


Wright State University

Department of Chemistry Newsletter

December 2004

Season's Greetings

Chair's Chat



Season's Greetings to you from all of us in the Chemistry Department. This is my first holiday newsletter since taking over as interim chair and I would like to thank my predecessor, Paul Seybold, for his 5 years of outstanding service to the department as chair. Paul is on leave for 2 quarters

(1 quarter at Virginia Commonwealth University and 1 quarter at University of California, San Diego) and will return to teaching in the spring. As regards the search for a "permanent" chair, the plan is to conduct a departmental "self-study" over the next 6 months and, then, to advertise the position toward the end of the summer. We're hopeful that this approach will attract some strong candidates.

I'm sure you have noticed that this year's newsletter is shorter than previous versions. We wanted to continue the holiday tradition of keeping in contact with our alumni but we are planning also to take advantage of a new initiative from the College of Science and Mathematics (CoSM). For the latter, each department has the opportunity to provide an insert to be included with the college's newsletter (the Equation). The next *Equation* will come out in May, so watch your mailboxes in late Spring!

Another initiative that we're undertaking with the hope of improving communication with, and between, our alumni, is a location on our Website for the posting of both contact and news information. We are hopeful that this will provide much more current information than has been possible previously. Look for it to become active in the New Year. Also on our Website (www.chm.wright.edu), you may enjoy viewing our annual department picture, pictures from the 2004 Procter and Gamble Lecture, and abstracts (with pictures) from recent M.S. theses.

As always, it has been a great pleasure to hear from many of you this past year. I hope that you will continue to contact us and keep us up to date on your activities and whereabouts. We very much enjoy hearing from you. Best of luck as you continue your careers!

--Ken Turnbull



Mary Sparks receives President's Award for Excellence in Service

Mary Sparks is one of the administrative specialists in the Chemistry department. She received the President's Award in September 2004.

Along with her full-time job, Sparks is a student in the Raj Soin College of Business, majoring in Management Information Systems.

She is a member of the Golden Key International, Beta Gamma Sigma and Phi Kappa Phi honor societies. She balances all this with caring for her husband and three stepdaughters.

Her colleagues in the Chemistry Department say her computer work in managing the department's databases, her co-editorship of the department's *Annual Chemistry Newsletter*, and her efforts on department's Web pages are a valued asset. The department considers her the total package: exceptional employee, active university citizen, dedicated parent and family member, and outstanding student.



Breslow is Second P&G Lecturer

To honor the support of the Procter & Gamble Co. for the Wright State Chemistry program, last year the Chemistry Department established a *Procter & Gamble Lectureship* Series to bring eminent chemists to campus.

The first P&G Lecturer was Prof. Jean M. J. Fréchet from the University of California, Berkeley who set a very high standard. This year we were delighted to welcome Professor Ronald Breslow, the S.L. Mitchell Professor of Chemistry and University Professor at Columbia University, who presented his seminar on the topic "Polymers as Enzyme Mimics" on Friday, October 22, 2004, in the Medical School Auditorium. The talk was in two parts, the first as per the title, and the second describing a novel type of anticancer compound. Both topics were quite fascinating and were very well received. Prof. Breslow was gracious enough to meet individually with both faculty and students and, that evening, a banquet was held in his honor at the Beaver Creek Golf Club.

Professor Breslow received his B.A., M.A., and Ph.D. from Harvard University with R. B. Woodward before undertaking postdoctoral work with Lord Todd at Cambridge University. He is the co-author of approximately 400 publications, and was President of the American Chemical Society in 1996. He has held over 150 named and visiting Professorships and received the 1987 Arthur C. Cope Award, the 1990 National Academy of Sciences Award in Chemistry, a 1991 U.S. National Medal of Science, and the 2002 ACS Bader Award in Bioorganic Chemistry.



Fossum Awards

Eric Fossum was granted tenure and promoted to Associate Professor effective September 1, 2004. Eric's group continued their research efforts in the area of branched polymers such as dendrimers and hyperbranched systems. Recent published work has focused on the development of

methodology that allows the use of kinetic parameters to control the size, shape, and distribution of the materials. He was recently invited to present some of their most recent results at the ACS sponsored international workshop on "Branched Polymers for Performance" held in May in scenic Williamsburg, Virginia. Also, in Spring 2004 Eric was awarded a CoSM outstanding teaching award.

Eric received his B.S. from the University of Wisconsin - Stevens Point in 1990, and his Ph.D. from Carnegie Mellon University in 1995 where he worked with Professor Kris Matyjaszewski. After a one year of postdoctoral work at Southwest Texas State with Professor Pat Cassidy and a three-year stint at Winona State University in Minnesota he moved to Wright State as an Assistant Professor in 1999. He is the author or co-author of over 20 research articles and book chapters. He spent the summers of 2001, 2002, and 2003 as an Air Force Office of Scientific Research Summer Fellow in the Polymer Branch at Wright Patterson Air Force Base. Eric and his wife, Renae, live in Middletown with their daughter.

Faculty Frolics

In the past year, **Dan Bombick** has become a mainstay in the Department's Early Childhood Education program, teaching classes (CHM 245 and 246) and taking a leadership role in the development of new classes and in representing the department's interests. In the research arena, his student, Stephanie Makselan, graduated with an M.S. and is now at Battelle in Columbus.

Dave Dolson enjoyed a larger than usual research group last year and one of his M.S. students, Brian Brumfield, was the recipient of a prestigious WSU Graduate Council Scholarship. Dave was able to cram in a visit to Singapore *via* an invitation to present a research talk at a symposium during the 3rd International Chemistry Conference.

Bill Feld also was a world traveler this year, attending conferences in Hawaii, Italy and Poland — all under the auspices of his well-funded Fuel Cell Battery research in association with Wright Patterson Air Force Base (WPAFB). Two of Bill's M.S. students graduated and went onto Ph.D. programs, *viz.* Xiao Cui (Indiana) and Katie McGinty (Akron). Bill's group has been a major provider of students to the Indiana program; Xiao represents the 4th such student (6th from the Department) in the past 2 or 3 years. We're hoping for a kickback!

2004 was an excellent year for **Eric Fossum**. He was promoted to Associate Professor and was the recipient of a College of Science of Mathematics' teaching award (see separate box). Eric continued to receive funding from Kodak Versamark and the Polymer Branch at WPAFB, gave an invited talk at an international workshop on branched polymers (Williamsburg, VA) and had 2 of his M.S. students graduate [James Guyo (Girindus, Cincinnati) and Hvroje Lusic (North Carolina State)].

As director of the Brehm Lab., **Roger Gilpin** has enhanced its reputation as a premier analytical facility. He is the principal investigator for a \$950,000 Hayes Investment Grant entitled "Consortium for Environmental and Process Technologies."

Dave Grossie was able to publish 4 papers in 2004 *despite* continuing to perform heroically as assistant chair! Dave made several trips to the Argonne Lab and to Youngstown State University for X-Ray data collection and he gave an invited talk at the Pittsburgh Diffraction Conference in the symposium on Education in Crystallography.

Steve Higgins taught in the Environmental Sciences' Ph.D. program as well as for the Department. This largesse may have paid off since he now has a Ph.D. student, Sweta Bose. Steve organized a symposium on Mineral Surface Reactivity for the Goldschmidt Conference in Copenhagen, gave an invited presentation at the Pacific North West National Lab. and took a short "sabbatical" at Argonne National Lab. to use the Synchrotron facility.

Vlado Katovic continued his successful, well-funded collaboration with WPAFB and the Faraday Company in the area of Fuel Cell Development. He was a guest editor for the Croatian journal, "Chemistry and Industry" and his M.S. student, Amanda Davidson, joined the Ph.D. program at the University of Texas to work with Allen Bard.

Dan Ketcha continued his successful initiatives in combinatorial chemistry. With **Dave Portlock** and colleagues from neighboring institutions, Dan was the primary organizer of the 2nd annual Ohio Valley Organic Chemistry Symposium (OVOCS) and the 3rd annual NSF Workshop on Combinatorial Chemistry; both held at WSU. He was an invited speaker at 5 Ohio institutions, at the BCCE (Iowa State) and a Biotage-organized symposium on microwave-assisted synthesis. Three of his students, Chrissy Charlesworth (Bayer), Brad Kohane and David Malwitz (Wyeth-Ayerst) graduated with M.S. degrees.

--Faculty Frolics continued from previous column--

Suzanne Lunsford's primary teaching responsibilities have continued to be in the Department's Middle Childhood Education program, teaching classes (CHM 246 and 345) and helping to organize and run workshops for classroom teachers.

Audrey McGowin continued as secretary for the AAUP (the faculty union). She gave a poster at the 11th International Symposium on Supercritical Fluids in Pittsburgh and submitted an invited chapter on Polycyclic Aromatic Hydrocarbons for the Marcel Dekker book, "Chromatographic Analysis of the Environment". Three of her students, Yumi Kamomae, Chris Klingshirn (WPAFB) and Francisca Masawi (P&G subcontractor) graduated with M.S. degrees.

Dave Portlock continued to do an excellent job as visiting research professor. As well as overseeing the Organic Chemistry labs., Dave taught our medicinal chemistry and chemical toxicology courses. Dave presented invited talks at Kenyon College and the University of New Haven; the latter as one of only four participants in a symposium on Modern Medicinal Chemistry and Drug Development. Dave's research in diversity-oriented synthesis has attracted 5 undergraduates, and his long-standing connection to Procter and Gamble helped secure donations of a mass spectrometer and a liquid chromatograph (both "lightly-used") worth ~\$250,000.

Paul Seybold continued to publish at a feverish pace during 2004. With his current leave, there will be no stopping him.

Adjunct Antics, Emeritus Escapades & Staff Spires

Our Adjunct Professors—**Lawrence Cerny** and **John Kuo** — continued to render great service to the Department, both teaching CHM 101 and 102 in the past year. **Jon Grieb**, our Organic Chemistry Lab. Coordinator, taught several sections of CHM 215 on top of his other duties, and he remains one of our most popular lecturers. **Andrea Burns** also was immensely helpful, teaching 6 sections of CHM 245 on top of her outstanding work as Freshman Chemistry Lab. Coordinator. Andrea once again provided sterling support services for the ever-popular Chemistry Demonstration Shows. For over 20 years, **Rubin Battino** and **John Fortman** have offered these shows to middle and high school students during the winter and spring breaks. This year, over 7,000 students came to campus to enjoy their efforts. John remains one of the most requested ACS tour speakers. Ruben and **Paul Seybold** hold a Dreyfus Foundation grant for mentoring undergraduate students, and are working on correlating gas solubilities. Ruben continued his joint research projects with T.M. Letcher in South Africa and helped the Department once more by teaching his graduate Thermodynamics class. **Paul Serve'** was invited to teach both Freshman and Chemical Toxicology classes at Notre Dame (his alma mater) this past winter semester and, by all accounts, the experience was mutually enjoyable. Both **Sue Cummings** and **George Hess** were in evidence for the Department picture (see the Department Web page for the proof)!

Marty Tucker remains the rock of stability in the department office. Her knowledge and humor are much appreciated. The former has been expanded recently in a different direction, since Marty has been taking classes toward master gardener status through the Montgomery County extension. **Mary Sparks**, our other senior administrative assistant, is working towards a degree in Management Information Systems. She has become an invaluable resource and, gratifyingly, was recognized with a Presidential Service Award (see page 1 column 1).

ALUMNI OPEN HOUSE

The department is planning an alumni open house on January 20, 2005 from 4:30—6:30 p.m. You will receive a separate mailing, but please keep the date open.