# app37

# Akta Patel's Individual Contribution Page

## **Spring 2011 Contributions**

This semester, I worked on coding a design for the Linear Dose Controller. I worked with the CDC research team (Matt Higgins, Drew Hart, Adam Salwen, and Chris Guerrero) to investigate and quantify the minor losses in the system. My Mathcad file outputs a length and number of tubes for a set diameter and coagulant flow rate. The minor loss coefficient used in the design was estimated from the CDC research team data, but this needs to be better quantified.

### **Fall 2010 Contributions**

I have been working on the design team to create code for a more general doser design so that it can be incorporated into the Automated Design Tool. The design is for a triple scale doser (three different orifice sizes). The tubing sizes from the constant head tank are determined by the minimum size required in order for the orifice head losses to dominate the major head losses in the tubing. Currently, I am working on determining the appropriate orifice size for the constant head tank and making surface tension effects are negligible even at the minimum dose at the minimum plant flow.

#### **Fall 2009 Contributions**

#### Chemical Dose Controller Team

I have been working with the Non-Linear Chemical Doser team to design a new non-linear alum doser. I have been working with Karen to do the teach-in and we have worked on the main page of the Non-Linear Chemical Doser to update it with our current research. We also created links for the other pages and showed our teammates how to attach files and how to link. I have started working with Harri and Monica to design the frame of the chemical doser. Also, Yoon, Dale, and I have started looking at tests we can run to determine Alum clogging of the orifices.

#### **Content Created**

Content created by Anonymous

There are no pages at the moment.