2009

93rd Annual Meeting, 2009: Program

Academy Editors

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SECTION PROGRAMS
ORAL PRESENTATIONS

SESSION 1: FRIDAY 1:00-2.30. CHAIR: JD SWANSON
BOARD OF TRUSTEES ROOM, ROBBINS LIBRARY
Topics: Molecular Biology, Biophysics, Genetics and Microbiology

1:00
CRITICAL EVALUATION OF BACTERIOPHAGE AS AN ALTERNATIVE TO ANTIBIOTICS IN ANIMAL AND HUMAN MEDICINE
Huff, William E; Huff, Geraldine R; Rath, Narayan C; Donoghue, Annie M. USDA/ARS, University of Arkansas - Fayetteville

1:15
COMPARISON OF BACILLUS CEREUS AND BACILLUS ANTHRACIS INFECTION MODELS AND GLYCOCONJUGATE-INDUCED IMMUNOMODULATION
Scott, Ashley; Lahiani, Mohamed H; Rasol, Aveen; Tarasenko, Olga. University of Arkansas - Little Rock

1:30
DNA SEQUENCE ANALYSIS OF FRESHWATER EUSTIGMATOPHYCEAE, A POTENTIAL SOURCE OF ESSENTIAL FATTY ACIDS
Prior, Sara E; Fawley, Marvin W; Fawley, Karen P. University of Arkansas - Monticello

1:45
THE COG COMPLEX, RAB6, AND COPI DEFINE A RETROGRADE TRAFFICKING PATHWAY ACROSS THE GOLGI APPARATUS EXPLOITED BY THE SUBTILASE CYTOTOXIN
Smith, Richard D; Willett, Rose; Paton, James C; Lupashin, Vladimir V. University of Arkansas for Medical Sciences

2:00
DIFFERENTIATING THE ROLES OF PAL 1 AND PAL 2 IN LATE PRICKLE DEVELOPMENT IN RUBUS
Little, Coleman; Jones, Nate; Magie, Ben; Delvasto, Jennyfer; Swanson, JD. University of Central Arkansas

2:15
DSCAM BINDING CAPABILITIES AND MICROSPHERE INTERACTIONS
Caldwell, Jennifer L; Collins, Jesse; Manoharan, Vinothan N. University of Arkansas - Pine Bluff

SESSION 1: FRIDAY 1:00-2.30. CHAIR: DEBRA L BURRIS
ROOM 129, SMITH-BROYLES SCIENCE BUILDING
Topics: Physics and Astronomy

1:00
MATTER-ANTIMATTER ASYMMETRY VIA PARTICLES DECAY PROCESSES
Bachtz, Abdel G; Kaladi, Babu S. Southern Arkansas University

1:15
ELECTRON FLUID DYNAMICAL EQUATIONS AND IONIZATION RATE FOR BREAKDOWN WAVES PROPAGATING INTO AN IONIZED MEDIUM
Rasul, Noaman; Hemnani, Mustafa; Peden, Robert. Arkansas Tech University

1:30
FLIPPING THE GENERAL CHEMISTRY CLASSROOM: METHOD AND APPLICATION
Grafton, Anthony K. Lyon College

SESSION 1: FRIDAY 1:00-2.30. CHAIR: JOHN L HARRIS
ROOM 001 BOREHAM BUSINESS BUILDING
Topics: Marine Biology

1:00
MATTIR PATTERNS OF INVERTEBRATE DRIFT AND FEEDING OF TWO SMALL FISHES IN CADRON CREEK
Mitchell, David; Walker, Richard. University of Central Arkansas

1:15
MOVEMENTS AND HABITAT USE OF A LEVIATHAN, ALLIGATOR GAR (ATRACTOSTEUS SPATULA): INITIAL PROGRESS AND PLANS
Kluender, Edward R; Lewis, Lindsey; Adams, S Reid. University of Central Arkansas

1:30
FOOD HABITS OF SYMPATRIC SPOTTED (LEPISOSTEUS OCLULATUS) AND SHORTNOSE (LEPISOSTEUS PLATOSTOMUS) GAR DURING FLOODING OF AN ARKANSAS RIVER TRIBUTARY
Walker, Richard H; Benton, Justin; Inebnit, Tommy; Adams, Reid. University of Central Arkansas

1:45
SPECIES RICHNESS, DISTRIBUTION, AND RELATIVE ABUNDANCE OF FRESHWATER MUSSELS (BIVALVIA: UNIONIDAE) OF THE BUFFALO NATIONAL RIVER, ARKANSAS
Matthews, Mickey W; Usrey, Faron; Hodges, Shawn W; Harris, John L; Christian, Alan. University of Arkansas State University

2:00
UNIONOIDA (MOLLUSCA: MARGARITIFERIDA, UNIONIDAE) IN ARKANSAS, THIRD STATUS REVIEW
Martin, Holly C; Harris, John L; Christian, Alan. University of Arkansas State University

2:15
A QUALITATIVE FRESHWATER MUSSEL SURVEY OF THE SOUTH FORK SPRING RIVER, MISSOURI AND ARKANSAS
Martin, Holly C; Harris, John L; Christian, Alan. University of Arkansas State University

SESSION 1: FRIDAY 1:00-2.30. CHAIR: ANTHONY K GRAFTON
ROOM 133, WALKER HALL
Topic: Chemistry

1:00
FLIPPING THE GENERAL CHEMISTRY CLASSROOM: METHOD AND APPLICATION
Grafton, Anthony K. Lyon College

Journal of the Arkansas Academy of Science, Vol. 63, 2009 15
1:15 FORTIFICATION OF GOAT’S MILK YOGHURT WITH WHEY PROTEIN CONCENTRATE AND TRI-CALCIUM CITRATE: CHEMICAL, PHYSICAL AND ORGANOLEPTIC EVALUATION
Zahoor, Tahir; Iqbal, Arshad; Kanwal, Shuja; Hossain, M Zakir; Umair, Bajwa A. University of Agriculture - Faisalabad, University of Arkansas - Little Rock

1:30 MICROENCAPSULATION OF CUMENE HYDROPEROXIDE AND its EFFECT ON FRONTAL POLYMERIZATION SYSTEMS
McFarland, Brian H; Popwell, Sam; Popman, John A. University of the Ozarks

1:45 HYDROGEN PRODUCTION BY STEAM-REFORMING OF ETHERATIONAL OVER SUPPORTED COBALT AND COBALT-ZINC CATALYSTS
Kazi, Abul B. University of Arkansas - Pine Bluff

2:00 ATOMIC FRACTURE MECHANISM OF GRAPHENE SHEET
Terdalkar, Sachin S; Zhang, Sulin L; Rencis, Joseph J. University of Arkansas - Fayetteville

SESSION 2: FRIDAY 3:00-4:30, CHAIR: JAMES M STEWART
BOARD OF TRUSTEES ROOM, ROBSON LIBRARY

3:00 DETERMINATION OF BENTHIC SOIL CONDITIONS USING NEMATODES
Matute, Moluwa, M; Perschbacher, Peter, M. University of Arkansas - Pine Bluff

3:15 EFFECT OF SALT ON SEVERAL GENOTYPES OF GOSSYPIUM (COTTON)
Tiwari, Rashmi S; Stewart, James M. University of Arkansas - Fayetteville

3:30 EFFECT OF HIGH TEMPERATURE ON POLLEN TUBE GROWTH AND ENERGETICS IN THE COTTON PISTIL
Snider, John L; Oosterhuis, Derrick M; Skulman, Briggs W; Kawakami, Eduardo M; Storch, Diana K. University of Arkansas - Fayetteville

3:45 THE FLOWERING WOODY FLORA OF LOGOLY STATE PARK
Shaw, Jesse C; Smith, Thomas; Erickson, Ray; Baker, Claude. Southern Arkansas University

4:00 PINE STRAW RAKING AND FERTILIZER SOURCE IMPACTS NITROGEN MINERALIZATION IN A LOBLOLLY PINE (PINUS TAEDA) PLANTATION
Ellum, Keith A; Liechty, Hal O; Blazier, Michael A. University of Arkansas - Monticello, Louisiana State University

4:15 IS WHALE WATCHING A THREAT TO ENDANGERED ORCINUS ORCA?
Wakefield, Timothy S; Otis, Robert E. John Brown University

SESSION 2 FRIDAY 3:00-4:30, CHAIR: DANIEL A BULLOCK
ROOM 001 BOREHAM BUSINESS BUILDING

3:00 DISTRIBUTION AND POPULATION CHARACTERISTICS OF WALLEEYE IN THE LOWER ELEVEN POINT RIVER, ARKANSAS
Johnson, Ronald L; Henry, Sam D; Barkley, Sam W. Arkansas State University

3:15 PERSISTENCE OF LARGEMOUTH BASS ALLELES IN AN ARKANSAS LAKE STOCKED WITH FLORIDA BASS
Allen, Ryan; Johnson, Ronald L. Arkansas State University

3:30 LENGTH AT AGE AND CONDITION FOR BASS RELATIVE TO PHENOTYPE FOR SOUTHERN ARKANSAS RESERVOIRS
Allen, Ryan; Cato, Christopher; Dennis, Colton; Johnson, Ronald L. Arkansas State University

3:45 SPATIAL DISTRIBUTION OF YELLOW GRUB IN SMALLMOUTH BASS OF CROOKED CREEK AS DETERMINED BY METACERCARIAL CYST COUNTS IN THE GILL-MOUTH SITES
Daly Sr., James J; Almond, James. University of Arkansas for Medical Sciences

4:00 SCREENING FOR YELLOW GRUB IN POND-RAISED CATFISH BY COUNTING CYSTS IN VISIBLE ANATOMICAL SITES
Singleton, Jeurel; Daly Sr., James J; Keller, Randal J. University of Maryland - Eastern Shore, University of Arkansas for Medical Sciences, Murray State University

4:15 NEW GEOGRAPHIC DISTRIBUTION RECORDS FOR THREE SPECIES OF NOTROPIS (CYPRINIFORMES: CYPRINIDAE) FROM LARGE RIVERS OF ARKANSAS
McAllister, Chris T; Layher, William G; Robison, Henry W; Buchanan, Thomas M. RapidWrite, Layher BioLogics RTEC, Inc., Southern Arkansas University, University of Arkansas - Fort Smith

Meeting Report

Journal of the Arkansas Academy of Science, Vol. 63, 2009
SESSION 2 FRIDAY 3:00-4:30. CHAIR: STANLEY E TRAUTH
ROOM 133, WALKER HALL
Topics: Herpetology, amphibians

3:00 COMPARATIVE UROGENITAL ANATOMY OF NORTH AMERICAN MALE COLOBROID SNAKES
Trauth, Stanley E. Arkansas State University

3:15 DOES HABITAT QUALITY AFFECT POPULATION DENSITIES OF AMERICAN ALLIGATORS (ALLIGATOR MISSISSIPHIENSIS) IN SOUTHWEST ARKANSAS?
Smith, Geoff D; Dinkelacker, Stephen A. University of Central Arkansas

3:30 DEMOGRAPHIC TRAITS OF WESTERN CHICKEN TURTLES (DEIROCHELYS RETICULARIA MIARIA) IN CENTRAL ARKANSAS
Hilzinger, Nathanael L; Dinkelacker, Stephen. University of Central Arkansas

3:45 BUFO FOWLERI ALTERS ITS ATTRACTION TO LIGHT IN THE PRESENCE OF A POTENTIAL PREDATOR
Wrensch, Zachary C; Mills, Nathan E. Harding University

4:00 COMMON GROUND SKINK FOUND ALIVE IN TALONS OF JUVENILE EASTERN BLUEBIRD
Freeman-Nelson, Kellie J; Risch, Thomas. Arkansas State University

SESSION 3 SATURDAY 9:00-10:30. CHAIR: ANWAR A BHUIYAN
ROOM 129, SMITH-BROYLES SCIENCE BUILDING
Topics: Physical and Inorganic Chemistry

9:00 SYNTHESIS AND CHARACTERIZATION OF HOMOLEPTIC AND HETEROLEPTIC RUTHENIUM POLYPYRIDINE COMPLEXES
Wade, Christina; Kudo, Shotaro; Davis, Robby F; Bhuiyan, Anwar A. Arkansas Tech University

9:15 SYNTHESIS OF [[6-P-CYMENE]RU(9-ATSC)Cl]PF6 AND ITS INTERACTION WITH HUMAN SERUM ALBUMIN (9-ATSC = 9-ANTHRALDEHYDE THIOSEMICARBAZONE)
Beckford, Floyd; Shaloski, Michael. Lyon College

9:30 MAGNETIC FIELD CONTROLLED SPRAY DEPOSITION OF NICKEL INK TO FORM ELECTRICALLY CONDUCTIVE CONTACT PATTERNS – PART I. USE OF AN ELECTROMAGNET
Sattler, Michael; Engelken, Robert; Felizco, Frederick M; Hickerson, Alan; Thapa, Shyam; Jacobs, Tom. Arkansas State University

9:45 MAGNETIC FIELD CONTROLLED SPRAY DEPOSITION OF NICKEL INK TO FORM ELECTRICALLY CONDUCTIVE CONTACT PATTERNS – PART II. RESULTS WITH A PERMANENT MAGNET AND WITH NO MAGNETIC FIELD
Felizco, Frederick M; Engelken, Robert; Sattler, Michael; Hickerson, Alan; Thapa, Shyam. Arkansas State University

10:00 FURTHER DEVELOPMENTS IN HIGH TEMPERATURE CHEMICAL BATH DEPOSITION OF INDIUM (III) SULFIDE FILMS FROM ORGANIC SOLUTIONS
Hickerson, Alan; Engelken, Robert; Sattler, Michael; Felizco, Frederick M; Thapa, Shyam; Chaudhury, Zariff; Karabacak, Tansel; Seo, Hyewon; Jakobs, Tom; Ewing, Barret. Arkansas State University, University of Arkansas - Little Rock, InvoTek, Inc.

SESSION 3: SATURDAY 9:00-10:30. CHAIR: JOYCE HARDIN
ROOM 001 BOREHAM BUSINESS BUILDING
Topic: Birds

9:00 RESPONSE OF AVIAN POPULATIONS TO WOODLAND RESTORATION IN THE OZARK MOUNTAINS, ARKANSAS
Chang, Helen; McClung, Maureen R. University of Arkansas - Fayetteville

9:15 TWO NEW BIRDS FOR ARKANSAS PLUS COMMENTS ON THE FORK-TAILED FLYCATCHER AND CLARIFYING OTHER ARKANSAS RECORDS
James, Douglas A; Neal, Joseph C; Smith, Kimberly G; Shepherd, William M; Mills, Charles. University of Arkansas - Fayetteville

9:30 ADVENT, DISPERSAL, AND CURRENT STATUS OF THE EXOTIC EURASIAN COLLARED-DOVE (STREPTOPELIA DECAOCTO) IN ARKANSAS
Dodd, Alena; Fielder, Mike; Kannan, Ragupathy. University of Arkansas - Fort Smith

9:45 HOUSE SPARRROWS REDUCE NESTING SUCCESS OF CLIFF SWALLOWS IN WESTERN ARKANSAS
Leasure, Douglas R; Kannan, Ragupathy; James, Douglas A. University of Arkansas - Fort Smith, University of Arkansas - Fayetteville

Arkansas Academy of Science

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Freeman-Nelson, Kellie J; Risch, Thomas. Arkansas State University

SESSION 3 SATURDAY 9:00-10:30. CHAIR: THOMAS SMITH
BOARD OF TRUSTEES ROOM, ROBSON LIBRARY
Topics: Zoology and ecology

9:00 CATERPILLARS AND KATYDIDS: DO THEIR CANAL-CUTTING BEHAVIORS FACILITATE HOST-RANGE EXPANSION?
Dussourd, David E. University of Central Arkansas

9:15 RANGE EXTENSION OF THE SEMINOLE BAT IN ARKANSAS
Risch, Thomas S; Klotz, Tracy L. Arkansas State University

9:30 THE IMPACT OF AIR POLLUTION ON AERO PHYTIC ALGAE AND SLIME MOLDS FROM TWO SITES IN COLORADO
Smith, Thomas; Stephenson, Steve; Nelson, Rodney K; Nelson, Lynda. Southern Arkansas University

9:45 REVISED ARKANSAS ALGAE AND NEW ADDITIONS
Smith, Thomas. Southern Arkansas University

10:00 ALGAL EXTREMOPHILES FROM HOT SPRINGS NATIONAL PARK, HOT SPRINGS, ARKANSAS
Smith, Thomas; Manoylov, Kalina; Packard, Anne. Southern Arkansas University

10:15 THE EFFECT OF LIGNITE ON PHASEOLUS VULGARIS PLANT DEVELOPMENT
Smith, Thomas; Banks, Surya; Narula, Nitish. Southern Arkansas University
Meeting Report

10:00  NUTRITIONAL IMMUNOMODULATION AS AN APPROACH TO DECREASING THE NEGATIVE EFFECTS OF STRESS IN POULTRY PRODUCTION
Huff, Geraldine R; Huff, William E; Rath, Narayan C. USDA/ARS, University of Arkansas - Fayetteville

10:15  PROTEOMIC CHANGES IN TIBIAL HEAD CARTILAGE OF CHICKENS WITH TIBIAL DYSCHONDROPLASIA, A METABOLIC SKELETAL DISEASE
Rasaputra, Komal S; Liyanage, Rohana; Lay, Jackson O; Rath, Narayan C. University of Arkansas – Fayetteville

SESSION 3: SATURDAY 9:00-10:30  CHAIR: MOLUWA M MATUTE. ROOM 133, WALKER HALL

TOPICS: Insects and arthropods

9:00  ENDANGERED NICROPHORUS AMERICANUS PREFER DISTURBED SUCCESSIONAL COMMUNITIES AT MILITARY INSTALLATION IN WESTERN ARKANSAS
Leasure, Douglas R; Garner, Kristine A. Fort Chaffee Maneuver Training Center, University of Arkansas - Fort Smith

9:15  A PRELIMINARY REPORT ON INSECTS INHABITING THE BURROWS OF BAIRD'S POCKET GOPHER IN ARKANSAS
Kovarik, Peter W; Connor, Matthew B; Chordas III, Steven W; Robison, Henry W; Guenther, Iden; Skelley, Paul E. Columbus State Community College, Arkansas State University, Ohio State University, Southern Arkansas University, Florida Department of Agriculture and Consumer Services

9:30  RECENT COLLECTIONS AND ADDITIONAL RECORDS OF COLLEMBOLA FROM ARKANSAS CAVES
Staley, Michael E; Graening, GO. The Nature Conservancy, California State University

9:45  NEW STATE DISTRIBUTIONAL RECORDS OF ANTS COLLECTED IN 2008
General, David M; Thompson, Lynne C. University of Arkansas - Monticello

10:00  YOU FOUND THOSE “BUGS” IN YOUR BACKYARD, HERE IN CLARKSVILLE? NO WAY?
Chordas III, Stephen W; Kremers, Joe. Ohio State University

POSTER PRESENTATIONS

1. RESIDUAL EFFECTS ON THE ANT COMMUNITY OF 2 HARVESTING TREATMENTS APPLIED 12-YEARS-EARLIER IN A PINE-HARDWOOD FOREST IN SOUTHEASTERN ARKANSAS
Thompson, Lynne C; General, David M. University of Arkansas - Monticello

2. LIFESTYLE INFLUENCES ON BODY MASS INDEX
Boumtje, Perre A; Black, Viktoriya A
Southern Arkansas University

3. LIPID PRODUCTION IN ALGAE AS A BIO-FUEL SOURCE
Narula, Nitish; Smith, Thomas. Southern Arkansas University

4. PRELIMINARY CHECKLIST OF VASCULAR FLORA OF COLUMBIA COUNTY, ARKANSAS
Logan, LA; Smith, Thomas; Winstead, Joe. Southern Arkansas University

5. PRELIMINARY CHECK-LIST OF VASCULAR FLORA OF LAKE COLUMBIA, COLUMBIA COUNTY, ARKANSAS
Logan, LA; Smith, Thomas; Baker, Claude. Southern Arkansas University

6. ALGAE OF LAKE COLUMBIA, COLUMBIA COUNTY, ARKANSAS
Bryan, Brynne; Smith, Thomas. Southern Arkansas University

7. SILVER CITRATE - A NOVEL TOPICAL ANTIMICROBIAL?
Durham, April; Hug, Amber; Yeboah, George; Atchley, Daniel. Harding University

8. ASSESSING THE “HEALTH” OF SAGER CREEK THROUGH WATER CHEMISTRY AND MACROINVERTEBRATE POPULATIONS
Caldwell, Andrew; Colip, Jason; Segel, Melanne; Flores, Kristin; Hallenbeck, Josh; Meng, David; Mitskevich, Mary; Oswald-Bauer, Teal; Wakerfield, Timothy. John Brown University

9. THE USE OF NATURAL POLYMERS FOR SOIL RECLAMATION
Ibeh, Tony L; Pinelo, Laura F; Watkins, Kayla. Saito, Chris, Lack, Jessica, Shelton, James; Love, Ebony; Bailey, Brittany; Benjamin, Earl; Benjamin, Ellis. Arkansas State University, Illinois Wesleyan University

10. GLYCOCONJUGATE STIMULATE BACILLUS ANTHRACIS SPORES KILLING INDEPENDENTLY FROM RACE OR GENDER
Lahiani, Mohamed H; Scott, Ashley; Rasol, Aveen; Saheb, Entsar; Alkarakooly, Zeyad; Tarasenko, Olga. University of Arkansas - Little Rock

11. GLYCOCONJUGATE STIMULATE BACILLUS ANTHRACIS SPORES AND TOXINS KILLING
Rasol, Aveen H; Lahiani, Mohamed H; Scott, Ashley; Saheb, Entsar; Alkarakooly, Zeyad; Tarasenko, Olga. University of Arkansas - Little Rock

12. EFFECT OF GLYCOCONJUGATES ON VIABILITY OF MACROPHAGES BY REDUCING LACTATE DEHYDROGENASE PRODUCTION AGAINST BACILLUS SPORES AND TOXINS
Alkarakooly, Zeyad; Rasol, Aveen; Saheb, Entsar; Lahiani, Mohammed H; Scott, Ashley; Tarasenko, Olga. University of Arkansas - Little Rock

13. ENHANCE MACROPHAGES NITRIC OXIDE PRODUCTION THAT PROMOTE KILLING BACILLUS ANTHRACIS STERE STRAIN SPORES AND TOXINS BY USING GLYCOCONJUGATES
Saheb, Entsar J; Scott, Ashley; Rasol, Aveen; Alkarakooly, Zeyad; Lahiani, Mohammed H; Scott, Ashley; Tarasenko, Olga. University of Arkansas - Little Rock

14. THE EFFECT OF HIGH TEMPERATURE ON IN VIVO POLLEN TUBE GROWTH, CALCIUM LEVELS, ANTIOXIDANT RESPONSE, AND SUPEROXIDE PRODUCTION IN THE COTTON PISTIL
Snider, John L; Oosterhuis, Derrick M; Skulman, Briggs W; Kawakami, Eduardo M; Storch, Diana K. University of Arkansas - Fayetteville

15. MODELING THE INTERNAL STRUCTURE OF THE BREAST
Greenlee, Jordan D; El-Shenawee, Magda. University of Arkansas - Fayetteville

16. EFFECTS OF CRAYFISH DENSITY ON BENTHIC PERIPHYTON
Banks, Brandon T; Ludlam, John P; Magoulick, Daniel D. University of Arkansas - Fayetteville

17. DISTRIBUTION AND ECOLOGY OF THE ASSEMBLAGES OF PROTOSTEOID AMOEBAE ASSOCIATED WITH MAJOR VEGETATION TYPES IN BIG BEND NATIONAL PARK, USA
Ndiritu, George G; Stephenson, Steven L; Spiegel, Frederick W. University of Arkansas - Fayetteville
18. ASSESSMENT OF CHINQUAPIN (CASTANEA OZARKENSIS) IN OZARKS NORTHWEST ARKANSAS
Onduso, Francis N; Paillet, Frederick L; Stephenson, Steven L. University of Arkansas - Fayetteville

19. STUDYING THE MYXOMYCETE-BRYOPHYTE RELATIONSHIP
Bates, Amanda; Doss, Robin; Rojas, Carlos; Stephenson, Steven L. University of Arkansas - Fayetteville

20. BIOGEOGRAPHY OF MYXOMYCETES IN HIGH-ELEVATION AREAS OF THE NORTHERN NEOTROPICS
Rojas, Carlos; Stephenson, Steven L. University of Arkansas - Fayetteville

21. FLOW CYTOMETRY ANALYSIS OF MERCURY AFFECTED B-CELL ACTIVATION
Weigand, Kara; Rowley, Ben. University of Central Arkansas

22. USE OF ANALYTICAL FLOW CYTOMETRY REGARDING THE EFFECTS OF MERCURY ON T-CELL SIGNAL TRANSDUCTION
Reno, J Leigh; Rowley, Ben. University of Central Arkansas

23. EFFECTS OF ATRAZINE AND NITRATE ON HYALLELA AZTECA (AMPHIPODA) IN LABORATORY EXPOSURES
Pandey, Ram B; Adams, Ginny, L; Warren, Laurie. University of Central Arkansas

24. ANALYSIS OF B-CELL ANTIBODY GENE SEGMENT USE IN RESPONSE TO MERCURY TREATMENT
Clarke, Heather, J. University of Central Arkansas

25. BEHAVIORAL AND FUNCTIONAL ANALYSIS OF CAF4 IN SACCHAROMYCES CEREVISIAE
Seiter, Jacob L; Wilkins, Annette; Naylor, Kari K. University of Central Arkansas

26. STUDYING THE DICTYOSTELIUM DISCOIDEUM MITOCHONDRIAL FISSION PROCESS TO UNDERSTAND THE EVOLUTIONARY LINK BETWEEN EUKARYOTES
Apata, LaRhonda; Turbeville, Dean; Naylor, Kari K. University of Central Arkansas

27. CLONING BY YEAST GAP REPAIR TO DETERMINE THE DIFFERENT FUNCTIONS OF THE HOMOLOGOUS PROTEINS MDV1 AND CAF4
Allen, Justin; Huett, Elizabeth; Naylor, Kari K. University of Central Arkansas

28. DISTRIBUTION AND FUNCTION OF GRIDLING BY CATERPILLARS OF PROMINENT MOTHS (LEPIDOPTERA: NOTODONTIDAE)
Ganong, Carissa N; Dussourd, David E. University of Central Arkansas

29. DO CARDENOLIDES AND PYRROLIZIDINE ALKALOIDS PROTECT EGGS OF THE MONARCH, DANAUS PLEXIPPUS?
Wright, Justin D; Dussourd, David E. University of Central Arkansas

30. WILL GIBBERELLIC ACID PROMOTE EARLY FLOWERING IN IMPORTANT PLANTS OF INTEREST?
Branaman, Tatum J; Cauldwell, John W; Swanson, JD. University of Arkansas - Fayetteville

31. EXAMINATION OF ALLIGATOR MISSISSIPPIENSIS POPULATIONS IN ARKANSAS FOR MULTIPLE PATERNITY
Knox, Nicole E; Swanson, JD. University of Central Arkansas

32. THE TISSUE CULTURE AND TRANSFORMATION OF RUBUS
Gates, Nadine; Kayla, Parker; Swanson, JD. University of Central Arkansas

33. IDENTIFYING STAGE ONE PRICKLE DEVELOPMENT GENES
Kellogg, Allicia A; Thompson, Meghan N; Swanson, JD. University of Central Arkansas

34. CHARACTERIZING THE VARIABILITY OF CHEMICAL PROPERTIES OF SOIL MAPPED AS AMY SILT LOAM SOILS IN SOUTHEASTERN ARKANSAS
Bhandari, Bita; Ficklin, Robert L. University of Arkansas - Monticello

35. MICROWAVE ASSISTED SYNTHESIS OF RUTHENIUM-DMSO COMPLEXES
Harvey, Amanda; Chui, Shengkuei; Snell, Rian; Draganjac, Mark; Benjamin, Ellis. Arkansas State University

36. TGA AND DTA STUDIES OF SELECTED RU-DMSO COMPLEXES
Chui, Shengkuei; Draganjac, Mark. Arkansas State University

37. MODIFICATION OF THALIDOMIDE FOR IMPROVED BIOLOGICAL ACTIVITY AND VISUALIZATION
Benjamin, Ellis; James, Tony; Bailey, Brittany; Watkins, Kayla; Saito, Christopher; Lack, Jessica; Shelton, James; Hutson, Shannon; Bailey, Brittany; Benjamin, Earl. Arkansas State University

38. DEVELOPMENT OF METAL PHOTSENSORS IN SOL GEL MATRIXES
Bailey, Brittany; James, Tony; Watkins, Kayla; Saito, Christopher, Lack, Jessica; Shelton, James; Love, Ebony; Benjamin, Earl; Benjamin, Ellis. Arkansas State University

39. ATOMIC FRACTURE MECHANISM OF GRAPHENE SHEET
Terdalkar, Sachin S; Zhang, Sulin L; Rencis, Joseph J. University of Arkansas - Fayetteville

40. E-85 VS. REGULAR GASOLINE: EFFECTS ON ENGINE PERFORMANCE, FUEL EFFICIENCY, AND EXHAUST EMISSIONS
Steinhaus, Jordan W; Johnson, Donald M; Wardlow, George W. University of Arkansas - Fayetteville

41. LIQUID-PHASE NMR STUDIES OF LACTOFERRICIN PEPTIDE
Brown, Joshua; Greathouse, Denise. University of Arkansas - Fayetteville

42. SYNTHESIS OF IRON COMPLEXES OF N-CONFUSED TETRAHENYLPORPHRINS
Flowers, Maureen; Monts, Deidre; Sanders, Donald; Watson, Charles T. University of Arkansas - Fort Smith

43. ACCURACY/PRECISION ASSESSMENT OF RECREATIONAL AND MAPPING GRADE GPS RECEIVERS
Weil, Robert C; Gilbert, Michael; Cross, Jack; Freeman, David. University of Arkansas – Monticello, Eagle Forestry Services, Inc.

44. HETEROGENEITY OF SOIL PHYSICAL PROPERTIES WITHIN ONE PHASE OF AMY SERIES SOILS
Ficklin, Robert L; Bhandari, Bita. University of Arkansas - Monticello