



Post-Doc Position

SULFUR AND CARBON CYCLES IN ANTARCTIC SEA ICE

Project description

The West Antarctic Peninsula (WAP) is among the most rapidly warming areas on Earth. Coinciding with the warming of shelf water, the amount of sea ice that is formed over winter is declining. Sea ice is an important mediator in the marine carbon and sulfur cycles as it contains dense phytoplankton layers that are released during the melting season, thereby releasing large amounts of organic material and climate gasses, such as the climate active gas dimethylsulfide (DMS). In January 2013 the Dutch Science Facility at the British Base Rothera opened and the first-ever time series of DMS and related compounds at the Rothera Time Series Station (RaTS) was initiated.

In the current project we will continue this time series and add to it a more in-depth study of the role of sea ice in both the sulfur and carbon cycles. We will investigate the flux of sea-ice organic carbon and sulfur to the surface ocean during ice melt. In incubation experiments with sea ice and water samples we will follow the conversion processes of organic carbon and sulfur, using stable isotopes and mass spectrometry.

Job description

You will be part of a small team based at the university of Groningen and will contribute to two field seasons at Rothera Base of 2 to 3 months each.

At base, you will take and analyze DMS(O/P) samples on a TOF-PTR-MS, collect additional biological samples and run experiments with stable isotopes.

At the home laboratory, you will assist in processing the biological samples where possible (HPLC-pigments, POC, phytoplankton counts etc.).

Data processing and writing papers is an important part of the job. You will not only process your own data but also process data collected over the seasons 2013/2014 and 2014/2015.

What we expect from you

- you have a PhD degree in marine science, with significant knowledge of the marine sulfur cycle.
- you have experience in data analyses and publishing papers
- you are eager to spend 2-3 months in the Antarctic and enjoy working in a team
- you are self supporting
- you are physically fit
- you have significant experience in operating analytical instruments, preferably a mass spectrometer

Working conditions

You are based at the GELIFES centre of the University of Groningen, the Netherlands, and will become member of the Plant Ecophysiology group. The appointment is a 2-year full time position; part-time conditions are negotiable. Gross salary for a full-time position is between €2,970 and €3,320 per month, depending on experience.

Send an application letter plus CV to j.stefels@rug.nl

Application deadline: 25 May 2015. Position to be filled as soon as possible.

For more information about this vacancy, please contact:

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