

The Mole Street Journal

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Arkansas INBRE Research Conference

The department is again co-hosting the Arkansas INBRE Research Conference, Nov. 7-8 in downtown Fayetteville.

The conference will feature a poster session, banquet, guest speakers, vendor show, faculty mixer and workshops.

New this year, undergraduates in biological sciences, physics and chemistry and biochemistry, are invited to submit abstracts for student oral presentations. Six in each of the three disciplines will be selected from submitted abstracts to present Friday afternoon.

The event begins Friday afternoon with faculty talks at the University of Arkansas Global Campus Conference Center (CTED 204) at 1 p.m.

Krishan K. Arora, Ph.D., Health Scientist Administrator, Division of Research Infrastructure, National Center for Research Resources, National Institutes of Health, Department of Health and Human Services will be the first speaker. He will present "NIH IDeA Program and Mentoring in Building and Enhancing Research Capacity."

Matt McIntosh, will present "The Role of Organic Synthesis in Drug Discovery."

Don White, Jr., James M. White Professor of Wildlife Ecology, School of Forest Resources, University of Arkansas at Monticello, and Stephen R. Addison, professor and chair, department of physics and astronomy, University of Central Arkansas, will also present.

The featured speaker is University Distinguished Professor David G. I. Kingston, department of chemistry, Virginia Polytechnic Institute and State University, who will present "Chemistry, Drug Discovery, and Conservation: What is a Chemist Doing in the Rain Forest?" Kingston will present at the banquet Friday night at the Fayetteville Town Center.

A combined poster session, breakfast, workshops and student award presentations will be Saturday.

The poster session is open to faculty, researchers, graduate students and undergraduate students. Those with INBRE

or NIH funding are encouraged to participate. No affiliation with INBRE is required and there are no registration fees. The registration deadline is Friday, Oct. 10.

Jack Lay will give a mass spectrometry workshop. Other workshop topics are Arkansas INBRE funding, finding scholarly resources and intellectual property.

This conference is sponsored by the Arkansas INBRE and hosted by the departments of biological sciences, physics, and chemistry and biochemistry, in the Fulbright College of Arts and Sciences, University of Arkansas.

To register or to view the schedule see <http://chemistry.uark.edu/1733.htm>

For more information contact cheminfo@uark.edu.

Arkansas INBRE

The Arkansas INBRE is funded by a grant from the NIH National Center for Research Resources, for the purpose of broadening the geographic distribution of NIH funding for biomedical and behavioral research.

It has established a statewide network that links Arkansas institutions of higher education to promote infrastructure for building additional biomedical research capacity in Arkansas. Lawrence Cornett, UAMS, is the PI.

For more information see <http://brin.uams.edu/default.asp>

Koeppke Takes Expanded Role within INBRE

Beginning in July, **Roger Koeppke** assumed new responsibilities as director of the Outreach Core for the Arkansas INBRE. Donald R. Bobbitt was the previous director.

Koeppke has served on the INBRE Steering Committee and as director of the Science Research Core since 2005.

The Outreach Core supports the Arkansas INBRE Research Conference and summer research opportunities for students and faculty from Arkansas campuses.



Roger Koeppke

Faculty News

On the Go

Suresh Kumar gave a lecture at the University of Missouri, Columbia Oct. 3.

Matt McIntosh visited Arkansas Tech in September for recruiting.

Research associate **K.M. Kathir** will present a poster "Understanding the Mechanism of the Anti-angiogenic Activity of Suramin," at the GRASP meeting at Kansas State University Oct. 3. He is in the Kumar lab.

Joshua Sakon presented "A Fusion Protein Of Parathyroid Hormone and a Collagen Binding Domain Shows Superior Efficacy and Longer Duration of Action Compared to Pth(1-34) as an Anabolic Bone Agent in Normal Female Mice," at the 30th annual meeting of the American Society in Bone and Mineral Research, in Montreal Sept. 13.

Julie Stenken will attend an NIH study session in Washington, D.C. Oct. 7.

Ryan Tian made a recruiting visit to Huntsville High School in September.

64th Southwest Regional ACS Meeting, Oct. 1-4, Little Rock

Paul Adams and **Bill Durham** attended.

Ingrid Fritsch and organized the session "Bioanalytical Chemistry" and the recruiting table.

Bob Gawley presented "Transatlantic Dual Bachelor of Science Degree in Chemistry."

Jack Lay chaired the session on "Small Molecule Mass Spectrometry" and presented "Mass Spectrometry Approaches for Extracting Protein Folding Energies."

Matt McIntosh chaired the Cope Scholar Symposium.

Julie Stenken presented "Challenges and Opportunities in Detecting in Vivo Peptide and Protein Chemical Communication."

Charlie Wilkins presented "Phospholipid Analysis in Genetically Modified Yeast by Fourier Transform Mass Spectrometry."

Nan Zheng presented "The Application of Pd- and Cu-Catalyzed Carbon-Nitrogen Bond Formation to Heterocycle Synthesis" at the Cope Scholar Symposium.

Post docs and Researchers

Raja Dakshinamurthy and undergraduate **Drew Avery**, Kumar lab, presented "Effect of Osmolytes on Protein Stability and Folding."

Mass Spec researcher **Jennifer Gidden** presented "Differentiation of Bacteria Using Lipid Profiles from MALDI-MS."

Huimin Liu, Adams lab, presented a poster "Expression of and Preliminary Biophysical Characterization of a Minimal Binding Domain Peptide of TSC2 That Binds to the Small GTPase Rheb."

Graduate Students

Coy Batoy, Wilkins lab, presented a poster "Analysis of Phospholipid Profiles of Different Yeast Mutants that have Altered Transcription Factors by MALDI FTMS."

David Clay, McIntosh lab, presented a poster "Toward the Total Synthesis of Antascomicin B via an Ireland Claisen (ICR) and Allylic Diazene (ADR) Rearrangement Sequence."

Dan Eddings, Gawley lab, presented a poster "Towards the Synthesis of the C22-C34 Fragment of Antascomicin B"

Ryan Farris, Gawley lab, presented "Optical Sensor for the Paralytic Shellfish Toxins."

Penny Lewis, Gawley lab, presented "Toward Electrochemical Detection of Saxitoxin: Signal Amplification by Redox Cycling at a Self-Contained Microelectrode Array in a Microchannel."

Tamilselvi Marutharaj, Durham lab, presented a poster "Dinuclear Ruthenium (II) Diphen Complex of HAT."

Chris Mazzanti, Koeppel lab, presented a poster "Experimental Solvation of KCl and NaCl in N-methylacetamide."

Sasa Miladinovic, Wilkins lab, presented a poster "LDI-FTMS Analysis of Polyacetylene Thin Films Deposited on Silicon by Plasma Polymerization."

Maha Shrestha, McIntosh lab, presented a poster "New Applications of the Allylic Diazene Rearrangement"

Vitaly Vostrikov, Koeppel lab, presented "Solid-State NMR Approaches to Transmembrane Peptide Tilt."

Melissa Weston, Fritsch lab, presented a poster "Manipulating Fluid Flow on a Chip Through Redox

Magneto-hydrodynamic Induced Convection,"

Undergraduates

Emily Edwards, Adams lab, presented "An Innovative Method for the Purification of Recombinant Proteins."

Antony Herbaugh, Stenken lab, presented a poster "An in Vitro Stopped Flow Method of Microdialysis Sampling for Cytokines."

Christena Hooten, Fritsch lab, presented a poster "Investigations of an Immunoassay-Compatible Species for Pumping with Magneto-hydrodynamic Force."

Miles Ritter, Stenken lab, presented a poster "Microdialysis Sampling for Localized Delivery of Immune Modulators."

Sean Stevens, Gawley lab, presented a poster "Detection and Toxin Profiling of Paralytic Shellfish Toxins Through the use of High Performance Liquid Chromatography."

Former REU student **Beth Hilburn** presented a poster "Exploring New Synthetic Routes for Nano-C60 Colloidal Suspensions."

Arkansas Biosciences Institute Fall Research Symposium, Oct. 7, Little Rock

Research associate, **Raja Dakshinamurthy**, Kumar lab, will present "Is Heparin Binding a Prerequisite for FGF Signaling?"

Graduate student **Estelle Huff**, Pulay lab, will make a poster presentation "Predicted NMR Shift Changes in the Aromatic Ring Due to Cation- π Interactions." She will present the same poster at the Conference on Current Trends in Computational Chemistry in Jackson, Miss, Oct. 31 to Nov. 1.

October Safety Tip

The area surrounding a balance is generally a housekeeping problem that needs everyone's attention.

Student News

Fulbright College Scholarship Luncheon

Several students were recognized at the annual tribute to outstanding students and benefactors of the Fulbright College Sept. 19 in the Alltel Ballroom.

Graduate student **Nick Gleason** received the Barrett S. and Peggy S. Duff Doctoral Fellowship awarded to a most distinguished and talented graduate student pursuing a career in graduate research. Gleason is in the Koeppel lab.



Nick Gleason

The following undergraduates were recognized.

Augustus C. and Margaret B. Jennings Endowed Scholarship - **Rhys Moore** and **Olena Pickett**.

Dr. Bill and Sandra Tranam Award, awards a student of academic promise in the arts and sciences - **Iryna Polyakova**.

Fulbright College of Arts and Sciences Scholarship, awarded for academic achievement - **Kellie Ong**.

Metraileer Support Scholarship, awarded students of academic promise majoring in science - **Christine Nicholson** and **Lindsey Brown**.

Roy and Christine Sturgis Study Abroad Grants - **Cory Garren** for study in South Africa, summer 2008 and **Charles McClure** for study in Costa Rica, fall 2008.

Fall 2007 scholarship recipients and spring awardees were also recognized.

Rutherford Passes Cumes

Graduate student **Lindsay Rutherford** passed the appropriate number of cumes with emphasis in biochemistry and is now admitted to candidacy. She is in the Kumar lab.



Lindsay Rutherford

Undergraduates to Present

Undergraduates **Laura Bradney** and **Rachel Thomas** will present at the Arkansas Association of Public Universities/Arkansas Science and Technology Authority annual conference in Little Rock.

Bradney will present "Investigations of Antimicrobial and Lipid Perturbing Properties of Modified Lactoferrin Peptides."

Thomas will present "Influence of Proline upon the Folding of a Designed Transmembrane Alpha-Helical Peptide."

Both are students in the Koeppel lab.

Web CT is now Blackboard

Log-on to the department site on Blackboard @ www.courses.uark.edu to find forms, a calendar of events, speaker information, job opportunities and more. To make suggestions or to gain access, contact cheminfo@uark.edu.

Family News

Quan Yuan married Yan Yang in Beijing, China, Aug. 23. Yang is from Beijing and holds a bachelor's degree in mechanical engineering. A reception took place at the home of Dan and Marilyn Davis in September. Yuan is a graduate student in the Millett lab.

Instructor and alumna **Mya Norman**, B.S. '99, M.S. '01, gave birth to a boy, August Taylor Norman, Saturday, Sept. 28. Norman will be on maternity leave until spring 2009. The department hosted a shower for her in September.

Graduate students **Amy Webb-Durchman** and **Jeremy Durchman** welcomed the birth of their son Lennon in August.



Top left: Quan Yuan and his bride Yan Yang at their ceremony.

Top right: Mya Norman, pre-baby at a shower in September.

Bottom: Lennon Durchman

Calendar of Events

October

- 01-04 64th Southwest Regional ACS Meeting, Little Rock
 06..... Department seminar - Oliver Reiser, University of Regensburg
 08..... Early progress reports for 1000 and 2000 classes e-mailed to students
 09..... Department picnic - The Gardens
 10..... CUME
 13..... Department seminar - Larry Suva, UAMS
 20..... Department seminar - Robert Powers, University of Nebraska
 24..... CUME
 27..... Department seminar - Babak Nikoobakht, National Institute of Standards and Technology
 31..... Last date to drop a full semester course with the mark of "W"

November

- 03-14 Priority registration for spring 2009 for currently enrolled students
 03..... Department seminar Ellen Fisher, Colorado State University
 07-08 INBRE conference
 10..... Department seminar - open date
 17..... Department seminar - Robert Gensure, Ochsner Health Systems
 21..... CUME
 24..... Department seminar - Robert Ben, University of Ottawa
 26..... Fall break - no classes
 27..... Thanksgiving - university CLOSED
 28..... University CLOSED

December

- 01..... Department seminar - Christy Landes, University of Houston
 08..... Fall seminar series concludes - Olafs Daugulis, University of Houston
 09..... Last day of fall classes
 09..... Last day to officially withdraw from all courses
 10..... Department holiday potluck
 10..... Dead Day - no classes
 10..... Final copies of master's thesis and doctoral dissertations must be submitted to the Graduate School for students graduating in Dec. 2008
 11-17 Final exams
 24-31 University CLOSED

Department Picnic

Thursday, October 9, 2008

At the Gardens off Razorback Rd. southwest of Bud Walton Arena
 Starts @ 6 p.m., dinner @ 6:30 p.m.

POTLUCK – bring your favorite dish or dessert. Sign-up sheet at the main desk, or e-mail cheminfo@uark.edu or call 575-4601. Hamburgers, veggie burgers, hotdogs, buns, condiments, potato salad, coleslaw, beans and beverages will be provided. Families welcome.

October Birthdays

- 01..... Rohana Liyanage
 03..... Nicholas Gleason
 09..... Leslie Johnson
 11..... Christopher Mazzanti
 13..... Gwen Mattice
 16..... Andy Williams
 20..... Zheng Li
 21..... Tomasz Janowski

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

Library Hours

Chemistry and Biochemistry

Fall hours

- Monday - Thursday.... 8 a.m. to 9 p.m.
 Friday 8 a.m. to 6 p.m.
 Saturday CLOSED
 Sunday..... 2 p.m. to 6 p.m.

Exceptions to fall hours

- Nov. 25-26 8 a.m. to 5 p.m.
 Nov. 27 CLOSED
 Nov. 28 CLOSED
 Nov. 30 CLOSED
 Dec. 17-19..... 8 a.m. to 5 p.m.
 Dec. 21 CLOSED
 Dec. 22-23..... 8 a.m. to 5 p.m.
 Dec. 24-Jan. 1 CLOSED

<http://libinfo.uark.edu/chemistry/>

Fall CUME Dates

Cumulative exams for graduate students will take place on the following Fridays from 5 p.m. to 6 p.m. in CHEM 144

Oct. 10, Oct. 24, Nov. 21.

United Way

Please return your United Way pledge cards to **Heather Jorgensen** by Oct. 15. Regardless of making a pledge. Last year the department received a sliver award for its combined participation.