



NATIONAL CENTRE FOR POLAR AND OCEAN RESEARCH

Ministry of Earth Sciences

Government of India

Headland Sada, Goa 403 804

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<http://www.ncpor.res.in>

CALL FOR PROPOSALS FOR SCIENTIFIC RESEARCH IN THE ARCTIC REGION 2024 - 2025

Application Deadline: 15th January 2024

Background

The National Centre for Polar and Ocean Research (NCPOR), an autonomous R & D Institution under the Ministry of Earth Sciences (MoES), Government of India is the designated nodal agency for the planning, coordination, and implementation of India's scientific research endeavours in the Arctic. On behalf of the MoES, NCPOR invites research proposals from Indian nationals working in Indian research institutes or academic organisations having a sustained interest in pursuing frontline research from **April 2024 to March 2025** in the Arctic region. This call includes fully-funded field access (comprising travel, boarding/lodging and DA as per the Government of India norms) to the high Arctic international research base Himadri located at Ny-Ålesund, Svalbard (for more details, please visit www.ncpor.res.in).

Scientific themes

Scientific research proposals are invited but are not limited to the scientific themes outlined below:

Theme 1: Atmospheric Science

Sub-themes:

- Trace gases
- Clouds, precipitation and hydrological cycle
- Boundary Layer Meteorology
- Atmospheric aerosols
- Interaction of snow, atmosphere and aerosols
- Atmospheric composition and pollution monitoring

- Middle and Upper atmospheric studies
- Atmospheric electric field measurement
- Lightning studies

Theme 2: Space Science, Astronomy and Astrophysics

Sub-themes:

- Space science studies
- Astronomy
- Astrophysics

Theme 3: Marine Science: Dynamics and functioning of Arctic fjords

Sub-themes:

- Hydrographic observations
- Biogeochemical studies
- Ocean-atmosphere-sea ice and snow interactions
- Land-sea-atmosphere interactions
- Diversity of Marine organisms

Theme 4: Environmental Chemistry:

Sub-themes:

- Contaminant fate and distribution
- Local and long-range pollutants
- Transport, sources, and sinks of pollutants
- Emerging contaminants
- Marine microplastics and litter
- Persistent Organic Pollutants (POPs) and heavy metals

Theme 5: Cryospheric studies:

Sub-themes:

- Snow and ice chemistry
- Glacier mass balance and dynamics
- Snow layer evolution and interaction with the atmosphere
- Glacier biogeochemistry and microbial dynamics

Theme 6: Terrestrial ecosystems:

Sub-themes:

- Animal adaptation and vegetation succession dynamics
- Plant-microbe interactions
- Nutrient fluxes
- Permafrost studies

Novel long-term scientific programs adding to our knowledge-base of the Arctic realm and enhancing India's scientific credentials in polar research would get precedence.

NCPOR encourages all the applicants to visit information appendices (I to X) to learn more about the Indian Arctic Programme, study area, resources, ongoing long-term projects, etc.

In addition, the applicants are also encouraged to visit resource websites listed in Appendix V for more information regarding the Arctic research. Please ensure that the planned research is not in conflict with the ongoing studies and the environmental laws and regulations in Ny-Ålesund.

NCPOR encourages the submission of multi-institutional, interdisciplinary, and collaborative research proposals (network projects) addressing some key scientific questions pertaining to climatic variability and its consequences in the Arctic region.

NCPOR may organise a brainstorming session for network projects to understand their logistical requirements and to provide critical scientific inputs.

Fieldwork period

This call is for the two periods – (i) spring and summer (April to September 2024), and (ii) autumn-winter (October 2024 to March 2025) in the Arctic. More details about the climate of the period is available in Appendix II. The field personnel will be deputed to the Arctic for the duration of 25 to 30 days in different batches as per the logistic availability.

Eligibility Criteria

The Principal Investigator (PI) as well as the co-investigator(s) (Co-PI), if any, should be from an Indian research or academic organization. The proposal should be endorsed by the PI's and Co-PI's institute or university. The endorsement authority should make sure that the PI/Co-PI has necessary funds for sample processing and analyses.

Project Proposal and deadline

Scientific research proposals in the prescribed format duly endorsed by the head of the organization should be emailed to arctic@ncpor.res.in on or before **15th January 2024**. In the case of network project proposals, it is required that each participating institution should endorse the application form before submission. Hardcopies need to be sent to the Director, National Centre for Polar and Ocean Research, Headland Sada, Goa 403 804. The envelope shall be marked "Proposal for Scientific Research in the Arctic (2024-25)".

Ongoing proposals or PIs who had earlier accessed the field and wish to continue need to reapply and must fill in the project assessment form along with the application.

Screening and Selection Procedure:

1. Submission of proposals along with endorsement before **15th January 2024**.
2. NCPOR would assess the proposals for completeness and logistics feasibility. Duly complete and logistically feasible proposals would be sent for further review.
3. Selected proposals will be sent to subject experts for peer review and recommendation.
4. Communication of results to the PIs will be done by **15 February 2024**.
5. Recommended proposals would be called for proposal defense and final team selection meeting before a group of experts and the NCPOR scientific community in the **1st week of March 2024**.

Data Policy

All metadata needs to be submitted to NCPOR after the expedition in the format given in Appendix VII.

Metadata submission along with expedition reports is compulsory for each project after the field trip. The final data of the project should be submitted to NCPOR within 3 years after the field trip. The data may be made public after 5 years of the field trip. The metadata and the data shall be submitted to arctic@ncpor.res.in.

Applicants may go through the data portal - National Polar Data Center at <https://npdc.ncaor.gov.in/npdc/homepage.action> and may also make use of the data collected earlier.

Application information

Please visit our website (<http://www.ncpor.res.in>) for further details of the application and information annexures.