

ANG KOON MENG (UCSI) WINS FYP 2019



by Ir. Dr Wang Hong Kok

2019 is the 3rd year for the Tan Sri Ir. Yusoff Best Final Year Project (FYP) Competition. Initiated by the IEM Education Fund, it is jointly conducted by IEM and The Institution of Engineering and Technology (IET).

The objective is to encourage engineering undergraduates to produce better quality FYPs. This competition is open to all universities and institutions of higher learning (IHL) with accredited engineering programmes. In the first 2 years, each university or IHL could only nominate the best FYP for submission.

This year, however, each university/IHL could submit only one nomination for each discipline and a total of 45 projects were received. They were 2 levels of assessment. Round 1, mainly on the project findings, contributed 80% of the total marks. In Round 2, students were assessed on presentation skills.

The organising committee members representing IEM, comprised Honorary Secretary Ir. Mohd Khir and Ir. Dr Wang Hong Kok. Representing IET were Associate Prof. Dr Lai Weng Kin and Mr. Indiran Nadarajan.

It was a privilege to have the following judges and we would like to extend to them our gratitude and thanks for their support.

| Name | Faculty/Department |
|--|-------------------------------------|
| Dr Idris Ismail @ UTP | Computing & Information Technology |
| Dr John Tan @ SilTerra Malaysia | Electrical & Electronic Engineering |
| Mr. Pang Jia Yew @ Heriot Watt Malaysia | Electrical & Electronic Engineering |
| Ir. Dr Khor Jeen Ghee @ Plexus Manufacturing | Electrical & Electronic Engineering |
| Dr Lim Li Li @ TARUC | Electrical & Electronic Engineering |

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| Dr Tiang Tow Leong @ UniMAP | Electrical & Electronic Engineering |
| Prof. Dr Esah Hamzah @ UTM | Material & Manufacturing |
| Assoc. Prof. Dr Astuty Amrin @ UTM | Material & Manufacturing |
| Ir. Dr Ng Soon Ching @ Sepakat Setia Perunding | Civil Engineering |
| Ir. Dr Lee Yun Fook @ Sepakat Setia Perunding | Civil Engineering |
| Dr Rizal Effendy @ UiTM | Mechanical Engineering |
| Dr Roslan Abdul Rahman @ UTM | Mechanical Engineering |
| Prof. Ir. Dr Wan Khairuddin @ UTM | Mechatronic Engineering |
| Dr Chong Chien Hwa @ Heriot Watt Malaysia | Chemical Engineering |
| Prof. Ir. Dr Rozita Binti Yusoff @ UM | Chemical Engineering |
| Dr Tee Tiam Ting @ UTAR | Chemical Engineering |
| Ir. Dr David Chuah Joon Huang @ UM | Electrical & Electronic Engineering |
| Ir. Dr Mohamad Syaiful Ashrul Ishak @ UniMAP | Mechanical, Material & Manufacturing |
| Prof. Dr Nazri Jaafar @ UTM | Mechanical, Material & Manufacturing |
| Dr Ang Kiang Loong | Mechanical Engineering |
| Ir. Elias Bin Saidin | Civil Engineering |
| Prof. Dr Rahmat Bin Mohsin @ UTM | Petroleum Engineering |
| Dr Dzeti Farhah Mohshim @ UTP | Petroleum Engineering |

Winner for 2019 FYP: RM 1000 + Certificate

Name: Ang Koon Meng
 University: UCSI
 FYP Title: Development of Improved Particle Swarm Optimisation Algorithm for Constrained Optimisation.
 Discipline: Mechatronic Engineering

Consolation Prize : RM 400 + Certificate

1. Name: Lee Wei Qin
 University: Curtin University Malaysia
 FYP Title: Cracks Identification in Building Structure
 Discipline: Electrical Power Engineering
2. Name: Heng Yen Fern
 University: University of Nottingham Malaysia
 FYP Title: Investigation of Jet Mixing in Swirl Co-Flow
 Discipline: Mechanical, Material & Manufacturing
3. Name: Tee Zhen Wei
 University: TAR University College
 FYP Title: Numerical Analysis on Vibro-Acoustic Characterisation of Honeycomb Structure with Flor Permeability
 Discipline: Mechanical Engineering
4. Name: Tan Jun Yan
 University: UTAR
 FYP Title: Study of Combined Effect of Concentrated Solar Power (CSP) and Phase Change Material (PCM) in Solar Desalination
 Discipline: Mechanical Engineering
5. Name: Lee Chong Hoe
 University: Universiti Malaysia Pahang (UMP)
 FYP Title: Diversity of Stress Ranges in Cables of Cable-Stayed Bridge Due to Traffic Loads and Far-Field Seismic Excitation
 Discipline: Civil Engineering
6. Name: Tay Sze Yee
 University: Heriot-Watt University Malaysia
 FYP Title: A Renewable Polysaccharide-Based Bio-Sorbent Functionalised with Calcium Chloride For Renewable of Azo Dye Methyl Orange
 Discipline: Chemical Engineering

This year we received participations from the faculties/ departments of Computing, Electronic Engineering, Electrical & Electronic Engineering, Civil Engineering, Mechanical Engineering, Petroleum Engineering, Mechatronic, Materials & Manufacturing, Agricultural & Biosystems Engineering, Biomedical and Chemical Engineering. We hope more students will be inspired to take part in the FYP competition next year. ■



Standing (l-r): Ang Koon Meng (winner of FYP 2019) and his supervisor Dr Lim Wei Hong from UCSI University.
 Seated (l-r): Judges representing IEM, Dr Amran Ayob and Ir. Dr Wang Hong Kok and judges representing IET, Dr Lai Weng Kin and Mr. Indiran Nadarajan



Finalists and their supervisors