collective performance shown in the results achieved in academic positioning, R&D stewardship, industry engagement and the University's overall efforts in operating effectively and efficiently - have all delivered outstanding outcomes.

A motivator, Ralph Marston once said, "Do not lower your expectations to meet your performance. Instead, raise your level of performance to meet your expectations. Expect the best of yourself, and then do what is necessary to make it a reality". At UTP, expectations are raised on a continual basis. However, the unwavering focus on the aspired results, outweighs the demanding working expectations.

## Moving Forward

Moving forward, there will always be looming challenges impacting institutions like UTP including attracting and retaining talents in the education sectors as well as within various industries, nurturing and developing industry leaders, enhancing academic capability to compete with regional and international institutions, transforming research and innovation landscape in both administration, product development and commercialisation - in addition to aspects that would invariably affect the sustainability of any higher learning institutions like infrastructure, endowment, and alumni management.

The University is ambitious with its targets and projections for FY2014. It aims to:

- achieve “Outstanding” status for SETARA 2014 with Tier-6;
- be amongst the Top 80 for engineering and technology discipline in QS Asian University Ranking;
- achieve ‘Outstanding’ status for MyRA 2014 with 6-Star; and
- be rated 4-Star for overall ranking in QS Star rating

We have a clear map for us to navigate through challenges to achieve our vision and mission. Thus far, we have outdone ourselves by breaking our own records to achieve certain milestones earlier than targeted.

## Appreciation

I would like to thank YABhg Tun Dr Mahathir bin Mohamad, the University's Chancellor for his exemplary leadership. Also, my deepest gratitude goes to Tan Sri Sidek Hassan and Tan Sri Dato' Shamsul Azhar Abbas, Pro Chancellors and Puan Juniwati Rahmat Hussin, the Chairman of the Board and my fellow board members for their collective wisdom, encouragement, support and counsel. Their credibility in their respective professions have lent tremendous weight to the growth of the University.

On behalf of the Board of Directors, the Management and staff, I wish to record my sincerest appreciation and gratitude to our partners, stakeholders and individuals whose trust, expertise and support have cumulatively contributed to the University's performance this year.

And most importantly, I owe many thanks to all staff for their commitment, support and high degree of professionalism during this period.

Thank you.



Datuk Ir (Dr) Abdul Rahim Hashim  
Vice Chancellor

# Highlights

- **Overview**
- **Academic Positioning**
- **R&D Stewardship**
- **Industry Engagement**
- **Students' Achievements**





# Overview



Establishment; **1997**



**400 acres** built areas

**600 acres** forest reserved



Academic Staff **340** (61% with PhD)

Academic/Admin Ratio **1:12** (23% expatriate)



Student **7330**

International Students **23% from 50 countries**



**36** Programmes (Undergraduate + Postgraduates)

Undergraduate/Postgraduate Ratio **1:4**





Alumni **10,716**

**95%** employability < 6 months



MSC Status University



Aga Khan Award 2007

## Academic Positioning



**5 Star** in Internationalisation, Facilities & Access



Ranked, **204**



Ranked **103** in QS Asian University Ranking in Engineering & Technology discipline



**TOP 251-300** in QS Asian University Ranking in Environmental Science discipline



Tier-5 (Excellence) in Teaching & Learning



CERTIFIED TO ISO 9001 : 2008  
CERT. NO. : MY-AR 5715

ISO-9001:2008 for Management of Final Examination for Undergraduate Programmes



Recognised Structured Industrial Internship Programme



**2.5** publications in citation index journal per staff (in ISI & SCOPUS)

Information Resource Centre with more than **200,000** volumes including 25,000 e-materials

# R&D Stewardship

**MYRA®**  
Malaysia Research Assessment Instrument

5 Star (Excellence) in Research



6 Professorial Chairs



15 Lab Scope (testing & calibration)  
Accredited



First Private University Accredited with the University Testing  
Machine Laboratory



More than **100** MoUs Signed with Universities, Industries and  
Research Institutions



**National Centre of Excellence** (Hi-COE)  
• Centre for Innovative Nanostructures and Nanodevices  
(COINN)

9 UTP's Centre of Excellence

3 Research Centres



#### 9 Mission Oriented Researches

- Enhanced Oil Recovery
- Carbon Dioxide Management
- Deepwater Technology
- Nanotechnology
- Green Technology
- Biomedical Technology
- Hybrid Energy System
- Intelligent City
- Sustainable Resources



More than **220** patents (Pending & Granted)



Over **RM 23** Million External Research Funding  
(Average per year)



**151** GOLD

**167** SILVER

**79** BRONZE

medals won at expositions

## Industry Engagement



**53** networking with Universities & Research Institutions



**400** Local and International industrial partners

Collaboration with **22** industries



# Students' Achievements



UTP Petrobots wins awards at the Malaysia International Robot Competition



Champion of the Highest Early Strength Concrete Cube Competition



Gatra Pertama Launched – First ever gamelan album produced in Malaysia by university students



Victory at World Dance Festival



4th time as Overall Champion of the International Students Sports Carnival

# The Annual Review

- **Main Events**
- **Academic Overview**
- **Research & Development**
- **Student Achievements and Activities**





# Main Events

The University vibed with various events from collaboration and partnership to corporate events and corporate social responsibility related activities. The following are the main highlights:



## 9 January 2013 Vice Chancellor's Annual Address

Datuk Ir (Dr) Abdul Rahim Hj Hashim, UTP Vice Chancellor delivered his 2013 Annual Address entitled "Towards a Distinctive Reputation" at UTP Chancellor Hall.

The annual address is a platform for the Vice Chancellor to inform the university's overall performance, as well as to deliver his aspiration and direction for the new year.

The session also provided an avenue for intellectual discourse between UTP Management and staff, especially on the matters of Academic, Research and Operational Excellence.

Organised by UTP Finance & Asset Management, this year's address discussed at length on what makes UTP a high performing university and the challenges it faces, as well as on the global education trend and how it will affect the university's community.

In his address, Datuk Ir (Dr) Abdul Rahim also stressed on the importance of being agile, adaptive, focused, dedicated and having a consistent mindset, while striving to create a balanced ecosystem for academic and research.



## 9 January 2013 Assoc Prof Dr Othman Mamat Appointed as The Distinguished Member of The Asean Quality Assurance Network (AQAN) Regional Assessor

Congratulations to Associate Professor (AP) Dr Othman Mamat of Mechanical Engineering Department for his recent appointment as one of the distinguished members of the ASEAN Quality Assurance Network (AQAN) Regional Assessor.

AQAN is jointly conducted by the German Academic Exchange Service (DAAD), the German Rectors' Conference (HRK), and the University of Potsdam, Germany together with partners from Southeast Asia and Europe – ASEAN Quality Assurance Network (AQAN), ASEAN University Network (AUN), European Association for Quality Assurance in Higher Education (ENQA) and the Regional Centre for Higher Education and Development (SEAMEO RIHED). Its objective is to develop the capacity in the field of quality assurance (QA) in the ASEAN region.



## 8 – 13 January 2013 International Goodwill Programme, Siem Reap, Cambodia

15 students who are members of the Rotaract Club of UTP traveled to Siem Reap, Cambodia using their own pocket money and some sponsorship only to put smiles on the unfortunate people.

International Goodwill Programme is the signature community programme organised annually by Rotaract Club of Universiti Teknologi PETRONAS (RACUTP). This year, the project was conducted in Siem Reap, Cambodia. Its aim is to promote peace and most importantly contribute to the community outside and inside of Malaysia. Throughout the programme, the students were accompanied by their advisor, En Zulkarnan Abdul, Manager of Strategic Branding and Communications, UTP.

As part of the activities and contributions to this programme, the students painted the school walls, taught English and played games with the students, donated bio-sand water filters, books and stationery for the underdeveloped Meanchey Primary School in Siem Reap, Cambodia. 10 units of bio-sand water filters were also donated to the villagers in Prey Chrouk, near Meanchey Primary School.



## 21 January 2013

### Signs MoU With University of Southampton UK

The University of Southampton, a leading UK teaching and research institution with a global reputation for high quality, top-notch research signed a Memorandum of Understanding (MoU) with UTP. The signing was a step towards opening pathways for research and academic-related collaborations between both universities.

The MoU was signed between Professor Mark Spearing, Pro Vice-Chancellor (International), University of Southampton and Datuk Ir (Dr) Abdul Rahim Hj Hashim, Vice-Chancellor, UTP. The event was also graced by Dr Mohamed Ali Abdul Rahman, Director of Institutions Governance Division, Ministry of Higher Education.

Following this MoU, University of Southampton and its Malaysia campus will be forging closer and stronger ties with UTP to develop academic exchanges and cooperation in teaching and research through collaborations which include information sharing sessions, joint academic and scientific activities such as seminars and conferences, academic exchanges and student exchanges opportunities, and joint application of research and development grants.



## 21 January 2013

### Workshop on Way Forward for UTP Student Industrial Internship Programme

In maintaining the standard of Student Industrial Internship Programme (SIIP), Centre for Student Internship, Mobility and Adjunct Lectureship (CSIMAL) together with the Faculty of Engineering, organised a workshop entitled "Way Forward for UTP Student Industrial Internship Programme" at Impiana KLCC Hotel, Kuala Lumpur.

The workshop was officiated by Datuk Ir (Dr) Abdul Rahim Hj Hashim, UTP Vice Chancellor. More than 40 participants from UTP and representatives from various industrial backgrounds such as PETRONAS Carigali, Schlumberger, Construction Industry Development Board Malaysia (CIDB), Ministry of Higher Education (MOHE), Pricewaterhouse Coopers, General Electric Oil & Gas, Baker Hughes, Malaysian Nuclear Agency, Halliburton, Total E&P, Petroleum Geo-Services, Intel Malaysia, PERODUA and Talent Corp came to give their support and put their thoughts together for the workshop. Although the participants came from different companies and background, their commitment and participation were exceptional.



## 30 January 2013

### Conferred A Tier 5 Rating For D-Setara '11

UTP has been conferred with a TIER 5 (EXCELLENT) rating for D-SETARA '11.

D-SETARA is a Discipline-Based Rating System which is almost similar to SETARA. It is a measurement tool used by MQA/MOHE to measure quality of teaching and learning for undergraduate programmes in four cluster of disciplines: Engineering, Medicine, Dentistry & Pharmacy, Health Sciences and Hospitality & Tourism.

Participation in D-SETARA is voluntary. Invitations were made to all Higher Education Institutions (HEIs) offering undergraduate programmes and have had the first batch of graduates in 2011. The Engineering discipline however, involved only HEIs which offer four-year degree programmes. The number of institutions rated in each discipline were 25 (Engineering), 15 (Medicine, Dentistry and Pharmacy), 14 (Health Sciences) and 7 (Hospitality and Tourism). This means that UTP have delivered 5 Star services to its stakeholders in teaching and learning for Engineering Discipline for undergraduate programmes. Ten (10) other Institutions of Higher Learning were also accorded TIER 5 rating.



1 February 2013

### **Baker Hughes – Yayasan UTP Presented Scholarship During the Launching of Baker Hughes Petroleum Education Centre**

Four talented and high achievers of UTP were awarded the Baker Hughes (BH) – Yayasan UTP (YUTP) Scholarships during the launching of Baker Hughes Petroleum Education Centre (BH PEC) at UTP. The scholarship recipients are Christine Ch'ng Wei Mann (Chemical Engineering), Norshazliana Zainal Abidin (Civil Engineering), Kishen Nanda Kumar (Mechanical Engineering) and Sum Yin Yan (Chemical Engineering)

The scholarships were awarded as part of Baker Hughes initiatives in developing the industry's future skilled workforce.

Presenting the scholarships to the students was Mr Ng Say Heng, BH Southeast Asia Vice President, witnessed by Datuk Ir (Dr) Abdul Rahim Hashim, UTP Vice Chancellor.



8 February 2013

### **UTP and Transwater Tenaga Sdn Bhd Joint Forces in Research**

UTP, the first and only private university in Malaysia that received 5 Star Rating under the Malaysian Research Assessment System (MyRA), signed a joint collaboration agreement with Transwater Tenaga Sdn Bhd (Transwater Tenaga), to pursue collaboration in the field of research and other areas of mutual interest.

For the signing of the agreement, UTP was represented by its Vice Chancellor, Datuk Ir (Dr) Abdul Rahim Hashim while Transwater Tenaga was represented by its Executive Director, Mr Tan U-Jiun.

"As the university continues its journey towards excellence, the creation of partnerships and synergies with the industry is a key initiative of the university. UTP is always mindful of the importance of industry-university linkage and that this factor is the differentiator for success. This is to ensure that UTP remains competitive and relevant to the industry and nation at large, besides ascertaining global recognition," said Datuk Ir (Dr) Abdul Rahim.



15 February 2013

### **The University warmly welcomes Malaysia's Prime Minister**

YAB Dato' Sri Mohd Najib Tun Abdul Razak, Malaysia's Prime Minister visited UTP. YAB Dato' Sri Mohd Najib was accompanied by the Minister of Rural and Regional Development, YB Dato' Seri Mohd Shafie Apdal; Perak Menteri Besar, YAB Dato' Seri DiRaja Dr Zambry Abdul Kadir; Perak State Assembly Speaker, YBhg Datuk R. Ganesan; Perak State Secretary, YB Dato' Abdul Puhat Mat Nayan and Perak State Finance Officer, YBhg Datuk Mohd Ghazali Jalal.

UTP Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hj Hashim and UTP Management Committee members were on hand to receive the Prime Minister and his delegation. YAB Dato' Sri Mohd Najib was briefed on UTP's progress by UTP Vice Chancellor and later taken for a short tour of the University's facilities which included the Information Resource Centre and the Chancellor Hall.

The Prime Minister then performed the Friday Prayer at UTP's An Nur Mosque together with 3,000 UTP students and staff before departing to UiTM Seri Iskandar, Perak.





## 18 February 2013 Sports & Co-Curriculum Appreciation Night

Co-Curriculum Unit, Student Support Services Department successfully organised the 2012 UTP Sports & Co-Curriculum Appreciation Night at UTP Main Hall.

The event was organised with the aim to show appreciation and acknowledgement to UTP students who had contributed in elevating the university's image and reputation through sports and extra-curricular activities throughout 2012. In addition, it was held to celebrate students who had embodied the spirit of excellence and overcome the challenges in sports.

The event was graced by the presence of Datuk Ir (Dr) Abdul Rahim B Hashim, UTP Vice Chancellor; Tn Hj Mohamed Noor Rosli Baharom, Deputy Vice Chancellor Student Affairs and Alumni, as well as UTP staff and students.



## 18 – 21 February 2013 UTP Debate Club Emerged Champion in The 2013 Asian English Olympics

UTP Debate Club (UTP DC) emerged as the Institutional Champion in the 2013 Asian English Olympics (AE013) at Bina Nusantara University in Jakarta.

The Asian English Olympics is an annual event organised by Binus University, as a platform to gather high school and university students all over Asia for the love of English.

This year, AE013 had over 500 participants representing more than 100 education institutions from the Asian region, including Universiti Teknologi MARA (UiTM) and International Islamic University Malaysia.

AE013 had six categories of competitions, namely debate, speech, storytelling, newscasting, scrabble and short movie-making. 21 students from UTP took part in all six categories. The students won individual awards for different categories, each award accumulating points for the Institutional Championship. This was the first time UTP won the first place since English Olympics was introduced in 2005. Binus University, Jakarta and Saint Marian College, Manila ranked second and third respectively.



## 21 – 23 February 2013 Sponsored Two Schools in Malaysian Technology Expo 2013

Faculty of Science and Information Technology (FSIT) of UTP recently sponsored two schools, Sekolah Kebangsaan (SK) Tronoh and Sekolah Menengah Kebangsaan (SMK) Seri Iskandar to participate in the Malaysian Technology Expo 2013 (MTE 2013).

Supported by the Ministry of Science, Technology and Innovation (MOSTI), this annual event is a platform for young inventors to showcase their invention and innovation to the local and international public. The objectives of MTE2013 participation are:

- To provide educational experience to the students through participation at science and technology exhibitions
- To introduce students to the world of science fair
- To develop the competencies of the students to participate in national and international level science competitions
- To develop students' soft skills through interactions with the judges, trade visitors and public
- To expand the schools' network with other schools and institutional bodies in MTE 2013



## 22 – 27 February 2013 Hsinchu County Lantern Festival Exchange Programme 2013

Eight members of UTP Performing Arts Group (UPAG) recently participated in the Hsinchu County Lantern Festival Exchange Programme held in Hsinchu Taiwan. UPAG's participation in this programme is to continuously appreciate the diversity of cultures between Taiwan and Malaysia, as well as to establish networking and friendship among the participants. UPAG was invited to perform Malaysian traditional dances to the honourable Mayor Chiew Ching Chun of Hsinchu County, Hsinchu County Council members and delegates from various countries who were involved in the Lantern Festival. There were also performances by Hsinchu Chinese Orchestra and Chinese Orchestra Group from Malaysia, led by Mr Goh Suk Liang.



## 25 February 2013 Signing Ceremony Agreement for The Sponsorship of A Professorial Chair In Deepwater and Subsea Technology Between Technip Geoproduction (M) Sdn Bhd and UTP

Universiti Teknologi PETRONAS (UTP) and Technip Geoproduction (M) Sdn Bhd signed an agreement today for the establishment of the Technip Chair in Deepwater and Subsea Technology, marking a milestone in spearheading research excellence and providing enhanced learning experience at the university.

During the signing, UTP was represented by its Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hashim, while Technip was represented by its Senior Vice President Asia Pacific, Mr Lim Kwee Keong.

The agreement is a testament of Technip's commitment in providing its expertise and knowledge to strengthen UTP's position in research and development in Deepwater Technology, which is one of UTP's niche areas or Mission Oriented Research.



## 26 February 2013 UTP Brings Chinese New Year's Cheer to Underprivileged Children

The Chinese New Year festivity continues at UTP as the university brought cheer to the under privileged children of Pusat Jagaan Pertubuhan Pengurusan Anak-Anak Yatim dan Miskin Anning, Ipoh, Perak.

The children (aged 6 to 17) gathered at the university's lobby and were warmly greeted by UTP Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hj Hashim, who then handed out cash and hampers to the children, and donated five computers to the home's caretaker, Mr Loke Wai Loon.

Afterwards, the children were treated for a sumptuous afternoon tea before they headed back home.



28 February 2013

### **An-Nur UTP Victorious In Marhaban Bahasa Melayu Competition**

Congratulations to An-Nur UTP team who emerged victorious in the Marhaban Bahasa Melayu competition held at Perak Cultural and Arts Department (JKKN) auditorium.

Officiated by YB Dato' Zainol Fadzi Haji bin Paharudin, Perak Exco of Arts, Culture, Youth and Sports Committee, the event was aimed to revitalise Marhaban culture as well as to attract the public, especially the young generation, to appreciate Marhaban.

This was the first time that the Marhaban was performed in Bahasa Melayu, as generally it would be sung in Arabic.

The competition is open to all private and public higher education institutions, secondary schools, private institutions and government bodies.



7 March 2013

### **Graduates in the 21st Century – an Annual Address by the Chancellor, Tun Dr Mahathir Mohamad**

YABhg Tun Dr Mahathir Bin Mohamad, Chancellor of Universiti Teknologi PETRONAS (UTP), gave his annual public lecture in front of a packed audience at UTP's Chancellor Hall. This year's lecture was entitled 'Graduates in the 21st Century'.

UTP has been organising the public lecture series since 1998 and since then, has invited many prominent speakers including His Royal Highness The Regent of Perak, Raja Dr Nazrin Shah; YBhg Prof Emeritus Tan Sri Dato' Dr Khoo Kay Kim and the late YBhg Tun Mohd Ghazali Shafie.

UTP Lecture Series is a valuable forum for knowledge sharing between the speakers and the university community on various topics and issues. The knowledge and information that can be obtained from these sessions complement and enhance what the students gain within the classroom and formal education. As for the lecturers and staff, such sessions will provide them with better insights of national and global issues.



8 March 2013

### **Shell Professorial Chair in Petroleum Geoscience Continues**

UTP and Shell, the global leader in power, energy and gas technology signed an agreement to continue the sponsorship of Shell Professorial Chair in Petroleum Geoscience at UTP. The signing ceremony was formalised between Datuk Ir (Dr) Abdul Rahim Hj Hashim, UTP Vice Chancellor and Mr Iain Lo, Shell Malaysia Chairman.

The establishment of the Chair was a result of the signing of an MoU between UTP and Shell in 2006.

The objective of the Chair is to promote an integrated system of research, training, information and documentation in reservoir characterisation in the field of Petroleum Geoscience generally. The Chair also serves as a means of facilitating collaboration between UTP and high-level, internationally recognised researchers and academics of other universities and institution

UTP hopes other top-notch and leading industry players will support the university with the aim to steer UTP academic and R&D programmes towards international recognition.



## 22 – 24 March 2013

### 3rd Perak Taekwondo Junior Development League Competition

Universiti Teknologi PETRONAS (UTP) Taekwondo Team bagged three gold and one silver medal in the 3rd Perak Taekwondo Junior Development League Competition (Circuit 1) at Pantai Remis, Perak. The event was organised by Persekutuan Taekwondo Negeri Perak (Perak State Taekwondo Association), Taekwondo Malaysia (Malaysia Taekwondo Association) and Perak State Sports Council (Majlis Sukan Negeri Perak).

This state level competition was aimed to develop and select representatives from Perak to participate in the National Taekwondo Championship. There were 2 categories contested, namely Sparring and Poomsae. This event will be conducted in 3 circuits at different districts in Perak to encourage participation.



## 23 March 2013

### UTP Family Day

23 March 2013 was an amazing day filled with laughter, fun and excitement for more than 300 staff of Universiti Teknologi PETRONAS and their families as they gathered at the Lost World of Tambun, Perak for the annual UTP Family Day.

Themed "Pirates of The Carribean", the event was an avenue for UTP staff to unwind and, most importantly, to foster the spirit of unity between UTP community and their family members.



## 29 March 2013

### Euphonious 2013

The final round of Euphonious 2013 competition was successfully held at Chancellor Hall, Universiti Teknologi PETRONAS (UTP).

Euphonious 2013 is an inter-university musical band competition featuring 22 talented musical bands, including one from Universiti Kuala Lumpur Malaysian Institute of Industrial Technology (UniKL MITEC), Johor and another from Multimedia University, Cyberjaya. The event was organised by the Co-Curriculum Unit, Student Support Services Department and International Culture Club, Universiti Teknologi PETRONAS.

Now in its eighth year, the competition was organised with the objective to provide a platform for institutions of higher learning students (both local and international) the opportunities to showcase their hidden talents in performing arts. With the theme "Audio Transcendence", it aimed to solidify unity among students to create a more harmonious and enjoyable environment through music.





### 3 April 2013

#### **Embrace Quality, Enrich Productivity, Enhance Sustainability**

Universiti Teknologi PETRONAS (UTP) held its annual Quality Day (Q Day 2012), to honour staff for their endless dedication, contribution and commitment in ensuring high standard of quality in all aspects of the university's processes. Held at UTP Main Hall, Q Day 2012 marked the 10th year of its organisation and was greeted with much enthusiasm from all staff.

The event was officiated by UTP's Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hashim. In his speech, YBhg Datuk highlighted that this year's theme 'Embrace Quality, Enrich Productivity, Enhance Sustainability' is aptly chosen to further broaden the university's awareness, increase knowledge and strengthen efforts in incorporating the PETRONAS Five Quality Principles in our work. "With the assimilation of these principles in each of us, we will deliver services of the highest standards for the benefit of our internal and external customers as well as our stakeholders", said YBhg Datuk.



### 3 – 7 April 2013

#### **2013 Pencak Silat Festival and Taming Sari V Championship For Higher Institution**

UTP Pencak Silat Team won 1 gold, 1 silver and 2 bronze in the 2013 Pencak Silat Festival and Taming Sari V Championship for Higher Institutions at Universiti Kebangsaan Malaysia (UKM).

Organised by UKM Pencak Silat Club, the event saw the participation from eight institutions, namely UTP, Universiti Kebangsaan Malaysia (UKM), Universiti Malaya (UM), Politeknik Ungku Omar (PUO), International Islamic University Malaysia (IIUM), Universiti Pertahanan Nasional Malaysia (UPNM), Insaniah University College (KUIN) and Albukhary International University (AIU).



### 11 – 14 April 2013

#### **PETROBOTS wins Awards at MIROC 2013**

UTP Robotics Society or PETROBOTS did the university proud when they clinched awards at the Malaysian International Robotic Competition (MiROC 2013). The competition, (formerly known as Malaysia University Robot Competitions, MuROC) was organised by Universiti Malaysia Perlis (UNIMAP). MiROC 2013 serves as a platform for students to showcase their own built robot, exchange and gain latest robotic technology as well as to seek innovative ways of building robots.

Participation came from Malaysia and international public and private universities (19 teams), Malaysian technical and skills institutions (26 teams) and secondary schools (24 teams). The event offered four game categories, namely Rope Climbing Robot, Fire Fighting Robot, Paintball Root and Rescue Robot.



13 April 2013

### Performing Arts at its Best at FESCO 2013

Co-Curriculum Unit of Student Support Services Department, Universiti Teknologi PETRONAS (UTP) organised the sixth edition of the Festival of Colours of the World (FESCO) 2013 at the Chancellor Hall, Universiti Teknologi PETRONAS.

The event was officiated by Puan Juniwati Rahmat Hussin, Chairman of Institute of Technology PETRONAS Sdn Bhd. Board of Directors/PETRONAS Vice President and Venture Director, Pengerang Integrated Complex.

The main objective of the festival was to provide an opportunity for students of Higher Learning Institutions (local and international) to showcase their talent in performing arts. The event also helped to inculcate a deeper appreciation of Global arts and culture.



16 – 19 April 2013

### Standing Tall at i-ENVEX 2013

Congratulations to UTP team for their achievements in winning three awards for their outstanding and creative innovations at the 4th International Engineering Invention & Innovation Exhibition (i-ENVEX) 2013, held at Universiti Malaysia Perlis (UniMAP) Main Campus, Perlis.

i-ENVEX is an annual international exhibition organised by ENVEX Young Researcher Club (EYReC), UniMAP and Ministry of Higher Education Malaysia (MOHE). This year's i-ENVEX and MIYIO (Malaysia International Young Inventors' Olympiad - another exhibition that runs concurrently) have attracted over 700 inventors from 14 countries, including Egypt, Canada, Iran, South Korea and Romania. i-ENVEX is organised with the aims to provide opportunity to promising young innovators to share their creative idea(s) as well as to provide an excellent exposure of invention and technological advancements in various sectors.



19 – 20 April 2013

### UTP Bagged Three Prizes in the Highest Early Strength Concrete Cube Competition (HESCCC) 2013

UTP team bagged three prizes in the 2013 Highest Early Strength Concrete Cube Competition (HESCCC) held at Universiti Teknologi MARA (UiTM) Shah Alam. The event was organised by American Concrete Institute (ACI) – KL Chapter in collaboration with Concrete Society of Malaysia (CSM) and UiTM, Shah Alam.

36 teams consisting of educational institutions and renowned industrial organisations participated in this competition, which included Universiti Malaya, Universiti Sains Malaysia, Universiti Teknologi Malaysia, Universiti Putra Malaysia, International Islamic University Malaysia, Universiti Teknologi MARA Shah Alam, Lafarge Concrete Malaysia, BASF Malaysia and CML Concrete Materials Laboratory Sdn Bhd, among others.





20 – 21 April 2013

### 2013 National Malay Gamelan Competition

UTP Gamelan Group, Sanggar Kirana, walked away with a cash prize of RM6,000.00 when they won the 2nd runner up at the 2013 National Malay Gamelan Competition, held at Sultan Mizan Hall, Universiti Malaysia Terengganu (UMT).

The competition's objectives were to create and promote a culture of appreciation and love towards Malay Gamelan. The two-day event was organised by Terengganu State Museum Board in collaboration with State Tourism, Art, Culture and Heritage, and was participated by 13 gamelan groups.

This year's event was officiated by YBhg Dato' Haji Mazlan Ngah, Terengganu State Secretary.



25 April 2013

### UTP Reaching through Career & Leadership Talk

UTP Alumni visited Sekolah Menengah Kebangsaan (Perempuan) St George, Penang and organised the "Career & Leadership Talk". The objective of this programme is for UTP Alumni to continue strengthening its existence at its chapters and involve actively with the community at the alumni's respective area. Through this programme, it will also develop positive personal attributes in UTP potential students.

90 Form 4 and Form 5 students from 8 selected schools across Penang benefited from the talk. The sharing session was given by UTP Alumni members who are currently working at various industries at Bayan Baru, Penang and Kulim, Kedah.

Based on the positive feedbacks received, the students enjoyed the talk and learnt greatly about UTP. They were keen to pursue their studies in UTP and look forward to seeing more activities from UTP Alumni.



27 April 2013

### Professor Dr Norani makes us proud

Universiti Teknologi PETRONAS (UTP) would like to congratulate Prof Dr Norani Muti Mohamed on her appointment as Fellow of the Academy of Sciences Malaysia (ASM). She is among the latest of the country's academics elected as a Fellow at ASM's 18th Annual General Meeting.

Prof Norani, who is currently holding a position as Director, UTP Centre of Innovative Nanostructures & Nanodevices (COINN), specialises in the area of Thin Film technology, Semiconductor technology and Nanotechnology. She is also the UTP Director of Nanotechnology Mission Oriented Research (MOR) since 2005. She has founded the Centre of Innovative Nanostructures and Nanodevices (COINN) at UTP with the objective of establishing a library of nanomaterials and synthesis techniques for accelerated production of innovative and beneficial commercialised products. In 2011, COINN was recognised as Nano Malaysia Centre of Excellence based on its continuous effort on R&D on nanotechnology, focusing on alternative and renewable energy.



### 3 – 5 May 2013

#### **Champion Again at Debat Muhibbah**

It was a joyous moment for UTP when its Malay Debate Team was crowned “Debat Muhibbah” Champion, for two consecutive years. In 2012, the team not only emerged as the Champion but also won the Best Speaker Award.

Debat Muhibbah, an annual Malay language debating event, was also participated by three other countries namely Brunei, Cambodia and Singapore. As in the previous years, the competition follows a parliamentary style concept, comprising the government and opposition team. UTP was announced as the eventual winner after defeating Singapore in the final round of the competition.



### 9 – 11 May 2013

#### **UTP Bags 87 Medals in ITEX 2013**

UTP researchers continues their excellent achievements in research and innovation when they bagged 31 gold, 54 silver and 2 bronze medals in the coveted 2013 International Invention, Innovation and Technology Exhibition (ITEX 2013).

Organised annually by MINDS (Malaysian Invention & Design Society), ITEX 2013 attracted participations from 47 institutions in Malaysia and more than 1000 inventions from various countries.



### 8 – 9 June 2013

#### **UTP Swimmers Finish 1st Runner-up in 2013 MASISWA Swimming Championship**

UTP Swimming Team emerged 1st runner-up when they bagged 8 medals (5 gold, 2 silver and 1 bronze) in the 2013 MASISWA Swimming Championship. They also brought home RM500.00 and a trophy.

The event was organised by Majlis Sukan IPTS Malaysia (MASISWA) in collaboration with INTI International University, Negeri Sembilan. It is open to all private higher learning institutions with the objective of selecting swimmers to represent Majlis Sukan IPTS Malaysia (MASISWA) at the 5th ‘Sukan Institusi Pendidikan Malaysia’ (SIPMA) from 16 to 22 November 2013.



15 June 2013

### Learning Mathematics and Science the fun way

Kampar and SK Ulu Geruntum, Gopeng took part in UTP's inaugural 1MKIDS (1 Malaysia Kids) Programme. They were joined by six other schools namely SK Tronoh, Tronoh; SK Seri Tronoh, Tronoh; SK (T) Tronoh, Tronoh; SJK (C) YitChee, Pusing; SK St. Bernadette's Convent, Batu Gajah and SK Seri Iskandar, Seri Iskandar.

Organised by Faculty of Science and Information Technology (FSIT), UTP and UTP Engineering Design Exhibition 31 (SEDEX 31) team, the 1MKIDS programme aims to create awareness of cultural diversity in Malaysia among school children, promote science and technology among primary students, build interest in learning Science and Mathematics through fun and simple ways, as well as expose the students with multimedia development skills. The event was officiated by Professor Dr. Noorhana Yahya, Dean of FSIT, UTP.

For this programme, 100 students, aged 10-12 years, were selected from various schools in Kinta, Kinta Selatan and Perak Tengah. They were divided into 10 groups, with each group consisting of students from different races mixed together, namely Malays, Chinese, Indians and Orang Asli.



15 – 16 June 2013

### PETRONAS AI-Quran Recitation Competition 2013

Majlis Tilawah AI-Quran PETRONAS (MTAQ) 2013 or the PETRONAS AI-Quran Recitation Competition was held at Chancellor Hall, UTP. 57 staff representing various zones on operating units took part in this competition namely Wilayah Persekutuan, West Coast, East Coast, Sabah/Wilayah Persekutuan Labuan, Sarawak as well as Brunei, Indonesia, Turkmenistan, South Africa, Iraq and Sudan.

Encik Amir Hamzah Azizan, Vice President of PETRONAS Downstream Marketing in his closing speech stated that event such as the Majlis Tilawah AI-Quran is significant to enhance the realisation of PETRONAS' shared values, universality and relationship among PETRONAS family members.

Tn. Hj. Mohamed Noor Rosli Baharom, UTP Deputy Vice Chancellor of Student Affairs and Alumni in his welcoming address said that to acquire the right "fikrah" or mindset, students must not only be equipped with the knowledge of science and technology but with other aspects of knowledge such as spiritual and character building. He was representing YBhg Datuk Ir (Dr) Abdul Rahim Hj. Hashim, UTP Vice Chancellor.



18 – 19 June 2013

### Technology, Education and Career (TEC) Exhibition 2013

The Student Representative Council of UTP (SRCUTP) and the Student Support Services Department (SSSD) of UTP in collaboration with the Ministry of Education (MOE) and Ministry of Science, Technology and Innovation (MOSTI) organised the Technology, Education and Career (TEC) Exhibition 2013 at UTP. The event was officiated by YBhg Dato' Mokhzani Mahathir, Executive Vice Chairman, Sapura Kencana Petroleum Berhad.

54 companies participated in the 12th edition of TEC. With the theme "Enrich Your Career Path", the objective of this event is to strengthen the University's relationship with the industries mainly in the areas of human capital development, and create awareness among UTP students and the public on available learning opportunities, job recruitments and the latest available technology.



21 – 23 June 2013

### UTP Crowns Overall Champion in Kejohanan Sukan MASISWA Zon Utara 2013

Universiti Teknologi PETRONAS contingent achieved an outstanding feat winning 12 medals to emerge as the overall champion in Kejohanan Sukan MASISWA Zon Utara 2013. The tournament was held in UniKL Malaysian Spanish Institute (MSI), Kedah in collaboration with the Ministry of Higher Education (MOHE) and Majlis Sukan IPTS Malaysia (MASISWA).

The tournament saw more than 400 athletes from 11 private institutions in the Northern Zone, competing against each other to clinch the championship title. Participation came from UTP, UniKL MSI, UniKL Royal College of Medicine Perak (RCMP), Open University Malaysia (OUM), Kolej PolyTech MARA (KPTM) Alor Star, Universiti Tunku Abdul Rahman (UTAR), Kolej Tunku Abdul Rahman (KTAR) Perak, Kolej Tunku Abdul Rahman (KTAR) Penang, Alliance University College of Medical Sciences (AUCMS), Kolej Islam Sains & Teknologi (KIST) and Albukhary International University (AiU). During the 3-day tournament, 6 sports were contested namely badminton, netball and tenpin bowling.



21 – 23 June 2013

### Research Expert Panel (REP) Workshop for Assessment of UTP Mission Oriented Research (MORs) Roadmap

UTP Research and Innovation Office, in collaboration with UTP Corporate Planning and Transformation Office, successfully conducted the Research Expert Panel (REP) workshop at Sama-Sama Hotel, KLIA. With 58 participants, the workshop was conducted with the following objectives:

- To evaluate current performance of MORs vis-à-vis planned roadmap;
- To identify gaps and propose the mitigation plan; and
- To re-fine, re-shape, re-scope and identify new requirement(s), if necessary, for the roadmap to ensure achievable milestones and aspiration.

The evaluation of MORs' performance vis-à-vis the planned roadmap is essential not only to evaluate the roadmap and its implementation, but also to strategise in driving UTP's research to a greater height.



22 June 2013

### Chakravedaz Cultural Night (Dance, Singing & Short Film Competition)

Universiti Teknologi PETRONAS (UTP) Indian Orchestra Group has proven that engineering students can also shine in arts and cultural competition. They emerged first runner up for the dance competition, second runner up and won consolation prizes for the singing competition in the Chakravedaz Cultural Night. This art and cultural, as well as charity night event was organised by the Indian Cultural Bureau of Universiti Tenaga Nasional (UNITEN) Kampus Sultan Haji Ahmad Shah (KSHAS).

The event was held with the following objectives:

- A charity event to raise funds and support SJK (T) Ladang Kelpin, Rompin Negeri Sembilan
- To celebrate Indian arts and culture, where dancing and singing played a significant role
- To create a new dimension of dancing and singing by combining classical and contemporary styles





22 June 2013

### Experimenting @ UTP Chemistry Lab with Go-Science

120 Year 6 students from SRK St Bernadette's Convent, Batu Gajah recently attended the Go-Science programme held at UTP. The event was officiated by En Ahmad Maswan Ahmad Fuaad, District English Language Officer, South Kinta District.

Organised by UTP Faculty of Science and Information Technology (FSIT), Go-Science programme is held with the following objectives:

- To create and elevate primary school children's awareness of Science through real and hands-on experiments. These experiments will then assist to develop students' long term spatial memory.
- To build and boost students' interest of learning Science by connecting science in their everyday life. This will aid students to understand better the fundamental concepts of Science.

For Go-Science, the students were required to carry out five experiments at UTP Chemistry Laboratory. The experiments that were carried out are based on Year 6 Science UPSR syllabus.



29 – 30 June 2013

### Won 3 gold medals in National Wu Do Championship

Khairul bin Anuar and Aqil bin Muhammad Yusof, did the University proud when they took home 3 gold and 1 bronze medal at the 2013 National Wu Do Championship held at Ji Shang Multipurpose Hall, Kuala Lumpur.

Wushu is both an exhibition and a full-contact sport derived from traditional Chinese martial arts. Organised by Wushu Federation of Malaysia and Wu Do Academy of Malaysia, this national level Wushu competition serves as a build up to the grand National Wushu Championship which will be held in September 2013. UTP sent 2 athletes, Khairul and Aqil (both from Petroleum Engineering programme), who successfully won medals in all the categories they contested. Khairul was also named as the Best Male Athlete in the competition.



4 July 2013

### UTP Renews Collaboration with University of Brighton, UK

UTP has renewed its collaboration with University of Brighton in the areas of staff development programme, student exchange programme, joint research and development as well as teaching and learning programme through the signing of a Memorandum of Understanding (MoU). To mark this occasion, a signing ceremony was held at the University of Brighton Campus in United Kingdom. The MoU was signed by UTP Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hj Hashim and University of Brighton Vice Chancellor, Prof. Julian Crampton. Also present as witnesses were Prof. Dr. Abdul Rashid Abdul Aziz, Deputy Vice Chancellor, Research and Innovation, UTP and Prof. Stuart Laing, Deputy Vice Chancellor, University of Brighton.

The renewal of this collaboration signals that on-going research and academic activities between the two universities have been fruitful and have produced successful results in the targeted areas. A Joint Working Committee was also established to oversee the collaborative efforts between the two institutions and ensure their effective implementation.



5 – 7 July 2013

### 3rd Perak Junior Development League Circuit 2 Competition

UTP Taekwondo Team did the University proud when it bagged 5 gold, 3 silver and 2 Bronze medals in the 3rd Perak Junior Development League Circuit 2 held at Dewan Bandaran Kampar, Perak. This state level event was organised by Perak State Taekwon-Do Association (PTNP) and Taekwondo Malaysia (TM) in collaboration with Perak State Sports Council (MSN Perak).

This competition is held with the aim to select representatives from Perak to participate in the National Taekwondo Championship. It consists of 3 circuits (Circuit 1 to 3) and is conducted in several districts around Perak to encourage wider participation of various age levels. For Circuit 1 (held last March), UTP Taekwondo Team won 3 Gold and 1 silver medals.

For Circuit 2, UTP's performance improved tremendously winning 10 medals. UTP sent a total of eight athletes (five males and three females) accompanied by UTP Taekwondo Coach, Master David Ng Teik Seng.



6 July 2013

### UTP Shares Joy With 170 Underprivileged Children

170 underprivileged children were treated to fun and games at the Sunway Lost World of Tambun Theme Park, Ipoh. They were all smiles when they visited the mini zoo and played games at the water park and rides.

The multiracial children were selected from four orphanages near Ipoh, namely Praise Home, Asrama Anak Yatim & Warga Miskin Budi Mulia Nurul Huda, Pusat Jagaan Anak-anak Yatim dan Miskin Nurul Iman and The Salvation Army Boys' House. The event was organised by UTP Corporate Services Department, as part of UTP's Corporate Social Responsibility (CSR) initiatives to engage with its surrounding community.

As part of UTP's efforts to help promote healthy lifestyles to the future generations, each children was given a skipping rope before entering the water park. Together with UTP staff, they did a ten-minute skipping exercise which was equivalent to a 45-minute running workout. The skipping ropes were sponsored by Rotary Club of Kinta and MILO.



15 July 2013

### UTP Pursues Corrosion Inhibitor Technology with D3 Chemicals Sdn Bhd

UTP and D3 Chemicals Sdn Bhd has signed an agreement to pursue collaboration in the field of corrosion inhibitor technology and other areas of mutual interest. For the signing, UTP was represented by its Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hj. Hashim, while D3 Chemicals Sdn. Bhd. was represented by its Chairman, YBhg Dato' Abu Talib Mohamed.

"This signing ceremony is another testament of the successful collaboration between the university and the industry. It has long been acknowledged that a university cannot be working separately from the industry but instead both parties should be collaborating in various aspects of teaching, learning, research and consultancy to bring tremendous benefits to both parties," said YBhg Datuk Ir (Dr) Abdul Rahim.





31 July 2013

### Tapping on Taiwan's experience for Nanoelectronics Research

Universiti Teknologi PETRONAS (UTP) and National Tsing Hua University (NTHU), a renowned university in Asia, has recently signed an MoU to collaborate in the areas of nanoelectronics research.

The MoU was signed by UTP Vice Chancellor, YBhg Datuk Ir (Dr) Abdul Rahim Hashim and NTHU Vice President for Global Affairs, Prof. Wei-Chung Wang at PETRONAS Twin Towers, Kuala Lumpur. Also present as witnesses were Prof. Dr. Abdul Rashid Abdul Aziz, UTP Deputy Vice Chancellor, Research and Innovation, and NTHU Dean of Electrical Engineering and Computer Science, Professor Keh-Yung Cheng.

The signing of the MoU is another important milestone for UTP's journey towards becoming an internationally recognised higher learning institution. UTP will work closely with NTHU to promote technical and engineering competencies in academic and research. This significant alliance will augur well towards the holistic development of both universities and further help UTP to remain competitive and relevant to the industry and nation at large.



20 August 2013

### Global CCS Institute Hands Over Carbon Capture Storage Technology to UTP

Global Carbon Capture and Storage (CCS) Institute officially handed over the Carbon Capture Storage (CCS) Technology to Universiti Teknologi PETRONAS (UTP), at a special ceremony held at PETRONAS Twin Towers in Kuala Lumpur. UTP was represented by its Vice Chancellor Datuk Ir (Dr) Abdul Rahim Hj Hashim while Global CCS Institute was represented by its Capacity Development Manager, Ms. Alice Gibson.

The handover ceremony was a result of a licensing signing agreement between Global CCS Institute and UTP in May 2013. This ceremony marked a historic occasion for the university, as the CCS Technology received will be utilised for educational materials and support related to carbon capture and storage for the university staff and students, as well as for PETRONAS employees.



21 August 2013

### SEDEX 31 sparks more inventions and innovation

UTP organised three simultaneous events; the Opening Ceremony of the 31st Science and Engineering Design Exhibition (SEDEX 31), MoU Signing Ceremony between UTP and Institution of Engineers Malaysia (IEM) and MoU Signing Ceremony between UTP and Anise Asia Cloud Sdn Bhd, as part of the University's efforts to realise its vision in becoming a leader in Technology Education and Centre for Creativity and Innovation.

This year marked the 31st Science and Engineering Design Exhibition (SEDEX 31). It serves as a platform for UTP students and staff to showcase their creative and innovative ideas and designs to the campus community. Since it was first held in 1997, the event has successfully produced many inventions leading to new prototypes, research methodologies and approaches in various fields of expertise.

The opening ceremony of SEDEX31 was officiated by Ir. Choo Kok Beng, President of Institution of Engineers Malaysia (IEM).



## 7 September 2013

### **An MBA that drives global energy business – UTP welcomes its first MBA in Energy Management cohort**

UTP received its first cohort of students who registered for the off-campus/September 2013 Master of Business Administration in Energy Management (MBA-EM) programme.

The September 2013 MBA-EM cohort sees 10 scholars, who come from a diverse professional background, enrolling in the programme. The average professional working experience among the scholars is 8 years, whose affiliations include companies from within and outside of PETRONAS group.

During the programme's registration and induction session at PETRONAS Petroleum Resource Centre (PRC), UTP Dean of Centre for Graduate Studies, Associate Professor Dr Mohd Fadzil Hassan, representing Professor Ir Dr Ahmad Fadzil Mohamad Hani, UTP Deputy Vice Chancellor of Academic, described the MBA-EM programme as a niche MBA programme similar to that offered by Singapore's Nanyang Technology University, but with a fraction of the fees which is to the benefit of students. The MBA-EM programme is the 7th post-graduate taught-course programme offered by UTP.



## 18 September 2013

### **'Reflection' – Honouring our Loyal Partners**

UTP organised a special event, "Reflection: An Evening with UTP Loyal Partners", to celebrate UTP-Industry partnership as well as to express the university's gratitude and appreciation to its loyal partners for their contributions and support towards the growth of UTP.

In order to mark this occasion, special awards were presented to PETRONAS, Shell, Schlumberger WTA (M) Sdn Bhd, Mitsubishi Corporation, Technip Geoproduction (M) Sdn Bhd, Majlis Amanah Rakyat (MARA) and Jabatan Perkhidmatan Awam (JPA).

Since UTP's establishment in 1997, many industry sectors have played significant roles contributing to the successes that the University has achieved so far. They have collaborated with UTP in many ways with greater engagement and working together in the true spirit of partnership.



## 18 September 2013

### **"Gatra Pertama" – A Gamelan Debut**

UTP Gamelan Group, Sanggar Kirana, launched a gamelan album, entitled "Gatra Pertama" at a special event in Marriot Putrajaya. The launching marks a historic event for the university as it is the first ever gamelan album produced in Malaysia by university students.

The album was also launched to celebrate Sanggar Kirana's accomplishments throughout its 11th year of establishment. The group has made the university proud by performing at national and international levels for the university, PETRONAS, Institutes of Higher Education Malaysia and state government occasions. Apart from that, UTP gamelan group has also participated in various music festivals, concerts and competitions, such as the International Javanese Gamelan Festival Bandung Indonesia, International Gamelan Festival Yogyakarta Indonesia, Festival Gamelan Malaysia Universiti Kebangsaan Malaysia, Tapestry of Colours at Dewan Filharmonik PETRONAS and National Malay Gamelan Competition.



## 21 – 22 September 2013

### **Young Programmers Camp 2013 (YPC13) Codes the Future**

UTP organised the Young Programmers Camp 2013: Coding The Future (YPC2013) for students to further explore the world of technology in a more interactive, fun and upbeat way.

YPC13 is the university's community-outreach project concentrating on secondary school students in UTP's surrounding vicinity. For this project, the students were selected from SMK Ahmad Boestamam, Sitiawan and SMK Seri Iskandar, Bota. The two-day camp was organised by Syntech Organisation, UTP's students IT club, and supported by Faculty of Science and Information Technology (FSIT) UTP.

The objectives of this programme are to stimulate students' creativity and innovation in IT as well as to promote UTP academic programmes to secondary students, namely Information & Communication Technology and Business Information Systems. The students were taught internet programming, commonly known as website development.



## 1 – 6 October 2013

### **Swaying away with awards at the World Dance Festival**

UTP Performing Arts Group (UPAG) danced to victory at the 10th Cheonan World Dance Festival at Cheonan Samgeori Park, Cheonan City, Korea when it won 3 awards namely First Prize Award for Cheonan Folk Dance Competition International Category, Best International Street Parade Award and Best Costume Award.

19 members from UTP Performing Arts Group (dancers) and 6 members from UTP Gamelan Group Sanggar Kirana (musicians) represented Malaysia for this festival. This was the third time UPAG represented Malaysia in this dance competition.

With the theme 'Let's Dance in Cheonan', the event was organised by Cheonan-SI, Cheonan Foundation for Arts and Culture, Ministry of Culture, Sports and Tourism, Ministry of Foreign & Trade of South Korea and FIDAF.

The main aim of this festival is to encourage and educate the international community to appreciate international folk dance cultures. It was participated by professional and national dance groups from 19 countries.



## 12 October 2013

### **Yayasan UTP raised RM 500,000 at charity Golf 2013**

Yayasan UTP raised nearly RM500,000 at the YUTP Charity Golf 2013 held at Kelab Golf Sultan Abdul Aziz Shah (KGSAAS), Shah Alam Selangor.

The event was organised in conjunction with UTP 13th Convocation ceremony and graced by the presence of UTP Pro-Chancellor and PETRONAS Chairman, YBhg Tan Sri Mohd Sidek Hassan, UTP Vice Chancellor, Datuk Ir (Dr) Abdul Rahim Hashim and PETRONAS top management personnel.

Some 80 golfers from the industry such as Exxon Mobil Exploration and Production Malaysia Inc., Dialog Group Berhad, Deleum Berhad, Halliburton, Baker Hughes and Bredero Shaw (M) Sdn Bhd participated in the event.

The charity golf event was held to raise funds for Yayasan UTP Bursary. The funds will then be awarded to deserving students to support their studies at the university. Currently, 40% of UTP undergraduate students depend upon loans from various agencies for their studies and expenses at UTP. Yayasan UTP has until now, awarded bursaries amounting to RM600,000 to an average of 100 students annually.



23 October – 3 November 2013

### International invention organisations recognised UTP's talents and innovation

At the British Invention Show (BIS), United Kingdom, UTP won all awards, with 8 gold, 2 silver medals and 2 Special Awards.

Associate Professor (AP) Dr Faiz Ahmad, Mohd Azman Zakariya, Associate Professor Dr Ahmad Mustafa Hashim, Associate Professor Dr Dayang Rohaya Awang Rambli and Associate Professor Dr Nasir Shafiq won eight gold medals. Mohd Azman also won a special double gold award through his invention (ICU-V) invention.

BIS is a platform for innovators to develop new business opportunities by bringing together innovation and enterprise, investors and inventors, designers and manufacturers alongside associated services. For 2013, it received participation from 15 countries.

UTP's participation in another similar invention show the International Trade Fair, Ideas, Inventions and New Products Exhibition (iENA 2013) in Nuremberg, Germany also resulted in tremendous success when it won 1 gold, 4 silver and 3 bronze medals.



27 October 2013  
**13th Convocation Ceremony**

YBhg Tan Sri Sidek Hassan, Pro Chancellor of Universiti Teknologi PETRONAS (UTP) and Chairman of PETRONAS presented Alumni Award for Best Research to Muhammad Farooq from Chemical Engineering Programme for Doctor of Philosophy category and to Jawad Humayun from Electrical and Electronic Engineering for Master's category, at UTP's 13th Convocation. Alumni contributed the awards in support and recognition for creativity and innovation amongst the scholars. At the same ceremony, YBhg Tan Sri Sidek also conferred doctoral, masters and bachelors degrees to 1147 students.

Out of the 1147 students, 157 are postgraduate students from Chemical Engineering, Electrical & Electronic Engineering, Mechanical Engineering, Civil Engineering, Information Technology, Process Integration, Asset Management & Maintenance, Electronic Systems Engineering, Petroleum Geoscience and Petroleum Engineering.



16 – 17 November 2013  
**UTP organised the Regional Conference on Student Activism (RECONSA 2013)**

UTP organised the Regional Conference on Student Activism (RECONSA 2013).

Themed, Embracing Volunteerism, this conference was held with the objectives of:

- Enriching and creating a conscious society that practices volunteerism in a right and comprehensive manner.
- Reinforcing the concept of well-rounded students who excel in academics while actively participating in voluntary activities and contributing to society
- Providing a platform for students to think critically and creatively in presenting their ideas and interacting with others from different backgrounds.

The two keynote speakers, Hasanain Juaini, a known figure in volunteerism field and Edmond Yap, the Founder of EduNation and eight presenters were able to provide interesting insights to all the 200 students from various universities who attended this 2-day conference.





## 17 November 2013

### Eduspec Junior Robothon National Finals

UTP hosted the Eduspec Junior Robothon National Finals. The theme of the 8th season robotics game was "Better City Better Life". 600 students from 40 different schools from all over Malaysia participated in this event.

This competition is one of the largest and fastest growing educational and competitive robotics programmes in Malaysia. Participants performed with outstanding efforts as they competed aggressively against opposing teams. Each team was given the same amount of time to complete a certain task. The demands for students to collaborate as they challenged against other schools and tested their critical thinking skills were essential for this competition.

"We realise the importance of IT literacy for 21st Century Learners, because IT literacy facilitates learning. Thus, it is important to introduce a programme that has industrial relevance, a well-planned syllabus with a good blend of content, pedagogical and technical knowledge." Said Lim En Hong, group CEO of Eduspec Holdings Bhd.



## 18 – 19 November 2013

### Ministry of Education completed auditing for Research University

UTP underwent the final process of the Research University auditing. The auditors were from the Ministry of Education.

The journey towards attaining Research University (RU) status requires collaborative efforts and strong teamwork. Prior to the site audit, UTP has carried out its own internal audit process which had shown a good example of teamwork and amalgamation of efforts from various departments.

Panel of Assessors for the Research University evaluation team:

1. YBhg Dato' Prof Emeritus Dr Muhamad bin Yahaya
2. YBhg Dato' Prof Dr Mohamed Isa bin Abdul Majid
3. YBhg Dato' Prof Emeritus Dr Md Ikram bin Mohd Said
4. YBhg Prof Dr Awalludin bin Mohamed Shaharoun
5. YBhg Prof Dr Mohd Adzir bin Mahdi
6. YBhg Prof Ir Megat Johari bin Megat Mohd Noor



## 21 November 2013

### Promoting Sustainable Forest Management with FRIM

UTP signed a memorandum of understanding (MoU) with Forest Research Institute Malaysia (FRIM) to collaborate in promoting sustainable forest management (SFM) and optimal use of forest resources through the application of knowledge and technology, generated through scientific research and development activities.

The signing ceremony was formalised between UTP Vice Chancellor, Datuk Ir (Dr) Abdul Rahim Hj. Hashim and FRIM Director General, Dato' Dr Abd Latif Mohmod. Also present as witnesses were UTP Chief Financial Officer, En. Hasbullah Hj Ihsan and FRIM Senior Research Officer, Forest Biodiversity Division, Dr Lillian Chua.

The signing of this MoU was another important milestone for UTP's journey towards becoming a recognised higher learning institution. The significant alliance with FRIM augured well towards the holistic development of both parties and further helped UTP to remain relevant to the industry and nation at large.





## 28 November – 1 December 2013

### **Champion for the unprecedented 4th time!**

UTP emerged as the overall champion in the International Student Sports Carnival 2013 (ISSC) for an unprecedented fourth time in a row after winning four gold, four silver and three bronze medals.

The gold medals came from Indoor Rowing Single (Female), Indoor Rowing Relay (Female), Road Relay (Male) and Volleyball (Male). Volleyball (Female), Road Relay (Female), Badminton (Mixed), Indoor Rowing Double (Male), Indoor Rowing Double (Female), Netball and Basketball (Female) contributed silver and bronze medals.

This tournament was held at Universiti Tenaga Nasional (UNITEN) and organised by the Ministry of Education Malaysia and Universiti Tenaga Nasional (UNITEN). Its main objective is to inculcate healthy and productive integration amongst international students from various ethnicities and nationalities, as well as with the local students of public and private higher learning institutions. 1200 students from 22 public and private higher learning institutions participated and competed in 19 games.



## 4 December 2013

### **Menggapai Impian reached to 60 Orphans**

As a responsible corporate citizen that strives to give back and make a meaningful difference in the lives of others, UTP reached out to 60 less underprivileged children in Ipoh, Perak through its Corporate Social Responsibility (CSR) programme, Menggapai Impian.

Now in its seventh year, Menggapai Impian is the university's signature annual CSR programme with the aim of providing the underprivileged children (primary and secondary students) a head start in their education and better learning experience.

With this CSR, UTP staff volunteer to sponsor a minimum of RM150 for one child. Each child will be given basic school necessities in the form of school uniforms, bags, shoes and stationery for the new school term.

For this programme, children are selected from different races of different orphanages from various districts in Perak. This year, 60 children were selected from three orphanages namely Pertubuhan Kebajikan Kasih Nurul Iman Negeri Perak, Pertubuhan Kebajikan Harapan Baru, Ipoh and Pertubuhan Kebajikan Anak Yatim Anugerah Istimewa, Ipoh.



## 7 December 2013

### **UTP brings relief to flood victims**

UTP community including UTP Alumni showed their caring sides when they donated nearly RM7,000 to the flood victims in the East Coast of Malaysia. The donated funds were then used to purchase essential items for the flood victims such as food, milk, mats, baby mattresses, toiletries and hand sanitisers.

Apart from this, there were donations in-kind from UTP staff in the form of baby milk, baby diapers, toiletries, medical supplies, towels, new and used clothes, blankets and shoes/sandals. Used items were sorted and only those that were in good condition were selected. Some of UTP's staff also bought these used clothes and the proceeds were then used to purchase food items.

The donated goods for the flood victims were delivered and unloaded at USJ 14, Selangor on 7 December 2013. They were then transported on the same day by lorries to the flood victims at four relief centres in Kuantan, namely Sekolah Kebangsaan Batu Tiga, Sekolah Kebangsaan Sungai Isap Murni, Kampung Bugis Berserah and Kampung Permatang Badak.

UTP's noble cause was also featured in TV Al-Hijrah and TV9.



18 December 2013

## **UTP – Media Bowling Meet 2013**

With 1471 pin falls, Harian Metro emerged as the winner in the UTP-Media Bowling Meet 2013 held at Ampang Superbowl, Ipoh recently. First runner-up was BERNAMA with 1363 pin falls while second runner-up went to Utusan Malaysia with 1319 pin falls.

Organised by UTP Corporate Services Department, this second bowling meet saw the participation of 14 media teams from Ipoh, Perak Branch and two teams from UTP. The game was conducted in a three-game series format with each team fielding four players.

The event is organised as part of the university's efforts to strengthen and maintain good relationship with all media personnel. In addition, it created a platform for better social interaction between UTP and the media in a fun and an informal environment.

The winning teams received prizes from En. Hasbullah Haji Ihsan, UTP's Chief Financial Officer. As champions, Harian Metro team walked away with a challenge trophy, individual trophies, hamper and cash prizes. As the runners-up, BERNAMA and Utusan.

# Academic Overview

The University reported a commendable performance this financial year due, in no small measure, to its academic programmes, student development programmes, academic faculty and student strength.

In FY2013, Universiti Teknologi PETRONAS introduced the MBA in Energy Management programme in addition to its currently available programmes ranging from Foundation Studies up to Doctoral programmes. New programmes that are being developed at the Bachelor level are BSc in Applied Physics, BSc in Applied Chemistry, and at the Masters level, MSc in Offshore Engineering, MSc in Drilling Engineering and MSc in Process Safety.

These current and new programmes with research active academics reinforced UTP's aspiration of being a recognised partner of choice for the Oil and Gas industry. Existing programmes are constantly reviewed to meet industry expectations and ensure relevance to stakeholders. The active participation by the Industry Advisory Panels and Adjunct Lecturers have added immeasurable value to the curriculum content, learning experience and assessment aspects. In 2013, 92 Adjunct Lecturers successfully conducted a total 86 lectures at UTP.

UTP was established with the intention of meeting professional requirements in Oil and Gas industry comprising of PETRONAS and other related national and international corporations. After more than 16 years since its inception, the University has been successful in meeting the demands of the industry. Nearly 80% of the graduates entered Oil and Gas industry with renowned brands like Shell, Exxon-Mobil, Conoco-Phillips, Schlumberger, Halliburton and Baker Hughes apart from PETRONAS. Others joined related engineering and technology giants like HUAWEI, LG, Motorola, PROTON and INTEL. Malaysia's automotive industry players like PROTON for example, preferred graduates from UTP. Many of the University's graduates have steadily climbed the corporate ladder, worldwide. Achievements as such are results of the University's strategic planning and execution especially in its 7 months Structured Industrial Internship Programme, supported by more than 400 local and international industrial learning partners. A total of 96 students obtained internship placements overseas such as United Kingdom, Australia, South Africa, France, Kingdom of Saudi Arabia, Egypt and United States of America.

UTP students' potential and performance are also supported by the University's Student Exchange and Mobility Programme. The programme offers boundless opportunities to incorporate international dimension to their University's training. In 2013, a total of 152 students were selected to join the Programme. 55 were selected to join the University for a short stint while 95 were selected to go abroad. Among the universities involved were Graz University of Technology, Austria; University of Burgundy, France; Lehigh University, United States; Indian Institute of Technology, Madras and many others.

As for the academic strength, 61% of the academic faculty members have PhD qualifications with 23% international faculty for global input and experience.

Student enrollment has been stable even though admission is stringent. A candidate will be evaluated on his/her display of confidence, strength, interest and skills, in addition to academic

performance and results. The following is the breakdown of the University's student population.

Total population: 7,330

- Foundation and Undergraduate: 5,828 (79.5%)
- Postgraduate: 1,502 (20.5%)
  - PhD: 747 (49.7%)
  - Masters: 755 (50.3%)
- International students: 23% from 50 countries

The University has been consistently producing approximately 1200 graduates every year.

The following is the breakdown of the University's convocation statistics:

Total graduates: 1,147

- Bachelor: 1,001
- Masters: 82
- PhD: 64

## Programmes

The following is a listing of the University's academic programmes for undergraduate and postgraduate including a new postgraduate programme introduced this year.

### Foundation Programmes

- Engineering
- Technology

### Bachelor of Engineering (Honours)

- Chemical
- Civil
- Electrical and Electronic
- Mechanical
- Petroleum

### Bachelor of Technology (Honours)

- Business Information Systems
- Information and Communication Technology
- Petroleum Geoscience

### Master by Coursework and Dissertation

- Advanced Process Control
- Asset Management and Maintenance
- Electronic Systems Engineering
- Petroleum Engineering
- Petroleum Geoscience
- Process Integration

### Master/PhD by Research

- Civil Engineering
- Chemical Engineering
- Electrical and Electronic Engineering
- Mechanical Engineering
- Petroleum Engineering
- Petroleum Geoscience

- Information Technology
- Science
- Management
- Social Science and Humanities

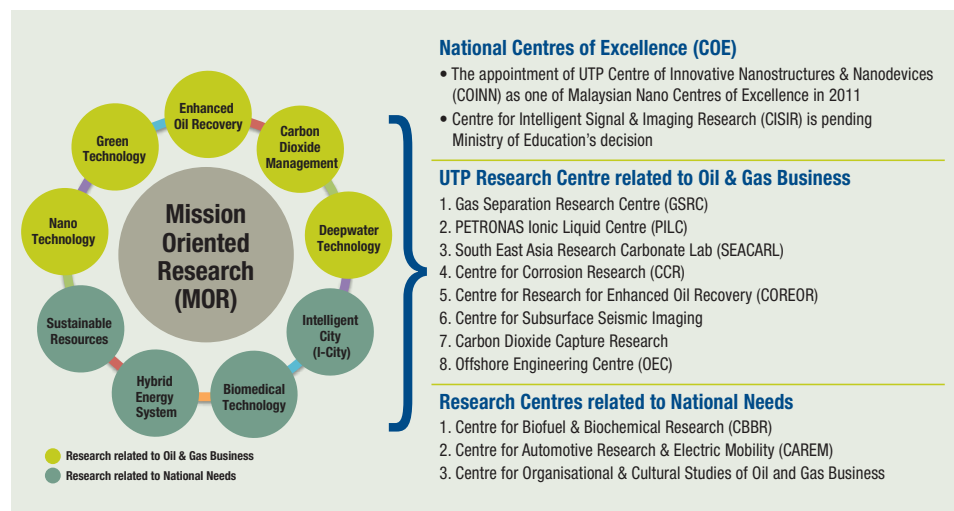
### New Programme

Masters of Business Administration (MBA) in Energy Management

# Research & Development

Research & Development is one of the core pillars in UTP Corporate Agenda. The strength of the university's R&D is in applied research with strong linkages to industries. The University's research direction has been guided by the 30-year aspiration roadmap. The aspiration includes making UTP the University of choice in the field of engineering and technology, particularly in the oil and gas industry. Thus far, UTP's research and innovation are mission-oriented based on national needs, global trends and industries' requirements.

## Mission Oriented Researches (MOR) and R&D Centres to drive Research & Development



The University has thus far been strategic in its research and innovation efforts. Participation at conventions, exhibitions and competitions provide the platform to showcase creativity and talents in the forms of products, services and expertise. The competitions also present windows of opportunities for venture capitalists, investors and industry players to review and evaluate the potential of the University's products and services to business and operations for commercialisation. Participation at invention showcase events, also avails opportunities for the Academic members to disclose the invention. The University targets 30 to 50 disclosures a year and filing for patent will be done upon recommendation of the Innovation Committee.

Presently with UTP being among the top seven research-focused higher learning institutions in the country and being the only private university to have achieved MyRA 5-star rating by the Malaysian Research Assessment Instrument, the University now aims at being recognised globally as the partner of choice for the industry and respected as an influential member of the scientific community.

Moving forward, UTP is strengthening its University-Industry collaboration through Joint Industry Project (JIP) and development of UTP R&D Park.



## Exhibitions and Competitions

### 24th International Invention, Innovation & Technology Exhibition (ITEX 2013)

KL Convention Centre, Kuala Lumpur

9 – 11 May 2013

No	Inventor (s)	Invention Title	Medal
1	Prof Dr Abdul Rashid b Abdul Aziz	Free Piston Linear Generator Fuelled With Waste Gas From Oil/Gas Reservoir	GOLD AWARD
2	Prof Ir Dr Ahmad Fadzil Mohamad Hani	Melcare: Skin Melanin Pigment Analyzer For Dermatology Care	GOLD AWARD
3	Dr Wong Peng Wen	Reconfigurable u-wit	GOLD AWARD
4	Dr Wong Peng Wen	Electronically reconfigurable microwave bandpass filter	GOLD AWARD
5	Assoc Prof Dr Mohamed Hasnain Isa	Thermal Degradation Process For Organic (T-Depho)	GOLD AWARD
6	Assoc Prof Dr Aamir Saeed Malik	Vegetation Encroachment Monitoring for Transmission Lines	GOLD AWARD
7	Assoc Prof Ahmad Mustafa Hashim	Interlocking Concrete Unit-V (ICU-V)	GOLD AWARD
8	Assoc Prof Dr Hussain Hammud Ja'afer Al-Kayiem	Integrated Solar-Nano/PCM Collector For Water Heating	GOLD AWARD
9	Assoc Prof Dr Hussain Hammud Ja'afer Al-Kayiem	Intelligent EMG Classification System (CECS)	GOLD AWARD
10	Assoc Prof Dr Irravan Elamvazuthi	Artificial Intelligence Based Tool For Optimization of MPPT of Photovoltaic System	GOLD AWARD
11	Azry Borhan	Gel Based Vibration Energy Generator	GOLD AWARD
12	Assoc Prof Dr Mokhtar Awang	Engineered Mangrove Forest Re-Planting Strategy for Effective Surface Wave Attenuation	GOLD AWARD
13	Assoc Prof Dr Anita Ramli	A Green Heterogeneous Catalyst From Indegineous Raw Material For Biodiesel Production	GOLD AWARD
14	Assoc Prof Dr Anita Ramli	One Step Esterification-Transesterification of High Free Fatty Acid Oil to Biodiesel using Bifunction Solid Catalyst	GOLD AWARD
15	Assoc Prof Dr Faiz Ahmad	A New Hybrid Fiber Composite for Drain Grating Cover	GOLD AWARD
16	Assoc Prof Dr Faiz Ahmad	Superconductor Nano Composite Heat Dissipater	GOLD AWARD
17	Dr Amirhossein Malakahmad	AOPSBR for Full Treatment of Refinery Waste Water	GOLD AWARD
18	Assoc Prof Dr Fakhruddin Mohd Hashim	Intelligent Pipeline Inspection Gauge (i-PIG) for Deep Water Pipelines Applications	GOLD AWARD
19	Assoc Prof Dr Nasir Shafiq	NANO-SiO <sub>2</sub> @SBA	GOLD AWARD
20	Assoc Prof Dr Suzana Yusup/ Mohd Zamri Abdullah	Code: The Eco Dehumidifier System	GOLD AWARD
21	Assoc Prof Ir Dr M Shahir Liew	Blue Hive Frequency Domain Analysis Package	GOLD AWARD
22	Dr Dennis Ling Chuan Ching	Tsunami Early Warning 2.0	GOLD AWARD
23	Assoc Prof Dr Fawnizu Azmadi Hussin	Android Device Based Diabetic Retinopathy Grading System	GOLD AWARD
24	Dr Nejatollah Rahmanian	The Sustainable Textile	GOLD AWARD
25	Assoc Prof Dr Nidal Kamel	Single Trial Subspace-based System for ERP Extraction	GOLD AWARD
26	Prof Dr Yoshimitsu Uemura	In Situ Upgrading of Pyrolysis Oil From Biomass using Fixed-Bed Pyrolysis	GOLD AWARD

*continued*

No	Inventor (s)	Invention Title	Medal
27	Prof Dr Yoshimitsu Uemura	Hydrophobic Silica Membrane System For High Temperature Sparation of H <sub>2</sub> /CO <sub>2</sub> Mixture	GOLD AWARD
28	Assoc Prof Ir Dr Shaharin Anwar Sulaiman	Multistage Swirling Fluidized Bed Reactor	GOLD AWARD
29	Mohd Azman b Zakariya	Cylindrical Dielectric Resonator Antenna Array for IEEE 802.11a WiFi Application	GOLD AWARD
30	Mohd Azman b Zakariya	Aperture Couple Dielectric Resonator Antenna with Curve Reflector for IEEE 802.11a WiFi Application	GOLD AWARD
31	Prof Norani Muti Mohamed	Power Generating Window Based On Dye Solar Cell	GOLD AWARD
32	Assoc Prof Dr Shamsul Rahman M Kutty	Mirsorb-Low Cost Adsorbent For Heavy Metals	SILVER AWARD
33	Assoc Prof Dr Shamsul Rahman M Kutty	Compact Extended Aeration Reactor (CEAR)-Study On Nitrogen Removal	SILVER AWARD
34	Prof Ir Muhd Fadhil Nuruddin	Development of Self-Compacting Geopolymer Concrete	SILVER AWARD
35	Prof Ir Muhd Fadhil Nuruddin	Ductile Self-Compacting Concrete With Mirha	SILVER AWARD
36	Assoc Prof Dr Nidal Kamel	Subspace Based Filter For Speckle Reduction In SAR Images	SILVER AWARD
37	Assoc Prof Dr Irraivan Elamvazuthi	Intelligent EMG Classification System (CECS)	SILVER AWARD
38	Assoc Prof Dr Irraivan Elamvazuthi	Neuro-Fuzzy Optimization System (NEUFOS) for Optimal Design of Hybrid Power Plant	SILVER AWARD
39	Assoc Prof Dr Irraivan Elamvazuthi	Multi-Object Optimization of Production of Syngas (MOSPO)	SILVER AWARD
40	Assoc Prof Dr Irraivan Elamvazuthi	Artificial Intelligence Based Tool for Optimization of MPPT of Photovoltaic System	SILVER AWARD
41	Dr Chong Fai Kait	SOLCAT_UTP: Sun Energy for DIPa – Containing Waste Water Treatment	SILVER AWARD
42	Assoc Prof Dr Aamir Saeed Malik	Tracking of EEG activity using Motion Estimation	SILVER AWARD
43	Assoc Prof Dr M Fadzil Hassan	Access Control System using ID Card Intergrated with Visual Monitoring (BIZSECURITY)	SILVER AWARD
44	Prof Dr Abdul Rashid b Abdul Aziz	Gel Based Vibration Energy Generator	SILVER AWARD
45	Prof Dr Abdul Rashid b Abdul Aziz	WAG Visualization	SILVER AWARD
46	Assoc Prof Dr Nasir Shafiq	A State of Art and Intelligent Structural Integrity, Maintenance and Management System (ISIMMS)	SILVER AWARD
47	Assoc Prof Dr Nasir Shafiq	Elasto-Plastic NFRC	SILVER AWARD
48	Assoc Prof Dr Nasir Shafiq	Glusteel-Structure	SILVER AWARD
49	Ahmad Izuddin Zainal Abidin	Hajj-G: Mobile Hajj Guide to Pilgrim	SILVER AWARD
50	Assoc Prof Dr Cecilia Devi Wilfred	Greener Metal Extractant	SILVER AWARD
51	Penny Goh Kim Nee	Rocktitan	SILVER AWARD
52	Penny Goh Kim Nee	Auto Accident Location Detection System (ALDS)	SILVER AWARD
53	Prof Ir Dr Ahmad Fadzil Mohamad Hani	HPD-Ulcer: Healing Progression Detector for Ulcer	SILVER AWARD
54	Faizairi Mohd Nor	Portable Run River Water Turbine	SILVER AWARD
55	Assoc Prof Dr Mohamed Hasnain Isa	Organic Matter and Nutrient Removal From Wastewater using A Novel Biological Reactor	SILVER AWARD
56	Assoc Prof Ahmad Mustafa Hashim	Engineered Mangrove Forest Re-Planting Strategy For Effective Surface Wave Attenuation	SILVER AWARD
57	Assoc Prof Dr Varun Jeoti	Substitution Box (S-Box)	SILVER AWARD

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No	Inventor (s)	Invention Title	Medal
58	Prof Norani Muti Mohamed	Ammonia (NH <sub>3</sub> ) Ionization-CNTs Detector (ICD)	SILVER AWARD
59	M Syaifuddin Mohamad	Alam 3.0	SILVER AWARD
60	M Syaifuddin Mohamad	Alam Mini	SILVER AWARD
61	Dr Nejatollah Rahmanian	A Proper Shoes For Diabetics	SILVER AWARD
62	Dr Likun Xia	Analog Fault Chip Analyzer	SILVER AWARD
63	Dr Azuraen Jaaper @ Jaafar	Cavendish Banana Peel Polymer as Drag Reduction Agent	SILVER AWARD
64	Prof Dr Alan Oxley	Display Power Management based on Application Idle Time Profiling	SILVER AWARD
65	Assoc Prof Dr Hussain Hammud Ja'afer Al-Kayiem	Modified Turbine for Solar Chimney Power Plant	SILVER AWARD
66	Assoc Prof Dr Faiz Ahmad	Fibre Reinforced Intumescent Coatings for Fire Safety of Structures	SILVER AWARD
67	Assoc Prof Dr Suzana Yusup	Agricultural Residue-Based Oil: Arboil	SILVER AWARD
68	Assoc Prof Dr Suzana Yusup	A New Activation Technique to Synthesis Adsorbent for CO <sub>2</sub> Rapture	SILVER AWARD
69	Assoc Prof Dr Wan Fatimah	Pitty Lost Kitty	SILVER AWARD
70	Assoc Prof Dr Wan Fatimah	Legend of History	SILVER AWARD
71	Assoc Prof Dr Wan Fatimah	Mobile Scholl Systems	SILVER AWARD
72	Assoc Prof Dr Wan Fatimah	Mmath Games	SILVER AWARD
73	Assoc Prof Dr Wan Fatimah	Mylinus	SILVER AWARD
74	Assoc Prof Dr Wan Fatimah	Evangard	SILVER AWARD
75	Assoc Prof Dr Wan Fatimah	The use of Collectible Card Game in Learning History: EduCard	SILVER AWARD
76	Assoc Prof Dr Dayang Rohaya	An Interactive Mobile Augmented Reality Magical Playbook: Learning Number With The Thirsty Crow	SILVER AWARD
77	Assoc Prof Dr Dayang Rohaya	Ar Circuit: An Interactive Augmented Reality Based Science Workbench	SILVER AWARD
78	Assoc Prof Dr Dayang Rohaya	Mybackrelief: An Interactive Mobile Companion For Backcare using Persuasive Technique	SILVER AWARD
79	Assoc Prof Dr Dayang Rohaya	AR_ABCD: An Interactive Mobile Augmented Reality Magical Playbook For Learning The Alphabet Via Story Telling and Story	SILVER AWARD
80	Assoc Prof Dr Dayang Rohaya	Mobile SMS and Social Network Services as An Emergency Broadcast System	SILVER AWARD
81	Dr Ibrahima Faye	Fast and Efficient Image Completion Method using Gray Level Co-occurrence Matrix (GLCM)	SILVER AWARD
82	Dr Teo Wee	Optimum Reinforcement Systems for Concrete Industrialized Building System (IBS)	BRONZE AWARD
83	Dr Taib Ibrahim	Development of Micro Hydro Generation System From Water Pipeline	BRONZE AWARD
84	Assoc Prof Dr Mokhtar Awang	A Novel Inertial Auto-Reinforcemagnetic Flywheel (I-Am Fly) Energy Storage For Hybrid System	BRONZE AWARD

### British Invention & Showcase (BIS)

London, United Kingdom

23 October – 3 November 2013

No	Inventor (s)	Invention Title	Medal
1	Assoc Prof Ahmad Mustafa Hashim	Interlocking Concrete Unit-V (ICU-V)	PLATINUM AWARD
2	Mohd Azman b Zakariya	Cylindrical Dielectric Resonator Antenna Array for IEEE 802.11a WiFi Application	DOUBLE GOLD
3	Mohd Azman b Zakariya	Cylindrical Dielectric Resonator Antenna Array for IEEE 802.11a WiFi Application	GOLD AWARD
4	Mohd Azman b Zakariya	Aperture Couple Dielectric Resonator Antenna with Curve Reflector for IEEE 802.11a WiFi Application	GOLD AWARD
5	Assoc Prof Ahmad Mustafa Hashim	Interlocking Concrete Unit-V (ICU-V)	GOLD AWARD
6	Assoc Prof Dr Nasir Shafiq	Glusteel-Structure	GOLD AWARD
7	Assoc Prof Dr Nasir Shafiq	Nano-Sio2@SBA	GOLD AWARD
8	Assoc Prof Dr Dayang Rohaya Awang Rambli	An Interactive Mobile Augmented Reality Magical Playbook: Learning Number With The Thirsty Crow	GOLD AWARD
9	Assoc Prof Dr Faiz Ahmad	A New Hybrib Fiber Composite For Drain Grating Cover	GOLD AWARD
10	Assoc Prof Dr Faiz Ahmad	Superconductor Nano Composite Heat Dissipeter	GOLD AWARD
11	Assoc Prof Ahmad Mustafa Hashim	Engineered Mangrove Forest Re-Planting Strategy For Effective Surface Wave Attenuation	SILVER AWARD
12	Assoc Prof Dr Dayang Rohaya Awang Rambli	Ar Circuit: An Interactive Augmented Reality Based Science Workbook	SILVER AWARD

### International Trade Fair, Ideas, Inventions and New Products Exhibition (iENA 2013)

Germany

31 October – 3 November 2013

No	Inventor (s)	Invention Title	Medal
1	Prof Dr Abdul Rashid b Abdul Aziz	Gel Based Vibration Energy Generator	SPECIAL AWARD
2	Prof Dr Abdul Rashid b Abdul Aziz	Free Piston Linear Generator	SPECIAL AWARD
3	Prof Dr Norani Muti Mohamed	Ammonia (NH3) Ionization-CNTs Detector (ICD)	GOLD AWARD
4	Prof Dr Abdul Rashid b Abdul Aziz	Gel Based Vibration Energy Generator	SILVER AWARD
5	Prof Dr Abdul Rashid b Abdul Aziz	Free Piston Linear Generator	SILVER AWARD
6	Dr Wong Peng Wen	Electronically reconfigurable microwave bandpass filter	SILVER AWARD
7	Dr Wong Peng Wen	Reconfigurable UWIT	SILVER AWARD
8	Prof Ir Dr Ahmad Fadzil Mohamad Hani	Melcare: Skin Melanin Pigment Analyzer For Dermatology Care	BRONZE AWARD
9	Prof Ir Dr Ahmad Fadzil Mohamad Hani	HPD-ULCER: Healing Progression Detector For Ulcer	BRONZE AWARD

# Research & Development

## Consultancy Projects

No	Project Title	Clients/Company	UTP Consultant (s)
1	Consultancy Work (Quantitative Data Analysis on Change Readiness Survey)for TNB Janamanjung Sdn Bhd by UTP	TNB Janamanjung Sdn Bhd	Dr Rohani Salleh & Haryanni Harun
2	A Comprehensive Study on the Vibration of Highway Bridges	Evenfit Consultant Sdn Bhd	Assoc Prof Ir Dr Mohd Shahir Liew (Project Leader)
3	Evaluation on the Suitability of Geophysical Method for Detecting Deep Seated Fracture in Hard Rock	Vigorous Consulting Services	Assoc Prof Dr Zuhar Zahir Tuan Harith (Project Leader), Khairul Arifin Mohd Noh
4	An Assessment Study on Green IT Related R&D Activities and Set-up in Malaysia No. 2, Sensing System Research (incl. 2nd supplemental agreement)	Hitachi Asia (M) Sdn Bhd	Dr Low Tan Jung
5	An Assessment Study on Green IT Related R&D Activities and Set-up in Malaysia No. 3, HPC Centre Research	Hitachi Asia (M) Sdn Bhd	Dr M Nordin Zakaria
6	Interviewers' Development Programme for Selection of PETRONAS Service Station Dealers	PETRONAS Dagangan Berhad	Azamudin B Badri-Harun
7	Development of Decision-Making Tool for Piping Inspection	PETRONAS Gas Berhad	Dr Ainul Akmar Bt Mokhtar (Project Leader), Dr Masdi Muhammad & Dr Hilmi Hussin
8	SKG16: CHRA, Level 3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Chandra Mohan
9	SKG16: Advanced CHRA	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Chandra Mohan
10	SKG12.3 Asset Life Cycle Cost, Level 3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Masdi Muhammad
11	Toxicity Study on ASP Chemicals	PETRONAS Research Sdn Bhd	Assoc Prof Dr M Ibrahim A Mutalib
12	Provision of Research Services on Seismic Hazard Study and Zoning of Offshore Locations in Malaysia for PCSB	PETRONAS Carigali Sdn Bhd	Assoc Prof Ir Dr Mohd Shahir Liew (Project Leader)
13	Development of Reliability, Availability, Maintainability (RAM) Model for Cogeneration System	PETRONAS Gas Berhad	Dr Masdi Muhammad
14	A Feasablity Study on the Balong Oil Palm Mill Energy Utilization and Recovery	Malaysia – Kuwaiti Investment Company Sdn Bhd	Dr Suhaimi Hassan (Project Leader), Ir Dr M Shiraz Aris, Mohd Faizairi Mohd Nor
15	2nd Short course on the Fundamentals of Subspace-based Techniques with Applications in Signal and Image Processing	Open to public	Assoc Prof Dr Nidal Kamel
16	SKG12.3: Reliability Engineering, Level 3 Part 2	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Masdi Muhammad & Dr Ainul Akmar



*continued*

No	Project Title	Clients/Company	UTP Consultant (s)
17	Energy Audit Project (Phase 3)	PETRONAS Chemical Ammonia Sdn Bhd	Assoc Prof Dr M Ramasamy (Project Leader), Assoc Prof Dr Shuhaimi Mahadzir, Dr Rajashekhar Pendyala, Dr Lemma Dendena Tufa, Assoc Prof Dr Zainal Ambri A Karim, Assoc Prof Dr Syed Gilani, Dr Aklilu T Baheta
18	2nd Short Course on Imaging for Biomedical Applications	Open to public	Prof Ir Dr Ahmad Fadzil Mohamad Hani, Assoc Prof Dr Aamir S Malik, Dr Ibrahima Faye, Dr Nicholas Walter
19	SKG16.6: Advanced GC Level 3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Chandra Mohan
20	SKG12.3: Reliability Engineering Level 3 Part 1	PETRONAS	Dr Masdi Muhammad
21	Carbonate Geology & Petrophysics Course	Newfield Peninsula Malaysia Inc	Prof Dr R P Major
22	SKG16.6: Advanced CHRA L3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Chandra Mohan
23	SKG16.6: Lab Safety Level 2	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Chandra Mohan
24	Interviewers' Development Programme for Selection of PETRONAS Service Station Dealers	PETRONAS Dagangan Berhad	Am Zairi Amar, Azamudin Badri @ Harun, M Radzi Zainol, Zulqarnain Abu Bakar & Zullina Hussain Shaari
25	PCSB-SKO Chemical Qualification and Selection	PETRONAS GTS	Assoc Prof Ir Dr Mokhtar Che Ismail
26	An Assessment Study on Green IT Related R&D Activities and Set-up in Malaysia No.5, GDC Big Data Analysis	Hitachi Asia (M) Sdn Bhd	Assoc Prof Ir Dr Shaharin Anwar Sulaiman, M Fatimie Irzaq & Dr M Nordin Zakaria
27	SKG16: Advanced Atomic Absorption Level 3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Chandra Mohan
28	Collaborative Research on Corrosion Inhibitor Formulation	D3 Chemicals Sdn Bhd	Assoc Prof Ir Dr Mokhtar Che Ismail
29	Statistical Inference Theory and Practice	Open to public	Assoc Prof Dr Sarat Chandra
30	Advance Imaging Techniques for Biomedical Applications	Open to public	Prof Ir Dr Ahmad Fadzil Mohamad Hani, Assoc Prof Dr Aamir S Malik
31	The Organisational and Behavioural Turnaround of PETRONAS Lubricants International Sdn Bhd (PLISB)	PETRONAS Lubricants International Sdn Bhd	Assoc Prof Dr Zulkipli Ghazali & Prof Mohamed Halib
32	CBBR Green Technology Open Short Course: Thermodynamics for Chemical Energy Conversion	Open to public	Prof Dr Yoshimitsu Uemura (Project Leader)
33	Development of FGRU Reliability Availability and Maintainability (RAM) model for PETRONAS Penapisan Melaka Sdn Bhd	PETRONAS GTS	Dr Masdi Muhammad
34	SKG16.3: Consequence Modelling & QRA, Level 3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Prof Dr Azmi M Shariff
35	An Assessment Study on Green IT Related R&D Activities and Set-up in Malaysia No.4, Wireless Sensing System Research	Hitachi Asia (M) Sdn Bhd	Dr Low Tan Jung & Dr Yong Suet Peng
36	Seismic Reflection Survey	Halliburton Technical Excellence Centre	Khairul Arifin Mohd Noh

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No	Project Title	Clients/Company	UTP Consultant (s)
37	SKG15: Risk Based Inspection (RBI), Level 3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Ainul Akmar Bt Mokhtar
38	Biomass Short Course	Open to public	Prof Dr Yoshimitsu Uemura (Project Leader)
39	Training for PETRONAS Carigali (Turkmenistan) Sdn Bhd	PETRONAS Carigali (Turkmenistan) Sdn Bhd	Assoc Prof Dr Eswaran A/L A R Padmanabhan & Prof Dr Mariyamni Awang
40	A Short Course on Fire Engineering and Fire Safety and Protection Engineering	Open to public	Dr M Shakir Nasif
41	Development of Corrosion Detection Underneath Composite Wrapping Project	Innovative Oilfield Services Sdn Bhd	Assoc Prof Ir Dr Mokhtar Che Ismail (Project Leader), Dr Zainal Arif Burhanudin
42	Provision of Metocean Software Package	PETRONAS Carigali Sdn Bhd	Assoc Prof Ir Dr M Shahir Liew
43	SKG16.6 : Lab Safety Level 2	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Chandra Mohan
44	Project Management in Oil & Gas Industry	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Masdi Muhammad (Project Leader), Dr Ainul Akmar Bt Mokhtar, Dr Hilmi Hussin
45	Corrosion Test – FRGS PSAS	Politeknik Sultan Azlan Shah	Assoc Prof Ir Dr Mokhtar Che Ismail
46	Seakeeping Test (Heaving & Pitching Motion Prediction)	UniKL MIMET	Assoc Prof Ahmad Mustafa Hashim
47	Metocean Modules	PETRONAS Carigali Sdn Bhd	Assoc Prof Ir Dr M Shahir Liew
48	Pre-Selection Development Programme for Selection of PETRONAS Service Station Dealers (Train-of-Trainers) PSP-TOT	PETRONAS Dagangan Berhad	Am Zairi Amar, Azamudin Badri @ Harun, M Radzi Zainol, Zulqarnain Abu Bakar & Zullina Hussain Shaari
49	A Short Course on ANSYS-Mechanical	Open to public	Assoc Prof Dr Mokhtar Awang
50	Introduction to Cloud Computing with Open Nebula	Open to public	Dr M Nordin Zakaria
51	Development of Two Mobile Augmented Reality Demo Applications	Toy Storm Studio	Dr Dayang Rohaya Awang Rambli
52	SKG13: Power System Studies Course	Institut Teknologi Petroleum PETRONAS (INSTEP)	Ir Mohd Faris Abdullah
53	SKG16.3: Consequence Modelling & QRA, Level 3	Institut Teknologi Petroleum PETRONAS (INSTEP)	Prof Dr Azmi M Shariff
54	SKG12.3: Reliability Engineering, Level 3 Part 2	Institut Teknologi Petroleum PETRONAS (INSTEP)	Dr Masdi Muhammad & Dr Ainul Akmar
55	Energy Auditing for Latexx Manufacturers Sdn Bhd	Latexx Manufacturing Sdn Bhd	Ir Dr Perumal A/L Nallagownden
56	Intelligent techniques for Rehabilitation Robotics	Open to public	Assoc Prof Dr Irraivan Elamvazuth
57	VLSI System Modelling and Testing	Open to public	Assoc Prof Dr Fawnizu Azmadi, Dr Likun Xia
58	Experimental Investigation on Tsunami Acting on Bridges	Universiti Malaya	Assoc Prof Ahmad Mustafa Hashim

# Research & Development

## Research Project

No	Project Title	Principal Investigator	Funding Agency
1	An Investigation into the Thermodynamics of Exergy Lost Minimization in Separation Processes	Assoc Prof Dr Shuhaimi Mahadzir	FRGS
2	Vegetation Encroachment Monitoring using Satellite Stereo for Power Lines in Malaysia	Assoc Prof Dr Aamir Saeed Malik	KETTHA
3	An Improved Software Development Process for Small and Medium Software Development Enterprises	Assoc Prof Dr M Fadzil Hassan	King Faisal University, Saudi Arabia
4	Intelligent Cloud-Based Collaborative Multi-Modal Disease Diagnostic System	Assoc Prof Dr M Fadzil Hassan	King Faisal University, Saudi Arabia
5	Design of EEG and Event Related Potential (ERP) Experiments using E-Prime Software for Static Audio Visual Educational Content	Assoc Prof Dr Aamir Saeed Malik	King Saud University, Saudi Arabia
6	Identification of Features and Classification for EEG and ERP Signal Analysis	Dr Ibrahima Faye	King Saud University, Saudi Arabia
7	Kinetic Study on Photooxidative Deep Desulfurization of Diesel Under Visible Light using Fe-and N-Modified TiO <sub>2</sub> Photocatalyst	Associate Prof Dr Chong Fai Kait	FRGS
8	Bond-Slip Relationship of CFRP Plated Steel Member Subjected to Fatigue Loading	Dr Ibrisam Akbar	FRGS
9	Modeling and Optimization of a MEMS Resonator for Monitoring Biomarker Concentration via Exhaled Breath	Assoc Prof Dr John Ojur Dennis	FRGS
10	Theoretical Modeling and Synthesis of Compact UWB Filter Topology Based on Multi-Resonances Resonator (MRR)	Dr Wong Peng Wen	FRGS
11	Fundamental Analysis on Behaviour of Stewart Platform Actuated by Shape Memory Alloy (SMA) Wires for Rehabilitation Activities	Prof Dr Nagarajan Thirumalaiswami	FRGS
12	Investigation of Auto Reinforce Concept in Flywheel Energy Storage System using Permanent Magnet	Assoc Prof Dr Mokhtar Awang	FRGS
13	Modeling of Slider and Journal Bearings with Partially Textured Slip Surface Lubricated with Non-Newtonian Fluids	Assoc Prof Dr Tadimalla VVLN Rao	FRGS
14	Expanded Austenite Layer on SS 316 L Resulting from Low Temperature Hybrid Thermochemical Treatments	Assoc Prof Dr Patthi Hussain	FRGS
15	To Investigate the Mechanism of Oil/Water Separation Assisted by Novel Natural Sorbents	Assoc Prof Dr Nasiman Sapari	FRGS
16	How Parent Carninogens in Urban Streams Convert to Product Compounds	Dr Amirhossein Malakahmad	FRGS

Note:

ERGS – Exploratory Research Grant Scheme

PRGS – Prototype Research Grant Scheme

FRGS – Fundamental Research Grant Scheme

LRGS – Long Term Research Grant Scheme

*continued*

No	Project Title	Principal Investigator	Funding Agency
17	Haptic Data Visualization Model for Interactions	Assoc Prof Dr Suziah Sulaiman	FRGS
18	Encapsulation of Water Leach Purification (WLP) Product in a Geopolymer Matrix	Prof Dr Ir M Fadhil Nuruddin	Lynas Australia
19	Conversion of Waste Polyethylene, Polyethylene Terephthalate and Lignocellulosic Mixtures to Syngas using Catalytic Steam Gasification Process	Assoc Prof Dr Suzana Yusup	PIAD
20	Seismic Anisotropy Imaging for Deep Reservoir and Fracture Basement	Prof Dr Deva Prasad Ghosh	PRF
21	JAR12 04: Design of Bridge Pier Structures Subjected to Impact Loading	Dr Teo Wee	JKR
22	Delay Differential Equation Based Interference for Vector-Borne Disease Dynamical Systems	Dr Sarat Chandra Dass	ERGS
23	Development of Vehicle Control and Guidance System with 6 DOF Trajectory Simulation for Autonomous Underwater Vehicle (AUV)	Prof Dr Nagarajan Thirumalaiswami	ERGS
24	Predictive Model using Soft Computing Techniques on Malay Dataset for Counter-Terrorism	Norshuhani Zamin	ERGS
25	Biodiesel Production by Transesterification Technique using New Feedstock Castor Bean Species	Prof Dr Yoshimitsu Uemura	ERGS
26	Model-Based Bending Fatigue and Service Life Prediction for Parallel Axes Gear in Misalignment Dynamics Condition	Assoc Prof Dr Mokhtar Awang	ERGS
27	Design, Development and Analysis of an Experimental Model Single Curved-Cylinder Novel Engine which Operates on Diesel	Assoc Prof Dr Ir Masri Baharom	ERGS
28	Coupling of Deepwater Marine Riser Induced Vibration to Drillstring Vibration	Dr William Pao King Sun	ERGS
29	Investigation of Digital Microfluids Biochips Testing by Dynamic Programming Model	Dr Noohul Basheer Zain Ali	ERGS
30	Exploring Optimum Performance of RFID Tags via Integration with Other Standard Network Technologies	Hanita Daud	ERGS
31	Design, and Modeling of a Portable Pico Linear Generator for Wave Energy Conversion System	Dr Taib Ibrahim	ERGS
32	Laser Speckle Imaging System as Stroke Diagnostic Tool	Assoc Prof Dr Tang Tong Boon	ERGS
33	Performance, Evaluation and Modeling of the Micro-Composite Interlayer for the Joining of Sialon to Stainless Steel	Assoc Prof Dr Patthi Hussain	ERGS
34	A One-Layer Approach for Integration Real-Time Optimization and Process Control Level in a Reaction-Separation System	Dr Nooryusmiza Yusoff	ERGS
35	Effect of Functionalized SAPO-34 on the Performance of Based Ionic Liquid Mixed Matrix Membrane (B-IL3M) for CO <sub>2</sub> Separation	Assoc Prof Dr Hilmi Mukhtar	ERGS

Note:

ERGS – Exploratory Research Grant Scheme  
 PRGS – Prototype Research Grant Scheme  
 FRGS – Fundamental Research Grant Scheme  
 LRGS – Long Term Research Grant Scheme

continued

No	Project Title	Principal Investigator	Funding Agency
36	Solar-Hydrogen Production System from Sea Water using Metal/SR2TA207–XNX Photocatalyst and Sunlight	Assoc Prof Dr Chong Fai Kait	ERGS
37	Towards Greener Network-On-Chip: A Clock-Less Communication Approach	Dr Maher Assad	ERGS
38	An Exploratory Investigation to Determine the Applicability of Game Theory in Ant Colony to Combat Botnet in Big Data Concept of Cloud Computing	Assoc Prof Dr Halabi Hasbullah	ERGS
39	Concurrent Service Level Agreement Negotiation in Cloud-Based Systems	Assoc Prof Dr M Fadzil Hassan	ERGS
40	An Exploratory Study to Improve 3D Novel Human Pose Tracking Performance in Low-Dimensional Manifold Leading	Assoc Prof Dr Dayang Rohaya Awang Rambli	ERGS
41	Stakeholder Communication, Socio-Economic & Financial Performance: Adoption on Innovations by Paddy Farmers in Perak	Assoc Prof Dr Shahrina Md Nordin	IDR
42	Adaptive Reuse of Steel from Fixed Offshore Structures	Assoc Prof Dr Ir M Shahir Liew	MSSA
43	Synthesis of Hybrid Amine Supported Mixed Matrix Membrane (HY3M) for the Separation of Carbon Dioxide (Co2) from Methane	Assoc Prof Dr Hilmi Mukhtar	Escience
44	Exploring the Mindset and Well-Being of Rural School Students	Zullina Hussain Shaari	IDR
45	Utilization of Bottom Ash as the Bed Material for Catalytic Biomass Gasification	Assoc Prof Dr Suzana Yusup	KETTHA
46	EOR Centre R&D Programme	Prof Dr Mariyamni Awang	PRSB
47	Development of EMG-Based Decision Support Tool for Diagnosis of Neuromuscular Disorders	Assoc Prof Dr Irraivan Elamvazuthi	PRGS
48	System on Chip (SOC) Implementation of PMSM Controller for Fault Tolerant Operation	Assoc Prof Dr Nor Hisham Hamid	PRGS
49	Self-Powered Tyre Pressure Monitoring System for Increased Safety of Road Vehicles	Dr Mohd Haris Md Khir	PRGS
50	Pilot-Scale Low Temperature Thermal Degradation of Recalcitrant Carcinogenic Organic Compounds and Fixation of Heavy Metals in Industrial Sludge	Assoc Prof Dr M Hasnain Isa	PRGS
51	Development of Thermo Eco Rubbercrete Hollow Block	Assoc Prof Dr Bashar s Mohammed	PRGS
52	Development of Fiber Optic Based Dynamic Structural Health Monitoring System for Offshore Structures	Assoc Prof Dr Ir M Shahir Liew	PRGS
53	Development of a Cloud-Based Ubiquitous Healthcare System	Assoc Prof Dr Wan Fatimah Wan Ahmad	PRGS
54	Product Development of First Multi-Resonances Microwave Cavity Filter for Compact Base Station Application	Dr Wong Peng Wen	PRGS
55	Heat Recovery System for Enhancement of Small-Scale Downdraft Gasifier Efficiency	Assoc Prof Dr Ir Shaharin Anwar Sulaiman	PRGS

Note:

ERGS – Exploratory Research Grant Scheme

PRGS – Prototype Research Grant Scheme

FRGS – Fundamental Research Grant Scheme

LRGS – Long Term Research Grant Scheme



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No	Project Title	Principal Investigator	Funding Agency
56	Compact Extended Aeration Reactor (CEAR), An Integrated Wastewater Treatment for Biological Treatment of Wastewater	Assoc Prof Dr Shamsul Rahman M Kutty	PRGS
57	High-Speed-Input-Output (HSIO) Test Coverage Metrics for System on a Chip (SOC)	Assoc Prof Dr Nor Hisham Hamid	CREST
58	Signal & Image Processing Research	Prof Dr Ir Ahmad Fadzil Mohamad Hani	SGGSJET
59	Smart Integrated Low Carbon Infrastructure (Smart i-LOCI)	Prof Dr Khairun Azizi Azizli	MyRA
60	CO <sub>2</sub> Rich Natural Gas Value Chain Programme	Prof Dr Azmi Mohd Shariff	MyRA
61	The Behaviour of Various Types of Concrete in High Intensify Fires and Evaluation of Thermal Radiation Models for Fire Spread Between Buildings	Dr Mohammad Shakir Nasif	Promat (M) Sdn Bhd
62	Biomedical and Healthcare Technology	Prof Dr Ir Ahmad Fadzil Mohamad Hani	Hitachi
63	Image-Based Numerical Modeling for Predicting the Risk of Cerebral Artery Rupture due to Aneurysm	Dr Anis Suhaila Shuib	Escience
64	Development of Organizational and Management Model for Plant Turnaround Maintenance in Malaysian Process-Based Industries	Assoc Prof Dr Zulkipli Ghazali	Escience
65	Received Signal Strength (RSS) Model for Device-Free Localization Technique	Assoc Prof Dr Mohd Yunus Nayan	FRGS
66	A Virtual Reality Interaction Model for Interactive Genetic Algorithm	Dr Mohamed Nordin Bin Zakaria	FRGS
67	Synthesis of Novel Eutectic and Task-Specific Ionic Liquids for Enhanced Oil Recovery (EOR) of heavy oil in extreme reservoir conditions	Dr Rashidah Binti Mohd Pilus	FRGS
68	Bimetallic Cu/ZrO <sub>2</sub> Zeolitic Imidazolate Frameworks (Cu-ZrO <sub>2</sub> /ZIF) as Highly Efficient Photocatalysts for Reduction of CO <sub>2</sub> into Methanol under Visible Light Irradiation	Dr Maizatul Shima Binti Shaharun	FRGS
69	Optimization of Ferromagnetic Nanocomposites as Electromagnetic Absorbing Material for Enhanced Oil Recovery Application	Dr Hassan Soleimani	FRGS
70	Development of Metal Oxide Nanoparticles for Optimal Nanofluid Viscosity and Interfacial Tension for Enhanced Oil Recovery	Assoc Prof Dr Hasnah Binti Mohd Zaid	FRGS
71	A Newton-Raphson Procedure for Estimating Variable Force of Infection in Disease Dynamical Systems	Assoc Prof Dr Sarat Chandra Dass	FRGS
72	Study on the Modulated Electrical Properties of N-doped Graphene Synthesized by Chemical Vapor Deposition for Photoelectrode Application	Assoc Prof Dr Balbir Singh A/L Mahinder Singh	FRGS
73	Super-Exchange Interactions and Spin Alignment in Rare Earth Substituted Ferrite	Dr Beh Hoe Guan	FRGS
74	The Moderating Effect of Contextual Variables on the Strategic Management Accounting Relationship to Organisational Effectiveness	Hezlina Binti Mohd Hashim	FRGS

Note:

ERGS – Exploratory Research Grant Scheme

PRGS – Prototype Research Grant Scheme

FRGS – Fundamental Research Grant Scheme

LRGS – Long Term Research Grant Scheme

continued

No	Project Title	Principal Investigator	Funding Agency
75	Formulation of an Integrated Approach to Performance Diagnostics and Reliability Monitoring for Gas Turbines	Assoc Prof Dr Fakhruddin Mohd Hashim	FRGS
76	Biomedical Engineering Study of Brain Neuronal Mechanisms using Signal Analysis of Magnetic Resonance Spectroscopy	Prof Ir Dr Ahmad Fadzil Mohamad Hani	FRGS
77	Gaussian Kernel Construction with Manifold Learning for System Identification	Assoc Prof Dr Vijanth Sagayan Asirvadam	FRGS
78	Formulation of a Mathematical Model for 3-D Reconstruction of Ultrasound Images of MSK Disorders	Assoc Prof Dr Irraivan A/L Elamvazuthi	FRGS
79	Mathematical Analysis of Fractal Antenna using Multiport Network Approach	Dr Mohd Zuki Bin Yusoff	FRGS
80	Investigation on the Effectiveness of Mangrove Forests in Coastal Protection	Assoc Prof Dr Ahmad Mustafa Bin Hashim	FRGS
81	Fatigue performance of Bridge Deck Link Slabs Designed with Ductile ECC	Assoc Prof Dr Bashar S. Mohammed	FRGS
82	Investigating Nonlinear Deformation Model for Offshore Platform based on Persistent Scatterer Interferometry (PSI) Technique	Assoc Prof Dr Abd Nasir Bin Matori	FRGS
83	Removal Mechanism of Heavy Metal Toxicity Impacts using Microwave Incinerated Sugar Cane Baggase through Physical and Biological Treatment Systems	Assoc Prof Dr Shamsul Rahman Bin Mohamed Kutty	FRGS
84	Basic Study on Soil Pore Water Pressure Variations Response to Rainfall	Dr Muhammad Raza UI Mustafa	FRGS
85	Fundamental Study on Synthesis and Characterization of Inorganic Nano-Filler Reinforced Intumescent Fire Retardant Coating for Structural Application	Assoc Prof Dr Faiz Ahmad	FRGS
86	New Route of Performing Siliconizing Process on Mild Steel Sustrate by using Local Silica Sand	Assoc Prof Dr Othman Bin Mamat	FRGS
87	Fatigue Analysis of Basalt Carbon Hybrid Composites for Wind Turbine Rotor Blades	Dr Saravanan A/L Karuppanan	FRGS
88	High Pressure Solubility and Kinetic Study of High CO <sub>2</sub> Content Methane Mixture in Novel Aqueous Sterically Hindered Amino Acid (SHAA)	Prof Dr Azmi Bin Mohd Shariff	FRGS
89	Fundamental Study on Torrefaction of Empty Fruit Bunches in the Presence of Oxygen and Carbon Dioxide	Prof Dr Yoshimitsu Uemura	FRGS
90	Fundamental and Experimental Study on Phase Change Kinetics of Geopolymer Formation	Dr Lukman Bin Ismail	FRGS
91	A Fundamnetal Study of Effect of Dimethylformamide (DMF) Solvent on Morphology of Polyvinyl Acetate (PVAc)/Polyethersulfone (PES) Novel Blend Membrane	Assoc Prof Dr Hilmi Bin Mukhtar	FRGS

Note:

ERGS – Exploratory Research Grant Scheme

PRGS – Prototype Research Grant Scheme

FRGS – Fundamental Research Grant Scheme

LRGS – Long Term Research Grant Scheme

continued

No	Project Title	Principal Investigator	Funding Agency
92	Interphase Behaviour of Biopolymer Nanocomposite Material Impacting Porous Surface	Assoc Prof Dr Ku Zilati Binti Ku Shaari	FRGS
93	Exergetic Performance Investigation of Transcritical and Supercritical CO <sub>2</sub> Power Cycles	Dr Aklilu Tesfamichael Baheta	FRGS
94	Method and Correlation on the Enhancement of Natural Heat Transfer by Artificial Conic Turbulators	Assoc Prof Dr Hussain H Jaafer Al Kayiem	FRGS
95	Establishing the Empirical Correlation of the Phases and Sizes Change in the Gas Turbine Engine Blade Microstructure With Respect to Various Operating Temperatures.	Ir Idris Bin Ibrahim	FRGS
96	Novel Electrolyte in Dye-Sensitized Solar cells (DSSC) using Quinolinium Ionic Liquids	Assoc Prof Dr Cecilia Devi A/P Wilfred	FRGS
97	Exergoeconomics Model for Analysis of Offshore Power Generating Systems	Assoc Prof Ir Dr Mohd Amin Bin Abd Majid	FRGS
98	Effects of Sintering Environment on Mechanical Properties & Corrosion Resistance of the Powder Injection Molded 316L Stainless Steel	Assoc Prof Dr Faiz Ahmad	Higher Education Commission of Pakistan
99	Insitu Catalytic Cracking of Biomass to Polyols, Alcohol, Phenolics, Aromatic and Alkanes	Assoc Prof Dr Suzana Yusup	LRGS
100	Establishment of Geological Atlas of Malaysia	Prof Dr Manuel Pubellier	French Embassy

Note:

ERGS – Exploratory Research Grant Scheme

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# Student Achievements and Activities

One of the hallmarks of this university is the high marketability and employability of its graduates. The University is proud to inform, consistently 95% of its graduates managed to gain employment in reputable local and multinational corporations within six months from their graduation. The high employability rate is a result of the University's superior academic programmes and education delivery complemented with sound implementation of systematic student development programmes which integrates both theoretical and experiential learning. These educational efforts are directed at developing students' potential including inculcating strong moral and spiritual attributes. Civic consciousness and sense of responsibility towards society and nation are also embedded in these programmes.

Participation in structured credited co-curricular courses provides holistic development for students. Various clubs and societies have been established to cater to various students' needs. The University also promotes the formation of "Special Interest Groups" (SIGs) among students to bring together students with common interest. The wide range of extra-curricular activities complements and contributes to the well-rounded development of students.

The University also places great emphasis on the importance of a healthy lifestyle by providing a wide spectrum of sports and recreational facilities on campus. Active participation in sports events and competitions further develops and strengthens the students' character. Strong encouragement is also given for students' involvement in arts and culture. Many students participate in the various performing arts groups the university has to offer.

UTP is now well known in sports and performing arts. UTP students are well respected as champions in various sports competitions and performing arts, locally and abroad. UTP is now recognised as the best private university in sports and performing arts in the country. Through these active involvements, UTP graduates are acknowledged to have strong leadership, effective communication skills, business acumen and problem solving skills. These attributes including technical competency and strong moral conduct makes UTP graduates very much sought after by industry.

## Alumni

There are many successful alumnus who have made great impact in various reputable organisations locally and internationally. They have now reached strategic decision making levels and also able to influence direction of industry and national development. UTP Alumni is now in a position to be the shakers and movers of industry and nation building. The philanthropy culture is actively being nurtured among the alumni so that the alumni members can consistently give back to the alma mater and society.

To date there are already 10 international chapters established in countries like Cambodia, Indonesia, Myanmar, Pakistan, South Africa, Sudan, Thailand, Turkmenistan and Vietnam. Locally, twelve branches have been established including Sabah and Sarawak. These alumni have been active in promoting the UTP brand, while doing their part to motivate students towards engineering and science education, and introducing the challenging and attractive oil and gas career to students.

## Student Achievements

No	Activities	Date	Venue	Organizer/Host	Achievement
1	Pidato Antarabangsa Bahasa Melayu (PABM) Antara IPT 2013"	29 – 31 Jan 2013	Universiti Malaya (UM)	Ministry of Higher Education (MOHE)	Semi Finals
2	2013 Asian English Olympics (AEO)	17 – 21 Feb 2013	Binus Nusantara Anggrek Campus, Jakarta Indonesia	Binus University, Indonesia	Overall Champion 1. Champion for Short Movie Making: Azrul, Salwa, Fatin, Firdaus 2. 1st place for Short Movie Making: Mahsyar, Putra, Amir, Moustafa 3. Side Achievement for Short Movie Making ("Best On The Spot Video"): Mahsyar, Putra, Amir, Moustafa 4. 1st Runner-up for Speech: Pravin Nair
3	Kejohanan Bola Sepak MASISWA 2013	18 – 23 Feb 2013	UKM, Bangi	MASISWA	Quarter Final
4	Liga Bola Jaring IPT 2013	20 – 23 Feb 2013	Universiti Malaya (UM)	Ministry of Higher Education (MOHE) and Universiti Malaya (UM)	UTP qualified to play in the Grand Finale of Liga Bola Jaring IPT 2013 in May 2013.
5	Pertandingan Debat Keamanan Antara IPT 2013	28 Feb – 4 Mar 2013	Universiti Pertahanan Nasional Malaysia	Ministry of Higher Education (MOHE) & UPNM	Semi Finals
6	PKS-UM World University Netball Championship 2013	20 – 24 Feb 2013	Universiti Malaya (UM)	UM, Kuala Lumpur	Third Place
7	Nilai University Fencing Championship 2013	22 – 24 Feb 2013	Gymnasium Institut Sukan Negara	Nilai University, Nilai	Grouping Stage
8	Debat Perdana Integriti Antara IPT 2013	8 – 11 Mar 2013	Universiti Tun Hussein Onn Malaysia (UTMH)	Institut Integriti Malaysia, UTHM & MADUM	Semi Finals
9	3rd Persekutuan Taekwondo Negeri Perak (PTNP), Taekwondo Malaysia (TM), Majlis Sukan Negeri (MSN) Perak Junior Development League Circuit 1	22 – 24 Mar 2013	Pantai Remis, Perak	Persekutuan Taekwondo Negeri Perak (PTNP), Taekwondo Malaysia (TM), Majlis Sukan Negeri (MSN) Perak, Chonkwon Taekwondo Club	1. Lee Kian Seng: Sparring (Final) – Gold 2. Lee Kian Seng: Poomsae (Individual) – Gold 3. Hisyam Hussin Bin Mohd Ismail: Sparring (Fly) – Silver 4. Ng Tze Yi: Sparring (Heavy) - Gold



*continued*

No	Activities	Date	Venue	Organizer/Host	Achievement
10	Festival & Kejohanan Pencak Silat Terbuka IPT & Jemputan Antarabangsa Taming Sari UKM V, 2013	3 – 7 Apr 2013	Universiti Kebangsaan Malaysia (UKM), Bangi, Selangor	UKM Pencak Silat Club In Collaboration With UKM Sports Center.	<b>Quarter Final:</b> <ol style="list-style-type: none"> <li>1. Muhammad Firdaus Bin Zainudin (ME) – Class E</li> <li>2. Muhammad Saufi Bin Ahmad Shahrhan (PGS) – Class H</li> <li>3. Suffi Sayyid Bin Sulaiman – (EE) – Class D</li> <li>4. Mohamad Hakim Bin Abdul Rahman (CV) – Class F</li> <li>5. Mohamad Bakhit Aiman Bin Harun (CV) – Class B</li> </ol> <b>Bronze:</b> <ol style="list-style-type: none"> <li>1. Nurul Fatimah Binti Awang (ME) – Class B</li> <li>2. Nurul Syifa Shafirah Binti Omar (EE) – Class C</li> </ol> <b>Silver:</b> <ol style="list-style-type: none"> <li>1. Muhammad Zulfaqar Bin Md Zahri (ICT) – Class C</li> </ol> <b>Gold:</b> <ol style="list-style-type: none"> <li>1. Muhamad Hasyeme Bin Nasir (EE) – Class A</li> </ol>
11	Pertandingan Gamelan Melayu Peringkat Kebangsaan 2013	20 – 21 April 2013	Dewan Sultan Mizan, Universiti Malaysia Terengganu (UMT)	Lembaga Muzium Negeri Terengganu in collaboration with Jabatan Budaya dan Kesenian Negeri Terengganu	2nd runner-up with a prize worth RM6,000.00
12	UTP Soccer League 2013	06 Mar – 14 Apr 2013	UTP Sports Complex	Co-Curriculum Unit, Student Support Services Department	Champion – DOBI FC Runner-up – AL-ITTIHAD FC
13	Kejohanan Liga Bola Sepak Piala Naib Canselor UTP 2013	14 Mar – 12 Apr 2013	UTP Sports Complex	KSKKU UTP	Champion – Tronoh FC Runner-up – STAFF FC
14	Flexpro Nottingham University Malaysia Campus Badminton Championship 2013	15 – 17 Mar 2013	The University of Nottingham Malaysia Campus (UNMC), Semenyih	The University of Nottingham Malaysia Campus (UNMC), Semenyih	Preliminary round
15	Kejohanan Futsal IPT Piala Menteri Pengajian Tinggi 2013 (Sirkuit 1) UIA	21 – 24 Mar 2013	International Islamic University Malaysia (IIUM), Gombak	International Islamic University Malaysia (IIUM), Gombak	Grouping Stage
16	Taylor's University Squash Open 2013	13 – 14 Apr 2013	Pusat Skuasy Nasional, Bukit Jalil	Taylor's University	Win Category Plate – Hussein Nordin bin Soraji
17	Festival of Colours of the World 2013	13 Apr 2013	Chancellor Hall, UTP	Co-Curriculum Unit Student Support Services Department, UTP	Champion: UiTM Shah Alam (Prisma Seni) 1st Runner-up: ASWARA (Rang Budaya) 2nd Runner-up: Sekolah Seni Johor Bharu

## Student Achievements and Activities | Student Achievements

*continued*

No	Activities	Date	Venue	Organizer/Host	Achievement
18	Pertandingan Gamelan Melayu Peringkat Kebangsaan 2013	21 Apr 2013	Dewan Sultan Mizan, Universiti Malaysia Terengganu (UMT)	Lembaga Muzium Negeri Terengganu & Jabatan Budaya dan Kesenian Negeri Terengganu	2nd runner-up
19	Debat Muhibbah 2013	3 – 5 May 2013	Sembawang Camp Challenge, Singapore	Singapore Malay Youth Literary Association	Champion
20	Youth Challenge Malaysia 2013 (ASME)	8 – 9 May 2013	Universiti Kebangsaan Malaysia (UKM), Bangi, Selangor	Eduevent, Sequoia	One of The Best 3 Teams For Central Region
21	Penang Debate Open 2013	21 – 24 May 2013	Universiti Teknologi MARA (UiTM) Bukit Mertajam, Pulau Pinang	UiTM Bukit Mertajam, Pulau Pinang in collaboration with Majlis Debat Universiti Malaysia (MADUM)	3rd place
22	MASISWA Swimming Championship 2013	8 – 9 June 2013	INTI International University, Nilai, Negeri Sembilan	MASISWA in collaboration with INTI International University	Overall Result: 1st Runner Up <b>GOLD:</b> 1. 100 m Breaststroke – Lee Hsiu Eik (Male) 2. 50 m Breaststroke – Lee Hsiu Eik (Male) 3. 100 m Breaststroke – Lim Chia Wei (Female) 4. 200 m Breaststroke – Lee Hsiu Eik (Male) 5. 200 m Breaststroke – Lim Chia Wei (Female) <b>SILVER:</b> 1. 100 m Breaststroke – Nur Anis Najihah (Female) 2. 200 m Breaststroke – Nur Anis Najihah (Female) <b>BRONZE:</b> 1. 200 m Freestyle – Lim Chia Wei (Female)
23	Kejohanan Sukan MASISWA Zon Utara 2013	21 – 23 June 2013	Malaysia Spanish Institute (UniKL MSI), Kulim, Kedah	Majlis Sukan IPTS Malaysia (MASISWA) and Malaysia Spanish Institute (UniKL MSI)	Overall Champion – UTP Badminton: Women's Single – Silver Women's Double – Silver Mix Double – Gold, Bronze Tenpin Bowling: Men's Team – Silver Women's Team – Gold Individu (Female) – Silver, Bronze Rugby 7S – Silver Volleyball – Gold Netball – Gold Futsal – Gold
24	Malaysian Chess Festival 2013	16 – 18 Aug 2013	Cititel Midvalley, Kuala Lumpur	Midvalley, KL	BEST IPT and Medals

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No	Activities	Date	Venue	Organizer/Host	Achievement
25	Kejohanan Pemilihan Pencak Silat, Pertubuhan Silat Seni Gayong Malaysia (PSSGM) Kebangsaan 2013	13 – 16 Sept 2013	SMK Seksyen 11, Shah Alam, Selangor	Persatuan Seni Silat Gayong Malaysia (PSSGM)	<b>Quarter Final:</b> <ol style="list-style-type: none"> <li>1. Muhammad Nur Iman bin Nordin – Class A (Putera)</li> <li>2. Nurul Fatimah binti Awang – Class B (Puteri)</li> <li>3. Effa Afiana binti Ishak – Class D (Puteri)</li> </ol> <b>Semi Final:</b> <ol style="list-style-type: none"> <li>1. Nurul Syifa Shafirah binti Omar – Class C (Puteri)</li> <li>2. Muhd Uzair bin Zainol – Class G (Putera)</li> <li>3. Muhammad Badrulnizam bin Kamaruzzaman – Class C (Putera)</li> </ol> <b>Final:</b> <ol style="list-style-type: none"> <li>1. Muhammad Firdaus bin Zainudin – Class D (Putera)</li> </ol>
26	32nd Perak Closed Taekwondo (WTF) Championship 2013	27 – 29 Sept 2013	Dewan Bunga Raya, Kuarters Seri Angkasa TUDM, Ipoh, Perak	Persekutuan Taekwondo Negeri Perak (PTNP) and Jass Taekwondo Club	Overall 3rd placing in Sparring Overall 2nd placing in Poomsae
27	Kejohanan Bola Tampar Jemputan Politeknik Tuanku Sultanah Bahiyah, Kulim	28 – 29 Sept 2013	Politeknik Tuanku Sultanah Bahiyah, Kulim, Kedah	Politeknik Tuanku Sultanah Bahiyah	3rd place
28	Cheonan World Dance Festival	28 Sept – 7 Oct 2013	Seoul, Korea	Cheonan Art and Cultural Promotion-Tourism Korea	Champion – Folk Dance Competition
29	Kejohanan Taekwondo MASISWA & Jemputan IPT 2013	18 – 20 Oct 2013	Tunku Abdul Rahman University College (TAR), Kuala Lumpur	Kementerian Pendidikan Malaysia in collaboration with Taekwondo Malaysia (TM) and Tunku Abdul Rahman University College (TAR)	2 Gold, 4 Silver and 3 Bronze <ol style="list-style-type: none"> <li>1. Lee Kian Seng, Sparring (Final) – Gold</li> <li>2. Muhammad Afiq bin Mohamad Sani, Sparring (Light) – Gold</li> <li>3. Nufarah Hanim Bt Abdullah, Sparring (Bantam) – Silver</li> <li>4. Nik Nur Nailini Bt Nik Ab Rashid, Sparring (Final) – Silver</li> <li>5. Hisyam Hussin B Mohd Ismail, Sparring (Fly) – Silver</li> <li>6. Muhammad Faisal Redzwan B MdRoslee, Sparring (Bantam) – Silver</li> <li>7. Muhammad Hanizam B Mohd Jahari, Sparring (Bantam) – Bronze</li> <li>8. Arif Hafizzie B Zainal Ariffin, Sparring (Middle) – Bronze</li> <li>9. Nufarah Hanim Bt Abdullah, Nik Nur Nailini Bt Nik Ab Rashid &amp; Ummi Amirah Afini Bt Ahmad Poomsae (Team)– Bronze</li> </ol>

## Student Achievements and Activities | Student Achievements

*continued*

No	Activities	Date	Venue	Organizer/Host	Achievement
30	Kejohanan Ragbi 10 Sebelah Piala Naib Canselor UPNM Kali Ke-4, 2013	11 – 13 Oct 2013	Universiti Pertahanan Nasional Malaysia (UPNM), Sungai Besi, Kuala Lumpur	Pusat Sukan Universiti Pertahanan Nasional Malaysia (UPNM)	Champion in the plate category
31	SPE Asia Pacific Regional Student Paper Contest	22 – 24 Oct 2013	Jakarta, Indonesia	2013 Asia Pacific Oil & Gas Conference and Exhibition	2nd Prize Winner – Cha Yee Weng (12901)
32	Pesta Bola Jaring USM-Penang International Ke-23, 2013	25 – 27 Oct 2013	Universiti Sains Malaysia (USM), Penang	Pusat Sukan Universiti Sains Malaysia and Persatuan Bola Jaring Malaysia	2nd RunnerUp
33	Kejohanan Rugbi MASISWA 10'S 2013	25 – 27 Oct 2013	Universiti Tenaga Nasional (UNITEN), Putrajaya	Majlis Sukan Institusi Pengajian Tinggi Swasta Malaysia (MASISWA) and Universiti Tenaga Nasional (UNITEN)	Champion
34	Kejohanan Kanu Kebangsaan 2013	1 – 3 Nov 2013	Pusat Rekreasi Air Tasik Ayer Keroh, Melaka	Kementerian Belia dan Sukan (KBS) with Jabatan Belia dan Sukan Negeri Melaka and Persatuan Kanu Malaysia (MASCA)	<b>Open Category:</b> 1. Single (Male) – Champion 2. Double (Male) – 2nd Runner-UP IPT Category – 4th Runner-Up
35	Kejohanan Sukan Institusi Pendidikan Malaysia (SIPMA) 2013	15 – 22 Nov 2013	Kolej Matrikulasi Pahang (KMPh), Gambang, Pahang	Majlis Sukan Institusi Pengajian Tinggi Swasta (MASISWA)	<b>3 Silver medals (Swimming Team)</b> 1. Lim Chia Wei (PE) – 15274 – 2 silver medals in the 4x100m Medley Relay and 4x100m Relay 2. Nur Anis Najihah (BIS) – 17941 – 1 silver medal in 4x100m Relay
36	GE University Level Open Innovation Grand Finale Challenge	19 Nov 2013	Renaissance Hotel, Kuala Lumpur	Agensi Inovasi Malaysia	<b>2nd Prize worth of RM2000</b> 1. Muhammad Syukri Bin Mohd Shah 2. Muhammad Izzuddin bin Mohamad Zaki (Final Year Bachelor of Chemical Engineering)
37	International Student Sports Carnival 2013 (ISSC)	29 Nov – 1 Dec 2013	Universiti Tenaga Nasional (UNITEN)	Kementerian Pendidikan Malaysia and Universiti Tenaga Nasional (UNITEN)	<b>Overall Champion</b> 4 gold, 4 silver and 3 bronze medals

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No	Activities	Date	Venue	Organizer/Host	Achievement
38	Larian Hari Keputeraan Sultan Azlan Shah	5 Dec 2013	SMK Clifford, Kuala Kangsar, Perak	Pacesetters Athletic Club	<b>11 Km Men Open:</b> 1. Almur Abdelkreem Saeed Rabi (G01997) – 1st Placing 2. Hamedelgazali Abdullah Hamed Ahmed (17759) – 5th Placing 3. Izzalden Idris Abdalla (G01999) – Finisher 4. Shathiskumar A/L Sockalingam (12846) – Finisher



## Student Activities

Activities	Date	Venue	Organiser / Host
Yong Belar – Tiga Negeri Cleaning Expedition	8 – 12 Jan 2013	Mount Yong Belar, Cameron Highlands	Kelab Kembara
Facilitator and Media Faci For Minggu Aluan Siswa Jan 2013 Programme	Jan 2013	UTP	Student Support Services Department
International Goodwill Programme	8 – 13 Jan 2013	Siem Reap, Cambodia	Rotaract Club
Visit to Pertubuhan Kebajikan Nur Kasih, Taiping, Perak	28 Jan 2013	Pertubuhan Kebajikan Nur Kasih Simpang 3, Ulu Sepetang, Taiping	ENACTUS
Chinese New Year Donation	15 – 19 Feb 2013	1. Gunung Lang Monastery, Ipoh 2. Yayasan Latihan Insan Istimewa, Ipoh 3. Agape Family, Ipoh	UTP Alumni and UTP Alumni Unit
Educational Trip to KL & CSR Programme	3 Feb 2013	Zoo Negara	International Student Council (ISC), Mozambique Committee & International Student Unit (ISU)
Arabic Language Teaching Programme	9 Feb – 14 Dec 2013	SMK Agama Sultan Azlan Shah, Perak	International Student Unit (ISU)
Global Enrichment Programme	27 Feb – 9 Mar 2013	University of Tokyo and University of Gunma, Japan	UTP PR Student Representative (UTPHost), International Student Council (ISC) and Village 4 Committee
UTP-INSTEP Intercultural Programme for South Sudanese & Equatorial Guinea	13 Feb 2013	INSTEP, Batu Rakit Terengganu	Counseling & Students Development Unit
Majlis Salam Sayang & Pra-Kempen "Greetings, Salam and Smile	17 Feb 2013	Dewan Orang Ramai & Bangunan Bengkel Kemas, Batu Kurau Taiping	Sekretariat Rakan Muda UTP
Medical Camp 2013	16 Mar 2013	Tesco Extra Bercham	Rotaract Club
Tunas Cemerlang	16 Mar 2013	Bait Al-Amin, Parit	Counseling & Students Development Unit
Majlis Pelancaran 1Malaysia Komuniti Perwani & 1 Million Women Purple Walk	17 Mar 2013	Dataran Putrajaya, Padang Ipoh & Padang Seri Iskandar	Ministry of Higher Education (MOHE)
Pre Event Mission Awareness Programme (MAP) 2013	17 Mar 2013	Trong and Taiping, Perak Darul Ridzuan	MAP Committee Members & International Student Unit (ISU)
Beyond Horizon Motivational Outreach 2013	17 Mar 2013	SMK Tarcisian Convent, Ipoh	Counseling & Students Development Unit
SK Suak Padi Transformation (1M4U Programme)	23 Mar 2013	SK Suak Padi, Bota, Perak	EUPHONIUS 2013 Committee
Excel Score UPSR	30 Mar 2013	Undercroft, UTP	Counseling & Students Development Unit & UTP Peers
Green to Gold (GTG)	Mar 2013 – Mar 2014	Kg Padang Marhum, Teluk Bakong, Perak	ENACTUS

## Student Achievements and Activities | Student Activities

*continued*

Activities	Date	Venue	Organiser / Host
Gang of Peers 2013	5 – 7 Apr 2013	Ruman Anak Yatim Ar-Rayyan, Johor	Counseling & Students Development Unit
Youth in Community (YiC)	13 Apr 2013	UTP	ENACTUS
Focus Group Programme Orang Asli Society and Community Info 1Malaysia	14 Apr 2013	SK Suak Padi, Bota, Perak	Department of Information Perak and in collaboration with Perak Tengah District Council
Youth in Community (YiC)	4 May 2013	UTP	ENACTUS
Mission Awareness Programme	6 – 11 May 2013	Kg Trong, Daerah Larut Matang & Selama, Perak	International Student Unit (ISU)
Greetings, Salam and Smile Campaign	9 May – 16 Aug 2013	UTP	International Student Unit (ISU), Sekretariat Rakan Muda UTP, Ministry of Higher Education (MOHE)
Moment to Share Rumah Seri Kenangan 2013	12-13 May 2013	Rumah Seri Kenangan Tanjung Rambutan	Sekretariat Rakan Muda UTP
Children Provision Charity 2013	1 Jun – 19 Jul 2013	UTP & Orphanage Homes	Rotaract Club
MEDTECH Cyber Gen 2013	1 Jun 2013	MRSM, Parit	MEDTECH
Technology, Education and Career (TEC), CSR Visit	2 Jun 2013	Rumah Kebajikan Anak Yatim Darus As-Salam, Ipoh	TEC Committee, Career Service Unit
CDSU I-NAT CSR Project	4 Jun 2013	Sekolah Rendah Agama Seri Iskandar (SRAHSI)	Counseling & Students Development Unit
Autocad and Geomatics Class 2013	4 Jun 2013	Pocket C, UTP	UCITY Club
Charity Works for Community	9 Jun 2013	Kampong Batu 14, Lekir Setiawan	Class Project ICT/BIS
Moment to Share PPRT Titi Gantung 2013	9 Jun 2013	Kg Titi Gantung, Bota Perak	Sekretariat Rakan Muda UTP
My Beautiful Malaysia Day	Jun 2013	Putrajaya	Ministry of Higher Education (MOHE)
Educational Trip to Putrajaya for Celebrating Prophet Muhammad's Birthday (Maulidur Rasul)	Jun 2013	Putrajaya	International Student Unit (ISU)
Beyond Horizon Motivational Outreach Programme	21 – 23 Jun 2013	SMK Ghafar Baba, Melaka	UTP BHMOC6, In Collaboration with UTP Peer Helpers and UTP Counseling & Students Development Unit
Car Wash for Charity	29 Jun 2013	UTP	Class Project Chemical Engineering
Cleaning the Cemetery	29 Jun 2013	Bota, Seri Iskandar	Class Project Petroleum Engineering
Jenazah Management & Cleaning The Cemetery	29 Jun 2013	Kampung Bali	Class Project Civil Engineering
Moment to Share – PPRT Titi Gantung 2013	29 Jun 2013	Kg Titi Gantung, Bota Perak	Sekretariat Rakan Muda UTP
Teater Kaunseling Interaktif	4 Jul 2013	SMK Ringlet, Cameron Highlands	Tronoh Theatre Shop
Moment to Share – PPRT Titi Gantung 2013	7 Jul 2013	Kg Titi Gantung, Bota Perak	Sekretariat Rakan Muda UTP
SEDEX31 UTP: 1Mkids Programme	11 Jul 2013	UTP	RESMATH

## Student Achievements and Activities | Student Activities

*continued*

Activities	Date	Venue	Organiser / Host
Cleaning the Mosque	13 Jul 2013	Masjid Sultan Yussof Ipoh	Class Project Electrical Engineering
Iftar with Rumah Nurul Iman	14 Jul 2013	Rumah Nurul Iman, Kamunting Perak	Class Project Mechanical Engineering
IKRAM MAANA	27 Jul 2013	Pusat Jagaan Anak-anak Yatim dan Miskin Nurul Iman, Ipoh, Perak	Class Project Post Graduate
MPPUTP CSR Project	27 Jul 2013	Pertubuhan Kebajikan Anak Yatim Dan Miskin Ar-Ridwani, Ipoh, Perak	MPPUTP
MAS CSR Project	27 Jul 2013	SK Tronoh, SJK (T) Tronoh, SJK (C) Tronoh	Counselling & Student Development
Youth Social Responsibility	3 Aug 2013	SJK (T) Tronoh, SJK © Chung Sun	IChemE-UTP-SC
Moment to Share – PPRT Titi Gantung 2013	17 Aug 2013	Kg Titi Gantung, Bota Perak	Sekretariat Rakan Muda UTP
CSR Programme – Cross Cultural Programme With SMJK (C) Sin Min, Sungai Petani, Kedah Darul Aman	23 – 24 Aug 2013	Cinta Sayang Resort, Sungai Petani Kedah	Co-Curriculum Unit and Universiti Teknologi PETRONAS Performing Arts Group (UPAG)
Youth in Community (YiC)	14 Sept 2013	UTP	ENACTUS
Community Service and Intercultural Exchange Programme in Vietnam	16 – 22 Sept 2013	Ho Chi Minh City, Vietnam	International Student Council (ISC) in collaboration with Ho Chi Minh City University of Technology (HCMUT), Alumni Group of Vietnamese Students in UTP and Student Support Services Department
Corporate Social Responsibility (CSR) Programme by Chemical Exposure Symposium (CHEXPOSIUM)	4 Oct 2013	SMK Tronoh	IChemE@UTP
Sousday Cambodia 2013	13-16 Oct 2013	Chrok Romiet, Kg Chhnang Province, Cambodia	Sekretariat Rakan Muda UTP
School Workshop in Perak (SWIP)	18 Oct 2013	SMK Ave Maria Convent, Ipoh	AIESEC-UTP Student Chapter
Youth Social Responsibility	18 Oct 2013	SMK Tronoh	Rotaract Club
Innovative Green Future	18 – 25 Oct 2013	St Michael Institution, Ipoh, Perak	IDEC UTP
Visit to Orphanage	19 Oct 2013	Pusat Jagaan Persatuan Kebajikan Yatim Rumah Visi Ipoh	Rotaract Club
School Workshop in Perak (SWIP)	24 Oct 2013	SMK Sungai Pari, Ipoh	AIESEC-UTP Student Chapter
School Workshop in Perak (SWIP)	25 Oct 2013	SMK Seri Puteri, Ipoh	AIESEC-UTP Student Chapter
Youth Social Responsibility	8 Nov 2013	SMK Tronoh	Rotaract Club
The Kasih Project	8 – 10 Nov 2013	Kg Padang Changkat Bota, Perak	MPPUTP
Youth Social Responsibility: Cheertime!	16 Nov 2013	Rumah Anak Yatim Perempuan Al-Barakah Teluk Intan	IChemE-UTP-SC Club
An Orphanage Day in UTP	20 Nov 2013	UTP	AIESEC-UTP Student Chapter

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Activities	Date	Venue	Organiser / Host
Community Service Trip to Children Welfare House of Perak State	22 Nov 2013	Children Welfare House of Perak State	Society of Petroleum Engineering UTP Student Chapter
My Village Project	29 Nov – 1 Dec 2013	Kg Pauh/Padang in the area of Behrang, Perak	Student Support Services Department
Programme Sukarelawan Sempena Hari Sukarelawan Sedunia 2013	5 Dec 2013	SK Tronoh, Perak	International Student Club (ISC) and Co-Curriculum Unit
Donation for the Flood Victims in the East Coast of Malaysia	18 – 19 Dec 2013	Kemaman, Terengganu	UTP Alumni in collaboration with ENACTUS Club (UTP Chapter)

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