

Saltwater Corrosion Testing

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Project Objective and Intern Contribution:

Our aim was to complete the saltwater corrosion tester that was created by former students from UC Santa Barbara. We have worked on challenging task that were left by former UCSB students, this includes fixing the wires and leaks.

The methods we used to accomplish this aim were purchasing the materials to seal the leaks spots and to use for the heaters. We also done research on how to code with python and raspberry pi to be able to operate with the sensors.

We were assigned to do three task for our project. Three of the tasks are implementing python code for the Raspberry Pi, submerging the leaks, and adding sensors to the tester.

Our contribution for reprogramming the code was going through the code to verify there are no bugs or errors, but also to create and develop code that allows the user a better control of the system, as well as implementing the sensors into the program to allow the user to receive feedback such as out putting pH levels.



What are you most proud of this summer [with respect to your experience/project]?

- Improve our challenges while working (communications and learning new materials)
- Work hands-on in a Laboratory (programing and saltwater corrosion chemistry)

Why was the internship valuable?

- Apply real world application related with engineering while working on the project.
- Make connections with NAVSEA engineers for job opportunities in the future.

Advice for future cohorts?

- Always ask questions when you don't understand the topic.
- Manage your time wisely to get your work done

Results / Accomplishments / Next Steps:

1. The impact for the Navy is high because of the billions the navy spends to battle corrosion.
2. What's most important is that our team was able to work together and tackle the tasks given.
3. In the future this work will be able to simulate real environments to give accurate testing in real time.
4. In the future it would be ideal to take everything that our team and the previous team have gathered and create a submersion tank 2.0 to work out the little details and have a prettier and neater system.

