

2014 Electrical Model Design Contest

Reported by Ms Candy Leung

In order to promote the awareness of energy saving and understanding on renewable energy among secondary school students, in particular the lower form students, the Electrical Division of the Hong Kong Institution of Engineers has organized a competition called the “2014 Electrical Model Design Contest”.

This was the third year that the Electrical Division has organized the same event and the main theme of this year contest was hydro power. The competition was designed for all F.1 to F.3 full-time students to attract their interest in electrical engineering, to stimulate creativity and also to foster their understanding on hydropower through design and production of a hydro-driven model. To ensure fair competition among participating teams, two motors were provided to each team and they were allowed to modify or build their own hydro power model to maximize efficiency, but with the expenditure limit of HK\$1,000. To encourage participation, all costs incurred in the modification were reimbursed to each team.

The contest was open to all full-time secondary schools in Hong Kong and this year we had a total of 35 secondary schools participating the competition on 4th May 2014 at the Hong Kong Polytechnic University. In addition to general briefing on the design concept, a technical visit to Tuen Mun Water Treatment Works was also organized on 22nd March 2014 to all participants to let them have a better understanding on hydro power. A judging panel consisting of Ir Dr. Edward Lo, Associate Professor of Electrical Department of the Hong Kong Polytechnic University, Ir T C Yee, General Manager – Corporate Development of the Hongkong Electric Co., Ltd., Ir Clement Leung, Chief Electrical Engineer of Water Supplies Department and Ir C L Leung, Chairman of Electrical Division, was formed. The team with the best energy output, creativity, workmanship and presentation skill will become the winners. After two rounds of exciting but interesting competition, the champion, first runner-up and second runner-up of the competition were Tung Wah Group of Hospitals Mrs Fung Wong Fung Ting College, Semple Memorial Secondary School and CMA Secondary School respectively. TWGHs Mrs Fung Wong Fung Ting College was also the winner of “My Favourite Model” prize and the “Best Workmanship” prize, Maryknoll Convent School (Secondary Section) won the “Best Presentation” prize while CCC Tam Lee Lai Fun Memorial Secondary School won the “Best Creativity” prize.

To let our fellow engineers and general public to appreciate the creativity of the students, we had also arranged to display the champion team model in the HKIE-Hi-Tech Fiesta 2014 on 8th June 2014. As part of the prizes of the contest to further enrich the participants’ understanding on various renewable energy options, another technical visit in Hong Kong or Mainland China will be organized for the participants in July 2014.



The champion team TWGHs Mrs Fung Wong Fung Ting College



Group photo of the winning teams with the judges



Group photo of all the students, judges and organizing committee members