During the eight weeks I learned a lot. With this experience, I reinforced my English, met new people and learned new laboratory techniques. I had the pleasure of working with Prof. John Reinfelder and his work team. What I have learned will help me in my future goals.

Methods

The purpose was to investigate "Digestion Method for Mercury and other Trace Metals in Marine Particulate Matter". The salt water samples were filtered. The filter collected was cut in half, that half is placed in the bottom of the acid cleaned quartz crucibles. The filter that was placed in the crucibles were treated with 3ml of 16m optima nitric acid and 2ml of 12M optima hydrochloric acid. Then they were placed to digest at room temperature for 48 hours. After 48 hours, the filters were removed and the crucibles were placed on a hot plate at 90° C, the purpose is to evaporate the acid, leaving the solid particles to remain. The remaining particles are treated with 3% nitric acid to dissolve the solid particles. Once the solid particles are dissolved, transfer 1ml of the sample to a microcentrifuge tube and add 10µ l of BrCl for the analysis sample. The remaining samples are placed in a certifuge tube, to determine other metal traces.

A fellow lab worker, following a certain procedure, prepares the mercury samples. The samples for trace metal are centrifuged for 5 minutes, and then they are analyzed in Atomic Absorption (A A) to determine the quantity of metal in the sample. I can not give any results due to technical problems with the instrument.

Long-term Goals

My goals are to finish graduate school in the field of environmental science. During my eight weeks of research I developed a great interest in this field. I plan to do my graduate research in analytical and environmental area. My goal is to work as a college professor. In addition, be an advocate in my community in the area of environmental awareness.