

Missouri Western Chemistry Alumni Newsletter

Missouri Western State University Department of Chemistry

Chair's Corner, Dr. Ben Caldwell

We are pleased to present to our alumni from the Chemistry Department at Missouri Western, the first installment of our Chemistry Alumni Newsletter. We wanted to reach out to our past graduates to reconnect and let you know what is happening in the department and at the University. In this newsletter you'll learn about several big events taking shape here in the Chemistry Department and at MWSU. In July, construction began on an addition to Agenstein Hall (AKA the science and math building) which will be known as Remington Hall. Following construction of this addition Agenstein Hall will receive a long awaited renovation and face lift. The entire project should be completed by or during the fall of 2010. Another milestone for the Chemistry Department has been the launch of one of Western's very first graduate

programs: a Masters of Applied Science (MAS) in Chemistry. As usual the Chemistry Department is helping to plow new ground for the University. We'd also like to share with you news about faculty and students in the department. If you haven't heard from us in a while we would like to let you know about changes in the department related to recent retirements and new faces that have joined us over the past several years. For some of you, my name may be completely new. In August of 2007 Dr. Len Archer completed his service as Chairperson of the department after 18 years of leadership, rejoining the faculty ranks. I want to continue and build upon the record of accomplishment Dr. Archer and those before us achieved. We would also like to hear from you and what you've been up to. So, the department web site

Dr. Len Archer Completes Service as Chair

After 18 years of leadership and service, Dr. Len Archer has stepped down as Department chair. Len was first elected chair in 1989. During his tenure as Chair MWSU and the Department of Chemistry underwent a lot of change including its designation as a university. Len oversaw a total

of 8 faculty and 3 staff hires including most of the current faculty members. He was instrumental in the establishment of three new interdisciplinary undergraduate degrees and the development of the new MAS Chemistry program. Len was also involved in the launch of the High

now has an Alumni page where you can contact us and let us know what has been happening in your lives lately or since you last visited Missouri Western. Let us know about your career milestones, family happenings and anything else you would like to share. Even send us some pictures. We'll either include them in an upcoming newsletter or post them on the Alumni web page. So, take a look, and let us know what you think about the newsletter. Thanks for reading.

Ben Caldwell
Associate Professor and Chair of Chemistry



Volume 1, Issue 1

October 2008

Points of Pride:

- Dr. Ben Caldwell received the MWSU Board of Governor's Distinguished Professor Award in 2008.
- Dr. Shauna Hiley received the Council of Chairpersons Award in 2007
- Dr. Mike Ducey received the Jesse Lee Meyers Excellence in Teaching Award in 2007.
- The Alchemist Club received an Honorable Mention Award from the ACS for its 2007-08 activities.
- Over the past 2-years MWSU Chemistry undergraduate and graduate students have presented their research at regional and national meetings of the ACS, Pittcon, and the national ASBMB meeting.
- Medical Technology student Beth Meyer was awarded a 2008-09 MWSU Esson Scholarship and the 2008 William Roesle Medical Technology Award.

Inside this issue:

Remington Hall Construction in Full Swing	2
Faculty Highlights	2
First MAS Chemistry Students Preparing to Graduate	2
Faculty Profile: John Rhoad	3
Past Department Faculty Update	3
Alumni Profile: Greg Downing	3
Important Dates	4
Alchemist Club Corner	4

Remington Hall Construction in Full Swing

An addition and renovation to the science and math facilities in Agenstein Hall has finally begun to take shape! The construction of the 54,000 sq ft. addition began in earnest in July 2008. Following its completion in December 2009, Agenstein Hall will undergo substantial renovations. The two facilities will be connected by a student centered atrium and will increase the space available to 123,000 sq ft for the departments of Chemistry, Biology, and Computer Science, Math, and Physics. The new facility will be named Remington Hall in honor of Wes and Patsy Remington who donated \$5 million to the project to support the education of science and math graduates from Western.

Student and faculty gathering spaces are featured in the design of the building, be-

ginning with the atrium, continued with the student areas and balconies on the east end of Remington and finished with small alcoves for gatherings carved out of the halls. The building is designed to give the science and mathematics students a home away from home while they are at Missouri Western

The new facility will provide state of the art collaborative laboratories in Remington Hall with the old laboratories in Agenstein Hall redesigned to be state of the art collaborative classrooms. Student and faculty research areas will be quadrupled in size to 6,500 sq ft. Renovations to Agenstein Hall is projected to be complete in December 2010. The addition and renovation project is being funded by \$ 30.1 million from the Lewis and Clark Discover Initia-

tive. In addition to the Remington's donation, a \$1 million donation from an anonymous Western alumni was made in September. With these donations the University hopes to raise approximately \$7.5 million to complete the building project.



Construction of Remington Hall is underway.

First Class of MAS Students to Graduate in Spring 2009

In the Fall of 2008, MWSU began offering its Masters of Applied Science (MAS), with areas of emphasis in Chemistry, Information Technology Management or Human Factors and Usability Testing. The MAS in Chemistry is an interdisciplinary professional degree program in which students receive advanced training in chemistry as well as management, communications, economics and other areas that would provide graduates with the skills necessary to manage projects and interact more effectively with non-scientists in the workplace. Our first MAS Chemistry class was 10 students!

Courses offered in the Chemistry option include Industrial Chemistry, Quality Assurance, Chemical Safety and Management, Advanced Chemical Methods, and Chemistry for Innovation. The Advanced Chemical

Methods course rotates through topics, the first of which will be Carbohydrate Chemistry taught this spring by Dr. Jon Rhoad. The Chemistry for Innovation course covers intellectual property rights and grant writing, and is currently taught by Dr. Benjamin Caldwell. The core classes that all MAS students take are Professional and Organizational Communications, Organizational Behavior and Design, Marketing Strategy, Managerial Economics, Technical Analysis for Decision-Making, and Graduate Colloquium. This balance of chemistry and business will prepare our graduates for advancement and give them a competitive edge in the job market.

Darcie Elder, a current MAS student states that the MAS is a "unique opportunity to gain insight into the business side of the chemical

industry." Another MAS student, Deborah Wright extols the program as an "extension of the Applied Learning Initiative beyond the undergraduate level." "It gives a new appreciation for related fields such as chemical engineering" states LeeAnn Schuster. The graduate students were also quick to point out the advantage of evening classes, so that those currently employed can advance their careers and maintain their current jobs. If you are a recent alum or know of a potential candidate who might be interested in the graduate program please contact Dr. Ben Caldwell (caldwell@missouriwestern.edu) for more information.

Applications are being accepted now for Fall 2009 admission.

Faculty Highlights—What we do with our "spare" time

Dr. Ben Caldwell

Department Chair and ASBMB Regional Director for South-Central Region Undergraduate Affiliate Network's.

Dr. Jerry Zweerink

Faculty Building Sheppard for the Remington Hall/Agenstein Hall project.

Dr. Len Archer

Back to research involving heavy metal

remediation from waste streams.

Dr. Shauna Hiley

MWSU Faculty Advising Coordinator and Faculty mentor to the Alchemist Club.

Dr. Steve Lorimor

University Faculty Senate Undergraduate Curriculum Committee Chair.

Dr. Mike Ducey

Chair of the Kansas City Section of the

American Chemical Society.

Dr. Jon Rhoad

MWSU Faculty Senator and faculty advisor to the MWSU Graduate Student Organization.

Dr. Jim Puckett

Membership Chair for Science Teachers of Missouri as well as the NSTA District 11 Director.

Faculty Profile: Dr. Jon Rhoad

In January of 2006, Dr. Jonathan Rhoad became the newest tenure-track faculty member of the MWSU Chemistry department. Jon is a native of Gower Missouri, having graduated from East Buchanan High School. His academic degrees are from, William Jewell College (A.B. Chemistry 1998), Ohio State University (M.S. Chemistry, 2002) and Ohio State University (Ph.D. Organic Chemistry, 2004). He completed his Ph.D. in Alberta, Edmonton, Canada under the direction of Dr. Todd Lowary, who moved from Ohio State University to the University of Alberta during the last stages of his graduate work. While at Ohio

State University, Jon served in the capacity as both a teaching assistant and research assistant in Organic Chemistry, and as a mentor to undergraduate researchers and first year graduate students. In 2005 he completed a post-doctoral research appointment in computational chemistry at the University of Missouri-Columbia working for Dr. Rainer Glaser. Jon's areas of expertise are Organic and Biochemistry with emphasis in synthetic and computational methods. He maintains a highly active research group focused on 5-membered ring carbohydrate cation intermediates.

Jon currently teaches the undergraduate first and second organic lecture and laboratory courses, an advanced undergraduate course in computational chemistry and will be teaching a graduate course in advanced chemical methods next spring.

Jon lives in St. Joseph with his wife Jennifer and his two sons Ian and Knox.



Past Faculty: Where are they now?

John Redmond August 1966 – May 1978; deceased in 2005; wife Ann lives in St. Joseph, MO.

Achsah M. Heckel August 1959-May 1987; retired; presently living in Topeka, KS.

Dr. Tim Lee Gruen, May 1970 – May 1973; presently living in Abilene, KS working as a Pharmacist in Salina, KS.

Dr. Russell Smith August 1969 – Dec. 31, 1996; retired; presently living in St. Joseph, MO and is co-owner of CIA Labs

Dr. Larry Lambing August 1968 – Dec. 31, 1997; retired; presently living in St. Joseph, MO with wife Virginia and volunteers for Habitat for Humanity in the RESTORE project.

Dr. Stanley Latesky August 1988 – May 1992; Associate Professor of Chemistry, University of the Virgin Islands, St. Thomas, VI

Dr. Anton Wallner August 1992- May 2000; Professor and Chairperson of Physical Sciences at Barry University, Miami, FL;

Tony was responsible for the NSF instrument grant that allowed MWSU to purchase the high field 300-MHz NMR Spectrometer in 1999.

Dr. Scott R. Carr August 2000 – May 2001; Professor of Chemistry and Physics at Anderson University, Anderson, IN

Dr. Richard Schwarz Aug 1976 – May 2005; retired; presently living in St. Joseph, MO with wife Anna and is co-owner of CIA Labs.

Alumni Profile: Greg Downing, 2007 Distinguished Alumnus Awardee

MWSU Chemistry alumnus Greg Downing received the 2007 Missouri Western State University Distinguished Alumnus Award. Greg received his B.S. Chemistry degree from Missouri Western State College in 1976. He went on to receive his Ph.D. in Nuclear Chemistry from the University of Missouri, Rolla and currently serves as a research chemist for the National Institute of Standards and Technology, Chemical Science and Technology Laboratory in Gaithersburg, Md. He also operates his company, RGD Research, Inc., where he

serves as a consultant for national and international businesses and governments on scientific programs.

Greg has nine inventions and procedures to his credit, six of which have been patented. Greg has published over 100 articles and made more than 125 presentations throughout the United States and the world, and has collaborated with scientists across the globe on a number of projects. Greg has served as an expert consultant for the International Atomic Energy Agency, as a committee member of the International

Union of Pure and Applied Chemists, and as an advisory board member for the Foundation for Chemical Research, Inc. at the University of Missouri in Rolla. He currently serves as a member of the American Chemical Society; Sigma Xi, The Research Society; the American Physical Society, and the American Nuclear Society.



We'd Love to Hear From You, Please Drop Us a Line!

Department of Chemistry
Missouri Western State University
4525 Downs Drive
St. Joseph, MO 64507
Phone: 816-271-4371
Fax: 816-271-4217
<http://www.missouriwestern.edu/chemistry>

Department of Chemistry Faculty and Staff

Dr. Ben Caldwell, Associate Professor, Chair
caldwell@missouriwestern.edu

Dr. Jerry Zweerink, Professor
zweerink@missouriwestern.edu

Dr. Len Archer, Professor
archer@missouriwestern.edu

Dr. Shauna Hiley, Associate Professor
hiley@missouriwestern.edu

Dr. Steve Lorimor, Associate Professor
lorimor@missouriwestern.edu

Dr. Mike Ducey, Associate Professor
ducey@missouriwestern.edu

Dr. Jon Rhoad, Assistant Professor
jrhoad1@missouriwestern.edu

Dr. Jim Puckett, Lecturer and High School Dual Credit Coordinator
jpuckett3@missouriwestern.edu

Vicky Sample, Chemical Stores Coordinator
sample@missouriwestern.edu

Cindie Curtis, Administrative Assistant
curtis@missouriwestern.edu

Important Upcoming Dates

Family Day	October 4, 2008
Fall Break	October 10-12, 2008
Presidential Inauguration	October 17, 2008
Homecoming	October 18, 2008
Last Day of Fall Classes	December 5, 2008
Winter Commencement	December 13, 2008
Winter Break (Campus Closed)	December 24—Jan 1
Beginning of Spring Term	January 12, 2009
Super Science Saturday	January 31, 2009
Boy Scout Merit Badge Workshop	February 7, 2009
Spring Break	March 8-15, 2009
Last Day of Spring Classes	April 27, 2009
Chemathon 2009	April 28, 2009
Spring Commencement	May 9, 2009

Help us stay in touch with you. Please take a few moments to complete the MWSU Chemistry Alumni Survey. The survey can be found at <http://www.missouriwestern.edu/chemistry/alumni>



Alchemist Club Corner

by Alchemist Club President, Will Newhart

The MWSU Alchemist Club has continued to make strides in providing a way for students interested in chemistry to become more involved on campus. Over the past several years, club membership has continued to rise steadily with the growing student population. The club continues with Western's commitment to community outreach with participation in the campus Family Day fair, Boy Scout Merit Badge Workshops, and Super Science Saturday, an annual exhibition to educate children and parents about chemistry with hands-on activities, and chemical demonstrations show called "Fire and Ice". The club also participates in campus oriented events such the freshmen Welcome Fair and move-in day for residential students. The time honored tradition of Chemathon continues

to draw large crowds of high school students ready and willing to earn prizes and scholarships for their exemplary knowledge of chemistry learned through the department's dual credit program. With all of these activities, club members still manage to conduct and present faculty assisted research projects at nationally recognized chemical symposiums such as at regional and national meeting of the American Chemical Society, the Pittsburgh Conference of Analytical Chemistry and Applied Spectroscopy, and the National meeting of the American Society for Biochemistry and Molecular Biology. Additionally, members get a chance to attend local American Chemical Society chapter meetings, and learn about influential researchers at the Spencer Awards dinner sponsored by the

Kansas City local section of the ACS. Faculty connections to local institutions and chemical businesses gives members access to hearing about cutting edge research, and insight into future employment prospects. Let's not forget that members also get a chance to meet new people with similar interests in science through movie and bowling nights, as well as holiday parties and everyday encounters throughout the year. All these events mentioned make the MWSU Alchemist club a fun and growing organization for eager MWSU students to participate in.

The 2008-09 Alchemist Club Officers are:

Will Newhart, President
Brandon Bressman, Vice President
Alicia Allen, Secretary
Jason Barnett, Treasurer