❑ Stories by TEE LIN DEE, LEOW YONG MAY, CINDY YEOH, LAVONNE CHEAH and PRAKASH GOPALAKRISHNAN

Hi-tech equipment: UCSI students conducting experiments with state-of-the-art instruments in the lab.

Big potential in oil sector

UCSI University petrochemical engineering graduates are highly sought-after by companies.

HIGH petroleum dependency and the acute awareness of its depletion have led to extensive research on alternative, renewable sources of energy. The world economy is still very much affected by the fluctuating price of petroleum, and more sophisticated techniques are being developed to find the resource.

Graduates in this field of study remain one of the most highly paid and sought-after candidates. Upstream oil and gas companies and related firms employ most of them even before they complete their programme due to high global demand. The advancements in current petroleum industries have spurred the creation of such courses at UCSI University.

According to the founder and head of the Chemical/Petrochemical Department in UCSI University Faculty of Engineering, Architecture and Built Environment, Prof Dr Hikmat Al Salim, "If you are a drilling engineer, you will be working with geologists, geophysicists and drilling contractors involved in the design and supervision of drilling operations. On the other hand, if you are a petroleum engineer, you will be involved in conducting assessment studies for the development of new oil and gas fields."

A Chemical and Petrochemical Engineering degree programme may be another option for those who wish to pursue a career in industrial chemical engineering. This programme is designed to equip students with a solid foundation in chemistry, physics, mathematics, mechanical and electrical engineering, and their industrial applications.

This UCSI University programme is unique as it allows students to utilise advanced analytical equipment to carry out experiments to complement the theoretical components of the programme. High technology testing equipment such as gas chromatography, infrared, ultraviolet, spectrophotometers, and a wide range of crude oil assessment equipment can be utilised by students.

Such advanced technology equipment is usually made available only to students at the masters level. The equipment was purchased and installed after surveys were made of such laboratories in world-class petrochemical engineering schools in the United States such as, at the University of Texas and the University of Tulsa, as well as at Imperial College and Aberdeen University in Britain.

To further equip students and enable them to be industry-ready, UCSI University has set up and equipped its petroleum engineering computer laboratory with reservoir and multilateral drilling simulation software.

Students will be able to experience the simulated environment and "see" how the knowledge they have acquired is utilised in a real-life situation.

Besides having access to well equipped and customised facilities, all engineering faculty students are required to have at least eight months of internship. This is broken into two four-month sessions in their second and fourth years. This is part of the UCSI University Co-Operative Education programme, which ensures all graduates are equipped with theoretical and field-related job experience before they join the workforce.

Dr Hikmat Al Salim says, "A petroleum engineer's job is an exciting but demanding one. You get to travel worldwide as overseas assignments are plenty. As a petroleum engineer, you will apply all the basic engineering sciences you have learnt, and use them to identify, formulate and solve petroleum-engineering problems. Challenges abound, it is a career path that has given job satisfaction to many."

❑ **To find out more, attend UCSI University Open Days from Feb 26-28, 9am-5pm and talk to their counsellors. You can call 03-9101 8880, e-mail *www.ucsi.edu.my/onlineenquiry/* or visit *www.ucsi.edu.my.***