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 shoeboxsized 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 conductive 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).

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- 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:

- Description of the chemical reaction / power source / stopping mechanism (20%)
- 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



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 or janet@iem.org.my

For other information: chemecar2011@gmail.com

REGISTRATION FORM

Chairman

Chem-E Car 2011 Organizing Committee c/o Chemical Engineering Technical Division The Institution of Engineers, Malavsia PO Box 223, Jalan Sultan, 46720 Petaling Jaya

MALAYSIAN CHEM-E CAR COMPETITION 2011

| Name of the Institution (University/ College) | : | |
|--|-----|----|
| Address | : | |
| Name of Team | : | |
| Team Leader | ••• | |
| Team Members | ••• | 1. |
| | ••• | 2. |
| | ••• | 3. |
| Name of Advisor | ••• | |
| Tel. Number | ••• | |
| Fax. Number | ••• | |
| e-mail Address | ••• | |

Please tick √

Note: Acceptance of participation is subject to decision by the Organizing Committee

We enclose herewith a crossed cheque/bank draft issued in favor of "The Institution of Engineers, Malaysia" No:

We authorize you to debit my Visa/ Mastercard

Card No:

Card Expiry Date

Amount: RM



I/We understand that the fee is not refundable if I/we withdraw after my/our application is/are accepted by the Organizing Committee. However, substitution of participants is allowed. If I/we failed to attend the competition, I/we will still settle the registration fee in full. All payment must be received by 15 February 2011.

Date:

Signature:

ORGANIZING COMMITTEE

Chairman Engr. Zulhafiz Tajudin (UniKL MICET)

Co-Chairman

Dr. Nooryusmiza Yusoff (UTP)

Members

Ir. Hj. Tunai Shamsidi Ahmad (Minconsult) Ir. Assoc. Prof. Dr. Abdul Aziz Abdul Raman (UM) Ir. Assoc. Prof. Dr. Thomas Choong Shean Yaw (UPM) Engr. Dr. Chong Mei Fong (Nottingham U) Ir. Mohamad Fadzil Adnan@Nan (PETRONAS) Engr. Raymond Ooi Eam Hooi (Worley-Parsons) Dr. Low Chong Yu (UTAR) Dr. Syed Mohd Saufi Tuan Chik (UMP) Dr. Badrul Mohamed Jan (UM) Assoc. Prof. Dr. Mohamad Zailani Abu Bakar (USM) En. Imran Zakaria (UniKL MICET) Tuan Syed Azhar Syed Ab Rahman (UniKL MICET) Assoc. Prof. Dr Siti Kartom Kamaruddin (UKM) En. Norhisham Tan Kofli (UKM)

ENQUIRY

If you require further details, kindly contact:

Chem-E Car 2011 Secretariat **Chemical Engineering Technical Division** The Institution of Engineers, Malaysia Bangunan Ingenieur. Lots 60 & 62, Jalan 52/4 PO Box 223 Jalan Sultan 46720 Petaling Jaya, Selangor Darul Ehsan Fax No: 603 - 7957 7678

Contact persons: Jacquelyn (603 – 79684024, jac@iem.org.my Janet (603 – 79684013, janet@iem.org.my

Email: chemecar2011@gmail.com Website: https://sites.google.com/site/chemecar2011/

MALAYSIAN CHEM-E CAR COMPETITION

2011

towards sustainability



| Orgai | nizer | Host university | |
|--------|-------------------------------|-----------------|--|
| Time: | 8.00am – 5.00pm | | |
| | Perak Darul Ridzuan | | |
| | 31750 Tronoh | | |
| | Bandar Seri Iskandar | | |
| Venue: | Universiti Teknologi PETRONAS | | |
| Date: | 16 - 17 March 2011 | | |



Chemical Engineering Tech. Div.,

The Institution of Engineers, Malaysia

INIVERSET TEKNOLOGI PETRONAS