

## UKM Seeks Tax Incentives For Research Collaboration With Industry

SATURDAY, 24 SEPTEMBER 2011 07:03



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BANGI, 23 Sept, 2011 - UKM Vice-Chancellor Prof Tan Sri Dato' Wira Dr Sharifah Hapsah Syed Hasan Shahabudin has appealed to the Government to extend the double tax exemption incentives for the research expenses incurred by companies to endow Chairs in universities.

"I also hope the government will consider allocating one ringgit for every ringgit given by the industry as an incentive for effective public-private partnership in research and education," she added. She was speaking at the launch of the UKM-Yayasan Sime Darby (YSD) Chair for Sustainable Development Zero Waste Technology for the Palm Oil Industry by Deputy Prime Minister Tan Sri Dato' Haji Muhyiddin Haji Mohd. Yassin here. Also present were YSD and Sime Darby Chairman Tun Musa Hitam, Higher Education Minister Dato' Seri Mohamed Khaled Nordin, Chairman of the UKM Board of Directors Tan Sri Zulkefli A. Hassan and Higher Education Ministry Secretary-General Datuk Abdul Rahim Md Noor.

At the event, Tun Musa presented Prof Sharifah Hapsah with a cheque for RM15 million as its contribution to the endowment fund for the Chair.

Prof Sharifah Hapsah said UKM's research strengths in climate change studies and renewable energy were the foundation on which the university built its proposals to secure two Chairs from YSD. One is for climate change studies. The other, launched today, is on sustainable development – zero waste technology for the palm oil industry. Its objective is to change palm oil mills into green, carbon-neutral factories with zero discharge while simultaneously increasing revenues and ensuring the long-term productivity and sustainability of the industry. The Chair, she noted, will also have a positive spin-off on human resource capacity building, development of intellectual properties and their commercialisation.

"We believe university-industry partnership, such as the one we are forging with YSD, is crucial for ensuring relevance in research and education as well as for sustaining and promoting transformational innovations.

"We need to look at how we can have further incentives for such partnerships," she said adding that UKM strives to be in line with the Government's economic transformation plan as well as the national higher education strategic plans.

"Towards this end, we have aligned our curricula offerings and research to support the needs of a fast developing innovation economy. Innovation and entrepreneurship as well as empowerment of students as self-directed learners.

"These are approaches to develop high tech job creators rather than just job seekers. Academic entrepreneurship is developed as an institutional culture to bring ideas and technology to the marketplace," she said.

"Our strategy focussing on eight interdisciplinary research areas with national and global impact is bearing fruit in terms of attracting research grants, producing patents and other intellectual property, publishing in high impact factor journals, commercialisation of technology and producing postgraduates skilled in technological innovations and enterprises."



The UKM-YSD Chair for Sustainable Development – Zero Waste Technology for the Palm Oil Industry comes at a timely moment when there is an urgent need for the palm oil industry to come up with solutions in reducing greenhouse gases through research on green technology and innovative practices.

The first Chairholder, Dr Ir Pieter Claassen, of Netherlands' Wageningen University and Research Centre, is senior scientist in the Biomass and Bioenergy Group at the Wageningen UR Food and Biobased Research Institute. She is an expert in the bioprocess for hydrogen production from biomass, which is one of the main thrust areas that will be explored by the Chair.

Other research areas that will be explored by the Chair are the composting of bio-solids for organic fertiliser, hydrogen production for steam and power generation, the pre-treatment of biomass for hydrogen production, algae production to sink carbon dioxide and the recycling and reuse of water.

The ultimate aim of the research is to turn palm oil mills into green factories that are not only carbon neutral but also leave a negative carbon footprint. Zero waste implies that the future production of palm oil will dispense no waste to the air, ground and water. At the same time, the research will also be able to increase the revenue of the industry and the productivity of palm oil companies.

The Chair's first project is to eliminate black smoke from Sime Darby's palm oil mills. The system being developed will be tested in October 2011 and if successful, black smoke from the chimney of West Oil Mills in Carey Island, Selangor, and later all Sime Darby mills will be a thing of the past.

At the same time, both the UKM and Sime Darby Plantation research teams are working on the production of nitrogen-enriched compost, which will have a direct impact on the reduction of fertiliser costs. It is anticipated that this project will be completed by mid-2012.

Other research projects under the Chair will lead to the production of renewable hydrogen fuel, bio-fertiliser and animal feed, among others. The production of hydrogen fuel will help contribute to Malaysia's commitment to reduce greenhouse gases intensity by 40 percent by 2020.

As fertiliser and animal feed are mostly imported, the production of Malaysia's own bio-fertiliser and animal feed through this Chair is expected to reduce annual import bills of these commodities by about RM4.2 billion and RM2.6 billion, respectively.

In addition, production of hydrogen, bio-fertiliser and animal feed will generate an additional revenue of RM14 billion a year to the oil palm industry or a 20 percent increase to the current palm products' revenue of RM60 billion.

The project, initiated by YSD in January 2010, will not only involve UKM but also other local public institutions. Through this concerted effort, it will create a consortium of Malaysian intellectual capital that will share their expertise in the Chair.

Currently, researchers from institutions such as the Malaysia Agricultural Research and Development Institute (MARDI), Universiti Teknologi Malaysia (UTM), Universiti Teknologi MARA (UiTM), Universiti Malaysia Pahang (UMP) and University of Nottingham Malaysia, are already working collaboratively with

UKM on various research areas that will help spur the Chair.

