eht26

Elizabeth Tutunjian's Individual Contribution Page

Fall 2009 Contributions

As a member of the Plate Settler Spacing Team, I have been investigating the "Floc Roll-Up Phenomenon." More specifically, I have been performing experiments that will help to determine the velocity and size of the particles that "roll-up" the tube settler and into the effluent rather than settling down the tube, back into the floc blanket.

In order to better understand this phenomenon, I have been working on the Theoretical Analysis of the Velocity Gradient. My particuular focus has been on updating the velocity gradient model previously created by the past Plate Settler Spacing Team in order to develop a working model better supports experimental results.

To find the critical velocity at which particles begin to roll up the tube settlers, the team performed the Ramp State Experiment. Later in the semester, more experiments are planned to further determine the accuracy of this model, thus far.

I also helped the team perform, and analyze data for, the Experiment with Saturated Water, in which we linked our apparatus with that of the Floating Floc Team in order to better investigate the "Floating Floc" problem.

Because the team is planning to experiment with natural organic matter, I helped perform a preliminary literature search to provide background information for future experiments.

Pages Created