

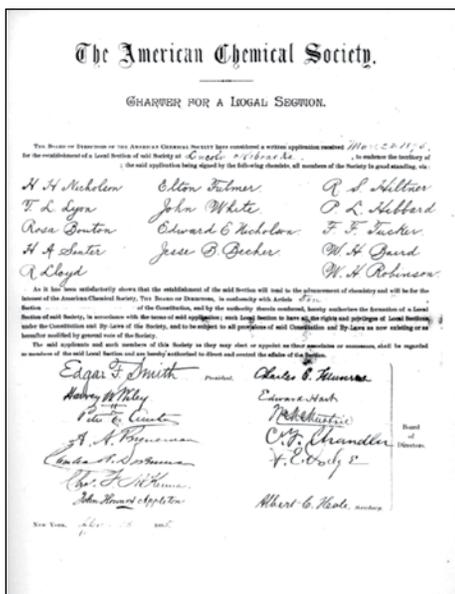


UNIVERSITY OF NEBRASKA-LINCOLN



# Celebrating 125 Years of Great Chemistry — Historical Perspectives (PART 4)

BY MARK A. GRIEP, AUGUST 2009



### Founding dates for the first eight ACS local sections:

- |                   |               |
|-------------------|---------------|
| 1. Rhode Island   | Jan. 21, 1891 |
| 2. New York       | Sep. 30, 1891 |
| 3. Cincinnati     | Mar. 29, 1892 |
| 4. Washington, DC | Apr. 13, 1893 |
| 5. Lehigh Valley  | Dec. 8, 1893  |
| 6. New Orleans    | Aug. 5, 1894  |
| 7. Nebraska       | Apr. 15, 1895 |
| 8. Chicago        | May 10, 1895  |

The faded, stained, and spray-mounted charter is still hanging in the Faculty/Staff Lounge. We also possess two leather-bound books that date from the section's founding, one is for recording "Minutes" and the other is to track finances. During the late 1890's and early 1900's, the Nebraska chapter included ten active women members, more than any other section. Brief biographies of the founding members follow.

### Founding members of the Nebraska local section:

**W. H. Baird**, Chief Chemist (qualitative) at the Norfolk Beet Sugar Factory from 1891 to 1904, at which time the plant was moved to Lamar, Colorado. He served as Plant Manager for two years from January 1900 to December 1901.

**Jesse Bradford Beecher**, B.Sc. about 1893 Nebraska, M.A. 1896 Nebraska for thesis titled "Some of the effects of freezing on solutions of salt in water".

**Rosa Bouton**, B.Ed. 1881 Normal State University in Peru, 1886 Instructor of Chemistry at University of Nebraska, B.Sc. 1891 Nebraska, M.A. 1893 Nebraska for her thesis titled "A new method for the determination of free sulphuric acid in mineral water". She became the second regular woman member

of ACS and was hired in 1893 as Adjunct Professor, and promoted in 1898 to Professor of Domestic Science. In 1904, her department was renamed College of Home Economics. She resigned in 1912 to begin a specialty bakery in San Diego and to take care of her ailing mother. Rationing during WWI forced her to abandon this business, so she spent the next 14 years as a home demonstration agent with the Arizona Agricultural Extension Service serving rural women and communities. University of Nebraska women's dormitory was later named Rosa Bouton Hall in her honor.

**H. Elton Fulmer**, B.Sc. 1887 Nebraska, M.A. 1890 Nebraska. He was hired in 1890 as Instructor of General Chemistry. In 1894, he joined the Chemistry faculty at Washington State College in Pullman, rising to head. In 1900, he added to duties of Washington state chemist. In 1908, he became Dean of the College. His brother C. A. was Chancellor of Wesleyan University in Lincoln.

**Paul L. Hibbard**, B.Sc. 1891 Nebraska. He became a chemist on a Louisiana sugar cane plantation and then a plant nutritionist at the University of California experiment station in Berkeley.

**Robert Silver Hiltner**, 1893 Assistant Chemist at the Experiment Station, B.Sc. 1894 Nebraska, M.A. 1896 Nebraska for thesis titled "The reaction of certain aldehydes upon phenyldimethyl-pyrazalone". He taught at the University for a few years and then became a chemist at the U.S. Food & Drug laboratory in Denver, where he was eventually promoted to chief. In 1920, he resigned to become Pure Food Chemist for the California Packers' Association.

At top: Charter of the Nebraska ACS Local Section. The image has been processed to remove the stain marks.

At left: "Minutes" book of the Nebraska Local Section. The first entry is dated April 15, 1895.



On an unrecorded date in 1894, fourteen men and women met in the University of Nebraska's Chemistry Building to discuss the formation of a local section of the American Chemical Society. They drew up a constitution and mailed their request to the national organization. Their request was granted on March 22, 1895, making them the seventh local chapter.

# MESSAGE FROM THE CHAIR

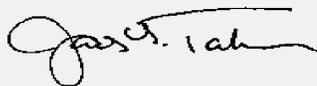


James M. Takacs  
Chair of the Department of Chemistry

The faculty at the University of Nebraska has largely been spared the harshest consequences of the country's economic problems relative to colleagues at many other universities. For that, we are very grateful. While budgets are extremely tight, we continue to make strategic investments for a much brighter future. The Department hired two outstanding young faculty colleagues this year, Drs. Eric Dodds and Jiantao Guo. They will start their independent academic careers at UNL this fall. Eric's research will be in the area of biomolecular mass spectrometry. Jiantao joins us to pursue research in bioorganic chemistry and chemical biology.

These hires and other ongoing faculty searches reflect the partnership of the UNL Administration and the Department to enhance the stature of UNL Chemistry within the scientific community and the joint commitment to our *Strategic Plan for Excellence in Chemistry: Maintaining strength in basic research while encouraging and enabling innovative research in interdisciplinary fields and on important applied problems.*

In closing, I am very pleased to make the following special announcement to all Chemistry Department Alumni and Friends. When you buy your new 2011 calendar, turn immediately to the month of April and color it red! We are planning a **2011 Chemistry Reunion** to celebrate the 125th anniversary of the B.Sc. degree awarded to George Bell Frankforter, the first degree granted by the UNL Chemistry Department. The exact dates are yet to be decided but the event will coincide with the 2011 Alumni Association Husker SpiritFest, UNL's annual spring homecoming weekend. If you would like to join the reunion organizing committee or just receive email updates, send your contact information to [ChemReunion2011@unl.edu](mailto:ChemReunion2011@unl.edu). We look forward to hearing from you.



Jim Takacs  
Bessey Professor and Chair of Chemistry

Dear Alumni and Friends,

Sadly, we lost a valued friend and colleague with the untimely passing of Professor T. Adrian George this past February. Adrian's career in the Chemistry Department spanned some 40 years and was marked by his uncompromised dedication to teaching, research, and service. Adrian is missed by current and former students, faculty, and staff. Our hearts go out to Denise and the George family.

Adrian was among a group of new faculty members hired in the late 1960's and early 70's that transformed UNL Chemistry into a nationally recognized research department. It is time, once again, to transform the Department and further enhance its stature within the international scientific community.

## In This Issue:

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## Support the Chemistry Department:

If you would like more information about specific needs of the department, such as graduate and undergraduate fellowships/scholarships, award lectureships, or research instrumentation, please contact:

Amber Antholz (402) 458-1182 direct  
Director of Development (800) 432-3216 toll free  
[aantholz@nufoundation.org](mailto:aantholz@nufoundation.org)

Story ideas, activities and achievements can be submitted by sending an email to [khoneyman2@unl.edu](mailto:khoneyman2@unl.edu). Receipt does not guarantee publication and the editor reserves the right to edit for space, clarity, grammar and style.

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## Updates:

Alumni members, now you can update your contact information by visiting <http://chem.unl.edu/dept/alumnreg.shtml>

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# ALUMNI FOCUS

## TWO AMONG MANY

BY JEFF BUNKER

### Dr. Sarah Petitto



Dr. Sarah Petitto

After completing a B.S. in chemistry with a concentration in environmental studies from Rochester Institute of Technology in Rochester, New York, Dr. Sarah Petitto came to the University of Nebraska–Lincoln to pursue a Ph.D. in Physical Surface Chemistry and studied under Dr. Marjorie Langell. Dr. Petitto was initially drawn to the strength of the department's physical-analytical chemistry divisions, in which there were several faculty members she wanted to work with.

After finishing her Ph.D., Dr. Petitto went on to complete a postdoc at the University of Alaska Fairbanks researching environmental surface chemistry of iron oxides. She later went on to receive a position as research staff scientist and visiting professor at the University of Alaska Fairbanks.

Dr. Petitto is now an Assistant Professor of Chemistry at St. Cloud State University, where she teaches lecture and lab courses, advises students for graduation degrees, conducts undergraduate research, is the faculty advisor for student chemistry club, and serves on various committees within the department and university.

Dr. Petitto remains thankful for her time spent at UNL:

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*“For a while, I was the only member of my group in the lab, so I learned how to do everything and then was able to train those students who joined. I also worked with many undergraduate/summer students that led to my teaching career.”*

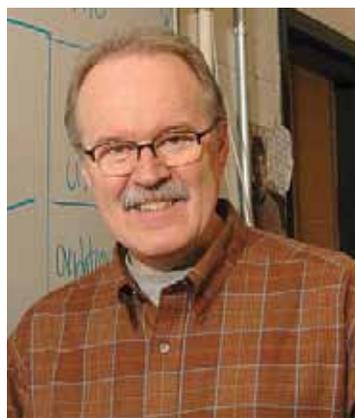
*“[My training at UNL] provided me with the skills, both in class design and in the laboratory, needed to get an awesome postdoc and become an active member of the scientific community.”*

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While at UNL, Dr. Petitto also worked with many faculty members in both the chemistry and physics departments and with many other graduate students. She attended several international and regional meetings annually and published seven papers.

We are proud of Dr. Petitto's accomplishments and wish her continued success in scientific pursuits.

### Dr. McLaughlin



Dr. Bill McLaughlin

Former UNL professor and graduate student Dr. Bill McLaughlin first started teaching chemistry at the high school level in 1969. In the 1980s, Dr. McLaughlin came to UNL to pursue a Ph.D. in analytical chemistry. After graduating, Dr. McLaughlin took a teaching position in Missouri, but through an unusual twist of events ended up accepting a one semester visiting professor slot here at UNL.

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*“That turned out to be very important because I liked teaching there, they liked me, and the position became full-time—so that one semester turned into an extremely valuable experience of over 10 years on campus.”*

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While at UNL, Dr. McLaughlin eventually became Coordinator of General Chemistry. He received the student vote for the campus Outstanding Professor four times, The Arts and Sciences Distinguished Educator Award, and the system-wide Outstanding Teaching and Creativity Award.

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*“Daily, I was rewarded with great experiences interacting with colleagues and thousands of excellent cooperative students.”*

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Dr. McLaughlin is now teaching general and analytical chemistry in the Department of Chemistry and Biochemistry at Montana State University. He estimates that he has taught over 10,000 students in his career. Dr. McLaughlin still loves teaching, and recently was awarded the 2009 President's Campus Wide Teaching Award at Montana State.

# OUTREACH

## CHEMISTRY DAY 2009



Jason Kautz (left), associate professor, shows how an acid and base interact during Chemistry Day 2009. (Photo courtesy of Troy Feddersen, University Communications)

The chemistry department's annual Chemistry Day was held on October 10, 2009. Throughout the day, high school juniors and seniors had the opportunity to participate in research lab, building, and campus tours, a seminar on the benefits of a chemistry education and degree, demonstrations, a chromatography lab in which students design their own T-shirts, and a free lunch. Additionally, several \$500.00 scholarships based on academic performance were awarded to participants. Workshops were also available during the day for high school chemistry teachers.

Chemistry Day was a great success, and received much positive feedback. Chemistry Day 2010 will be held on Saturday, October 9, 2010. With generous support provided by the Carl A. Donaldson Fund in Chemistry, this year's event promises to be even bigger and better! For more information, please visit [chem.unl.edu/chemday](http://chem.unl.edu/chemday).

### *History continued from page 1*

**Rachel Abbie Holloway Lloyd**, attended Harvard's Summer Chemistry Short Course from 1876 to 1884 and earned her 1886 Ph.D. in Zurich. She was hired in 1887 by Nebraska as Associate Professor of Analytic Chemistry and promoted to Professor the next year. She "retired" in 1894 due to poor health. Rachel Lloyd was the first woman to become a regular member of the American Chemical Society when she was allowed to join in 1891. The only previous woman was Rachel Bodley, a founding charter member. Bodley resigned in 1880 to protest the misogynistic antics at an ACS dinner party.

**Thomas Lyttleton Lyon**, B.Sc. 1891 Cornell. He was hired in 1890 as Adjunct Professor of Agricultural Chemistry. He left in 1903 to join Cornell faculty in the Department of Soil Science, where he published various soil textbooks in 1907, 1909, 1915, 1917, 1947, and 1953.

**Edward E. Nicholson** (son of H.H. Nicholson), 1893 Assistant Agriculturist at the Experiment Station, B.Sc. 1894 Nebraska, M.A. 1896 Nebraska. After graduation, he became University of Minnesota Assistant Professor of Chemistry, soon rising to Professor. He added title of Dean of Student Affairs in 1917. The University of Minnesota Men's Union was renamed Nicholson Hall in his honor.

**Hudson H. Nicholson**, B.Sc. 1870 Antioch in Yellow Springs, OH, M.A. 1874 Lawrence College in Appleton, WI. He was hired in 1874 as Professor of Natural Sciences at Nebraska State Normal University in Peru. In 1882, he was hired as Chair and Professor of Chemistry and Physics. In 1885, he became Director of Chemical Laboratory of the Experiment Station. When Brace was hired in 1887, Nicholson was no longer chair of Physics. Nicholson was Director of the Agricultural Experiment Station in 1892-1893. He resigned his professorship in 1905 to pursue gold mining.

**William S. Robinson**, A.B. 1887 Harvard, M.A. Harvard. In 1890, he opened an assay shop at 1112 Dodge Street in Omaha.

**Herbert A. Senter**, B.Sc. 1893 Nebraska, Ph.D. 1896 Heidelberg. He became head Chemistry teacher in Omaha's Central High School and helped found the Omaha section of the ACS in 1921.

**Francis F. Tucker**, B.Sc. 1894 Nebraska. He and his wife earned medical degrees at the University of Nebraska. From about 1905 to 1930, they were medical missionaries in P'ang Chuan Te Chou, Shantung, China. Their hospital was substantially improved with missionary funds in 1907 and renamed the Francis Tucker Hospital.

**John White**, B.A. 1888 Johns Hopkins, Ph.D. 1891 Johns Hopkins. In 1891, he became a Cornell University Assistant Professor in Chemistry. In 1893, he became an Instructor of Analytic Chemistry at Nebraska, and was promoted in 1900 to Associate Professor. He left in 1903 to join Chemistry faculty at Rose Polytechnic Institute in Terre Haute, IN.

# FACULTY AND STAFF

## STAFF CHANGES

BY JEFF BUNKER



Kate Honeyman

We are proud to have welcomed Kate Honeyman, our new Recruiting and Admissions Coordinator, to Hamilton Hall this January. As Recruiting and Admissions Coordinator, Kate's duties include scheduling visits for prospective graduate students, website development for the department's website, general promotion of the department, creation and coordination of marketing materials, and coordination of this alumni newsletter!

Prior to joining the UNL chemistry staff, Kate graduated with a degree in theater from Nebraska Wesleyan University in 2006, and spent a year touring with the Kentucky Shakespeare Festival, based in Louisville, Kentucky. She then returned to Nebraska in 2007 and served as Special Events Coordinator & Marketing Assistant for Omaha Children's Museum.

Outside of work, Kate enjoys participating in and attending local theater, reading, and attending auctions. She is also pursuing a Master of Arts degree in Management at Doane College. Kate enjoys spending time with family, and is planning a wedding in October! We are very pleased to welcome Kate as a member of our staff.



Peter Daniels

Last June, the chemistry department welcomed Peter Daniels to its staff as a Crystallography Specialist in the Nebraska Center for Materials and Nanoscience. Peter oversees the crystallography lab, and is responsible for the technical equipment in the lab, which includes a diffractometer for single crystal work as well as some preparative equipment. Users can supply crystals for analysis. Peter then does most of the experimental work, data collection, and in many cases solves the crystal structure,

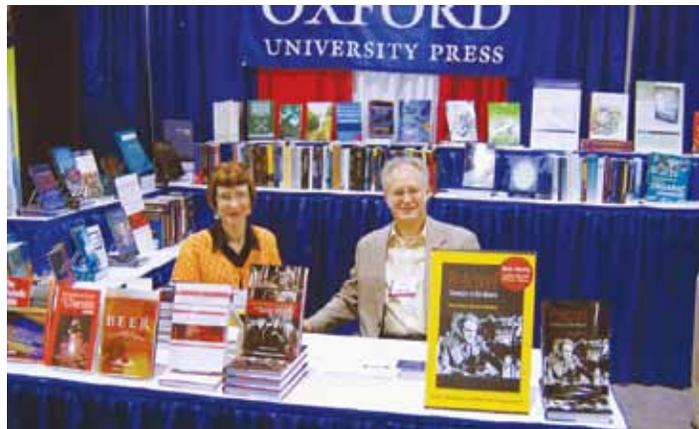
writes up a brief report, and then discusses the results with the user. He is also available to answer any questions regarding crystals, including their properties, growth, and analysis.

Peter started as a mineralogist doing analysis of inorganic materials using methods such as x-ray diffraction and NMR spectroscopy. He also worked on similar studies with synthetic materials such as Zeolites and related compounds. He studied ferroelectric and magnetic materials and their phase transitions with diffraction materials at low temperatures using synchrotron radiation. Outside the university, he has also served as a Field Service Engineer, traveling Western Europe looking after laboratory equipment and taking care of customer needs.

Away from science, Peter also enjoys spending time with his family and sports such as running. On behalf of the entire department, we extend a warm welcome to Peter and his family.

## BEHIND THE SCENES

BY MARK GRIEP



Dr. Mark Griep and Artist Marjorie Mikasen at a book signing - American Chemical Society Meeting, August 2009

### Dr. Griep's new book— **ReAction! Chemistry in the Movies**

*Book By Mark Griep & Marjorie Mikasen*

*ReAction! Chemistry in the Movies* (published by Oxford University Press; funded by the Alfred P. Sloan Foundation) by UNL Chemistry Professor Mark Griep and Artist Marjorie Mikasen gives a scientist's and artist's response to the dark and bright sides of chemistry found in over 110 films, most of them contemporary Hollywood feature films but also a few documentaries, shorts, silents, and international films. Even though there are some examples of screen chemistry between the actors and of behind-the-scenes special effects, this book is really about the chemistry when it is part of the narrative.

It is about the dualities of Dr. Jekyll vs. inventor chemists, the invisible man vs. forensic chemists, chemical weapons vs. classroom chemistry, chemical companies that knowingly pollute the environment vs. altruistic research chemists trying to make the world a better place to live, and, finally, about people who choose to experiment with mind-altering drugs vs. the drug discovery process. Watching films with chemical eyes, Dr. Jekyll is recast as a chemist engaged in psychopharmaceutical research, but who becomes addicted to his own formula. He is balanced by the often wacky inventor chemists who make their oxymoronic products, such as flexible glass, by trial-and-error.

This insightful book informs as it entertains, so grab a bowl of popcorn and learn about chemistry, movies, and chemistry in the movies!

## IN REMEMBRANCE

### Dr. T. Adrian George



Dr. Thomas Adrian George

Thomas Adrian George, 68, died after a courageous battle with pancreatic cancer on February 4, 2010. Born in Darlington, England on February 1, 1942, he received a B.Sc. (Tech) with honors from Manchester College of Science and Technology and earned a D.Phil. from the University of Sussex for studies on aminostannanes.

*"In 1970 I became Dr. George's first Ph.D. student. I had left the graduate program in 1968 as I wasn't making much progress on my research. I returned in 1970 and began working with this enthusiastic and wonderful professor. I completed my dissertation and obtained my Ph.D. in 1972. ... I was hired by 3M where I worked as a research chemist, manager and finally Technical Director. ... I owe my career success to the Department of Chemistry and especially to Dr. George ... My son was 5 years old when I was completing my research. He and Dr. George spent many hours throwing paper airplanes down the hallway in Hamilton so I could finish a critical experiment."* – Carol D. Seibold, Ph.D.

Following postdoctoral studies on metallocarboranes with Professor Fred Hawthorne at the University of California Riverside, Adrian joined the Chemistry Department at the University of Nebraska–Lincoln, where he rose to the rank of full professor, and served as vice chair.

*"I am extremely lucky to have met and worked with Dr. George. When I was accepted to the graduate program, I am pretty sure it was because of the faith Dr. George had in me. Thanks to his influence, I am enjoying my life as an educator and mentor to many future scientists. My family and I will miss him greatly."* – Stacy Stoll

Adrian George was the author of over ninety papers in inorganic and organometallic chemistry, including key early publications related to inorganic and organometallic models for dinitrogen fixation. He directed more than two dozen masters and doctoral students, and was an accomplished classroom educator whose teaching was recognized by a number of university awards, the most recent being the Hazel R. McClymont Distinguished Teaching Fellow Award in 2009. Adrian served as Chair of the Nebraska section of the American Chemical Society and Membership Chairman of the ACS Inorganic Division. He was a member of the Royal Chemical Society and Sigma Xi, and was active in the chemistry honor society Phi Lambda Upsilon as the national treasurer and as the councilor for the Rho chapter.

*"The thing that struck everyone about Adrian is that he was always happy to discuss science or teaching, and never stopped working to make the department a better place. Perhaps more importantly, he had a smile for almost everyone and was always willing to find the time to provide a sympathetic ear."* – Prof. Pat Dussault

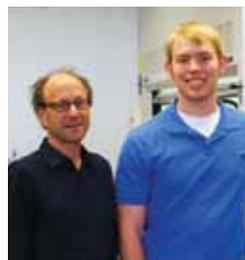
Outside of the lab, Adrian enjoyed experiencing the four seasons on a rural acreage. He is survived by Denise George, his wife of 41 years and a fellow chemist, his two children and their spouses, a granddaughter, and a brother. Adrian touched many lives and is deeply missed.

*"I was blessed to be Adrian's final doctoral candidate. The legacy that Adrian left within each of his students was not exclusively of science, molecules or chemical reactions. Adrian taught his students to be great researchers, dedicated educators and more importantly, successful people in life. I am honored to state that I studied under T. Adrian George at UNL."* – Kerry A. Clark, Ph.D.

A Celebration of Life Service was held in late February. The family requested that memorials be directed to the NU Foundation to support Undergraduate Research in the UNL Chemistry Department or to UNMC for Pancreatic Cancer Research.

*"It was with great sadness that I learned of Adrian's illness and watched his courageous but ultimately losing fight with pancreatic cancer. Adrian joined the chemistry faculty a few years after I did. He was not only a great colleague in every way, he was a fine person. He and Denise lived an unpretentious yet exemplary personal and professional life. I will always cherish their friendship. I think it would be an appropriate remembrance to establish a permanent endowment to honor Adrian and other former faculty. I invite others interested in joining in this effort to contact me (kgmrsm@verizon.net) or the Chemistry Department (ChemChair@unlnotes.unl.edu)."* – Dr. Bob Marianelli

We are pleased to announce the 2009-2010 T. Adrian George Undergraduate Research Award was given to Mr. Ross Cheloha, pictured below with his research mentor, Prof. David Berkowitz. Ross carried out undergraduate research on the use of enzymes in organic synthesis leading to a publication in *Organic Letters*. Ross has received a number of awards and honors during the course of his undergraduate studies including induction into the prestigious Phi Beta Kappa Honor Society, being awarded an American Chemical Society Summer Undergraduate Research Fellowship, and graduating with high distinction. He plans to attend graduate school for Chemistry at the University of Wisconsin in the fall. We thank those who generously contributed in memory of Adrian to make this award possible.



Prof. David Berkowitz and Ross Cheloha

## A LOOK INTO THE PAST: DR. PILL-SOON SONG

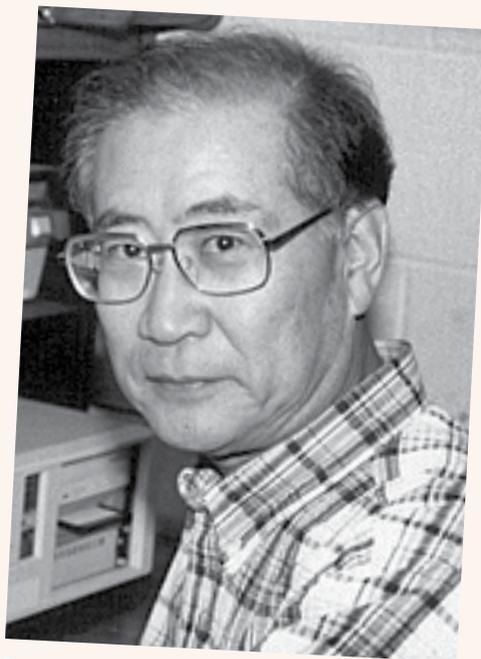
*Dr. Pill-Soon Song retired from UNL in 2003, after being part of the Chemistry department for 17 years. He served as the Chair of the department from 1987-1996. In recognition of Dr. Song's outstanding research, carried out in part during his time at UNL, Dr. Song was awarded the 2009 Finsen Medal in Photobiology by the International Union of Photobiology. Here, Dr. Song reflects on memories of his tenure at UNL.*

BY JEFF BUNKER

I came to UNL in 1987, after being offered a job as chair of the chemistry department. Prior to coming to UNL, I was a graduate student at the University of California at Davis and subsequently a professor in the chemistry department at Texas Tech from 1965 to 1987. As department chair, I had the opportunity to make a significant impact on the chemistry department during my tenure. I fondly remember the daily advice and constructive criticism I received from my colleagues, both faculty and staff. Perhaps my most memorable moment was meeting with the department's distinguished chemistry alumni at the first industrial advisory board meeting. As the department chair, I'm proud to have helped establish a chemistry program ranked in the top 65 in the nation.

I typically spent most of my mornings in the department chair's office doing administrative work and meeting with faculty colleagues. I tried to spend my afternoons with my students in my lab, but often failed to do so - I usually spent my evenings and weekends having research related discussions with my students. In total, I supervised the study of 7 M.S. and 33 Ph.D. students.

My research was focused on several fronts, including quantum biochemistry, spectroscopy, and photobiology. My accomplishments include elucidation of the chemical identities of stentorin and blepharismine, which are photoreceptors for the ciliates stentor and blepharisma, as well as the structure-function relation of plant photoreceptor proteins called phytochromes.



Dr. Pill-Soon Song

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*"My advice to aspiring graduate students and assistant professors is to work on a critically important problem for long-term research from the very beginning, no matter how tough the problem appears at first glance."*

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After my retirement from UNL in 2003, I went on to the Kumho Life Science Laboratory, where I was the director until 2006. Since then, I have been teaching graduate classes in plant biotechnology and photobiology at Jeju National University in Jeju, Korea, as well as developing commercially viable turfgrass varieties which are genetically modified with shade tolerant phytochrome genes. My "3rd" retirement plan, at the end of 2012, is to aim for a high 70s golf score here in Jeju or in Temecula, California. It would be wonderful to come back and golf at the Pioneer or Holmes Lake golf courses in Lincoln!

*Pill-Soon Song*

# AWARDS AND ACHIEVEMENTS

## FACULTY

### New Funding: July – December 2009

The following are newly funded grants received by the chemistry faculty. Congratulations!

**PI:** Dr. David Berkowitz  
**Funding Source:** American Heart Association  
**Title:** Human Serine Racemase: A new potential target for preventing excitotoxic neuronal damage pursuant to stroke  
**Project Start Date:** July 2009

**PI:** Dr. David Berkowitz  
**Funding Source:** Creighton Subcontract (NIH/ARRA)  
**Title:** Antibiotic Properties of Artificial Agonists for a Bacterial Riboswitch  
**Project Start Date:** September 2009

**PI:** Dr. David Berkowitz  
**Co-PI:** Dr. Paul Blum (School of Biological Sciences)  
**Funding Source:** UNL Nebraska Center for Energy Sciences Research  
**Title:** Establishing the Synthetic Potential of Geothermal Dehydrogenases  
**Project Start Date:** November 2009

**PI:** Dr. Liangcheng Du  
**Funding Source:** NIH/ARRA  
**Title:** Biosynthesis of HSAF, an Antifungal Natural Product with a Novel Mode of Action  
**Project Start Date:** July 2009

**PI:** Dr. Stephen Ducharme (Department of Physics & Astronomy)  
**Co-PI:** Dr. James Takacs  
**Funding Source:** DOE/EPSCoR  
**Title:** Rational Design of Molecular Ferroelectric Materials and Nanostructures  
**Project Start Date:** August 2009

**PI:** Dr. David Hage  
**Funding Source:** NIH DK (Year 4 of 4)  
**Title:** Chromatographic Studies of Functional Proteomics  
**Project Start Date:** August 2009

**PI:** Dr. Robert Powers  
**Funding Source:** UNL Redox Biology Center  
**Title:** Redox Biology Center  
**Project Start Date:** November 2009

**PI:** Dr. Robert Powers  
**Funding Source:** UNL Veterinary & Biomedical Sciences  
**Title:** Interdisciplinary Grant  
**Project Start Date:** October 2009

**PI:** Dr. Andrzej Rajca  
**Funding Source:** NIH (Year 2 of 2)  
**Title:** High-Spin Nitroxide Radical for Biomedical Imaging Applications  
**Project Start Date:** September 2009

**PI:** Dr. Andrzej Rajca  
**Funding Source:** NSF (Year 3 of 3)  
**Title:** Stable High-Spin Polyradicals and Chiral pi-Conjugated Systems  
**Project Start Date:** November 2009

**PI:** Dr. Jody Redepenning  
**Funding Source:** DOD/USA Medical Research  
**Title:** Bioceramic Bones for Battlefield Trauma  
**Project Start Date:** October 2009

**PI:** David Sellmeyer (Department of Physics and Astronomy)  
**Co-PIs:** Drs. Patrick Dussault and Rebecca Lai  
**Title:** Cooperative Agreement to Research and Develop High-Sensitivity Nanosensors for Defense Applications  
**Project Start Date:** September 2009

### 2009 Service Awards

Years of Service	Awardee
5 years	Wonjong Choe
5 years	Joseph James Dumais
5 years	Carita J. Kordik
5 years	Jason A. Kautz
15 years	Richard C. Hartung
15 years	Kurt W. Wulser
20 years	David S. Hage
40 years	Lawrence J. Parkhurst

## STAFF

### Applause Award Recipients



Carita Kordik, 2009

#### Carita Kordik, Walt Hancock, and Robert Wilson

The APPLAUSE Program recognizes consistently outstanding performance and service above and beyond the call of duty to Managerial/Professional (B-line) and Clerical/Tech/Service (C-line) staff in the College of Arts & Sciences.

Applause Awards over the last nine months have gone to **Carita Kordik**, Research Technician in the Mass Spectrometry Facility and **Walt Hancock**, Electronics Shop Manager. **Robert Wilson**, Laboratory Storekeeper, received the Annual Applause Award for 2009.

Carita's nominators say: "Carita is a hard working, dedicated employee who deserves some recognition. She stays very busy testing samples in the Mass Spec facility. She's always anxious to get the tests done so she can tell the students the results. She's a great team player and she's always willing to help out in other areas if needed. Carita deserves to be rewarded for her strong work ethic, her communication skills, her problem solving abilities, and for being such a great person to work with. We are very lucky to have someone like her in our department!"

Walt's nominators share: "Walt has been instrumental in providing the Chemistry department with a high level of dependable and expert service in electronics and computers for many years. He has a wealth of knowledge, is always courteous, and seems to be able to get along with everyone. He is able to accomplish all this in an unassuming way with no complaints. I would highly recommend Walt for the Applause award!"

Nominations for Robert say: "Robert is the organic storekeeper for the chemistry department. Robert takes care of the organic labs. He makes solution and unknowns for over 600 students a semester. Robert orders the chemical reagents and equipment and maintains the rotovaps, coolers, and melt-temps. Robert is not a clock watcher, he often stays past the scheduled lab time to make sure the equipment is shut down properly to prevent break downs. Robert handles the proper disposal of chemicals for the organic labs. Robert is an important part of the smoother operation of the organic labs."



Walt Hancock, 2009



Robert Wilson, 2009

**Applause**  
The Perfect Thank You

Date \_\_\_\_\_

Pay to the Order of \_\_\_\_\_ \$ **200.00**

Two Hundred and <sup>no</sup> / 100 \_\_\_\_\_ Dollars  
(Your monetary award will be added to your next paycheck.)

UNIVERSITY OF Nebraska COLLEGE OF ARTS AND SCIENCES  
Lincoln Office of the Dean

Memo Staff Awardee

## STUDENTS

### Ovation Award Recipient

#### Ashley Leming

Recipient of the  
September 2009 Ovation Award



Ashley Leming

"Ashley is remarkable for her focus on the tasks she is assigned. She is very efficient and never seems to waste a minute. She is easily one of the most dependable student workers I've ever met."

"One of the things that Ashley does for the chemistry department is file the dreaded Material Safety Data Sheets! Every chemical in Hamilton Hall is required to have an MSDS sheet on file in the building to remain in compliance. Ashley is a great example of the hard working, friendly, efficient student worker that will one day be a great asset to any future employer."

**OVATION**  
The Perfect Thank You... for Student Employees

Date \_\_\_\_\_

Pay to the Order of \_\_\_\_\_ \$ **50.00**

Fifty and <sup>no</sup> / 100 \_\_\_\_\_ Dollars  
(Your award will be added to your paycheck.)

UNIVERSITY OF Nebraska COLLEGE OF ARTS AND SCIENCES  
Lincoln Office of the Dean

Memo Student Awardee

# AWARDS & ACHIEVEMENTS

*Congratulations to  
all 2009 Chemistry  
Department Graduates  
and Awardees!*

## CONGRATULATIONS TO GRADUATES

### May 2009 PhD Graduates

Name	Area	Adviser
John Schiel	Analytical	Hage

### May 2009 Masters Graduates

Name	Area	Adviser
Kittichai Chaiseeda	Organic	Moriyama

### May 2009 Chemistry Major Graduates

Xuyen Doan – BA	Crystal Fehr – BS
Alexander Braganov – BS	Cole Reha – BA

### August 2009 PhD Graduates

Name	Area	Adviser
Chad Briscoe	Analytical	Hage
Chad Killblane	Physical	Zeng

### August 2009 Masters Graduates

Name	Area	Adviser
Jeanethe Anquizola	Analytical	Hage
Sara Basiaga	Analytical	Hage

### August 2009 Chemistry Major Graduates

Zachary Able – BA	Huy Pham – BA
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### December 2009 PhD Graduates

Name	Area	Adviser
Roberto Delgadillo	Biochemistry	Parkhurst

### December 2009 Masters Graduates

Name	Area	Adviser
Xu Zhang	Organic	Takacs

## PHI LAMBDA UPSILON

Phi Lambda Upsilon was founded as an honorary society in March 1899 at the University of Illinois. The society stands as a monument to the enthusiasm and zeal of Horace C. Porter, Paul F. A. Rudnick, and Fred C. Koch, who, at the time, were seniors majoring in chemistry. The founders were assisted in their undertaking by Professors Arthur W. Palmer, Harry S. Grindley, and Samuel W. Parr, who continued for many years to manifest an active interest in the Society and to work for the maintenance of its high standards.

The aims and purposes of the Society were from its inception “the promotion of high scholarship and original investigation in all branches of pure and applied chemistry.” Through these objectives the founders envisaged a society which would serve the field of chemistry in the same manner that Phi Beta Kappa does in the Humanities, Sigma Xi scientific research, and Tau Beta Pi in Engineering. Throughout its history, Phi Lambda Upsilon has shown a consistent devotion to its objectives as an honor society.

The Rho chapter of Phi Lambda Upsilon began at the University of Nebraska–Lincoln in 1922. Members of the Rho chapter are graduate and undergraduate students in the Department of Chemistry at the University

of Nebraska–Lincoln, elected on the basis of their academic achievement and potential. Members include exceptional students from both pure and applied fields of chemistry. The Rho chapter members also participate in a variety of social and service activities throughout the school year and summer. For more information about PLU please visit <http://www.chem.unl.edu/PLU/about.shtml>.

### PLU Officers for 2010-2011 are:

- Mattie Peck – President
- Leah Thompson – Vice President
- Monica Kinde-Carson – Treasurer
- Bridgette Foley – Secretary
- Sarah Hitchcock – Historian

# RECONNECT

## LinkedIn and Twitter



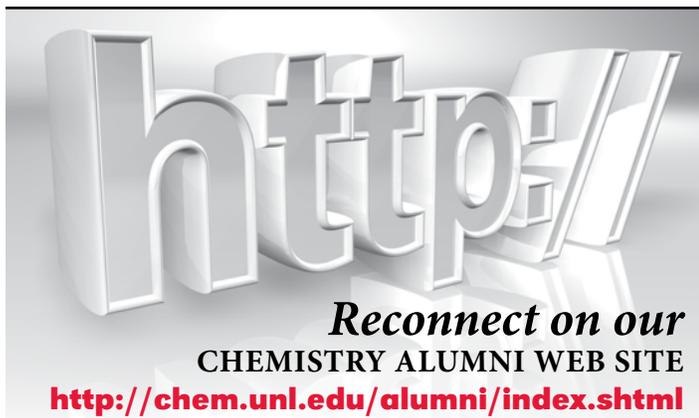
Join the University of Nebraska–Lincoln Chemistry Alumni group on LinkedIn and reconnect with professors, colleagues, classmates, and friends! The Department of Chemistry Alumni group will help you expand and strengthen your professional networks while keeping you posted on all of the happenings in the department.



New! Follow the UNL Chemistry department on Twitter! Keep up to date on department awards, events, and research by following @UNLChemistry on Twitter.

## 2011 Chemistry Reunion

Mark your calendar for the 2011 Chemistry Reunion! In April 2011, we'll celebrate the 125th anniversary of the B.Sc. degree awarded to George Bell Frankforter in 1886. The exact dates for this fun-filled weekend are yet to be decided, but the event will coincide with the 2011 Alumni Association Husker SpiritFest. If you would like to join the reunion organizing committee or receive email updates about the event, please contact [ChemReunion2011@unl.edu](mailto:ChemReunion2011@unl.edu)!



### Offering:

**Class Listings:** Current listings of Ph.D., masters, and B.S./B.A. graduates

**Connections:** Career Networking Services provide links to job listings, help with chemistry job searches, and opportunities to use Chemistry Facebook Group and LinkedIn for social and professional networking.

Update your contact information by sending to [alumni@huskeralum.org](mailto:alumni@huskeralum.org)

**Events/News:** Keep up with current events, past happenings, alumni newsletter, alumni stories

**Support the Department:** Learn how to support the UNL Department of Chemistry through a variety of ways

## Updates:

*Alumni members,  
now you can update your  
contact information by  
visiting <http://chem.unl.edu/dept/alumnreg.shtml>*

## Graduate Students Get a New Lounge on the Hamilton 4th Floor

BY JEFF BUNKER

Chemistry graduate students have a new place to escape to in Hamilton Hall. Last August, a brand-new lounge on the fourth floor was completed. The lounge contains couches, a nice TV, a computer, study tables, microwaves, and a fridge, as well as a coffee maker and free coffee. It provides the perfect quiet area for graduate students to take a quick nap between experiments, to work on grading and preparing for teaching assignments, or to grab a cup of coffee while reading papers.

Students have already been quite receptive of the new lounge. Many of the students are taking advantage of the space, and there is a regular lunch crowd that meets in the lounge. Students can thank the Phi Lambda Upsilon members, who negotiated the new space from the department, provided funds to purchase the new TV and couches, and cleaned and organized the new space.



Graduate students new lounge

Department of Chemistry  
552 Hamilton Hall  
P.O. Box 880304  
Lincoln, NE 68588-0304



WWW.CHEM.UNL.EDU

## Supporting the Greatest Opportunities: **THE CHEMISTRY EXCELLENCE FUND**

The Chemistry Excellence Fund is key to ensuring a continued tradition of excellence by providing the resources needed to develop transformative programs of research in pursuing the Department's Strategic Plan for Excellence. Your donation will provide the critical discretionary funding needed to develop signature programs at research frontiers, now and into the future. Donate today at [www.chem.unl.edu](http://www.chem.unl.edu) or through the NU Foundation at <http://nufoundation.org>.



WHAT'S HAPPENING IN  
**CHEMISTRY**