

**Technical Visit to Oryx Advanced Materials Sdn. Bhd.**

by Ir. Dr Mui Kai Yin

Ir. Dr Mui Kai Yin is currently the Deputy chairman in Electronic Engineering Technical Division (eETD).

The IEM Electronic Engineering Technical Division (eETD) has hosted a technical visit to **Oryx Advanced Materials Sdn. Bhd.** in Penang on 28<sup>th</sup> February 2020 and was headed by IEM eETD Honorary Secretary cum Treasurer, also IEM Penang Branch Past Chairman, Ir. Dr. Mui Kai Yin. IEM members were warmly welcomed by Oryx Advanced Materials Sdn. Bhd. management team, including Director of Manufacturing Mr. Mohamad Nasir Osman, Senior Manager of Production Mr. Zaidi Amin Zainol, Assistant Manager of Production Mr. Mazlan Tahir, and Principal Engineer of R&D and Additive Manufacturing Dr. Tan Kim Seah. Ir. Dr. Mui sincerely thank Oryx Advanced Materials Sdn. Bhd. and their senior management team for allowing IEM members visiting the facility.

Oryx Advanced Materials, headquarters in Silicon Valley, is a US-based multinational company founded in 1976 specialized in materials research for specialty materials. The company possesses long history expertise by adopting latest technologies at producing metal, alloy and ceramic sputtering targets in high purity and complex characteristics used in creating thin films for a variety of applications, such as magnetic hard-disk drive storage and photovoltaic solar cells.

The manufacturing subsidiary in Penang, Oryx Advanced Materials Sdn Bhd, was established in 1999 in leveraging the experience, knowledge and strategically supports for global technology partners and manufacturing plants in Asia-Pacific Region, particularly South-East Asia.

Oryx have made extensive investments in materials processing such as high temperature vacuum induction melting & casting, rolling, inert gas atomization, hot isostatic pressing, metal 3D printing and materials characterization. At Oryx, highly skilled team of material scientists and engineers are employed to develop material solutions that giving its customers a true competitive advantage in product's cost and time to market.

This is the first in history that Oryx Penang welcomes IEM delegates to explore the mystery of cutting-edge technologies in materials research, design, processing and mass manufacturing, all under one roof which certified by ISO 9001, ISO 14001, ISO 45001 and AS 9100.

This technical visit started off with a presentation by Dr. Tan Kim Seah, who is the Principal Engineer of Additive Manufacturing, and involved in many new development projects. Dr. Tan shared the history and future direction of the company. He also presented the latest development technology in sputtering targets, metal powders for 3D printing, the alloy materials manufacturing methodologies and skills, as well as the future road map in their industry. The session continued with a series of questions and answers (Q&A). Several interesting questions were raised by the branch engineers, such as the quality and reliability of metal 3D printing products, business challenges and competitiveness, as well as the cost effectiveness of manufacturing processes.

After the informative introduction and discussion, IEM members were given opportunity to visit to various manufacturing facilities inside the plant, specifically the casting and metal powder manufacturing processes, metal 3D printing and hot isostatic pressing processes, witness some of the finished products, etc. The technical visit session was ended with a group photograph at the plant reception area.



Group photograph at the plant reception area of Oryx Advanced Materials Sdn Bhd.



Welcoming speech by Manufacturing Director, Mr. Nasir Osman.



Souvenirs presentation to Oryx Advanced Materials Sdn Bhd.

**Programme**

- 09.00 am – 09.15 am : Arrival of IEM Delegates
- 09.15 am – 09.30 am : Registration and Networking
- 09.30 am – 09.45 am : Welcoming Speech by Director of Manufacturing
- 10.00 am – 10.30 am : Introduction and Technical Presentation by Principal Engineer,  
Dr. Tan Kim Seah
- 10.30 am – 11.30 am : Plant tour/visit at Oryx's Facilities
- 11.30 am – 11.45 am : Question and Answer Session
- 11.45 am – 12.00 pm : Round Up, Photo Session and Souvenirs Presentation