

The Department of Chemistry and Biochemistry

Utah State University

FALL 2004

Dear Alum:

Greetings from Logan, where our October precipitation augurs well for a possible end of the drought that has been plaguing the area. And skiers are hardly complaining about the snow, which will lead to early openings of ski resorts.



The big event for us over the past few months was the Regional ACS meeting in June. By all indications, it went very well, with a total attendance in excess of 400, from all over the country and in fact the entire world. We were especially pleased to see a large turnout of students, with 36 undergraduates and 103 graduate students. The Meeting opened on Sunday evening (June 6) with a plenary talk by Robert Hamers, of the University of Wisconsin, on how chemistry sits at a crossroads of microelectronics, biology, and nanotechnology as all of these fields develop, followed by an ice cream social in our beautiful courtyard outside the recently completed Eccles Science Learning Center. On Monday evening, attendees adjourned to the American West Heritage Center just outside of town, for a tasty barbecue, all basking in the lovely scenery of the valley as the sun set behind the mountains.

In addition to general sessions in analytical, organic, physical, and inorganic chemistry, there were nine more specialized symposia, all attracting a sizable audience. These symposia spanned the topics of air pollution monitoring, environmental spectroscopy, protein-nucleic acid interactions, synthesis of bioactive compounds, energetic materials, and the interface of analytical chemistry with biology. Lance Seefeldt and Lisa Berreau centered a particularly well attended symposium around the topic of metalloenzymes that ran for two days, as did Alex

Boldyrev's symposium on new aspects of chemical bonding. The latter attracted an international crowd, including speakers from Germany, Finland, and England. Rick Holz and T. C. Shen (of the Physics Department) put their heads together for an interdisciplinary symposium on the development of new materials with potential uses as nanoscale devices. Altogether, we saw a total of 160 oral presentations over the Monday-Tuesday segment of the meeting.

The conference also encompassed a particularly lively poster session, combined with an industrial exposition that attracted 20 different vendors. There were 116 poster presentations, spanning just about every area of chemistry. The vast majority of these posters were manned by students, both undergraduate and graduate. Thanks to the Salt Lake ACS section, we were able to hand out 14 awards (\$75 each) to the best of these. Students were also the heart of an ACS-sponsored Career Workshop.

Industrial Innovation Awards were provided to a pair of research groups at a special luncheon. Robert Wardle, Scott Hamilton, Gene Johnston, and Vincent Mancini (ATK Thiokol Propulsion) were recognized for the development of a production scale synthesis of CL-20, a new high-energy energetic material and Novella Bridges, Darrell Fisher, and Anna Gutowska (PNNL) for the development of radiolabeled composites as therapeutic agents for cancer treatment. The meeting concluded on Wednesday with a pair of hands-on workshops, run by Thermo Electron Scientific Instruments (Infrared and Raman Spectroscopy) and Molecular Imaging (Scanning Probe Microscopy). Attendance was solid for these events as well.

I was proud of the members of our Department who combined for fully 42 presentations at the Meeting, showing off the diversity and quality of our research program. Visitors were impressed with the beauty

of the campus and the Logan environs, as well as with our Department's research facilities. The weather certainly cooperated, with bright sunny skies and comfortable temperatures throughout. I believe visitors left campus with a very favorable impression of the Department, and USU in general.

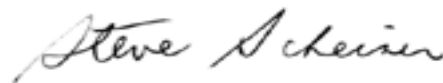
The Department is indebted to a large number of people, all of whom contributed to a successful meeting. Alex Boldyrev served as Program Chair, Alvan Hengge was in charge of publicity, and Lance Seefeldt oversaw the selection of awards to student poster presentations. Glen Thornley was aided by Dennis Fife (of Thiokol) in soliciting and managing the industrial exhibitors. Our own Geri Child was invaluable in overseeing local arrangements, and Anastassia Alexandrova did a wonderful job of organizing and managing the meeting website. We are also grateful to a large number of student volunteers, supervised by Jeff Boyd.

I have become almost dizzy watching Department staff come and go of late. Maradean Holmes and Audra Aston, both having joined the Department office staff relatively recently, have both left upon the births of their first children. Both had healthy daughters (and both very cute), and we wish them the best. We were fortunate to replace them with very capable replacements. Miriam Felton came to us from the campus library, and we were able to persuade our own Camille Miller to come back and work for us again, after a stint in the President's Office. Just when we thought things had finally stabilized, Glen Thornley hit us with the bombshell that he was planning retirement. Many of you will remember Glen as he has been the Department's ballast and stability for many years. Indeed, Glen's value can perhaps best be exemplified by the fact that we will need to hire two full time staff to fill his shoes.

And finally, the Utah Board of Regents has announced that they are lifting the statewide moratorium on new programs. I therefore hope that I will soon be able to report to you that the Department is offering a full-fledged biochemistry undergraduate degree, to complement our longstanding chemistry degree.

I apologize for this particularly long message, but I wanted to be sure to share with you the details of our ACS Meeting, and the advance it has brought your former Department in terms of visibility and prestige. It is our hope to continue this progress in the next year. In the meantime, please accept the entire Department's wishes for a truly wonderful 2005.

With my most cordial wishes,



GRADUATE STUDENTS

Six students arrived at USU in August 2004 to begin their studies for MS or PhD graduate degrees. One more will arrive in January 2005. The new graduate students come from the United States, Cameroon, Nigeria, Poland and Russia.



ALUMNI NEWS

ALUMNI UPDATES

Madison Thomas (BS 1938) received a MS degree in Neurology in 1952. As a physician, he has served as Chairman of medical panels for the Utah Labor Commission, and a member of the Utah State Drivers License Medical Advisory Board. Last year he was invited to address four national and international associations. He has been recognized as one of the International Biographical Center's Health Professionals of the year for his work in the intermountain area.

Gordon J. Ewing (BS 1954, MS 1956) went on to earn his PhD from Penn State in 1960. He retired in 1993 from the Chemistry Department at New Mexico State University

James Thorne (BS 1961) went on to earn his PhD in Chemistry from UC Berkeley in 1966. He is now retired, and residing in Alpine, UT.

Manuel Castillo (BS 1983) returned to Caracas upon his graduation. He held several positions at Petroleos de Venezuela until 1999, when he moved to Citgo in Tulsa, where he worked as senior products trader. In 2002, he returned to Petroleos, and just recently joined Petrobras in Houston where he acts as Gasoline Trading Manager

Hui Yu (MS) has secured a job offer from Pfizer in Groton, CT.

Alicia Copik (PhD 2003) is one of only six recipients of a Jeane B. Kempner Postdoctoral Scholar Award. She will be working with Dr. E. Brad Thompson, of the University of Texas, Medical Branch on a project entitled "Structural studies on the N-terminal domain of the human glucocorticoid receptor."

Jarod Younker (BS 2004) has moved on to graduate school at Penn State University where he is a Graduate Assistant.

Not an alumni *per se*, **Donald Emerich** served as a Visiting Instructor here in 1986-87. Dr. Emerich reached his 84th birthday in July. Before retirement in 1985, he had served as Department Head at Mississippi State University. He has three sons, one of whom received his PhD in inorganic chemistry and is employed by Drew Chemical in New Jersey. Dr. Emerich is unfortunately suffering from health problems.

OBITUARY

We were saddened to learn that Lynn Pribble (BS 1939) passed away in April. Lynn had served as a Colonel in the U.S. Air Force.

ALUMNI LINK

<http://www.chem.usu.edu>

- **Alumni** – Reminisce about the Widtsoe Chemistry Building as it once was and watch it transform into the new Widtsoe Hall.
<http://www.chem.usu.edu/alumni.php>
- **Alumni Database** – The Department of Chemistry and Biochemistry wants to know about our alumni and any significant events in their lives.
<http://www.chem.usu.edu/alumni-database.php>
- **Alumni Newsletter**
Department Newsletters, including past issues are available at:
<http://www.chem.usu.edu/newsletters.php>

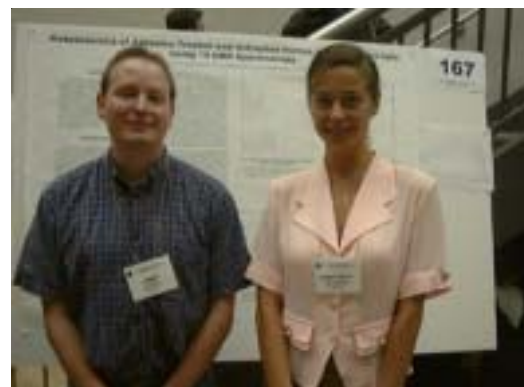
Joint ACS 59th Northwest & 18th Rocky Mountain Regional Meeting
June 6-9, 2004
Utah State University



ACS Organizer,
Staff and Volunteers



Travis Messenger, Ian McAlexander



Loren Hansen, Anastassia Alexandrova



Professor Brian Bennett
Medical College of Wisconsin



Prof. J.V. Ortiz, Kansas State Univ
Prof. Alex Boldyrev, USU
Dr. Boggavarapu Kiran, PNNL



Prof. Stephen Bialkowski and
Washington State University Student



Rex Watkins



Robert Igarashi
Jeannine Chan



Sanghamitra Mitra



Jared Hardman



Amy Fuller,
Jamie Purcell



Gabe Velazquez, Wade McGregor,
& Vinny Zachary

COMINGS AND GOINGS



Miriam Felton grew up in Southern California, and later moved to Cache Valley where she attended Logan High School. She is currently working toward her December degree from USU in Human Resource Management. Miriam and her husband Caleb reside here in Logan.

Camille Miller was brought up in Woods Cross, and has three brothers and a sister. She earned a degree in English from the University of Utah. Camille's husband Carl hopes to attend law school upon completion of his USU studies.



The Department was pleased to host a return visit by **Ikenna Onyido** of the Chemistry Department of the University of Agriculture in Makurdi, Nigeria. Ikenna was here for several weeks this semester to continue work on his collaborative research project with Dr. Alvan Hengge.

Both **Brad Davidson** and **Robert Brown** have returned from their recent sabbaticals where they each learned new techniques which they will apply to their research. **Vernon Parker** is currently on sabbatical, spending the year in Europe, primarily in Sweden.

Dr. **Ann Aust** has accepted a position as Associate Vice President for Research here on campus. She will maintain a part-time association as a member of this Department's faculty.

DEPARTMENT HAPPENINGS



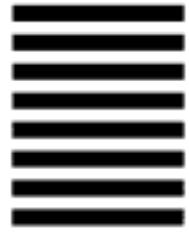
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Other Degree(s) _____ Year(s) _____ Major(s) _____

Profession/Employer _____

We are interested in any news about yourself, your career, your family, etc. that you would care to share with other alumni. Submit the information via <http://www.chem.usu.edu/alumni-database.php> or detach and mail, postage paid.