AIChE Meeting Minutes

09/10/2013

* Announcements
	+ Mines Link
		- Find out about events
		- Log Community Service Hours
		- Recommendation: go online and become a member
	+ Float in the M-Week Parade
		- Any interest? None
	+ Dues
		- $5 per semester, $10 for the year
		- Covers the cost of refreshments (pizza and drinks)
		- Pay money to Willie
	+ National Conference
		- San Francisco, CA
		- October 31 – November 4
		- Early registration ends September 22
		- Events
			* Listen to people talk about the ChemE career
			* Hear about undergraduate activities
			* Attend workshops
			* ChemE Car competition
			* Undergraduate poster presentation
	+ Chapter Advisor
		- Dr. Gilcrease
	+ Future Meetings
		- Dr. Monroe and his research
		- Mr. Sawyer about the career fair
	+ AIChE
		- Feel free to ask questions to any of the officers
		- Highway Clean-Up
		- Dublin Dash
		- Great for the résumé
		- Regional and National Conference
* Internship Presentations
	+ Andrea Strain
		- Germanol Intern with Cargill
		- Oil Process
			* Mechanical process to crush the germ seed and gather the oil
			* Chemical process to extract the rest of the oil
		- Ethanol Process
			* Fermentation to feed the bugs and create ethanol
		- Project
			* Tank Vent Calculations
				+ Calculate all vent sizes in ethanol and germ
				+ Found 11 tanks needed to be resized
			* Ammonia Tank Demo
				+ Remove old ammonium hydroxide tank
				+ Electrical demo and line cleaning
				+ Created plan of action
			* Cooling Tower Water Platforms
				+ Place permanent platforms to save money and increase safety
			* Caustic Optimization
				+ Come up with plan to optimize caustic usage
		- Goals and Growth
			* Safety Items
			* Time management
			* Networking
		- Lessons Learned
			* The scope of the project changes
			* Time management
			* Communication/People Skills
				+ Don’t be afraid to say “I don’t know”
		- Questions?
			* Lay Out of the Job
				+ Safety Training for a few weeks
				+ List of projects from the boss
				+ Tackle the projects with order of importance
			* Projects – Team or alone?
				+ Mainly alone
				+ Call people in for advice
				+ Never isolated
	+ Joe Bob Machado III
		- Cargill Internship in the Corn Milling Facility
		- Plant Overview
			* Steep the corn
			* Separate the germ
			* Gather the fiber
				+ Water from steeping goes onto the fiber
			* Starches and gluten continue through the process
			* Starches turned into glucose and corn syrup
				+ Different products
		- Feed Department
			* Major Products
				+ Cattle pellets
				+ High protein gluten
			* Projects
				+ Tank would always plug because of heavy steep water

Fat in the heavy steep water was causing problems

Viscometer readings

Problems because of a thick layer forming on top

Recommendation: change pipes to sweeping instead of 90 degree angles

* + - * + Watch over contractors

Placed two valves with the handles touching

Caught it and fixed it

Second set of eyes is beneficial

* + - * + Dust collector

Safety Project:

Dust creates explosion hazard

Dust collector was plugging up

Learned about solids handling

Recommendation: increase piping size

* + - * + Team Project

Retain Building

Worked with food safety team to find a place to store samples

* + - * Suggestions
				+ Go to the career fair
				+ First day: kind of hectic
				+ Be flexible
				+ Be open to anything that can happen
			* Questions?
				+ LyondellBasell vs. Cargill

Petroleum vs. Food Industry

LyondellBasell was more chemistry

Cargill was more mechanical

Cargill felt more friendly

LyondellBasell had more hazardous chemicals

LyondellBasell taught appreciation for safety

* + Taylor Schoenfelder
		- Ethanol Intern with POET
			* Safety is a huge thing
		- Projects
			* Worked with a variety of different tasks
				+ Decrease amount of purge time, design a wrench, etc…
		- Advice
			* Be ready to learn
			* Apply school learning
		- Things appreciated
			* Working with different tasks
			* Getting to participate
		- Benefits of Experiences (Internships, Co-ops, etc…)
			* Makes you stand out in the crowd
			* The more you have, the more hirable you are