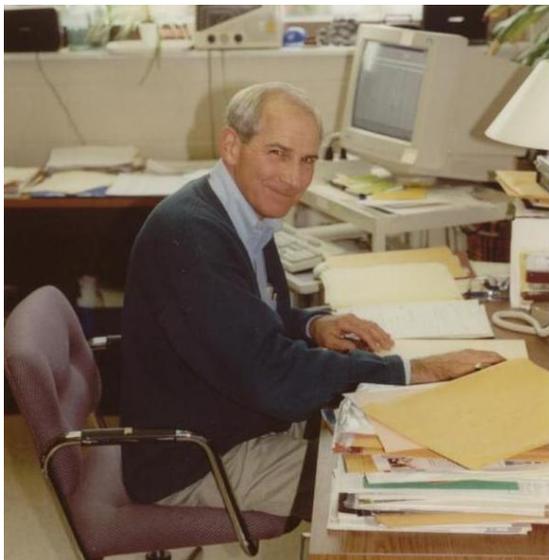


Hello again

When I (CEM) was putting together the first issue of the newsletter, I was thinking, is there anything to write about in future issues of this thing? It turns out yes. Hopefully you find it of sufficient interest to read. Many good things happened this year which will be described in the following pages. First however, I have to address is the passing of Professor Franz. Dave (officially) retired in 2005 but he was still teaching general chemistry night labs for us up until this past year.

I was playing tennis with Dave last September when he mentioned to me that that he had some numbness in his fingers. We talked about how he probably slept funny and pinched a nerve. It turned out to be the worst case scenario, a metastasis of his earlier melanoma on his foot. He had great support from his wife and family. He received the best medical care available in this country, they tried everything possible, and this disease still took



Professor David Alan Franz

him from us in a very short time. He faced all of this with courage and a great attitude. He died on April 21, 2009 and his funeral at Clark Chapel was well-attended and something of a celebration of his life. I know you have fond remembrances of Dr. Franz, he was always great with students, his colleagues, alums, everybody associated with the college. We always joked about what a good schmoozer he was, not a skill we all possess. He was a presence within the department and the college in general for well over 30 years. He influenced the lives of countless students and will be missed by all of us.

Over the past year we've had several students conduct research within the department over the past year. Alex Hunter, under the direction of Dr Mahler, investigated the synthesis and spectroscopic correlations of various monodentate and bidentate phosphine complexes of ruthenium. Casey Wells did a fine job continuing this work in the spring. Kyle Totaro and David Sampsell worked with Dr. McDonald on different aspects of the synthesis and characterization of HMPA analogs for complexation to samarium diiodide. Alex and Kyle spoke on their work at the Intercollegiate Student Chemists Convention at Franklin and Marshall College. John Stutzman worked for Dr. Ramsey on detection of outgassing of cell phones and other electronic devices. Mike Cecchini worked with Dr. Ramsey on the effect of nitrophenyl layer thickness on the electrochemistry of a variety of redox groups, including dopamine. Kyle Ruhl worked with Dr. Bendorf on using their hydroacylation/ conjugate addition strategy to make fused three-ring heterocyclics. During the summer Kyle and Tess Duffin worked on intra- and inter-molecular versions of rhodium hydroacylation chemistry. Our summer

researchers did a great job. Along with the labwork, we had lunchtime meetings where much pizza was consumed and everybody gave chalk talks describing their work. We also got in a little whiffleball this summer.

In sports news, Chemistry once again whupped up on the Biology in softball. These are strange games, played in the quad with a short right field towards Long Hall and about nine outfielders to deal with. Gabe always plays the Star Spangled Banner on his trumpet with incredible enthusiasm and some skill. It is a great time.

We try to get in a picnic in the summer for summer researchers and all of the chemfolk that are around. This year it was done at the Bendorf/McDonald estate. We grilled hamburgers and hot dogs. Heather Ramsey brought her signature chicken wings, truly fine dining.



Mike Cecchini flings a shoe at the picnic

We continue to have the Chemistree Party each year the week before finals. We decorate the tree, drink punch, eat cookies, chips, and salsa. We sing goofy chemistry carols, and play ping pong. Here are some pictures from the 2008 iteration of this event.



Yum!



Shouldn't these people be decorating the tree?



Snackin' and pongin' at the Chemistree '08 party

Dr. 's Mahler (fall) and Bendorf (spring) will be on sabbatical this year. Dr. Todd Morris has been hired in a one year position to fill in for them. Dr. Morris comes to us from NIST. His wife, Judy, teaches broadcast journalism at Susquehanna University.



Dr. Todd Morris

2009 Graduates and Their Placement

This past year, we had a small graduating class. We are very proud of them, and look what they are doing as they move forward with their lives!

Alex Hunter	Ph.D. program in chemistry, Lehigh University (analytical)
John Stutzman	Ph.D. program in chemistry, Purdue University (analytical)
Kyle Totaro	Ph.D. program in chemistry, Brown University (organic)
Oscar Wheeler	Ph.D. program in chemistry, University of Utah (analytical)

2008-2009 Department of Chemistry Award Winners

Kyle Ruhl	PolyEd Organic Chemistry Award
Rob Ross	Analytical Chemistry Award
Kristen Fahey	Brunstetter Award (joint award with Biology)
John Stutzman	Trask Award
Alex Hunter	American Institute of Chemists Award
Kyle Totaro	American Chemical Society Award

2008 Gamma Sigma Epsilon Inductees

Brittany Bryan	Eric Dingler-Brown	James Dolak
Tess Duffin	Kristin Fahey	Carrie Harsomchuck
Trisha Lindenmuth	Damian Mariano	John McDonough
Cole Pizzingrilli	Casey Walls	Stephanie Woodhouse
Debbie Smith		

Papers, Presentations, and Grants

1. Bendorf, H. "Rhodium(I)-Catalyzed Hydroacylation Promoted by Chelating Amines" Petroleum Research Fund, \$65,000.
2. McDonald, C.; Ramsey, J.; Grant, J.; Howerter, K. "Characterization of the Complex Formed Between Samarium Diiodide and the Dehydro Dimer of HMPA (diHMPA), *Tetrahedron Lett.*, **2009**, 50, 5308.
3. McDonald, C. "A Two-Step Synthesis of Virstatin", *J. Chem. Ed.* **2009**, 86, 482.
4. Hunter, A, "Ruthenium Phosphine Complexes and Their NMR Spectra", 73rd Intercollegiate Student Chemists Convention, Franklin and Marshall College, 4/18/09.
5. Totaro, K. "The Use of Hydroxyl-Containing Derivatives of HMPA in Samarium-Mediated Reactions", 73rd Intercollegiate Student Chemists Convention, Franklin and Marshall College, 4/18/09.

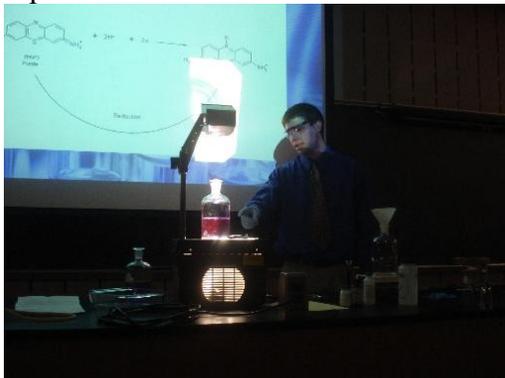
Student Talks in the Lycoming Chemistry Colloquium Series

1. Stutzman, J. "Towards Enabling Hydride as a Leaving Group: Carbon Kinetic Isotope Effect on the Hydride Abstraction of 1-Phenylethanol", 9/5/08 (research performed at the University of Southern California, summer 08).

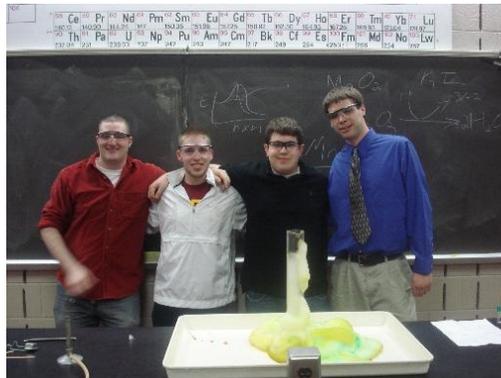
2. Lindenmuth, T. "Electrodes Modified with Polyoxometalates Using Layer-by-Layer Assembly: Applications in Catalysis and Chemical Sensing", 9/12/08 (research conducted at Auburn University, summer 08).
3. Wheeler, O. "Synthesis of an Anion Specific Sensor", 9/19/08 (research conducted at the University of Southern Mississippi, summer 08).
4. Hunter, A. "Organometallic Ruthenium Complexes: Synthesis and Nuclear Magnetic Resonance Studies", 11/21/08.
5. Stutzman, J. "Outgassing of Common Electronic Devices", 12/3/09.
6. Totaro, K. "A New Ligand for Samarium Diodide", 12/5/09.
7. Ruhl, K. "A One Pot, Three Step Synthesis of 6-7-6 Fused Heterocycles", 4/17/09
8. Walls, C. "Synthesis and NMR of Pentamethylcyclopentadienyl Ruthenium Phosphine Complexes", 4/24/09.

Demo Colloquium

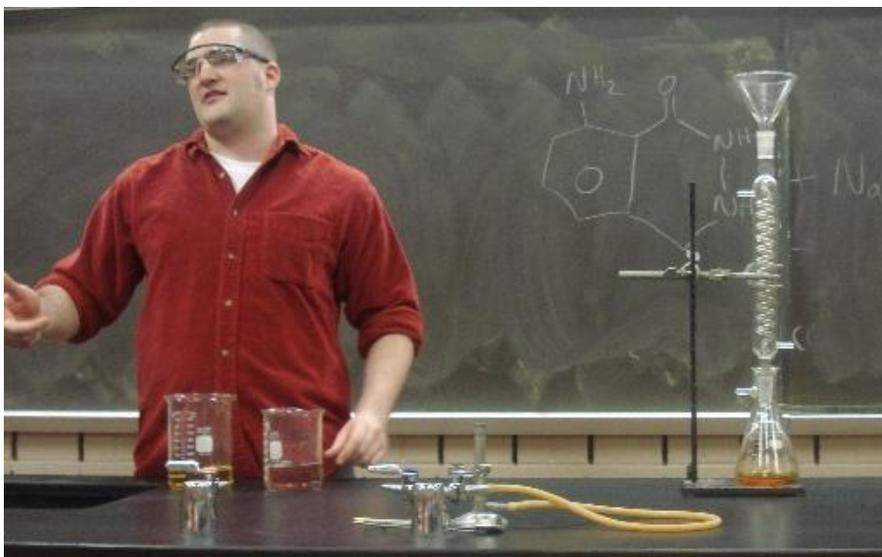
Over the past several years we've had colloquia where faculty members performed their favorite demonstrations and explained the chemistry behind them. As you well know, because of Dr. Franz' influence there is a strong tradition of chemical demonstration within the Department of Chemistry. This past year we tweaked the format by having junior/senior students volunteer to do their thing. Wow, did they come through and do a great job. Chemiluminescence (Oscar Wheeler), oscillating reactions (John Stutzman), catalysis (Kyle Totaro), and light sensitive redox reactions (Mike Ceccini) were the topics of the demos.



Mike Ceccini holds forth on light-sensitive redox



Oscar, John, Kyle, and Mike



Oscar tells us what he's going to do.....



...then he does it!



John is preparing his oscillating reaction



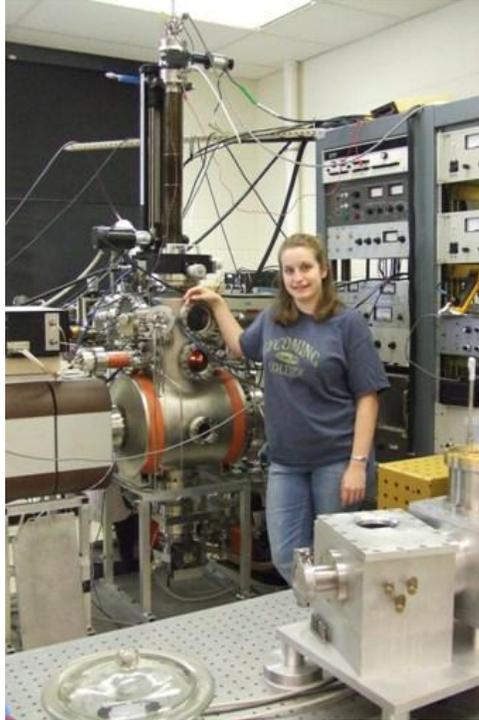
The crowd goes **wild**

News from Alums

We often hear from former students. Lately we've asked them for current pictures and descriptions of what they are doing, and permission to include the information in the newsletter. Here's what they had to say!

Lindsey Welch (class of 2006)

I'm happy to report that I passed my candidacy exam on Friday so now I can refer to myself as a Ph.D.C. here at Lehigh. I've attached a picture of me with my vacuum chamber. It's great to hear we're getting another Lyco alum in the chemistry department at Lehigh. Keep 'em coming. Also, congrats to Dr. Bendorf on her PRF grant.



Lindsey and her vacuum chamber

Michelle Morone Maddock (class of 2005)

I attached a picture of myself with my husband, Jonathan. I earned a Master's Degree in Medical Humanities from Drew University in 2007 (NJ). I completed a Clinical Research Certificate Program from Napier University in 2009 (Scotland). I've been working at Covance, Inc. in Princeton, NJ as a Clinical Research Associate since 2006. My job requires a lot of travel and I'm all over the northeast visiting Dr.'s offices and hospitals to monitor the studies. I'm currently working on an acute MI study with adult mesenchymal stem cells. For this study I demonstrate how to prepare the stem cells for infusion. I'm working in a hood and putting my lab skills to good use, just like the old days! I married Jonathan Maddock in August 2008 and we currently reside in Freehold, NJ, where I "lurk in the shadows" and "ride in the spotlight".



Michelle and her husband

Chris Micklitsch (class of 2001)

I am doing well. I'm in my second year of a post-doc with Dan Appella at the NIDDK/NIH doing mostly bioorganic chemistry. My main work focuses on detection of DNA using peptide nucleic acids that covalently crosslink on hybridization with a target DNA sequence and using ELISA to signal the hybridization. The NIH is a great place to be, plenty of funding, lots of good speakers come in for talks. DC is ok, lots to see and do in and around the area. I do try to get back home about once an month since Jersey Shore (PA) isn't too far away.

Nancy Dech McGovern (class of 1991)

I am doing well. I remain on a long-term contract in a Global Packaging group at Wyeth in Collegeville, PA. When not at work, our daughter Maddy (almost 5) and dog, Guinness, always keep us guessing. I can honestly say that my Lycoming experience began with meeting Dr. Franz for a summer tour in 1987 with my parents. That meeting and the plans at that time for the Heim Building were two of the key reasons I chose Lycoming. I know I will not ever be able to visit Lycoming without remembering him.



Nancy and family

Melody Griese Epley (class of 1987)

I am teaching Chemistry – AP/Honors/Academic. I love it. I have an excellent foundation from Lycoming!! I use references all the time from labs and techniques that we used. I am sure you remember Michael Justice and Walt!! Walt is in Colorado and Mike in California. I miss Lycoming. Great memories!!

Bruce Murray (class of 1965)

Thanks for sending the Lycoming Chemistry newsletter. It was interesting to read about the faculty and student research at Lycoming now.

I'll have to say I was amused with the article about new lab equipment and the quote, "Small items (chromatography columns, rotary evaporators, computers...) can be obtained through the normal Lycoming budgetary process".

I took analytical chemistry with Dr. Frederick in 1962-3 and our major pieces of equipment in the Lycoming lab were a Beckman DU Spectrophotometer and a Mettler balance. When it came time for chromatography, we did some work with paper chromatography at Lycoming but traveled to Bucknell to use their equipment for a lab on "Gas Chromatography". Instrumentation has made quantum leaps in the last 40 years.

I'm glad that you have ways to get good instrumentation for the students. I'd like to read about the careers of some other 1965 Chemistry graduates. We graduated at a time when polymer chemistry was really a growing field, and that was my area of specialization.

After graduation, I started at a small company named Loctite Corp., a manufacturer of unique specialty adhesives, and was their first cyanoacrylate chemist, working on synthesis and formulation of cyanoacrylate adhesives that later would become popular as "Super Glue". I was sticking my friends and family together before most of the country even heard of the technology, and spent many hours working in a glove box, since cyanoacrylates are moisture sensitive. Loctite was started by a retired chemistry professor from Trinity College in Hartford and thus had a distinctive emphasis on chemistry. Loctite was a leader in chemical sealing and assembly technology with both cyanoacrylates and another technology called "Anaerobic Adhesives". As the company grew at more than 30%/year I moved from the lab to technical service in 1968 and later into management as I became a product and marketing manager for Loctite and several other companies.

I retired in 2003 from Emerson & Cuming, an electronic materials division of National Starch & Chemical, having spent my entire career in adhesive work. Over the years I worked on projects ranging from sealing nuclear reactor plumbing to assembling the electronics of heart pacemakers and assembling Stretch Armstrong's head connector. I've had a great career as a chemist and beyond.

In retirement my primary activity is as a Master Gardener. I sit on the board of the Greater Cincinnati Master Gardener Association, and volunteer (A necessary activity for Master Gardeners) in several different areas. Of course I connect with several other current and retired chemists from Proctor & Gamble who are also Master Gardeners. I've grown as a photographer and I have been an official photographer for the local garden club, the Cincinnati Flower Show, the Civic Garden Center of Greater Cincinnati, and other organizations. I've exhibited my pictures and have even sold a few.

Homecoming 2009

Homecoming this year is on the weekend of October 9-11. Our speaker at the Homecoming colloquium (formally known as The William and Barbara Haller Endowed Lectureship in Biology and Chemistry) will be Dr. Katherine J. Franz, Department of Chemistry, Duke University. Kathy is Dave Franz' daughter and she will be speaking on her research (Minding Metals: Designing Iron Chelating Agents for Neurodegenerative Disease). Her talk will take place G-11, in the Heim Building, at 4:00 pm. After the colloquium, we will have a brief ceremony where the Instrument lab will be named in her father's honor. This will take place at 5:30 up on the Chemistry floor. Then at 6:00 we will have the Biology-Chemistry Homecoming dinner. Reservations for the dinner can be placed with our secretary, Debbie Smith, at 570-321-4180. We are hoping many of you can attend these events, we'd love to see you.



Dr. Katherine J. Franz

Endowment Funds Benefitting the Department of Chemistry and Its Students

The Department of Chemistry is pleased to offer a wide variety of philanthropic opportunities to donors. If you are interested in “giving back” or “paying forward”, please consider one of these endowment funds. Each is very useful to the department and its students and all are in need of additional funding. Your gift will be very much appreciated.

The David A. Franz Chemistry Instrumentation Endowed Fund was started by an anonymous donor, and renamed in 2005 for Dr. Franz upon his retirement. This fund has grown over the years and now provides annual revenues that can be used to help acquire small instruments or matching funds for grants procured from outside agencies. The Chemistry Research Endowed Fund was also started by an anonymous donor. The goal of this fund is to assist with the stipends given to students who participate in the summer research program that the department began in 1987.

The John A. Radspinner Endowed Scholarship Fund was started by a group of local area alumni. It was named in honor of Dr. Radspinner who taught general chemistry and physical chemistry at Lycoming from 1957 to 1987, and who made such an impact on the lives of so many Lycoming students. This scholarship benefits talented chemistry majors. The James K. Hummer Endowed Scholarship Fund was started in 2007 by one of Dr. Hummer's colleagues in the department. It recognizes his contributions to students and the department from 1962 to 1988. This endowment fund provides a

scholarship for a chemistry major who is also a participant in one of the college's musical groups (choir, band, orchestra). The Brian Belz '96 Endowed Scholarship Fund was started by Brian Belz himself and benefits chemistry majors who demonstrate financial need.

Invitation to Contact Us!

We would love to hear from you. Send us an update and let us know if you want us to include it in the next issue of the newsletter. Any comments or ideas for the newsletter will be much appreciated. **We'd love to have a current picture of you too.** You can send your updates to: mcdonald@lycoming.edu. We hope you enjoyed reading this. We promise to write more in the future.

