

# Trace metal biogeochemistry

## Graduate student (PhD) positions

- 1) Northern Gulf of Alaska Long Term Ecological Research (NGA LTER) <https://nga.lternet.edu/>  
The Northern Gulf of Alaska is a subpolar biome characterized by enhanced production and high environmental variability. This project is part of the new NGA LTER site and focuses on understanding the processes that control macro- and micro-nutrient dynamics over the shelf and slope regions of the NGA. This is a field intensive project with 3 yearly cruises from spring to fall. The student will be responsible for collecting and processing seawater and suspended particulate samples during cruises and determining micro-nutrient concentrations using an Element2 HR-ICPMS. Results will be interpreted within the LTER framework which will require collaboration with the interdisciplinary LTER research community. The student will be required to present work at international conferences, and to produce publishable manuscripts.  
**Funding is available for 3 years.**
- 2) Chemical, Physical and Biological Processes Linking Snow and Sea Ice to the Arctic Ocean Mixed Layer (part of the MOSAiC platform study). <https://www.mosaic-expedition.org/>  
Sea ice, a major component of the polar oceans, serves as an important platform for the accumulation and transport of dissolved and particulate material. This project is part of the international MOSAiC study and focuses on sea ice processes that influence nutrient cycling in the upper Arctic Ocean. Observations will take place during several multi-month deployments from Fall 2019 through Spring 2020. The student will be responsible for collecting samples during one of the field deployments and determining dissolved and particulate micro-nutrient concentrations in snow, sea ice and seawater using an Element2 HR-ICPMS. Results will be interpreted within the MOSAiC framework and will be used to help constrain sea ice models. This will require collaboration with the MOSAiC research community. The student will be required to present work at international conferences, and to produce publishable manuscripts. **Funding is available for 3 years.**



**Applicants** must have a strong background in chemistry and/or oceanography, and strong written and oral communication skills. Experience participating in field research, with chemical analysis, working in clean laboratory facilities and/or experience with ICPMS analysis is desirable. Underrepresented students are encouraged to apply.

**Advisor:** Dr. Ana Aguilar-Islas. For additional information email ([amaquilarislas@alaska.edu](mailto:amaquilarislas@alaska.edu))

**Deadline:** Applications for graduate admission to UAF with all supporting documentation, transcripts and test scores must be received by June 1, 2019. Contact Dr. Aguilar-Islas before April 15, 2019.

Application information can be found at <http://www.uaf.edu/cfos/academics/graduate/oceanography/>

The UAF College of Fisheries and Ocean Science is located in Fairbanks Alaska. UAF is America's Arctic University and a Land, Sea, and Space Grant Institution. The University of Alaska is an AA/EEO employer and educational institution and prohibits illegal discrimination against any individual: [www.alaska.edu/nondiscrimination](http://www.alaska.edu/nondiscrimination).