

UKM Chemical Engineering Students Win IEM's 1st Malaysian Chem-E-Car Competition 2004

Reported by: Prof. Dr Asbi bin Ali and Dr Law Chung Lim, Chemical Engineering **Technical Division**

n 12 January 2005, the Chemical Engineering Technical Division organised the 1st Malaysian Chem-E-Car 2004 Competition. Universiti Kebangsaan Malaysia co-organiser of this event. The competition was officially opened by Ir. Prof. Abang Abdullah bin Abang Ali, President of The Institution of Engineers, Malaysia. Ir. Prof. Abang Abdullah was pleased to see participating students who will be young engineers in the future being very creative and innovative in making their own Chem-E-Car. The Organising Chair of Asia Pacific Confederation on Chemical Engineering Congress 2006 (APCChE 2006) announced that a regional Chem-E-Car Competition will be organised by the Organising Committee in conjunction with APCChE 2006. He was confident that participating students national competition will have gained experience and will be able to compete very well with teams from other countries during the regional competition.

The competition consisted of two sessions. The first session was a poster presentation. Participants were given 10 minutes to present their model car and describe the propulsion system as well as the innovative and creative ideas they have made in areas such as propulsion system, safety, environmental issues, efficiency, etc. It was then followed by the car competition where each team was given four attempts. The team whose model car ended nearest to the end line wins the competition.

A Chem-E-Car is a model whose propulsion system is either a chemical cell or a fuel cell. The power that is required to drive the



"Fuel Cell" from UKM won the poster presentation



Winner for Car Model presentation

model car must be generated or converted from chemical energy. Of course, commercial batteries and fuel cells were not allowed in the competition.

Seven teams from Universiti Kebangsaan Malaysia (UKM). Universiti Malaya (UM) Universiti Putra Malaysia (UPM) participated in the competition. The participating teams were: Pro-A, Chem-X, Funny Car, Avicenna and Fuel Cell from UKM, Crest from UM and Phoenix from UPM. competition day, the participating teams were notified that the distance to be traveled was 15m and the



Organising Committee with the car models of the teams



Participating Teams in the 1st Malaysian Chem-E-Car Competition 2004

additional load to be carried by the model car was null.

The team of judges for the competition consisted of Ir. Johan Alimin bin Abdul Samad, Ir. Ahmad Nordeen bin Mohd Salleh and Ir. Chen Yew Seong. Rules Coordinator was Dr Law Chung Lim.

Fuel Cell from UKM won the competition. The team scored 346cm from the finish line. The next closest competitor was ProA from UKM at 393cm, and third place went to Avicenna from UKM at about 468cm. The first prize is a cheque for RM1500.00 and certificates.

In addition to doing well in the model car competition, the winning team also won the first place in the poster competition. Other winners in the poster competition were Phoenix from UPM (second place) and Funny Car from UKM (third place).

Chemical Engineering Technical The Division is excited about the success of the Chem-E-Car competition which produced a winning team this year and looks forward to the opportunity of having this team to compete at the international level in Glasgow in July 2005 to represent IEM and Malaysia. The 2nd IEM Chem-E-Car Competition is being organised for this year and an announcement will be made soon.