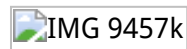


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English News

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USM RECEIVES THE FIRST NMR700MHz MACHINE IN ASIA-PACIFIC, RAISES CAPACITY OF HIGH-IMPACT RESEARCH



USM, PENANG, 17 April 2016 – Today marked yet another historic moment for Universiti Sains Malaysia (USM) when it received the NMR700 MHz machine, purchased together between the Ministry of Science, Technology and Innovation (MOSTI) and USM from Bruker Corporation.

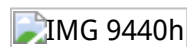
The purchase of the NMR700 MHz machine, costing RM7.8 million, was the result of a collaboration agreement signed on 21 December 2012 between USM and the Malaysian Government (represented by MOSTI).

According to the Vice-Chancellor, Professor Dato' Dr. Omar Osman, the powerful and sophisticated machine, is the first of its kind in the Asia Pacific region and will be placed in the Malaysian Institute of Pharmaceuticals and Nutraceuticals (IPHARM) at Bukit Gambir, Penang.

"Compared to similar existing machines, this machine has a lower maintenance cost and does not require the addition of helium gas and nitrogen unlike the previous versions, operates more quietly through integrated sound insulation and it is more durable and has a longer magnet lifespan," he told reporters after the handing over ceremony and laboratory visit.

For future plans, he hoped that this machine is able to raise the capacity of advanced high-impact research, support the industry and enhance collaboration with Bruker Corporation to make the NMR USM-IPHARM Unit as a training and reference centre for NMR in the region.

"With this technology, experimental discovery will have a higher value and will not be questioned because it has a high impact in terms of resolution and accuracy," he added.

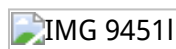


Meanwhile, a lecturer from the School of Pharmaceutical Sciences, Dr. Teh Chin Hoe who has been entrusted with the responsibility to operate this machine, said that NMR700 MHz is equipped with the most recent technology for NMR spectroscopy and can be used in a variety of disciplines including biology, chemistry, medicine, pharmacy and other related industries.

"Among the areas of research that require the use of NMR700 technology are in determining the structure of small molecules (commonly found in the pharmaceutical industry) and macromolecules such as proteins, DNA and oligosaccharides, in identifying small molecules and protein interactions and in identifying the metabolic phenotypes," he explained.

Prior to this, USM has 5 similar machines but they are of lower capacity, and this newly acquired unit will be the sixth machine and it is believed to be the most sophisticated one to date.

An Administrative Council was set up to oversee the operation of the machine and it consisted of four representatives from USM and 3 from the Malaysian Government (MOSTI) to be chaired by the USM Deputy Vice-Chancellor (Research and Innovation), Professor Dato' Dr. Muhamad Jantan.



The formal handover ceremony was also attended by Muhamad Jantan, IPHARM Executive Director Associate Professor Dr. Mohamed Ibrahim Noordin and some 50 representatives from USM, IPHARM MOSTI and Bruker Corporation.

Bruker Corporation is a manufacturer of scientific instruments for molecular and materials research, as well as for industrial and applied analysis that is headquartered in Massachusetts, USA.

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