



BEM APPROVED CPD: 15.0
REF NO: IEM25/HQ/501/C

INTRODUCTION

The 2nd Malaysian Geotechnical Conference 2025 (MGC) is organised by The Institution of Engineers Malaysia Geotechnical Engineering Technical Division, in collaboration with Malaysia Geotechnical Society (MGS). The 1st MGC was held in year 2004. The objectives of the seminar are to highlight various aspects of geotechnical engineering challenges faced by professionals, keeping abreast in latest technology as well as providing a networking platform. The conference will incorporate a session of memorial lectures for late Ir Dr Ooi Tek Aun and late Ir Dr Ting Wen Hui to commemorate their contribution to the engineering society. Both were part of the 1st MGC 2004 as organising committee and keynote lecturer. This conference also takes the opportunity to combine with IEM-CIE-HKIE Tripartite Seminar as 2025 is the year to be hosted by Malaysia IEM. The IEM-CIE-HKIE Tripartite Seminar is an annual seminar aimed to create a venue for interactive discussions and sharing of experience in multi-discipline engineering among The Institution of Engineers, Malaysia (IEM), Chinese Institute of Engineers (CIE, Taiwan) and Hong Kong Institution of Engineers (HKIE). The Seminar is hosted in turn by each of the aforementioned three professional institutions.

PROGRAMME

Malaysian Geotechnical Conference 2025

“Innovative and Practical Geotechnical Solutions”

We are pleased to announce that Malaysian Geotechnical Conference (MGC) 2025 will be held on the 3rd and 4th of December 2025. This prestigious event will bring together leading experts, researchers, and practitioners in the field of geotechnical engineering to share their latest research findings, innovative practices, and future trends.

Conference Themes: We invite submissions on a wide range of topics, including but not limited to:

- Soil Mechanics and Foundation Engineering
- Slope Stability and Landslides
- Ground Improvement Techniques
- Geosynthetics applications in Geotechnical Engineering
- Deep Excavations
- Soil Investigation and Testing
- Environmental Geotechnics
- Pavement Foundation
- Geotechnical Aspects of Sustainable Development
- Case Histories and Practical Applications on Megaprojects

Submission Guidelines:

- Abstracts should be no more than 300 words and not exceeding two (2) pages.
- Full papers must be written in English and submitted in Microsoft Word and PDF file format.
- All submissions must be original and not previously published or under consideration for publication elsewhere.
- Papers will be peer-reviewed and accepted papers will be published in the conference proceedings.

Outstanding Paper Award: An Outstanding Paper Award will be presented to the best paper submitted to the conference. The award will recognize exceptional research, innovation, and contribution to the field of geotechnical engineering. The winning paper will be selected by a panel of experts and announced during the conference. The selected paper will also be considered to be published under an International indexed publications, subject to approval by the panel of experts.

PROGRAMME

3rd December 2025 (Wednesday)

Time	Programme MGC 2025 Ballroom 1, Level 2, Wyndham Grand Bangsar	
08:00am – 08:30am	Registration & Light Refreshment	
08:30am – 08:40am	Welcome Speech By Organising Chairman	
08:40am – 08:50am	Opening Address by the IEM President, Ir. Prof. Dr. Jeffrey Chiang Choong Luin	
08:50am – 09:40am	Keynote Speaker 1 - Dr Vivi Anggraini Title: Data-Driven Analysis of Rainfall-Soil Moisture Interaction for Urban Slopes: Linking Environmental Geotechnics with Sustainable Development	
09:40am – 10:30am	Keynote Speaker 2 - Mr. Chris Lawson Title: Geosynthetic Reinforced Fills Used in Marine Engineering Applications	
10:30am – 10:50am	Morning Tea Break	
10:50am – 11:40am	Keynote Speaker 3 - Prof Chu Jian Title: New Type of Foundation for Container Yards in Singapore	
11:40am – 12:30pm	Keynote Speaker 4 - Ir. Dr. Ooi Lean Hock Title: Some Case Histories on Underground Excavation in Sedimentary Formations	
12:30pm – 2:00pm	Lunch	
Time	Programme MGC 2025 Ballroom 1, Level 2, Wyndham Grand Bangsar	Programme Tripartite Seminar Ballroom 2, Level 2, Wyndham Grand Bangsar
	MGC Paper Presentation Session 1 Chair: Ir. Frankie Cheah Peng Leong Co-Chair: Ir. Dr. Ng Soon Min	Tripartite Seminar
2:00pm – 2:20pm	Anisotropy and relict joint control on slope stability in tropical granitic residual soils Mohd Ashraf Mohamad Ismail	Welcome Speech, Token Presentation & Photography Session
		Tripartite Seminar Session 1 Chair: Ir. Tan Teng Hau (IEM)
2:20pm – 2:40pm	Addressing landslide risks in Penang: Lessons from the past, solutions for the future Kathireen Kalaivani Rajamanickam	Recent advancement in pile load testing with WiNA-platform based automated Maintain Load Test (aMLT) Real-Time Monitoring System Lee Sieng Kai
2:40pm – 3:00pm	Cut slope design and remediation in low-strength weathered sedimentary formation: Case study of KM426.11 Southbound, North-South Expressway Jimjali Ahmed	Application of Deep Excavation Design Platform in MRT Design: Monitoring Data and Predictive Analysis Chang Cheng-Hsien
3:00pm – 3:20pm	Twenty years' experience in flexible debris flow protection Naziha Nordin	Machine Learning-Driven Adaptive Updating of Geotechnical Properties using Monitoring Data Andy Leung
3:20pm – 3:40pm	Discontinuity Controlled Analysis in Rock Slope Using Discrete Fracture Network (DFN) – A Class B Prediction Ong Yin Hoe	Study on Tunneling-Induced Settlement of Twin Tunnel Construction in Mixed Ground Hsu Kai-Shiang
3:40pm – 4:10pm	Q&A + Presentation of Appreciation Certificate	Panel Discussion and Q&A + Presentation of Appreciation Certificate
4:10pm – 4:30pm	Afternoon Tea Break	

PROGRAMME

3rd December 2025 (Wednesday)

Time	Programme MGC 2025 Ballroom 1, Level 2, Wyndham Grand Bangsar	Programme Tripartite Seminar Ballroom 2, Level 2, Wyndham Grand Bangsar
	MGC Paper Presentation Session 2 Chair: Ir. Mak Wai Kin Co-Chair: Ir. Raftah Mahfar	Tripartite Seminar Session 2 Chair: Mr. Lai Chien Ming (CIE)
4:30pm - 4:50pm	Bridge at Grade on peatland: A holistic and innovative solution for sustainable infrastructure <i>Chin Yaw Ming</i>	Feasibility and Advantages of Large Diameter Precast High-Strength Spun Concrete Piles in Land Projects Calvin Ng
4:50pm - 5:10pm	Soil Improvement by Deep Soil Mixing Columns for a 7-Storey Building in Manila, Philippines <i>Philipp Schober</i>	Geotechnical Real-Time Monitoring Automation System and Predictive Analysis - The Study of the Airport Rapid Transit Project Passing Through the Terminal 3 of Taoyuan International Airport <i>Hsu Shu Ming</i>
5:10pm - 5:30pm	Integrating cognitive and nature-based solutions for sustainable coastal and flood protection in Singapore and Malaysia <i>Lee Choong Hong.</i>	Full-scale Pile Loading Tests using Osterberg Cell in Meta-sedimentary Rock <i>Andrew Wong</i>
5:30pm - 5:50pm	Satellite InSAR for geotechnical monitoring: precise detection of ground instabilities <i>Alastair Belson</i>	Panel Discussion and Q&A + Presentation of Appreciation Certificate
5:50pm - 6:15pm	Q&A + Presentation of Appreciation Certificate	End of Tripartite Day 1
6:15pm	End of Day 1	

PROGRAMME

4th December 2025 (Thursday)

Time	Programme MGC 2025 Ballroom 1, Level 2, Wyndham Grand Bangsar	Programme Tripartite Seminar Ballroom 2, Level 2, Wyndham Grand Bangsar
	MGC Paper Presentation Session 3 Chair: Ir. Som Pong A/L Pichan Co-Chair: Ir. Colin Lim Boon Lin	Tripartite Seminar Session 3 Chair: Ir. Jack Yiu (HKIE)
08:30am – 08:50am	Temperature Effects on Strut or Prop Loads in Deep Excavation <i>Kwang Kim Lup</i>	<i>Advancing Pile Load Testing: Assessment of Pile Lock-In Stress, Creep, Residual Settlement, and Pile Shortening Using Distributed Fibre Optic Strain Sensing (DFOSS) Technology</i> <i>Tee Bun Pin</i>
08:50am – 09:10am	Hammer Weight Selection in High-Strain Dynamic Pile Testing: A Mechanics-Based Framework with Evidence from Case Studies <i>Muhamad Fauzi Ahad</i>	Advancing Geotechnical Resilience with the Smart Surface Drainage Monitoring System (SSDMS) <i>Raymond Law</i>
09:10am – 09:30am	Advanced Settlement Monitoring of Micro-Tunneling Pipe-Jacking Operations Using Distributed Strain Sensing (DSS) <i>Muhammad Farid bin Ghazali</i>	Application of Real-Time Geotechnical Monitoring-Taoyuan Airport MRT Section during the Construction of Terminal 3 at Taoyuan International Airport <i>Chen Pei Wen</i>
09:30am – 09:50am	Instability of Waterfront Structures Along Riverbank <i>Ong Yin Hoe</i>	Development of a Landslide Prediction Model Using Random Forest and Real-Time Monitoring in Sabah, Sarawak, and Labuan <i>Wan Muhammad Hafiz bin Zakaria</i>
09:50am – 10:10am	Case Study on Ground Vibrations Induced by Pile Driving Works in Quaternary Deposit Formation at Kota Bharu, Kelantan <i>Syahnimzi Ifwat bin Azharnim</i>	Panel Discussion and Q&A + Presentation of Appreciation Certificate
10:10am – 10:35am	Q&A + Presentation of Appreciation Certificate	Tripartite Closing Remarks
10:35am – 11:00am	Morning Tea Break	
	MGC Paper Presentation Session 4 Chair: Ir. Allan Chwee Yew Lun Co-Chair: Ir. Dr. Choo Chung Siung	
11:00am – 11:20am	Evaluating the Performance of Basal Cellular Foundation Mattress in Supporting Heavy-Duty Yard Infrastructure in Vietnam <i>Dong Ngo</i>	
11:20am – 11:40am	White Surfaced Geomembrane in Geoenvironmental Containment Applications – Southeast Asia Experience <i>Hermann Ng</i>	
11:40am – 12:00pm	Guniting alternative- a sustainable flexible facing: success story in Alam Damai, Cheras Perdana <i>Naziha Nordin</i>	
12:00pm – 12:20pm	Settlement behaviour of highly compressible peat soils under different fill heights for the Sebuyau to Betong stretch of the Sarawak Second Trunk Road <i>Vera Loo</i>	
12:20pm – 12:40pm	Q&A + Presentation of Appreciation Certificate	
12:40pm – 2:00pm	Lunch	

PROGRAMME

4th December 2025 (Thursday)

Time	Programme MGC 2025 Ballroom 1, Level 2, Wyndham Grand Bangsar
2:00pm - 2:10pm	Memorial Lectures Opening Address by Memorial Lectures Organising Chair
2:10pm - 3:10pm	Memorial Lecture 1 - Mr Mike Dobie
3:10pm - 3:30pm	Q&A + Presentation of Appreciation Certificate
3:30pm - 4:00pm	Afternoon Tea Break
4:00pm - 5:00pm	Memorial Lecture 2 - Ir. Dr Toh Cheng Teik
5:00pm - 5:20pm	Q&A + Presentation of Appreciation Certificate
5:20pm - 5:30pm	Closing

KEYNOTE SPEAKERS' PROFILE

DR. VIVI ANGGRAINI



Dr. Vivi Anggraini is a Senior Lecturer in Geomechanics at Monash University Malaysia with 20 years of academic and professional experience. She holds a PhD in Geotechnical and Geological Engineering, with expertise in geomaterials, geosynthetics, ground improvement, and environmental geotechnics.

She has published over 50 research papers, a construction guideline on peat and organic soils, three book chapters, and a book on ground improvement. Her research has been supported by Monash University, industry partners, and the Ministry of Higher Education Malaysia.

Dr. Anggraini is the current President of the Malaysian Chapter of the International Geosynthetics Society (MyIGS), which promotes the appropriate use of geosynthetics in engineering practice. She is also a registered Professional Engineer (P.Eng) with the Institution of Engineers Indonesia and a member of the Board of Engineers Malaysia and Engineers Australia. Her project experience spans Malaysia, Indonesia, and Australia across both public and private sectors.

MR. CHRIS LAWSON

Chris Lawson is an engineering consultant based in Malaysia. Chris received his Engineering Degrees from The University of New South Wales, Sydney, Australia. He has worked in the field of geosynthetics for 45 years in Australia, Europe, North America and Asia. During this period, he has worked on large scale geosynthetics projects in the field of reinforced embankments, other reinforced fill techniques, and coastal, hydraulic and environmental engineering structures in many countries. Chris has served on international organizations developing Standards and Codes of Practices for geosynthetics and geosynthetics structures. He is the author of over 50 technical papers on geosynthetics, geotechnical engineering, mining and hydraulic and coastal engineering. In 2006 he delivered the 3rd Giroud Lecture at the 6th International Conference on Geosynthetics at Yokohama, Japan



KEYNOTE SPEAKERS' PROFILE

PROF. CHU JIAN



Prof CHU Jian is the President's Chair in Civil Engineering, the Chair of the School of Civil and Environmental Engineering and the Director of the Centre for Urban Solutions at the Nanyang Technological University (NTU), Singapore. He also worked for Iowa State University, USA, from 2011 to 2014 as professor and James M. Hoover Chair in Geotechnical Engineering. Prof Chu is currently the Chair of Technical Committee TC217 on Land Reclamation and a Committee Member for TC211 on Ground Improvement under the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE). He is an Editor of a high impact journal Acta Geotechnica, Editor-in-chief of Biogeotechnics, and Co-Editor for Journal of Materials in Civil Engineering, ASCE. He has delivered over 70 keynote or invited lectures at international conferences. As a past President of the Geotechnical Society of Singapore, Prof Chu has worked as a consultant or advisor for a number of large-scale projects in Singapore and other countries. He received the R. M. Quigley Award from the Canadian Geotechnical Society in 2004 and the Outstanding Geotechnical Engineer Award from the Geotechnical Society of Singapore in 2018.

IR DR OOI LEAN HOCK

Ir. Dr. Ooi is a member of The Institution of Engineers, Malaysia and Member of The Institution of Engineers Australia. He was the geotechnical head of Gamuda Engineering for the Klang Valley Mass Rapid Transit (KVMRT) Projects and is now seconded to Gamuda Engineering Australia as the Geotechnical SME. He was involved in the delivery of the underground sections of the KVMRT Projects both Kajang and Putrajaya Lines. He is actively involved in the projects won and ongoing tenders of underground Metros and major infrastructural projects in Australia. He is also a registered professional Engineer in Malaysia. He has authored and co-authored more 20 technical papers in geotechnical engineering, underground space and tunnelling.



MEMORIAL LECTURE SPEAKERS' PROFILE

Mr. MIKE DOBIE

Mike Dobie is a practicing geotechnical engineer, graduating in civil engineering from Bristol University (UK) and later obtaining a master's degree in soil mechanics from Imperial College, London. He is a Chartered Engineer and a Fellow of the Institution of Civil Engineers (UK). Since graduating in 1973, he has worked in the field of geotechnical engineering for British consultant WS Atkins & Partners, the Delft Soil Mechanics Laboratory in the Netherlands and Singapore, and American specialist consultant Dames & Moore. More recently he has worked for Acer Consultants (now Hyder Consultants, previously Freeman Fox & Partners), being seconded to establish the Central Soils Laboratory (CSL) in Bangi, to provide high quality soil testing for the North-South Expressway. Mike joined Tensar International in 1991 and currently is the Regional Manager (Asia Pacific) based in Jakarta with responsibilities for the development of design methods and software for both reinforced soil structures and mechanical stabilisation techniques.



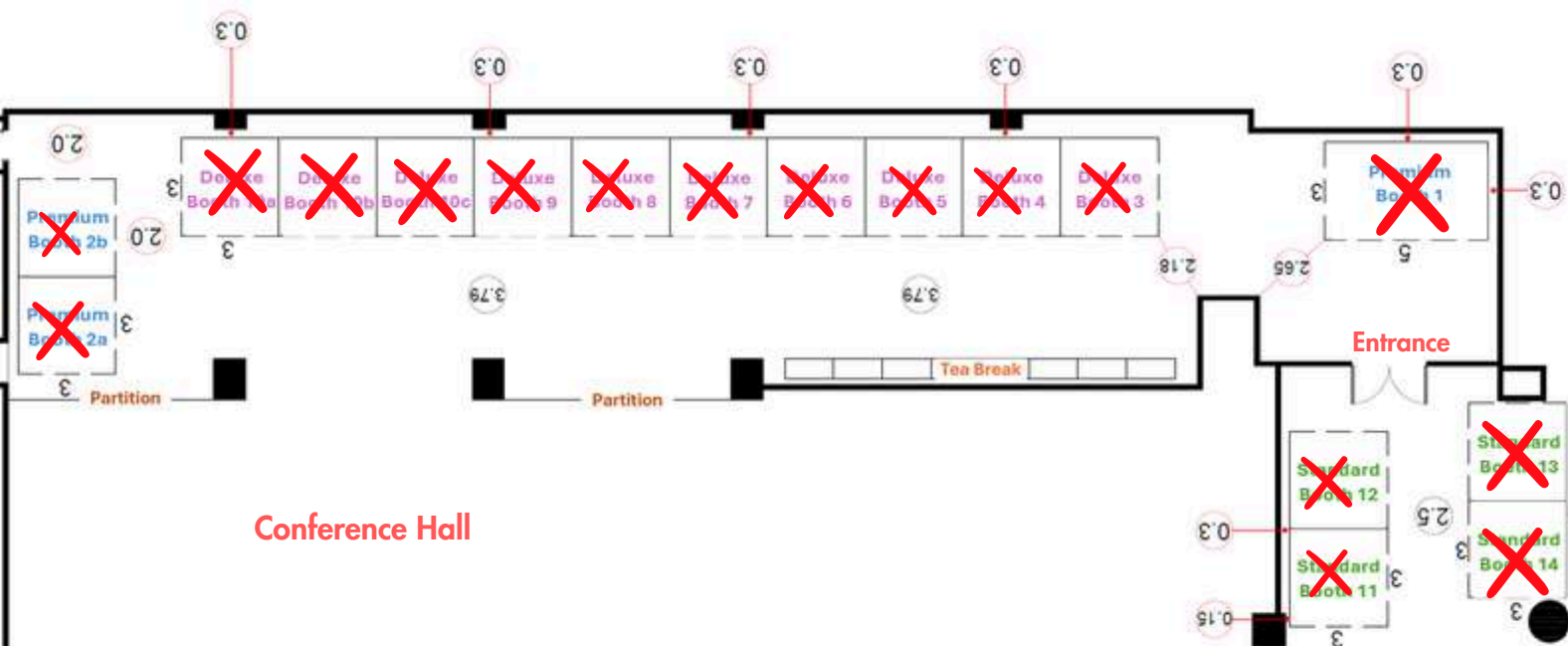
Ir. DR TOH CHENG TEIK



Ir. Dr C.T Toh is currently a Director at Dr. Toh Associates Sdn Bhd. He has been practicing geotechnical engineering for 46 years. He graduated from Monash University in 1974 with the degree Bachelor of Civil Engineering and was subsequently awarded a Doctorate from the same university in 1979.

His experience covers foundations, soil treatment, slope stabilization, basement construction etc. in alluvial and marine deposits, peat, residual soils and rocks.

EXHIBITION BOOTH



Grand Ballroom 1, Level 2

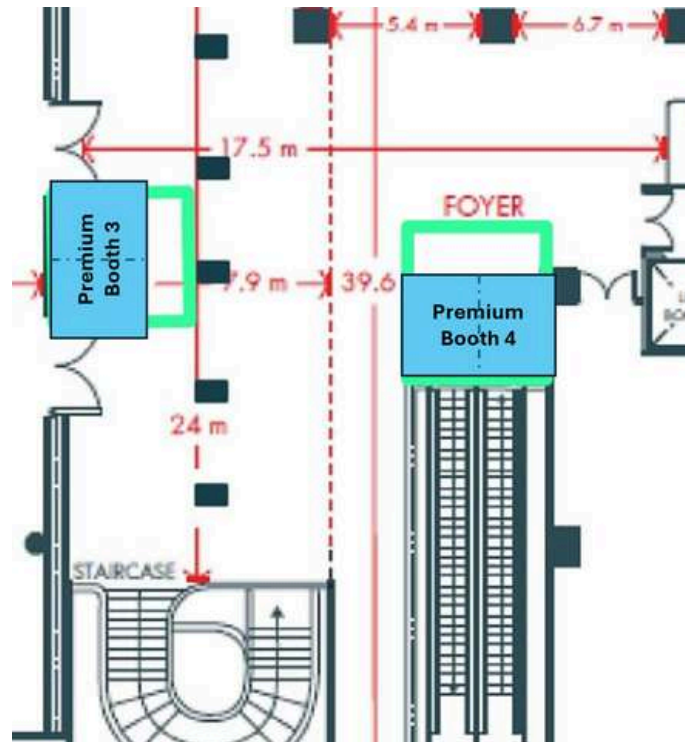
CATEGORY	AMOUNT (MYR)*	BENEFITS
Premium Booth (Booth No. 1 & 2) @ Grand Ballroom 1 (Level 2)	38,000	<ul style="list-style-type: none"> Complimentary 8 participants for conference & tripartite seminar Acknowledgement (conference booklet)
Deluxe Booth (Booth No. 3-10) @ Grand Ballroom 1 (Level 2)	17,000	<ul style="list-style-type: none"> Complimentary 4 participants for conference & tripartite seminar Acknowledgement (conference booklet)
Standard Booth (Booth No. 11-12) @ Outside Grand Ballroom 1 (Level 2)	13,000	<ul style="list-style-type: none"> Complimentary 2 participants for conference & tripartite seminar Acknowledgement (conference booklet)

*inclusive of 8% SST

(Please note that the booth and tea break floor plan is not to scale and may be adjusted based on the actual setup on the day of the event)

PREMIUM BOOTH COME IN SIZES 5M × 3M OR 6M × 3M. IF NEEDED, WE CAN ALSO OFFER **HALF UNITS AT A DISCOUNTED PRICE**. JUST CHECK WITH THE SPONSORSHIP SUB-COMMITTEE BY CONTACTING MARCUS (012-376 8568), JACK (016-263 1038), OR GERALD (017-830 8602)."

EXHIBITION BOOTH



Foyer, Level 2

CATEGORY	AMOUNT (MYR)*	BENEFITS
Premium Booth (Booth No. 1 & 2) @ Grand Ballroom 1 (Level 2)	38,000	<ul style="list-style-type: none"> Complimentary 8 participants for conference & tripartite seminar Acknowledgement (conference booklet)
Deluxe Booth (Booth No. 3-10) @ Grand Ballroom 1 (Level 2)	17,000	<ul style="list-style-type: none"> Complimentary 4 participants for conference & tripartite seminar Acknowledgement (conference booklet)
Standard Booth (Booth No. 11-12) @ Outside Grand Ballroom 1 (Level 2)	13,000	<ul style="list-style-type: none"> Complimentary 2 participants for conference & tripartite seminar Acknowledgement (conference booklet)

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PLATINUM GOLD AND SILVER SPONSORSHIP

CATEGORY	AMOUNT (MYR)*	BENEFITS
Platinum	30,000	<ul style="list-style-type: none"> • Complimentary 10 participants for conference & tripartite seminar • Video advertisement in conference (before event start & tea break) • Inside front-page advertisement (conference booklet) • Acknowledgement (conference booklet)
Gold	20,000	<ul style="list-style-type: none"> • Complimentary 6 participants for conference & tripartite seminar • Video advertisement in conference (tea break) • Inside & outside back-page (first come first serve), or inside full-page advertisement (conference booklet) • Acknowledgement (conference booklet)
Silver	15,000	<ul style="list-style-type: none"> • Complimentary 4 participants for conference & tripartite seminar • Video advertisement in conference (tea break) • Inside full-page advertisement (conference booklet) • Acknowledgement (conference booklet)

*inclusive of 8% SST

OTHER SPONSORSHIP PACKAGES

Category	Amount (MYR)*	Benefits
***Conference registration tag & lanyard sponsorship	5,000	<ul style="list-style-type: none"> • Complimentary 1 participant for conference & tripartite seminar • Company logo (on registration tags & lanyard) • Acknowledgement (conference booklet)
Conference thumb-drive sponsorship	5,000	<ul style="list-style-type: none"> • Complimentary 1 participant for conference & tripartite seminar (storing softcopy of conference materials) • Company logo (on thumb-drive) • Acknowledgement (conference booklet)
Conference souvenir sponsorship	5,000	<ul style="list-style-type: none"> • Complimentary 1 participant for conference & tripartite seminar • Company logo (on souvenir) • Acknowledgement (conference booklet)
Conference booklet advertisement	3,000	<ul style="list-style-type: none"> • Inside full-page advertisement (conference booklet)
Site visit sponsorship	6,000	<ul style="list-style-type: none"> • Complimentary inside full-page advertisement (conference booklet) • Acknowledgement (conference booklet)
Memorial lecturer sponsorship	10,000	<ul style="list-style-type: none"> • Complimentary inside full-page advertisement (conference booklet) • Acknowledgement (conference booklet)

*inclusive of 8% SST

***Max. 2 sponsors

BOOKING FOR EXHIBITION BOOTH, PLATINUM, GOLD & SILVER SPONSORSHIP, AND OTHER SPONSORSHIP PACKAGES

EXHIBITION BOOTH		PLATINUM, GOLD AND SILVER SPONSORSHIP		OTHER SPONSORSHIP PACKAGES	
CATEGORY	PLEASE TICK (✓)	CATEGORY	PLEASE TICK (✓)	CATEGORY	PLEASE TICK (✓)
Premium Booth		Platinum		Conference registration tag & lanyard sponsorship	✗
Deluxe Booth		Gold		Conference thumb-drive sponsorship	✗
Standard Booth	✗			Conference souvenir sponsorship	✗
		Silver		Conference booklet advertisement	
				Site visit sponsorship	
				Memorial lecturer sponsorship	

Name _____ Designation: _____

Address: _____

Tel No: _____ Email: _____

Signature & Stamp

Date

CONFERENCE REGISTRATION FORM

No	Name (s)	M'Ship Number	IC No.	Fee (RM)
SUB TOTAL				
ADD SST @8%				
TOTAL PAYABLE				

Name _____ Designation: _____

Address: _____

Tel No: _____ Email: _____

Signature & Stamp

Date

Kindly email the registration form to
sitiaisyah@iem.org.my