1999

83rd Annual Meeting, 1999. Program

Academy Editors

Follow this and additional works at: http://scholarworks.uark.edu/jaas

Recommended Citation
Available at: http://scholarworks.uark.edu/jaas/vol53/iss1/4

This article is available for use under the Creative Commons license: Attribution-NoDerivatives 4.0 International (CC BY-ND 4.0). Users are able to read, download, copy, print, distribute, search, link to the full texts of these articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author.
This Arkansas Academy Annual Meeting report is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Journal of the Arkansas Academy of Science by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.
PROGRAM
Arkansas Academy of Science
83rd Annual Meeting
April 2-3, 1999
Arkansas Tech University

SCHEDULE OF EVENTS

Friday, April 2, 1999
9:00 am - 11:00 p.m. Executive Committee Meeting
Doc Brian Student
Services Bldg. 104

11:00 a.m. - 4:00 p.m. Registration
McEver Entrance

11:00 a.m. - 12:00 p.m. First Business Meeting
Doc Brian Student
Services Bldg. 104

1:00 p.m. - 5:00 p.m. Poster Sessions
McEver Hallway

1:00 p.m. - 4:00 p.m. Oral Presentations
- Physics & Geology
  McEver 202
- Biomedical Science
  McEver 162
- Terrestrial Ecology
  McEver 206
- Invertebrate Zoology
  McEver 210
- Chemistry I
  McEver 204

2:00 p.m. - 2:30 p.m. Refreshments
McEver Entrance

4:00 p.m. - 5:00 p.m. Library & Technology Center Tour
Meet at Registration Desk

4:00 p.m. - 5:00 p.m. Board of Governors Meeting of the Ouachita Biological Station
McEver 204

5:00 p.m. - 6:15 p.m. Social Mixer*
Holiday Inn,
Nebo Room

6:30 p.m. - 8:30 p.m. Dinner
Chambers Cafeteria
East Entrance

Welcome by Dr. Charles Robert Brown, President

7:30 p.m. - 9:00 p.m. Invited Guest Speaker
Chambers Cafeteria
Dr. Dawn Bonnell, University of Pennsylvania

9:00 p.m. - 9:30 p.m. Good Evening**

Saturday, April 3, 1999
7:30 a.m. - 10:00 a.m. Registration
McEver Entrance

7:30 a.m. - 10:00 a.m. Refreshments
McEver Entrance

8:00 a.m. - 11:00 a.m. Oral Presentations
- Microelectronics & Eng.
  McEver 202
- Aquatic Ecology
  McEver 162
- Vertebrate Zoology
  McEver 206
- Plant Ecology & Botany
  McEver 210
- Chemistry II
  McEver 204

11:00 a.m. - 11:30 a.m. Judges Meeting
McEver 202

12:00 p.m. - 1:00 p.m. Second Business Meeting
& Award Presentations
McEver 162

*A shuttle bus will operate between McEver Hall and the Holiday Inn during these indicated times.

SECTION PROGRAMS
* Undergraduate **Graduate

ORAL PRESENTATIONS
Friday, April 2, 1999
Physics and Geology
Location: McEver Hall, Room 202

Chairperson: Dr. Wilfred J. Braithwaite, University of Arkansas at Little Rock

Time Topic
1:00 Karen Abruckle and Leo Carson Davis. Department of

PALEOZOIC FOSSILS FROM THE GULF COASTAL PLAIN OF ARKANSAS

Ben Waggoner, Department of Biology, University of Central Arkansas, Conway, AR 72035-0001. MAZON CREEK-TYPE FOSSILS FROM THE MCALESTER FORMATION (PENNSYLVANIAN: DESMOINESIAN), JOHNSON COUNTY, ARKANSAS
1:30 Felix Tenduk, Department of Mathematical Sciences & Technology, Box 4587, University of Arkansas at Pine Bluff, Pine Bluff, AR 71611. STATISTICAL ANALYSIS OF CLIMATIC VARIABLES IN THE ARKANSAS-RED RIVER BASIN

1:45 William Tyler, S. Khan, V. Blunt, V. Litman, W.M. Willingham & A.H. Chowdhury, Research Center, University of Arkansas, Pine Bluff, AR 71611. CALIBRATION OF ZAHN CUP

2:00 Christine A. Byrd, W.J. Braithwaite, Physics and Astronomy, University of Arkansas, Little Rock, AR 72204, E. S. Braithwaite, Science and Mathematics, Cedarville College, Cedarville, OH 45314, and J. G. Cramer, Department of Physics, University of Washington, Seattle, WA 98195. IMPACT ON HBT OF TOTAL SEPARATION OF KAONS AND PIONS IN STARS TPC

2:15 Frances Terry and M. Hemmati, Physical Science Department, Arkansas Tech University, Russellville, AR 72801. ELECTRON SHOCK WAVES

2:30 Break

2:45 Christine A. Byrd, W.J. Braithwaite, Physics and Astronomy, University of Arkansas, Little Rock, AR 72204, and E. S. Braithwaite, Science and Mathematics, Cedarville College, Cedarville, OH 45314. ONLINE ACCEPTANCE AND EFFICIENCY MONITORING OF STAR'S MAIN TPC

3:00 Mostafa Hemmati and Heath Spillers, Physical Science Department, Arkansas Tech University, Russellville, AR 72801. EFFECTS OF SCIENCE CRUSADE IN ARKANSAS

3:15 Eric George, Mostafa Hemmati, and Frances Terry, Physical Science Department, Arkansas Tech University, Russellville, AR 72801. SPEED RANGE FOR BREAKDOWN WAVES

3:30 Robert Fitlen, Ronald E. Nelson, Arkansas Tech University, Russellville, AR, 72801. WAVELETS FROM FINITE IMPULSE RESPONSE FILTERS

3:45 R. Tut Campbell and Jeff Robertson, Physical Science Department, Arkansas Tech University, Russellville, AR, 72801. A SUPERNova PATROL PROGRAM

Biomedical Science

Location: McEver Hall, Room 102

Chairperson: Dr. Scott Kirkconnell, Arkansas Tech University

Time
Topic

1:00 Garrett B. Sanford, Thomas J. Lynch, James W. Hardin, and John Theus. 1Dept. of Biology, University of Arkansas at Little Rock; Little Rock, AR 72204, 2John Wayne Cancer Center, Santa Monica, CA 90404, 3University of Arkansas for Medical Sciences, Little Rock, AR 72204. STUDIES ON NFkB IN CULTURED MULTIPLE MYELOMA CELLS

1:15 C.V. Ashburn and W.L. Gray. Department of Microbiology and Immunology, University of Arkansas for Medical Sciences, Little Rock, AR 72205. IDENTIFICATION OF THE SVV GLYCOPROTEIN LgI

1:30 Jonathan Whitlock, Center for Basic Neuroscience, UT Southwestern Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75235-0111, Hendrix College, undergraduate affiliation
1:45 Jeffrey T. Briggler, James E. Johnson, and Dwayne D. Rambo, Department of Biological Sciences, University of Arkansas, Fayetteville, AR 72701. DEMOGRAPHICS OF A RINGED SALAMANDER (AMBYSTOMA ANNULATUM) BREEDING POPULATION DURING MIGRATION.

2:00 Thomas Nelson, Department of Biological Sciences, Eastern Illinois University, Charleston, IL 61920. EVALUATION OF THREE TYPES OF FOREST OPENINGS FOR WILD TURKEYS.

2:15 Break.

2:30 Shawn M. Cochran, J. D. Wilhide and V. R. McDaniel, Department of Biological Sciences, Arkansas State University, State University, 72467. ROOSTING AND HABITAT USE OF RAFINESQUE’S BIG EARED BAT IN A BOTTOMLAND HARDWOOD FOREST ECOSYSTEM.

2:45 Paul T. Hoover, Janet Lanza, Brian Wells, Samuel Nelson, Biology Department, University of Arkansas at Little Rock, 2801 South University, Little Rock, Arkansas 72204. THE EFFECTS OF VARYING AMINO ACID CONCENTRATIONS ON REPRODUCTIVE SUCCESS BY CABBAGE WHITE BUTTERFLIES.

3:00 Janet Lanza, Biology Department, University of Arkansas at Little Rock, 2801 South University, Little Rock, Arkansas 72204. OPEN-ENDED INQUIRY-BASED LABORATORIES IN FIRST-YEAR BIOLOGY.

3:15 Jimmy D. Winter and Janet Lanza. Graduate Institute of Technology, University of Arkansas at Little Rock, 2801 South University, Little Rock, Arkansas 72204. EXPERIENCING RESEARCH AND LEARNING INQUIRY-BASED TEACHING METHODS THROUGH THE ARKANSAS STRIVE PROGRAM.

INVERTEBRATE ZOOLOGY

Location: McEver Hall, Room 210

Chairperson: Dr. Gerald E. Walsh, 9 Yocum Road, Rogers, AR 72756

Time Topic
1:00 Heidi Dukat and Dan Magoullick, Department of Biology, University of Central Arkansas, Conway, Arkansas 72035. EFFECTS OF PREDATION ON HABITAT SELECTION BY TWO SPECIES OF STREAM-DWELLING CRAYFISH, Orconectes marchandi AND Cambarus kubisi.

1:15 *Michael Buck, Dr. Robert Engelken, C. Workman, A. Thapa, and C. Edrington, Department of Engineering, Arkansas State University, State University (Jonesboro), AR 72467. INDUM-TELLURIUM COMPOUNDS ELECTROPLATED FROM MOLTEN SALT BATHS.

1:30 Camille Flinders Sand Dan Magoullick, Department of Biology, University of Central Arkansas, Conway, Arkansas 72035. HABITAT PARTITIONING IN A LOTIC CRAYFISH COMMUNITY IN THE OZARK PLATEAUS: THE ROLE OF ENVIRONMENTAL VARIABLES.

1:45 Gianetta L. Adams, James E. Johnson, and John V. Brahana, U.S. Geological Survey, Department of Biological Sciences and Department of Geology, University of Arkansas, Fayetteville, AR 72701. ARKANSAS RANGE EXTENSION FOR THE BRISTLY CAVE CRAYFISH, CAMPUS ADAMS.

2:00 BARUS SETOSUS FAXON (DECAPODA, CAMBARIIDAE).

2:15 Break.

2:30 J. M. Turbeville and Jeffrey T. Briggler, Department of Biological Sciences, University of Arkansas, Fayetteville, AR 72701. THE FIRST RECORD OF THE LEECH MACRORDELLA DIPLOTERIA (MEYER, 1975) (ANNELIDA: CLITELLELLATA) IN ARKANSAS AND PRELIMINARY OBSERVATIONS ON ITS NATURAL HISTORY.

2:45 Brian F. Coles and Gerald E. Walsh, 4202 Scottie Smith Drive, Jefferson, AR 72079, and 9 Yocum Road, Rogers, AR 72756. A REVISED LIST OF ARKANSAS LAND MOLLUSCA WITH NOTES ON THE GEOGRAPHIC DISTRIBUTION OF SPECIES.

CHEMISTRY I

Location: McEver Hall, Room 204

Chairperson: Dr. Franklin D. Hardcastle, Arkansas Tech University

Time Topic
1:00 Victor M. Blunt, A. H. Chowdhury, S. Khan, V. Litman and W. M. Willingham, Department of Chemistry & Physics, University of Arkansas at Pine Bluff, Pine Bluff, AR 71601. CHEMICAL ANALYSIS OF SMOKE BOMB MIXTURES.

1:15 Dedric Hayes and Victor M. Blunt, Department of Chemistry & Physics, University of Arkansas at Pine Bluff, Pine Bluff, AR 71601. QUANTITATIVE AND QUALITATIVE ANALYSIS OF LACTOSE AND POTASSIUM CHLORATE IN SMOKE BOMB MIXTURES.

1:30 Franklin D. Hardcastle, Department of Physical Science, McEver Hall, Arkansas Tech University, Russellville, Arkansas 72801. MOLECULAR STRUCTURES OF TITANITES BY RAMAN SPECTROSCOPY.

1:45 Muhammad H. Zaman, John P. Graham and Franklin D. Hardcastle, Department of Physical Science, McEver Hall, Arkansas Tech University, Russellville, Arkansas 72801. RAMAN SPECTROSCOPY OF PHOSPHATES.

2:00 Lex Mitchell and Franklin D. Hardcastle, Department of Physical Science, McEver Hall, Arkansas Tech University, Russellville, Arkansas 72801. INTERPRETING THE RAMAN SPECTRA OF IRON OXIDE CORROSION PRODUCTS.

2:15 Break.

2:45 John P. Graham, Department of Physical Science, McEver Hall, Arkansas Tech University, Russellville, Arkansas 72801. STRUCTURE AND BONDING OF A NOVEL CHELATING CARBENE COMPLEX.

3:00 D. Cipson, Dr. R. Engelken, M. Buck, C. Edrington, and A. Thapa, Department of Engineering, Arkansas State University, P.O. Box 1740, State University, Arkansas 72467. MINIMALLY HAZARDOUS AND ENVIRONMENTALLY IMPACTIVE METALLIC ALLOY AND SEMI-
CONDUCTING OXIDE FILMS OF Mo, W, Fe, AND/OR Ni ELECTROPLATED FROM AQUEOUS ELECTROLYSES

3:15 A. Thapa, Dr. R. Engelken, C. Edrington, M. Buck and D. Gipson, Department of Engineering, Arkansas State University, P.O. Box 1740, State University, Arkansas 72467. CHEMICAL PRECIPITATION DEPOSITION OF INDUIM SULFIDE AND OTHER METAL SULFIDE FILMS FROM A NEW LOW pH AQUEOUS, THIOUREA/TTHIOACETAMIDE-FREE BATH WITH REDUCED HAZARDS AND ENVIRONMENTAL IMPACT

3:30 C. Edrington, Dr. R. Engelken, M. Buck, A. Thapa and D. Gipson, Department of Engineering, Arkansas State University, P.O. Box 1740, State University, Arkansas 72467. IMPROVEMENTS IN PHOTOCONDUCTANCE OF EVAPORATED INDIUM (III) SULFIDE FILMS BY ANNEALING

ORAL PRESENTATIONS

Saturday, April 3, 1999
MICROELECTRONICS AND ENGINEERING
Location: McEver Hall, Room 202
Chairperson: Dr. Wilfred J. Braithwaite, University of Arkansas at Little Rock

Time Topic
8:15 Aslam H. Chowdhury, S. Khan, V. Blunt, V. Litman and W. M. Willingham, Research Center, University of Arkansas, Pine Bluff, AR 71611. SETTLING RATE BY OPTICAL METHOD
8:30 Clayton Workman,* Dr. Phillipe Ballet, Dr. Jay Smathers, Dr. Greg Salamo and Dr. Hameed Naseem. A COMPARISON OF THE ATOMIC FORCE MICROSCOPY (AFM) AND SCANNING TUNNELING MICROSCOPY (STM) OF SELF-ASSEMBLED InAs QUANTUM DOTS ON GaAs AND AlAs
8:45 D. W. Bullock, H. Yang, V. P. Labella, Z. Ding and P. M. Thibado, Physics Department, University of Arkansas, Fayetteville, AR 72701. ATOMIC CONTROL OF SEMICONDUCTOR STRUCTURES
9:00 Jstediah J. Young, Nick Rosser, and Ajay P. Malshe, MRL, Department of Mechanical Engineering, University of Arkansas, Fayetteville, AR 72701. MICROELECTRONICALLY INTEGRATED MULTIFUNCTIONAL INFLATABLE MICROCOMMUNICATIONS (MICMIC): THE NEXT GENERATION OF INFLATABLES FOR SPACE APPLICATIONS
9:15 Break
9:45 Kaneez E. Banu, Biao Huang, and Simon S. Ang, University of Arkansas, High-Density Electronics Center, 600 W. 20th, Fayetteville, AR 72701. MICROMACHINED HEAT SINK FOR INTEGRATED CIRCUITS COOLING
10:00 Chris Hearne, Biao Huang, and Simon S. Ang, University of Arkansas, High-Density Electronics Center, 600 W. 20th, Fayetteville, AR 72701. MICROELECTROMECHANICAL SYSTEMS FABRICATION TECHNIQUES

10:15 Dr. Andrew P. Wright, University of Arkansas at Little Rock, Department of Applied Science, 2801 South University, Little Rock, AR 72204. EQUATIONS OF MOTION FOR 4 DEGREE OF FREEDOM LEG FOR WALKING ROBOT
10:30 Steve Farmer and Dr. Bob Sims P.E., University of Arkansas at Little Rock (UALR), Department of Applied Science, Little Rock, AR 72204. IMPLEMENTING THE HART COMMUNICATIONS PROTOCOL IN CONTROL VALVE APPLICATIONS
10:45 W. K. Chok and R. A. Sims, Applied Science Department, University of Arkansas at Little Rock, 2801 S. University Ave., Little Rock, AR 72204. ION CURRENT IN THE ELECTROSTATIC APPLICATION OF AUTOMOTIVE CLEAR COAT POWDER

AQUATIC ECOLOGY
Location: McEver Hall, Room 162
Chairperson: Dr. Joe Stoeckel, Arkansas Tech University

Time Topic
8:00 Denver Dunn and George L. Harp (Arkansas State University Dept. of Biological Sciences, State University, Arkansas, 72467). DEGREE OF COTTUS PREDATION ON TROUT EGGS/FRY IN THE BULL SHOALS LAKE COLD TAILWATERS
8:15 Shawn W. Hodges, Charles J. Gagen, Fisheries and Wildlife Biology Program, Arkansas Tech University, Russellville, AR 72801. EFFECT OF LOW SUMMER STREAMFLOW ON SMALLMOUTH BASS MOVEMENTS IN CROOKED CREEK
8:30 Daniel Ward, Denver Dunn, Hilary Worley, Martin Ruane, Vernon Hoffman, Grace Toontman, and Stanley Trauth (Arkansas State University Dept. of Biological Sciences, State University, Arkansas 72467). THE FIRST REPORT OF LAMPETRA APPENDIX (DEKAY) FROM THE BLACK RIVER DRAINAGE SYSTEM OF ARKANSAS
8:45 Thomas M. Buchanan and Josh Nichols, Department of Biology, Westark College, Fort Smith, AR 72913, Don Turman, Colton Dennis, Stuart Wooldridge, and Brett Hobbs, Arkansas Game & Fish Commission, 2 Natural Resources Drives, Little Rock, AR 72205. OCCURRENCE AND REPRODUCTION OF THE ALABAMA SHAD, ALOS A ALABAMAE, IN THE OUACHITA RIVER SYSTEM OF ARKANSAS
9:00 Richard Grippa, Bobby Bennett, Department of Biological Sciences, and Randal Cox, Department of Chemistry and Physics, Arkansas State University, State University, AR 72467. COMPARISON OF ENVIRONMENTAL ASSESSMENTS OF HARBOR EXPANSIONS ON THE MISSISSIPPI RIVER
9:15 Break
9:30 John D. Rickett, Biology Department, U. A. L. R., 2801 S. University, Little Rock, AR 72204. E.P. (Perry) Floyd, 2423 E. Woodson Lateral, No. 35, Hensley, AR 72965. MORPHOMETRY, WATERSHED CHARACTERISTICS AND WATER QUALITY OF FERGUSON LAKE, SALINE COUNTY, ARKANSAS
Secretary's Report

9:45 Andi Dickens and Scott Kirkconnell Biology Department, Arkansas Tech University, Russellville, AR 72801. COLIFORM EVALUATION OF RIVER VALLEY WATERWAYS

10:00 Eric Anderson and Scott Kirkconnell, Biology Department, Arkansas Tech University, Russellville, AR 72801. EFFECTS OF ANO EFFLUENT ON LAKE DARDANELLE MICROFLORA

10:15 Jennifer Smith, Ana Ghanem, Missy Elzey and Thomas Soerens,* Department of Civil Engineering, University of Arkansas, 4100 Bell Engineering Center, Fayetteville, AR 72701. LOCATING NAPLs IN GROUND WATER USING PARTITIONING FLUORESCENT DYES

10:30 Yian-Mei Lo, Thomas S. Soerens,* Marc A. Nelson, Department of Civil Engineering, University of Arkansas, 4100 Bell Engineering Center, Fayetteville, AR 72701. OPTIMUM STORM SAMPLING OF CALCULATION OF NUTRIENT LOADS IN MOORE'S CREEK AND THE ILLINOIS RIVER

VERTEBRATE ZOOLOGY
Location: McEver Hall, Room 206

Chairperson: Dr. Tom Nupp, Arkansas Tech University

Time Topic
8:00 Stanley E. Trauth and J.D. Willhide, Department of Biological Sciences, Arkansas State University, P.O. Box 599, State University, AR 72467-0599. STATUS OF THREE PLETHODONTID SALAMANDERS (GENUS PLETHODON) FROM THE OUACHITA NATIONAL FOREST OF SOUTHWESTERN ARKANSAS

8:15 Douglas A. James1 and Christopher J. Kellner2, Department of Biological Sciences, University of Arkansas, AR 72701 and 2Department of Biology, Arkansas Tech University, Russellville, AR 72801. STATUS OF THE CERULEAN WARBLER IN ARKANSAS IN THE 1990s

8:30 Peta Elsken-Lacy, Amy M. Wilson, James H. Peck and Gary A. Heidt, Dept. of Biology, UALR, Little Rock, AR 72204. ARKANSAS GRAY FOX FOR PRICE-HARVEST MODEL REVISITED

8:45 Wayne E. Thogmartin, James E. Johnson, Bradley A. Schaeffer, and Camille C. Ciriaco Arkansas Cooperative Fish and Wildlife Research Unit, U.S. Geological Survey, Biological Resources Division, Department of Biological Sciences, University of Arkansas, Fayetteville, AR 72701. SURVEY OF DISEASES IN WILD TURKEYS IN ARKANSAS

9:00 Josie H. Dickins, David W. Clark, Steffany White, and Gary A. Heidt, Department of Biology, UALR, Little Rock, AR 72204. SURVEY OF MEDIUM AND LARGE MAMMALS IN AN URBAN PARK (MURRAY PARK, LITTLE ROCK, AR)

9:15 Break


9:45 Keith Sutton1 and David Jamieson2 1Arkansas Game and Fish Commission, 2 Natural Resources Drive, Little Rock, AR 72205. 2Arkansas State University-Newport, Department of Biological Science, 7648 Victory Boulevard, Newport, AR 72112. RESULTS OF AN ARKANSAS WILDLIFE MAGAZINE READER SURVEY CONCERNING REINTRODUCTION OF THE FLORIDA PANther (FELIS CONCOLOR CORY) IN ARKANSAS

10:00 Kimberly G. Smith, Department of Biological Sciences, University of Arkansas, Fayetteville, AR 72701, Cindy Osborne, Arkansas Natural Heritage Commission, Little Rock, AR 72201. 1999 REPORT OF THE ARKANSAS AVIAN VIABLELITY ASSESSMENT COMMITTEE

PLANT ECOLOGY & BOTANY
Location: McEver Hall, Room 210

Chairperson: Dr. Gary Tucker

Time Topic
8:00 Timothy A. Golden and Daniel L. Marsh, Department of Botany, Henderson State University, Arkadelphia, AR 71923. VARIATIONS IN Sphaerocarpus (Marchantiophyta) in Arkansas

8:15 Jared W. Kyzer and Daniel L. Marsh, Department of Biology, Henderson State University, Arkadelphia, AR 71923. OCCURRENCES OF Petalophyllum fossombroniaceae in the Interior Highlands of Arkansas

8:30 Casey Jones and Renn Tunlison, Department of Biology, Henderson State University, Arkadelphia, AR 71923. WOODY VEGETATION OF A HILLTOP ISLAND IN DEGRAY LAKE

8:45 Anne A. Grippi1, Yan Xie2, Benjamin L. Rougeau2, William Y. Wyatt2, Departments of 1Biological Sciences and 2Chemistry & Physics, Arkansas State University, State University, AR 72467. ANALYSIS OF PHYTOESTRONGENS BY HIGH PRESSURE LIQUID CHROMATOGRAPHY

9:00 Larson, Katherine C. University of Central Arkansas, Conway, AR 72035. FORAGING BEHAVIOR OF HONEYSUCKLE VINES: CONTRAST BETWEEN THE INVASIVE Lonicera japonica and its Native Congener L. sempervirens

9:15 Break

9:30 Linh V. Hoang1, Department of Biological Sciences, Arkansas State University, P.O. Box 399, State University, AR 72467-0599. THE POPULATION STRUCTURE OF SOLIDAGO Riddell II (Riddell's Goldenrod: Asteraceae) at Rock Creek Natural Area in Arkansas and Throughout its Range in North America

CHEMISTRY II
Location: McEver Hall, Room 204

Chairperson: Dr. Michael J. Panigot

Time Topic
9:00 Stanley L. Chapman and William Teague, University of Arkansas, P.O. Box 391, Little Rock, AR 72203. CHANGES
IN SOIL CHEMISTRY BENEATH EXPOSED POULTRY HOUSE PADS AND MANURE STORAGE AREAS

9:15 M. A. Miah, Department of Chemistry and Physics, P.O. Box 4941, University of Arkansas at Pine Bluff, Pine Bluff, AR 71611. ARSENIC CONTAMINATION IN BANGLADESH

9:30 Paul Nave and Mark Draganjac, Department of Chemistry and Physics, Arkansas State University, State University, AR 72467; A. W. Cordes and Tosah Barclay, Department of Chemistry and Biochemistry, University of Arkansas, Fayetteville, AR 72701. LIGAND SUBSTITUTION REACTIONS OF [CuRu(PPh₃)(tht)₂]OTf. MOLECULAR STRUCTURE OF [CpRu(PPh₃)(pms)₂]OTf x 3/4C₂H₄Cl₂, pms = pentamethylene sulfide.

10:00 Johnetta Price and Victor M. Blunt, Department of Chemistry & Physics, University of Arkansas at Pine Bluff, AR 71601. SYNTHESIS AND CHARACTERIZATION OF CALCIUM (II) ADAMANTANEDICARBOXYLATE

10:15 Brian D. Abbott, Robert Allen, and Robin D. Rogers, Department of Physical Sciences, Arkansas Tech University, Russellville, AR 72801. ROOM TEMPERATURE IONIC LIQUIDS AND THEIR USE IN LIQUID/LIQUID EXTRACTIONS

10:30 Michael Shane Greene, Rose M. McConnell, and Walter E. Godwin, School of Mathematics & Natural Sciences, University of Arkansas at Monticello, Monticello, Arkansas 71657. PLANAR COPOLYMERS OF FURAN, THIOPHENE, AND PYRROLE: A MOLECULAR MODELING STUDY

POSTER SESSIONS

Friday, April 2, 1999
Location: McEver Hall

Michael J. Panigot, Kevin Lawrence, and Laura Benton. APPROACHES TO THE SYNTHESIS OF STEREOSELECTIVELY BETA-DEUTERATED LEUCINE AND TRYPTOPHAN.

Leslie Parsley and Rory A. Roberts, Arkansas Tech University, Russellville, AR 72801. INDUCING WING-LIKE FLUTTER IN A WIND TUNNEL.

Matthew W. Nix and Thomas M. Walker, Department of Biology, University of Central Arkansas, Conway, AR 72035-0001. MACROPHAGES ACTIVATED BY PACLITAXEL EXPRESS CD40 AND CD80.

Thomas M. Walker, Department of Biology, University of Central Arkansas, Conway, AR 72035. DECREASED VIABILITY OF PACLITAXEL-ACTIVATED MACROPHAGES OCCURS THROUGH NITRIC OXIDE DEPENDENT AND INDEPENDENT MECHANISMS.

Michael D. VanPelt, LaTonya Green and Clifton Orr, Department of Biology, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas 71611. SULFORHODAMION B (SRB) COLORIMETRIC CYTOTOXICITY ASSAY FOR MEASURING ANTICANCER EFFECTS.

Sherry Peterbaugh and K. C. Larson, Department of Biology, University of Central Arkansas, Conway, AR 72035. SEED GERMINATION AND SEEDLING RECRUITMENT OF LONICERA JAPONICA, JAPANESE HONEYSUCKLE.

LaTonya Green, Michael D. VanPelt, Clifton Orr, Department of Biology,