



30 years of compressor research and innovations

by Ir. Dr Khor Jeen Ghee

Ir. Dr Khor Jeen Ghee is the Advisor of Electronic Engineering Technical Division (eETD).

The Technical Talk entitled “30 years of compressor research and innovations” was organized by the Institution of Engineers, Malaysia (IEM) Electronic Engineering Technical Division (eETD) and IEM Penang Branch. The talk was delivered by the distinguished Professor and Chair of NTU’s School of Mechanical and Aerospace Engineering, Professor Ooi Kim Tiow. It was attended by about 20 participants.

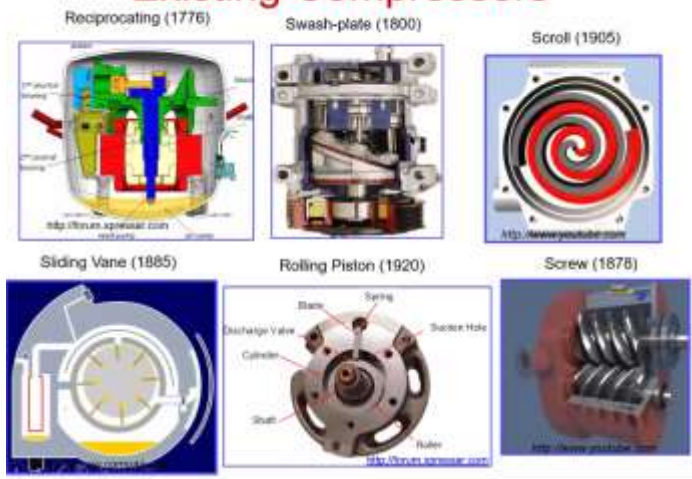
The talk began with an introduction and welcoming of Prof. Ooi by the moderator, Ir. Dr. Khor. Dr. Khor described Prof. Ooi as a prolific writer, an award-winning inventor, Teacher of the Year and an international expert in mechanical engineering all rolled into one package. Prof. Ooi has a long list of publication and awards under his belt with numerous patents, 150 research papers, Nanyang Innovation & Entrepreneurship Award, Fluid Mechanics Prize, just to name a few.

He also serves as Editor and Reviewer in various international journals. Despite his impressive stature, over the course of the talk, Prof. Ooi came across as a very down-to-earth, humble and an extremely friendly gentleman. He is also a proud Kedahan.

Prof. Ooi kicked off the talk with a brief introduction about his Faculty at the Nanyang Technological University, Singapore. He then shared the story about how he came into the field of compressor design. He also noted that compressor is an understated piece of technology that has a significant impact to our lives. Compressor is the technology behind pumps, refrigeration, and many more engineering advances without which the world as we know today will be a very different place.

He then proceeded to walk the audience through the historical and recent advances in compressor design, highlighting milestone designs such as reciprocating compressors, swash-plate compressors, screw compressors and sliding vane compressors. At each step of the discussion, he made it a point to inject personal stories and anecdotes that made the lecture ever more interesting. Prof. Ooi then dedicated a good portion of time diving into the design of revolving vane compressor and introduced to the audience a new coupled vane compressor design.

Existing Compressors



The talk concluded with Prof. Ooi answering some questions from the audience. Overall, the audience found the talk engaging both at a technical as well as a personal level.