

The Mole Street Journal

Volume 6, Issue 6

Commencement 2007



Jody Buckholtz



Julie Chittenden



Gavin Jones



Jeff Froude

Doctoral Degrees Awarded

Julie Chittenden, directed by Derek Sears, "Investigation of the Effect of Dissolved Salts, Soil Layers, and Wind on the Evaporation Rate of Water on Mars."

Jody Buckholtz, directed by David Paul, "In-Vitro/In-Vivo Calibration Method for Electrochemical Oxygen Sensors." Buckholtz is an assistant professor of analytical chemistry at Northeastern State University in Oklahoma.

Jeffrey Froude, directed by Wesley Stites, "The Oxidation of Thrombomodulin in Smokers." Froude serves in the US Army.

Gavin Jones, directed by David Vivic, "Exploring the Chemistry of Intermediates in the Nickel Catalyzed Cross-coupling of Alkyl Electrophiles." Jones is an assistant professor of chemistry at Arkansas Tech University.

Jose Aldana, Emily Anderson, Ray Rajagukguk, and Sany Rajagukguk were announced at the time of their defense.

Haley Wins Harold Hantz Award

Aireal Haley received the Harold D. Hantz Four-Year Scholars Award for the most outstanding honors graduate in the Fulbright College. Haley graduated Summa Cum Laude. She will attend graduate school at the University of Michigan. Mentor David Vivic, "Adventures in Gold Chemistry: An Undergraduate Experience."



Aireal Haley

First Ranked Senior Scholars

Haley and fellow graduate **Megan Evans** received the recognition of First Ranked Senior Scholar. Evans graduated Summa Cum Laude and will attend UAMS Medical School. Mentor Neil Allison, "Study of the Synthesis and Chemistry of an Ortho-Quinone Methide Analog as a Potential DNA Alkylator and Antitumor Compound."



Megan Evans



The Seal of the University of Arkansas is affixed to each diploma cover. The central element of the Seal is the front entrance to Old Main, the oldest building on campus

First Ranked Senior Scholars are students who earned a 4.0 GPA for the baccalaureate degree with all course work being completed at the U of A. Only 25 graduates earned this honor.

Undergraduate Degrees Awarded

The graduates below are listed with their research mentor and senior thesis title.

Four Year Honors Students Bachelor of Science

Shelly Buffington, *Summa Cum Laude*, Mentor Matt McIntosh, "Diastereoselective Reductions of α -chiral, α -alkoxy Tosyl"

Juan Chipollini, *Summa Cum Laude*, Mentor Denise Greathouse, "Peptide/lipid Interactions of Anchored Antimicrobial Lactoferricin Peptides by 31P and 2H NMR Spectroscopy"

Sarah Covey, *Cum Laude*, Mentor Bill Durham, "Synthesis of a Water Soluble tris-chelating Ruthenium(II) Complex"

John Faver, *Cum Laude*, Mentor Matt McIntosh, "Synthesis of Biologically Active Simple Analogs of Sclerophytin-A"

Lacy Fincannon, *Magna Cum Laude*, Mentor Matt McIntosh, "Exploring the Generality of a Novel Directed Ortho Metalation"

Jay Kasbohm, *Cum Laude*, Mentor Ryan Tian, "Design and Synthesis of Branched Heteromicrostructures with Magnetic Cores for Biomedical Applications"

Ann Marie Kieber-Emmons, *Cum Laude*, Mentor Frank Millett, "The Effects of Mutations in Cytochrome C Have on the Binding with Cytochrome C Oxidase"

Michael McLaughlin, *Cum Laude*, Mentor Wesley Stites, "Variations in Thrombomodulin Levels Throughout the Menstrual Cycle"

Andy Whiteley, *Magna Cum Laude*, Mentor David Vicic, "Understanding the Factors Influencing Asymmetric Cross-coupling Reactions"

Department Honors Students Bachelor of Science

Joseph Allison, *Cum Laude*, Mentor Joshua Sakon, "Crystallization and X-ray Crystallographic Analysis of Cel74a from *Acidothermus cellulolyticus*"

Megan Carter, *Cum Laude*, Mentor Joshua Sakon, "Structural Changes of the Collagen Binding Domain by Different Metals"

Jana Gertsch, *Cum Laude*, Mentor Ingrid Fritsch, "The Effects of Finished Drinking Water Components on the Electrochemical Immunoassay Detection of *Cryptosporidium parvum*"

Evan Hawkins, *Magna Cum Laude*, Mentor Neil Allison, "Investigation of a Peterson-type Olefination Synthesis of Vinyl Allenes as Quinone Methide Precursors"

Becky Kerr, *Cum Laude*, Mentor Dan Davis, "The Expression and Purification of *Chlamydomonas reinhardtii* Plastocyanin in *E. coli*"

Khoi Vo, *Cum Laude*, Mentor Wesley Stites, "Calorimetric Measurement of the Enthalpy of Denaturation for Staphylococcal Nuclease"

Bachelor of Arts

Allyson Neal
Laura Wilson Pratt
Dawn Hawkins

Bachelor of Science

Rebecca Aleck
Tiffany Hays
Jordan Hess
Jay Hinkle
Johnathon Hudman
Benjamin Jones
John Kaufman
Melinda Larson, *Summa Cum Laude*
Joseph Smith
Timothy Timmons
Jennifer Woods

UA Alma Mater

Pure as the dawn on the brow of thy beauty
Watches thy soul from the mountains of God
Over the Fates of thy children departed
Far from the land where their footsteps have trod.
Beacon of hope in the ways dreary lighted;
Pride of our hearts that are loyal and true;
From those who adore unto one who adores us—
Mother of Mothers, we sing unto you.
We, with our faces turned high to the Eastward,
Proud of our place in the vanguard of Truth,
Will sing unto thee a new song of thanksgiving—
Honor to God and the Springtime of Youth.
Shout of the victor or tear of the vanquished;
Sunshine or tempest thy heart is e'er true;
Pride of the Hills and the white-laden Lowlands—
Mother of Mothers, we kneel unto you.
Ever the Legions of Sin will assail us,
Ever the Battle in Cities afar;
Still in the depths will thy Spirit eternal
Beckon us on like a piloting Star.
Down in dim years do thy dead children call thee,
Wafted to Sleep while the Springtime was new;
We, of the Present, thy hope of the Future—
Mother of Mothers, we pray unto you.

In 1909, Brodie Payne, an alumnus of the University of Arkansas, submitted his song to an ongoing competition to find a University song and won first prize. Henry D. Tovey, who was the director of the Glee Club at that time, set the song to music. In 1931, the University College Song Association in New York reviewed a collection of 500 college tunes, and the UA Alma Mater was judged to be one of the 25 best college songs of the United States.

Student News

Sturgis Study Abroad Grants

Undergraduates Vanessa Bradley and James Steele received Sturgis Study Abroad grants. Bradley for study in South Africa and Steele for study in Sweden.

Atlantis Grant

Sean Stevens, will spend the fall semester at Dublin City University and the summer term at the University of Regensburg. He is participating in the Transatlantic Dual Degree Program funded by an Atlantis Grant

GK-12 Program

Graduate students Charleigh English, Jeff Havens, Grace Ong, Lindsay Rutherford and Richard Smart were accepted into the UA GK-12 Fellowship program funded by NSF for the 2007-2008 school year.



Charleigh English



Jeff Havens



Grace Ong



Lindsay Rutherford



Richard Smart

July Safety Tip

Please report safety issues in the new laboratories to the chairman immediately by e-mail so that these can be addressed.

Correction



Roland Njabon

Roland Njabon was incorrectly noted as working under the direction of David Paul. Ryan Tian is Njabon's dissertation advisor. Please let us know when we err - contact cheminfo@uark.edu

REU Poster Presentations



Undergraduate students in the department REU summer research program will make poster presentations in the Chemistry Building, Thursday July 26. INBRE students will make poster presentations in Little Rock. David Paul poses with INBRE and REU students at left.

From left, front: Sharon Sanders, Lauren Woods, Carrie Peter. Middle: Jahnavi Chatterjee, Karole Blythe, Michelle Reed, Sherry Brixey. Back: David Paul, Cassandra Hunter, Charles Loftis, Nakita Lovelady, Roger Williams and Adam Ring

Summer Calendar

July

- 02..... Summer Session II begins
 04..... Independence Day, University of Arkansas CLOSED
 06..... Last date to drop a Session II class without a "W"
 26..... REU poster presentations
 30..... Last date to drop a Session II course with a "W"

August

- 03..... Final copies of master's thesis/doctoral dissertations must be submitted to the Graduate School for students graduating in August 2007
 10..... Summer II ends
 19..... Last date to receive 100% fee cancellation for an Official Withdrawal for Fall
 20..... Fall 2007 begins
 24..... Last date to register or add a full semester class
 27..... Fall seminar series begins
 31..... Last date to drop a full semester course without a "W"

Fall At-A-Glance

- September 3 Labor Day Holiday, U of A CLOSED
 October 3..... Early Progress grade reports for 1000 and 2000 level classes will be e-mailed to student's University email account
 October 26..... Last date to drop a full semester class or classes with a mark of "W"
 November 9-10 .. Fall INBRE Conference
 November 21..... Fall Break, NO CLASSES, U of A is open
 November 22-23 Thanksgiving Holiday, U of A CLOSED
 December 4 Last date to Officially Withdraw from all full semester classes for the Fall 2007 and last day of classes
 December 5 Dead day, NO CLASSES
 Final copies of master's thesis/doctoral dissertations must be submitted to the Graduate School for December 2007 graduation
 December 6-12... Final exams

- Dates above are also on the Web CT calendar <http://WebCT.uark.edu/>
- For more academic dates see <http://www.uark.edu/registrar/classes/calcover.html>
- To see what is going on in the Fulbright College see <http://fulbright.uark.edu>

New Procedure for Advance Cost Center

Research Accounting and Research Support and Sponsored Programs (RSSP) have implemented a new procedure and form for investigators to use when establishing a cost center prior to receipt of the award document from the sponsor.

Investigators will now be required to submit a budget, whether for the full amount of the anticipated award or the requested portion of the anticipated award. Starting July 2, the new form template, "Request for Sponsored Project Advance Cost Center Number," in pdf format, can be downloaded from the RSSP Postaward Web site at <http://www.uark.edu/admin/rsspinfo/postaward/index.html>. Alternatively, you may request the template by e-mailing rsspinfo@uark.edu.

July Birthdays

- 01.....Roger Koeppe
 01.....Deepika Talla
 15.....Aaron Beuterbaugh
 15.....Sharon Sanders, INBRE
 20.....Joshua Sakon
 27.....Mitzi Volgamore
 27.....Anna Daily
 27.....Charles Loftis, REU
 29.....Marv Leister

The publishing of birthdays is not intended to invade the privacy of anyone. If you prefer not to be included, please let us know.

Chemistry Library Summer Hours

Monday - Thursday....8 a.m. to 9 p.m.
 Friday8 a.m. to 5 p.m.
 SaturdayCLOSED
 Sunday.....2 p.m. to 6 p.m.

Reserved Parking

The department has two reserved parking spaces on the south side of the Chemistry Building. These are not for your personal convenience. The policy for use is the same as it was before we moved. See Heather Jorgensen for a pass.

The Department of Chemistry and Biochemistry at the University of Arkansas strives for excellence in research, teaching and service in chemistry—the central science.

We aspire to positions of leadership regarding the discovery of new scientific knowledge, the training of students, and the economic development of the State of Arkansas.

We seek to recruit and retain a diverse group of the best faculty, students and staff to address the challenges of the future through interdisciplinary and multidisciplinary research and education.