Asian Forum for Polar Sciences
AFOPS
NEWSLETTER
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AFoPS Special Meeting in Prague

The Asian Forum for Polar Sciences (AFoPS) special meeting in 2017 was held in Prague in March. As the chairman of the AFoPS rotation for year 2017-2018, the conference was hosted by the Polar Research Institute of China.

This meeting discussed the revision of 2016 AFoPS annual meeting, participants agreed that the implementation progress of all countries or related polar research projects should be appropriately increased. The handover work from KOPRI to PRIC such as website, website, drafting and amendment were discussed.

Following consensus were agreed by all participants at the discussion of Main Issues: Thailand's Application for Membership was approved; each member country could nominate one honorary member candidate for people who have made significant contribution to the development of AFoPS; the framework of the agenda for annual meeting to be held in Shanghai in September 2017 was adopted.

Group Photo for Participants on Prague's Meeting

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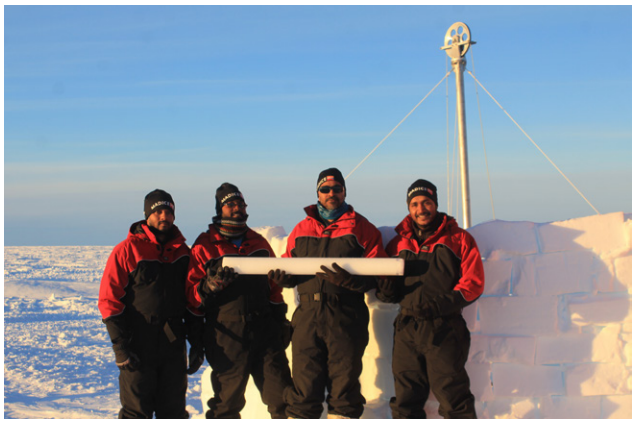
Resource: PRIC

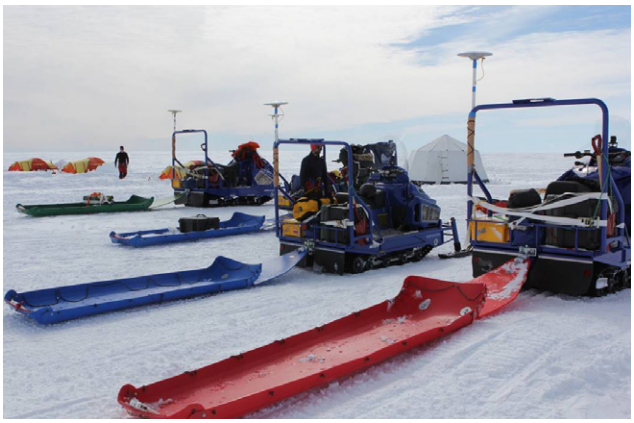
Indian Scientists Completed 36th Expedition to the Icy Continent

Under the Indian Scientific Expedition to Antarctica, 36th expedition to Antarctica has been successfully completed. The summer team has returned back to India in the first week of April after completing a successful five month stint in Antarctica. As many as fifty summer scientific members from over twelve R&D institutes and universities were part of this short-term expedition. The scientific projects focused mainly on climate change with thrust areas in Atmosphere Sciences and Meteorology, Earth Sciences and Glaciology, Biological Sciences and Environmental Monitoring. The winter over team members of the 36th Indian Scientific Expedition to Antarctica are at Indian Research Bases, Maitri and Bharati.

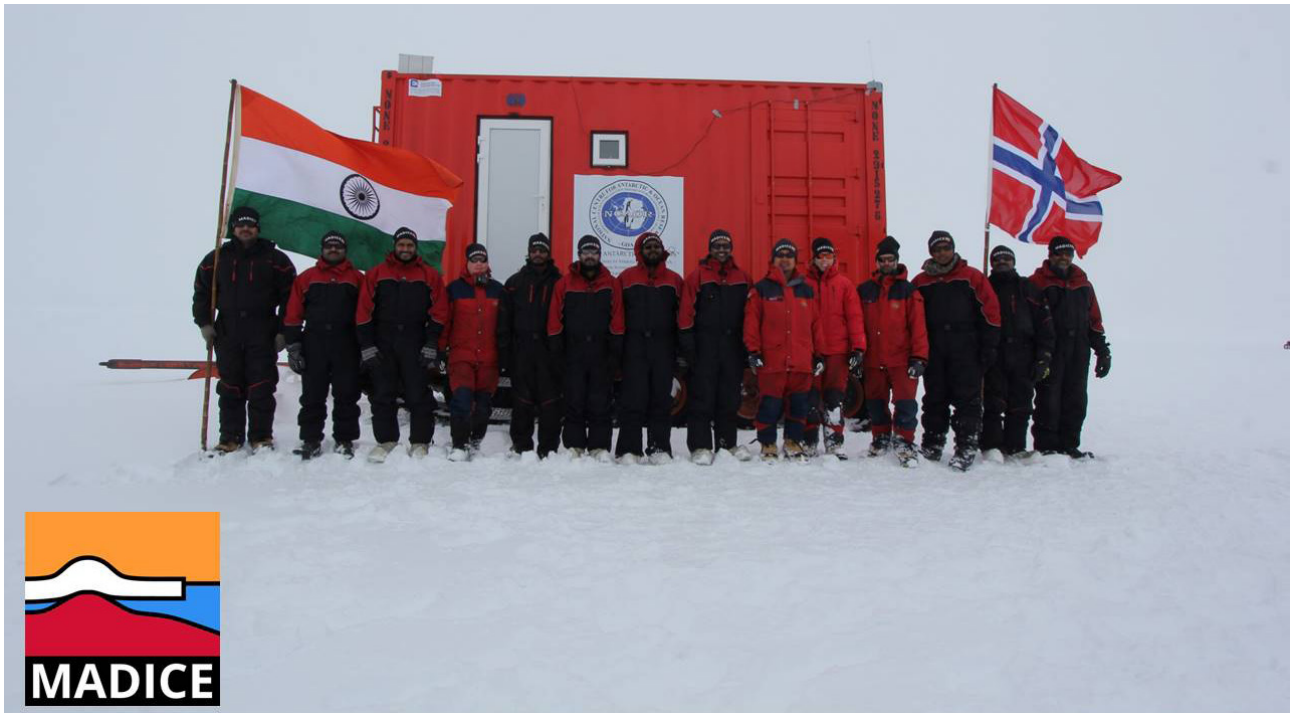
A collaborative scientific work was initiated under the acronym MADICE (Mass-balance, dynamics, and climate of the Dronning Maud Land coast, East Antarctica) project. MADICE is an Indo-Norwegian research project focusing on investigating mass balance, ice dynamics and past-climate reconstruction in Antarctica lead by the nodal agency National Centre for Antarctic and Ocean Research, Goa and National Polar Institute (Norsk Polar Institutt), Tromso. The first sampling of MADICE team was successfully done during the 2016-2017 austral summer. As part of the project which was spread over 35 days of camping, the team accomplished 2000 km Kinematic GPS measurements and 90 Static GPS measurement points was marked to measure ice flow fields. Over 800 km of track was surveyed for bed topography using Ground Penetrating Radar (GPR) in both high and low frequencies. A 50 m core was raised in the Leningrad ice rise to study the ice shelf.



Indian Scientist with the ice core



Vehicles used during geophysical studies by MADICE team



Indo-Norwegian members of MADICE Team

Resource: NCAOR

The China's 33rd Antarctic Expedition Successfully Completed Its Mission

The 33rd Chinese National Antarctic Research Expedition was an important connecting node of Chinese polar expeditions, as well as the starting expedition in the 13th Five-year polar development plan. The expedition adopted the "one ship, four stations" and surround Antarctic voyage mode, and undertook three key tasks. The expedition team which consisted of 256 people carried out the 8 categories of 72 projects.

R/V Xuelong left from Shanghai on November 2nd, 2016. Her journey lasted for 161 days, covering around 31,000 nautical mile. She returned to Shanghai on April 11th, 2017. During the voyage, R/V Xuelong arrived at latitude 78°41' in the Ross sea waters for the first time, which set a southernmost record in the Antarctic waters among all expedition vessels around the world.

The 33rd Chinese National Antarctic Research Expedition achieved many breakthroughs. The fixed wing aircraft "Snow Eagle 601" successfully landed in Antarctic Kunlun station, and achieved her first operational flight. It marked the entry of a new era that the Chinese Antarctic expedition initiated the aeroamphibious investigation. The large-scale environmental treatment campaigns which were carried out by the Great Wall Station, the Zhongshan Station and the Kunlun Station had scored remarkable achievements. The volume of waste which was carried back hit a historical high. It started a new chapter of Antarctic environment protection and began the elaborated developing mode of Chinese Antarctic expedition that was concerning more and more on the quality. The site selection of the new station around the Ross Sea area moved on. The comparison of the potential station sites had been completed.

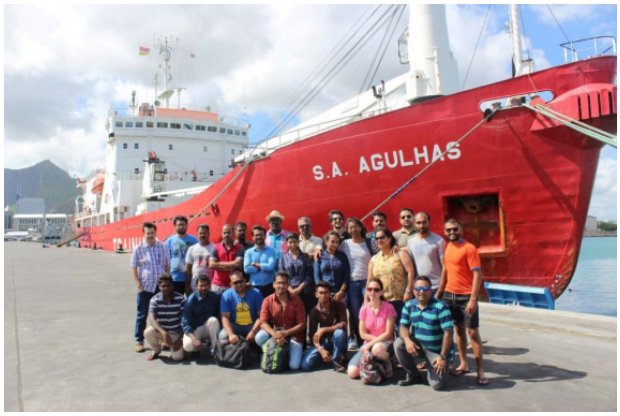
The China's 33rd Antarctic Expedition Team are celebrating the crossing of the equator

Resource: PRIC

Successful Completion of 9th Southern Ocean Expedition by Indian Scientists

The Indian Expedition to Southern Ocean is a major polar scientific research programme of Ministry of Earth Sciences, which confers with the climate variability scenario on a global and regional scale. It is a multidisciplinary and multinational program. The ninth expedition was launched from Port Louis, Mauritius on 6th January 2017. A team of 24 scientists from about 6 organizations and Universities including University of York, United Kingdom departed onboard the chartered Ice Class Research Vessel SA Agulhas [owned by South African Maritime Safety Authority, a South African Government Institute]. The duration of the expedition was 60 days.

During expedition, continuous observations for various atmospheric and oceanic parameters were carried out along the entire cruise track. Mooring equipments at various depths were deployed for a period of one year in the Subtropical Frontal region [40.11°S 58.5°E]. Time series observations for a period of 72hrs were carried out in the Prydz Bay region [near the coastal waters of the India's third Antarctic station "Bharati"]. After completion of the entire scientific operations upto Prydz Bay region [69° S 76 °E] the vessel arrived at Mauritius on 28th February, 2017.



Team of 9th Indian Southern Ocean Expedition

Mooring during 9th Indian Southern Ocean Expedition

Resource: NCAOR

AFoPS Chair, Dr. Huigen Yang

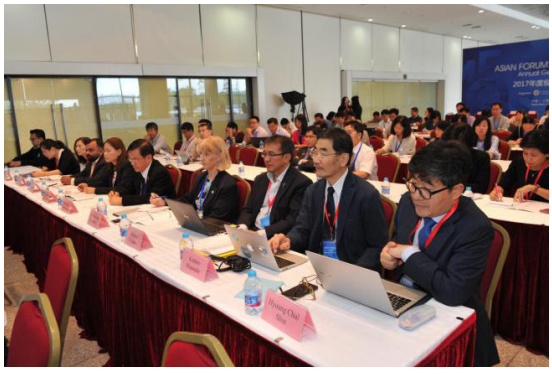


Photo of AGM 2017 Conference Site

AFoPS AGM 2017 in Shanghai

The Annual General Meeting 2017 of Asian Forum for Polar Sciences (AFoPS) was held in Lingang, Shanghai in September.

For the first time, the AGM 2017 initiated the plenary lectures section and breakout session, which would deepen and broaden communications in all member countries. Dr. Wentao Huang, Dr. Peng Jiang and Dr. Satoshi Imura organized the breakout session of this meeting as the conveners and reported to all representatives and coordinators of member countries on business meeting. It was agreed by both the conveners and business participants that the plenary lectures and breakout sessions were informative and useful, which should be continued.

On behalf of Polar Research Institute of China, and the chair of AFoPS, Dr. Yang Huigen mentioned that AFoPS is an important stage for Polar Regions academic exchanges and cooperation between countries in Asia, as well as a communication platform for planning and exploring the development of the Polar Regions.

All member countries of AFoPS would increase their involvement in SCAR, IASC, COMNAP and FARO with an active figure.

Resource: PRIC

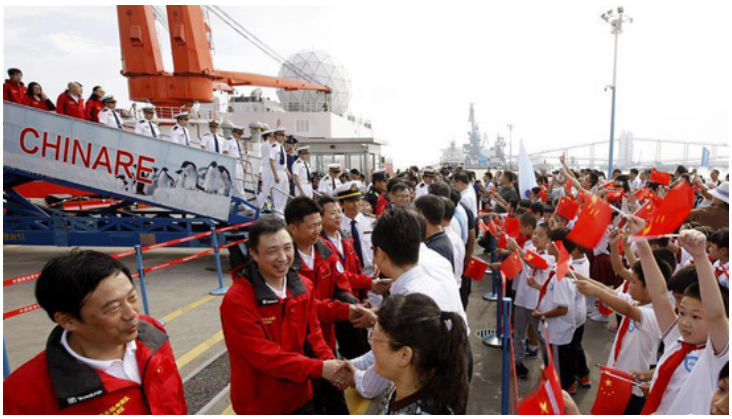
China's ice breaker sets sail for Arctic rim expedition

The Chinese icebreaker Xuelong has completed its eighth Arctic expedition, since July till October 2017. The expedition focused on a series of frontier scientific research on marine biology, meteorology, geology and chemistry, such as ocean acidification and plastic pollution in the sea.

The vessel traveled through the central and northwest shipping lanes along the Arctic rim for the first time, completing China's first circumnavigation of the top of the world.

The vessel departed from the exploration base in Shanghai on July 20 with 96 crew members. It traveled 20000 nautical miles in 83 days, including 1995 nautical miles through ice formations, according to the institute.

Usually Arctic expeditions are carried out once every two years. Starting this year, China plan to increase the frequency of expeditions.



Members of the Chinese scientific expedition team are welcomed upon their return in Shanghai, east China, Oct. 10, 2017.

Resource: PRIC

National Institute of Polar Research Open Access Policy

Approved By National Institute of Polar Research on 24/11/2017

Principles relating to research outputs

NIPR provides open public access to NIPR research outputs published in journal articles (hereinafter referred to as the "NIPR research outputs") via National Institute of Polar Research Repository.

As a general rule, research outputs will be licensed under a Creative Commons Attribution 4.0 International license (or successor version).

Principles relating to research data

NIPR provides open public access to the research data accompanying NIPR research outputs in principle.

Exception

When there is a special circumstance that there is a possibility of infringing the rights of a third party by applying this policy, or when there is a contract conflicting with this policy is entered upon NIPR research outputs and its basis data, NIPR does not provide open public access to NIPR research outputs and its basis data.

However, this description shall not apply when special circumstances have disappeared or contracts contrary to this policy are canceled.

Application date

This policy shall be applied to NIPR research outputs and its basis data after 12/2017.

Others

Beyond what is provided for in this Policy, necessary particulars involving open access issues shall be negotiated by the persons concerned.

Resource: NIPR

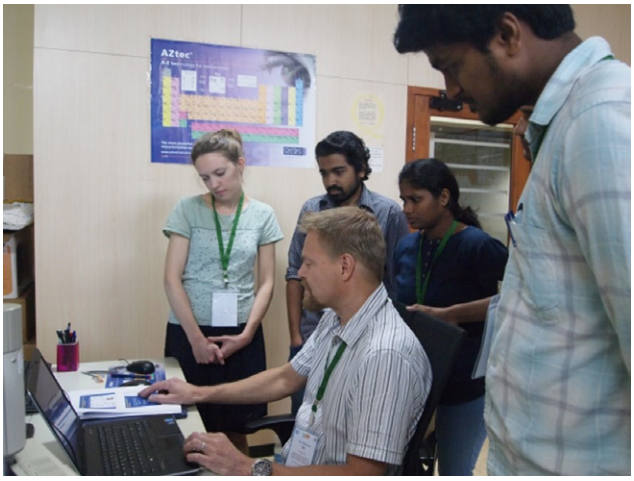
Training under Indo- Norwegian OCTEL Project organised by ESSO-NCAOR in association with NPI

OCTEL (Ocean, sea ice and atmospheric teleconnections between Southern Ocean and North Atlantic, during the Holocene) is an Indo-Norwegian project undertaken by ESSO-National Centre for Antarctic and Ocean Research (ESSO-NCAOR) in collaboration with Norwegian Polar Institute (NPI), Norway. The project aims to explore the ocean, sea-ice and atmosphere interactions both in the Southern Ocean and the northern North Atlantic in order to assess the manifestation of inter hemispheric teleconnection and their influence on climate during last 11,700 years (the Holocene) with a special focus on the last 2000 years. The Holocene, was considered to be a stable period, considering large scale climatic oscillations, but sub orbital (Millennial to decadal) scale has been recorded throughout its span.

ESSO-NCAOR in collaboration with NPI, Norway organised a training course on "Quantitative reconstructions and numerical methods for Analysis of Past climatic variability using diatoms" under the Indo-Norwegian Project-OCTEL from 21st to 24th November, 2017.

Six students from 04 institutes/universities selected for the specialised course. The course encompassed lectures from basic taxonomy of diatoms to the numerical analysis for past reconstruction followed by poster presentation by the participants. Lectures were delivered by the Norwegian mentors, Dr. Lisa Orme, NPI on basics of Diatoms; Dr. Dimitry Divine, NPI on quantitative paleoceanography using microfossil data and Dr. Arto Miettinen, NPI on taxonomy of diatoms. On the last day of training, participants presented poster on their research works. The training was well appreciated by all the participants who learned quantitative technique for paleoclimatic reconstruction.

Group photo of the course



Lectures by the Norwegian mentors

Resource: NCAOR

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Dr. Huigen Yang
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