The department hosted its annual Honors Night April 26, 2012 at the UARK Ballroom on Dickson Street. The evening began with Honors College chemistry majors making poster presentations of their research. Senior Honors College students in the department must make a poster presentation in addition to defending and writing a thesis. Following the poster session, the department awarded more than $25,000 to scholarship and award recipients during a ceremony and dinner. Photos by Frank Millett. Students absent from picture are (np).
Faculty News

On the Go
Department Chair Bob Gawley gave a lecture at Brown University April 20 “Catalytic Dynamic Resolution-Discovery, Applications, and a Little Mechanistic Speculation.” Matt McIntosh gave the Scholes Lecture at Alfred University April 18th “The Role of Organic Synthesis in Drug Discovery.” Ryan Tian attended the MRS Spring 2012 Conference, San Francisco, CA April 8-13, where he presented “New Surface Properties and Thermal Stability of Composite Nafion/Titinate Nanobelt Membrane.” Charles Wilkins presented an invited paper at Pittcon 2012, March 15, Orlando, FL “Ion Cyclotron Resonance Spectrometry: Then and Now.” He presented the same paper at the 10th European FTMS Workshop April 1-5 at University of Warwick in the United Kingdom. Paul Adams has been appointed to a National Institutes of Health (NIH) Study Section in Macromolecular Structure and Function (Section B). The Study Section will be held in San Francisco, CA in June. Graduate student Ryan Bauer is leaving May 14 to spend the summer working with Dr. Osamu Matsushita at Okayama University Medical School.

Promotions Announced
Paul Adams was promoted to the academic rank of Associate Professor with tenure. The Board of Trustees and President Donald R. Bobbitt approved this at their meeting March 30, 2012. This promotion recognizes the significant contributions made to the university in the areas of teaching, research, and public service. Dr. Adams joined the faculty as an Assistant Professor in January of 2007. Bill Durham was promoted to the academic rank of University Professor. The Board of Trustees and President Donald R. Bobbitt approved this at their meeting on March 30, 2012. Appointment to a university professorship signifies a special honor conferred only upon active faculty of extraordinary merit. Dr. Durham joined the University of Arkansas as an Assistant Professor in 1979. He was promoted to Associate Professor in 1984, and full Professor in 1990. Dr. Durham served as the department’s Vice-Chairman from 1998-2000, and as Chairman form 2000-2011. Roger Koepe was promoted to the academic rank of Distinguished Professor at the March meeting of the Board of Trustees and President Donald R. Bobbitt. A distinguished professorship is reserved for those individuals who are recognized nationally and internationally as intellectual leaders in their academic disciplines for extraordinary accomplishments in teaching, published works, research, and who have gained such recognition for distinction at this or another university prior to appointment as such. Dr. Koepe joined the University of Arkansas’ faculty in 1979 as an Assistant Professor. He was promoted to Associate Professor in 1982 and Professor in 1987. He was honored with the rank of University Professor in 1996.

Service Commendation
Denise Greathouse was honored with a Service Commendation from Sidney Burris, Director, Fulbright College Honors Program for her involvement in the reading of numerous applications to the program. Dr. Greathouse is a Research Assistant Professor and has been associated with the university since 1987.

Golden Tusks Awarded
Margie Hoskins, Josh McFarland and Ronesha Sharma, Fulbright IT, were all awarded Golden Tusks for going out of their way to be cooperative and helpful.

Kuroda Inducted into AXΣ Hall of Fame
Distinguished Professor Paul Kuroda has been inducted posthumously into the AXΣ Hall of Fame, for his lifelong work as an ambassador for the chemical sciences and as a contributor to the success of many generations of chemists. Dr. Kuroda joined the Fraternity in 1996. He was educated at Tokyo Imperial University and received his doctoral degree in 1944. He emigrated to the United States in 1949 to become a research fellow at the University of Minnesota. He joined the UA in 1952 and retired in 1987. During his tenure at the UA, Dr. Kuroda trained 64 PhD students, several postdoctoral associates, became the first Edgar Wertheim Distinguished Professor of Chemistry and was the author or co-author of almost 400 publications. His research in nuclear chemistry began in Japan, before the atomic bomb was dropped on Hiroshima and Nagasaki. He was known for his study of spontaneous fission and for having predicted, in 1956, that self-sustaining nuclear chain reactions could have occurred naturally in Earth’s geologic history, and for having predicted, in 1960, that Plutonium-244 had been present in the early solar system.
Honors Night (cont. from p. 1)

Poster presentations were made by the Honor’s Class.

**Shaun Adams** Identification and Characterization of Juxtamembrane Domains (Kumar)

**Ashlee Bell-Cohn** Characterization of Antimicrobial Peptides Relating to Shortened RWALP Model Peptides (Koeppe)

**Kaitlyn Bryant** Characterization and Optimization of Growth of Rheb F31L (Adams)

**Timothy Burnside** Reaction of Cytochrome c and Cytochrome b₅ (Millett)

**Courtney Cagle** The Biodiversity and Prevalence of Entamoeba in Periplaneta americana, the American Cockroach (Silberman)

**Emily Crossfield** Purification and Characterization of Novel Affinity Tag (Kumar)

**Stephen Dalby** Partial Synthesis of Pd-cycloheptatrenylidene Complexes via N-heterocyclic Carbenes to be Tested for Catalytic Activity (Allison)

**Arshan Dehbozorgi** Characterization of a Thermostable Quadruple Mutant of Human Fibroblast Growth Factor-I (Kumar)

**Hunter Dunn** Optimization and Characterization of a Mutant of Cdc42 (Adams)

**Alta Johnson** New Methods for Green Pharmaceutical Synthesis (McIntosh)

**Alex Jones** Analysis of the H35F and L58F Mutation on the Human Acidic Fibroblast Growth Factor (Kumar)

**Mizuho Kaneko** Effect of the Ratio of Cd and Te Surface Atoms on the Blinking Statistics of Quantum Dots: A Single particle Fluorescence Study (Heyes)

**Brandon Kelly** Water Soluble Nanoparticles for Biological Imaging (Gawley)

**Devin Kennedy** Analysis of Low and Intermediate Molecular Weight Polyaniline by MALDI Fourier Transform Mass Spectrometry (Wilkins)

**Kelsey Knewtson** From Hydrogels to Chiral Ligands: A compilation of Research Done Both at Home and Abroad (Gawley)

**Iris Kon Njewel** Optimization and Characterization of Cdc42 (F28DeltaL8) (Adams)

**Colton Kordsmeier** Characterization of Methylated Lactoferricin B Antimicrobial Peptides (Greathouse)

**Ethan Latimer** Structure Determination of Clostridium histolyticum S2a Collagen Binding Domain and Staphylococcal Nuclease Improving the Specificity of Cynogen Bromide Cleavage in Proteins (Sakon)

**Joanna Libby** Improving the Specificity of Cynogen Bromide Cleavage in Proteins (Stites)

**Nabih Masri** Enantioselective Cyclopropanation of Enamides (Zheng)

**Matthew McMahon** Analysis of Platinum Squares by MALDI-FTMS (Wilkins)

**Morgan Merriman** Design of Novel Heparin Binding Peptides (Kumar)

**Ashley Miller** Characterization of a Stabilizing Mutant of the Human Fibroblast Growth Factor (Kumar)

**Jessica Morales** Triple Mutant (K126E/K132E/R146E) of the Human Acidic Fibroblast Growth Factor-a (Kumar)

**Amir Mortaqzavi** Qualitative and Quantitative Assessment of Melanocyte-Specific Autoantibodies Prior to and through out Development of Autoimmune Vitiligo in Smyth Line Chickens (Erf)

**Christopher Moutos** Membrane Permeability Induced by Antimicrobial Peptides (McNabb)

**Devin O’Dea** A Search for Deep Tissue Brain Cells that Contain a Rhodopsin-like Pigment for Photoreception (Kuenzel)

Milestones

Allison Elizabeth Millett was born to Paul and Lea Millett in Idaho Falls on April 24 at 11:27 a.m. She weighed 7 pounds 8 ounces. She is the second granddaugther of Eunice and Frank Millett.

**Christian Loeschel** defended his Ph.D. dissertation Monday, April 23. His title was “Part I—A Study of the Formation of Carbenes by Elimination of α-Bromosilanes and Application toward the Synthesis of Transition Metal Complexed Quinone Methide Analogs. Part II—Development of Novel 7-Membered Ring Carbene Ligands for Palladium Catalyzed Cross Coupling Reactions.” His research mentor is Neil Allison.
Excellence in the Central Science

Honors Night (cont. from p. 3)

Parth Patel  Cleaning Glass Surfaces and Modifying with PEG Biotin (Heyes)
Kaila Pianalto  Investigation of Electron Transfer between Cytochrome b5 and Cytochrome C Wild Type and Mutants (Millet)
Leah Ramey  Proliferation and Metabolism of Human Pluripotent Stem Cells Grown on Different Membrane Substrates (Jin)
Ettore Rastelli  Ruthenium (II) Photocatalyzed [3+2] Annulation of Spirocyclic Cyclopropylamines with Olefins (Zheng)
Kimberly Reynolds  Synthesis and the Use of Gold Nanocages for Controlled Release (Chen)
Richards Rieske  Functionality of Disulfide Bond in D2 Domain of Fibroblast Growth Factor Receptors (Kumar)
Sunshine Robertson  Quantitative Proteomic Analysis of Radiation Resistant Pancreatic Cancer Cells (Du)
Jeffrey Roesser  Collagen Binding Domain of Collagen 5a3b (Sakon)
Ashley Rosenberg  Towards the Synthesis of Antascomicin B (McIntosh)
Preston Scrape  Redox-Magnetohydrodynamic Flow between Distant Active Electrodes (Fritsch)
Matthew Sharum  Metal Doped Alginate Hydrogels (Zheng)
Spencer Shinabery  Intermolecular [3+2] Cycloaddition of Cyclopropylamines with Olefins by Visible Light Photocatalysis (Zheng)
Rebecca Simpson  Investigation of the Structural Stability of cpSRP43 Chromodomain 2 by Hydrogen-deuterium Exchange (Kumar)
Colby Smith  Membrane Interactions of Antimicrobial Tryptophan-Methylated Lactoferricin Peptides (Greathouse)
Kelsey Sparks  Effects of Aromatic Anchor Identity on Dynamics and Orientation of Transmembrane Peptides (Koeppen)
Galen Tobey  Methionine Sulfoxide as a Biomarker of Oxidative Stress (Stites)
Jake Usery  Understanding the Binding Interactions of the 43kDa Subunit of cpSRP (Kumar)
Fang Weng  Study of the Effect of Microdialysis Membrane Hydrophobicity on the Collection of Cytokines (Stenken)
Jahan Zehtaban  Identifying the Structure and Resonance of CypSRP43 (Kumar)

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.

Calendar of Events

May

06  Dead Day
07-11  Final Exam week
12  Commencement Day
Fulbright College-1:00 p.m. Bud Walton Arena. Assemble at 12:15 p.m. inside the truck tunnel under the Harrod (east) entrance.
12  Complete all degree requirements no later than this date to be eligible for spring graduation
15  Departmental Canoe Trip
20  INBRE students arrive
24  Last day to drop SSI class without a mark of "W" or change SSI class from credit to audit
28  Memorial Day Holiday-University Closed
31  Last day to drop SS III course without a “W”

June

04  Classes begin for SS IV & V
06  Last day to drop SS V class without a “W”
12  Last day to drop SS IV course without a “W”
18  Last day to drop a SSI class with a “W”

Library Hours

CHBC Library (CHEM 225)
http://libinfo.uark.edu/chemistry
May 12-20  Monday-Friday  8 a.m.-5 p.m.  575-2557
May 21  Summer Hours
Monday-Thursday  8 a.m.-6 p.m.
Friday  8 a.m.-5 p.m.

The chemistry and biochemistry library resources can be accessed in the following LibGuides: http://uark.libguides.com/content.php?pid=110953. Please bookmark for future use.

Theses and dissertation resources can be found on the following LibGuide: http://uark.libguides.com/content.php?pid=123035&sid=1057466.