State of the Department

Michael R. Mueller, Ph.D.
Department Head

Hello to all Rose-Hulman chemistry alumni and friends! As the 2010-2011 academic year comes to a close, we can reflect on another very successful year, and we look forward to the exciting undergraduate research that will begin in just a couple of weeks. We also congratulate the seniors as they now join the familial ranks of Rose-Hulman alumni!

The chemistry class of 2010 is going on to some very exciting opportunities. Some are going on to graduate school including Rice University, Texas A&M, U. of Kansas, U. of Louisville, and Indiana U. Two graduates are going on to medical school at U of Cincinnati and Northwestern U. Some of our graduates are going to work for employers such as AIT Laboratories, Teach America, and WS Atkins. The success of our graduates continues to demonstrate the strength of the chemistry program at Rose-Hulman.

Recruitment of chemistry and biochemistry majors continues to improve. There are 14 incoming majors: 9 biochemistry and 5 chemistry majors. The incoming class size a year ago was 12.

In order to provide career guidance for science and mathematics majors at Rose-Hulman, a new course called CHEM200 Career Preparation is now a part of the chemistry and biochemistry curriculum. This required one credit hour course is cross-listed with mathematics (MA200), physics (PH200), and economics (SV200). This course will help science and mathematics majors prepare for placement following graduation to postgraduate schools and employment.

A new minor in environmental chemistry has just been added to the program. The minor is especially well suited for chemical engineering majors that currently desire a chemistry minor. The minor consists of assembling mostly currently existing courses in chemistry and chemical engineering with only one new chemistry course created, CHEM371 Environmental Analytical Chemistry. CHEM371 is a laboratory-driven course addressing processes involved in performing environmental analytical chemistry. This minor fills a need on campus for an environmental science plan of study.

We have also done a significant amount of work this past year to benchmark and assess the chemistry program. We compared ourselves to 14 different institutions such as Carnegie-Melon, Case-Western, William and Mary, St. Olaf, Grinnell, and Oberlin to name a few. We discovered that our program is in many cases more rigorous than at other institutions. In addition, undergraduate research is an opportunity only some of their students get to experience whereas at Rose all of our majors are required to take at least 3 credit hours. The instrumentation in our laboratories, used by all of our students, is equal to or superior to what is found at the benchmark institutions. We have also begun assessing our majors using standardized testing. ACS examinations are being used in analytical, inorganic, organic, and physical chemistry. The comparative results should be available later this year. We have also administered the ETS Major Field Exam in Chemistry to all of our seniors. ETS is the same company that administers the SAT exam. Our majors scored nationally in the 96th percentile!

Often people have the impression that nothing happens here in the summer. This is simply not true! In just a couple of weeks, the department will be abuzz with activity as students will be working alongside faculty on research. This summer there will be approximately 12 students working on research projects including topics such as alternative fuels, biochemistry, organic, environmental, and analytical chemistry. Students will present their research in a symposium here at Rose in October. I encourage you to attend because it is a real treat to see the amazing work our students do in the summer! All of these exciting projects require support, most of it external, to make it a reality. It takes approximately $4000 per student to support three months of research in the summer. Please consider making a donation to the department to keep this vital activity happening each year.

Dr. Mueller helps Amanda Jevons and Kate Sernett with Quantum Chemistry.

To make a gift to Rose-Hulman, visit the development office Web site: https://alumni.rosehulman.edu/donations/donate.asp?id=2221.

If you wish, you may designate the gift to the chemistry department by stating “other” and writing “Chemistry and Biochemistry Department” in the comment area.
Graduates head to Grad School and Workforce
Congratulations to our 2010 Graduating Seniors

Brett Anderson is going to graduate school at Texas A & M University.

Joseph Barlan is going to graduate school at the University of Kansas, Organic Chemistry Division.

David Cooper is going to graduate school at Rice University.

Sarah Erhart will be working for Teach American in the Mississippi Delta.

Ted Frater is going to graduate school at Indiana University.

Scott Klare has a job with WS Atkins in their Oil and Gas division in Houston, TX.

Joshua Knapp will be attending the Feinberg School of Medicine at Northwestern University.

Michael Montalbo, Jr. is going to graduate school at The University of Louisville.

Tim Mosely is currently seeking employment.

Anthony Pearce is currently seeking employment.

Kathryn Sernett is going to work for AIT Laboratories in Indianapolis, IN.

Eric Smith will begin an MD/PhD program at the University of Cincinnati (8 year med school and grad school, paid for by the NIH).

Dean Straub is seeking employment.

Tyler Werle is going to graduate school at Texas A & M University.

New Environmental Chemistry Minor Approved

Senior Picnic

Fifty faculty, staff and students attended the Senior Picnic on May 6. This year the picnic was held at Cook Stadium. The seniors were presented with plaques showcasing the weather predicting stormglasses they made. Thanks to Cyndi Erwin, Dave Erwin, and Rebecca DeVasher for their efforts in putting together the awards. Games had a “Minute to win it” theme. The seniors presented the faculty and staff with certificates ranging from Dr. Mueller’s Water Cooler award to Patti’s Top Chemistry Student award. See a video of the fun here http://www.rose-hulman.edu/chem/news.htm

Art Western receives a stormglass during the picnic in appreciation of his continued support of the Chemistry Department during his tenure as Dean of Faculty.

We are on the web
http://www.rose-hulman.edu/chem/
Alumni News

Emily Mitchell ’05 is working toward her PhD in Biological Chemistry from the University of California, Irvine in the lab of Dr. Leslie Thompson. She is studying the role of protein aggregation in the pathogenesis of Huntington’s Disease – a rare, genetic neurological disorder. Emily hopes to finish up in the next year.

Derek Stouder ’08 married Amanda Stephan Stouder ’08 in November 2009. They incorporated “chemistry” into their wedding reception with flask centerpieces! They now live and work in Broomfield CO.

Roger Wiltfong ’07 will be starting his residency training at Mount Carmel Health System for orthopedic surgery in Columbus, OH. Roger received his MD from Albert Einstein School of Medicine in May.

Faculty and Staff News

Professor Christopher Nicholson will be leaving us after three years as a visiting professor. Chris has accepted a job at Lake College in Michigan City. He plans to defend in August completing his Ph.D. in Organic Chemistry. Chris had a great impact on Rose chemistry as a student and as a visiting professor. We wish him luck. He will be missed.

Chemistry Professors

Recognized for Service to RHIT

Dr. Michael Mueller will be recognized for 20 years of service

Dr. Edward Mottel will be recognized for 35 years of service

Stay Connected

If you have news to share, such as advanced degrees, promotions, weddings, births or moves, we would like to include it in this newsletter. Please send your information to patti.staggs@rose-hulman.edu

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