

## ABOUT THE COMPETITION

Chem-E Car Competition is an annual event organized by the Chemical Engineering Technical Division (CETD) of the Institution of Engineers of Malaysia (IEM) and a selected host institution of higher learning. The event, which started in 2005, will mark the 6th consecutive competition in Malaysia. The previous Chem-E Car Competitions have attracted considerable participation from institutions of higher learning locally and abroad.

The main objective of the competition is to construct a shoeboxed car powered by a chemical reaction. The car must be able to carry a certain load of water and stop within 2 minutes at a specified distance. The closest car is the winner. Here, the students have to apply their knowledge in chemistry and reaction engineering as well as technical skills in designing gearbox and electrical circuits in order to successfully run and stop the car. The Chem-E Car Competition is a good platform for students to demonstrate their creativity and innovativeness gained from their undergraduate studies.

## ABOUT THE HOST UNIVERSITY

Universiti Teknologi PETRONAS (UTP) was established on January 10, 1997 when the Malaysian government invited PETRONAS to set up a university. UTP aspires to be "**A Leader in Technology Education and Centre for Creativity and Innovation.**"

UTP offers a wide range of engineering and technology programs at undergraduate and postgraduate levels complemented with a strong focus on Research and Development. The programs are designed with high industry relevance to provide a dynamic learning environment.

The University community comprises students and staff from various countries. It is strategically located in a panoramic landscaped setting, amidst the new township of Seri Iskandar. Its peaceful environment, wide open spaces and abundant lakes make these serene surroundings a conducive place to study.

## COMPETITION CATEGORIES

### CAR PERFORMANCE

- Each car will be given two opportunities to traverse a certain distance (15-25 meter) while carrying a specified load of water (100-500 mL).
- The goal of the competition is to have the model car stop at the finishing line.
- Participants are also required to abide by safety rules as specified by the organizer.
- Details and competition rules would be made available to the participants upon acceptance of registration by the Organizing Committee.

### POSTER PRESENTATION

The presentation duration is 2 min for each team followed by a 3-min Q&A session. The winner will be determined from an averaged mark of minimum 3 judges who will evaluate the following 5 criteria:

- a. Description of the chemical reaction / power source / stopping mechanism (20%)
- b. Design creativity and unique features of the vehicle (20%)
- c. Environmental and safety features (20%)
- d. Economic aspects (20%)
- e. Quality of the poster and team member presentations (20%)

## PRIZES

### CATEGORY A: CAR PERFORMANCE

Gold: Challenge Trophy + Certificate + **USD 1,000.00**  
Silver: Certificate + **USD 700.00**  
Bronze: Certificate + **USD 500.00**

### CATEGORY B: POSTER PRESENTATION

Gold: Certificate + Token  
Silver: Certificate + Token  
Bronze: Certificate + Token

### CATEGORY C: SPECIAL AWARD

Certificate + **RM 500.00**

## REGISTRATION

### Participation Fee:

**RM 250.00** per-team (Malaysian)

**USD 150.00** per-team (International)

**Registration closing date: 15 February 2011**

Please send and/or fax your registration form and fee to IEM: [jac@iem.org.my](mailto:jac@iem.org.my) or [janet@iem.org.my](mailto:janet@iem.org.my)

For other information: [chemecar2011@gmail.com](mailto:chemecar2011@gmail.com)

