

## President's Corner



As I sit down to write this article I realize we are already a month into the new year. I am still trying to figure out how to fit all of these books in my backpack. If you haven't had your first test or paper due yet I'm sure it is just around the corner. While trying not to be the bearer of bad news, we all realize how demanding chemical engineering can be. None of you would be here if you had not already proved yourself to be the highest caliber of students. For all the seniors out there who are now trying to juggle writing a resume, interviews and classes, the end of the tunnel is approaching. To the sophomores who are not sure why the heck they are even in this curriculum you will have to trust us that one day it

will all be worth it.

The year will pass quicker than most of us realize. But in that time, I hope we can make this a terrific year and form lasting friendships that will survive well beyond our limited days at this institution.

— Steve Maygar



Check out [The State of AICHE](http://www2.ncsu.edu/eos/info/aiche_info/mosaics/Aiche.html) online at [http://www2.ncsu.edu/eos/info/aiche\\_info/mosaics/Aiche.html](http://www2.ncsu.edu/eos/info/aiche_info/mosaics/Aiche.html)



Oct. 1  
Wednesday  
Intel  
Mann 307 @ 12:20 PM

How about an exciting career at the world largest PC CPU producer? AICHE invites company representatives from Intel to tell you more about it. Free lunch served, MEMBERS ONLY.



Oct. 2  
Thursday  
Mock Interview, Job Search, Resume  
Mann 304 @ 6:00 PM

Representatives from companies and former NCSU graduates help you to sharpen your interview skills.



Oct. 3  
Friday  
Armstrong  
Mann 307 @ 12:20 PM



Oct. 4  
Saturday  
AICHE Car Wash  
Meet at Wal-mart on Glenwood Ave. @ 9:30 AM  
Fund-raising for AICHE National Student Conference at L.A.

## Dr. Richard M. Felder

*"Walk into a chemical engineering class anywhere in the world, and chances are students use a textbook written by Richard Felder, an N.C. State University professor whose introductory text is among the most popular in the field." (News & Observer, 3/24, 1993)*

*Dr. Richard M. Felder is the Hoechst Celanese Professor of Chemical Engineering at State. His current fields of interest include computer-assisted manufacturing of specialty chemicals, simulation and optimization of chemical processes, and methodologies of engineering education. His book, Elementary Principles of Chemical Engineering Processes has been used as the introductory chemical engineering text by over 100 universities in the US and*

*abroad. He has authored or co-authored over 100 papers on chemical process engineering and engineering education and has presented seminars, workshops, and short courses in both categories to industrial and research institutions and universities in the US, Europe, and South America. Since 1990 he has codirected the National Effective Teaching Institute under the auspices of the American Society for Engineering Education.*

*Among many awards Dr. Felder has received, he was designated the AIChE Institute Lecturer in 1991 and was selected as one of five Outstanding Engineering Educators of the Century by the Southeastern Section of the ASEE in 1993.*

*Dr. Felder is teaching CHE 205 this semester. His office hours are Tuesday and Wednesday from 2:30 - 4:00 PM.*

*Dr. Steven W. Peretti is an Associate Professor. He graduated from Yale in 1979 and received his Ph.D., Chemical Engineering at California Institute of Technology in 1987*

*His areas of interest are metabolic characterization and manipulation.*

*"Biological systems are finding an ever increasing utility in effective industrial processes, most notably in the areas of pharmaceutical production and bioremediation. While the primary control mechanisms are known for many cellular pathways, the interactions between different pathways and the ripple effect created by the manipulation of particular metabolic activities are not as clearly understood.*

*For example, such considerations play a major role in the production of heterologous proteins, effecting both product yield and product toxicity. Another burgeoning area of inquiry is that of in situ process development. There are many factors to consider in the design of such processes, including mixed-population competition, predation, biofilm formation and gene expression in nutrient-limited environments. The characteristics that make particular organisms better suited for in situ processes are largely unknown.*

## Dr. Steven W. Peretti

*Our primary research focus is bioremediation. This effort builds on our expertise regarding cloned gene expression in bacteria.*

*We are currently investigating*

- 1. the structure and regulation of nitroaromatic biodegradative pathways,*
- 2. cell-cell interactions of immobilized and biofilm-bound microorganisms,*
- 3. gene and plasmid transfer between similar and dissimilar organisms in suspension and biofilms,*
- 4. the utility of halophilic and marine organisms for biodegradation in saline environments,*
- 5. multiple steady-states exhibited by populations that are substrate-inhibited, and*
- 6. the development of bioconversion for the production of fine chemicals from aromatic feedstocks.*

*The assumption underlying all of our research is that most bioprocessing problems have biological (genetic) solutions.*

*Therefore, the keys to effective bioprocess design are the selection and design of the organism(s). "*

*In order to further improve the communications between faculty and students, we decided to add a new feature, "Faculty Connection". We will have articles on one to two ChE Faculty members in each issue of "The State of AIChE."*

*To those who prefer the web or a larger print, we will also have the newsletter available online on our AIChE homepage at:*

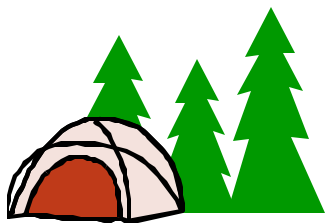
[http://www2.ncsu.edu/eos/info/aiche\\_info/mosaics/Aiche.html](http://www2.ncsu.edu/eos/info/aiche_info/mosaics/Aiche.html)

*The State of AIChE, a publication of the NCSU Student Chapter of AIChE, is presented to you by*



Thanks to all the people contributed to the publication of this newsletter.  
Special Thanks to Lauren, Ketan, Tim, Steve and Jackie

# Whitewater Rafting Trip:



On the weekend of September 5th, 6 AIChE members and their friends went up to Erwin, TN to camp and white water raft with Cherokee Adventures. We had perfect weather and everyone was looking forward to the trip. Most everyone was a first-time rafter and a little hesitant about taking individual rafts down 9.7 miles of the Upper Nolichucky River.

Early on, everyone was having a blast and doing a fine job of maneuvering through the class IV rapids. After we finished two-thirds of the trip though, a lot of people starting getting REALLY tired. I can't imagine why though, the river level was only the lowest it's been since 1985!! We did get to know quite a few rocks on a very personal level!!

Everyone camped out alongside the river both nights and had a great time after all was said and done. We got some great pictures of some of the rafters for the

graduation slide show, so everyone can get a glimpse of what fun we had on some of the bigger rapids!!

Cherokee Adventures told us about another trip they offer which has 5 miles of class III-IV rapids which only takes about one hour to finish. Maybe that is worth looking into for any white water lovers!!

There are some people who deserve special recognition from this trip:

**Teresa "Mom" Forehand** - for making sure we had absolutely EVERYTHING we could have ever needed for our trip!

"We did get to know quite a few rocks on a very personal level!!"

**Amy McDonald** - for being the BRAVEST rafter I've ever seen! Way to go Amy!!

**William Brooks** - for providing the nightly music we



## Who Are the Officers?

**Steve Maygar** is the Chapter President of AIChE at State. He is a senior. The Vice President is **Jackie Mullen**; she is also a senior and from Raleigh. **Joey Baker** is our trusty treasurer; she is a senior and went to school at Fayetteville. The corresponding secretary is **Brad Cozart**. **Ketan Vaidya** is the recording secretary. His hometown is Apex, and he is a junior.

The Social Committee is chaired by **Beth Allen**. Beth is a senior, and she is from Jamestown, NC. **Jennifer Knight** heads the

Finance Committee. Luncheon Committee chair is **Jeff Goodwin**. Anyone who is interested in helping out the lunches should contact Jeff or Brad. **Lauren Edwards** is the committee chair of the AIChE Communications Committee. Lauren is a junior, and her hometown is Charlotte. The athletic director is **Jason Queen**. Jason is looking for people who are interested in joining AIChE intramural teams. The Mentor Committee is headed by **Becky Roberge**. She is a senior from Laverne, TN.

Please contact the committee chairpersons to volunteer to serve on a committee.



Check out AIChE's Webpage [http://www2.ncsu.edu/eos/info/aiche\\_info/mosaics/Aiche.html](http://www2.ncsu.edu/eos/info/aiche_info/mosaics/Aiche.html)

It was said, "You cannot get everything with money, but you cannot get anything without money."

AIChE too needs money to do all kinds of good things for its members, bigger newsletters for example. Well, where does the money come from? That's the time when you as a member need to come out to show your support and help the organization to raise money to serve you, the member.

There will be our exclusive "Faces of Engineering" T shirt(\$10) sales throughout the week from 10:00-3:00 PM. Please sign up at the lounge. One hour from each member

is our goal. Please help out. A car wash is scheduled on Oct.

2, please check the bulletin board and sign up. We had a car wash last Saturday, Sep. 27 at K-mart and made over \$120 even though the weather was not cooperative. Thanks to all the people who helped out.

Luncheon Committee needs a couple of good people to help out. Please contact Jeff Goodwin or Brad Cozart if you are interested.

**AIChE Needs YOU!**

## September

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	22 Union Camp @Mann 307 12:20 PM	23 CHE 450 Test CHE 311 Test (Parsons)	24 Amoco @BR 1402 12:20 PM CHE 315 Test (Lim)	25 LA Trip Fee Deadline CHE 311 Test (Grant) Co-op Workshop @Tompkins 123 4:30PM	26 CHE 312 Test AIChE Picnic!! 5-8 PM Shelter # 9 Pullen Park	27
28	29 Exxon Corp @Mann 307 12:20 PM	30 CHE 316 Test Co-op Workshop @Tompkins 123 5:30 PM				

## October

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 Intel Corp.	2 Mock Interview, Job Search, Re-	3 Armstrong	4
5	6 Union Carbide @Mann 307 12:20 PM	7	8 ISPE Luncheon Co-op Workshop @Tompkins 123 4:30PM	9 Polymer Seminar at Faculty Club @ 7:30PM TOPIC: "Surface Anchoring and Electro-Optics in Polymer-Dispersed Liquid Crystals" Speaker: Dr. Kal Amundsen, Bell Laboratories. Luccent Technologies. Contact Dr. Gary Adams @ 469-2500 ext. 397 for more information.	10 CHE 315 Test	11
12	13 Fall break holiday	14 Fall break holiday	15 Job search, ChE op-	16 Co-op Workshop	17 National Starch	18
19	20 UOP @Mann 307 12:20 PM	21 CHE 205 Test Co-op Workshop @Tompkins 123	22	23	24 Bonset America @Mann 307 12:20 PM	25
26	27	28	29 CHE 330 Test Co-op Workshop @Tompkins 123	30 CHE 446 Test	31	

### You might be a chemical engineer if ..

- You have a favorite pump manufacturer.
- You can quote from any Monty Python movie
- You know who invented Jell-O
- You know the direction the water swirls when you flush
- You cannot write unless the paper has both horizontal and vertical lines.
- You have no life — and you can PROVE it mathematically
- Your ideal evening consists of fast-forwarding through the latest sci-fi movie looking for technical inaccuracies.
- You automatically associate the words "sexy," "beautiful" and "new butterfly valve"
- The only jokes you receive are through e-

### AIChE OFFICERS AND COMMITTEE CHAIRS

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