



Outstanding Women Engineers' Luncheon

by Michelle Lau

Michelle Lau is currently a committee member of Women Engineers Section.

When engineers hear this as an event and luncheon topic, many different thoughts and ideas come about. We even received a few phone calls to ask if our male counterparts could attend this event, which of course it was open to all. Unfortunately, not a single male was present at this event. However, for those who attended, they were more than satisfied as 8 women from diverse fields shared their experience with the crowd of over 40 people.

Forgoing four hours on a Saturday morning, is a tough decision. Many factors have to be weighed, or what I would class this as, work life balance. Is this essential or important? These are some of the buzzing questions that runs across today's professional's mind, may they be from Baby-boomers generation or Gen X, Y or Z. Are you going to give up four hours, just to collect the required CPD points to meet the criteria for your career path, or are you going to volunteer your time to give back to the community and industry, or are you going to just go, attend and listen to what others have to share? Maybe instead of posing so many questions, I would summarise and say that some came to learn and broaden their knowledge, some came to be inspired by these outstanding women engineers who have created waves in their industry, while some came to network and to have a good lunch. Whatever the reason or excuse that brought the crowd, there was no doubt that the event concluded successfully.

Ir Syarifah Azlina, in her extremely tight schedule, showed us what it means to give back to industry. She had a work engagement where she had to be in Kuching the same day as this event, but she arrived early, presented to us before heading to the airport to catch her flight out. This is what commitment is all about. Amongst the experiences she shared, is being an engineer who has personally seen and been involved in some of Malaysia's finest landmark projects, especially in the transportation sector utilizing Building Information Modelling (BIM). Projects have taken her around the world, and she now manages one of the top engineering consultancy firms. Her diverse scope, from collaboration with architects, technology transfer from other global professionals, and not only speaking the engineering language, but being open to learning and dealing with the finance and economics, makes her the outstanding engineer she is.



In the past number of years, Klang Valley has been experiencing major flash floods, especially along parts of Federal Highway. It was Ir Suhana Abdul Majid and her team who undertook a project to provide a solution to this problem, ie Flood Mitigation. One of the biggest challenges her team faced was in executing a brownfield project. In projects of this nature, things are not what they are meant to be. Local, existing site conditions are not as presented per as-built drawings, nor anticipated as what it could be implemented and constructed in actual. Extension of time, negotiations, and site modifications are just the norm.

We all know that after we press the flush, water streams down and gets processed somewhere. Where does it all go? What happens to it? How will it affect us? Ir Jama'iatul Lailah, gave us a presentation on what I would simply put it as 'Sewerage 101'. It addresses the importance and awareness of the sewerage process, how it's being treated before it is discharged back into our rivers. There's green technology being utilized, new plants that have just been commissioned and are in operation, but there needs to be engineers like Ir Jama'iatul to ensure that our Malaysian industry not only keeps up with these new technology via membrane treatment but is able to deliver the treated sewerage water.

Consideration of Acoustics Aspects in Construction Works: This is something that is probably considered unavoidable or taken for granted that it will be noisy in the construction industry. Hazards are everywhere, but hazards can be overcome, mitigated and prevented. Then again, once we forget to stay within the stipulated regulations, operate or conduct work within the boundaries our human body can withstand, we head into trouble. This was, Ir Zaiton Haron's session with us. She not only spoke about the effects, but she also demonstrated that the acoustic environment can be predicted via modeling.

From acoustic, we were exposed to green technology. Solar panel design and how new developments on concentrated photovoltaic panel are not only more effective, more efficient and is more economical. This is the expertise that Dr Nurul Aini Bani shared with us. Solar photovoltaic is the fastest growing green technology in the world, but yet it only provides about 1% of the world's electricity requirement due to the high cost of its installations. One probable solution in making solar power more affordable is to use less solar-cell material while producing the same, if not more, electrical output. To achieve this, she proposed an optical concentrator that focuses solar energy on a small area attached to a

photovoltaic cell. The main challenge is to design and install the concentrator on a solar panel while offering lower overall cost.

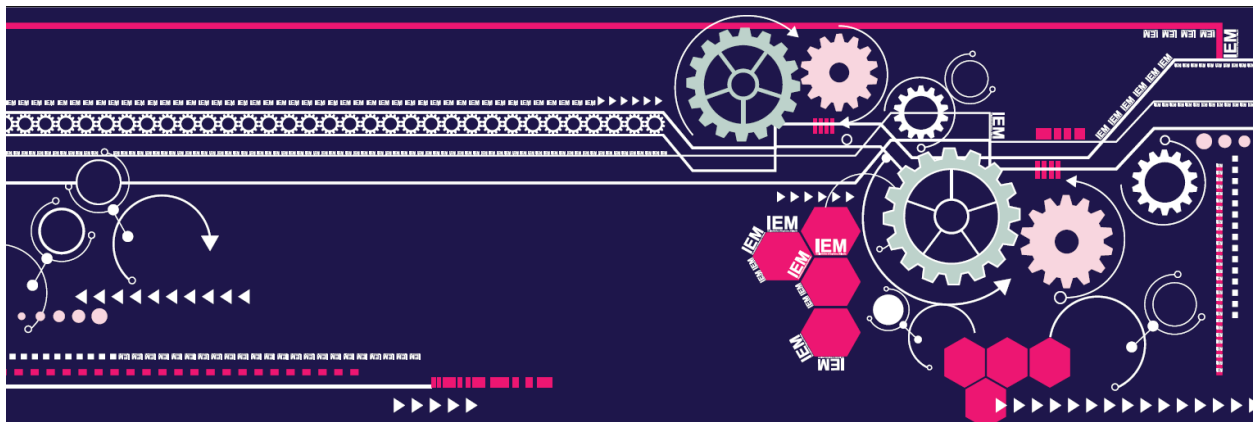
Professor Dr Cheong Sok Ching, from a Chemistry background, is now specializing in cancer research. Taking us away from everything technical, she addressed something that at times is forgotten. Like in engineering, we have opposites of a magnet, a coin as two faces, so, everything exists in a pair. Work life balance, it is real; it is not and will never be perfect. For women in the professional arena to be successful, she needs support and the environment has to be conducive. This is where she shared her own experience, where she has had peer support, support from her superiors (both male and female). Don't be mistaken, this is not only experienced by women, but it is experienced by both genders, as explained by Professor Cheong. She encouraged the engineers in the room, especially the younger ones, to be open and to see the world, to be exposed, as one's career development depends on innovation and positive thinking.



Ir Mah Siew Kien shared her brief thoughts about how engineering and the world has become as we have headed into the next industrial revolution. Digital Globalisation for Engineers addressed the largest impact, which is the instant access to data. This has revolutionized our world, so much so that now, even a small upcoming company can be on the same playing field as the huge conglomerates. Besides that she also added a mention about contribution to the community and looked forward to many new faces who would be sharing their knowledge around.

Although, all these ladies spoke in detail about each of their individual field of expertise, what we gathered and at the end of the day has achieved the objective that was set out. To showcase the outstanding work these women have done in their career, no matter which field they are from, be it from engineering, or the medical field or as even displayed by Ms Sim Yee, a graphic designer who has touched us engineers too. This young lady not in the engineering fraternity, stood up and presented to us her work as a graphic designer; how she takes what's around her to inspire her to design, draw and convey the message across to the viewer. Amongst her designs are for comic, children's books, advertisements and many others.

She's the proud winner of WES initiative for our IEM scarf. Her depiction of us engineers, it's about geometry and spinning wheels.



To sum up: I'd like to share this as quote from Professor Cheong, ***"It's a two way street, volunteer and mentor- help someone else grow"***.