



National Centre for Polar & Ocean Research Indian Scientific Expedition to Antarctica (ISEA)



Greetings from National Centre for Polar & Ocean Research and a warm welcome from the Antarctic Operations!

National Centre for Polar & Ocean Research (NCPOR) is an autonomous institution under Ministry of Earth Sciences (MoES), Govt. of India and the nodal agency for the National Polar Science Programme. Antarctic Operations (AO) is a division of NCPOR that takes care of the Antarctic Programme.

This is in regard to your project proposal under consideration for the Indian Scientific Expedition to Antarctica (ISEA) subject to recommendations of the review committee and decision of the National Committee on Polar Programmes.

Before taking you through the details in regard to participation in the Antarctic Expedition, it would be of mutual benefit if you could please mark some important dates in your calendar of activities.

- “ Last date for receiving personal details of participating individuals in form AL1208, **01-July-2025**.
- “ last date for receiving selected Scientific Cargo needed to be **airlifted** from Cape Town and required at Maitri/Bharati during **early summer** (Nov2025-Mar 2026) of 45 ISEA along-with detailed declaration in form **AL-1403** is **31 July 2025**, 1500 hrs IST.
- “ Last date for receiving institutional/ individual cargo at NCPOR (scientific equipment/ accessories/chemical/glassware etc.) necessary for successful completion of project in Antarctica during **Voyage** with a detailed declaration in form **AL-1403** is **31-August-2025**.
- “ Medical examination and Pre Antarctic-Training for participating individuals in multiple batches **31- July- 2025 to 26-September-2025**.
- “ Participants from organizations under the **Govt. of India** are required to arrange their official passports through their respective departments, once political clearance (MEA) provided by NCPOR.
- “ Participating individuals from autonomous organizations/ private institutes must submit their official/personal passport(s) by **05 September 2025** to NCPOR for obtaining official passports for them.
- “ Deputation for Antarctica- **last week of October 2025 onwards** depending on the nature of the project and availability of flights/ship.

While it takes time to get through the entire process of selection until final confirmation of project being short-listed for mounting with the ISEA, it will be nice if you knew a few things about the logistics involved viz. participation in the Indian Antarctic Expedition. Knowledge of our capabilities, inabilities and available facilities will help you plan better and save us of last-minute surprises and unnecessary delays.

1. AREA OF OPERATIONS IN ANTARCTICA

NCPOR offers opportunity to scientists for working in and around two research bases Maitri and Bharati, and also in the Southern Ocean region onboard chartered Ice Class ship during the voyage between Cape Town and Antarctica depending on the nature of the project.

1.1. Bharati Station

Operational since March 2012 is located between Thala Fjord & Quilty bay, east of Stornes Peninsula at 69.40680S, 76.19525E in Larsemann Hills, Antarctica. It is about 35 m above sea level and just about 300 meters from the shoreline.

The station facilitates year-round scientific research in and around Larsemann Hills. It can support 47 persons in the main building during summer as well as winters. An additional emergency shelters / satellite camp is available adjacent to the main station building. Bharati offers 220 volts regulated power supply; automated heat-ventilation & air-conditioning; hot and cold running water, 24x7 broadband connectivity for voice, video and data; flush toilets; aesthetically designed living, dining, lounge, laboratory space and basic medical facilities.

1.2. Maitri Station

Our main stay in Antarctica, operational since 1988 offers more of conventional and old heroic style of living and working. About 3000 km west of Bharati, it is situated at 70.76683367S and 11.73078318E in the central part of Schirmacher Oasis, in central Dronning Maudland region of East Antarctica. It is an inland station about 100 km from the shore at an elevation of about 117 meters above sea level.

With 220 volts regulated power supply, 24x7 broadband connectivity for voice, video and data; Incinerator based toilets; living, dining, lounge and basic medical facilities the station facilitates year-round scientific research in and around Schirmacher/ Wohlthat mountains and can support 25 persons in the main building during summers as well as winters and about 40 in summer facility comprising of containerized living modules.

1.3. Chartered Expedition Vessel

The vessel can accommodate 38 expedition members in twin sharing cabins with attached bathrooms. Indian vegetarian/ non-vegetarian food is available on board. The vessel has an exclusive dining space, lounge and basic medical facility for the expedition crew with common laundry, gymnasium, sauna bath and swimming pool. Limited communication through Iridium phone and through a common email ID is also available onboard. Electric power at 220 volts is available in all the cabins and common areas.

The vessel does not have any oceanographic survey equipment, winch/ A-frame or any other mechanism for collection and processing of samples. Nevertheless, arrangements can be made for installation of small winches/ aerial mast etc. on prior intimation and being made available by the scientist/ institution concerned.

2. TRAVEL AND TRANSIT ACCOMMODATION

Expedition members are inducted to Antarctica in small groups between November and January and de-inducted between January and March. NCPOR takes care of travel and transit

accommodations from Goa to Antarctica via Cape Town, South Africa and back. Passage between Goa and Cape Town is arranged by air through commercial airlines and between Cape Town and Antarctica (Maitri/ Bharati) by ship or by chartered flights depending on the nature of work and operational requirements/ limitations and not as a matter of choice.

2.1. Tentative Voyage Plan

Tentative Voyage Plan for season 2025-26 for 100+/-30 days		
Itinerary	Date	Duration of Voyage/Halt
Charter	15 Dec 2025	1
ETD Cape Town	23 Dec 2025	8
Crossing 40 deg S Lat	25 Dec 2025	2
ETA India Bay	02 Jan 2026	8
ETD India Bay	22 Jan 2026	20
ETA Larseman Hills	08 Feb 2026	17
ETD Larseman Hills	05 Mar 2026	20
ETA India Bay	13 Mar 2026	13
ETD India Bay	23 Mar 2026	10
Crossing 40 deg S Lat	31 Mar 2026	8
ETA Cape Town	02 Apr 2026	2
De-Charter	04 Apr 2026	2
Approximate Duration		111 days

2.2. Air Travel between Cape Town – Maitri and Cape Town - Bharati

Chartered flights between Cape Town and Maitri (~5 hours) under the aegis of DROMLAN shall be available between November to February of season 2025-2026. Limited flights between Cape Town and Bharati (~7 hours) should also be available in the season. Getting seats for Indian participants in any of the DROMLAN flights needs prior planning and shall depend on the nature of work, operational requirement and availability of funds but not as a matter of choice or preference of participating organizations / individuals.

Cape Town, South Africa being the gateway city for the Indian expeditions to Antarctica, members need to undergo international travel and fly between Goa and Cape Town. Each member is entitled to carry 30 kg of personal baggage, along with an additional 10 kg specifically for polar gear given by NCPOR. Members proceeding to Antarctica for long-term may choose to send their additional personal baggage in advance to NCPOR, Goa by **31-August-2025**. These items will be shipped to Antarctica and delivered during the expedition vessel.

2.3. Inland Transport in Antarctica

For inland transport around Maitri, and Bharati two helicopters, Aerospatial- AS 350 and KAMOV-32 shall provide aviation support but will remain onboard the ship and therefore shall be available only when the ship is around (refer voyage plan). During lean period while the ship and helicopters are away, tracked snowmobile - Piston bully vehicles and snow scooters shall remain available as the work must go on. Maitri has an additional facility of a four-wheeled Toyota Hylex for Antarctic conditions and is available round the year.

3. NOMINATION OF SCIENTISTS FOR PARTICIPATION IN THE ANTARCTIC EXPEDITION

Members participating in the Antarctic expedition need to have valid official passport and clearance of medical board and M&SI, ITBP, Auli. Participating organization(s) / Project Leader(s) need to nominate participating Scientist(s) by name with at least one standby candidate for an eventuality if the main candidate being not found fit by the Medical board and / or during the Pre-Antarctic Training at M&SI, Auli.

Name(s) and personal details of nominated candidate(s) in **Form AL-1208** <https://ncpor.res.in/antarcticas/display/427-participation-forms> and **Permit from Committee on Antarctic Governance and Environmental Protection (CAGEP)** <https://ncpor.res.in/antarcticas/display/443-application-forms-to-obtain-permit> (available on NCPOR website) must reach NCPOR by 01-July-2025, enabling NCPOR to arrange for administrative approvals, medical examination, pre-Antarctic training, political clearance, insurance and air tickets.

3.1. Passport

Expedition members travel on Official Passport for their travel to Antarctica via Cape Town, Republic of South Africa. Participants from organizations under the Government of India are required to arrange their official passports through their respective departments once MEA provided by NCPOR.

Participating individuals from autonomous organizations/private institution must submit their Official/Personal Passport(s) by **15-September-2025** to NCPOR for obtaining official passport for them.

In expectational circumstances, members travelling on Personal Passport or Foreign Passport need to obtain South African Visa before moving for Antarctica.

4. EXPEDITION CARGO- SCIENTIFIC EQUIPMENTS

For scientific projects or expedition or any excess baggage (for individual members), consumables including chemicals, gases, laboratory ware, glassware, batteries, books etc. necessary for successful completion of projects are to be sent in advance at NCPOR in sea-worthy packaging with UN certifications further shipment is provided by NCPOR through commercial shipping lines or air freight.

4.1. Cargo Required Early Summer

For projects commencing early summer (Nov-Dec 2025) the cargo needs to be delivered at NCPOR by **31 July 2025** (with detailed declaration in Form AL-1403 available on NCPOR website). This cargo shall be sent to Maitri/Bharati Station via Cape Town, subject to flight availability and cargo allowance on board. Any such cargo received late, but not after **31 August 2025**, shall be sent by shipping line and shall reach Maitri only by **January 2026**.

4.2. Cargo Required Late Summer/ Winter

Most of the cargo is shipped in departmental freight containers with expedition cargo including that of individuals and participating organizations. Procedures, such as, Customs inspection, biosecurity measures are at the Indian port of exit before onward shipment to Cape Town. Services of the commercial shipping lines are utilized for delivery to Cape Town and thereafter to Maitri/ Bharati on board chartered expedition vessel. For expected delivery date of cargo at the stations – Bharati and Maitri may refer to the tentative voyage plan.

Considering the time required for systematic stuffing of cargo in containers, transit time from Goa to Cape Town via Mumbai and further the deadline for cargo to reach Cape Town in order to catch the Chartered Expedition vessel at Cape Town before sailing off for Antarctica; all cargo meant for Maitri and / or Voyage must reach NCPOR not later than **31 August 2025** (with detailed declarations in Form AL-1403 available on NCPOR website). ***Cargo reaching NCPOR after 31 August 2025 shall not be accepted and returned to the owners at their cost and expense.***

4.3. Direct Delivery to Cape Town

In the event of missing the above-mentioned timelines or imported cargo, participating organization(s), in consultation with NCPOR, may arrange direct delivery to Cape Town, South Africa at own expense. Please refer to **AL-04** for further information. Such cargo, however, must reach Cape Town by **01 December 2025**.

4.4. Cargo -Packing and Safety

Movement of cargo between Goa and Antarctica (Maitri/ Bharati) involves various modes of transportation (trucks, ships, aircraft, helicopters, snowmobiles) and transshipment at Goa, Mumbai, Cape Town and handling by cranes, forklifts, skilled & unskilled personnel hence, packing becomes central for safety of machinery/ equipment/ accessories/ consumables. Kindly ensure proper shock proof packing to avoid damage during transportation/ transshipment/ handling. NCPOR shall not be responsible for any damage to cargo due to poor packing. Ensure that the packaging materials and the packed goods meet specific international standards for safe transportation. It's crucial for goods like hazardous materials, and may be supported with the valid documents like a UN certificate* or MSDS or a Pre-shipment Inspection Certificate (Hazardous cargo e.g battery, chemical, compressed bottles, gas cylinders etc). Such cargo should be transported in advance by an expedition.

* An UN Certificate, often referred to as a IIP Certificate, is issued by the Indian Institute of Packaging (IIP) for packages containing hazardous and dangerous goods exported from India. This certification ensures that the packaging meets international standards for the safe transportation of these materials by sea or air.

4.5. Labelling for Identification

NCPOR receives cargo from a number of organizations / individual with different destinations (**Maitri/ Bharati/ Voyage**) and unlabeled packages add to confusion.

May kindly ensure proper labelling of packets with Name of Organization/ Individual; Destination-(**MAITRI OR BHARATI OR VOYAGE**);

Expedition Number- **45ISEA**; Box/ Packet Number- 1,2,3,4....;

Content Description - Also, ensure that labels are painted or firmly pasted on boxes / packets so that it does not peel off during transit, resulting in cargo being misplaced or delayed.

NCPOR assumes no responsibility for loss or delay in the delivery of unlabelled or improperly labelled cargo.

Participating members must carry their own boxes [preferably wooden or Metal] /ice boxes/ Plastic Insulated storage containers, etc, for carrying scientific samples; under controlled temperature or cold chain transfer. Thermocol / EPB / single-use plastic or cardboard corrugated boxes are discouraged.

5. MEDICAL EXAMINATION / PRE-ANTARCTIC TRAINING

All expedition members have to undergo medical/ psychological examination at All India Institute of Medical Sciences (AIIMS), New Delhi followed by “Pre-Antarctic Snow-Ice Acclimatisation Training” at Mountaineering and Skiing Institute, ITBP Auli. Medical examination at AIIMS and the training at Auli are organized in three batches of approximately 20 days duration each between August and September. Exact date shall be communicated in due course.

Member(s) not cleared by the medical board at AIIMS and /or not found fit/ suitable (physically or temperamentally) shall be excluded and will not be able to participate in the Antarctic Expedition.

5.1. Accommodation during Medical Examination

Parent organizations / Individuals will have to arrange for their accommodation at New Delhi for the duration (8 to 12 days) of the medical / psychological examination at their cost and expense. No TA/DA will be paid by NCPOR.

5.2. Accommodation/ Transport for Pre-Antarctic Training

NCPOR shall arrange for the transportation, accommodation and food (Breakfast, Lunch & Dinner) for participating members from Delhi to Auli and back at no cost to participating organizations / individuals however, no TA/DA shall be paid by NCPOR. Accommodation during transit and training is generally shared between 2 to 15 members in room/ barrack. Individual's ability to adopt to the limitations, inherent to the high-altitude or remote locations, is important part of the training.

ITBP's Mountaineering and Skiing Institute is located at AULI in the Chamoli District of Uttarakhand at an altitude of about 10,000 feet and training is imparted in nearby glaciated terrains ranging between 10,000 to 14,000 feet above mean sea level in the months of August to September. During the training season at Auli the temperature ranges between 02 to 37 Degree Celsius with average hovering around 16 degree Celsius and monthly rainfall in the

range of 20-320 mm. Members are advised to carry light protective clothing and good quality walking/ jogging/ sports shoes. Special mountaineering gear shall be provided by NCPOR at M&SI Auli on returnable basis.

6. PAY AND ALLOWANCES

Pay, allowances and all compensations including Hard Duty Allowance (HDA), contingencies, etc. are to be borne by the parent organization.

6.1. Antarctic Allowance

As per the GOI rules all expedition members regardless of rank and pay are entitled for special Antarctic Allowance (HDA) at rates detailed below-

Summer period -Rs. 1500/- per day
Winter period -Rs. 2000/- per day
Team Leaders - 10% extra of the above rates

The hardship allowance is applicable for the period actually spent in Antarctica and/or beyond 40 degrees south latitude. The winter period for the purpose of disbursement of HDA is considered from 1st March to 30th November of each calendar year whereas, the summer period from 1st December to 28th / 29th February of succeeding calendar year.

6.2. Expedition Readiness Expense Reimbursement

Expedition members regardless of rank and pay are provided with following special polar clothing by NCPOR, which is necessary for enduring the harsh climatic conditions of Antarctica.

Sr. No.	ITEMS	SHORT TERM	LONG TERM	REMARKS
1	Working overall with hood/ Dungaree	1	2	Returnable
2	Feather Jacket	-	Need Based	Returnable
3	Snow Boots (Knee Highs)	1	1	Returnable
4	Kit Bag	1	1	kit allowance
5	Snow Goggles	1	1	Non-Returnable
6	Solar Glasses / Sun Glasses	1	1	Non-Returnable
7	Working Gloves	1	2	Non-Returnable
8	Trekking Boots	1	1	Non-Returnable
9	Silk Gloves	Need Based	Need Based	Non-Returnable
10	Balaclava	1	2	Non-Returnable
11	Face Mask	-	Need Based	Non-Returnable
12	Polar Undershirt/ Thermal Vest	1	2	Non-Returnable
13	Polar Underpants/ Thermal Long Johns	1	2	Non-Returnable
14	Polar Socks/ stockings	1	2	Non-Returnable

In addition to polar gear, NCPOR will reimburses Rs. 40,000/- to short term and Rs. 60,000/- to long term members spent towards preparation for Antarctic expedition and making arrangement their off.

The reimbursement, however, is limited to pre-approved list of items (as per OM HRA/14011/1/2023-ADMIN-NCPOR dated 20.11.23) and anything beyond the list shall be on individual's account.

Members need to submit a detailed account of expenditure supported with original GST invoices/vouchers on individual name to NCPOR before proceeding to Antarctica for reimbursement.

It is mandatory that the name of the claimant/member is clearly mentioned on each invoice/voucher/bills.

In case the invoices/vouchers are printed on thermal paper, members must submit the original along with a photocopy for record purpose.

7. MANDATORY SOCIAL RESPONSIBILITIES

Cost of sustenance in Antarctic is perhaps the highest compared to any part of the globe and probably second to space missions and therefore limitations on resources. NCPOR provides for almost everything needed for a decent living and sustenance at Maitri, Bharati and onboard Ship which come along certain social responsibilities which can neither be overlooked nor avoided. The most significant responsibilities are outlined as under.

7.1. Galley Duty

For obvious reasons, NCPOR does not provide housekeeping staff for upkeep of Maitri and Bharati stations and for the chartered expedition vessel. The daily chores need to be taken care by the expedition members regardless of age, sex, rank and pay or nature of work, affiliation and duration of stay. Station/ Voyage Leader(s), maintain a galley duty roster and duties are assigned to individual and everyone gets a fair share during his/her stay in Antarctica.

Galley duty involves general up-keep of the station/ ship and involves following activities

- 7.1.1.Cleaning and sanitizing the toilets, urinals and washrooms, corridors and all common areas within station premises.
- 7.1.2.Washing/ cleaning utensils and glassware and clean all pots, pans and equipment etc., as well as the general cleaning of galley.
- 7.1.3.Assisting Cook (s) in bring provisions from store to kitchen, cutting/ peeling of vegetables / meat and serving food in the dining hall.
- 7.1.4.Cleaning and sanitizing the kitchen, fridge, freezer, including floors, walls, steps etc.
- 7.1.5.Maintaining round the clock security vigil; taking periodical rounds of all sensitive areas of station to check for alarms in life support systems, indication of smoke, fire, oil & water leak and spills etc.

7.2. Shramadaan/ Community Service

Once in a while with the view to set the house in order apart from the regular galley duty, members are required to contribute for the upkeep of stations, transfer of provisions, cleaning the outside areas of the station, organising containers and material etc. On such occasions individuals

are supposed to work in groups/teams. Field parties are restricted from venture out and every individual is required to carry out the assigned task.

Working in Antarctica apart from deriving immense professional satisfaction also helps in testing one's own endurance, ability to think and react to fast changing scenarios which inculcates agility of thought process, a sense of accomplishment and self-actualization and some tiny little monetary compensation as well.

We request you to kindly sensitize the nominees/ prospective participants to the ensuing Antarctic Expedition and make them aware of the facilities, limitations, responsibilities and the time lines. This will help them prepare to face the challenge and help us in providing better services.

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Please feel free to get in touch for clarifications with our team,

Useful Contacts

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| 1. Ms. Reena Naik
(HR/ Team / Travel/ Medical/ Training)
Phone: +91-832-2525 520, 523)
Email:
reena.log@ncpor.res.inlogistics@ncpor.res.in | 2. Dr. Anand Kumar Singh
Scientist-E
Scientist In-Charge (Space Weather Sciences)
Phone: +91-832-2525524, 523
Email: aks@ncpor.res.in |
| 3. Dr. Ravi Mishra
Scientist-E
Scientist In-Charge (Supply Chain Logistics)
&Rajbhasha Officer
Phone: +91-832-2525 609
Email: ravimishra@ncpor.res.in | 4. Dr. Yogesh Ray
Scientist-E
Scientist In-Charge (Antarctic Operations &
Science Coordination)
Phone:+91-832-2525 530, 523
Email: yogesh@ncpor.res.in |
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- 5. Dr. Shailendra Saini**
-
- Scientist-F
-
- Group Director (Antarctic Operations)
-
- Phone: +91-832-2525 568, 523
-
- Email: shailendra@ncpor.res.in

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