



A Courtesy Visit to Penang Science Cluster

by Ir. Bhuvendhraa Rudrusamy

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The committee members of The Electronic Engineering Technical Division (eETD) paid a courtesy visit to Penang Science Cluster (<http://www.pscpen.com/>), PSC@Heritage located at Wisma Yeap Chor Ee in Georgetown, Penang last January this. The objective of this visit is to foster a relationship between IEM and PSC.

PSC, a non-profit organization established in 2013 through sponsorship from industry and support from the Penang state government, aims to promote science and technology, innovation, and techno-entrepreneurship among young generation.

PSC chief executive officer Mr. Ooi Peng Ee extended a warm welcome to eETD delegates and presented an overview of PSC followed by workshop visit.

PSC has been cultivating the interest in science, technology, engineering and mathematics (STEM) among school students and inspires them to pursue further study and career in STEM.

PSC also motivates young engineers to stay competitive with regional peers especially from Singapore or China, and strengthen manufacturing and research competencies, thus creating more job opportunities in Malaysia. This is in line with Penang Industrialization Plan, initiated by the late chief minister, Tun Dr. Lim Chong Eu.

Since its inception, PSC has been expanding by having strong supports from the industries, entrepreneurs and experienced engineers in Penang. Among them are *Motorola Solutions Malaysia, National Instruments, Intel Malaysia, Exabytes, B Braun, Agilent Technologies Malaysia, Keysight Technologies Malaysia, Dream Catcher Consulting, CEEDTec, Mini Circuits and Vitroxand*.

There are various programs developed and organized by PSC to promote science and technology, some of the key programs are as follows:

- **TechMentor Program for Schools.** PSC supports school science programs such as LEGO robotics and embedded systems. In 2015, with the supports from 150 volunteers from industry and academia, PSC successfully organized LEGO robotic and Embedded System programs for 68 and 35 schools respectively besides facilitating the loan of hardware and software to students.
- **Penang International Science Fair (PISF)** An annual premier science and technology event and open to the public. There are exhibitions, competitions, workshops and MakerFest organized for two days. The main objective of PISF is to inspire innovation where the students are given the opportunities to participate in the hands-on activities, creating interesting stimulus learning! The recent PISF was held last November 2015

and had attracted a crowd of almost 60,000 people. Upcoming PISF 2016 is scheduled from 12 to 13th November 2016.

- **Penang Science Cafe** A fun learning science and interaction forum that serves the public interest. PSC had successfully piloted Penang Science Cafe at Krystal Point, Bayan Lepas in December 2013 and subsequently launched a new Cafe in PSC@Heritage, Georgetown in December 2015. The Penang Science Cafe at Wisma Yeap Chor Ee has a space area over 13,000 ft² which comprises of workshops, meeting rooms, discussion area, learning platforms and marker space. There are many interesting apparatus like Van de Graaff generator, lifting system with pulleys, compressors, model bridges, 3D printer etc, which make science learning very interactive and enjoyable.

PSC has also actively organized outreach programs to cultivate interest in STEM for under-privileged communities. Some of these programs are:

- Exhibitions and hands-on workshops to create awareness of STEM for underserved schools, rural communities, orphanages etc.
- Supporting Penang Youth Development Corporation in organizing Engaging Science, Technology, Engineering, English and Maths (ESTEEM) program to motivate students from low-income families to improve their academic performance in STEM and English with a minimum fee.
- Vocational Skills Employment Program (VSEP), a collaborative program with Small and Medium Enterprise Association Malaysia (SME) and Fourier Technical Consultant which allows the poor vocationally inclined SPM school leavers to work in SMEs while pursuing their part-time vocational studies. This helps in equipping workforce with sound technical know-how and vast hands-on experience which can support industry needs.

In conclusion, the visit was a fruitful one as both eETD and PSC were able to foster better understanding of each role and responsibilities as well as opportunity to discuss future collaboration.



Model exhaust system in PSC@Heritage workshop



eETD committee members Ir. Dr. Lee Choo Yong, Ir. Dr. Mui Kai Yin, Ir. Bhuvendhraa Rudrusamy, Dr. Chang Boon Peng, Mr. Lau Heng Kar, Dr. Leow Cheah Wei and Mr. Sivarama Rajah with PSC CEO Mr. Ooi Peng Ee (from left to right), in front of model aircraft at PSC@Heritage, Wisma Yeap Cho rEe, Georgetown, Penang.