PHYSICAL TALK

"ASSET MANAGEMENT, ENVIRONMENTAL, SOCIAL, GOVERNANCE (ESG) AND OTHER REQUIREMENTS FOR THE ELECTRICAL POWER CABLE SIZING APPROACHES"

IEM
The Institution of Engineers, Malaysia

Organised by :

Consulting Engineers, Special Interest Group, CESIG

Talk Details

- **Date : 10th June 2026 Wednesday**
- **Time : 5.30pm - 7.30pm**
- **Venue : Chin Fung Kee Auditorium**
  3rd Floor, Wisma IEM, PJ
- **BEM CPD: 2**
  Ref. No.: IEM26/HQ/197/T
- **Registration fees**
  IEM Student: FOC
  IEM Members: RM15
  NON-IEM Members: RM70

Talk Synopsis:

The IEM June 2023 Bulletin offers a comprehensive and practical approach to ESG (Environmental, Social, and Governance) considerations in an ongoing electrical power cable sizing project. This project involves collaboration with an international university and the Singaporean / Malaysian Power Cable industry. The main focus is on transforming intentions into actionable academic and engineering calculations, specifically targeting practitioners, designers, and students. To achieve precise client requirements, impressive ROI, and improved business practices, it emphasizes the need for precise implementation involving all stakeholders and adhering to relevant compliances. During the presentation, attention will be given to the reasons behind Malaysia's has difficulties in securing international project consultancies. It attributes this issue not only to power cable sizing practices but also to the underlying principles, concepts, and values applied in those practices. The discussion on power cable sizing serves as a window into the broader engineering activities currently employed in Malaysia. Leveraging insights from the speaker's international experience, the presentation aims to enrich design engineering education and support the career development of Malaysian electrical engineers.

The complexity of the subject matter discussed indicates that it cannot be effectively addressed by ChatGPT or any other AI in the foreseeable future (within the next 5 to 10 years). Instead, the session will address challenging questions, including the absence of a power cable sizing methodology in Malaysia over the past 60 years, the factors driving its current significance, and the global trends enforcing these mandatory requirements. The presentation underscores the importance of engineering excellence, efficient processes, and innovative practices aligned with ESG principles to prevent risks that could jeopardize the engineering industry and negatively impact Malaysia's consultancy future. The presentation also highlights the shift away from the notion that a degree alone sufficiently reflects an engineer's intellect, character, and values. Such correlations are now being questioned, and the evolving landscape emphasizes engineers' abilities, competencies, and adherence to ESG principles for the well-being of Malaysia, both in the present and the future.

Speaker’s Biodata

Ir. (Dr.) S. Vignaeswaran PEPC boasts an impressive track record with over 40 years of extensive experience in various fields, including electrical engineering, computer science, IT, SCADA (Supervisory Control and Data Acquisition), project management, and tendering. His expertise spans cutting-edge applications, such as advanced power system design and cyber-security, dating back to the 1990s. Educationally, he holds a degree in Electrical Engineering from Monash University (Clayton, Australia) and an MSc in IT/BIS from the University of Keele, UK. His outstanding achievements have been recognized with an Honorary Doctorate from the United States of America, completing a remarkable tri-continental accomplishment. Continuously pushing the boundaries of knowledge, Dr. Vignaeswaran regularly publishes international papers in the fields of Engineering, IT, Computer Security, and Project Management. He has also held the esteemed position of Client's HOD (Head of Department) for Electrical & Automation in a prestigious Saudi Arabian project valued at RM 8 billion. Currently, Dr. Vignaeswaran is actively engaged in pioneering research focusing on state-of-the-art utility power systems, automation, cyber security, tendering, education and other innovative AI-based applications. His wealth of experience and dedication to pushing the frontiers of technology make him a valuable asset to the field of engineering and beyond.