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Dali Sun's Individual Contribution Page

Fall 2009 Mid-Semester Contributions

During the fall 2009 semester, I have worked on the Research Team. I was specifically working to develop the Flocculation Residual Turbidity Analyzer as a tool to measuring the floc sedimentation velocity distribution and the post-sedimentation residual turbidity of a flocculated suspension. In the Mid-Semester, I have done the two experiments with others on my team. The first one was performed on the same FReTA setup that was developed previously (Spring 2009), which is with alum at 2.6g/L, clay at 10g/L and 2796 cm pipe. In the second experiment, I with other teammates chose to investigate the optimal alum dosage for two different influent turbidities (100 NTU, and 500 NTU) and three different flocculator lengths (2796 cm, 5592 cm, and 8388 cm) with the flow rate 5mL/s.

Fall 2009 Final Contributions

During the whole Fall 2009 semester, I have worked on the research team. I was working with tube floc team to determine the NTU in the water. And in these experiments, comparing with the Mid-semester, we still used 2.5 g/L alum and 10g/L clay, however, we used 6 liters instead of 3 liters before. I and my experiment partner had done the 5, 25, 50, 100 and 500 NTU experiments with one length and three length flocculator, which are 2796 cm and 8388 cm to analyze the results. Additionally; we also have changed some values in the process controller.