

Why Engineers "Rock"

CHEMICAL ENGINEERING TECHNICAL DIVISION



by Dr. Prof. Dr Dominic Foo Chwen Yee

A forum entitled "Engineers Are Not Kayu" was held at Taylor's University Lakeside Campus on 11 May 2013, specially dedicated to the September issue of IEM *JURUTERA*. The forum was jointly organised by Chemical Engineering Technical Division (CETD), Young Engineers Section (YES) of IEM and Taylor's University. Seven panel speakers were invited to talk about their professional work duties along with their interests and talents.

When the forum started at 11.15 a.m., two academic members of CETD, Engr. Dr Chong Chien Hwa (Taylor's University) and Engr. Assoc. Prof. Dr Denny Ng Kok Sum (University of Nottingham Malaysia Campus) shared with participants about their professional work as lecturers and researchers. Apart from performing their academic duties, both have other interests that are lesser known to their students and academic colleagues.



Figure 1: Engr. Dr Chong Chien Hwa and some of his signature dishes

Engr. Dr Chong Chien Hwa enjoys cooking during his free time and some of his signature recipes are for fish and other seafood (see Figure 1). On the other hand, Engr. Assoc. Prof. Dr Denny Ng loves to travel and play badminton. He shared a few photographs of himself taking part in badminton competitions (Figure 2), as well as his trips to various Asian and European cities. He also shared his tips on how to travel on a tight budget.

Next, Engr. Rafil Elyas, a consultant with East 101 Sdn. Bhd., talked about his professional work in the oil and gas business. In his spare time, he enjoys writing fiction and short stories, playing and composing music, as well as recording music.

One common interest that he and Ir. Prof. Dr Dominic Foo share is music. The latter is a chemical engineering professor whose regular work duties include being a researcher, author, editor, teacher and "social worker" (his service with IEM). Playing their guitars, the duo performed a new song that Engr. Rafil had composed



Figure 2: Engr. Assoc. Prof. Dr Denny Ng in action during a badminton competition

specially for the forum, titled "I Want To Be An Engineer". The forum participants were also given a copy of the song lyrics (see box for song lyrics and Figure 3 for photo) and invited to sing along. Video clips of the performance can now be viewed on the blog of CETD (<http://iemcetd.blogspot.com/>).

I WANT TO BE AN ENGINEER

Composer: Engr. Rafil Elyas

I want to build a rocket ship, I want to grow a giant turnip
I want to break covalent bonds, maybe find a Higgs boson
I want to make some gasoline, put it in my speedy machine
Drive it over to your house, build a giant robot mouse

(Chorus)

*I wanna be an engineer, you wanna be an engineer!
I don't wanna be no doctor, I don't want to be no lawyer
I want a hard hat, safety boots, don't want no designer shoes
One to a beam falls on my toes, dance around in my coveralls*

I like chemistry and physics, diff EQs and stochastic
I really dig fluid mechanics, gotta have my thermodynamics
Willard Gibbs is the Taylor! Bernoulli, Maxwell and Euler!
Now we can make anti freeze, build space stations, refineries!

*I wanna be an engineer, you wanna be an engineer!
I don't wanna be no doctor, I don't want to be no lawyer
I want a hard hat, safety boots, don't want nice designer shoes
One to a beam falls on my toes, dance around in my coveralls*

I wanna make my car go faster, I wanna make my bridge span longer
I wanna make my sub go deeper, I wanna make my plane fly higher
I wanna end all world hunger, make sure everyone's got clean water
Everyone's healthy there and here! So everyone can be engineer!

*I wanna be an engineer, you wanna be an engineer!
I don't wanna be no doctor, I don't want to be no lawyer
I want a hard hat, safety boots, don't want nice designer shoes
One to a beam falls on my toes, dance around in my coveralls*

You want to be an engineer, you mamma wants to be an engineer
Your papa wants to be an engineer, you brother wants to be an engineer
Your kid wants to be an engineer, your neighbour wants to be an engineer
Everyone can be engineer! Everyone can be engineer! ENGINEER!



Figure 3: Song performance by Ir. Prof. Dr Dominic Foo (left) and Engr. Rafli Elyas

Engr. Lim Mei Ling was the next panel of the forum. She shared about her professional work as a mechanical engineer at Technip Geoproduction (M) Sdn. Bhd., a project management, engineering and construction company. To the surprise of all forum participants, the young lady revealed that she is actually a tough sport woman who enjoys outdoor activities such as mountain hiking, running marathons and mountain biking! She has hiked up many mountains in the country, including Gunung Batu Putih, Gunung Irau and Gunung Nuang. She has also finished three 42 km marathons and cycled to Bukit Fraser, Cameron Highland and Bukit Tinggi, among others (Figure 4).



Figure 4: Sports activities of Engr. Lim Mei Ling

The next speaker, Engr. Mohd. Khairul Kamaruddin, is also another sports enthusiast. Apart from working as a piping engineer at Technip Geoproduction (M) Sdn. Bhd., he spends his spare time paragliding and rock climbing. He had worked as a rock climbing instructor and is now a member of the Malaysian national paragliding team. His past achievements include a silver and two bronze medals in Southeast Asia (SEA) Games 2011 that was held at Indonesia (Figure 5). He will soon represent the country again in the coming 2013 SEA Games in Myanmar. He



Figure 5: Engr. Mohd. Khairul Kamaruddin at SEA Games 2011

also shared how he appreciates the knowledge in fluid mechanics through paragliding activities.

Ir. Razmawata Mohd. Razalli, the last panel of the forum, is an oil and gas consultant in Synergy Oil & Gas Engineering. However, the 2012/13 Session Chairman of the Oil, Gas & Mining Technical Division (OGTD) told the audience that not all his offshore trips are work related. Ir. Razmawata, who has a professional scuba diving licence, explained that it was also to satisfy his interest in the many micro-organisms and other creatures in the deep sea. He showed pictures that he had taken of some of these unique and amazing creatures that lived under the waves (see Figure 6) and these left a deep impression on the forum participants.



Figure 6: Ir. Razmawata and pictures he had taken of some of the lovely creatures that lived in the deep blue sea (cowrie shell and a squid)



Figure 7: Group photo at the end of the forum

The forum ended at 1.00 p.m., with a group photo (Figure 7) and lunch session. Many in the audience felt that an engineer's life can be very interesting provided that we know how to enjoy it. The forum left some good memories especially for undergraduate Engineering student participants. ■

Ir. Prof. Dr Dominic Foo is the Professor of Process Design and Integration at the University of Nottingham Malaysia Campus, and the Founding Director for the Centre of Excellence for Green Technologies. He is a Fellow of the Institution of Chemical Engineers UK (IChemE), and 2012/3 session Chairman for the Chemical Engineering Technical Division (CETD) of IEM. Professor Foo is the Chief Editor for IEM Journal and Subject Editor for Transactions of IChemE Part B. He is the winners of the Innovator of the Year Award 2009 of IChemE, Young Engineer Award 2010 of IEM, as well as the Outstanding Young Malaysian Award 2012.