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CALL FOR PROPOSALS FOR SCIENTIFIC RESEARCH IN THE ARCTIC REGION 2025 - 2026

Advt. No.: NCPOR/14/2024

Application Deadline: 01 DECEMBER 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 2025 to March 2026** 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 Sciences

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 Sciences

Sub-themes:

- Dynamics and functioning of Arctic fjords
- Hydrography observations
- Biogeochemical studies
- Ocean-atmosphere-sea ice and snow interactions
- Land-sea-atmosphere interactions

Theme 4: Environmental Sciences

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: Geosciences

Sub-themes:

- Past Climate Studies
- Structural Geology

Theme 6: Cryospheric Studies

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

Theme 7: Biological Sciences

Sub-themes:

- Diversity of marine organisms
- 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-5 for more information regarding Arctic research. Please ensure that the planned research is not in conflict with any 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 climate 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. This may happen before the review meeting.

Fieldwork period

This call is for the **two** periods – **(i) spring and summer** (April to October 2025), and (ii) **autumn-winter** (November 2025 to March 2026) in the Arctic. More details about the study region, the climate of the fieldwork periods, and research facilities are available in Appendix-2.

The field personnel will be deputed to the Arctic for the duration of 30 to 60 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 an Indian national from an Indian research or academic organization. The proposal should be endorsed by the PI's and Co-PI's organisation. The endorsing authority should make sure that the PI/Co-PI has the necessary funds and facilities for sample processing and analyses.

Project Proposal Submission Link and Deadline

Scientific research proposals in the prescribed format duly endorsed by the head of the organization should be submitted at the following link on or before **25 November 2024**.

Link for proposal submission: https://ncpor.res.in/arctics/display/401-advertisement

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 **25 November 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 **5 January 2025**.
- 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 **last week** of January 2025.

Data Policy

All metadata needs to be submitted to NCPOR after the expedition in the format given in Appendix-7.

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 the National Polar Data Center at https://npdc.ncaor.gov.in

Applicants may also go through the above data portal and may also make use of the data collected earlier to avoid repetition.

Application information

Please visit our website (http://www.ncpor.res.in) for further details of the application and information annexures. The proposal submission link is: https://ncpor.res.in/arctics/display/401-advertisement