Summer 2013 Volume 9

KSU Chemist

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Dear Friends -

Several things have been behind schedule in Manhattan this year: the Spring rains (now in overabundance); the Higher Education budget from the Legislature (received with disappointment); and this newsletter. I'll only take the blame for the latter!

Our students continue to distinguish themselves and bring great credit to our department. Jenny Barriga, entering her senior year working with Stefan Bossmann, was named a Goldwater Scholar, the 16th of our students to be so honored. Shane Nichols (B.S. 2011: now at NYU), who did his undergraduate research here with Mark Hollingsworth, was awarded an NSF Graduate Research Fellowship: Shane is the 6th of our students in the past 6 years to receive this prestigious fellowship.

Elizabeth Ploetz, 4th year Ph.D. student in Paul Smith's group, was chosen to attend the 63rd Nobel Laureate Meeting in Lindau, Germany. This highly selective international competition paired ca. 600 young scholars from around the world with 34 Nobel laureates for six days of lectures and informal interactions in June and July. Elizabeth is the second member of our department to have had this remarkable opportunity: Christine Aikens also was chosen as an attendee during her graduate work at Iowa State.

All of us were delighted to welcome two new colleagues to the department this summer. Emily McLaurin joined us in July as Assistant Professor of Inorganic Chemistry. She was our top choice from an extremely strong group of applicants and interviewees. Emily earned her B.S. from UC-San Diego, where she did undergraduate research with Cliff Kubiak. She then earned her Ph.D. at MIT working in Dan Nocera's group. Prior to coming to Manhattan, Emily spent a very productive postdoctoral appointment with Dan Gamelin at the



Prof. Levy and Liebig's "Barking Dog" reaction

University of Washington. Emily's research will focus on the synthesis and characterization of nanomaterials and their applications as sensors, etc. Her wide expertise in the area complements one of our department's core strengths.

Michael Hinton started as our Director of Undergraduate Laboratories in late June. Mike is an alumnus of the department who earned three magna cum laude B.S. degrees at K-State (in Chemistry, Physics, and Secondary Chemistry and Physics Education) prior to earning his M.S. in Chemical Education at Purdue. Given the delay in receiving our budget, and the need each of you for your continued support to replace some 60+ faucets in our teaching labs at the end of the summer term, Mike has had to hit the ground running and he has aced every test so far!

We enrolled 41 first-year Chemistry majors last year, the most at any time in the previous 30 years. Much of the credit for this growth goes to Chris Culbertson, who does a superb job as our lead advisor. In March, Ryszard Jankowiak was named as a University Distinguished Professor: this highest academic honor recognizes Ryszard's groundbreaking research work in spectroscopy, photosynthetic reaction mechanisms and cancer detection, his skills as a mentor, and his efforts to encourage young students to pursue scientific careers. Congratulations, Ryszard!

Stefan Bossmann (as PI) and Leila Maurmann (as co-PI) were notified that their \$1.6M NSF proposal to acquire a wide-bore 600 MHz NMR spectrometer will be funded this Fall. The instrument will eventually allow real time monitoring of the uptake, distribution and efficacy of magnetic nanoparticles used for hyperthermal cancer treatment in live mice. This is a tremendous upgrade to our research capability and is a testament to the quality of Stefan's research program.

I'm also very happy to say that, as of Fall 2013, the College of Arts and Sciences has instituted a per course fee that will be used for upgrading equipment in our teaching labs, providing research stipends and travel support for undergraduates and graduate students, etc. Special thanks are due to our Advisory Council members who helped to keep this issue alive throughout the long process of approval.

I'll close as I usually do, thanking and for your confidence in us. You can take pride in the fact that you have contributed to many of the successes that our students and our department have achieved; I'm certain that many more are on the horizon.

Eric Maatta

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A Fitting Tribute

On the evening of Friday, May 31, more than 120 people gathered at the KSU Alumni Center Ballroom for a special celebration honoring Ken Klabunde on the occasion of his retirement. At a social hour and throughout an excellent dinner, there were many opportunities to catch up with friends from all over the U.S. and even some from overseas. After dinner, Ken was lauded by Provost April Mason, Dean Peter Dorhout and Dr. Olga Koper. Later, both Linda Klabunde and longtime collaborator University Distinguished Professor Chris Sorensen offered some counterbalancing remarks with their humorous and well-received "roasting". A few photos from this event are available here: http://www.k-state.edu/chem/news/klabunde1.html

On Saturday, June 1, a day-long symposium "Nanotechnology and Perspectives in Organometallic, Materials and Environmental Chemistry" was held in Ken's honor. A large audience heard talks by his former students and collaborators on topics spanning the gamut of nanomaterials synthesis, characterization and applications.

In thinking about an appropriate departmental gift for Ken, Jim Hodgson had the brilliant idea to fabricate a half-scale replica of a SMAD (Solvated Metal Atom Dispersion) reactor - the device that launched Ken's nanotechnology career and which was a workhorse in his labs for 40 years. Aided by Ron Jackson's excellent machining skills, Jim devised a technically correct and visually stunning masterpiece. Ken was delighted, and therefore so were all of us.







Although not visible in these photos, the stand of the SMAD reactor bears an inscribed plate reading: "For Professor Kenneth J. Klabunde with admiration and respect for your 34 years of outstanding research, teaching, leadership, service and mentoring in the Kansas State University Chemistry Department and beyond".

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We'd enjoy hearing from you.



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Thank you, Earline!

For the past 42 years, one extraordinary feature of our department has been the presence of Earline Dikeman. Although her title was Director of Undergraduate Laboratories, that doesn't begin to describe the many vital ways in which she enriched the environment for our students, faculty and staff.

Of course she hired, trained, evaluated and arranged schedules for all of our Teaching Assistants. She continually updated our lab manuals, revising experiments every year. She wrote all of the exams for our first-year labs and kept track of all of the grades of more than 3,000 students each year. She played a large role in the department's orientation sessions for entering grad students. She set the line schedules for every course offered by the department. With so many students under her supervision, she was rarely alone in her office, yet she was always a cheerful, helpful and kind source of wisdom and advice. Enjoy your retirement, Earline!

A Round of Applause for:

Peter Dorhout, who was named a Fellow of the American Chemical Society in its 2013 class.

Dipak Giri, 3rd year Ph.D. student in Dan Higgins' group, who received the 2013 Fateley-Hammaker Collaboration in Research Award.

Dale Hawley, who was recognized at our Fall 2012 departmental picnic as a 50-year member of the ACS.

Cliff Meloan, who was recognized at our Fall 2012 departmental picnic as a 60-year member of the ACS. Cliff was never one to be outdone!

Angela Grommet, B.S. 2013, who received an annual fellowship of £ 30,000 to pursue her Ph.D. in Chemistry at the University of Cambridge.

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