MTSF Award for Asst. Prof Dr. Teh Geok Bee

Our heartiest congratulations to Assistant Professor Dr Teh Geok Bee, a lecturer from the Faculty of Engineering and Science (FES), who has been selected as one of the sixteen researchers to receive the 2005 Malaysia Toray Science Foundation (MTSF) Science and Technology Research Grant.

The Malaysia Toray Science Foundation was established in 1993 through a RM4 million endowment by Toray Industries, Inc. Japan. It is an organisation formed to advance the objective of promoting science and technology in Malaysia. The Science and Technology Research Grant is awarded annually to those persons whose outstanding achievements have contributed to scientific and technological progress.

The Grant which carries a prize of RM20,000.00 will be presented to Asst Prof Dr Teh Geok Bee at a prize giving ceremony to be held on 28 November 2005 at Hotel Nikko, Kuala Lumpur, for a scientific project entitled "Investigation of Silicon Nanocrystals: Synthesis, Structural and Properties Characterisations". The project is lead by Asst Prof Dr Teh Geok Bee, working together with Asst Prof Dr Saravanan Nagalingam (UTAR) and Dr Richard D. Tilley (Victoria University of Wellington).

Research of silicon nanocrystals although both scientifically interesting and industrially benefiting, is still lacking in Malaysia. Dr Teh Geok Bee with previous experience in the field of nanoscience, intends to investigate the employment of wet chemistry, namely the micro-emulsion technique in producing silicon nanocrystals in room temperature condition. The current employed technique of mechanical milling, vapour phase system and laser assisted etching is expensive due to the requirement of specific equipments. The micro-emulsion technique represents an inexpensive and easy way to prepare nanostructured silicon particles. She also envisages that the employment of micro-emulsion technique will produce a wider size distribution of silicon nanocrystals.

The investigation of silicon nanocrystals' properties is expected to benefit the semiconductor industry as silicon is the workhorse of this industry.