Malaysia’s activities and achievements in Antarctic research and diplomacy

Malaysia’s activities and achievements in Antarctic research and diplomacy

Introduction

Malaysia is extremely honoured to be part of the 44th Antarctic Treaty Consultative Meeting (ATCM) in Berlin, Germany. This meeting marks the eleventh (11th) time whereby Malaysia makes its presence at this prestigious meeting since being a member of the Antarctic Treaty System (ATS) in 2011. Malaysia is also pleased to share the progress of its activities and achievements in its Antarctic research and diplomacy.

Progress

To date, the Sultan Mizan Antarctic Research Foundation (SMARF), which was established in July 2012 has disbursed and awarded:

* 36 Research Grants to Malaysian scientists;
* 13 Fellowships to young Malaysian scientists; and
* 12 Antarctic Berth Support to Malaysian scientists.

These awards are in line with the Foundation’s objective to promote scientific research programmes in the Polar regions and to provide as well as manage funding for research grants, post-graduate studies and fellowship in scientific research in the Polar regions among Malaysian scientists. Other than providing research grants, fellowship and berth support, the Foundation continues to undertake awareness programmes to promote the importance of the Antarctic among school children and Malaysian public. The programmes include Antarctica exhibitions, sharing sessions with polar scientists, and various contests.

Through the grant and research support provided by SMARF, three (3) Malaysian scientists have carried out field works in the Antarctic as part of their research activities at the following facilities during the 2021/2022 summer season as follow:

* Field research at the Chilean facilities in Antarctica;
* Field research at the United Kingdom facilities in Antarctica; and
* Field research at the Korean facilities in Antarctica.

Field research at the Chilean facilities in Antarctica

One (1) Malaysian researcher visited and carried out field work at the Bernardo O’Higgins Station in Antarctica for the third time to continue her previous project. Her visit this time was made possible under the collaboration between Universidad de Magallanes, Chile and Centro de Investigación y Monitoreo Medio Ambiental Antártico (CIMAA). Malaysia would like to thank Chile for the opportunity given and continuous support to work at the Chilean facilities in Antarctica. The collaborative project that our scientist worked on was:

|  |  |  |  |
| --- | --- | --- | --- |
| **Scientist/Researcher** | **Research Title** | **Expedition Date** | **Station** |
| Assoc. Prof. Dr. Siti Aqlima Ahmad | Third Stage of Bioreactor Design for Cold-adapted Bioremediation of Antarctic Soils Contaminated with Diesel Hydrocarbons | 2 March – 20 March  2022 | Bernardo O’Higgins |

### Field research at the British Antarctic Survey facilities in Antarctica

One (1) Malaysian researcher visited and carried out field work at the Rothera station in Antarctica. His visit was made possible through the collaboration between the Foundation and British Antarctic Survey (BAS) through the renewed Memorandum of Understanding between both parties for another five (5) years (2019-2024). During this field work, he collected some soil samples and to be couriered to Malaysia for further analysis. Malaysia would like to thank United Kingdom for the opportunity given to these scientists to work at the British Antarctic Survey facilities in Antarctica. The collaborative project that our researcher worked on was:

|  |  |  |  |
| --- | --- | --- | --- |
| **Scientist/Researcher** | **Research Title** | **Expedition Date** | **Station** |
| Dr. Wan Lutfi Wan Johari | Multi-omics Analysis of the Impacts of Climate Change and Pollution on Nitrogen-fixing Microbial Communities. | 16 February –  9 March 2022 | Rothera |

### Field research at the Korean Polar Institute facilities in Antarctica

One (1) researcher from Malaysia visited and carried out field work at the King Sejong Station in Antarctica. He is under co-supervision of a researcher that received the KOPRI Antarctic Science Fellowship 2019 which worked on the same project and was in the same station in 2020. Malaysia would like to thank Korea for the opportunity given to these scientists to work at the KOPRI facilities in Antarctica. The collaborative projects that our scientists worked on were:

|  |  |  |  |
| --- | --- | --- | --- |
| **Student** | **Research Title** | **Expedition Date** | **Station** |
| Mr. Sulaiman Ali Mohammad | Understanding the Correlation Between Lightning Activities in Antarctica Peninsula and Climate Change Effect | 4 Feb – 1 March 2022 | King Sejong |

Diplomacy & Collaboration

The Chairmanship of Asian Forum on Polar Sciences (AFoPS) was officially handed over to Malaysia on 1 November 2020. The term of Chairmanship is for two years (2021-2022). Malaysia chaired the Annual General Meeting (AGM) of AFOPS virtually in October 2021 and chaired a special meeting of AFoPS on 28 March 2022 that was virtually held as business meeting under Arctic Science Summit Week 2022 (ASSW). The meeting deliberated on the several items including the update on expedition and operational plan, research highlights, cooperation between other international organizations and AFOPS, cooperative projects and research collaboration. Through AFOPS, a Malaysian scientist benefited from Korea Polar Research Institute (KOPRI) Antarctic Science Fellowship Program in 2020 and he is expected to undertake his field work at KOPRI research station in 2021/2022 summer season as the expedition for 2020/2021 was cancelled due to Covid-19 pandemic. Next AGM of AFoPS will be held on 20 October 2022 in Kuala Lumpur, Malaysia. This will be the last AGM to be chaired by Malaysia before the Chairmanship be transferred to Thailand for term of 2022-2023.

Malaysia is also honoured to inform at this meeting that in conjunction with the 10th anniversary of the establishment of SMARF, SMARF with the support from Ministry of Environment and Water, Malaysia will organize a Polar Research Symposium on 18-19 October 2022 in Kuala Lumpur which will be held back-to-back with AGM of AFoPS. This symposium will bring together local and international Polar researchers to highlight latest findings and achievements in Polar research and provide the platform to promote scientific cooperation at regional level. The theme of the symposium will be “Polar Regions as Legacy of Scientific Cooperation.”

Malaysia, as an Observer of Council of Managers of National Antarctic Program (COMNAP) will be participating at the upcoming   XXXIV COMNAP AGM 2022. As a member of the Scientific Committee on Antarctic Research (SCAR), Malaysia will also be attending the 37th (XXXVII) SCAR Open Science Conference from 1-10 August 2022 (to be held virtually) and SCAR Delegates’ Meeting from 5-7 September 2022 in Hyderabad, India.

National Governance

On the governance front, in order to implement its international obligations under the Antarctic Treaty and Madrid Protocol, Malaysia is in the final stages of drafting its national legislation on Antarctica. The Antarctic Bill will be tabled in Parliament once the necessary legal scrubbing process concludes.

Conclusion

Malaysia looks forward to a continuous active engagement in the Antarctic Treaty development process.