Grove City College Chemistry eNewsLetter

Spring 2013

Departmental News

By Dr. Timothy Homan, Chair

Teaching, advising students, and administrative duties which come with being chair usually keep me quite busy, but I have had opportunities to serve the broader campus community this year that have also taken a lot of effort. Every ten years, Grove City College goes through the process to be re-accredited by the Middle States Commission on Higher Education. We completed the last cycle in 2008, but are required to provide a five-year Periodic Review Report (PRR) this year, and I have served as the chair of one of the committees to draft this report. It is a very valuable process, but one which requires much time. The PRR had to be submitted to Middle States by June 4.

Earlier this semester, Provost William P. Anderson requested to step down from his administrative duties and return to full-time teaching. A search committee was formed and I was selected to be a member of it. We had to evaluate resumes, contact references, and during the last two weeks of April set up interviews with the two finalists on campus. Numerous opportunities were provided for the faculty to meet with the candidates, who then conveyed their feedback to the search committee.

The search committee provided President Jewell, who is responsible for making the final decision, with their evaluation of the candidates. President Jewell announced on May 20 that Dr. Robert Graham, the current Provost of Waynesburg University, will assume the position of Provost at Grove City College in the middle of July.

We're also preparing to move into the new STEM Hall this summer. We were recently informed that construction will be completed by the end of June. Office furniture will be delivered and installed the first two weeks of July. We have been packing up labs since the semester wound down, and will be moving to our offices soon.

The plan is for an outside moving company to move the books and papers from our offices, along with larger lab equipment, the week of July 15. The following week, another company is coming in to handle the move of our chemicals. After that, we will begin to set up our offices, labs, and move over the smaller equipment that we are choosing to move ourselves. If all goes as scheduled, we will be well on our way to getting set up in our new facilities at the beginning of August, leaving plenty (we hope!) of time to be ready when the Fall semester begins.

Even with all of this going on, Drs. Falcetta and Kriley are still going to be supervising students in research this summer. It will be a hectic time, but an exciting one for our department. We make a special invitation to all to the dedication of STEM Hall September 19, or to Homecoming on October 4 - 6. A Homecoming breakfast will be held for all Hopeman School (Science, Engineering and Math) departments in the STEM Atrium the morning of October 5, 9 – 10:30 a.m. We'd love to see many of you and show you our new home.

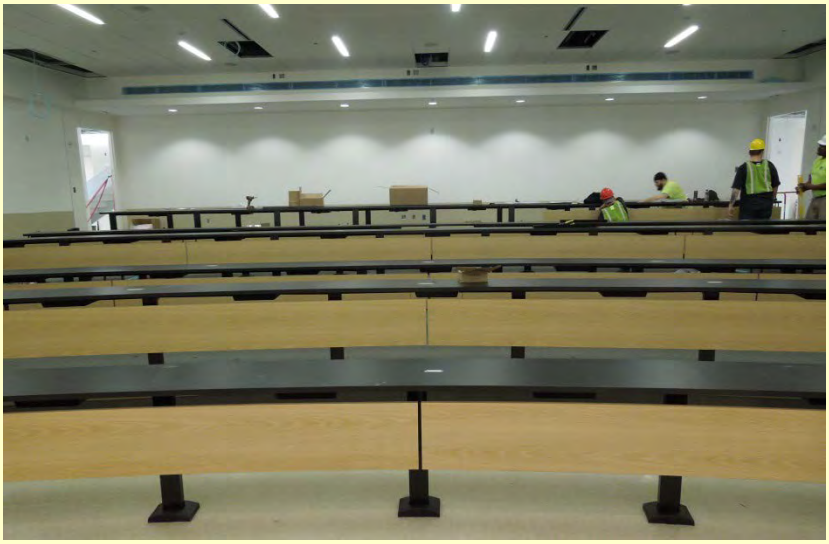
A view of the eastern side of the nearly completed STEM Hall, which was taken from the second floor of the Breen Student Union.

Pictures from inside STEM Hall

The picture at left is of the Atrium/common area which will be on the side of the building facing the Breen Student Union, where students will be able to congregate or study. The windows (facing East) can be dimmed during bright sunshine to cut down on the glare.

The picture at right depicts the skylights over the third floor. The building is designed to maximize the amount of natural light inside.

The picture at left shows off two of the dominant features of STEM Hall. To allow natural light throughout the building, there will be open areas from the basement up to the third floor, between the hallways and the main labs located in the center of the building. To allow this light into more of the building, there are many interior windows. This also allows for “science in sight” – as visitors go through the building, from the hallways they will have full view of what’s happening in the labs.



Here is a view of our new lecture hall, as the workers are installing tables. It will be located in the basement. We are looking forward to being fully ventilated (unlike the old Rockwell Auditorium), and that we will be able to wheel carts with chemicals and/or equipment to the front of the room for doing demonstrations.

This picture allows you to see the stairway which will be located between the Atrium and the main labs in the center of the building. The glass rails will protect the open areas in the center of the building where natural light will be allowed to flow.

Student Highlights

How fitting that the 2013 class of the Chemistry department consisted of thirteen students who graduated with degrees in chemistry or biochemistry on May 18. It was a beautiful, warm spring day, so graduation was held outdoors on the Quad, overlooking Wolf Creek. This year's class included six chemistry majors and seven biochemistry majors. Five of them graduated *Magna Cum Laude* and one *Cum Laude*, which is determined by overall grade point average. One earned *Highest Honors*, four earned *High Honors*, and one earned *Honor*, which is determined by their major QPA. Many of the graduates are still searching for positions, but two students have been accepted into PhD programs (at the Scripps Research Institute in Florida and the University of Colorado), one into the DO program at Philadelphia College of Medicine, and another into the pharmacy program at Ohio State.

Graduates of the class of '13 and faculty. First Row: Dr. Susan Cramer, Hannah Tubb (CHEM), and Pat Miller (BIOC). Second Row: Jamie Alburger (CHEM) and Peter Foster (CHEM). Third Row: Aaron Sircy (CHEM), Dr. Falcetta, Laurie Lytle (staff technician and proud Mom), and Jake Lytle (BIOC). Fourth Row: Dr. Augspurger, Dr. Kriley, and Dr. Shaw. Not pictured are Cory Baker (CHEM), Ryan Fisher (CHEM), James Harbison (CHEM), Dan Henley (CHEM), Matt Moffett (CHEM), David Schaefer (BIOC), Stephen Schaefer (BIOC), and Drs. Homan and Conder.

This year's graduation gift from the Chemistry department was a travel mug. It was designed by Dr. Kriley, with a picture of Rockwell, so that they can remember the many hours they spent there the past four years.

Alumni Spotlight

Erin (Smith) Johnson graduated with a degree in chemistry from Grove City College in 1999. She recently returned to campus to take part in a panel discussion set up by Career Services, called the *Alumni Career Panel Night*, where alumni return to speak to current students about careers and finding employment. After catching up with her, we thought it appropriate to share with our other alumni and our current students what she has learned it her career.

Erin, tell us about your current position.

My current employer is Gelok International Corporation, a division of Principle Business Enterprises, which is a key supplier to consumers, caregivers, medical professionals, home health and health care institutions through distributors, dealers and retail outlets. Gelok is a premier manufacturer of thin, super absorbent laminates and composites structures, which are essentially ultra-thin pieces of cellulose infused with a super absorbent polymer (sodium polyacrylate). These papers can then be used as is or introduced as a raw material component into a variety of finished products that are designed to control the migration of fluids such as water, blood, urine, and other aqueous solutions. Applications for laminate structures include personal hygiene, medical packaging, spill control, filtration, medical cleanup, wound dressing, manufacturing and other operations where aqueous absorbency is needed.

I am the Sales & Business Development manager for the product line, and my primary responsibilities are:

1. prospecting for new customers and understanding the changing needs of the absorbent materials market place for all the markets listed above,
2. interviewing prospective accounts and making technical assessments regarding their specific application requirements,
3. designing custom absorbent solutions based on super absorbent polymer technologies,
4. running production level trials to produce these goods,
5. supporting customer converting work to produce these goods, and
6. maintaining the product design requirements over time.

From a technical standpoint, my math and chemistry background has been essential in supporting my efforts to design products and think creatively while maintaining a logical approach to my work.

What other jobs have you held, and how did they prepare you for your current job?

My first job was as a 2nd Shift Quality Associate at Abbott Labs, qualifying raw and finished materials for pharmaceutical products. A couple of years later, I became a Quality Associate with 3M/Emtech Emulsion Technologies, qualifying raw and finished materials for label products. I then became a Customer Complaint Manager, where I reviewed and conducted investigations on product quality issues with label stock material customers. Finally, still with 3M, I moved to a position as a Technical Sales Representative, to assess customer label application requirements, recommend products, provide product testing data specific to the customer's application, provide pricing for existing and custom materials, and carry out production trials for custom requests. After a total of nine years with 3M, I began my current job in 2009.

As you can see, I was given increased levels of responsibility that moved me from the lab environment into more of a customer facing role. However, each job was integral to developing certain skills that prepared me for my next job level. You can't get much worse than a 2nd shift Quality Lab position in my book. But there

was value in working in an entry level position, as it familiarized me with the work environment and what I really wanted out of future jobs that would be coming my way. My quality skills also help me to effectively write product specifications and maintain the attention to detail. Customers really like this! As for my time in customer complaints, if you can work with a customer that is literally screaming at you, you can work with anyone.

As you look back on your time at GCC, what do you see being the most valuable things you learned?

First of all, while I don't use many of the lab techniques or synthesis methods from my GCC lab days, the time spent in the lab environment helped me to think creatively. Creativity in the work environment and finding solutions that are not always obvious is absolutely critical. I think back to the times when I was searching through Aldrich chemical identification books to classify a material and reach a solution. It is the same in the work place today when I come up against a challenge, only now I have Google. We need to be seekers of solutions when the odds are stacked against us.

Secondly, the use of Office-based software, analytical techniques, and mathematics must continue to be maximized. On a daily basis I use Word, Excel, Outlook, PowerPoint, statistical analysis software, linear regression software and all sorts of conversion calculations. I encourage all students to be power users of available software and to keep their math skills sharp. It will save you time and headaches down the road if you are competent in these areas. GCC definitely equipped me from a technology standpoint (computer/software) and I am able to work ahead of many of my peers in this regard. If a student is not technologically strong, then it is a good idea to take extra classes to increase competency in these areas. I also suggest doing the Math minor at GCC.

Third, GCC gave me a foundation to further develop my work ethic. Employers really like this trait and are seeking dependable workers. Even when others around you are not working to their top potential, you must stay the course. Your efforts will be recognized and often result in increased responsibilities and promotions within your chosen occupation/organization.

Finally, GCC helped me to develop both interpersonal and independent work qualities. You must have both to be successful in today's workplace. From the interpersonal standpoint, there is a vast collection of personalities in today's work environment. Students must learn to be chameleons when it comes to adapting and working with even the most challenging behavioral styles. You may not like all your co-workers but you still need to work with them. On the flipside, independent work is also required, as there is not someone telling you what to do 24-7. GCC helped me to develop my independent work in both the class and lab arenas. Today, my ability to work independently helps me to keep on task and see project work assigned to me through to completion.

What advice do you have for our current majors?

My advice is to give the workforce a try. I never even considered higher education after receiving my bachelors and here is why:

1. Entering the workforce and collecting your first paycheck is a huge accomplishment and certainly just reward for your four years of hard work at GCC. Don't think you are a second class student just because you opted to forgo higher education upon completion of your bachelors. Disclaimer: Your first job will **NOT** be your dream job. Be prepared to use a small portion of your bachelor's degree when you begin working. The remainder is on-the-job training. And don't worry, while you may not be using your specific degree on a daily basis, you will find ways to incorporate it here and there. The higher you go within an organization, the more you will be able to leverage your degree.

2. We don't always know where our true vocational passions lie right at graduation. Working within a company will give you a better idea regarding your possible fit within an organization. Consequently, you will better understand what educational assistance you may need to support your advancement within your given organization.
3. You may find that your educational interests have changed in alignment with your vocational assignments. Being in the workforce will help you understand what other educational options are available outside of the focus of your bachelor's degree. In my case, I elected to pursue my MBA as it was a better fit for my career advancement plans. I didn't even know that the MBA option existed the day I graduated from GCC.
4. You can always go on for additional schooling at a later date. Flexible education options including weekend offerings, evening school or even online instruction make higher education more accessible than ever. Even better, your employer may be able to subsidize most, if not all, of your continuing education. This may take you a bit longer but it can be very family friendly and just as fulfilling as full-time educational options.

Thanks, Erin. As always, we would appreciate and enjoy hearing from you about your accomplishments. Email us at jdaugspurger@gcc.edu. Have a great summer!