

# klk55

## Spring 2009

During the Spring 2009 semester I have worked on the [Plate Settler Spacing Team](#). I have been working with Sarah Long and Colette Kopan to get our system up and running to do experiments. We were able to run our first set of experiments on sedimentation during the week of March 2, but had a few complications due to a miscalibrated pump. We are also performing experiments dealing with the formation of the floc blanket in our system. It was my job to translate the pictures that we took of the forming floc blanket into data, and post this onto a [research page](#). I also did a lot of the work in organizing our [main page](#), and wrote the overview for the system. I worked in the lab, coming in to help run the [Flow Rate Experiment](#) and the [Tube Length Experiment](#) when my shifts were scheduled. I also analyzed a few of the data sets from our experiments. I gave a presentation about AguaClara with Nicole to prospective students as well.

## Fall 2008

For the Fall 2008 semester, I have been working on the [Pilot Plant Team](#). I was specifically working on the [Sedimentation Team](#), with the two separate sedimentation tanks to experiment with sludge blankets and lamella to obtain the clearest effluent. Unfortunately, our team met several obstacles in the beginning half of the semester, and we had not yet been able to begin the testing. In the very beginning of the semester, we were told that a pipe from the flocculator to one of the sedimentation tanks was leaking. We shut down the plant; however, the pipe needed to be completely dry in order for the caulk to set properly, so we waited. After three separate trips to the pilot plant to dry the area and re-caulk it, Julia discovered that it was actually the plant leveling tank that was leaking. I fabricated a seal for one of the pipes to the sedimentation tank so that the flocculator could still operate independent of the leak. When I wasn't heading up to the pilot plant to check the leaky pipe, I worked on the Sedimentation wiki, organizing the Spring 2008 report into something that would be more user friendly and accessible, including the following pages: [Pilot Plant Sedimentation Tank Overview](#), [PPST Research](#), [PPST Maintenance](#), and the [PPST Construction History](#).

In the second half of the semester, the plant continued to pose challenges. These included problems with alum pumping the wrong direction and an overflowing rapid mix pipe, but the biggest issue was that the flow through the plant would decrease dramatically while we were gone. This problem was attributed to leaves from Fall Creek clogging up the pump. Initially, we just solved the problem by using a long stick with a brush attached; however a more permanent solution was required. I fabricated a cage for the pump out of a metal screen material. Since then, the flow rate has been very consistent. Shaina and I also trimmed the weirs for the plant leveling tank, so that there would not be any possibility of overflow leading to flooding. I also continued to focus on making the PPST wiki more user friendly, including the following pages: [Pilot Plant Sedimentation Tank Overview](#), [PPST Methods](#), [Troubleshooting](#), [PPST Sludge Blanket Results](#), [PPST Sludge Blanket Formation](#), [Sed Tank Design](#).

<b>Content created by Anonymous</b>
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