

The Norwegian Polar Institute Section for Oceanography

Jobbnorge ID: 240007 Deadline: 5/2/2023

Website: http://www.npolar.no

Scope: Fulltime

Duration: Fixed Term

# Postdoctoral Research Fellowship in physical/chemical oceanography (3 yrs)

## **Exciting postdoctoral position open!**

We have an open position as Postdoctoral Research Fellow in oceanography. The position is funded by the project "Sustainable Development of the Arctic Ocean (SUDARCO)".

This is a fixed-term position for 3 years and belongs to the institute's Arctic Ocean programme. This program consists of a wide range of interdisciplinary research projects that ensure a good basis for environmental management. You will be employed at the Section for Oceanography in our Research Department. The oceanography section conducts research and monitoring in physical and chemical oceanography in the polar regions. This contributes to quantification of key climate indicators, increased understanding of climate processes and improved environmental management in the Arctic and the Antarctic.

Your workplace will be Tromsø, Norway. Some travel will be expected including research cruises to the Central Arctic Ocean and presentation of published research papers at major international conferences.

#### Work content

You will participate in the project's examinations of:

- processes controlling the delivery of a) heat, to the sea ice cover, and b) nutrients, carbon, and contaminants to organisms living in the
  photic zone in the Nansen and Amundsen Basins
- vertical and lateral transports of freshwater, nutrients, carbon/CO2 and contaminants in the Nansen and Amundsen Basins

The main work tasks in this position are to:

- process new and compile existing CTD & ADCP data from moored and shipboard instruments in the Nansen and Amundsen Basins of the Arctic Ocean
- use CTD and turbulent microstructure (MSS) measurements to calculate ocean stratification, vertical mixing rates and vertical transports
  of heat, nutrients, carbon/CO2 and contaminants, using information from water samples.
- compile and quality control biogeochemical measurements, such as nitrate and CO2
- use CTD and ADCP measurements to investigate lateral transports of nutrients, carbon/CO2 and contaminants across a repeated (2021, 2022, 2024) ship section traversing the Nansen and Amundsen Basins.
- analysis of ADCP, CTD and MSS profiles and calculation of derived parameters (e.g. vertical mixing rates) using MATLAB
- · water mass analysis and characterization in terms of nutrient and carbon ratios and contaminant levels

You will collect, compile, and publish quality-assured ocean observations from the Central Arctic Ocean and publish peer-reviewed research papers in accordance with the SUDARCO project plan. You will be expected to collaborate with other SUDARCO project members on the implications of the above-mentioned processes for biological production.

### Qualifications

You must hold a completed PhD in Physical or Chemical Oceanography, or a closely related discipline.

A Norwegian doctoral degree or equivalent doctoral degree from a foreign university is required. You are welcome to apply if you have not completed your doctoral dissertation yet, but you must then provide documentation that your dissertation has been submitted for evaluation before the application deadline for the position. An approved public defence of your doctoral thesis is a prerequisite for employment.

In addition to your PhD degree the position requires competence and experience with programming in languages such as MATLAB or Python and a track record of publication in the field in high-quality, peer-reviewed journals.

The following are considered assets:

- · Competence and experience of calculating vertical/horizontal transports and mixing rates.
- Good knowledge of the physical oceanography of the Arctic Ocean.
- Good knowledge of the biogeochemical processes in the Arctic Ocean.
- Experience with moored CTD and ADCP observations and time series analysis.

- Experience with shipboard CTD and ADCP observations.
- Experience of working together with numerical modelling specialists.
- Experience with and interest in interdisciplinary research.

We are looking for a person who is self-motivated, solution-oriented and willing to learn about new tools, techniques and parameters. You are efficient and understand the importance to deliver on time. You will collaborate with colleagues at the Norwegian Polar Institute and external project partners, so good collaborative skills and communications skills are essential.

Good language skills in English are required. Our working language is Norwegian, so knowledge of the Norwegian language will carry weight in the assessment. If you do not speak Norwegian you are expected to attend language courses within the first two years of your employment since communicating in Norwegian will be important for you, as well as for the institute. We pay for courses that are completed successfully.

To participate in cruises, you must pass the required health check (carried out by seafarer's doctor) required for work on a Norwegian vessel.

#### We offer

- · Interesting and exciting work tasks in a highly international research environment.
- Salary according to the Norwegian State salary code 1352 postdoctoral research fellow (2% is deducted to the Norwegian Public Service Pension Fund).
- Field pay according to national and local agreements.
- Membership of the Norwegian Public Service Pension Fund. The membership includes many benefits, such as lifetime retirement pension, the right to financial support if you become ill or disabled, financial support for your family if something happens to you in our service, insurance against occupational injury/illness, as well as good mortgage terms.
- Membership in our staff association, which among other things has its own cabin and facilitates various social gatherings.

A diverse work force is important to us. If you are qualified for the position, you are welcome to apply regardless of your gender, age, cultural background, disabilities, or gaps in your CV. The latter two may be used for registration purposes in connection with the government's policies. There are special health requirements for this position that could complicate our possibilities to accommodate special needs, but we always consider it.

Tromsø and the surrounding area have excellent conditions for experiencing the midnight sun, polar night, Northern lights, varied outdoor activities and a lively cultural and entertainment environment. Tromsø is situated at nearly 70°N with just about 75.000 residents. The city is an expanding centre for research, with numerous governmental and private research institutions and a major well-established university.

#### **Applications**

Further inquiries about the position may be directed to Research Scientist Dr. Paul A. Dodd, <u>paul.dodd@npolar.no</u>, tel. +47 462 22 516, Research Scientist Dr. Agneta Fransson, <u>agneta.fransson@npolar.no</u>, tel. +47 406 16 653 or Programme Leader Dr. Arild Sundfjord, arild.sundfjord@npolar.no, tel. +47 473 04 197.

#### The application deadline is 2 May 2023.

Your application must be submitted in Jobbnorge. The application should include details of your relevant qualifications and experience, attachments, CV, publications list, copies of your transcripts and names of three references. Please, do not include copies of publications or other works in the application, but note that this may be requested later in the process.

To ensure a good recruitment process, we will carry out background checks on relevant candidates for the position. This helps ensure that we recruit the right expertise and contribute to a fair evaluation of the applicants. The background check often consists of verification of information provided in the application, CV, diploma, etc. through interviews, reference interviews, searches in open sources, etc.

All applications are handled in confidentiality until the application deadline. Thereafter, a public list of applicants will be prepared. Applicants who wish to reserve their applications from the public list must give reasons for this in their applications. Information about an applicant can be made public even if the applicant has requested that they be excluded from the public list of applicants, cf. Freedom of Information Act, Section 25, 2nd paragraph.

# The Norwegian Polar Institute

is a directorate under the auspices of the Ministry of Climate and Environment and has approximately 160 employees located in Tromsø, Svalbard and Antarctica. The institute is the main strategic adviser for the Norwegian State

in polar issues, represents Norway internationally with respect to polar sciences and management committees and processes, and is Norway's environmental authority in Antarctica. For more information visit <a href="https://www.npolar.no">www.npolar.no</a>.

#### Additional information

## Place of service:

Tromsø 9296 Tromsø (Tromsø - Romsa Municipality)