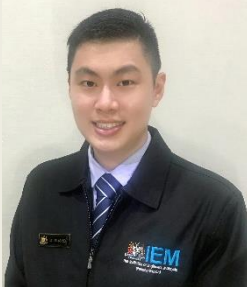




### **Visit to Boston Scientific Medical Device (Malaysia) Sdn. Bhd.**

By Ir. Dr. Mui Kai Yin and Ir. Ts. Dr. Tan Kim Seah

Ir. Dr. Mui Kai Yin is the advisor of Electronic Engineering Technical Division and Ts. Dr. Tan Kim Seah is the Deputy Chairman of Electronic Engineering Technical Division for session 2024/2025



The IEM Electronic Engineering Technical Division (eETD) has hosted a technical visit to Boston Scientific Medical Device (Malaysia) Sdn. Bhd. in Batu Kawan Penang on 1<sup>st</sup> March 2024 and was headed by IEM eETD Chairman, IEM MaTD Executive Committee, and IEM Penang Branch Past Chairman, Ir. Dr. Mui Kai Yin. A total of 34 delegates from IEM joined the visit. IEM members were warmly welcomed by Boston Scientific Medical Device (Malaysia) Sdn. Bhd. senior management team, including Engineering Director Sayron Ruiz, Senior Department Equipment Engineer (Digital Factory) Vincennzh Kooi, and group of engineers from various functions (Figure 1). Ir. Dr. Mui sincerely thanks Boston Scientific Medical Device (Malaysia) Sdn. Bhd. and their senior management team for allowing IEM members visiting the facility (Figure 2).

Boston Scientific is a Massachusetts-based medical device company with a focus on non-invasive treatment – primarily of cardiovascular, respiratory, neurological, digestive, urological and pelvic conditions. Its first major product was an angioplasty balloon for cardiovascular treatments, introduced in the late-1970s.

Boston Scientific transforms lives through innovative medical solutions that improve the health of patients around the world. As a global medical technology leader for more than 40 years, they advance science for life by providing a broad range of high-performance solutions that address unmet patient needs and reduce the cost of healthcare. Boston Scientific has had a strong manufacturing presence in Penang for over six years. More than 7 million medical devices have been produced at the site, including diagnostic and therapeutic technologies such as biopsy forceps, balloon angioplasty products and laser fibres.

The Penang facility includes the third global distribution centre for the company and the first located in Asia, shipping medical devices within Malaysia and around the world. In addition to manufacturing roles, the site will employ professionals in knowledge-intensive regional supply chain roles such as planning, logistics, customer care and equipment service repair. As such, Penang will be key to the company's global supply chain network, serving as a hub for Asia Pacific markets and supporting ongoing global business continuity and resilience.

This technical visit started off with a warm welcome by Mr. Vincenzh Kooi, who is Senior Department Equipment Engineer (Digital Factory) involved in many new development projects (Figure 1). Follow with a welcome speech by Mr. Sayron Ruiz, who is the Engineering Director of Penang Engineering. Mr. Sayron thanked The Institution of Engineers Malaysia (IEM) members who come forward to visit Boston Scientific, which enabled the good connection and exchange between IEM and Boston Scientific.

Thereafter, Ir. Dr. Mui Kai Yin, who is the Chairman of The Institution of Engineers Malaysia (IEM) Electronic Engineering Technical Division (eETD) introduced The Institution of Engineers Malaysia (IEM) to the host (Boston Scientific) and members. It was an interactive session led by Dr. Mui, with many relevant questions asked on what the benefits of joining IEM, and how to become a professional engineer. It was answered well by Dr. Mui (Figure 2).

Thereafter, Vincenzh shared the brief history and future direction of the company. He also presented the latest technology of various medical products (Figure 3), unique manufacturing processes and special skills required, as well as the future road map and direction in their industry. There were quiz sessions (with gifts) for participants to answer, which attracted a strong participation from the crowd. The session continued with a series of questions and answers (Q&A). Several interesting questions were raised by the branch engineers, such as the medical products applications, the patient treatment process, safety of these new products, business challenges and competitiveness, as well as the cost effectiveness of manufacturing processes.

After the informative introduction and discussion, IEM members were given the opportunity to visit various manufacturing facilities, utilities systems inside the plant (Figure 3 to 6). Participants had the opportunity to witness the state-of-the-art Boston Scientific manufacturing production lines. At the same time, participants were guided with explanations on how medical products were processed and assembled.

The participants were exposed that these industrial components are critical to the efficient and safe operation of industrial facilities. Regular maintenance and monitoring of these components can help ensure optimal performance and avoid potential problems that can affect the quality and safety of industrial processes.

The technical visit session ended with a group photograph at the plant function room area (Figure 8), and certificate of presentation to the Boston Scientific Medical Device (Malaysia) Sdn. Bhd Engineering Director Mr. Sayron Ruiz by IEM eETD Chairman Ir. Dr Mui Kai Yin (Figure 9).



Figure 1. Warm welcome by Vincennzh Kooi, Senior Department Equipment Engineer (Digital Factory) Boston Scientific Medical Device (Malaysia) Sdn. Bhd.



Figure 2. Welcome speech and introduction of IEM by Ir. Dr Mui Kai Yin, Chairman of the Institution of Engineers Malaysia, Electronic Engineering Technical Division (Session 2023/2024)

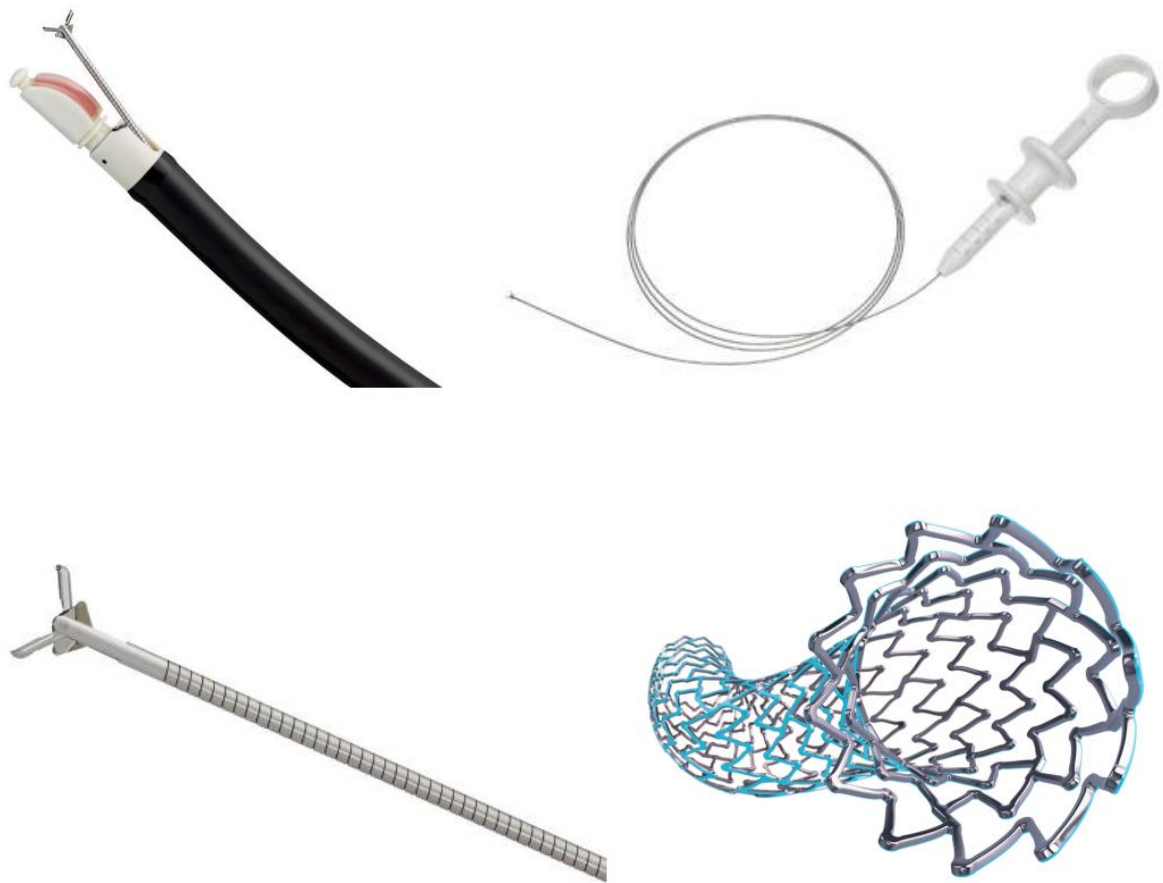


Figure 3. Some of the medical products produced in the Boston Scientific Medical Device (Malaysia) Sdn. Bhd. facility.





Figure 4. Participants visiting the manufacturing plant areas.



Figure 5. Participants visiting the manufacturing plant areas.



Figure 6. Participants visiting the manufacturing plant areas.





Figure 7. Group photo of some participants together with Mr. Vincenzh Kooi and Ir. Dr Mui Kai Yin at the Boston Scientific Medical Device (Malaysia) Sdn. Bhd. main lobby area.



Figure 8. Group Photograph of Participants at the Boston Scientific Medical Device (Malaysia) Sdn. Bhd. Function Room.



Figure 9. Certificate of Appreciation Presentation to Boston Scientific Medical Device (Malaysia) Sdn. Bhd Engineering Director Mr. Sayron Ruiz by IEM eETD Chairman Ir. Dr. Mui Kai Yin (Session 2023/2024)