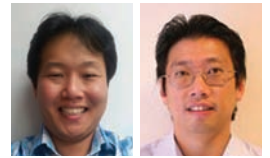


The 20th Annual Prof. Chin Fung Kee Memorial Lecture



by Ir. Tan Ek Khai and Ir. Yee Yew Weng

GEOTECHNICAL ENGINEERING TECHNICAL DIVISION

THE 20th Annual Prof. Chin Fung Kee Memorial Lecture was held at the Auditorium Tan Sri Prof. Chin Fung Kee, Wisma IEM. The annual event features distinguished lecturers from local and international engineering fraternities and is jointly organised by The Institution of Engineers Malaysia and the Engineering Alumni Association of the University of Malaya.

The lecture featured a lecture by Prof. Pedro Simão Sêco e Pinto entitled "Dam Engineering: State of the Art and Practice, Observed Behaviour and Future Challenges". Prof. Pinto was invited by the Management Committee due to his experience in research and engineering practice globally on geotechnical engineering, especially in dams and earthquake engineering, which was the subject of his lecture.

Over his 30-year career, he has authored and co-authored over 350 technical and scientific reports and more than 150 papers for international conferences and journals. He has also contributed to four books on various subjects. Prof. Pinto is the Immediate Past President of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) and has also served as the ISSMGE Vice President for Europe. He is currently the Professor of Geotechnical Engineering at the University of Coimbra, Portugal, and the Principal Research Engineer for the Portuguese National Laboratory of Civil Engineering (LNEC).

The lecture was chaired by Ir. Dr Chan Sin Fatt, and a total of 163 participants attended the event. Prof. Pinto presented many well-documented case histories from many parts of the world related to embankment dams behaviour under static and seismic actions. In his lecture, Prof. Pinto touched on the following issues: the background of embankment dam engineering history; a summary of factors affecting embankment dam behaviours with emphasis on the requirements for materials characterised in embankment dam engineering; the design and analysis of dam stability under static and seismic conditions; reservoir-triggered earthquakes and its causative factors; dam monitoring and inspections; and an analysis of the ageing effects of dams and its rehabilitation.

Risks associated with dam projects were discussed using experience from past failures and incidents. He explained that 65% of dam failures were due to the ageing or deterioration of the structure, whilst only 10% were due to slope failure. Lessons learnt from failures suggest that major dams need an independent review board and a design team should follow its construction closely. He concluded that the major concerns surrounding reservoirs involves social factors (i.e. resettlement) and the environment.

In his lecture, Prof. Pinto drew wisdom not only from engineers, but also included thoughts from philosophers ranging from Plato to Hippocrates. He said that the "7 pillars of engineering wisdom" are: Precedents, Practice, Principles, Prudence, Perspicacity, Professionalism and Prediction.

He is also familiar with Tan Sri Prof. Chin Fung Kee's academic and learned society work, and made references to these works in his lecture.

At the end of the lecture, Prof. Pinto kindly answered some questions from the floor. Ir. Dr Chan closed the proceedings by presenting Prof. Pinto with a memento, accompanied by loud applause from the audience. ■



Photo 1: Some Advisory Committee Members of the Prof. Chin Fung Kee Memorial Lecture with Prof. Pinto (From left: Ir. Y. K. Tan, Ir. Dr. T. A. Ooi, Ir. S. L. Ng, Ir. Dr. S. F. Chan, Prof. Pinto, Academician Datuk Ir. Prof. H. T. Chuah, Ir. C. Y. Choo, Ir. Y. W. Yee)

Note: The 21st Prof. Chin Fung Kee Memorial Lecture entitled "Engineering and Entrepreneurship: Is it an Oxymoron?" is to be delivered by Tan Sri Dr Francis Yeoh Sock Ping at JW Marriott Hotel on 5 November 2011. Kindly refer to the IEM web portal at www.myiem.org.my for further details.