Talk on "Chartered Professional **Engineer and Engineers Australia** e-Chartered Assessment System"





by Ir. Chew Weng Yuen

THE Engineering Education Technical Division and Engineers Australia Malaysia Chapter co-organised a talk titled "Chartered Professional Engineer and Engineers Australia e-Chartered Assessment System" on 26th September 2013, at the Auditorium Tan Sri Prof. Chin Fung Kee, Wisma IEM. The talk was delivered by Mr. Malcolm Macdonald, a National Assessor with Engineers Australia.

The talk commenced at 5.30 p.m. with 80 participants. First, Mr. Macdonald gave a brief overview of the benefits of being a chartered professional engineer. He said an engineer who wishes to register with Engineers Australia and be a chartered professional engineer, has to go through two (2) competency stages.

The first stage is the Engineers Australia (EA) Stage 1 Competency. Upon successful admission, engineers will become corporate members of The Institution of Engineers, Australia. The criteria for admission is a recognised engineering qualification. possession of fundamental engineering knowledge and skills, at least 3-5 years working experience as an engineer and industry experience, and subscribing to continuing professional development (CPD).

For EA Stage 2 Competency, engineers have to demonstrate that they are technically competent, able to work independently and have been subscribing to CPD before they are admitted to being a chartered professional engineer and are able to register with the National Professional Engineers Register (NPER) of Australia, and the Registered Professional Engineers of Queensland (RPEQ).

Mr. Macdonald then described succinctly the EA e-Chartered process and the four pathways available for enrolment to the programme, namely Engineering Competency Report (ECR), Professional Development Programme (PDP), Mature Experienced Engineer (MEE) or Mutual Recognition Agreement (MRA), and all were elaborated at length.

He explained that the e-Chartered works based on a browser access whereby submissions, verification and assessment are all done online and are supported by online guides, tutorials and examples. Fees payable are apportioned for each stage of the application.

Submissions for the e-Chartered include Engineering Claims of Competency (ECC), Engineering Experience Record (EER), current Curriculum Vitae and continuing professional development log showing a minimum of 150 hours over the last 3 years. For the ECC, applicants are required to write up online approximately 500-700 words on each of the 16 elements of competencies (11 for those taking the MEE route) as follows:

A. Personal Commitment

- 1. Deal with ethical issues
- 2. Practices competently
- 3. Responsibility for engineering activities

B. Obligations to Community

- 4. Develop safe and sustainable solutions
- 5. Engage with the relevant community and stakeholders
- 6. Identify, assess and manage risks
- 7. Meet legal and regulatory requirements

C. Value in the Workplace

- 8. Communication
- 9. Performance
- 10. Taking action
- 11. Judgement

D. Technical Proficiency

- 12. Advance engineering knowledge
- 13. Local engineering knowledge
- 14. Problem analysis
- 15. Creativity and innovation
- 16. Evaluation

For the EER, applicants are required to write approximately 700-1,000 words online, a detailed and verified statement of work carried out by the applicants over the previous 3 years (5 years for MEE applicants).

Mr. Macdonald advised applicants to carefully read and understand the requirements as stated in the document, "EA Competency Standards Stage 2", and to refer to other resources available on the e-Chartered website. He strongly advised applicants to write on 5 or 6 of their career highlights or episodes. He also gave a comprehensive overview on the ECC and elaborated on the "dos and don'ts" when writing up the same.

On the verification of documents, Mr. Macdonald said applicants should request their supervisor or peer (preferably a chartered professional engineer) who is familiar with their work, to do so for them. The verifier, however, must be a senior engineer with a minimum of 10 years' experience. Statutory Declarations are acceptable for up to 5 ECCs only.

At the end of the talk, there was active discussion and the participants raised questions which Mr. Macdonald answered and clarified. The talk ended with the presentation of a memento to Mr. Macdonald and a round of applause from the participants.

Ir. Chew Weng Yuen is a committee member of the Engineering Education Technical Division of IEM. He is currently the Deputy General Manager of Forefront Tiara Sdn. Bhd., a property development company.