New job opportunities at the Nansen Center

Thanks to recent grants awarded, **the Nansen Environmental and Remote Sensing Center (NERSC) opens four positions: three project-financed researcher positions and one post-doc** in the modeling and data assimilation department of the Mohn-Sverdrup Center.

Scientist DA1: A 4-years scientist positions is open for an expert in data assimilation. The goal is to carry out methodological developments based on the Ensemble Kalman Filter (EnKF), and apply them to the TOPAZ coupled ice-ocean monitoring and forecasting system. The developments should improve the performance of the system and assimilate new types of observations. Experience with the ocean model HYCOM or other large-scale coupled ice-ocean models will be considered as an advantage. Start expected early 2014 or sooner.

Scientist DA2: A 4-years scientist position is open for assimilation of biological data from satellite and in-situ measurements into coupled physical-ecosystem models. The goal is to carry out methodological developments of the data assimilation stochastic model in order to adapt it to the challenges of strongly non-linear biogeochemical models, in particular the estimation of their parameters. It will be implemented in the TOPAZ-NORWECOM model of primary production as well as the global model of the ocean Carbon cycle in the Norwegian Earth system Model (NorESM). The latter work is done in collaboration with the University of Bergen. Start expected early 2014 or sooner.

Scientist OM: A 4-years scientist position is open for an expert in numerical ocean modeling with a strong background in theoretical oceanography. The goal of this position is to conduct oceanographic analyses of the output from the TOPAZ system and to improve the physical ocean model HYCOM, in particular in regards to the mixing parameterizations in the Arctic Ocean and the forthcoming incorporation of a new sea ice model developed at NERSC. Start expected early 2014 or sooner.

Post-doc: A 3-years post-doc will apply the EnKF to the ocean component of NorESM. The goal is to develop and assess a seasonal-to-decadal climate prediction system. The position is fully funded by the collaborative EPOCASA project from the Research Council of Norway and contributes to the Bjerknes Center for Climate Research. The candidate should have a PhD in applied mathematics and experience with data assimilation. Start expected January 2014 or sooner.

The applicants must hold a PhD in applied mathematics or oceanography, have a long experience in numerical modeling and parallel programming with complex codes. The salaries are based on qualification, experience and publications. For an equal level of qualifications, female applicants will be given priority.

NERSC is an independent non-profit research foundation affiliated with the University of Bergen, Norway. It conducts basic and applied environmental and climate research. NERSC has leading expertise in coupled ocean modeling, sea ice modeling, ecosystem modeling and data assimilation. TOPAZ is a modeling and data assimilation system for the North Atlantic and Arctic Oceans that has been developed at NERSC during the last 15 years and is now run operationally at met.no as the Arctic component of the MyOcean system. TOPAZ uses the Ensemble Kalman Filter for assimilating several types of data, both for operational forecasting and reanalysis and it is the Arctic component of the integrated European system for ocean forecasting named MyOcean. TOPAZ is to date the only operational ocean forecasting system using jointly advanced data assimilation and ocean modeling tools, with ongoing developments of ecosystem models and new sea ice modeling approaches.

More information:
http://www.nersc.no
http://www.myocean.eu and http://myocean.met.no/
http://skd.bccr.no/projects/practice/

The deadline for application is 30th September 2013. Please send your application with CV, publication list and the contacts of three references by e-mail - indicating to which position(s) you are applying - to the following address: admin@nersc.no with CC to Laurent Bertino (Laurent.Bertino@nersc.no) and Johnny A. Johannessen (Johnny.Johannessen@nersc.no). Include in the subject line *"Application for a position in modeling and data assimilation (DA1/DA2/OM/postdoc)".*