

MEMBERSHIP

To All Members,

Date: 15 May 2006

CANDIDATES APPROVED TO SIT FOR YEAR 2006 PROFESSIONAL INTERVIEW

The following candidates have been approved to sit for the Professional Interview for 2006.

In accordance with Bylaws 3.7, the undermentioned names are published as having applied for membership of the Institution, subject to passing the year 2006 Professional Interview.

If any Corporate Member of the Institution has any reason as to why any of the candidates is not a fit and proper person for election, he should communicate in writing to the Hon. Secretary. Such communication should be lodged a month from the date of publication.

Engr. Oon Chee Kheng F.I.E.M., P.Eng.
Honorary Secretary, IEM

TRANSFER APPLICANTS		
Membership No	Name	Qualifications
AGRICULTURAL ENGINEERING		
21589	YONG HONG LIANG	BE (HONS) (UPM) (AGRI, 98)
CIVIL ENGINEERING		
19471	MOHD ASRI BIN SIDEK	BE (UTM) (CIVIL, 91)
10849	TEE HOI ENG	BE (HONS) (MIDDLESEX) (CIVIL, 86)
NEW APPLICANTS		
Name	Qualifications	
STRUCTURAL ENGINEERING		
TAN TIAN WEE	BSc (NAT. CHENG KUNG, UNI) (CIVIL, 97) MSc (SHEFFIELD) (STRUCT, 98)	

ADMISSION / ELECTION / TRANSFER

The IEM Council, at its 352nd meeting on 22 April 2006, approved the admission / election / transfer of a total of 158 members, consisting the following:

DISCIPLINES	MEMBERSHIP GRADES				
Disciplines	Fellow	Member	Graduate	Student	Total
Aeronautical				16	16
Aerospace				1	1
Agricultural		1			1
Automotive					
Biochemical					
Biomedical					
Biotechnology					
CAD/CAM					
Chemical		2	8	1	11
Civil	2	12	19	39	72
Communication					
Computer				1	1
Computer Systems					
Computer and Communication					
Electrical		6	4		10
Electronic			2		2
Electromechanical					
Energy					
Environmental				3	3
Food and Process					
Geotechnical					

MEMBERSHIP

DISCIPLINES	MEMBERSHIP GRADES				
Disciplines	Fellow	Member	Graduate	Student	Total
Highway					
Industrial					
Information System					
Information Technology					
Instrumentation and Control					
Manufacturing				1	1
Materials			1	2	3
Mechanical		2	12	22	36
Mechatronic					
Mineral Resources					
Mining					
Naval Architecture					
Polymer					
Petroleum		1			1
Structural					
Telecommunication					
Water Resources					
TOTAL	2	24	46	86	158

The Members' names and qualifications are detailed below. The Institution congratulates the members on their admission / election / transfer.

Engr. Oon Chee Kheng F.I.E.M., P.Eng.
*Honorary Secretary,
The Institution of Engineers, Malaysia*

TRANSFER TO THE GRADE OF FELLOW			
Membership No	Discipline	Name	Qualifications
8457	CIVIL	ENGR. ASSOC. PROF. SITI HAWA BT HAMZAH	BSc (MIAMI) (CIVIL, 83) MSc (KENTUCKY) (CIVIL, 88)
11883	CIVIL	ENGR. CHOW WAI MING	BSc (HONS) (QUEENS UNIV OF KINGSTON) (CIVIL, 86)

TRANSFER TO THE GRADE OF MEMBER			
Name	Membership No	Qualification	Discipline
CHOO CHEE MING	23927	BE (HONS)(UPM)(CHEM, 2000) ME (SC)(GRIFFITH)(ENVI, 2002)	CHEMICAL
CHUAH SHANG CHING	22485	BE (HONS)(UKM)(CIVIL & STRUCTURAL, 1999)	CIVIL
LIM KHING FULL	19679	BSc (MISSISSIPPI STATE)(CIVIL, 1997)	CIVIL
LIM SHEAU ROU	21801	BE (HONS)(UTM)(CIVIL, 2000)	CIVIL
MOHAMAD ARIFFIN BIN ABDUL BASAR	18114	BE (HONS)(ITM)(CIVIL, 1998)	CIVIL
ROBIN TIGAI	17007	BE (HONS)(UTM)(CIVIL, 1990)	CIVIL
TANG LEE LEE	17293	BE (HONS)(UTM)(CIVIL, 2000)	CIVIL
THEN FOONG TSONG	19007	BE (HONS)(SOUTHAMPTON)(CIVIL, 1997)	CIVIL
WAN YOW CHOY	20585	BE (HONS)(MALAYA)(CIVIL, 1999)	CIVIL
MOSTAPHA BIN LAI	15756	BE (HONS)(WALES)(ELECT & E'TRONIC, 1988)	ELECTRICAL
PADMANATHAN A/L A. SUBRAMANIAM	7782	BE (HONS)(MALAYA)(MECH, 1984)	MECHANICAL
CHONG KOK JIN	11271	BSc (HONS)(IMPERIAL COLLEGE)(PETROLEUM, 1978)	PETROLEUM
Pass Professional Assessment (PAE)			
MURALINDRAN A/L KOVINDASAMY	14562	BE (HONS)(UTM)(CHEM, 1993) MSc (USM)(CHEM, 1999)	CHEMICAL
MOHD ZAILANI BIN MOHD SHAFI	10435	BE (HONS)(UTM)(CIVIL, 1988)	CIVIL
ROSLIM BIN IBRAHIM	17240	BE (SALFORD)(E'TRONIC & ELECT, 1991)	ELECTRICAL
TEH CHIN LEONG	22241	BSc (NORTH DAKOTA)(ELECT, 1996)	ELECTRICAL

MEMBERSHIP

ELECTION TO THE GRADE OF MEMBER		
Name	Membership No	Discipline
KIU KWONG CHIANG	BE (HONS)(UPM)(BIO & AGRI, 1999)	AGRICULTURAL
DURAILINGAM A/L THURAICHAMY	BSc (CALICUT)(CIVIL, 1982) MSc (WALES)(CIVIL, 1985)	CIVIL
MOHAMAD MARZUKI BIN BUJANG	BSc (HONS)(STRATHCLYDE)(CIVIL, 1985)	CIVIL
YONG DEUNG MING	BE (HONS)(NUS)(CIVIL, 1988) PhD(NUS)(1994)	CIVIL
LIAW SUNG GUAN	BE (HONS)(MMU)(ELECT, 2002)	ELECTRICAL
SURESH A/L SANKARAN	BE (MANGALORE)(ELECT, 1993)	ELECTRICAL
TIONG TIUNG POH	BE (HONS)(LIVERPOOL JOHN MOORES)(MECH, 1997)	MECHANICAL
Pass Professional Assessment (PAE)		
LUM SIEW CHEONG, JEFFREY	BSC (MISSOURI)(ELECT, 1994)	ELECTRICAL

TRANSFER TO THE GRADE OF GRADUATE			
Membership No	Discipline	Name	Qualifications
15719	CHEMICAL	PANG WING CHEONG	BE (HONS) (UM) (CHEM, 97)
24010	MECHANICAL	CHAN YEN SIANG	BE (HONS) (UTM) (MECH, 03)
22520	MECHANICAL	PHEH GUAN CHOON	BE (HONS) (UPM) (MECH,04)

ADMISSION TO THE GRADE OF GRADUATE		
Discipline	Name	Qualifications
CHEMICAL	CHENG SHU YIEN	BE (HONS) (UTM) (CHEM, 04)
CHEMICAL	CHIA CHOO LUANG	BE (HONS) (CURTIN) (CHEM, 05)
CHEMICAL	LIM YING PEI	BE (HONS) (UKM) (CHEM, 01) ME (UKM) (ENVT, 03)
CHEMICAL	LINGESVEERAMANI A/L MARUTHAI	BE (HONS) (UKM) (CHEM, 01)
CHEMICAL	RAJA SHAZRIN SHAH BIN RAJA EHSAN SHAH	BE (HONS) (UM) (CHEM, 04)
CHEMICAL	SYAIFALIZAN AKMA BINTI HAJI JAMALUDIN	BE (HONS) (UTP) (CHEM, 02)
CHEMICAL	WONG LING HUEY	BE (HONS) (UTP) (CHEM, 05)
CIVIL	ANDY FAIZAL BIN SAHAPADIN	BE (HONS) (UTM) (CIVIL, 05)
CIVIL	ANG KOK WEE	BE (HONS) (NEW SOUTH WALES) (CIVIL, 05)
CIVIL	CHEW OOI TECK	BE (HONS) (UPM) (CIVIL, 00)
CIVIL	CHOO KIM FOO	BE (HONS) (USM) (CIVIL, 05)
CIVIL	CHOW WAI HONG	BE (HONS) (UM) (CIVIL, 05)
CIVIL	KANG POH JING	BE (ADELAIDE) (CIVIL, 03) ME (WOLLONGONG) (CIVIL, 05)
CIVIL	KANTHIMA BINTI NUIN	BE (HONS) (UNITEN) (CIVIL, 05)
CIVIL	LAU WEI NAM	BE (HONS) (UPM) (CIVIL, 02)
CIVIL	LIEW HENG SIONG	BE (HONS) (UNITEN) (CIVIL, 04)
CIVIL	LIM LEE WEE	BE (HONS) (UTM) (CIVIL-CONST. MGMT, 03)
CIVIL	LOK CHIN HOONG	BE (HONS) (USM) (CIVIL, 05)
CIVIL	LOW SOON AIK	BE (HONS) (UTM) (CIVIL, 01)
CIVIL	MOHAMMED ALIAS BIN YUSOF	BE (HONS) (UTM) (CIVIL, 02) MSc (UiTM) (INTEGRATED CONST. PROJECT. MGMT, 05)
CIVIL	PARAMJEET KAUR A/P SARBAN SINGH	BE (HONS) (UM) (CIVIL, 05)
CIVIL	SITI AIANE BINTI MD YUNOS	BE (HONS) (UTM) (CIVIL, 00)
CIVIL	SIU KEIH TING	BE (HONS) (RMIT) (CIVIL, 02)
CIVIL	SIVANESAN A/L NADARAJAH	BSc (TEXAS) (CIVIL, 86) MSc (UTAH STATE) (CIVIL & ENV'T, 88)
CIVIL	SYAIFUL ISKANDAR BIN YAHAYA	BE (HONS) (UiTM) (CIVIL, 03)
CIVIL	TOH CHANG PIN	BE (HONS) (BIRMINGHAM) (CIVIL, 98)
ELECTRICAL	PETER TREVOR JAU A JR	BE (HONS) (UM) (ELECT, 03)
ELECTRICAL	RAJENDRAN A/L SINNADURAI	BE (HONS) (MMU) (ELECT, 02)
ELECTRICAL	TAYALAN A/L PATMANATHAN	EC (PART II) - 2005 HIGHER DIP (MEGATECH) (ELECT&E'TRONIC, 99)
ELECTRICAL	ZUNNASRI BIN SALIHIN	BE (HONS) (UM) (ELECT, 02)
ELECTRONIC	AKMAL BIN HAJI ABDULLAH	BE (HONS) (KUiTTHO) (ELECT, 03)
ELECTRONIC	MOHAMMAD FAIZAL BIN AHMAD FAUZI	BE (HONS) (LONDON) (ELECT & E'TRONIC, 99) PHD (SOUTHAMPTON) (E'TRONIC & COMP SC, 04)
MATERIAL	AMALINA BINTI AMIR	BE (HONS) (USM) (MATERIALS, 05)
MECHANICAL	ALEX JEFFREY NATHAN	BE (HONS) (UNITEN) (MECH, 01)
MECHANICAL	HANAFI BIN TALIB	BE (HONS) (MONASH) (MECH, 97)

MEMBERSHIP

ADMISSION TO THE GRADE OF GRADUATE

Discipline	Name	Qualifications
MECHANICAL	KHOR TEIK HEONG	BE (HONS) (NAT. UNIV. S'PORE) (MECH, 99)
MECHANICAL	MOHD FAIZZAL BIN BAHARULRAZI	BE (HONS) (UTM) (MECH-AERONAUTICS, 05)
MECHANICAL	PREM RAKESH A/L SUBRAMANIAM	BE (HONS) (UNITEN) (MECH, 05)
MECHANICAL	PUI TECK SIN	BE (HONS) (KUiTTHO) (MECH, 03)
MECHANICAL	SYED AHMAD ADAM BIN SYED ANNUAR	BE (HONS) (UNITEN) (MECH, 03)
MECHANICAL	TAN YEW SING	EC (PART II) - 1988
MECHANICAL	TUAN MOHD SAIFUL BIN TUAN SOH	BE (HONS) (UTM) (MECH-AERONAUTIC, 03)
MECHANICAL	WONG CHOON HO	BE (HONS) (MONASH) (MECH, 05)

ADMISSION TO THE GRADE OF STUDENT

Discipline	Name	Qualifications
AERONAUTIC	FAIZUL ERWAN BIN PUZI	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	HEIRIL AZHAR BIN SUHAMIN	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	KHAIRUL NADZRY BIN NAZAR	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	KHAIRULAMRI BIN YUSOF	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	M. SHAHRUL NIDZAM BIN ISMAIL	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	MOHAMMAD SARIFUDDIN BIN HASSAN	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	MOHD AIZAT AKMAL BIN AHMAD	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	MOHD FARIS BIN ISMAIL	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	MOHD NASRUL BIN ROSLAN	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	MUHAMMAD AZFAR BIN MUHAMAD DAN	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	MUHAMMAD FAIRUZ ZAMIR BIN JOHAR	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	MUHAMMAD HAZIM BIN ALI	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	NORHAYATI BTE RAMLI	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	SULAIMAN BIN MOHAMED NOR	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	UMAR FAROOQ BIN ABDUL AZIZ	2ND YEAR (ATMA) (AERONAUTIC)
AERONAUTIC	WAN NURDIANA BINTI WAN YUSOFF	2ND YEAR (ATMA) (AERONAUTIC)
AEROSPACE	P. PRABAKHAR PALPANATHAN	3RD YEAR (UIAM) (AEROSPACE)
CHEMICAL	EMY SYAFINAS BINTI HAMID @ OSMAN	3RD YEAR (KUKTEM) (CHEM)
CIVIL	AHMAD SYAZWAN BIN MOHD SUKARNO	2ND YEAR (UTM) (CIVIL)
CIVIL	ASHARI BIN ABDUL AZIZ	2ND YEAR (UTM) (CIVIL)
CIVIL	CHOO HUI SHIEN, ANNIE	FINAL YEAR (UTM) (CIVIL)
CIVIL	DANNY BARNABAS KIANG	FINAL YEAR (UiTM) (CIVIL)
CIVIL	EGU PHOOI MEI	4TH YEAR (UM) (CIVIL)
CIVIL	EVELYN RONI ANAK TADA	FINAL YEAR (UiTM) (CIVIL)
CIVIL	EZUAN BIN HAJI JAMADON	FINAL YEAR (UTM) (CIVIL)
CIVIL	GOH HOOI BEIN	FINAL YEAR (UTM) (CIVIL)
CIVIL	HAMIDUN BIN MOHD NOH	2ND YEAR (UTM) (CIVIL)
CIVIL	HAMIZAH BINTI ABDUL RAHIM	2ND YEAR (UTM) (CIVIL)
CIVIL	INTAN SURAYA BINTI AHMAD	2ND YEAR (UTM) (CIVIL)
CIVIL	IZA HASNI BINTI ISMAIL	FINAL YEAR (UM) (CIVIL)
CIVIL	JACKLYN BINTI JUSTIN	FINAL YEAR (UiTM) (CIVIL)
CIVIL	KUEK YI HAO	3RD YEAR (UM) (CIVIL)
CIVIL	LAU WEI THENG	FINAL YEAR (UTM) (CIVIL)
CIVIL	MAHIRA BINTI OTHMAN	2ND YEAR (UTM) (CIVIL)
CIVIL	MEOR IBRAHIM BIN MEOR HASAN	FINAL YEAR (UiTM) (CIVIL)
CIVIL	MOHAMAD ADAM BIN KASSIM	2ND YEAR (UTM) (CIVIL)
CIVIL	MOHAMAD AZHAR BIN ABU BAKAR	FINAL YEAR (UTM) (CIVIL)
CIVIL	MOHD FAIRUS BIN ABD RAZAK	FINAL YEAR (UiTM) (CIVIL)
CIVIL	MOHD FARIZ BIN MASORUDIN	FINAL YEAR (UiTM) (CIVIL)
CIVIL	MUHAMMAD SAIFUDDIN BIN MHMAD NASIR	FINAL YEAR (UTM) (CIVIL)
CIVIL	MUHAMMAD YAZID OMAR	FINAL YEAR (UM) (CIVIL)
CIVIL	NAJMUHUDA BINTI IBRAHIM	FINAL YEAR (UM)
CIVIL	NOR APAZIAH BINTI OZMAN	2ND YEAR (UTM) (CIVIL)
CIVIL	NOR HAZLINDA BINTI MD. RODUAN	2ND YEAR (UTM) (CIVIL)
CIVIL	NURUL HAYATI BINTI AINUN NAIM	FINAL YEAR (UM) (CIVIL)
CIVIL	NURUL HUDA MOHD RUSLI	2ND YEAR (UTM) (CIVIL)
CIVIL	OOI PEI SHING	FINAL YEAR (UTM) (CIVIL)
CIVIL	PETER GOU	FINAL YEAR (UM) (CIVIL)
CIVIL	SAZALI BIN TAUPIT	FINAL YEAR (UM) (CIVIL)

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ADMISSION TO THE GRADE OF STUDENT		
Discipline	Name	Qualifications
CIVIL	SHERLYE DONOL	FINAL YEAR (UM) (CIVIL)
CIVIL	SITI NOR AISHAH BINTI MANSOR	2ND YEAR (UTM) (CIVIL)
CIVIL	SITI SOFIA BINTI ANWAR VIJAYA	3RD YEAR (UM) (CIVIL)
CIVIL	TAN ENG HOOI	FINAL YEAR (UTM) (CIVIL)
CIVIL	WALTER BIN TAIMIN	FINAL YEAR (UiTM) (CIVIL)
CIVIL	WONG AIK PEOW	FINAL YEAR (UTM) (CIVIL)
CIVIL	YONG SUOK YEN	FINAL YEAR (UTM) (CIVIL)
CIVIL	ZETTY NOOR AKMAR BINTI ABD MAJID	3RD YEAR (UM) (CIVIL)
COMPUTER	ADI SUMANSYAH BIN ABU SHAH	2ND YEAR (ATMA) (COMP)
ENVIRONMENTAL	HERAWATI BINTI IBRAHIM	3RD YEAR (UM) (ENVTL)
ENVIRONMENTAL	JALINA KASSIM	FINAL YEAR (UTM) (ENVTL)
ENVIRONMENTAL	NOR AIMA BINTI SAID @ AHMAD	3RD YEAR (UM) (ENVTL)
MATERIALS	TAY SEE LENG	FINAL YEAR (UM) (MATERIAL)
MATERIALS	IRUWANIZUDIN BIN SHARIFF	2ND YR (USM) (MATERIALS)
MECHANICAL	ABDUL KHALIQ BIN ABDUL HAMID	FINAL YEAR (UM) (MECH)
MECHANICAL	ALDRIN MUNAI	FINAL YEAR (UM) (MECH)
MECHANICAL	AMINUL AHZAR AKHYAR BIN AHMAD	2ND YEAR (ATMA) (MECH)
MECHANICAL	ANIS SYAHIDA BTE MOHD KAMIL	2ND YEAR (ATMA) (MECH)
MECHANICAL	FAHMEER BIN NGALIMAN	2ND YEAR (ATMA) (MECH)
MECHANICAL	HAYANA DARLIZ BT ABD. HAMED	2ND YEAR (ATMA) (MECH)
MECHANICAL	MOHAMMAD RAFIQ BIN UNTONG	FINAL YEAR (UNIMAS) (MECH - MFTG)
MECHANICAL	MOHD HAFIZ RIDZUAN BIN AZIZ	2ND YEAR (ATMA) (MECH)
MECHANICAL	MOHD HAFIZI BIN ISNAINI	2ND YEAR (ATMA) (MECH)
MECHANICAL	MOHD MU'AZZAM BIN RAMLI	2ND YEAR (ATMA) (MECH)

ADMISSION TO THE GRADE OF STUDENT		
Discipline	Name	Qualifications
MECHANICAL	MOHD SHAHRUL BIN KAMARUL ZAMAN	2ND YEAR (ATMA) (MECH)
MECHANICAL	MUHAMAD ZHAFARI BIN NIK ZAID	2ND YEAR (ATMA) (MECH)
MECHANICAL	MUHAMMAD IKHWAN BIN HUSSIN	2ND YEAR (ATMA) (MECH)
MECHANICAL	NG YI MING	4TH YEAR (KUiTTHO) (MECH)
MECHANICAL	NIK MOHD AIZUL BIN NIK BAIDILLEH	2ND YEAR (ATMA) (MECH)
MECHANICAL	NUR ILYAS BIN IDRIS	2ND YEAR (ATMA) (MECH)
MECHANICAL	NURUL SUHAINI BINTI MOHD RADZI	2ND YEAR (ATMA) (MECH)
MECHANICAL	REMUS LARA TALENTA	FINAL YEAR (UM) (MECH)
MECHANICAL	SHAHRILL IBNI AL-HAFIES B. MOHAMAD RADZI	2ND YEAR (ATMA) (MECH)
MECHANICAL	SHATYA SHARMEN KUPPUSAMY	2ND YEAR (ATMA) (MECH)
MECHANICAL	SYED ABD RAHMAN BIN SYED SUHAIMI	2ND YEAR (ATMA) (MECH)
MECHANICAL	ZUZAILIE BINTI ROSLI	2ND YEAR (UM) (MECH)
MANUFACTURING	AHMAD SYARIEF BIN FADHLI	3RD YEAR (UIAM) (MFTG)

ERRATA

In last month's issue of JURUTERA, on Page 3 of the Blue Page, under the table "TRANSFER TO THE GRADE OF MEMBER", we incorrectly aligned the names of two members. The corrections are below:

AHMAD TAMARUZZAMAN BIN AHMAD should read "*AHMAD TAMARUZZAMAN BIN AHMAD TAJUDDIN*"

and

MOHAMMAD ADLIN BIN MAD NORDIN TAJUDDIN should read "*MOHAMMAD ADLIN BIN MAD NORDIN*"

We apologise to both members for the mix-up. Thank you.

ANNOUNCEMENT



IEM DIARY OF EVENTS

For further enquiries on the events below, please contact IEM Secretariat at 03-7968 4001/2 or visit IEM Homepage at <http://www.iem.org.my>

15 JUNE 2006

Time: 6.30 a.m.

IEM Golf Tournament 2006

Kota Permai and Country Club

Water Resources Technical Division

10 JUNE 2006

Time: 12.00 noon - 2.00 p.m.

19th Annual General Meeting (AGM)

Time: 8.15 a.m. - 4.00 p.m.

8th Annual IEM Water Resources Colloquium

Geotechnical Engineering Technical Division

17 JUNE 2006

Time: 9.30 a.m.

Landslides: Case Histories, Lessons Learned and Mitigation Measures

Time: 11.45 a.m. - 1.00 p.m.

17th Annual General Meeting (AGM)

Mechanical Engineering Technical Division

12 JUNE 2006

Time: 8.30 p.m. - 5.30 p.m.

One Day Course on "M&E Services Contracts"

Production and Manufacturing Engineering Technical Division

17 JUNE 2006

Time: 9.00 a.m. - 12.00 noon

Visit to Royal Selangor Pewter, Setapak Jaya

Information Technology Special Interest Group

20 JUNE 2006

Time: 5.30 p.m. - 7.30 p.m.

Talk on CMMI: Overview of a Software Process Improvement Framework

Electrical Engineering Technical Division

29 JUNE 2006

Time: 9.00 a.m. - 2.00 p.m.

A Half-Day Course on "Protective Relay"

Agricultural and Food Engineering Technical Division

29 JUNE 2006

Time: 5.30 p.m. - 7.30 p.m.

Talk on 'Soil Erosion: Cause and Effect, Management and Early Warning System in Malaysia'

Graduate and Student Section

5 AUGUST 2006

Time: 2.00 p.m.

36th Annual General Meeting (AGM)

CONFERENCES FOR 2006

27 - 30 AUGUST 2006

11th APCChE Congress

Kuala Lumpur Convention Centre (KLCC)

(Second Announcement)

28 AUGUST 2006

IEM/IES/PII Tripartite Meeting

Kuala Lumpur Convention Centre (KLCC)

28 - 30 AUGUST 2006

Chemical Technology Exhibition (ChemTex)
Kuala Lumpur Convention Centre (KLCC)

4 - 5 SEPTEMBER 2006

Seminar on Engineering and Technology 2006 (SET 2005), Putrajaya

(Call for papers - before 3 July 2006)

5 - 7 SEPTEMBER 2006

Brownfield Asia 2006 - International Conference on Remediation and Management of Contaminated Land: Focus on Asia
Berjaya Times Square Hotel and Convention Centre

31 OCTOBER 2006

GSM-IEM Oktoberforum 2006: "Engineering Geology and Geotechnical Engineering"
Department of Geology, University of Malaya

Abstract Deadline: 15 June 2006

Full Paper Deadline: 15 August 2006

29 NOVEMBER - 3 DECEMBER 2006

24th Conference of ASEAN Federation of Engineering Organisation (CAFEO' 06)

Petaling Jaya

Website: <http://www.aseanengineers.com/>
CAFEO24

(Call for Papers - before 20 April 2006)

CONFERENCES FOR 2007

8 - 11 MAY 2007

16th Southeast Asian Geotechnical Conference (SEAGC 2007)

Venue: Sheraton Subang Hotel & Towers, Subang Jaya

E-Mail: 16seagc@iem.org.my

Website: <http://www.16seagc.com>

(Second Bulletin Call for Papers and Invitation to Register)

1 - 5 AUGUST 2007

3rd World Engineering Congress (WEC)

Venue: Penang

ANNUAL DINNER AND AGM OF BRANCHES YEAR 2006

AGM	Southern Branch	24 June 06
Annual dinner	Southern Branch	1 Jul 06
AGM and Annual Dinner	Perak Branch	July 06
AGM	Miri Branch	31 Oct 06
AGM	Sabah Branch	4 Nov 06
AGM and Annual Dinner	Penang Branch	22 Nov 06
Annual Dinner	Sabah Branch	9 Dec 06
AGM and Annual Dinner	Kedah/Perlis Branch	Dec 06
AGM and Annual Dinner	Sarawak Branch	Dec 06
AGM and Annual Dinner	Terengganu Branch	Dec 06
AGM and Annual Dinner	Melaka Branch	Dec 06
AGM and Annual Dinner	Eastern Branch	TBA

CONFERENCE & SEMINAR



MALAYSIA

20 - 21 June 2006

2-DAY WORKSHOP ON QUALITY CONTROL/QUALITY ASSURANCE IN PAVEMENT CONSTRUCTION

Venue: UTM, Shah Alam

Organiser: MTRANS, UTM

Tel: 03-5544 2343

Fax: 03-5544 2344

E-mail: mitrans@salam.uitm.edu.my

(Invitation to Register)

27 - 28 June 2006

WORLD SECURITY FORUM - CHANGING MINDSETS

Venue: Kuala Lumpur Convention Centre, KL

Organiser: ICSM

(Invitation to Register)

29 June 2006

SPECIALISED REPAIR USING NEW TECHNOLOGIES IN INJECTION METHOD AND MATERIALS

Venue: Armada Hotel, Petaling Jaya

Organiser: MC Bauchemie (M) Sdn Bhd

Tel: 03-7877 1232

Fax: 03-7877 0911

E-mail: sylvia@mc-bauchemie.com.my

(Invitation to Register)

16 - 17 November 2006

MUSIC 2006: MMU INTERNATIONAL SYMPOSIUM ON INFORMATION AND COMMUNICATIONS TECHNOLOGIES 2006 - "FRONTIERS OF ICT RESEARCH"

Venue: PJ Hilton, Petaling Jaya

Organiser: MMU

Tel: +603 8312 5436

Fax: +603 8318 3029

E-mail: swlee@mmu.edu.my

Website: www.mmu.edu.my/m2usic

(Call for Papers - before 2 July 2006)

3 - 6 December 2006

INTERNATIONAL SYMPOSIUM AND EXHIBITION ON SUSTAINABLE ENERGY AND ENVIRONMENT (ISESEE 2006)

Venue: Maya Hotel, KL

Organiser: UiTM

Tel: +603 5544 2094/2095/3867

E-mail: isesee@salam.uitm.edu.my

Website: www.uitm.edu.my

(Call for Papers - before 31 July 2006)

UK

11 July 2006

SLOPE ENGINEERING: "PRACTICAL SOLUTIONS FOR EFFECTIVE SLOPE STABILISATION, REINFORCEMENT AND REMEDIATION"

Venue: Olympia Conference Centre, London

Tel: +0845 056 8069

Fax: +020 7505 6001

E-mail: constructionconferences@emap.com

Website: www.slopeengineering.co.uk

(Invitation to Register)

HUNGARY

24 - 27 September 2006

2006 INTERNATIONAL CONSULTING ENGINEERING CONFERENCE: "WHERE THE ROADS MEET"

Venue: Budapest, Hungary

Organiser: FIDIC, EFCA, AHCEA

Tel: +36 1 488 20 37

Fax: +36 1 375 79 82

E-mail: fidic2006@tmsz.org

Website: www.tmsz.org

(Invitation to Register - before 15 July 2006)



Professional Interview Candidate

By: Engr. Chong Kok Jin

Question 1:

In the development of, say an offshore gas platform, certain key business and technical criteria must have been thoroughly evaluated. State what are these and describe processes, the key activities and challenges to the development of the field.

Development of an offshore gas field requires numerous key studies and decisions to delivery a project that is fit for purpose, generates values to the customers and meet stakeholders' requirements.

The gas (hydrocarbon) and condensate (that is produced with the gas) and the reservoir that contained them are what is termed the subsurface assets. A team of subsurface engineers and scientists that typically comprises of the reservoir engineer, petro-physicists, geologists and seismic interpreters will study the fields seismic data, the exploration well and appraisals wells' reports, the wells' logs and core samples, production test reports and PVT analysis results of the well's fluid. Together, they describe the field's subsurface assets and report the gas and condensate expectation reserves and the uncertainties in the subsurface assets that translate into a range: upper (high) and lower (proven) reserves for the field, plus the gas production rate that the field can be expected to deliver.

A gas field has to be developed to specifically feed the demand of defined and contractually binding customer(s). This is unlike an oil field development where it can be developed anywhere in the world and the oil produced sold in the open market. Gas customers vary from a small town taking low volume of gas for cooking and heating to an electrical power generating station or a large liquefied natural gas plant (LNG). A gas sales contract with the customer(s) will be required to develop a gas field. The terms and conditions of the contract will need to spell out the duration of sale, gas price, gas sales specification, contaminant (typically CO₂ and H₂S) levels acceptable range, gas sales rate including daily expected fluctuation in gas consumption rate. The latter is

important for sizing the production capacity for the field development.

The two main categories of facilities for which most of the capital expenditure is spent are (i) the production wells that will be drilled and completed and (ii) the surface facilities namely, the platform that comprise the jacket, the topside and the pipelines.

The well engineers will decide on the number of wells to be drilled, where to place these wells in the reservoir and the type of wells to be completed for production of the gas. Wells can be of the conventional type, big bore, expanded tubular, horizontal wells, lateral wells with different completions available e.g. open hole, cased, expanded sand screen or gravel pack completion. A wrong decision could lead to under performance of wells or shortened the life of wells. For a right decision to be made, the well engineer requires to know the reservoir properties like reservoir shape, size, thickness, porosity, permeability, pressure and temperature, rock properties, fluid properties, the properties of the aquifer below the gas zones, and required production capacity.

The surface engineers will decide on the processing required to bring the well fluid to the right specification and condition for export and sale to customer. The processing plant has to be designed and sized to meet the capacity required for sale of gas to the customers. Sometimes, the gas field to be developed lies nearby to an existing processing platform, in which case the gas field can be developed more cheaply as a satellite to the existing mother platform where the gas is processed and exported. If it takes only one or two wells to develop the field, the field development could be totally subsea, with wellheads on the sea bed to produce via a pipeline to a

mother platform supported by an umbilical from the mother platform that supplies power and chemicals for injection into the pipeline and carries the control and monitoring signals between the subsea facilities and mother platform.

Where wells are to be drilled on the platform, it is essential to know the type of rig that will be utilised: tender assisted, submersible rig or jack-up. Each poses different size and load demand on the platform and hence the platform's cost.

Flow assurance has to be established for export of the gas through the pipeline to the mother platform or sales customers. Gas and condensate production is accompanied by condensed water or formation aquifer water production that together with carbon dioxide that is present in different quantity in gas will cause corrosion. Corrosion is controlled by (i) removing the water before the gas is exported or (ii) by injection of corrosion inhibitor or (iii) use of stainless steel internal cladding of the pipeline or solid stainless steel pipeline. Hydrate can form in a pipeline at certain conditions causing blockage. Again a decision has to be made whether to dehydrate the gas or inject hydrate inhibitor.

The meteorological, ocean environmental and geographical and soil data at the location of the field to be developed will be gathered as these have major impact on the development cost e.g. a platform sitting on 50 m water will only be a fraction of the cost of an equivalent sitting on 500 m water depth.

It is also essential to identify the hazards (the potential to cause harm) associated with the gas field development. Hazards could be to do with safety, environment occupational health. These hazards are then assessed and risk mitigation measures put in place for the

ESSAY

life of the project from inception through execution, production and decommissioning. At times, there could be potential "show-stoppers" identified that need major attention. An example would be that the field to be developed is right in the middle of an area where endangered whales winter or breed or that the sea is covered extensively by coral reefs.

The laws and regulations of the country where the development is to take place has to be established so that the development is within the legal framework. An example is the requirement for environmental base line study and environmental impact assessment to be performed and report approved before the project can be executed. Some countries have carbon taxes for CO₂ emissions that need to be included in the overall project economics.

The options in the field development in terms of number and type of wells, type of surface facilities and production rate are listed and studied, typically with the aid of integrated hydrocarbon field computer simulation program and economics

performed to select an optimum development concept. The outcome will be a selected field development concept that is typically reported in a field development plan that describes the subsurface asset, the selected wells and surface development concept, how risks is reduced to as low as reasonably practicable (ALARP) in the selected concept, the key uncertainties and how they are managed, the capital expenditure required, the operating expenditures throughout the project life, the expectation production profile until decommissioning of the facilities.

The development of a gas field requires considerable input from specialist consultants and service providers ranging from drilling rigs, well services, design consultants, fabrication yard, installation barges and workboats. It is essential to know what is available locally so that the development concept selected will use the local expertise as far possible and avoid higher costs for engaging and mobilising services from far away places.

Typically the risks and opportunities of the project are identified, evaluated and

measures put in place to manage them, for a gas field development can have numerous risk. A key risk is typically hydrocarbon reserve uncertainties. Where the uncertainty is wide, it may be decided to perform more simulation work, gather more data or drill additional appraisal well to narrow the range of uncertainty to reduce risk. Opportunities are typically to increase recovery of gas, increase production, use of new technology or processes that could add considerable value to the project. But there are other risks or opportunities that are technical, economical, commercial, organisational or political in nature. All these will typically be managed and pursued.

Finally the work of the engineers in coming up with the development concept are subjected to reviews and audits at key milestones by technical experts to verify that the project development proposed is technically sound, commercially robust, meeting the legal and HSE standards and that the risks and opportunities associated with the project are adequately identified and managed. ■

Question 2:

In the technological age, the power of the engineers in shaping the society and the environment is all pervading and can profoundly affect the lives of many members of the society. Enumerate, from your personal experience, how largely positive impacts have accrued from the contribution of engineers.

We live in the technological age – defined by instant satellite communication, the internet, cars, airplanes, DVD players, air conditioners, atomic bombs, submarines and intercontinental ballistic missiles.

I am a petroleum engineer working for an oil and gas exploration and production company where I do see and experience largely positive and sometimes negative impacts that engineers contributed to my work and daily life.

Engineers in their profession, take into account the profound impact that their work and products have on the safety and health of the public and also on those that are involved in production and manufacturing of the product. Engineers identify these safety and health risks, assess them and take steps to minimise or eliminate and control these risks in the work place and public arena. Engineers are involved in the search for safer work places and products. For example the electric

shavers powered by batteries are definitely safer than the razor blades that we had in the past. These search for improved safety benefited in reducing accidents and harm to the public.

Engineers are keenly aware that their work and recommendations can have a very major impact on the environment that we live in. The very car that we drive emits carbon dioxide that is considered to be causing a gradual warming of the atmosphere that eventual could lead to massive environmental disasters later. Engineers are at the very core of the research and development into ways and means to reduce emissions by example of hybrid cars, cars running on hydrogen or biofuel alternative.

The key companies in a country that contributed and paid the taxes to the country's treasury are staffed with varying proportion of engineers. Companies like oil and gas companies, refineries, factories that produce anything from toys to TVs to

aircrafts require engineers to run and operate for the profits to be generated before tax. The government spends the taxes for the general good of the people. The same goes to companies that provide services, from buses to satellite TV provider to amusement theme parks where engineers installed and are involved in the maintenance and safe operations of the vehicles or machines.

Engineers contributed very significantly to a country's development from an agricultural economy to one that includes manufacturing, communication services and exploitation of the country's natural resources like tin, iron, hydropower, oil and gas. They built the infrastructure and the tools necessary for progress. Without road, highways, bridges, clean water supply, electrical power supply, telephone and cell phone communication, we would be living lives in kampong, where it will be dark at night and water is from the well. In India, engineering talent has become a

product by itself. India is a very poor country with a significant section of the population living below the poverty line, but lately, numerous multinational corporations have opened up research and development bases in the southern part of the country to tap into the country's large and talented pool of scientists and engineers, and shifting their main product development activities to these new Indian bases. It can be expected that the engineers and scientists in India will propel the country to new heights of progress in the coming decades, achieving more than what their computer software service providers have, viewing that engineering disciplines are far broader in scope and depth than writing computer software.

The life expectancy of the population at large is getting longer and part of the reason is to do with the health service providers like hospital being equipped

with tools and machines e.g. x-rays, scanners, small insertion devices developed and built by engineers. Medicine has been made more cheaply and widely available by new manufacturing techniques and processes that chemical engineers are involved to develop.

The home is typically equipped with air-conditioning, washing machine, refrigerator and freezers that engineers contributed in the development and manufacturing so that we can live a more comfortable life with more time away from washing cloths and dishes in favour of more productive and creative activities.

Satellite TV and cell phones together with computer and internet have enabled us to communicate instantly and anywhere on earth, so that we are now more informed than ever with the information that can be searched for and accessed more readily. These were developed and built

with the input from electrical and electronic engineers.

Engineer's professional behaviour require that they act faithfully to their employer or clients, be competent in their field of work, gain required technical know how and work experience, put the safety of the public in profound regards, protect the environment, contribute to sustainable development, make objective and truthful report to the public if needed, avoid conflict of interest in the job and to act honourably and respectfully in their professional conduct. These behaviours generally spill over to the professional's conduct in public and at home thereby contributing not only to a better work place and to the society from the services and products they have generated, but also to the home and to their social and religious circles around them. ■

ANNOUNCEMENT

CALL FOR NOMINATIONS

IEM LADY ENGINEER AWARD 2007

The Lady Engineer's Sub-Committee under the auspices of the Welfare Committee is proud to invite nominations for the Lady Engineer Award 2007.

The primary objective of the Award is to recognise the contributions by lady engineers. This Award may also incidentally encourage interest in engineering among ladies and encourage them to strive towards greater excellence. The Award will be presented to the lady engineer who has shown outstanding ability and leadership qualities, or has been a pioneer in any one or more of the following areas:

- In the design and/or construction of an engineering device or system, structural system, planned development, environmental improvements or,
- In the research and development of engineering device, systems, processes and/ or materials, publication of paper or,
- In the teaching of engineering or,

- In the management of engineering projects,
- Entrepreneurship in the commercial sector.

In making the selection, the following criteria will be given special consideration:

- Contribution to the well-being of people and communities
- Resourcefulness in planning and in the solution of design problems
- Pioneering in use of materials and methods
- Innovations in planning, design and construction
- Unusual aspects and aesthetic values

The Award is opened to candidates who are:

- Registered members of the Board of Engineers, Malaysia,
- Malaysian citizens or permanent residents of Malaysia,
- Graduate or corporate members of The Institution of Engineers, Malaysia.

The closing date for nominations is October 2006. Please submit nomination to:

**Chairperson
Sub-Committee on Ladies Engineers,
The Institution of Engineers,
Malaysia, Bangunan Ingenieur,
Lots 60/62, Jalan 52/4,
P.O. Box 223, Jalan Sultan
46720 Petaling Jaya, Selangor D. E.**

The Proposer may or not be a member of IEM or BEM, or an engineer. However, each nomination shall be supported by a brief recommendation from two Referees who are Graduate or Corporate member of IEM. If the Proposer is herself either a Corporate or Graduate member of IEM (or higher), then she may also act as one of the two required Referees.

Nomination forms can be downloaded from the IEM website. For further details, kindly contact En. Mizi at 03-7968 4001/2. ■

ANNOUNCEMENT

CALL FOR NOMINATIONS

IEM Outstanding Engineering Achievement Award 2007

The IEM Outstanding Engineering Achievement Award is created to confer recognition to outstanding engineering achievements within Malaysia. The award will be given to an organisation or body responsible for an outstanding engineering project in the country.

The basis for the award shall be an engineering achievement that demonstrates outstanding engineering skills which has made a significant contribution to the engineering progress and the quality of life in Malaysia. In making the selection, the following criteria will be given special consideration.

Contribution to the well-being of people and communities; resourcefulness in planning and in the solution of design problems; pioneering in use of materials and methods; innovations in planning, design and construction; unusual aspects and aesthetic values.

Engineering achievements which include, inter-alia, the following can be submitted for consideration:

- Bridges, Tunnels, Waterways Structures, Roads.
- Telecommunications of national/international character, Power Transmission and Transportation.
- Dams and Power Stations.
- Ports and Harbours.
- Building and Structures.
- Airports.
- Water Supply, Waste Disposal Projects.
- Military projects, such as bases, launching units, harbour facilities.
- Drainage, Irrigation and Flood Control Projects.
- Local design and manufacture of high technology products.
- Energy, Heat, Mass Transfer.
- Outstanding work in engineering research and development.
- Chemical processing of indigenous raw resources such as rubber, palm oil and various other local plants.
- Innovative use of local engineering materials.
- Outstanding contribution in engineering education.

- Original discovery of useful engineering theory.

Nominations are invited from all members of the Institution. Each nomination submitted should contain a brief summary/write-up of the project in approximately 1,000 to 2,000 words together with full relevant reports on the project and three copies of supporting documentation including photographs. A project or component part thereof which has received an earlier award, either from IEM or other institutions does not qualify for nomination.

The closing date for receipt of nominations for the 2007 Award is October 2006. Please submit nomination to:

Hon. Secretary, The Institution
of Engineers, Malaysia,
Bangunan Ingenieur, Lots 60/62,
Jalan 52/4, P.O. BOX 223,
(Jalan Sultan), 46720 Petaling Jaya.

IEM Award for Contribution to Engineering in Malaysia 2007

To encourage interest in engineering and to recognise services or contributions to engineering in Malaysia, the IEM Award for Contribution to Engineering in Malaysia is to be presented to the person(s), who has

- contributed to the advancement of engineering in Malaysia, or
- designed and/or constructed an original engineering device or system of merit and immediate applicability to industry

The award is open to all Malaysian citizens and permanent residents.

NOMINATIONS

- Nominations will be invited annually. **The closing date for receipt of nominations for award for year 2007 is October 2006.**
- Nominations shall be made through a member of the Institution. Each member is restricted to one nomination per year.
- Each nomination shall be accompanied by a brief write-up of the services rendered or contributions made or system designed and/or constructed together with relevant photographs for publicity purposes.

AWARD

- Award is to be made by the Council upon recommendation by the IEM Awards Committee
- The Award shall comprise an appropriate metal plaque, a scroll and a sum of RM1,000 and shall be presented with due ceremony.

Hon. Secretary, The Institution
of Engineers, Malaysia,
Bangunan Ingenieur, Lots 60/62,
Jalan 52/4, P.O. BOX 223,
(Jalan Sultan), 46720 Petaling Jaya.

NOTICE

Note: This notice was extracted with permission from BEM.

Rev. No. : 0

Date : 5 April 2005

BEM/RD/PPC/09

Serial No. 0018



BOARD OF ENGINEERS MALAYSIA

CIRCULAR NO. 4/2005

**ENGINEER'S RESPONSIBILITY
FOR SUBSURFACE INVESTIGATION**
(Generally known as soil investigation)

To All Professional Engineers,

It has come to the attention of the Board of Engineers Malaysia that inadequate and/or unreliable geotechnical information and laboratory test results are sometimes used in the design of geotechnical/foundation works. The main reason for this reprehensible practice is that there are still misconceptions among some engineers on their responsibility in planning and supervising subsurface investigation and field and laboratory testing.

2. Using inadequate and unreliable information from subsurface investigation have caused problems during construction and sometimes even after the completion of structures. The problem can arise from unexpected ground conditions causing foundation or slope/foundation failures. Such failures often require extensive changes and/or remedial works entailing increase construction costs, delays and sometimes even threatening the safety of the public.

3. Inadequate subsurface investigation information is often the result of consulting engineers failing to properly plan and specify the types of field and laboratory tests needed to acquire the necessary information for design. They sometimes leave it to Subsurface Investigation (S.I.) Contractors to plan/specify/dictate the works for them, or permit their clients to specify the scope of such S.I. Needless to say, geotechnical information thus obtained could well leave much to be desired; the engineer must specify the scope of the subsurface investigation for the works he is to design.

4. The Board of Engineers Malaysia takes a serious view of this matter and hereby reminds all Professional Engineers of the following:

- (1) that subsurface investigation should be properly planned after a desk study and site reconnaissance, including reviewing of all available information of the site and adjacent areas. The methods of subsurface investigation and sampling for laboratory tests must also be adequately specified for the type of development to be undertaken and the ground condition.
- (2) Subsurface investigation should be properly carried out by qualified and experienced personnel according to approved methods.
- (3) All subsurface investigation should be supervised directly by the professional who is responsible for the design or by qualified and experienced staff under his/her control. This is consistent with the professional services as described in the Board of Engineers Malaysia Scale of Fees (1998).
- (4) Part IV, Code of Professional Conduct of the Registration of Engineers Regulation 1990 (Amendment 2003) requires Professional Engineers to discharge their professional duty with due care and diligence. Failure to do so contravenes the Act and calls for disciplinary action under Section 15 the Registration of Engineers Act 1967 (Amendment 2002).

[BEM-246th Meeting / 5 April 2005]

TAN SRI DATO' Ir. Hj. ZAINI BIN OMAR

President

Board of Engineers Malaysia

NOTICE

Note: The following is published with BEM's approval.

Rev.: 0
Date: 9.8.2005

BEM/RED/PPC/12

BRIEF INTRODUCTION TO CODE OF ETHICS FOR YOUNG ENGINEERS

Serial No: 0021

INTRODUCTION

The Board of Engineers Malaysia (BEM) has, from time to time, received enquiries and complaints from the public about the conduct of engineers in relation to the Registration of Engineers Act. BEM has, therefore, produced the guidelines herein that outline the conduct expected of engineers. These guidelines are set out under a number of broad areas relating to the engineering profession.

Do's & Don'ts

1) Registration

Under the Registration of Engineers Act 1967 (Act 138) and subsequent amendments, the most recent being year 2002, it is a requirement of the Law that any person providing engineering services be a qualified person and registered with the Board of Engineers Malaysia. This requirement extends to foreigners who are required to seek registration as Temporary Engineers. The Do's and Don'ts below relate to the requirement of this Act.

DO's

- 1.1 An engineering graduate with accredited engineering degree must register with the Board of Engineers to take up employment as an engineer

DON'Ts

- 1.1 An engineer should not be the Submitting Person for designs beyond his/her area of competency
- 1.2 An engineer should not endorse his PE Stamp and sign on reports or plans not prepared by him.(see also Consultancy - 2.3 of Don't)
- 1.3 An engineer should not enter into partnership with any party not permitted under the Engineers Act.
- 1.4 An Engineering Consultancy Practice should not provide professional services in any branch of engineering where none of its directors are registered to practise in that branch of engineering.
- 1.5 An engineer must not practise in the branch of engineering he is not registered in.

2) Consultancy

In the Registration of Engineers Act 1967 (Revised 2002), provision is included for the registration of Accredited Checkers and the requirement of Continuing Professional Development (CPD) beginning year 2005.

DOs

- 2.1 An engineer should be transparent and receptive to peer review or checking of his work if requested/required by the client/authorities.
- 2.2 A checker engineer must be open to the views and design concept of the original designer and in areas of disagreement, the checker must give justification for his disagreement.
- 2.3 A checker engineer should take full responsibility for the checking of the work himself.
- 2.4 An engineer should undertake continuing professional development to enhance his knowledge and capability.
- 2.5 An employer engineer should ensure that his employee engineers are bona fide engineers registered with BEM.
- 2.6 An engineer should report unethical practice to BEM.
- 2.7 An engineer who is a Submitting Person must ensure the accuracy of and be responsible for all works delegated to others by him.
- 2.8 An engineer should make optimum use of manpower, materials and money.
- 2.9 An engineer should be aware of Government requirement to use local materials, wherever possible.

DON'Ts

- 2.1 A checker engineer should not accept checking of work not within his area of competency as well as work that he is not familiar with.
- 2.2 An engineering consultant should not carry out projects for fees below the minimum outlined in the scale of fees.
- 2.3 An engineer should not endorse any work not performed and/or supervised by him.
- 2.4 An engineer should not supplant another engineer.
- 2.5 An engineer should not compromise on public safety.
- 2.6 An engineer should not offer his opinion on engineering matters unless he has full facts to support the opinion.
- 2.7 An engineer should not base his design on unsubstantiated data, for example designing foundation without soil investigation.
- 2.8 An engineer should not have any conflict of interest whatsoever in connection with the work he is undertaking unless prior approval from BEM and client are obtained.
- 2.9 An engineer should not accept work outside his regular work without the expressed permission of his employer.

NOTICE**3) Supervision**

The supervision of works designed by the Submitting Engineer is a requirement under the Uniform Building By-Law 5 (UBBL 5). This By-Law states that supervision must be provided by the Submitting Engineer to ensure that the works carried out are as intended in the design. Delegation of supervision is permitted but the responsibility of this supervision still rests with the Submitting Engineer.

DOs

- 3.1 An engineer who is the Submitting Person should be responsible for the project regardless of whether it is self-supervised and/or delegated supervision.
- 3.2 An engineer must be meticulously proper and correct in certification of works.
- 3.3 An engineer must be familiar with and knowledgeable in the work he is to supervise.
- 3.4 An employer engineer shall ensure that his staff undergoes regular and proper skills-training.
- 3.5 An engineer supervising a project shall keep proper records of all documents and correspondence pertaining to the project.
- 3.6 An engineer must be conversant with time and cost implications in the issuance of any instruction.

DON'Ts

- 3.1 An engineer must not over or under certify progress of works.
- 3.2 An engineer must not make wrongful certifications.
- 3.3 An engineer must not certify work not within his expertise.
- 3.4 An engineer must not accept site supervisory staff who are not qualified or are incompetent.
- 3.5 An engineer must not delay approvals without justification.
- 3.6 An engineer must not intentionally delay inspection of works.

4) Regulatory Requirements

All engineers registered with the Board of Engineers Malaysia must be familiar with the requirements of the Registration of Engineers Act 1967 (Act 138) and its subsequent amendments. Ignorance of the requirements of this Act is no defense in the Courts of Law in Malaysia.

DOs

- 4.1 An engineer should notify the relevant authorities (within reasonable/statutory time limit) on changes in designs or withdrawal of services.
- 4.2 An engineer should submit completed forms in time for inspection and approval for Certificate of Fitness / Certificate of Completion and Compliance.
- 4.3 An engineer should be aware of environmental, health and safety matters during and after construction.
- 4.4 An engineer should ensure that environmental, health and safety measures are implemented as per drawings and specifications.

DON'Ts

- 4.1 An engineer should not allow works to proceed before plans are submitted to and/or approved by the relevant authorities.
- 4.2 An engineer should not undertake a project for which the client is not going to fulfill statutory requirements.

5) All engineers are expected to uphold the integrity of the profession by behaving in a manner expected of him in the Code of Conduct of Engineers.**DOs**

- 5.1 An engineer must be conversant with the Code of Conduct of Engineers.
- 5.2 An engineer must understand the need for responsibility and liability as stipulated in the Code of Conduct.
- 5.3 An engineer must respond promptly to complaints and enquiries by clients /authorities.

DON'Ts

- 5.1 An engineer should not solicit/ tout.
- 5.2 An engineer should not knowingly mislead the public by giving misrepresented information so as to gain commercial advantage/mileage.
- 5.3 An engineer should not respond to an open advertisement to bid for provision of professional service if such provision for the service requires bidding fees or equivalent as is usually imposed on contractors.
- 5.4 An engineer should avoid favoritism among vendors and other suppliers.

These guidelines are by no means exhaustive and will be updated from time to time to reflect the changing needs of the profession. All engineers are required to be fully familiar with the Registration of Engineers Act 1967 (Act 138), and its subsequent amendments, and the Code of Ethics. The requirements of this Act are to be upheld at all times by the engineering profession. ■

ANNOUNCEMENT

BEM APPROVED CPD HOURS

The CPD Hours for the following courses organised by the various Training Providers indicated had been approved by IEM on behalf of Board of Engineers Malaysia.

For 2005

Title of the courses/seminar	Organisers/Providers	Reference Number	CPD Hours Approved
Short Course - How to be a successful Manager	MRS Management Sdn Bhd, Sarawak	IEM05/ATP/001/C	10
Emotional Intelligence (EQ) and Leadership	MRS Management Sdn Bhd, Sarawak	IEM05/ATP/002/C	10
Coaching, Counselling and Monitoring Work Performance	MRS Management Sdn Bhd, Sarawak	IEM05/ATP/003/C	10
How to analyse and interpret Financial Statements	MRS Management Sdn Bhd, Sarawak	IEM05/ATP/004/C	10
Legal Aspects of Construction Claims	MRS Management Sdn Bhd, Sarawak	IEM05/ATP/005/C	6
Smart Partnership – Negotiating and Managing JVs	MRS Management Sdn Bhd, Sarawak	IEM05/ATP/006/C	6
Fire Engineering: Design of Steel and Composite Structures	WE Engineering, Sarawak	IEM05/ATP/007/C	16
Practical Leadership for Engineers	WE Engineering, Sarawak	IEM05/ATP/008/C	8
Seminar on Earthquake Engineering for Professional	School of Civil Engineering, USM	IEM05/ATP/009/S	7
Course on Eurocode 2 (Module 1) (Module 2) (Module 3) (Module 4)	Cawangan Pakar dan Kejuruteraan, JKR	IEM05/ATP/010/C	16 16 16 8
How to Write Impressive Technical Reports and Papers Easily	Tactic Asia	IEM05/ATP/011/C	16
Value Engineering Concepts and Management	WE Engineering, Sarawak	IEM05/ATP/012/C	8
Understand Common Converter and Drive Harmonics	WE Engineering, Sarawak	IEM05/ATP/013/C	8
Failure Analysis and Prevention for Engineering Structures and Material	WE Engineering, Sarawak	IEM05/ATP/014/C	16
International Conference in Defence Technology 2005	Military Academy Malaysia	IEM05/ATP/015/C	16
2 Day Course on Laboratory and In-situ Soil Tests & Result Interpretation -	WE Engineering, Sarawak	IEM05/ATP/016/C	16
1 Day Course on Advance Wastewater Treatment	WE Engineering, Sarawak	IEM05/ATP/017/C	8
1/3 Day Course on Tackling the Waste Challenges: from Waste to Resources	WE Engineering, Sarawak	IEM05/ATP/018/C	4

Up to June 2006

Title of the courses/seminar	Organisers/Providers	Reference Number	CPD Hours Approved
Powerful Presentation Skills for Technical Professionals	IQCP Worldwide Pte. Ltd	IEM06/TP/001/C	16
Wiring Devices Product	MK Electric (M) Sdn Bhd	IEM06/TP/002/C	2.5
Seminar on Super Spanned Structure Design	Tensys Sdn Bhd	IEM06/TP/003/C	3
Seminar on Exploring Bridges Analysis Techniques for Better Design Solutions	Astasoft Sdn Bhd	IEM06/TP/004/C	8
1 Day Course on Strategic Marketing for	WE Engineering, Sarawak	IEM06/TP/005/C	8
2 Day Course on Effective Construction Management and Control of Building Projects	WE Engineering, Sarawak	IEM06/TP/006/C	16
2 Days Construction Project Management	SPACE - UTM	IEM06/TP/007/C	16
2 Days Seminar on How to Provide Effective Project Management	KLIA Consult	IEM06/TP/008/S	12

ANNOUNCEMENT

Up to June 2006

Title of the courses/seminar	Organisers/Providers	Reference Number	CPD Hours Approved
Maximising Technology & ROI of Robotics and Automation	KCOM Management Sdn Bhd	IEM06/TP/009/S	16
CPKA Seminar 2005	Cawangan Pakar dan Kejuruteraan, JKR	IEM06/TP/010/S	16
Reliability and Maintenance Congress	IQCP Worldwide Pte. Ltd	IEM06/TP/011/C	21
Design of Treatment Plant and System for Water Work Branch	C.M. Management (Sarawak) Sdn Bhd	IEM06/TP/012/C	14
One Day International Conference on Excellence in Manufacturing	FMM Institute	IEM06/TP/013/C	8
Seminar on Design of Buildings and Constructed Assets	SIRIM Berhad	IEM06/TP/014/S	4
Manufacturing Wiring Devices Product	MK Electric (M) Sdn Bhd	IEM06/TP/015/C	4
A Short Course on Blasting and Explosives Technology	School of Materials and Mineral Resources Engineering, USM	IEM06/TP/016/C	16

ERRATA

Amendment to the text on Page 7, April 2006 (Blue page)

To all AER Life Membership,

The text on the item (c) in the announcement on “**The Introduction of AER Life Membership**” should be read as follows:-

Please note that the changes made to the below highlighted item in the below statement.

(c) That a candidate possessing a recognised engineering degree from his home country, being a full-time member of the Engineering or Technical Associations and licensed to practice in his home country, and having post-graduate working experience in an engineering environment of no less than seven (7) years, is eligible to be a member of AER Register.

Please take note of the corrected version.

Thank you.

ANNOUNCEMENT

APEC/EMF Registers

With effect from 1 January 2006, the National Monitoring committee of the two registers have agreed to waive the entrance fee and subscription for the year. IEM Members keen to sign up for the register would be required to pay RM 150.00 for the two registers.

The Sub-Committee on Library would like thank the Mechanical Engineering Technical Division for donating the books listed below. All books can be obtained at the IEM Library. Please contact us for more information.

NO	TITLE	AUTHOR	CAT. NO
1.	Experimental Methods for Engineers	JP Holman	620.007 / 004726
2.	Fire in Tall Buildings: Occupant's Safety and Owner's Liability	Jelani Abdullah	693.82 / 004732
3.	Internet Simplified: A Step by Step Approach	Panani Murugappan	681.324/004733
4.	Refrigeration: Pocket Book	Michael Boast	621.57 / 004735
5.	Konsep Keselamatan Kebakaran Bangunan	M David Egan	683.92 / 004737
6.	Engineering Mechanics Dynamics	RC Hibbeler	620.104 / 004744
7.	Engineering Mechanics Dynamics – SI Edition	RC Hibbeler	620.104 / 004745

COMMENT

Dear Chief Editor,

MRR2: ENGINEERS COLD NOT SPEAK UP?

I refer to Engr. Dr Wahid bin Omar's comments on Page 38 of JURUTERA, April 2006. While the writer has the best intention of elevating the stature of engineering practice to initiate a new culture of transparency and openness, one must be extremely careful not to overstep one's professional and ethical responsibilities.

Participation in public discussion is fine, but one must not merely comment without knowing the full facts. Learning from "bad experience" is also fine, but the sharing of such "bad experience" can only come about if the persons involved can come forward with honesty and integrity, having resolved all related professional, ethical and legal

implications. How many professionals are prepared to do this? Isn't it a matter of survival for one to protect his or her rice bowl?

We did have "experts" in the case of the MRR2 crisis in the stage of public comments and opinions in 2004. Unfortunately, such "experts" may have unwittingly contributed to the confusion by their explanations and opinions. The following "expert" comments with respect to the possible causes of the occurrences of cracks have appeared prominently (with graphics too) in one local newspaper then were: -

- Excessive number of heavy vehicles (possibly overlooked during pre-construction survey). Hence, we need to install weighing bridges.
- Impact of vibrations.
- Corrosion of steel reinforcement bars.
- Structural expansions and contractions.

Comments as such were not only inaccurate, but also reflect a very bad impression on the overall standard of bridge engineering practice in Malaysia.

Engineers in Malaysia in general may be passive due to many circumstances and should be encouraged to participate in meaningful and contributory public discussions by all means. However, one must be careful to exercise the strictest sense of professional integrity and ethical responsibilities. One should endeavor to obtain all facts prior to any such participation. A true professional should avoid the temptation to accept any invitation to make public comments when one does not possess the facts and relevant professional knowledge and experience.

Engr. Tham Kum Weng FIEM, P.Eng.
F 01513

REPLY FROM THE BULLETIN EDITOR

We thank the writer on the topic and his concern for the engineering profession in facing issues highlighted in the local media. In fact, we have professional engineers holding high and important positions in government agencies and regulating bodies that should take the first "initiative to take charge of the situation with the highest professional integrity and ethical responsibilities"

and advise the respective highest authorities (such as the respective Ministers and the Director-General of JKR, Head of CIDB, ACEM and BEM, etc.) to come up with proper perspectives and correct stand on the issues at hand. This will definitely be much better than casual comments highlighting only engineering concerns, which could misdirect the wrong focus of deficiencies based on engineering

assumptions than the competent control on the different phases of the projects. It should be stressed that the Malaysian construction industry has been governed by numerous Acts, Standard Codes of Practices. If good government and professional ethics are adhered to and complied with, such a situation would have been minimised if not totally considered. ■

LETTER TO THE EDITOR

Dear Chief Editor,

IEM ELECTION AND JURUTERA

The recent "controversies in the manner of the execution of the IEM Council Election brings forth the need for all parties to ensure absolute clarity and transparency in all institutional matters. In a departure from past practice, the notice of Nominations for Election for Council Session 2006/2007 was only published in the Blue Pages (generally reserved for miscellaneous news and reporting) of the January 2006 issue of JURUTERA. This was with the declared intention of cost-saving. Of course, such notice was also published in the IEM web page.

Perhaps it was because of this apparent lack of publicity, fewer nominations were received, resulting in the IEM Executive Committee (EXCOMM) nominating directly certain individuals to fill the remaining uncontested vacancies in the Council.

This matter was aptly raised by one concerned and passionate IEM Member under Any Other Business at the 47th IEM AGM on 22 April 2006. It would appear there may be "potential" theical, constitutional and legal consequences stemming from the interpretation and exercising of the IEM constitutional rights of the EXCOMM. These are best left to the experts.

While the majority of IEM members did not believe the EXCOMM had acted in bad faith, we do

hope the new IEM Council will study the matter with full seriousness and integrity so that all future IEM Council elections are not only implemented above board, but seen to be truly above board. Many at the AGM had also expressed that "cost saving" should be of the least consideration to ensure the constitutional rights of each member is safe guarded.

Notwithstanding the events eclipsed, the four hundred or so members present at the AGM had almost unanimously voted to endorse the whole Council Session 2006/2007 so that the IEM Council could move forward with its business, knowing that it had the full support of the members from the supreme IEM AGM mandate. Hopefully, our trust will not be misplaced. The IEM Council, being wiser and more attuned to the sensitivities of the members at large, will be courageous enough to act with a sense of integrity and common sense to correct whatever deficiencies or weaknesses, be it real, perceived or otherwise potential, so that the greater needs of the engineering professional and institution members can be well served.

On this note, may I suggest the following inclusions with respect to the cover page presentation for JURUTERA:-

- (a) There should be a clear Headline on the Cover Page announcing the Nominations for Council Election and the page number for relevant details and forms, etc. The Notice should be

published in two (2) consecutive issues of JURUTERA.

- (b) Similarly, for certain highlighted "Cover Stories, Features or Reports, etc.", it will be useful if the corresponding page numbers are given as well, so that any reader interested in any of such highlighted articles can quickly zoom in on to the correct page without trying hard to look for it. While one can still go to the content page, such a move to put a few extra page numbers will surely complement the rationale for highlighting certain selected articles where readers may be motivated or excited enough to quickly get into the act of reading such articles having scanned the cover page within seconds.

May I take this opportunity to congratulate the President and all the elected Council Members. you have chosen to serve the interest of the engineering profession. May your sense of commitment, professional duties and many personal sacrifices bear the desired fruits to further advance the interests of the engineering practice and the public at large.

Thank you,
Engr. Tham Kum Weng FIEM, P.Eng.
F 01513

REPLY FROM THE BULLETIN EDITOR

We thank Engr. Tham for his well-written letter and rational approach towards the betterment of our IEM.

We hope that all related parties will take note of the contents and strive to review whatever recommendations and implementations wherever

possible towards serving our IEM Members and readers of our monthly bulletin, JURUTERA. ■