

The Nansen Environmental and Remote Sensing Center (NERSC) is an independent non-profit research foundation in Norway. The vision of the Center is "to pioneer understanding of the Earth system and science-based innovation for society". The Center conducts multidisciplinary sciences with focus on marine, cryosphere and atmospheric research with integration and links to innovation and service development. The high latitudes and the Arctic are given special attention. NERSC takes an active part in training and capacity building as well as dissemination to stakeholders and society in support of sustainable environment and blue growth. Strategic national and international partnerships are highly prioritized.

The primary financial income for NERSC derives from projects from various financing agencies awarded in open competition. The Center also receives basic funding from the Ministry of Climate and Environment in Norway. NERSC is an active research partner in the <u>Bjerknes Centre</u> for Climate Research and at the <u>Hjort Centre for Marine Ecosystem Dynamics</u>. NERSC is also leading the Copernicus Marine Environmental Monitoring service for the high latitude seas and Arctic Ocean in collaboration with the Meteorological Institute of Norway and the Institute of Marine Research. The Center has extensive international collaboration, including the "Nansen Group" with research centers in Russia, India, China, South Africa and Bangladesh. The Center presently has 80 employees from 25 nations.

Position as senior ocean modeler at the Nansen Environmental and Remote Sensing Center (NERSC) in Bergen, Norway.

The ocean and sea ice modeling activities at NERSC focus on processes and dynamics, data assimilation, and coupled ocean-biogeochemical studies. Together, the team has developed the TOPAZ system, the official Arctic component of the Copernicus Marine Services, and has established a leading European position for operational ocean forecasting in the Arctic and Nordic Seas. The TOPAZ system is built on the HYCOM ocean model, which has been used at NERSC for more than 15 years and constitutes the core of our ocean modeling and data assimilation activities. These are shared with the international Nansen Centers in P.R. China and South Africa, who maintain regional configurations of HYCOM, running both with and without data assimilation.

More information:

http://www.nersc.no http://marine.copernicus.eu/

NERSC is looking for a senior ocean modeler/oceanographer to be in charge of the ocean modeling developments at NERSC over the next years. The position is initially offered for a period of two years. It will be continued in a permanent position depending on satisfactory performance and funding opportunities. The scientist is expected to conduct original, independent and collaborative research toward the development of HYCOM in connection to the novel sea ice and ecosystem models being developed at NERSC. The scientist will play a central role in strategic decisions on the future evolution of the ocean modeling system.

Initially the main tasks in the position will be:

- o Contribute to the coupling framework of a new coupled sea ice-ocean system in collaboration with NERSC sea-ice modelers
- o Carry out developments as part of the evolution of the operational service in the Arctic.

Requirements:

- o A Ph.D. or equivalent in applied mathematics, engineering, computer science, earth system science, or a related physical science.
- o Research experience in a relevant field and good publication record in refereed journals.
- o Experience with development and/or extensive use of ocean models, and their evaluation using observations.
- o Teamwork spirit and good communication- and collaborative skills.

Knowledge in one or more of the following areas will strengthen the application:

- o Ocean-ice-atmosphere coupling processes in the Arctic Ocean.
- Oceanography of the North Atlantic and Arctic.
- o Experience with HYCOM or general vertical coordinate ocean models.
- o Experience with couplers such as OASIS or CPL7, or coupling frameworks such as ESMF or MCT.
- o Excellent programming skills in Fortran or C++ to manage big and collaborative projects and experience with version control systems, such as GIT and SVN.
- o Previous experience in scientific software and tools, such as MATLAB, Python and R.

We offer:

- o Interesting work in a stimulating research environment.
- o Salary according to qualifications.
- o Pension scheme.
- o Financial help with relocation.

The position is open from 1. January, 2017 or as soon as possible after that.

Please send your application (consisting of a CV, motivation letter and contact of 2 or 3 references) by e-mail to <u>admin@nersc.no</u> (with copy to <u>annette.samuelsen@nersc.no</u> <u>and laurent.bertino@nersc.no</u>) within the 8th December 2016. Use the subject "Application for a senior ocean modeler".