

# TECHNICAL SEMINAR ON "LATEST DEVELOPMENT IN FIRE PROTECTION PRACTICES"

Time: 8.30am - 6.00pm

BEM APPROVED
(for Seminar)
CPD/PDP Hours: 10.5
Ref: IEM15/HQ/009/S

BEM APPROVED
(for Technical Dialogue)
CPD/PDP Hours: 3.5
Ref: IEM15/HQ/010/F

Date & Day: 23<sup>rd</sup> - 24<sup>th</sup> March 2015 (Monday-Tuesday)

#### Venue:

Ballroom II and III, Dorsett Grand Subang, Selangor

#### Organised by:

The Subcommittee on the Fire Advisory Board on Fire Protection Services, Standing Committee on Professional Practice (PPC), IEM

## **Supported by:**



**TRRGET AUDIENCE:**PRACTISING ENGINEERS, ARCHITECTS &
OTHER ALLIED PROFESSIONALS

#### HOT ISSUES TO BE DISCUSSED

- Why > 50% fire submissions are still rejected by BOMBA?
   Are you in the crossroads to decide on what standard to
- use in the fire design?
  What happens after you signed off the relevant form for CCC application?

#### NEW TOPICS

\* Commissioning \*

\* UBBL \* Requirements by JBPM

#### **ROADSHOW OBJECTIVES**

- HOW TO IMPROVE SUCCESS RATE IN SUBMISSION OF FIRE PLANS
- DISCUSSION ON SMOKE CONTROL CROSSROADS
   THE WAY FORWARD ON FIRE ENGINEERING PRACTIC

2<sup>ND</sup> FAB ROADSHOW (2nd Announcement)

# **TENTATIVE PROGRAMME**

(SUBJECT TO CHANGE\*):

TIME	TOPICS	MODERATOR
	TECHNICAL SEMINAR DAY 1 (23 <sup>rd</sup> March 2015)	
08.00 – 8.30 a.m.	Arrival of Presenter and Invited Guests	-
08.30 -09.00 a.m.	Registration 1 & Log-in	Secretariat
09.05 – 09.10 a.m.	Emcee and Moderator for Day 1	Ir. Chong Chew Fan
09.15 - 09.25 a.m.	Opening Remarks	Dato' Ir. Lim Chow Hock (IEM President)
09.30 – 09.40 a.m.	Keynote Address and Launching of the 2 <sup>nd</sup> FAB Roadshow and Latest and Revised UBBL*	DG of JBPM, Putrajaya
09.45 – 10.00 a.m.	Momento and Press Conference*	Ir. Thin Choon Chai
10.05 – 10.30 a.m.	Tea Break	-
10.35 – 11.00 a.m.	Session 1: Introduction - The Current and Future Practice of Fire Engineering in Malaysia	Ir. Thin Choon Chai
11.05 – 11.30 a.m.	Session 2: Latest Amendments and Revision on UBBL 1984	Ir. Wong See Foong
11.35 – 12.00 n.n.	Session 3: Guide to Fire Submission to Bomba	Ir. Wong See Foong
12.05 – 12.45 p.m.	Q&A	Ir. Chong Chew Fan
12.50 – 02.00 p.m.	Lunch Break	-
02.05 – 02.30 p.m.	Session 4: Certificate of Compliance and Completion (CCC) & OSC 3.0	Ir. Yim Hon Wa
02.35 – 03.00 p.m.	<u>Session 5:</u> Commissioning of Fire Pump Design and Testing	Ir. Cha Hoong Kum
03.05 – 03.15 p.m.	Tea Break	-
03.20 – 04.00 p.m.	Session 6: System Audit and Fire Systems Record Book	Ir. Loo Chee Kin
04.05 – 04.30 p.m.	<u>Session 7</u> : CFD Modelling Programme: Introduction on CFD & Selected Industrial Applications on Fire Topics	Ir. Dr Kannan M. Munisamy
04.35 – 05.00 p.m.	Session 8: Smoke Management - Jet Fan System and Commissioning	Ir. Soong Peng Soon
05.05 – 06.00 p.m.	Session 9: The Role of Insurance Company, Risk Surveyor o Property Safety	Ir. Gary Lim Eng Hwa

06.05 - 06.30	Session 10: State of the Art Modern Fire Fighting System	Ir. Dr Tan Chee Fai
p.m. TIME	TOPICS	MODERATOR
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06.35- 07.00 p.m.	Q&A and Conclusion	Ir. Chong Chew Fan
	NETWORKING DINNER	
07.05 – 9.00 p.m.	Session 11: Dinner Commence	FAB Committee Member
	TECHNICAL SEMINAR DAY 2 (24 <sup>th</sup> March 2015)	
08.30 – 09.00 a.m.	Registration 3 & Log-in	Secretariat
09.05 – 09.10 a.m.	Emcee and Moderator for Day 2	Ir. Chong Chew Fan
09.15 – 10.05 a.m.	<u>Session 12</u> : Current Trend Towards the use of Performance-based Designs for Smoke Ventilation and Available Safe Evacuation Time	Datuk Ir. Prof. Dr Ow Chee Sheng
10.10- 10.30 a.m.	Tea Break	-
10.35 – 11.00 a.m.	Session 13: Engineered Smoke Control for Shopping Malls and Atria	Ir. Tan Chew
11.05 – 11.35 a.m.	Sessions 14: Recommended Smoke Control and Smoke Management Systems in Buildings with Reference to Fire Authority's Requirements and Latest Revised UBBL	Ir. Daniel Lim Kim Chuan
11.40 – 11.45 p.m.	Q&A and Conclusion	FAB Committee Member
11.50 – 12.00 n.n.	Lunch Break	-
	OPEN FORUM & TECHNICAL DIALOGUE DAY 2 (24 <sup>th</sup> March 2015)	
01.05 – 02.30 p.m.	Registration 4 & Log-in	Secretariat
02.35 – 02.40 p.m.	Emcee and Moderator for Day 2	Ir. Chong Chew Fan
02.45 – 04.45 p.m.	Session 15: Open Forum & Technical Dialogue with IEM members and participants	JBPM Representatives* with FAB Committee Member
04.50 – 05.00 p.m.	Tea Break	
05.05 – 05.30 p.m.	Log-Out & Collection of CPD flyer	Secretariat
05.40 p.m.	End of Open Forum	Ir. Chong Chew Fan

Complimentary copy of UBBL

i	Closing for registration: 20 <sup>th</sup> March 2015
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TIME	TOPICS	MODERATOR
	TECHNICAL SEMINAR - DAY 1 (23rd March 2015)	
08.00 – 8.30 a.m.	Arrival of Presenter and Invited Guests	-
08.35 -09.00 a.m.	Registration 1 & Log-in	Secretariat
09.05 – 09.10 a.m.	Emcee and Moderator for Day 1	Ir. Chong Chew Fan
	Ir. Chong Chew Fan; holds a Bachelor of Engineering (Hons) in Electrical and Electronics from Universiti Kebangsaan Malaysia. He is a Professional Engineer registered with Board of Engineers, Malaysia (BEM), Qualified Person with Suruhanjaya Perkhidmatan Air Negara (SPAN), Corporate Member of The Institution of Engineers, Malaysia (IEM) and certified GBI Facilitator with Green Building Index Sán. Bhd. Ir. Chong has more than 10 years of working experience covering design, contract administration, project management and consultancy in electrical and instrumentation services. He has vast experience in infrastructure and building works including green building and sustainable designs, housing development, mixed development, office and commercial buildings, water and wastewater, highways and roads. Ir. Chong is also an active member in various Working Group on Green Technology and Energy Efficient and Conservations in SIRIM and CIDB. He is currently the Deputy Chairman of the Fire Advisory Board (FAB), IEM.	
09.15 - 09.25 a.m.	Opening Remarks	Dato' Ir. Lim Chow Hock, IEM President
09.30 - 09.40 a.m.	Keynote Address	YAS Datuk Wira
	<ul> <li>Launching of the 2<sup>nd</sup> FAB Roadshow</li> <li>Introduction to the UBBL</li> </ul>	Hj. Wan Mohd. Nor bin Hj. Ibrahim, DG of JBPM, Putrajaya
09.45 – 10.00 a.m.	❖ Momento to DG by IEM President	Ir. Thin Choon
	❖ Visit to the Exhibition booth	Chai
	❖ Presss Conference*	
10.05 – 10.30 a.m.	Tea Break	
10.35 – 11.00 a.m.	Introduction Session 1: The Current and Future Practice of Fire Engineering in Malaysia	Ir. Thin Choon Chai
	Ir. Thin Choon Chai; graduated from Trinity College, Dublin with Bachelor of Arts, Bachelor of Engineering Science (Mechanical, in 1974). He is a Corporate Member of The Institution of Engineers, Malaysia (IEM), Professional Engineer (P.Eng.) registered with the Board of Engineers, Malaysia (BEM), Member, Institution of Fire Engineers (IFE) (Malaysia Branch), Accredited engineer with Architect Centre and Pertubuhan Akitek Malaysia (PAM) for fire safety	

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TIME	TOPICS	MODERATOR
	TECHNICAL SEMINAR - DAY 1 (23rd March 2015)	
1.05 – 11.30 a.m.	Session 2: Latest Amendments and Revision on UBBL 1984	Ir. Wong See Foong
	Ir. Wong See Foong; graduated with a degree in Mechanical Engineering from the University of Malaya in 1974 and has been in the Engineering consultancy practice over the past 38 years. He is a professional engineer registered with the Board of Engineers, Malaysia and is presently a partner of MEP Engineering Sdn Bhd, a mechanical and electrical engineering consultancy practice. Ir. Wong is presently the President of the Association of Consulting Engineers, Malaysia (ACEM) and represents the association on issues related to building regulations, fire safety and professional practice. He is currently the Advisor of the Fire Advisory Board (FAB), IEM.	
	SYNOPSIS: This presentation is to introduce the amendments to the Uniform Building By-Laws that has been enacted in the state of Selangor. A similar version has been sent by the Ministry of Housing and Local Government to all the states and local authorities for adoption with amendments to suit each local authority's requirements where necessary. The seminar will focus on the engineering aspects of the bylaws under Part VII to Part VIII.	
1.35 – 12.00 n.n.	Session 3: Guide to Fire Submission to Bomba	Ir. Wong See Foong
	SYNOPSIS:  This presentation is to explain the requirements for submission to Jabatan Bomba, the information and documents to be included and details of the technical requirements to be complied with. The scope will include both the active and passive aspects of the submission. The common reasons for rejection will also be presented so that submitting engineers can avoid the mistakes and resubmissions minimized.	
2.05 – 12.45 p.m.	Q&A	Ir. Chong Chew Fan
2.50 – 02.00 p.m.	Lunch Break	-
2.05 – 02.30 p.m.	Session 4: Certificate of Completion and Compliance (CCC) & One Stop Centre (OSC) 3.0	Ir. Yim Hon Wa
	Ir. Yim Hon Wa P.Eng, FIEM, MACEM, MASHRAE, ASEAN Eng., CEng, FIMechE, is the founder of Perunding IBS Sdn. Bhd. specialising in air-conditioning & ventilation, indoor air quality, fire protection, hot & cold water plumbing since 1991. He has more than 25 years of experience in the building industries. Ir. Vim has been the Past President of ASHRAE – Malaysian Chapter (1996-1997), He is an active member in establishing Region XIII of ASHRAE and Regional Vice Chair for Research Promotion. Ir. Yim is a registered Professional Engineer. A Fellow member and Vice President of The Institution of Engineers, Malaysia (IEM), he has been Council Member of IEM for term of 1996-1999 and 2000-2003 and Executive Council Member since 1996. He is actively involved in IEM activities and served in various Standing and Sub-Committees inclusive of Standing Committee of Activities, Professional Practice, Admission and Qualification, Examinations & Training and Sub-Committee of Fere, Building By-Low, Specialist Engineer,	

Accreditation Board, Fellow, Building and Maintenance, Accreditation Board, Fire Advisory Board.						
TIME	TOPICS	MODERATOR				
	TECHNICAL SEMINAR - DAY 1 (23rd March 2015)					
	Since 2008, He is the Chairman of the Executive Board of IEM Training Centre Sdn. Bhd. and Director of IEM Academy Sdn. Bhd. He is a Chartered Engineer with the Engineering Council (UK) and a Fellow Member of Institution of Mechanical Engineers, UK.Ir. Yim is actively involved in drafting of the Malaysian Standard such as the standard code for wet & dry firefighting system, thermal insulation and fire protection equipment and installation. He is also the Industry Standards Committee on Mechanical Engineering on Malaysia Standards and member of Nasional Steering Committee of Industrial Building System since 1998. Currently, Ir. Yim served in the BEM—Professional Practice Committee (PPC)—Sub Committee on Certificate Completion and Compliance (CCC). He also served in the OSC 3.0 committee with MPC.					
	SYNOPSIS:  The Seminar on OSC 3.0 dealing with improvement of the building permits application process over OSC 2.0 and the speaker will elaborate these process improvements and the engineer's role; its duties and responsibilities in the issuance of Certificate of Compilance and Completion (CCC). The speaker will also cover the relevant Acts governing the CCC which replaces Certificate of Fitness Occupation CFO). He will explain how and when CCC can be issued. There are twenty one forms to be filled (61 to G21). Practical examples of common errors in the form filling will be demonstrated and explained. Active interaction from the floor during question time will be expected.					
02.35 – 03.00 p.m.	Session 5: Commissioning of Fire Pump Design and Testing	Ir. Cha Hoong Kum				
	Ir. Cha Hoong Kum; graduated from the University of Westminster of UK with a Bachelor of Engineering (Mechanical) Second Class Honours (I <sup>12</sup> Division) in 1991. Ir. Cha then obtained his Master of Business Administration from Leicester University, UK in 1992. Upon his return he joined Filters Engineering Services San Bhd and worked his way to be the General Manager. Helft and joined Mac-Tech Engineering San Bhd as the General Manager. During this period he was involved in the design, tender and project management in Fire Engineering projects and is now well verse with the various NFPA and MS standards on fire. The fire pumps selection, testing and commissioning was his main focus to ensure the fire protection systems performance and functionality. Ir. Cha started his own company Versus Solutions Sch Bhd in year 2011 and offers various Specialist services, like the testing and commissioning of Fire pumps, the design of fire protection systems and supply of various fireflighting equipment.					
	SYNOPSIS: Fire Pump is the heart of the active fire protection systems; it delivers the water demand during the fire incident. This topic will deliver the various fire Protection system pump selection, pump curve characteristics in accordance with MS 1910 for sprinkler system and the latest draft MS Fire Pump Standard for others system, such as Wet Riser Pump, and Hydrant pump. This topic also includes the fire pump performance test at site, test results analysis, and common problems arising, and suggested solutions for the problems being identified.					
03.05 – 03.15 p.m.	Tea Break					

			TIME	TOPICS	MODERATOR	TIME	TOPICS	MODERATOR
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				TECHNICAL SEMINAR - DAY 1 (23rd March 2015)			TECHNICAL SEMINAR - DAY 1 (23rd March 2015)	
	TECHNICAL SEMINAR - DAY 1 (23rd March 2015)			SYNOPSIS:		05.05 – 06.00 p.m.	Session 9: The Role of Insurance Risk Engineer on Property Safety	Ir. Gary Lim Eng
	Session 6: System Audit and Fire Systems Record Book	Ir. Loo Chee Kin		"In the early 1970's, the CFD approach was used in aircraft industry.  One of the early successes was the experimental NASA aircraft called		US.US – U6.UU p.m.		Hwa
03.20 – 04.00 p.m.	<u>-casans</u> .	II. LOO CHEE KIII	·	HiMAT (Highly Maneuverable Aircraft Technology), which is a test of designing high speed fighter planes for next generations. In order to				
	Ir. Loo Chee Kin, is a Senior Consultant with Global Risk Consultants (GRC) and before that he was a Senior Engineering Specialist with FM Global. He has more than 20 years engineering experience, from design to field work, since graduating from UMIST, Manchester, UK with a B.Eng. in Electromechanical Systems Engineering. He is a P.Eng in Mechanical and Electrical Engineering and a Member of IEM. He is a Member of IMechE and IEE, and registered C.Eng. He is an active committee member in the IEM's Mechanical			obtain useful data, the wind tunnel had to be redesigned for the testing of the wings near the speed of sound. The cost of redesigning would be hundred fifty thousand US Dollars and the project will be delayed. Whereas, the wings was redesigned with the help of computers for only six thousands US Dollars." (Anderson, John D., JR, 1995). That was one of the first "click" to Computational Fluid Dynamics (CFD) area or rather discovery of a new ocean. Since then CFD has evolved tremendously in almost all areas where fluid and heat transfer is a concern. CFD is a computational art of solving control volumes of any fluid flow domain defined.			Ir. Gary Lim, a Fellow of IEM is a Mechanical Engineer graduated from University of Canterbury, New Zealand in 1978. He worked in the manufacturing sector for over 20 years then joined the insurance industry as the Risk Engineer and retired as the Risk Manager of the MNC insurance company. Since his retirement, he has been conducting courses on concepts and the design of Fire Engineering and Plumbing Engineering, SWV systems at all the IEM major branches in Malaysia. Ir. Gary shares his knowledge of insurance company underwriting principles to enable Engineers appreciates the role of Risk Engineers of insurer hence Engineers get a better perspective of the	
	Engineering Technical Division and the Fire Advisory Board as well as various Sub-Committees and Boards. His areas of risk evaluation are both for existing sites as well as engineering services for new projects of clients.		04.35 – 05.00 p.m.	Session 8: Smoke Management - Jet Fan System	Ir. Soong Peng Soon		relationship between insurance and fire protection systems. This is one area where many engineers failed to appreciate the role of risk engineers.  SYNOPSIS:	
	SYNOPSIS:  Once a building is built and operational, the general perception is that everything is well and in place. Contrary to that, every system needs up keeping and maintenance. A fire protection system does not take care of itself. These systems are seldom appreciated until it is needed in an emergency or disaster. And when these essential systems do not work, it would not only result in property damage but possible injury and loss of life. Fire system audit is important to ensure that such systems are always ready as these are first line of fire protection, and probably the last in some instances. A proper audit is only possible if proper inspection, maintenance and testing records are kept. This session will touch on the difference before a record book and just contractor maintenance records; the latter being the norm in most instances.			Ir. Soong Peng Soon; graduated from the University of Malaya in 1984 and has more than 30 years in the design, manufacturing, construction and testing of ventition, HVAC system & components and general M&E services. He is highly regarded for his wide hands-on experience from design to start-up of many prestigious projects. He is one of the well known Commissioning Specialist for new building systems and Building Auditor for evaluation of existing building systems.  He is the only ASHRAE certified Commissioning Process Management Professional (CPMP) in this region. As one of the IEM Representative to JBPM work group in establishing the local guideline for jet fan system, his knowledge in jet fan system was accumulated since year 2005 with			When a property is damaged by fire, the insurer pays the claims and this makes the insurer one of the major stakeholder of the property. Insurance company is a business entity like all other businesses profit is critical to continue its operations in a competitive business environment. In this respect fire protection systems in buildings are important considerations when the underwriter of the insurer decides to accept/decline/co-share the risk with other insurers. Insurance industry employs Risk Surveyor and they gather information in a prescribed format for the Underwriter to evaluate the risk. One of the key areas which the Risk Surveyor would visit is the fire protection systems installed in the building. Engineering consultants work is evaluated and shortcomings if any could be forwarded to the Property Owner as a recommendation. Engineering consultants should be mindful of these shortcomings as this could lead to Professional	
04.05 – 04.30 p.m.	Session 7: CFD Modelling Programme: Introduction on CFD & Selected Industrial Applications on Fire Topics	Ir. Dr Kannan M. Munisamy		his wide exposure while assisting major Malaysian contractors in successful negotiation of mega projects in Middle East, where at there we wtinessed some of world first large scale application of jet fans. His research in this field was started even before inclusion of jet fan system in standard BS7346-7. Subsequently he has witnessed the commissining and testing of many jet fan projects locally.			negligence. Whilst it is not common that Property Owners take such drastic steps but this should not be assumed it would not happen in future. In the event of a large claim, the insurer can exercise the right of subrogation from the owner to sue the 3 <sup>rd</sup> parties who cause the losses. Professional negligence of not designing the protection system in accordance to Malaysian Standards can deemed as negligence!	
	Ir. Dr. Kannan M. Munisamy; graduated from UNITEN in 2000 with Bachelor of Mechanical Engineering (Hans). Then joined UNITEN as tutor. Upon completion of training with TNB as trainee engineer he pursued his Master Degree in Cranfield University, Millton Keynes, UK. He was conferred with Master of Science in (Aeradynamics) specializing in Computational Fluid Dynamics and currently serving as senior lecturer in UNITEN. He has completed PhD in Mechanical Engineering specializing in CFD and experimental on automotive brake application from Universit Tenaga Nasional in year 2012. With fundamental knowledge of CFD, various industrial consultancy projects were lead and contributed as team member. The consultancy projects including hydro power plant water flow problems, thermal power plant heat transfer related solutions, and air conditioning industry flow cases, high efficiency axial fan development, fire simulations and green building air change effectiveness calculations. Besides that, his expertise is in the area of automotive brake disk design and flow analysis for commercial and race car applications.  He has lead couple of Ministry of Science and Innovation (MOSTI) funded projects on the development of brake disk experimental rig in lab located at UNITEN.  He is also a member of Center of Fluids Dynamics (CFD) at UNITEN, IEM Council Member, Fire Advisory board member (IEM), SIRIM work group member for a few sub-standards in MS standard, IEM, IMechE, and Engineers Australia member. He has published in international and local journals and conferences. He is also reviewer for IMechE journals.  He has vost experience operating CFD ACE+, GRIDGEN and FLUENT, commercial CFD software. Special interest is on rotating type of flow simulations. His industrial CFD and themero-fluid engineering experiences are accredited by Board of Engineers Malaysia and			SYNOPSIS: The use of jet fan system for car park ventilation has been widespread in European & Middle east countries since year 2005. Locally, designers have considered it as a good alternative to conventional car park exhaust system since year 2006 due to its many advantages. As application of jet fan system required new skills and knowledge in design / installation and thus, the British Standards Institution (BSI), the Singapore Civil Defence Force (SCDF) and Jabatan Bomba & Penyelamat Malaysia (JBPM) have separately drafted guideline for application of jet fan system in year 2006, 2008 and 2010 respectively. Initially, as most of the major manufacturers and system designers were originated from European countries, the BSI guideline, BS-7346-7:2006 was then considered to be the most comprehensive literature. It was published in October 2006 which covered not only jet fans system but also the overall car park ventilation system including conventional ducting system and the more advance smoke & heat exhaust system (SHEVS).  It was revised in August 2013 that has included the many new developments of jet fan system of the past many years. This session will describe the background and development of jet fan system with reference to the various world standards and relevant comparison to Malaysian practice and authority guideline. Some of the new development of BS 7346-4:2013 will be highlighted as more robust prescription to the design philosophy of jet fan system and overall car park ventilation system. The speaker will present the pros and cons of jet fan system in real practical situation, based on his sextended handson experience in commissioning and audit of physical systems.		06.05 – 06.30 p.m.	Session 10: State of the Art Modern Fire Fighting System  Ir. Dr Tan Chee Fai is a practising mechanical consultant, researcher and academician. He is graduated with Bachelor of Engineering (Mechanical) and M.Sc. (Manufacturing Systems Engineering) from Universiti Putra Malaysia (UPM), as well as PhD in Industrial Design Engineering from Eindhoven University of Technology (TU/e), the Netherlands. He is a registered Professional Engineer (Mechanical) with Board of Engineers, Malaysia and E-fellow of The Institution of Engineers, Malaysia (IEM). He is presently a partner of Perunding IBS Sdn Bhd. His field of expertise covers the aspects of mechanical engineering, industrial design engineering, artificial intelligence, transportation engineering, industrial automation and human-technology interaction design. He has vast experience in mechanical and active system design.	Ir. Dr Tan Chee Fai

TIME	TOPICS	MODERATOR	TIME	TOPICS	MODERATOR	TIME	TOPICS	MODERATOR
	TECHNICAL SEMINAR - DAY 2 (24 <sup>th</sup> March 2015)			TECHNICAL SEMINAR - DAY 2 (24 <sup>th</sup> March 2015)			TECHNICAL SEMINAR - DAY 2 (24 <sup>th</sup> March 2015)	
	SYNOPSIS: Fire protection systems are desirable in all structures where fires can occur and where such fires are not wanted - which is to say virtually all of them. Past the obvious need for a fire protection system is the need to choose the proper type of system, the answer to which depends on the design of structure being protected, the nature of the materials comprising the structure and of those found within, its surroundings, and all applicable laws, regulations, codes, and policles. As fire is quick to spread and becomes increasingly complicated to handle after it does, the prevention of that spread is a vital key point in many approaches to fire protection. This forces the myriad of existing methods and technologies to be used as component parts of a unified comprehensive system rather than independently installed units. That, in turn, requires the individual elements of fire protection systems to be predictable in their design, manufacture, inspection procedures, functioning, and usage, so that they may all be intertwined in a reliable way. This presentation is to describe the state of the art fire-fighting system for building.		10.10– 10.30 a.m. 10.35 – 11.00 a.m.	SYNOPSIS: The topic shall focus on the current trend towards the use of Performance based designs for Smoke Ventilation and Available Safe Evacuation Time as opposed to prescriptive requirement. Both Zone and Field Modelling shall be discussed, the limitations imposed by each method and its suitability to be use under special circumstances. Of particular interest are the various inherent assumptions employed with respect to field models and hence their limitations when used.  Tea Break  Session 12: Engineered Smoke Control for Shopping Malls and Atria	Ir. Tan Chew		Ir. Daniel Lim Kim Chuan; Principal – Mechanical Engineering Consultant, AD Consultants (M) Sdn Bhd. Ir. Daniel Lim Kim Chuan has a total of 24 years working experience in prominent positions in Consultant Firms, Overseas Contracting Operations and Public Listed Contracting Companies. His exposure revolves around companies involved in Mechanical, Electrical and Intelligence Systems for various types of Buildings. His experiences include design, implementation and contracting for Mechanical and Electrical Building Services of various types of buildings from specialised buildings to high irse buildings, both locally and overseas. Ir. Daniel Lim Kim Chuan has a Bachelor of Engineering in Mechanical from University of Manchester Institute of Science and Technology (UMIST), UK, and a Diploma in Building Services from Nape Ann Polytechnic, Singapore. He is a	
06.35 – 07.00 p.m.		Ir. Chong Chew Fan		Ir. Tan Chew; Principal – Fire Safety Engineering Consultant, GP-Team Design Sdn Bhd. Ir. Tan Chew has more than twenty year experiences in the Fire Safety Engineering design on smoke control system for factories, industrial buildings, hypermarkets,			Member of The Institution of Engineers, Malaysia (IEM) and a Registered Professional Engineer in Board of Engineering Malaysia (BEM). He is also a Member of the Association of Consulting Engineers Malaysia (ACEM) and a Committee Member of the IEM and Fire Advisory Board, IEM. He is currently representing IEM in the SIRIM Technical Committee Working Group on Smoke Duct, Smoke Control and Pressurization, and SIRIM Working Group on Fixed Aerosol Fire	
	NETWORKING DINNER			shopping complexes, atrium, power plants, tunnel and etc. He worked very closely with CSIRO, Australia on Performance Based Designs required CFD simulations for smoke control system in car parks, power plants, shopping complexes, hypermarkets, etc. Ir Tan Chew graduated			Extinguishing System.  SYNOPSIS:	
07.05 – 07.10 p.m.	Introduction	Ir. Thin Choon Chai		from University of London and City University, London for his Bachelor of Science in Mechanical Engineering during 1979 and Master of Science in Air Conditioning and Refrigeration the following year. After working in the air conditioning and ventilation industry for about 3 years, he pursued his MBA in London City University in 1984. He is a			Smoke Management System is both a huge and controversial topic. It has been widely discussed and today, there are many studies, as well as successful application of different methodology, all with the primary if not sole aim to reduce smoke during a fire to facilitate escape, reduce probability for re-ignition as well as to improve safety for fire-	
07.15 – 9.00 p.m.	Session 12: Networking Dinner Commence	FAB Committee Member		years, he pursued his Man Hi rollow Ity Olivierskiy hi 1994. He is a Member of The Institution of Engineers, Malaysia (IEM) and a Registered Professional Engineer in Board of Engineering Malaysia (BEM). He is also a member of Society of Fire Protection Engineers, USA (ISFE), a Member of The Institution Of Fire Engineers, UK (IFE)			fighters who are tasked with the unenviable position to enter a burning building. However, Smoke Management System has gone to a level of complexity that the basic intentions and consideration have many times been forgotten, if not overlooked. The objective of this Seminar is to identify the origination of the principles behind smoke control	
08.30 – 09.00 a.m.	Registration 2 & Log-in	Secretariat		Malaysian branch and a member of International Association for Fire Safety Science (IAFSS). Ir Tan Chew is actively involved in the SIRIM Technical Committee for Smoke Control (TCS) and SIRIM Technical Committee in Passive Fire Protection (TCP) including chairing of the			management, which, are the primary regulation and guidelines, as clearly depicted in our UBBL and UBBL referred regulatory documents. It will also identify basic principles such as understanding fire rating of ducts as well as correct penetrations treatments.	
09.05 – 09.10 a.m.	Emcee and Moderator for Day 2	Ir. Chong Chew Fan		working group in the TCS.  SYNOPSIS:		11.40 – 11.45 a.m.		Ir. Chong Chew Fan
09.15 – 10.05 a.m.	Session 11: Overview on Performance-Based Fire Protection Analysis and Design	Datuk Ir. Prof. Dr Ow Chee Sheng		Smoke is a major killer in almost all the fire incidents. A good smoke management design is utmost important for the life safety of the occupants during evacuation under the fire scenario. There are various means of designing a smoke Management System which is also commonly termed as smoke control, smoke spill, smoke exhaust,			<ul> <li>❖ Conclusion</li> <li>❖ End of 2-Day Seminar</li> </ul>	Secretariat
	Datuk Ir. Prof. Dr Ow Chee Sheng has been involved with IEM's volunteer work since 1984 holding various posts from Council member (85-88) to Hon Treasurer (88-90), Hon Secretary (90-92), Vice			smoke venting system, etc. Different methods of Smoke Management System have their own principles and applications and hence may achieve different objectives. The objectives should 17 be defined before proceeding with type of Smoke Management method and application. A public shopping complex or private office for example may have different designs in the applications of the Smoke Management System due to their different nature in the operations.		11.50 – 12.00 n.n.	<ul> <li>Log-Out</li> <li>Collection of CPD Certificate of Attendance</li> </ul>	Secretaria
	President (93-96) and President of The Institution of Engineers, Malaysia (05-07). At the same time he has been an active council member of the Malaysian Scientific Association from 1983 till 1997. A member of Malaysian Inventors and Designers Society (MINDS), he assisted in the formulation for the evaluation criteria for Judging of			The Malaysia By-Law emphasizes on the occupants' life safety even in the Smoke Management System. Hence, in complying with the By-Law, the Smoke Management System should focus on the life safety aspect as its main objective. Other objectives of smoke management system include fire fighters life safety, goods protection, and minimising of business interruptions, etc.		12.05 – 01.00 p.m.	Lunch Break	
	Innovations and Inventions and was call to be member of the panel of judges for the past 15 years since 1990 judging winners for MINDEX, INNOTEX & ITEX., albeit happily retired from this duty as of 2009. As a member of American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE), he served as Chairman of the Malaysian Chapter in 1990 and has since been active holding the present post of Director of Region's Council of Region XIII of the Asia-Pacific region of ASHRAE. A recent member of the Academy of Sciences Malaysia, he has also been active in developing fire and smoke control standards for SIRIM and the country. He has served and is currently with the Mechanical Engineering Faculty of Universiti Teknologi MARA as a Contract Professor.		11.05 – 11.35 a.m.	Sessions 13: Recommended Smoke Control and Smoke Management Systems in Buildings with Reference to Fire Authority's Requirements and Latest Revised UBBL.	Ir. Daniel Lim Kim Chuan			

as a Contract Professor.

	OPEN FORUM & TECHNICAL DIALOGUE	
01.05 - 02.30 p.m.	Registration 4 & Log-in	Secretariat
02.35 - 02.40 p.m.	Emcee and Moderator for Day 2	Ir. Chong Chew Fan
02.45 - 04.45 p.m.	Session 15: Open Forum & Technical Dialogue with IEM members and participants	JBPM & FAB Committee Member
04.50 - 05.00 p.m.	Tea Break	-
05.05 - 05.30 p.m.	End of Open Forum & Technical Dialogue Log-Out & Collection of CPD flyer	Secretariat

## **INFORMATION:**

Registration fee for full paid event will covers one set of the event notes, a copy of the UBBL, refreshments, dinner and open forum. All fees must be fully paid before commencement of the event, otherwise participant will not be allowed to enter the Lecture Hall. Reservation/Booking by online, fax or email of intending participants are acceptable with payment being forwarded before the closing date (20<sup>th</sup> March 2015). If a place is reserved and the intended participants failed to attend the event on the date of the event the fee is to be settled in full within 30 days from the event conducted. Invoice will be issue for the purpose.

Completed registration form accompanied by cheque/PO/MO are to be made payable to "The Institution of Engineers, Malaysia Account" should reach the IEM Secretariat not later than 20<sup>th</sup> March 2015.

The fee paid is non-refundable. However, substitution of participants(s) will be permitted with approval by IEM. In view of the limited places available, intending participants are advised to send their registration as early as possible so as to avoid disappointment.

The Organising Committee reserves the right to alter or change the programme due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes.

If you require further details or clarifications kindly contract the IEM Secretariat at:

The Institution of Engineers, Malaysia Lot 60/62, Jalan 52/4, PO Box 223 (Jalan Sultan) 46720 Petaling Jaya, Selangor Darul Ehsan

Tel No: 03-7968 4001/02 Fax: 03-7957 7678 Email Address: sec@iem.org.my Website: www.myiem.org.my

#### Disclaimer:

At times, due to unforeseen circumstances, the scheduled events may have to be rescheduled for which IEM Secretariat would normally inform the registered attendees / participants accordingly. In order to avoid causing any inconvenience to members due to any last minute changes, we strongly recommend that members to register with IEM for the scheduled events. The Organiser has the right to change the programme, presenters and other publications materials due to unforeseen circumstances.

# Closing for registration: 20<sup>th</sup> March 2015

CONTACT D	PETAILS	
Name:		
Membership No & Grade:		
Contact Number:		
Email Address:	• •	
Signature:	Date:	

Ir. Thin Choon Chai, Chairman, Sub Committee on Fire Advisory Board of Standing Committee on Professional Practice c/o The Institution of Engineers, Malaysia P O Box 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor

Email: nurul@iem.org.mv Fax: 03-7957 7678



# REGISTRATION FORM

Note: For online registration, kindly login IEM website at www.myiem.org.my

Closing for registration: 20<sup>th</sup> March 2015

TECHNICAL SEMINAR ON

LATEST DEVELOPMENT IN FIRE PROTECTION PRACTICES

Time: 8.30am - 10.00pm

Note: Fee includes the Networking Dinner and Open Forum

IEM Student (Below 30 years) - RM 500 (Online: RM 400)

IEM Graduate Member - RM 800 (Online: RM 700)

IEM Member - RM 1,000 (Online RM 900)

Invited Guest - RM 1,000 (Online RM 900)

Name (a) M/alain Crade

Non-IEM Member - RM 1,500 (Online RM 1,400)

Name(s)	No No	Grade	rees
		TOTAL	

Ir. Thin Choon Chai, Chairman, Sub Committee on Fire Advisory F

Email: nurul@iem.org.mv

Chairman, Sub Committee on Fire Advisory Board of Standing Committee on Professional Practice c/o The Institution of Engineers, Malaysia P O Box 223 (Ialan Sultan), 46720 Petaling Jaya, Selangor



# REGISTRATION FORM

Fax: 03-7957 7678

(Note: For online registration, kindly login IEM website at www.myiem.org.my)

Closing for registration: 20<sup>th</sup> March 2015

# OPEN FORUM & TECHNICAL DIALOGUE

Time: 2.30pm - 6.00pm

Note: Fee for walk-in participants or whom wish to attend only the Open Forum & Technical Dialogue (not include the Seminar and Dinner)

IEM Member / Invited Guest - RM 100 (Online RM 50) Non-IEM Member - RM 150 (Online RM 100)

M/ship No	Grade	Fees
	TOTAL	
	M/ship No	

#### QUESTIONS

FOR OPEN FORUM & TECHNICAL DIALOGUE Time: 2.30pm - 6.00pm

Question No. 1:	
Question No. 2:	
Question No. 3:	