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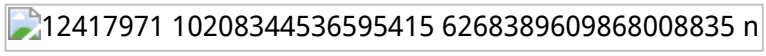
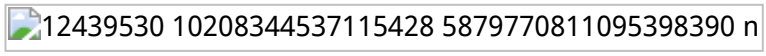
USM PROUDLY SUPPORTS TWO RESEARCHERS ON ANTARCTICA EXPEDITION



PENANG, 20 January 2016 - Two Universiti Sains Malaysia (USM) researchers,Dr. Foong Swee Yeok and Muhammad Hilal Mohd Zainudinwere among the eight researchers from six local universities who were on a 22-day expedition to Antarctica beginning 18 January, as a continuation of the involvement of Malaysian scientists in scientific expeditions which have started since 1999.

The expedition is under the coordination of the Sultan Mizan Antarctica Research Foundation (Yayasan Penyelidikan Antartika Sultan Mizan/YPASM) in cooperation with the National Antarctica Research Centre (Pusat Penyelidikan Antartika Kebangsaan), Universiti Malaya and together with several international agencies such as the International Center for Space Weather Science and Education (ICSWSE), Kyushu University, Korean Polar Research Institute (KOPRI) and University of Cambridge, UK.

According to the Dean, School of Biological Sciences USM, Professor Dr. Amirul Al-Ashraf Balakrishnan bin Abdullah, he was proud that the two USM researchers came from the School of Biological Sciences and their participation has once again put USM name on the world stage.



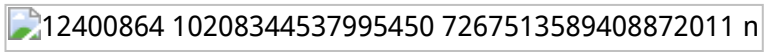
“Although this is not the first time that researchers from the USM School of Biological Sciences have participated in an expedition to Antarctica, with this sixth expedition comprising of researchers from USM, it is hoped that this expedition would yield results that not only would benefit USM and the country, but also the world over,” said Amirul Al-Ashraf Balakrishnan.

Swee Yeok is a senior lecturer in Environmental Studies who has done numerous researches on the ecosystem of mangrove swamps and biodiversity.

She was awarded a grant by YPASM to do research in Antarctica on the pollination process and the dispersion of pollens on the surface of Antarctica.

Muhammad Hilal Zainuddin meanwhile is pursuing his Master’s in Science programme at USM under the supervision of Dr. Mahadi Mohammad and Dr. Sazlina Md Salleh, both of whom were among the USM scientists involved in the Expedition to Antarctica in 2002 together with a group of other fellow scientists.

According to Mahadi, Muhammad Hilal would be looking at the Antarctica coastline, where various microbes and microalgae could be found, being the source of food for organisms at higher trophic levels during the cold season and with limited sunlight and food sources.



Mahadi, who was proud with the selection of his student for the expedition explained that, the microalgae community has contributed around 30% of the primary production in the icy areas. However, in the context of global warming, the microalgae community has been affected by the changes in temperature and rays from the sun.

“Global warming has affected all the oceans and brought challenges to marine organisms especially to the microalgae community, due to the higher temperatures and surrounding light, resulting in photo inhibition to the microalgae cells, slowing down growth and reducing the ability for survival,” said Mahadi.

He further explained that, the objective of Muhammad Hilal’s research was to investigate the composition and distribution of microalgae in the polar and tropical regions, analysing photosynthesis activities and the ability of microalgae to adapt in different natural zones and to analyse the effects of light and temperature on the photosynthesis ability of the microalgae in the sub-Polar, Antarctic and also the tropical regions.

“During his time there, he would be sampling the sea water, ice fragments and also the soil to identify the types of microalgae species. Experiments would be done to test the adaptability of the photosynthesis activity of the microalgae to the changes in light intensity and temperature in the field,” said Mahadi further, as he constantly monitors his student’s work and assists in any way to ensure the success of this expedition.

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