NGEA51 Internship Report

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Internship Summary

Firstly, for this full-time internship I worked under the supervision of Martin Berggren, Senior lecturer, at Dept of Physical Geography and Ecosystem Science. The internship focused on the topic of Dissolved Organic Carbon within different water samples, specifically within Arctic Canada samples which will be used for my Master Thesis project.

The main goal of this internship was to learn different methods of laboratory analysis, to use these different methods on the Arctic Canada water samples, to produce meaningful data which can be further analysed and discussed within the Master Thesis project. These methods were also used on other samples, mainly a PhD students' samples, so that I could learn from and alongside them, and continue to assist with their workload. Furthermore, one of the methods I also applied to a backlog of samples stored by the department for a mesocosm study, which amounted to hundreds of samples being processed.

I had a range of tasks that I performed, which varied mostly between three different laboratories within the department; The use of an Aqualog machine to export and produce fluorescence data, which was then processed within MATLAB using a technique I learned called PARAFAC. Learning and applying 3H-leucine technique to measure bacterial production. Learning and applying measurements of microbial respiration using optical oxygen sensors. Attending every other week meetings.

Overall, this internship was very rewarding, and the experience I have gained will be very useful for me in the future, and the guidance I received was excellent.