

The Department of Chemistry Newsletter

Spring 2004

A Message from the Editor

The last year certainly has been one of change within the Department of Chemistry at the University of Evansville. Perhaps one of the more obvious changes is the distribution of this newsletter as an electronic document. This is a work in progress and we shall certainly learn from our errors, but we believe that the time has come for this change. One of its greatest benefits to you, our alumni and friends, is that we will be able to get news to you in a much timelier fashion. Our hope is that, over time we can post updates to this document as events occur, rather than waiting until May of each year.

Old and New Faces in the Department

As we told you last year, Jean Beckman, who chaired the department for some fifteen years, was chosen to become full time dean of the College of Arts and Sciences. Ray Lutgring succeeded her as department chair and has done yeoman work in learning the ropes of a difficult job.

Nancy Ubelhor, our good friend and departmental administrative assistant, decided to follow Jean to the dean's office. We know that many of you who were friends of Nancy wish her well in her new position and will be happy to know that she hasn't forgotten you and will be happy to receive the occasional phone call or e-mail. Joann Hussmann began work for the department in late August and was immediately faced with the enormity of MACTLAC mailings and record keeping. Of that, more will be said later.

Our search for a biochemist concluded in the late winter with the hiring of Kristy Miller who, even as I write these words, is nearing the defense of her doctoral dissertation in biochemistry under the direction of Russell A. Prough at the University of Louisville. Kristy will be teaching biochemistry and introductory chemistry for us in the fall. Her research involved the metabolism of nutritional supplements. Kristy is an Indiana native who grew up in Washington, Indiana. We are all looking forward to her arrival on campus.

Jerry Sanders, longtime chemistry teacher at Bosse High School in Evansville, joined us this year to teach sections of introductory chemistry as well as organic chemistry laboratories. We anticipate that Jerry will be with us again in the fall and, we hope, for years to come.

A Sad Parting

As many of you may be aware, Marge Kinsey, the wife of Phil Kinsey who first edited this newsletter and was mentor to both faculty and students for many years, succumbed to cancer late last July after a relatively brief illness. Phil is doing well and continues his custom golf club business. I'm certain that he would welcome any notes or calls from his many friends.

The Big Meeting-MACTLAC

Last October 10 and 11 we hosted some sixty chemistry faculty from eight midwestern states for the 51st annual meeting of the Midwestern Association of Chemistry Teachers in Liberal Arts Colleges. The meeting featured plenary addresses by Graham Cooks and Gabriela Weaver of Purdue University and Ken Suslick of the University of Illinois as well as discussion groups, exhibits by chemical and textbook vendors, a research poster session, and good food. It was our opportunity to show off the renovated and expanded Koch Center and to show southern Indiana hospitality to many folks who had become our friends over the years. By all accounts, the meeting was a great success.

News of our Faculty

Bryan Lynch

It was a very busy year for me in both teaching, research and community involvement. Most of the summer was spent writing an interface for a computer application that allows our physical chemistry students to calculate the HCl rotational-vibrational spectrum and overlay the simulation onto their experimental spectrum. Students found it to be of great use this past spring semester, and I hope to begin work on a number of other simulation programs. In the research lab, senior **Kim Brown** was busy incorporating a small piece of ruby into our EPR cavity. The ruby will serve as an intensity standard, and will be used to determine the relative amounts of manganese found in aquatic plants. Finally, I have been doing a bit of community work. In addition to my annual trip to Dexter Elementary School where I perform demonstrations for the fourth graders, I began tutoring a high school chemistry student downtown at Impact Ministries. I also hosted a Tiger Cub Boy Scout troop for a series of demonstrations and exercises so they could qualify for their science pin. We had a great time and every Cub Scout built his own "Alka-Seltzer Rocket." Finally, in my "spare" time I served as the chair of the local section of the American Chemical Society.

Don Batema

In addition to working in the Chemistry 118 and 240 labs this year, I taught a section of 118 in the fall. I continue to teach the evening environmental science classes in the Bachelor of Liberal Studies program. I am also currently teaching the Environmental Science 299 class on the introduction to soil science. **Rita Jung**, an environmental science student, finished a project on wetlands. She looked at the macroinvertebrates of several area wetlands as indicators of ecosystem health. Another student, **Joseph Pleen**, has just learned that his proposal, submitted to the undergraduate research committee, has just been accepted and funded for summer research. Joe will look at atrazine degradation in a recently created wetland compared to a reference wetland in the area. The main focus will be whether or not created wetlands have the same functions as natural wetlands.

Ray Lutgring

Many changes have taken place in the department over the last year. As I assumed the role of chair and learned more about what it involved, I found I had even more respect for Jean

Beckman. Two of our challenges this year included the hiring a new biochemist and hosting the MACTLAC meeting.

As mentioned earlier, we have hired Kristy Miller to fill our vacancy in biochemistry. The number of biochemistry majors and biology majors taking biochemistry has continued to grow, so this was a critical hire.

The MACTLAC meeting was a great success thanks largely to Bill Morrison's excellent planning. Everyone pitched in and helped to make the meeting run smoothly. Our new administrative assistant, JoAnn Hussmann, was especially helpful especially considering she was still learning the ins and outs of the University.

Arlen Kaufman and I continued our immunoaffinity chromatography research this summer. Junior biochemistry major Morgan Oberle worked on the project during the summer of 2003. Morgan made a great deal of progress and looked at taking the project in an entirely new direction. Senior **Nick Manicke** and Junior **David Winternheimer** worked with me on the continuing synthesis of a novel biomimetic.

Arlen Kaufman

This year, as in years past, I once again taught Instrumental and Quantitative Analysis and the honors section of Principles of Chemistry. These courses continue to be a pleasure to teach, and the quality of the students enrolled continues to be first rate.

In addition to teaching, I have had some very active research students working with me this year. **L. Morgan Oberle**, a junior biochemistry major, worked with Ray Lutgring and me over the summer on our project to develop a better method for the rapid determination of biological warfare agents. She was funded, in part, through the University's UExplore Undergraduate Research Program. Morgan was very successful in demonstrating the potential of our experimental design.

Katie (Kat) Schurmeier, a graduating senior biochemistry major, completed our work on developing an analytical method for determining the amount of phytoestrogen contained in animal feed. The results from this project were used by Lora Becker's (psychology) group in her research on assessing the developmental effects of phytoestrogen in the diet of adolescent male rats.

After the completion of this research, Kat began working on another analytical methods development project to assist Cris Hochwender's (biology) group in their study of plant resistance to herbivores. The goal of this new work was to develop a method to quantitate the amount of two specific molecules in the leaves of willow trees that are known to be used by willows in defense against herbivores. Unfortunately (for us, not for her) she is a graduating senior and will not be able to finish this project. This summer, two sophomore chemistry majors, **Ashley Neuman** and **Brandi Warren**, will continue where Kat left off. They are being funded by the UExplore program. Their goal for the summer is to finish the methods development stage of this project, analyze approximately 300 leaf samples, and attempt to correlate their results to Professor Hochwender's data on plant growth and tolerance to herbivores. If everything is

successful, we should be able to determine if there are allocation costs associated with the production of chemical defenses in willow trees

Bill Morrison

I conclude my 29th year with the University thinking about the many changes that have taken place on campus and the all the good friends among students and faculty that I have known. I think that I have been a very lucky individual. As many of you are aware, I married Sue Colvin, a University alumna and local stained glass artist, some seven years ago. Our big family news is that Mary, our sixteen-year-old, will spend five weeks this summer studying at the Stella Adler Studio of Acting in New York City. She is an up and coming young actress with talents even beyond what we recognized.

Lowell Weller

Professor Weller stops by the department from time to time for a visit. He and Eloise are doing well and continue to live in Evansville.

News of our Students

This Year's Graduates

Kim Brown is seeking employment as a chemist.

Nick Manicke will spend time relaxing in Lafayette, Indiana, before pursuing further studies.

Jessie Reiherzer will begin graduate studies in chemistry at Cornell University where he hopes to work with the Frank DiSalvo group on the synthesis and characterization of solid state compounds.

Randy Scherer plans to pursue graduate studies in brewing science with the hope of becoming a master brewer.

Katie (Kat) Schurmeier will begin work as a chemical technician with the Sigma-Aldrich Corporation in St. Louis.

Lora Spiller has received a Rotary Ambassadorial Scholarship which will enable her to spend the next academic year studying chemistry at the Universidade de Lisboa in Lisbon, Portugal.

Crystal White is pursuing employment and is applying to graduate schools.

Summer Plans of Some Sophomores and Juniors

David Winterheimer will spend the summer doing biomedical research at New York University. David plans on a bit of travel in Europe before he begins his studies. **Mandir Helms** will spend the summer in research at Virginia Commonwealth University. **Brian Alberding** and **Samantha Kirsch** will participate in REU programs at Michigan State University and Miami University (Ohio) respectively. **Lauren Massey** will do undergraduate research in the cancer

center at IUPUI and **Morgan Oberle** will participate in a 10 week REU program at the Indiana University Medical School, while **Ashley Neuman** and **Brandi Warren** will do research here on the University of Evansville campus.

Student Award Winners

Each year the Indiana-Kentucky Border section of the American Chemical Society presents awards to our outstanding sophomore and senior majors. The awardees this year are sophomore **Mandir Helms** and senior **Nick Manicke**. The American Chemical Society Polymer Division recognizes a sophomore for outstanding performance in organic chemistry. **Jessica Frisz** received this year's award. The CRC award for outstanding work in freshman chemistry (a Handbook of Chemistry and Physics) went to **Kim Fessel**.

Chemistry Club Dinner

The Chemistry Club recently held its annual spring dinner at the Olive Garden Restaurant. Graduating seniors were recognized and gifts were given to both students and faculty. A good time was had by all. Here are a couple of pictures from that dinner. More photos may be accessed through a link on the departmental Web site, chemistry.evansville.edu.



Our seniors



Our "distinguished" faculty

Alumni News

Andy Britt '94 completed his residency in family practice last summer and moved to Fairfield, Illinois, where he joined Southern Illinois Primary Care Associates. He and his wife, Sarah, have a young son, Jacob Andrew. Andy enjoys traveling, fishing, golf and basketball.

Jonathon Cavins '99 graduated from the Indiana University Medical School last May and is a pediatric resident and Riley Hospital in Indianapolis.

Landa Colvin '02 is a chemist with Nanoscale Materials Inc. in Manhattan, Kansas. She reports that she is still taking classes working towards a master's degree in public health. She is scheduled to be married this August (see Chris Marion below).

Anna Dowdy '96 is a senior researcher at Procter & Gamble. She reports that she was expecting the birth of twins in November 2003.

James George '88 is a lead European applications specialist for CodeLink (MicroArrays). He was married in September 2001 to Heidi Bertram; they were expecting their first child in November 2003.

Melanie Giusti '00 is a clinical laboratory scientist with the Hoxworth Blood Center in immunohematology-compatibility at the Cincinnati Children's Hospital Medical Center. She attended the University of Cincinnati to study medical technology/clinical lab science and was ASCP certified in 2002.

Jeremy Heinold '03 has moved to North Carolina to teach at Graham High School. He was to coach basketball and track and teach algebra and geometry with a good opportunity to teach chemistry and physics in the future.

Angie Krieg '95 stops by from time to time and has kept particularly close contact with Nancy Ubelhor. Here is a recent photo of the Krieg family.



Chris Marion '01 is a first year veterinary medicine student at Kansas State University. He and Landa Colvin will marry on August 21 of this year.

Kurt Oldenburg '92 continues to work for 3M in the twin cities. He reports that his job is now aligned with quality control instead of manufacturing and that he is the part-time laboratory supervisor with about 25 percent of his job in supervision and about 75 percent in technical areas. Debbie has shifted from graphic design to photography courses. They have been taking photography courses for some four years and have set up a studio and dark room in their basement.

Amy Besing Paik '99 is a senior research engineer at the United Technologies Research Center in East Hartford, Connecticut. She's enjoying life there and has been a project leader for a \$200,000 project during the past year. She was married in January 2004.

Cliff Renschler '77 is deputy director in the Nuclear Weapons Planning & Operations Office of Sandia National Laboratories.

Summer Lockerbie Randall '00 writes that she expects to finish her PhD at the University of Washington in the near future. Summer is working in the UW Center for Process Analytical Chemistry. Last summer she was one of 27 students from the United States to attend the 53rd International Convention of Nobel Laureates in Lindau, Germany.

Brigitte Robinson '03 is a graduate student in chemistry at Indiana University. Here is a photo taken last spring when Brigitte was presented with an award for the best senior honors project.



David Russell '83 stopped by a couple of months ago. He is a Baptist pastor in Ames, Iowa, and has begun a doctor of ministry program at Luther Seminary in St. Paul, Minnesota, with a specialization in university congregations. He reports that his daughter, Zoe, is 11 and an aspiring actress.

Mark Seib '90 is a physician living in Fishers, Indiana. He has served as the president of the Madison County Medical Society for three years and is medical director for Aventis Bioservices (a plasma donation center).

David Schultz, II '94 is a physician practicing with Evansville Primary Care. He reported that he and his wife were expecting their first child last fall.

Laura Schultz '97 continues to work for General Electric Plastics in Mt. Vernon, Indiana. Last fall Laura taught an evening section of Principles of Chemistry for the University.

David Summerville '01 began the industrial internship master's program in advanced organic synthesis through the Materials Science Institute at the University of Oregon.

Ben Tucker '01 stops by from time to time. He continues to pursue a PhD in chemistry at the University of Illinois.

Luke Turner '97 completed a doctorate at Purdue University and has taken a postdoctoral position at Bath University in England. He was awarded a Royal Society USA Research Fellowship which will enable him to spend three years working with Matthew Davidson in inorganic chemistry.

Deaths

Marge Kinsey died July 25, 2003

Lois Roepke '37 died February 28, 2003

Jim Short '86 died January 26, 2004

Department of Chemistry Alumni Information Form

Name _____ Year of UE Graduation _____

Address _____

E-mail _____

Current Position _____

Family News:

Education since Leaving the University _____

Travel/ Hobbies/ Honors:

Names and Addresses of Prospective New Students

Feel free to mail this form to us at
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send us information by e-mail either via the link on the Department of Chemistry home page
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