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Spring 2009 Semester Contributions

Since Midterm

I spent the second part of this semester trying to stay on task with this project and get some data. I mostly wrote a lot of goals and schedules for our team and made sure that the apparatus was running properly. I also corroborated with Sarah and Monroe about the velocity gradient analysis. For this final wiki report I worked primarily on the capture velocity, process controller, challenges, and varying length of tubes experiment pages; wiki organization; and general editing.

This year on AguaClara has been quite exciting. I look forward to really diving into comprehensive data analysis over the next week or so and drafting a paper with my teammates. Sorry that we always seem to be a little behind..

Before Midterm

I spent the beginning of this semester, along with my two teammates, organizing our system, getting Kellie oriented, and determining the direction of our team this semester. I also did the preliminary write-up for our goals , though they have since been revised several times over again. In terms of system organization, I was in charge of coiling the cords behind our system, helping to move equipment, and assisting with Process Control setup (I especially enjoyed using the increment function).

For the teach-in, I did the methods section. For the midterm report I worked on the methods section as well.

I would like to get some data soon.

Fall 2008 Semester Contributions

Since Midterm

I spent the last part of this semester in the lab working towards getting our system up and running. The first couple of times that I ran the system, I learned a great deal about process control and about being sensitive to all of the variables in our system. While running experiments, I checked on the system frequently and made comments in process control, refilled alum and clay solutions, and monitored floc blanket depth. I spent a lot of time learning how to trouble shoot problems by brainstorming and tracing problems, manipulating process control, and asking for help from others. I collected a great deal of our data gathered so far through process control and made many improvements to our system. For example, I setup the sedimentation tubes; upon Monroe's advice, added the control weir to regulate our floc blanket depth; and, generally, assisted with most aspects of the system.

For our final report, I was responsible for the results and discussion section.
Also, I helped write our quiz for next semester..

Before Midterm

I spent the beginning of this semester getting oriented to the AguaClara project and the plate settler spacing research team. In addition to the time that I spent with the plate settler spacing team, I read research articles on water treatment, attended the demo plant demonstration, and presented the demo plant with Vanish to a freshmen class.

The first challenge that our team faced was determining what tube diameters to test. I spent time working with Sarah Long to determine whether or not shear stress would be the limiting factor for minimum tube diameter. During this time, I learned how to use MathCad to manipulate equations and I studied some fundamental fluid dynamics.

Another assignment that I had was to research a more uniform and easy to manage material than straws to use as tube settlers. Ultimately, the honeycomb that I found was less economical and more cumbersome than the tube-manifold system used by Matt Hurst.

For our teach-in, I presented background information, goals, and details on the sedimentation portion of our experimental apparatus. Teach-In

In preparation for our midterm report, I spent a lot of time getting familiar with the Wiki and I tried to help Sarah organize linking through the plate settler spacing section. For the midterm report, I helped update our team goals: Goals and was responsible for the sections of the report on sedimentation, obstacles, and future work: Midterm Report

Below are links to some meeting minutes and our midterm report:

Content created by Anonymous
There are no pages at the moment.