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English News

17
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FROM USM TO ANTARCTICA, FOR THE PRESERVATION OF BIODIVERSITY



PENANG, 17 February 2016 – There was a deep feeling of gratefulness and excitement shared by the researchers upon arriving on Malaysian soil, on the evening of Sunday, 14 January 2016.

Among them was the Centre for Marine and Coastal Studies (CEMACS) Universiti Sains Malaysia (USM) graduate student, Muhamad Hilal Mohd Zainudin, 26.

According to Hilal, the challenging expedition which lasted for 22 days started from the port of Ushuaia town in Argentina, which is located approximately 1,000 kilometres away from Antarctica.

"We travelled along the fringes to the Antarctic Peninsula, from King George Island down to Darboux Island in the south, in a 23-metre long yacht called 'AUSTRALIS'," he said.

The challenge though actually started when the yacht crossed 'Drake Passage' before reaching Antarctica, as the area is famed for its rough and turbulent sea conditions.

The 'Drake Passage' comprised of the 'Drake Lake', where the condition is calmer and the 'Drake Shake' with its rough and turbulent nature.

"Luck was not on our side when we experienced 'Drake Shake' as we headed there and back, where the waves reached the height of 8 metres when we sailed through to 'Drake Passage' and at times, our yacht was tilting at a 45-degree angle and that made it difficult to do our activities and daily routines on the yacht due to security reasons while being at 'Drake Passage'".

"We went through 'Drake Passage' for almost 3 days to reach Antarctica, and that the first attempt to reach Antarctica was unsuccessful due to the strong winds and rough seas which lasted for 15 hours and made us decide to return to Puerto Williams, Chile. We took shelter and waited for 2 days for the weather to become suitable for our yacht to set sail again to reach Antarctica," he said.

Among other challenges faced were in stabilising the conditions of the yacht, the dry and cold environment in Antarctica and the sea conditions, as we tried to complete the research and achieve the main objectives of the expedition.

Hilal also shared a bad experience when thrice he was almost attacked by Brown Squaw birds, as he passed by the bird's nest on his way across from one part of the area to another for sampling activities, while a pleasing experience was to be able to witness the beauty of the

Antarctic continent from the aspects of the mountains, wildlife such as the penguins, the fauna of the cold climate and the spectacular geographical landscape.

"In Antarctica, I was assigned to gather sediments and water samples to test for their composition, the distribution of polar marine microalgae and also to look at photosynthesis activities as well as the adaptation strategies of the polar marine microalgae in the study of this naturally-formed site," explained the graduate student who hailed from Johor.

In sharing further, he said that the research at the polar icecaps (antarctica and arctic) by researchers from USM is not something new, as USM had previously sent researchers to the polar regions, and he hoped that such programmes would be continued and more USM students would be given the lifetime opportunity to do future research at those locations.

It is still too early to see the impact and results from the expedition, and for the research that I am involved in, it requires a comparison with the situation in the tropics, and my initial findings would be presented at SCAR 2016 (The Scientific Committee on Antarctic Research) at the end of August, where Kuala Lumpur would be the host."

"I would also like to convey my appreciation to my Supervisors, Dr. Mahadi Mohammad and Dr. Sazlina Salleh for entrusting me and giving me the opportunity to join the expedition, allowing me to utilise the research findings as part of my thesis, and also to CEMACS USM for offering me the platform to join this expedition, as well as to my colleagues at USM for the endless support and assistance prior to and during the expedition," he said.

The expedition comprised of 8 people consisting of 2 graduate students and 6 academicians from 6 different universities, and among them, two members came from the School of Biological Sciences USM - Dr. Foong Swee Yeok and myself.

The expedition was organised by the Ministry of Science, Technology and Innovation (MOSTI) and coordinated by the Sultan Mizan Antarctica Research Foundation (YPASM), together with the assistance provided by the National Antarctica Research Centre, University of Malaya and also cooperation from a number of international agencies such as the International Centre for Space Weather Science and Education (ICSWSE), Kyushu University, Korean Polar Research Institute (KOPRI) and University of Cambridge, UK.

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