The Institution of Engineers Malaysia (Sarawak Branch) 2014





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46th Annual General Meeting Report

CONTENTS

Notice of 46th Annual General Meeting

IEM (Sarawak Branch) Committee Member Session 2013/2014

Honorary Secretary's Report

Honorary Treasurer's Report

Discipline Code Master List

APPENDICES

Minutes of 45th Annual General Meeting

IEM (Sarawak Branch) Professional Interview Summary

Branch Committee Meeting Attendance Summary

NOTICE OF 46TH ANNUAL GENERAL MEETING Saturday, 21st June 2014, 8:30 am at Citadines Uplands Jalan Simpang Tiga, Kuching

In accordance to the Branch By-Laws (Revised and Approved 1 August 1998), notice is hereby given that the 46th Annual General Meeting of the Institution of Engineers Malaysia (Sarawak Branch) shall be held at Grand Hall, Citadines Uplands, Jalan Simpang Tiga, Kuching on Saturday, 21st June 2014 at 8:30 am.

The Agenda for the Annual General Meeting is as follows:

1 **REGISTRATION** commencing from 8:15am

2 AGENDA

- (i) Welcoming Address by Ir Tan Yean Chin, Deputy President representing the President of IEM (Session 2014/2015)
- (ii) Confirmation of Minutes of the 45th Annual General Meeting held on 22nd June 2013
- (iii) Matters Arising Related to the 45th AGM
- (iv) Annual Report (Session 2013/2014) by Honorary Secretary
- (v) Honorary Treasurer's Report
- (vi) Election of 2 Honorary Auditors and Appointment of 1 External Auditor
- (vii) Proposed Extension of Service for Richard Kiew & Company
- (viii) Announcement of Results of Election for Branch Committee (Session 2014/2015)
- (ix) New Chairman, Ir Haidel Heli Address
- (x) Briefing on IntEC Development
- (xi) Any Other Business

Ir Sim Hui Kheng Honorary Secretary (Session 2013/2014)

IEM/SB/1/01 Pt.2 (50.00) 20th June 2014



Seated (From Left): Ir. Haidel Heli (Vice Chairman); Ir. Kenny Thian Boon Khuin (Chairman); Ir. Choo Kok Beng (IEM President); Ir. Alan Tan Khiok Chun (Immediate Past Chairman); Ir. Vincent Tang ChokKhing (Vice Chairman); Ir. Stephanie Sim Hui Kheng (Honorary Secretary)

Stand (From Left): Engr. Ron Aldrino Chan (YES Chairperson); Ir. Johnny Tan Joo Kok (Committee: Electrical); Ir. Bernard Chong Yin Shik (Committee: Any Discipline) Ir. Dr. Dominic Ong Ek Leong (Committee: Civil); Ir. Dr. Mohammad Shahril Osman (Committee: Mechanical); Ir. Rudi Abang Zamhari (Honorary Treasurer)

Not in Photo: Ir. Hj. Zawawi Embong (IntEC Committee Chairperson); Ir. Tiong King Wei (IEM Sibu Chairperson); Ir. Abdul Nasser Abdul Wahab (IEM Bintulu Chairperson)



1.0 Introduction

It is with great pleasure to present to you the **46**th **Annual Report** for Session 2013/2014 covering the period 1stApril 2013 until 31 March 2014.

1.1 **The Committee**

A total of 8 Branch Committee Meetings were held during the session. The Branch had its 45th Annual General Meeting on the 22nd June 2013 at Auditorium, Ultimate Professional Centre. Ir. Kenny Thian Boon Khuin was elected as the new Chairman for 2013/2014 session. A total of 160 members attended the meeting. The total corporate membership of the Branch is now recorded at 690 members. Please refer to the Appendix for meeting frequency record and attendance.

2.0 Branch Activities & Events for 2013/2014

The branch reported that during the session, it had organized the following activities.

2.1 Activities summary

No	Title (Course/Seminar/Talk/Site Visit)	Date	Speaker
1	Power System Protection Course(with SEB)	2, 3 & 4 April 2013	Ir Lee Chong Kiow
2	Distribution Substation Design Course(with SEB)	9,10 & 11 Apr 2013	Ir Thum Peng Chew
3	Design & Practice of Earthing Course(with SEB)	14,15 & 16 Apr 2013	Ir Thum Peng Chew
4	Cooling Capacity Calculations & Psychrometric	15, 16 April 2013	Ir Chua Keng Seng
5	BEM Code of Ethics	17, 18 April 2013	Ir Choo Kok Beng & Ir Yim Hon Wa
6	Contract Administration for Construction & Engineering Contracts	2, 3 May 2013	Ir Harbans Singh
7	Applied Project Management	13 - 15 May 2013	Ir Frankie Chong
8	Malaysia Perspective In Ultra-High Performance Ductile Concrete (UHPDC)	15 May 2013	Adj Prof Dr Voo Yen Lai
9	BEM Engineering Management Practice-	16, 17 May 2013	Cdr (Rtd) Ir Raymond Swa
10	Talk on "The Role of the Contract Administration in Construction Contract" & 45th Annual General Meeting	22 June 2013	Sr Teo Siaw Chung
11	BEM Safety & Health at Work	24, 25 July 2013	Cdr (Rtd) Ir Raymond Swa
12	Design Concepts of Plumbing & Soil Waste Vent System	22, 23 August 2013	Ir Gary Lim Eng Hwa
13	Design & Practice of Earthing Course (with SEB)	27 - 29 August 2013	Ir Thum Peng Chew

14	IEM Penang Technical Visit	28 – 30 August 2013	Coordinated by Ir Vincent Tang, Ir Bernard Chong, Ir Johnny Tan, Engr Lim Yew Leong
15	Talk on Systematic Assessment, Simulation & Interactive Design of Electrical System in Buildings	23 Sept 2013	Prof Teo Cheng Yu
16	Project Management Fundamentals(with SEB)	24 - 26 Sept 2013	Ir Dr Syed Ahmad Fuad
17	Analysis, Selection & Specification of Indoor MV Distribution Switchgear(with SEB)	16 - 18 Oct 2013	Ir Thum Peng Chew
18	An Overview on PE Interview 2013 (YES- Graduate)	19 Oct 2013	Ir Vincent Tang & Ir Dr Dominic
19	Geotechnical Engineering Seminar	28, 29 Oct 2013	Ir Dr Ooi Lean Hock, Ir. Chow Chee Meng, Ir Oh Chin Wah, Ir. Teh Kim Ong, Ir Yee Thien Seng, Ir. Kenny Yee, Ir. Liew Shaw Shong & Ir. Lee PeirTien
20	Fire Control Concepts & Design of Active Wet System	11, 12 Nov 2013	Ir Gary Lim Eng Hwa
21	Talk on Project Management	15 Nov 2013	Ir Dr Mui Kai Yin
22	Site Visit to Batang Sadong Bridge Construction (YES-Graduate)	16 Nov 2013	Ir Vincent Tang
23	Seminar on IEM Form of Contract	23 Nov 2013	Ir Lim Eng Chong, & Mr Ang Seah Heng
24	An Overview of The Latest Procedures for Post- Contract in JKR Sarawak	7 Dec 2013	Sr Kii Ing Ching
25	Blood Donation & Public Talk 2013(YES- Graduate)	14 Dec 2013	Assoc Prof Ir Dr Resdiansyah Mansyur
26	Credential Security & Physical Access Control Systems	11 Feb 2014	Mr Tai Keang Seng
27	Project Management Foundation & Practices	24, 25 Feb 2014	Ir Dr Mui Kai Yin
28	Talk on Project Management	25 Feb 2014	Ir Dr Mui Kai Yin
29	PMP ® Boot Camp	26 Feb – 1 March 2014	Ir Dr Mui Kai Yin
30	Civil & Structural Software Presentation	3 March 2014	Mr Nigel Watts
31	Technical Visit to Kuching International Airport Traffic Control Tower and Department of Civil Aviation Office, 2014	8 March 2014	Officer-in-Charge Mr Lucas Ting
32	Common Commercial & Contract Administration Problems & their solutions	10, 11 March 2014	Ir Harbans Singh
33	BEM Engineering Management Practice	12, 13 March 2014	Cdr (Rtd) Ir Raymond Swa

2.2 2, 3 & 4 April 2013 Power System Protection Course

This course is jointly organized with Sarawak Energy Bhd Conducted by Ir Lee Chong Kiow

This course is mainly for the benefit of all engineers and other technical staff who are interested in enhancing their appreciation of this basic and exciting aspect of power system protection and commissioning of transformers. This course attempts to answer the many questions in an electrical engineer's mind by describing the various concepts of power system protection. The scope includes all the main components and types of protection schemes. The course also describes practical protection schemes. This course is intended for consulting, design, and operation and maintenance engineers responsible for medium and high voltage transmission, distribution, and industrial and commercial power systems. Participants are expected to have a basic knowledge of power system practices.

2.3 9,10 & 11 Apr 2013 Distribution Substation Design Course

This course is jointly organized with Sarawak Energy Bhd Conducted by Ir Thum Peng Chew

The distribution substation can be designed as an indoor substation or as an outdoor open-terminal type. Both are cost-effectively designed and constructed in the urban and rural areas respectively. Once designed and built, it is expected to be reliable and lasting for many years. For such expectations to be realised critical design factors have to be addressed.

The purpose of this course is to address the design issues of 33/11 kV distribution substations, particularly the open terminal type by bringing to focus the important factors in the selection of busbar configurations, layout of primary equipment, impact of transformers, circuit breaking & enclosure technology, lightning shielding, insulation coordination principles, protection and earthing. It attempts to answer questions such as "How are busbar configuration selected and designed?", "How does transformer neutral earthing impact insulation levels?", "What circuit breaking and enclosure technology is relevant?", "How does lightning shielding, transformer neutral earthing, and earthing impact insulation coordination?"

The course endeavors to answer these questions at the fundamental level. To do so, it focuses on the substation's primary equipment and protection requirements and answers some fundamental design questions relevant to achieving performance, reliability, quality and economics. At the same time, it will lead the participants through a learning experience and practical understanding of designing a 33/11 kV substation from scratch.

2.4 14,15 & 16 Apr 2013 Design & Practice of Earthing Course

This course is jointly organized with Sarawak Energy Bhd Conducted by Ir Thum Peng Chew The purpose of this course is to give an overview of the function of electrical earthing in a power system. It covers the general and fundamental characteristics of an earthing system and parameters that influence the flow of earth currents and the earth resistance value. The functions and behaviors of the various types of earths e.g. lightning, neutral and frame and electronic earths, are covered. Practical aspects are embedded in the course to enhance the appreciation of their design and practical application. The course explains the electrical shock criterion and shock situations and traces the development of earthing grid design. It then gives an introduction to the EMC problem that is now becoming a critical issue in computer control of the power system especially in the substation and industrial plant.

At the end of the course, the participant will have a wider knowledge base and appreciation of the basis for designing an earthing system from an experience of actual hands-on exercises conducted during the course.

2.5 15, 16 April 2013 Cooling Capacity Calculations & Psychrometric

This course is jointly organized with IEM Training Centre Conducted by Ir Chua Keng Seng and attended by 21 engineers

Cooling capacity calculation is the most fundamental requirement for any air conditioning system design. The application of psychrometric principles is often regarded as an area of mystery to many air conditioning engineers. However, it is the key for solving many air conditioning problems such as condensations, humidity problems, non-performance at part-load operations etc.

The objective of this course is to enable participants to calculate the cooling capacity required for a particular air conditioning system. Furthermore, the participants will understand the practical applications of psychrometric in air conditioning, design for humidity controlled systems and problem solving using psychrometric chart.

2.6 17, 18 April 2013 BEM Code of Ethics

This course is jointly organized with IEM Training Centre Conducted by Cdr (Rtd) Ir Raymond Swa and attended by 76 participants

This programme is specially designed in respect to the Code of Ethics in which engineers have to oblige. This is to ensure that the Engineering Professionalism in our country is enhanced and as competent as that of their counterpart globally. This programme will critically explain the role of engineers in facing crucial situation at their workplace. Besides that, the programme will also touch on the most appropriate way of dealing with difficult scenario that arise at workplace which may have some conflicts of engineering ethical. Since the conflict of interests between organization and engineers varies from one to another, cases and facts from real job situation will be highlighted and discussed, which covers six elements of engineering aspects.

Objectives

- To promote awareness of engineers' code of ethics at the workplace.
- To highlight responsibilities of engineers towards their organization and community.
- To provide guidance on code of ethics to engineers in their respective branch of

engineering.

- To expose the importance of environmental preservation in any project cts undertaken.
- To create understanding of the need to adhere to ethics.
- To inform the importance of Ethics for Professionals.
- To highlight the expectations of Public and Society towards Engineering Professionalism

2.7 2, 3 May 2013

Contract Administration for Construction & Engineering Contracts

This course is jointly organized with IEM Training Centre Conducted by Ir Harbans Singh with a total attendance of 39 participants

Objectives

- To familiarize participants with the various types of Construction/Engineering Contracts Procurement Methods used.
- To understand the rights and duties of the various parties under the contract especially the Main and Sub-Contractors.
- To learn all aspects of administering the contract from commencement up to the issue of the Final Certificate.
- To acquaint with the practical issues involved in the day-to-day running of a contract.
- To arm yourself with effective ways of managing time and cost related claims
- To have a thorough understanding of the various means of avoiding delays, disputes and cost overruns.

2.8 13 - 15 May 2014 Applied Project Management

This course is jointly organized with IEM Training Centre Conducted by Ir Frankie Chong and attended by 21 engineers

Mastering the essential integrated project management knowledge, best practices and skills, including software applications in 3 days! Project Management is a systematic application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholders' needs and expectations. Studies have shown that the success rate of projects will increase when a structured approach to project management is adopted, thus enhancing ROI and overall customer satisfaction.

Unlike other workshops, this intensive 3-day program begins with a unique Step-by-Step approach in covering the essential principles and people skills of Project Management complemented with ample working exercises and examples, templates and real-life experiences, and ends with the learning and application of a user-friendly Microsoft Project 2010 software tool.

Objectives

- Master fundamental project management knowledge, skills, concepts, tools and techniques with cross references to world class standard in USA-based Project Management Institute's body of knowledge PMBOK®.
- Understand & apply the best practices in carrying out a feasibility study, to initiate, define, plan, implement, monitor, control & close-out phases of a Project Life Cycle.

- Justify project & link project goals to stakeholder needs.
- Identify the critical role and functions of project managers.
- Avoid costly mistakes by gaining an insight into the success and failure factors of projects.
- Improves your project success rate by enhancing your management skills in leading, motivating, communicating and resolving conflicts.
- Be more confident in forecasting time and cost of project completion.
- Develop SMART Objectives, WBS, Project Plan & Schedule
- Develop network diagrams to analyze Critical Path and compress project duration
- Estimate project costs, & budget using simple, proven techniques
- Identify project risks and develop quality objectives
- Save time & effort by using Microsoft Project software tool.
- Terminating project with Post Implementation Review & lessons learned
- Networks with other participants and shares valuable experiences.

2.9 15 May 2013

Malaysia Perspective In Ultra-High Performance Ductile Concrete (UHPDC)

Conducted by Adj. Professor Ir Dr Voo Yen Lei A total 25 engineers attended this seminar

'Environmental Friendly', 'Eco-', 'Green', 'Sustainable', 'Recycle' – are the contemporary key words mentioned at least once in our conversation, media, press-releases and many others. They are associated with almost everything that we see, hear and feel. The mother Earth has now come to the brink of needing another revolution; a revolution to sustain! For as long as civilization, the mother earth had been faithfully supporting us. However, with continuous efforts in extracting, we now see, and are starting to experience, the result of our human deeds through global warming. With the current stage of the earth; temperature rising, water level rising, natural disasters happening in unexpected parts of the world, food and clean water scarcity, diseases, limited natural resources, animal extinction, and growing human population, it is no wonder that scientist have issued an alarming warning that the planet is in need of help.

One of the biggest breakthrough in concrete technology at the 21st century is the development of ultra-high performance ductile concrete (UHPDC) with compressive strength up to 200 MPa, and remarkable improvement in durability and ductility. Over the last two decades, tremendous amount of works had been undertaken by the academics and engineers worldwide with the aim to utilize the technology of UHPDC as an alternative for the visionary of sustainable construction. In brief, UHPDC is a cementitious based composite material that consists of the unique characteristics of the ultra-high performance concrete and the very high strength micro fibers.

The "science" on the development of the Malaysia blend of UHPDC (known as DURA®) and its material characteristics compare against conventional concrete technology will be presented. Then various successful local examples on UHPDC application will be presented. From the examples, it can be seen that UHPDC technology in general believe is the construction material for presence and future as it can support the visionary of sustainable development due to in most cases it is able to: (1) gives immediate cost saving; (2) prolong both the service and design life of structure; (3) reduce maintenance which translate into long-term saving; (4) save natural raw recourses as it required half the building material in term of mass/volume; and (5) overall reduction in carbon foot-print, thus reduce global warming potential.

2.10 22 Jun 2013

45th Annual General Meeting and Talk on "**The Role of the Contract Administration in Construction Contract**" Attendance of 160 participants

2.11 24, 25 July 2013 BEM Safety & Health at Work

This course is jointly organized with IEM Training Centre Conducted by Cdr (Rtd) Ir Raymond Swa and attended by 88 engineers

Industrial safety and health of engineering activities are increasingly given greater emphasis in practice and law. This programme examines the latest statutory obligations of both the engineers and environment. It will also expose the engineers on the Occupational Safety and Health Management issues and related elements of safe systems at work. How do we ensure compliance of the latest Safety and Health Act? How can we implement and control a sound safety and health programme at our workplace?

Objectives

- To promote safety and health awareness at workplace.
- To create understanding on the Occupational Safety & Health Act and its regulations: Factories & Machinery Act and its regulations: Fire Services Act 1988 and its regulations.
- To promote safety and health awareness at workplace.
- To provide guidance on the importance of safety and health in engineering works.
- To highlight the purpose and key elements of OSH Management.
- To give information on the elements of safe systems of work.

2.12 22, 23 August 2013

Design Concepts of Plumbing & Soil Waste Vent System

Conducted by Ir Gary Lim Eng Hwa and attended by 18 engineers

Objectives

- 1. Understand the basis to determine the cold water storage demand and size the transfer pump accordingly. This is in accordance to the latest SPAN Uniform Technical Guidelines.
- 2. Select the suitable type of pumping system to meet the water usage requirements namely direct, variable speed drive, and pneumatic tank.
- 3. Select the piping material amongst the many choices of plastic and metal.
- 4. Calculate the piping size for cold water in accordance to the BS6700 standard methodology of Loading Units.
- 5. Take preventive measures to minimize the impact of water hammer to the pipe lines by way of design and selection of the right equipment.
- 6. Determine the stack size of Soil, Waste, Vent (SWV) using Discharge Unit methodology and understand the constraints impose on branch discharge pipe in particular on the gradient to minimize blockage.
- 7. Understand the factors which contribute to smelly toilets and the solutions.
- 8. Observe poorly installed plumbing and SWV systems which are preventable.

2.13 27 - 29 August 2013 Design & Practice of Earthing Course

This course is jointly organized with Sarawak Energy Bhd Conducted by Ir Thum Peng Chew

The purpose of this course is to give an overview of the function of electrical earthing in a power system. It covers the general and fundamental characteristics of an earthing system and parameters that influence the flow of earth currents and the earth resistance value. The functions and behaviors of the various types of earths e.g. lightning, neutral and frame and electronic earths, are covered. Practical aspects are embedded in the course to enhance the appreciation of their design and practical application. The course explains the electrical shock criterion and shock situations and traces the development of earthing grid design. It then gives an introduction to the EMC problem that is now becoming a critical issue in computer control of the power system especially in the substation and industrial plant.

At the end of the course, the participant will have a wider knowledge base and appreciation of the basis for designing an earthing system from an experience of actual hands-on exercises conducted during the course.

To increase the benefits to the participants, it is required that they are fully engaged in actual hands-on exercises during the course.

2.14 28 – 30 August 2013 IEM Penang Technical Visit

The Institution of Engineers (Sarawak Branch), Kuching was the host for the IEM Penang Technical Visit to Sarawak from 28 August to 30 August 2013 in Kuching, Sarawak. The 12 person delegate from Penang was led by the Penang Branch Chairman, Engr. Paul Phor Chi Wei. IEM Sarawak was coordinated and represented by 3 members of IEM Sarawak, Ir Bernard Chong, Ir Johnny Tan and Engr Lim Yew Leong.

The technical visit was to provide a platform for understanding advancement in Building Technology and GBI implementation in Sarawak based on the recently completed DUN Building and Menara Sarawak Energy. This visit by Penang's delegate also provided a good platform for the engineers to share their knowledge and stories in IEM's activities.

Technical Visit's Schedule

Upon arrival, delegates were taken on a technical visit to the latest new Menara Sarawak Energy which is located land in the vicinity of The Isthmus, Kuching and Sarawak State Legislative Assembly Building (DUN Complex) which is located at the North bank of the Sarawak River during the second day before experiencing Sarawak's multi ethnic culture in Cultural Village, Santubong. A welcoming dinner was hosted by IEM Sarawak on the first night arranged by Ir Vincent Tang.

2.15 23 Sept 2013

Talk on Systematic Assessment, Simulation & Interactive Design of Electrical System in Buildings

This course is jointly organized with Jabatan Kerja Raya Sarawak Conducted by Professor Teo Cheng Yu Every installation, either as a whole building or parts of it, shall comply with the safety regulations such as CP5 or the IEE Wiring Regulations. On one hand, the designer should not over-design. On the other hand, the installed system should be robust, reliable and flexible. Although there are standard rules used to guide the design of an installation, it is always difficult for the designer to visualize how well the design has been done. A visually interactive program was developed for consultant, owner or contractor to carry out assessment or design for any given electrical installation. By using this program, not only is the time taken substantially reduced, the completed design will be adequate to meet the specifications and yet no over-design. The analysis and assessment process can thus be done in a more comprehensive and systematic way. As all the design elements are represented in a complete database, this program can be installed for practical use by consultants and will meet the relevant code of practice. The talk will describe a computer-aided assessment of LV network through seven types of critical tests and three types of non-critical tests. These tests are conducted for each circuit in each DB to assess whether a given design is acceptable under normal loading, overloading and short-circuit conditions. Through simulation, the designer can visualize the performance of the installation under various simulated conditions to ensure that safety requirements are met, and/or experience the consequence of design errors.

The user may carry out the design work for a main switchboard (MSW), a main distribution board (MDB) or a final distribution board (FDB). Facilities are provided for the user to link the complete network by backward chaining from FDB, MDB to MSW, or a forward chaining from MSW, MDB to FDB. For each circuit, based on the required power rating, required type of cable and installation method, circuit length, correction factors and fault level at the incoming source, the program automates the design process and shows the appropriate breaker and cable including CPC in a single line diagram. Facilities are provided for the user to list a technical summary, cost summary and bill of material for the whole project. In the technical summary, the maximum demand, 3phase fault current, earth fault current, the cumulated voltage drop to each final circuit are listed together with the outcome of the seven critical tests of each DB in the whole project. The DB, which has a final circuit exceed 4% voltage drop limit, and the DB, which has a failure in one of the seven critical tests are identified. Options are provided for user to view graphically discrimination test of short-circuit or earth fault including the display of fault current, breaker curves and withstand limit of cable for any selected circuit in any DB. Through a Smart Draw program, the completed network including all the DBs can be automatically plotted on in a number of single-line diagrams on A3 or A1 papers with facilities to export to AutoCAD.

2.16 24 - 26 Sept 2013 Project Management Fundamentals

This course is jointly organized with Sarawak Energy Bhd Conducted by Ir Dr Syed Ahmad Fuad Syed Abdul Hamid

This short course is intended mainly for the benefit of all engineers and other technical staff whose duties include working on, or managing projects, or who may be required to implement projects in their organizations, apart from their normal functional duties.

2.17 16 - 18 Oct 2013

Analysis, Selection & Specification of Indoor MV Distribution Switchgear This course is jointly organized with Sarawak Energy Bhd Conducted by Ir. Thum Peng Chew

It is no longer acceptable to specify circuit breakers based on an incomplete set of parameters or by 'rule-of-thumb' methods. The IEC 62271 puts the onus of specifying circuit breaking requirements on the purchaser.

The purpose of this course is to examine the essential features that IEC requires in the specification of MV circuit breaker. First, it gives an overview of the function of MV circuit breaker in an electric power system as well as in commercial/industrial systems, covering its functions and its design and selection principles. It covers the various switching aspects and performance of various duties of current interruption. It also addresses the rating of the circuit breaker for load and short - circuit duties. Description of the main components of distribution switchgear will be given to enhance the understanding of their engineering aspects & practical considerations of their selection.

At the end of the course, the participant will benefit from having a wider knowledge base and appreciation of the basis of their function, selection and IEC specification for utility, commercial and industrial systems.

2.18 19 October 2013 An Overview on PE Interview 2013

Conducted by Ir Vincent Tang Chok Khing and Ir Dr Dominic Ong Ek Leong Attended by 86 Engineers, Graduate Engineers and Engineering Students

An Overview Talk on PE Interview organized by IEM Graduate & Students Sarawak Branch for young engineers who would like to know about the requirements and questions on how to get a PE status. The talk also discusses on issues pertaining the regulations for entry and submissions of documents for PE interview.

The main objective of the talk is to provide better understanding on the regulations and the documents needed to prepare young engineers for their PE interview.

The other objectives are:

- 1. To create awareness on the regulations for entry and submissions of documents for PE interview.
- 2. To advice potential PE candidates on the issues pertaining the details of the documents.
- 3. To advice and provide hands-on guidance on the preparation of documents for professional assessment examination (PAE) and
- 4. To advice on the current issues on the regulations for PE Interview.

2.19 28, 29 Oct 2013

Geotechnical Engineering Seminar

Conducted by Ir. Dr. Ooi Lean Hock, Ir. Chow Chee Meng, Ir. Oh Chin Wah, Ir. Teh Kim Ong, Ir. Yee Thien Seng, Ir. Kenny Yee, Ir. Liew Shaw Shong and Ir. Lee Peir Tien and attended by 92 Engineers

Geotechnical engineering always is an important element in civil engineering works. With proper understanding in geotechnical engineering, an engineer will be able to provide practical and safe design on foundation, slope stability, retaining wall and ground improvement. Therefore, this seminar is aimed to provide a platform to the members to have better understanding on the following subjects (from planning to design and to construction):

- a. Subsurface investigation (SI) works
- b. Slope stability
- c. Grouting and Cement Mixing method
- d. Design of embedded retaining wall for deep excavation
- e. Geosynthetic application in civil engineering
- f. In-situ testing and instrumentation
- g. Soil nailing
- h. Pile foundation : Driven piles, Jack in piles, micro pile, caisson and testing
- i. Embankment design and ground improvement

2.20 11, 12 Nov 2013

Fire Control Concepts & Design of Active Wet System

Conducted by Ir Gary Lim Eng Hwa and attended by 11 engineers Objectives:

- Understand the Risk Management Process and Major causes of Fire Losses;
- Understand the principles of combustion, fire behavior;
- Identify the possible causes of fire and explosion (gas and dust) like static electricity;
- Minimize these causes and design of active wet systems in case to mitigate the potential losses;
- Understand the incentives provided by the insurance company for the installation of active wet systems, up to 70% discounts on the premium;
- Able to design fire pumps and pipe sizing of the wet systems (jockey and duty pump for hydrant ring main, wet riser, sprinkler);
- MS1910:2006 Fixed Firefighting systems Automatic Sprinkler Systems Design, Installation and Maintenance, able to design a Pre-Calculated Sprinkler system for Ordinary Hazard and selection of orifice plate;
- Understand the difference between Clean and Non-clean gaseous suppression systems and its application; and
- Able to conduct a fire pump flow test using a Piton tube and its applicable formula.

2.21 15 Nov 2013

Talk on Project Management

Conducted by Ir Dr Mui Kai Yin and attended by 44 engineers

Objectives

• To Elevate Project Management Expertise of Organizations, Individuals and Communities

Key Learning Outcome

- Project Management Processes, Basics tools and Techniques
- Tips on Effective Planning, Executing and Managing Project Outcomes
- PMI Project Management Professional PMP

 © Credential (Project Management Certification)
- How PMO ASIA can help to get MDeC subsidy for PMP [®] Certification (Government fund)

2.22 16 Nov 2013

Site Visit to Batang Sadong Bridge Construction

Headed by Ir Vincent Tang Chok Khing and attended by 40 engineers

The Proposed Jambatan Batang Sadong, Kampung Buloh, Samarahan, Sarawak is an important project to complete the coastal link by road between Sebuyau and Kota Samarahan. The road from Kota Samarahan to Kampung Buloh in Samarahan and the road from the opposite bank of Batang Sadong through Sebangan to Sebuyau had been constructed.

The major objectives for the implementation of the Proposed Jambatan Batang Sadong are

- To complete the coastal link by road between Sebuyau and Kota Samarahan
- To reduce traveling time and to ensure an all-weather and safer mode of transportation across Batang Sadong
- To improve social-economic development of the coastal region.

The objectives of this site visit are

- 1) To enable interested members from IEM Sarawak Branch to visit and observe various operation and implementation of a bridge project ; and
- 2) To allow members to be aware on the current development and construction activities around Kuching Samarahan Division.

2.23 23 Nov 2013

Seminar on IEM Form of Contract

Conducted by Ir Lim Eng Chong &Mr Ang Seah Heng Attended by 31 engineers

Even very experienced contracts administrators often misunderstand the exact scope of contractors' scope of works in respect to respective items in the contract bills. They also often misunderstand the employers' rights in the event of breaches by their contractors. Similarly, contractors' project managers also misunderstand what they are obliged to carry out as a part their contractual obligations. They, conversely to their contractual counterparts (i.e. administrators) also do not clearly understand their rights and obligations not only in executing the works but also in the event of breaches (by either party). This talk, expected to take about 6 to 7 hours will therefore seek to examine both employers' and contractors' rights and obligations in different circumstances.

2.24 7 Dec 2013

An Overview of The Latest Procedures for Post-Contract in JKR Sarawak

Conducted by Sr Kii Ing Ching and attended by 67 engineers

The main purpose of this program is to provide engineers, who are employed in projects where the Employer is represented by JKR Sarawak, awareness of the contractual and related administrative procedures in the post contract administration.

The objectives of the program covers area of contractual and administrative procedures related to post contract administration as per JKR Sarawak with legal rationale, where necessary. The program shall assist engineers to administer/assist to administer projects in their roles of either S.O. or S.O.R. and to ensure that the requirements of the client, JKR Sarawak representing the Government are met.

The key modules are site possession, variations, extension of time, payment and dispute resolution.

2.25 14 Dec 2013

Blood Donation & Public Talk 2013

Public Talk conducted by Assoc Prof Ir Dr Resdiansyah Mansyur Attended by 22 engineers

Young Engineers Section (YES) of the Institution of Engineers Malaysia (IEM - Sarawak Branch) will be organizing "Blood Donation – Save a Life" on 14th December 2013. The blood donation event is in collaboration between IEM (Sarawak Branch), YES and the Sarawak General Hospital. The Blood Donation Campaign would create a wider awareness of the importance of voluntary blood donation and encourage more engineers and public to become regular blood donors. The purpose is not to attract only new donors, but to infuse in the minds of people the importance of saving life.

As part of giving back to society, a public talk will also be organized during the campaign and members of the public as well as engineers are invited to attend this talk. This talk is **free of charge** and members of the institution can claim their CPD/PDP by registering on the day itself as certificates will be awarded.

Objectives

- To create a wider awareness of the importance of voluntary blood donation.
- To encourage more engineers and public to become regular blood donors
- To promote and increase the awareness of the public on the existence of IEM (Institution of Engineers Malaysia) and YES (Young Engineers Section).

2.26 11 February 2014

Credential Security & Physical Access Control System

Conducted by Mr Tai Keang Seng and attended by 21 engineers

Security managers have never had more options for access control cards and other badging and credentialing applications. Magnetic stripe, Wiegand and proximity technology all remain popular and effective.

One new technology many security and IT managers are evaluating is contactless smart cards. Just as proximity technology brought advantages over Wiegand card technology 20 years ago, contactless smart card technology today is bringing new advantages over proximity for physical access control as well as other applications.

Any card access system will consist of four basic elements. Depending on the size and purpose of the system, there may be many additional types of devices however the four basic elements are:

- 1. Cards
- 2. Readers (possibly equipped with keypads)
- 3. Access control panels (controllers)
- 4. An operator interface or "Host" PC (SW)

Contactless smart card technology is well-suited for access control applications. It provides higher levels of security than traditional access control technologies and the platform from which additional applications can be implemented on the same credential. There are products available on the market today that provide an affordable migration path to smart card technology while protecting customer investments in existing infrastructures.

With the introduction of iCLASS technology, HID established a new and significantly

lower cost for contactless smart cards. Traditionally, proximity cards have been more convenient to use, and HID's iCLASS contactless technology brings this same level of convenience to smart cards.

Whether a company is implementing an IT security solution today, or is looking downstream and planning for the future, it makes sense to put in a contactless smart card access control system like iCLASS, because it creates a technology base that can support IT security and physical access applications on the same credential.

2.27 24 - 25 February 2014

Project Management Foundation & Practices

Conducted by Ir Dr Mui Kai Yin and attended by 26 engineers

From the Project Management Institute (PMI®) special group studies on "Researching the Value of Project Management" (Source: PMI® Research Conference, Warsaw, Poland, 2008) indicate the increased in organization's project management maturity delivers greater value both tangible and intangible. This course is based primarily on the latest PMI® "A Guide to the Project Management Body of Knowledge, Fifth Edition", (PMBOK® Guide) standards that covers the five project management processes and ten knowledge areas. The 2-day comprehensive course lays a solid foundation, tools and techniques to project success.

The objectives of this class is to equip project stakeholders with systematic project management approach on initiate, plan, implement and close out project activities. It will also align project members to deliver project goals and objectives; establish common project management language and basic understanding.

The key learning points include:

- Master the five fundamental project management processes (viz. project initiating, project planning, project executing, project monitoring/controlling and project closing), concepts, tools and techniques; also the procedure and concepts of project management
- Set realistic, measurable SMART goals and ensure positive results; know what are the key project success factors
- Develop work breakdown structure (WBS); planning of work packages
- Estimate project cost and schedule using simple and proven techniques (Network Diagrams & Critical Path)
- Assign team member responsibilities
- Track project performance using Milestone tracking, S-curve, Earned Value Management (EVM)
- Handle project change management effectively
- Establish good control, monitoring and communication systems.

With the knowledge and skills acquired at the end of the training program, participants will be able to plan and manage projects from project initiating to closing. They can utilize and customize various project management tools introduced in the class to be used in their organizations.

2.28 25 February 2014

Evening Talk on Project Management

Conducted by Ir Dr Mui Kai Yin and attended by 34 engineers

Objective

To Elevate Project Management Expertise of Organizations, Individuals and Communities

Key Learning Outcome

- **Project Management Processes, Basics tools and Techniques**
- Tips on Effective Planning, Executing and Managing Project Outcomes
- PMI Project Management Professional PMP ® Credential (Project Management ٠ Certification)
- How PMO ASIA can help to get MDeC subsidy for PMP ® Certification (Government fund)

2.29 26 February – 1 March 2014

Project Management Practices Certification Course, PMP ® Boot Camp

Conducted by Ir Dr Mui Kai Yin and attended by 8 engineers

Beyond academic credentials, certification by the Project Management Institute (PMI®) as a Project Management Professional (PMP®) indicates that you've mastered essential project management skills and knowledge. This course is based primarily on the latest PMI® "A Guide to the Project Management Body of Knowledge, Fifth Edition", (PMBOK® Guide) standards that covers the five project management processes and ten knowledge areas. The 4-day boot camp is a comprehensive course that is designed to prepare participants to pass the PMP® exam at first attempt.

The objectives of this class is to prepare participants for the PMP® examination and provide guidance on how to tackle exam questions and reduce study time by focusing only on relevant exam topics. The training includes sharing exam taking experience from PMP® certified instructors and going through typical exam questions and answers. This improves chances of passing the grueling PMP® exam on the first try. Find out exactly what components of project management background will be tested and know where to focus attention during preparation. Learn from the project management experts how to make the most of your limited study time.

Benefits of PMP Credential

- PMP® is the most respected and internationally recognized credential for certified professional project managers.
- Use PMP® credential after your name after you passed the exam; demonstrate solid foundation on project management knowledge and experience.
- PMP® credential holders are generally getting higher remuneration package than • non-credential peers. It provides competitive edge in enhancing your career and promotion prospects.

2.30 3 March 2014

Civil and Structural Software Presentation

Conducted by Mr Nigel Watts and attended by 44 engineers

The adoption of BIM within the construction Industry has increased enormously over recent years. The benefits of BIM are generally well understood, however some engineers believe BIM only addresses external communication with the client, architect and contractor. The concept structural BIM, which is the sharing of project data between the structural engineer and the technician within the structural design office, can bring huge efficiencies and increased productivity. As the global market leader in structural BIM technology, CSC provides full intergration between orion and Fastrak with leading BIM platforms such as Autodesk ®, Revit ® and Tekla Structures. Speaker explain how CSC's Orion and Fastrak software can help engineering firms implement and reap the benefit of structural BIM Technology.

Recognising that structures BIM is vital to the future of structural engineering firms in increasing productivity and maintaining a competitive edge, CSC has invested in a major product development initiative to enhance the unique BIM Intergration within Fastrak and Orion. Giving delegates and insight into CSC's future releases of Fastrak and Orion.

2.31 8 March 2014

Technical Visit to Kuching International Airport Traffic Control Tower and Department of Civil Aviation Office, 2014 Attended by 35 engineers

Kuching International Airport (KIA) is an international airport serving the entire southwestern region of Sarawak. It is also the secondary hub for Malaysia Airlines and has been growing rapidly to tackle the demand of travelers in and out of East Malaysia region.

The airport terminal is capable of handling five million passengers per annum and it is the fourth busiest airport in Malaysia. KIA has grown rapidly with an increasing number of passengers and aircraft movements. In 2010, KIA handled 3,684,000 passengers with a corresponding volume of 46,382 flights. In the same year, 26,977 metric tonnes of cargo were handled through this facility.

Objectives

- 1. To have an overview of the running of day to day air traffic flow in Kuching International Airport.
- 2. To understand about service provided by ground-based controllers who direct aircraft on the ground and through controlled airspace and can provide advisory services to aircraft in non-controlled airspace.
- 3. To learn the primary purpose of Air Traffic Control and the overall running of airport management and services.

2.32 10 - 11 March 2014

Common Commercial & Contract

Administration Problems & Their Solutions

This course is jointly organised with IEM Training Centre Conducted by Ir Harbans Singh and attended by 33 engineers

Objectives

- Identify the common commercial and contract administration problems encountered in the Engineering/ Construction Contracts.
- To offer practical solutions to the said problems in the light of recent developments.
- To review areas of doubt and difficulty so that the practitioners can have better guidance in their everyday work.

- Ensure that there is better administration of contracts in particular on the Commercial and Professional aspects.
- Expose participants to the applicable law, good practice and contemporary developments on the local front.

The course comprises a series of about 45 questions and answers covering the core issues such as

- Cost Estimates/Tender Estimates
- Cost Control Measures
- Payment Procedures & CIPAA 2012
- Remedies available following payment default & CIPAA 2012
- "Back-to-Back" Payment to Sub-Contractors & CIPAA 2012
- Payment in Turnkey/Design and Build Contracts & CIPAA 2012
- Direct Loss and Expense & Variations Claims
- Problems with Final Account
- Payment for "Off-Site" Materials
- Problems with Retention of Title Clause
- Non-Payment to Consultants & CIPAA 2012
- Problems with Supervision/Inspections
- Contract Administration difficulties
- Liabilities problems of Contract Administrators
- 3rd Party Claims against Consultants
- Problems with Resident Site Staff
- Problems with Authorities
- Letter of Release and the Consultants
- Problems with Professional Indemnity Insurances
- Design Bond Issues
- Adverse Ground Conditions
- Liability for Shop Drawings/Fabrication Drawings, etc.
- Miscellaneous Problems/Issues

2.33 12 – 13 March 2014

BEM Engineering Management Practice

This course is co organized with IEM Training Centre Conducted by Cdr (Rtd) Ir Raymond Swa and attended by 51 engineers

The need of a well-structured course on engineering management methodology is essential to practising engineers who have the intention to develop their career as well as to be decision makers in their organization. This programme is specially designed to expose engineers on the art of managing Engineering Companies. Financial knowledge for engineers, project management, the needs of information technology in preparation for the challenges into the next millennium and so forth. This programme, in total, will expose the engineers with the contemporary management and functional skills to enable them to manage their work more effectively.

Objectives

- To expose the aspects of managing engineering companies.
- To provide management principles to engineer Culture, politics, motivation.
- To create financial understanding for the engineers.
- To highlight engineer's perspective on project financing.
- To give information on the importance of IT to engineers.
- To provide awareness on global trends of trade liberalization.

- 2.34 Overall, a total of 328 CPD hours has been organized for session of 2013/2014.
- 2.35 **Photo Galary of branch activities & events**

22 Jun 2013 **45th Annual General Meeting and Talk on** "The Role of the Contract Administration in Construction Contract"



24, 25 July 2013 BEM Safety & Health at Work



22, 23 August 2013 Design Concepts of Plumbing & Soil Waste Vent System



28 - 30 August 2013 IEM Penang Technical Visit



23 Sept 2013 Talk on Systematic Assessment, Simulation & Interactive Design of Electrical System in Buildings



19 October 2013 An Overview on PE Interview 2013



28, 29 Oct 2013 Geotechnical Engineering Seminar



11, 12 Nov 2013 Fire Control Concepts & Design of Active Wet System



15 Nov 2013 Talk on Project Management



16 Nov 2013 Site Visit to Batang Sadong Bridge Construction



23 Nov 2013 Seminar on IEM Form of Contract



7 Dec 2013

An Overview of The Latest Procedures for Post-Contract in JKR Sarawak



11 February 2014 Credential Security & Physical Access Control System



24 - 25 February 2014 Project Management Foundation & Practices



25 February 2014 **Evening Talk on Project Management**



26 February – 1 March 2014 Project Management Practices Certification Course, PMP ® Boot Camp



3 March 2014 Civil and Structural Software Presentation



10 - 11 March 2014

Common Commercial & Contract Administration Problems & Their Solutions



12 – 13 March 2014 BEM Engineering Management Practice



3.0 Nomination & Election Result

During the 8th Branch Committee Meeting (255th) for session 2013/2014 which was held on Monday, 12 May 2014, **Ir. Haidel Heli (M22455)** was unanimously selected by the committee members to be the upcoming Chairman of the IEM Sarawak Branch.

As stipulated in By-Laws No. 7, nomination notice was issued on 10thMac. 2014 to invite for the posts of Vice Chairmen (2 vacancies), Honorary Secretary (1 vacancy), Honorary Treasurer (1 vacancy) and Ordinary Committee Member (4 vacancies).

The nomination of Committee vacancies for session 2014/2015 were closed by 3:00pm on Monday 21th April 2014 and result of nominations are as appended below.

As a result of the above, the following candidates were elected unopposed for the respective office:

Vice Chairman (2 vacancies for session 2014/2015) Ir. Tang Chok Khing, Vincent (M9555) Ir. Dr. Ong Ek Leong, Dominic (M19462)

Honorary Secretary (1 vacancy for session 2014/2015) Ir. Sim Hui Kheng (M19167)

Honorary Treasurer (1 vacancy for session 2014/2015) Ir. Rudi Abang Zamhari (M20712)

Committee Members (Mechanical Discipline)(1 vacancy for session 2014/2015) Ir. Dr. Mohammad Shahril Osman (M19410)

Committee Members (Electrical Discipline)(1 vacancy for session 2014/2015) Ir. Tan Joo Kok (M41506)

Committee Members (Civil Discipline) (1 vacancy for session 2014/2015) Ir. Terence Wong Kuen Mou (M20525)

Committee Members (Any Discipline) (1 vacancy for session 2014/2015) Ir. Chong Yin Shik, Bernard (M24205)

There were two (2) nominations for the vacancy of Vice Chairman & Committee Members (Electrical Discipline) which were received after the closing date. Therefore, the nominations were deemed void and communication to the nominated candidates was made to inform and reinvite them for next session's nomination.

4.0 **Professional Interview**

During the session, the branch has recorded a total of 20 (new) candidates who has been approved to sit for their Professional Interview.

5.0 **Update on Propose IntEC (Proposed International Engineering Centre)**

During 2013 AGM, it was reported that, on 21st March 2013, IntEC Land Title has been issued by Land & Survey Samarahan under IEM (Sarawak Branch) name. Total premium paid to Sarawak Government is RM 558,696.00 and the annual quick rent payable is RM1,237.00.

Till date, repayment of softloan to IEM HQs at an amount of RM 20,000 from IntEC account.

During the final meeting of the 2013/ 2014 session (ref: 8th Branch Committee Meeting, 255th held on 12 May 2014), it was decided to put up all the relevant information for the members to aware and acknowledge the latest development of the Proposed IntEC.

Furtherance to that also, IntEC development conceptual framework being proposed are:

- a) Formalising the modus operandi of the IntEC development;
- b) Appointment of the IEM Sarawak Branch Committee Members and appointed IntEC sub committee to form the IntEC Standing Committee;
- c) Main committee of IEM SB to formulate IntEC development business plan;
- d) Main committee of IEM SB to prepare a repayment plan for RM 500, 000 soft loan from IEM HQs;
- e) Main committee of IEM SB to prepare Terms of Reference (TOR) on appointment of consultant;
- f) Main committee to perform procurement of services upon endorsement of all the above by the IEM SB members.



6.0 **Report from Graduates & Students Section (YES)**

List of Committee

Chairman	Engr Ron Aldrino Chan @ Ron Buking
Vice-Chairman I	Engr. Shawn Mckenzie
Vice-Chairman II	Engr. Dr Ling Tong Wei
Hon. Secretary	Ms. Thong Chia Chia
Vice Secretary	Mr. Yong Leong Kong
Treasurer	Engr. Chan Kwok Kwang
PD Training & Development	Mr. Kelvin Foo Chin Yen & Engr. Dr Fauzan Sahdi
PD External Affair &	Engr Lau See Hung & Mr. Moh Hioung Teck
Publicity/Co-opted	
PD Community Services &	Engr. Dr Mah Yau Seng, Mr. Striprabu a/l Strimari
Social/ Co-opted	& Engr. Jarvis Ling
PD Student Affair	Engr. Dr Shafrida Bt Sahrani & Engr. Dr Rudy Tawie
PD Technical & Logistics/	Mr. Chong Kok Hing & Mr. Eric Yong Pik Kwong
Co-opted	
Committee Members	Engr. Elizabeth Chong, Engr. Dr Mohd Danial B. Ibrahim
	& Engr. Lee Mei Ping

6.1 **Snapshots of YES IEM SB activities & events**

6.1.1 IEM Sarawak Branch - G&S 'Go Back To School' Program Title: 'What is so beautiful about engineering?' Speaker: Engr. Ron Aldrino 1) Location: SMK DPHA Gapor Stampin, Kuching

Date: 17th June 2013

2) Location: SMB St. Thomas, Kuching Date: 18th October 2013

3) Location: SMK Sg. Tapang, Samarahan Date: 29th October 2013

This talk is one of IEM (SB) Graduate & Student Section agenda in our IEM 'Go Back To School' program that aims to instill awareness and information on various engineering disciplines to secondary school students as a whole.

The purpose of this talk is to create awareness on the various opportunities in engineering and its need for the development of our country. It is also to help students understand the various engineering field which they can venture into as well as helping students realize the importance of science and mathematics.

6.1.2 IEM Young Engineer Section National Summit 2013 Location: Lembah Azwen in Hulu Langat, Selangor

Date: 27-30th June 2013

For years, IEM Young Engineer Section (YES) has been organizing the National Summit annually. It serves as a platform for the young engineers to exchange ideas and connect with each other on the prospect of the growth of the young engineers. In 2013, the IEM YES National Summit was held together with the Student National Summit in Kuala Lumpur, led by IEM YES KL's Chairman, Engr. Mah Way Sheng. It was attended by all branches' representatives from all over Malaysia, namely; Penang, Perak, KL, Sarawak, Miri and Sabah branch. The numbers of participants this year turned out to be 80 and was deemed a success.

6.1.3 Half-Day Talk on Professional Interview 2013 Location: Ultimate Training Centre, Kuching

Date: 19th October 2013

Speakers: Ir Vincent Tang & Ir Dr Dominic Ong

This talk on PE Interview is conducted specifically for young engineers who would like to know about the requirements and questions on how to get a PE status. The talk also discusses on issues pertaining the regulations for entry and submissions of documents for PE interview.

6.1.4 **Technical Visit: Batang Sadong Bridge** Location: Batang Sadong, Kampong Buloh, Samarahan Division Date: 16th November 2013

The Proposed Jambatan Batang Sadong, Kampung Buloh, Samarahan, Sarawak is an important project to complete the coastal link by road between Sebuyau and Kota Samarahan. The road from Kota Samarahan to Kampung Buloh in Samarahan and the road from the opposite bank of Batang Sadong through Sebangan to Sebuyau had been constructed.

The purpose of this visit is i)To enable interested members from IEM Sarawak Branch to visit and observe various operation and implementation of a bridge project ; and ii)To allow members to be aware on the current development and construction activities around Kuching - Samarahan Division.

6.1.5 Conference: 31st Conference of ASEAN Federation of Engineering Organisations (2013)

Location: Jakarta, Indonesia

Date: 9th-13th November 2013

The Conference of the ASEAN Federation of Engineering Organisations (CAFEO) is held on an annual basis, with one of the member organisations as the host.

For the 31st CAFEO, Engr. Ron Aldrino Chan @ Ron Buking was selected as one of the presenter representing IEM with the topic titled: '*Investigating Potential Usage Of Raw Oil Palm Shell As Coarse Aggregate For Conventional Pavement Mix Design*'.

6.1.6 Blood Donation – Save a Life' & Public Talk on Engineering 2013

Location: Hills Shopping Mall, Pullman Kuching

Date: 14th December 2013

The blood donation event is in collaboration between IEM (Sarawak Branch) - YES and the Sarawak General Hospital. The Blood Donation Campaign purpose is to create a wider awareness of the importance of voluntary blood donation and encourage more engineers and public to become regular blood donors. The purpose is not to attract only new donors, but to infuse in the minds of people the importance of saving life.

As part of giving back to society, a public talk on **Overcoming Congestion: BUS RAPID TRANSIT (BRT) A Preferred Choice for Kuching City?** By Assoc. Prof Ir Dr Resdiansyah of UNIMAS was organized during the campaign and members of the public as well as engineers were invited to attend this talk without any charges.

6.1.7 Technical Visit: Kuching International Airport Traffic Control Tower and DCA Office

Location: KIA Traffic Control Tower and DCA Office Date: 8th March 2014

Kuching International Airport (initialized: KIA) is an international airport serving the entire southwestern region of Sarawak. It is also the secondary hub for Malaysia Airlines and has been growing rapidly to tackle the demand of travelers in and out of East Malaysia region.

The airport terminal is capable of handling five million passengers per annum and it is the fourth busiest airport in Malaysia. KIA has grown rapidly with an increasing number of passengers and aircraft movements. In 2010, KIA handled 3,684,000 passengers with a corresponding volume of 46,382 flights. In the same year, 26,977 metric tonnes of cargo were handled through this facility.

The purpose of this visit is:

i) To have an overview of the running of day to day air traffic flow in Kuching International Airport

ii) To understand about service provided by ground-based controllers who direct aircraft on the ground and through controlled airspace and can provide advisory services to aircraft in non-controlled airspace

iii) To learn the primary purpose of Air Traffic Control and the overall running of airport management and services

6.2 IEM YES Photo Gallery of activities of events for 2013/2014



27-30th June 2013 IEM-YES National Summit 2013 KL, Site Visit to MRT Project Kuala Lumpur



17 June 2013 Talk on "What Is So Beautiful About Engineering?"SMK DPHA Stampin, Kuching





18 August 2013 Talk on "What Is So Beautiful About Engineering?" SMK St.Thomas Kuching

9 October 2013 Inter-Professional Games 2013 Prize Giving Dinner Sarawak Club, Kuching





29 October 2013 Talk on "What Is So Beautiful About Engineering? @SMK Sungai Tapang, Kuching

9-13 November 2013 YEAFEO Trip To Jakarta, Indonesia





15 December 2013 Blood Donation & Public Talk on Engineering 2013; HILLS Shopping Mall, Kuching

8 March 2014 Technical Visit to Kuching International Airport Traffic Control Tower and Department of Civil Aviation Office, 2014



7.0 **Report From IEM Sibu Sub Region**



Left to right: (Seated) Engr. Ting Kong Siin (Advisor), Engr. Richard Soh Siau Chui (Vice Chairman), Engr. Daniel Wong Park Ing (Advisor), Engr. Sim Kok Kee (Patron), Engr. Tiong King Wei (Chairman), Engr. Lau Pon Yin (Secretary), Engr.Patrick Tong Hing Lee (Advisor).

Left to right: (Back row): Engr. Jong Thian Puk, Engr. Teo Nguong Leong (Treasurer), Engr. Anderson Sie Teck Soon, Engr. Sia How Teck, Engr. Wong Siong Boon, Engr. Ting Sing Kwong, Engr. Siew Kok Kiong (Asst. Secretary)

7.1 Snapshots of Sibu Sub Region Activities & Events for session 2013/2014

The branch reported that during the session, it had organized the following activities:

7.1.1 8th October 2013

"One Day Seminar On 'An Overview Of The Latest Procedures For Post-Contract Management In JKR Sarawak" (For Anyone Acting As S.O. For The Government in Either State Or Federal)" at the UCTS, Sibu

Conducted by Sr Kii Ing Ching and attended by 92 participants

The main purpose of this program is to provide engineers, who are employed in projects where the Employer is represented by JKR Sarawak, awareness of the contractual and related administrative procedures in the post contract administration.

The objectives of the program covers area of contractual and administrative procedures related to post contract administration as per JKR Sarawak with legal rationale, where necessary. The program shall assist engineers to administer/assist to administer projects in their roles of either S.O. or S.O.R. and to ensure that the requirements of the client, JKR Sarawak representing the Government are met.

7.1.2 **31**st October 2014

A-Day Seminar of "Flood Mitigation and Traffic Issues in Sibu" at UCTS, Sibu Conducted by Ir Ting Sing Kwong and attended by 58 participants

The main purpose of this programme is to provide engineers, town planners and developer on the awareness of

- The evolution of Sibu Road System and Urban Developments: Past, Present and Future including the needs of Public Transport and Non-Motorized Transport for the future.
- The Drainage/Flood Mitigation that recently completed under Phase 1 and continue construction under Phase 2.

Objectives

- The past roads network system, the current and the future needs in order to have a sustainable road networks transport system.
- The drainage/flood mitigation that had been completed in Sibu under Phase 1 and Phase 2, in order to mitigate flooding issue.

7.1.3 16th April 2014

"Construction Quality on Building Awareness" at the University College of Technology Sarawak Conducted by Mr Kang Wee Leng (Joshua) and attended by 78 participants

The main purpose of this program is to provide awareness training on quality standards for buildings.

The objectives of the program are to provide QLASSIC Awareness training on the assessment approach, score calculation, assessment criteria and etc.

7.1.4 Social Activities

13th February 2014 **'Chinese New Year Gathering'** at the Hibiscus Ballroom at RH Hotel

7.1.5 **Other Event**

2nd November 2013 **Opening of Sibu Regional Office** No 3, Level 1, Tuanku Osman 2 Guest of Honor YB Dato Sri Wong Soon Koh Minister of Finance II & Minister of Local Government cum Community Development, Sarawak

7.1.6 **Professional Interview Conducted**

Total : 1 Held on 10/5/2014 at the Level 15, JKR, Wisma Sanyan, Sibu

7.2 **Photo Gallery of activities & Events**

8th October 2013

"One Day Seminar On 'An Overview Of The Latest Procedures For Post-Contract Management In JKR Sarawak" (For Anyone Acting As S.O. For The Government in Either State Or Federal)



16th April 2014 **"Construction Quality on Building Awareness"**



Social Activities on 13^h February 2014 **'Chinese New Year Gathering'** at the Hibiscus Ballroom at RH Hotel





Other Event 2nd November 2013 Opening of IEM Sibu Regional Office





7.3 Report from Treasurer

THE INSTITUTION OF ENGINEERS MALAYSIA, SARAWAK BRANCH SIBU REGION												
			STATE	MENT OF AC	COUNT FOR	APRIL 2013	3 TO MARCH	12014				
INCOME STATEMENT	April 2013	May 2013	June 2013	July 2013	Aug 2013	Sept 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014
INCOME (B/F)	71,887.40	71,887.40	71,887.40	71,887.40	72,037.40	71,406.40	71,406.40	63,248.30	75,448.30	84,546.35	83,441.40	81,120.60
Donation by YB Dato Sri							-	-	10,000.00	0	0	0
Courses Registration Fee							20,250.00	16,350.00	0	0	0	1,200.00
Sales of Tables (Fund Raising)							-	13,300.00	0	0	0	0
Grant from IEM Sarawak							-	-	0	0	0	4,072.00
Donations							-	3,000.00	0	0	0	0
							-	-	0	0	0	0
TOTAL Income	71,887.40	71,887.40	71,887.40	71,887.40	72,037.40	71,406.40	91,656.40	95,898.30	85,448.30	84,546.35	83,441.40	86,392.60
Expenses												
Foods and Drinks							3,500.00	1,260.00	0	0	0	-
Electricity							-	300.00	0	32.40	22.25	22.25
Water							-	-	44.95	22.55	22.55	22.55
Fitting & Fixtures							2,920.00	-	0	0	0	0
Airconditioner							2,820.00	-	0	0	0	0
Stationery							153.20	-	0	0	0	0
Office Equipment							1,887.00	-	0	0	0	0
Honorarium to Faclilitator Allowance to Course							3,010.00	1,000.00	0	0	0	0
Helpers							200.00	550.00	0	0	0	0
Allowance to Office Cordinator							-	300.00	300.00	300.00	300.00	300.00
Charity Donation							-	3,000.00		0	0	0
Travelling Expenses							-	-	0	0	0	699.00
Sginac							-	1,744.00	0	0	0	0
Legal Fee							-	159.00	0	0	0	0
Office Rental							500.00	500.00	500.00	500.00	500.00	500.00
Photogaph for Courses							920.00	581.00	0	250.00	0	0
Secuirty Deposit Rental/Electricity								3,000.00	0	0	0	0
Maintenance to Office Door							-	-	0	0	500.00	0
Printing of Course Mateials							280.00	-		0	0	0
Miscellaneous Expenses							17.90	1,880.00	47.00	0	0	0
Bank Charges							-	10.00	10.00	0	0	0
Function Gathering							-	9,810.00	0	0	976.00	0
TOTAL Expenses							16,208.10	24,094.00	901.95	1,104.95	2320.80	1,543.80
NETT INCOME							63,248.30	75,448.30	84,546.35	83,441.40	81,120.60	84,848.80

8.0 **Report From IEM Bintulu Sub Region**

8.1 Activities Organized in 2013

8.1.1 26th September 2013 Networking Dinner with IEM Sabah Branch & IMM Bintulu Chapter Location: Marco Polo Restaurant, Bintulu

IEM Sarawak Bintulu Region organized a Networking Dinner with IEM Sabah Branch as well as IMM (Institute of Material Malaysia) at Marco Polo Restaurant, Bintulu on the 26th September 2013 at 8:30PM.

The 12 member delegates from IEM Sabah Branch were led by Ir Tan KY while IMM was led by MrYii MS. About 16 engineers attended the networking dinner.

8.1.2 27th September 2013

Technical Visit: Malaysia Liquefied Natural Gas Plant Location: Malaysia LNG Sdn Bhd, Bintulu

Malaysia is endowed with natural gas reserves three times larger than its oil reserves. With total proven natural gas reserves of 2,400 billion cubic meters, Malaysia is ranked 13th largest in the world.

PETRONAS was involved in every aspect of the project in Bintulu, Sarawak; from the plant, jetty and infrastructure construction to the acquisition of LNG carriers and training of human resource.

The nation's first liquefaction plant in Bintulu was completed on 7 August 1982. PETRONAS achieved another milestone when the first cargo departed on 29 January 1983 on board the LNG carrier, *Tenaga Satu*, heading for the Japanese market.

The 276-hectare **PETRONAS LNG Complex (PLC)** located in Bintulu, a town in the East Malaysian State of Sarawak, currently produces 25.7 million tonnes of LNG per year contributing to some 40.5% to Sarawak's gross export, 6% to Malaysia's total export and 4.2% to the national Gross Domestic Product (GDP.

Globally, Malaysia meets 21% of total LNG needs. In terms of LNG exports, Malaysia supplies 49% of Taiwan's LNG needs, 25% of Japan's needs and 21% of South Korea's LNG needs.

IEM Bintulu Region was led by Ir. Abdul Nasser with a total of 20 engineer delegate for the LNG Complex visit held on 27th September 2013.

The delegates were given a 30 minutes corporate briefing at the Auditorium of MLNG and followed by a plant tour at the LNG Complex. The delegates were treated with a buffet later at the plant foyer for networking.

8.1.3 29th March 2014

Seminar: An Overview of the Latest Procedures of Post Contract Management in JKR Sarawak" facilitated by Mr. KiiIngChing held at Kemena Hotel Bintulu on the 29th March 2014 Location: Kemena Hotel, Bintulu

The objectives of the seminar are to provide an insight of contractual and administrative procedures related to post contract administration for projects associated with JKR Sarawak. The program assisted engineers to administer/assist to administer projects in their roles of either S.O. or S.O.R. and to ensure that the requirements of the client, JKR Sarawak representing the Gov't, are met.

8.2 Report from Treasurer

IEM (BINTUL)	J REGIO	ON) BALANCE	E SHEET DEBIT	:	•	1.1.2013	3 to 31.12.2013
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CURRENT ASSET

CURRENT LIABILITY

Total

18140.40

BALANCE In Bank As Of 31st Dec, 2013

1,418.66

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Agreed by:

Total

Date:

Ir Abdul Nasser Abdul Wahab

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9.0 Honorary Treasurer's Report

As the Honorary Treasurer for the Session 2013/2014, it is my honour to present to you the audited account of the Institution for the financial period from 01.04.2013 to 31.03.2014. The Auditor's Report, Balance Sheet, Income and Expenditure Account and the Notes to the Financial Statements which formed this financial statement are for your kind perusal and scrutiny.

The financial health of the Institution remains stable as we recorded another surplus again for the corresponding period. The total income recorded was RM 211,543.28 against total expenditure of RM 177,296.83 which gave a surplus of RM 34,246.45. The outstanding Bamboo to Broadband Book loan amount of RM49,950 was fully settled and first payment of RM 20,000 for the INTEC land acquisition loan made to IEM HQ helped to reduce our current liabilities.

Surplus from organized courses and subsidies from Headquarters were the top two income contributors amounting to RM 92,961.84 and RM 88,850.00 respectively. Proceeds from Bamboo to Broadband Book sale contributes RM 15,576.00 to the operating income with 177 copies sold, mostly to course participants as part of the course fee.

Expenditures incurred were mainly for the administrative expenses amounting to RM149,250.05 with depreciation of non-current assets such as property, plant and equipment, taken up for first time ever, formed the major portion amounting to RM46,344.15 that also included depreciation in all those previous years which were never been accounted previously.

I wish to record my thanks and appreciation to fellow Committee members and the Secretariat of IEM (Sarawak Branch) for the contribution, hard work and cooperation. Special thanks also go to our internal auditors, Ir. Tan Tai Kang and Ir. Chan Hua Tack who had consented to spend their time in going through the audited account.

Finally, I would like to request for your kind consent to accept this audited account presented.

Thank you.

Ir. Rudi AbangZamhari Honorary Treasurer IEM (Sarawak Branch) Session 2013/2014

Discipline Code Master List

0001	Aeronautical
0002	Building
0003	Civil
0004	Electrical
0005	Electronic
0006	Fuel
0007	Gas
8000	Highway
0009	Electromechanical
0010	Flight
0011	Production
0012	Mechanical
0013	Marine
0014	Naval Architecture
0015	Mining
0016	Petroleum
0017	Industrial
0018	Environmental
0019	Structural
0020	Architectural
0021	Hydraulic
0022	Public Health
0023	Metallurgy
0024	Transport
0025	Chemical
0026	Agricultural
0027	Mineral Processing
0028	Geological
0029	Computer
0030	Materials
0031	Instrumentation & Control
0032	Textile
0033	Electrical & Electronic
0034	Civil & Structural
0035	Municipal
0036	Electronic & Radio

- 0037 Biochemical 0038 Building Services 0039 Instrumentation & System 0040 Mining & Metallurgy 0041 Mechanics 0042 Nuclear 0043 Control Systems 0044 Water Resources 0045 Offshore 0046 Energy 0047 Manufacturing 0048 Aerospace 0049 Communication 0050 Construction 0051 Geotechnical 0052 Thermal 0053 Manufacturing System 0054 **Computer System** 0055 Food & Process 0056 **Computer & Communication** 0057 **Bio-Medical** 0058 CAD/CAM 0059 Telecommunication 0060 **Mechatronics** 0061 Mineral Resources 0062 Information System 0063 Polymer 0064 Biology & Agricultural 0065 Automotive 0066 Information Technology 0067 Biotechnology 0068 Mineral
- 0069 Microelectronic
- 0070 Highway & Transport
- 0099 Others

Attachment

Minutes of 45th Annual General Meeting

IEM (Sarawak Branch) Professional Interview Summary

Branch Committee Meeting Attendance Summary