jw785 Jingfei Wang's Individual Contribution Page

Spring 2017 Contributions

I switched to Sensor Development team this semester. The primary goal of this semester is the fluidized bed concentration sensor. We will colaborate with the AFB team, and then find out a better calibration curve and lowest intensity of light needed for this sensor. The second task would be designing and fabricating a floc hopper probe which could measure the depth of flocs. The probe will be tested using the 1L/s water plant.

Fall 2016 Contributions

This fall I joined AguaClara design team as a freshman. I started of getting myself acquainted with using MathCAD and AutoCAD in order to create my designs later. I was also learning about how the design team fits into AguaClara by facilitating communication between engineers in Honduras, research teams and our partners. I wanted to come up with some new designs or fix some previous ones by the end of the semester.

After familiarized myself with all available challenges, I decided to focus my time on the backwash recycling one with another team member, Nicholas Kan. It is an open-ended question that would allow me to design a new part, the backwash tank, for water plants. I spent some time working on settling tank, pumps and how they are going to fit in a current existing plant in San Matias, Honduras. We finally came up with a tank design that could free the plant operators from labor work. We narrowed the pumps to three choices, and calculated the payback period for investigate on the backwash recycling system. We thought the system would be necessary to the plant. I hope our design could ultimately be put into action, which would improve the water shortage in that area.