

2015 Electrical Model Design Contest

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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 “2015 Electrical Model Design Contest”.

This was the fourth year that the Electrical Division has organized the same event and the main theme of this year contest was the same as last year i.e. hydro-power generation. 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 renewable energy 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 design and build their own hydro-power model to maximize energy output, but with the expenditure limit of HK\$1,000.

The contest was open to all full-time secondary schools in Hong Kong and this year we had a total of 28 secondary schools participating the competition on 3rd May 2015 at the Hong Kong Polytechnic University. In addition to general briefing on the design concept, a technical visit to Shatin Sewage Treatment Works was also organized on 21st March 2015 to all participants to let them have a better understanding on applications of electrical engineering. 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 Ho Siu Kwong, Chairman of Electrical Division, and Ms Woo Pui Ling, representative from the Education Bureau 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, second runner-up and three merit award winners of the competition were HHCKLA Buddhist Ching Kok Secondary School, TWGHs Sun Hoi Directors' College, TWGHs Mrs Fung Wong Fung Ting College, Shun Lee Catholic Secondary School, St. Paul's Convent School and TWGHs Mrs Wu York Yu Memorial College respectively. TWGHs Mrs Fung Wong Fung Ting College was also the winner of “My Favourite Model” prize and the “Best Workmanship” prize, TWGHs Sun Hoi Directors' College won the “Best Presentation” prize and the “Best Team Work” prize as well while Christian Alliance Cheng Wing Gee College won the “Best Creativity” prize.

The judges were not only amazed by the creativity and enthusiasm of each team, but also the positive attitude towards continuous improvement and their interest in electrical engineering. They wish this experience can enhance their knowledge in hydro power and increase their interest in engineering field. 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 2015.



Our Division Chairman, Ir S.K. Ho (right), presenting prize to the champion team HHCKLA Buddhist Ching Kok Secondary School



Group photo of the winning teams with the judges and organising committee members



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