



Safety Seminar

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The Chemical Engineering Technical Division (CETD) had organised a "Half-Day Safety Seminar 2012" on 20 October 2012 presented by Ir. Razmahwata bin Mohamad Razalli, the Director of Synergy Oil & Gas Engineering Sdn. Bhd. This seminar was one of the training series organised in conjunction with the Chemical Engineering Design Competition by CETD. The seminar attracted participants from student groups who signed up for the design competition, as well as chemical engineering students from University Malaya, who was the host for the seminar.



Ir. Razmahwata at the seminar

The seminar started with introduction to the concept of risk, where Ir. Razmahwata also gave an overview of the assessment tools used to assist in decision making process pertinent to safety. This was followed by introduction to two different approaches in implementing safety into design, which is inherently safe design and engineered safe design.

After the refreshment break, the participants were familiarised with Process Hazard Analysis (PHA) process. Ir. Razmahwata introduced the qualitative and quantitative methods in assessing process hazards, such as Failure Mode and Effect Analysis (FMEA) and Fault Tree Analysis. He also elaborately explained about Hazard and Operability Study (HAZOP) methodology with real life examples from the oil and gas industry.

Introduction to implementing safety into operations was also covered in the seminar. This includes the type of hazards in operation and how to mitigate them by having good maintenance practice and rigorous Permit to Work (PTW) system. Videos on the worst accidents in history, such as Bhopal, Piper Alpha and Flixborough were also played during the seminar to provide better understanding to the participants.



At the end of the seminar, Ir. Razmahwata shared the list of sources where the participants can obtain further information on safety. The participants felt that the seminar was very comprehensive and provided an industrial view of applying safety to chemical engineering solutions.

Students at the seminar