

# BYU Chemical Engineering 2006 Newsletter

Greetings from BYU's Chemical Engineering Department. We hope that all is well with you and your families. The department continues to move forward as we work to fulfill our stewardship of educating wonderful young people and preparing them to improve the world.

The class of 2005-2006 was a relatively small class with only 36 graduates. The job market for these graduates was quite good and so there were recruiting companies who didn't have enough candidates to fill their quotas. This was complicated by the fact that about 50% of the graduates decided to continue their schooling. This coming year our senior class is significantly larger (about 53) and the job market continues to look strong, so we are expecting a good recruiting year.



We welcome to the faculty Dr. Thomas (Tommy) A. Knotts. Dr. Knotts graduated in Chemical Engineering from BYU in 2001 and just finished his Ph.D. at the University of Wisconsin this summer. His area of expertise is modeling of biological molecules. We are now back to 13 full-time faculty.

We appreciate your continued support of the department. We look forward to seeing you at our upcoming alumni activities and encourage you to continue to help us bless the lives of our students through scholarship donations and work opportunities. May you enjoy the Lord's richest blessings.

Dr. W. Vincent Wilding  
Department Chair



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# Department News

## Faculty News

Dr. Randy S. Lewis joined the Chemical Engineering Department at the beginning of August 2005. His research area here at BYU involves the fermentation of synthesis gas to ethanol and acetic acid. The current research is focusing on modeling and optimizing the process.



Welcome to Dr. Thomas A. Knotts, who joins us this September as a new faculty member. Dr. Knotts has just recently finished his PhD at the University of Wisconsin. His research area is the simulation of protein folding, DNA hybridization, and biomolecule surface interaction.

Dr. Dean Wheeler recently received a Faculty Early Career Development Award of \$400,000 from the National Science Foundation. The grant will fund his investigations into electrocatalysis and allow him to help develop new engineering projects for high school students.



## Junior Recruiting Banquet



Thinking of graduate school...students were invited to a banquet put on by the Chemical Engineering Department to share information on pursuing graduate school. There was a question and answer panel where professors help resolve

(l to r) **Jeremy Brown, Travis King, James Hillier, Holly Clayton, Megan Woodhouse**

# American Institute of Chemical Engineers

## 2005 Interviewing Workshop



The annual Interviewing Workshop that is hosted by BYU's AIChE Student Chapter was held on September 30th. Juniors and Seniors from the Chemical Engineering Program started the day enjoying breakfast with recruiters from companies including ExxonMobil, Micron, Dow, Intel, Valero, and Celanese. After breakfast several recruiters gave presentations on resumes, interviewing and other career skills. There was a question and answer panel where students were able to ask specific questions to the group of recruiters. The morning ended with students breaking up into small groups with individual recruiters for personalized attention.



## Annual Faculty/Student Golf Tournament

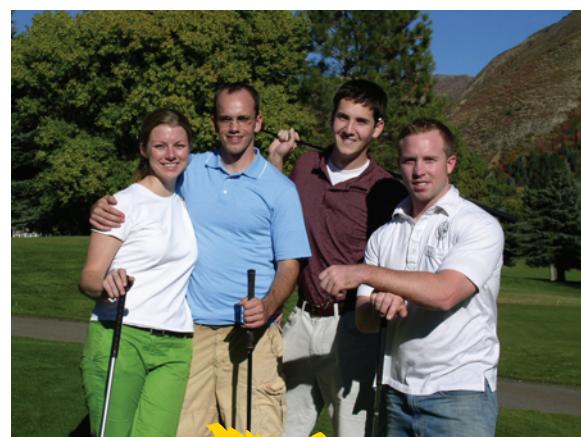


Chris Higginson



Ryan Rust

At the conclusion of Recruiter's Week, the AIChE Student Chapter put on the annual Chemical Engineering Department Golf Tournament. Faculty, students, and recruiters broke out their golf swings and enjoyed each others' company and the beautiful surroundings at Hobble Creek Golf Course.



# Alumni Board Chairman's Corner



Football season is just around the corner! Fall is fast approaching. With the coming of Football season and fall colors, we look forward to a chance to meet together again at the Alumni banquet. As I look back over my talk at last year's banquet, I am excited to report on the progress we've made toward our four main goals:

1. Identify 3 service opportunities and organize alumni to provide meaningful service
2. Complete membership list and finalize class representatives
3. Help support 2 class reunions next year
4. Fully fund Alumni banquet

As BYU graduates, the motto "enter to learn, go forth to serve" has special meaning to us. A key goal for this year has been to find and identify service opportunities for our alumni. One opportunity we've identified that our alumni might get involved in is helping rural towns and small communities improve the heat efficiency in school buildings and "de-bottlenecking" inefficient water/sewer

systems. One alumni board member recently worked with a rural elementary school with a limited amount of money to improve the school's heat efficiency. For those interested, a good first contact is your local state representative who likely knows the needs of his state's communities and possible funding available to support this work. Several other ideas have also been discussed and are being evaluated as potential service opportunities.

A second goal is to update our alumni membership records to help reconnect past class mates as an added service to our society. To accomplish this goal, we wanted to find out how accurate our records were so we sent out about 150 email flyers introducing the Alumni Society and 2/3 of them were returned! So, we decided to try to get some help updating our records. So far we've made great progress and now have over one thousand accurate pieces of data in our alumni data base.

The third and forth goals have to do with financial matters. One of the fun things we started last year is to support annual class reunions during homecoming week in conjunction with our alumni banquet. Of course this support has to come from the alumni so finding ways to raise funds is an important part of the Alumni Society. At last year's banquet we introduced the "charter" membership program that allows our alumni to become official members of the Alumni Society through dues. So far we've been underwhelmed by the small number of alumni who have joined. It's hard to function without a budget so your support is critical for our continued success. We have two main objectives that require funds: 1) fund and maintain an alumni scholarship for the Chemical Engineering department, and 2) fully fund the annual banquet which has been funded by the department in years past. Again, please be generous with your support.

This year's banquet should be pretty exciting as we are pleased to announce that Professor Richard Bushman of Columbia University will be our keynote speaker to talk about his recent book *Joseph Smith: A Rough Stone Rolling*. Being back in Provo in the fall is wonderful and I encourage all of you who can to make plans now to attend. If you can't make the journey back to Provo, we've also arranged to have BYU Radio carry a rebroadcast of Prof. Bushman's talk so you can tune in to hear his comments.

Finally, I want to thank all of our board members who have taken time away from jobs and family to help the Chemical Engineering Alumni Society grow into an organization that can impact lives. Also, I want to thank our alumni who have continued to serve in their respective communities. Your actions speak much louder than any words and I join with all of the board in thanking you for your service!

Please join us in our efforts to support the department, one another, and society by becoming a charter member of the Alumni Society. Volunteer to work on one of the committees. With your help we can focus our considerable energy and become a great force for good.

Regards,  
Joseph Smith

# 2005 Homecoming Banquet

by: Doug Ludlow

The 2006 Chemical Engineering Homecoming Banquet will be held on Friday, Oct 20th. The homecoming football game will be the next day against UNLV.

On the evening of Friday, October 14, 2005, faculty, alumni and friends of the Chemical Engineering Department had an enjoyable time meeting together and socializing. After a period of greeting old classmates and chatting with faculty, the formal events began with introductions by BYU ChE Alumni Society President Joseph Smith.

Following an excellent banquet, the evening continued with the honoring of the 2005 outstanding alumnus award winner, Dr. Phillip J. Smith, Chair of Chemical Engineering at the University of Utah. Dr. Smith earned his B.S. in 1975, his M.S. in 1976 and his PhD in 1979 from Brigham Young University. He completed his doctoral studies with Dean L. D. Smoot. From 1979 to 1990, Dr. Smith taught and conducted research at BYU, developing models of combustion. In 1990 he moved to the University of Utah to continue his teaching and research career. As part of the awards ceremony, Dr. Smith gave a very interesting presentation of some achievements of his research group, including several "movies" developed from their numerical simulation of combustion.



Phillip J. Smith



Daniel C. Peterson, a professor of Islamic Studies and Arabic in the Department of Asian and Near Eastern Languages at Brigham Young University, was the keynote speaker of the evening. Dr. Peterson has been involved with FARMS and gave a delightful discussion about several of the evidences of the Book of Mormon that have been found. His talk was very engaging and fun. Much of the content can be found on his webpage :  
<http://farms.byu.edu/display.php?table=transcripts&id=1>

Daniel C. Peterson

## Class Reunions

Another highlight of the evening was the class reunions held by the classes of 1995 and 1996. All had a great time joining together to renew old friendships and swap tales of late night study sessions.



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The Department of Chemical Engineering exists to support the mission of BYU by preparing students for lives of scholarship and continued learning, lives of service, and lives spent contributing to society.