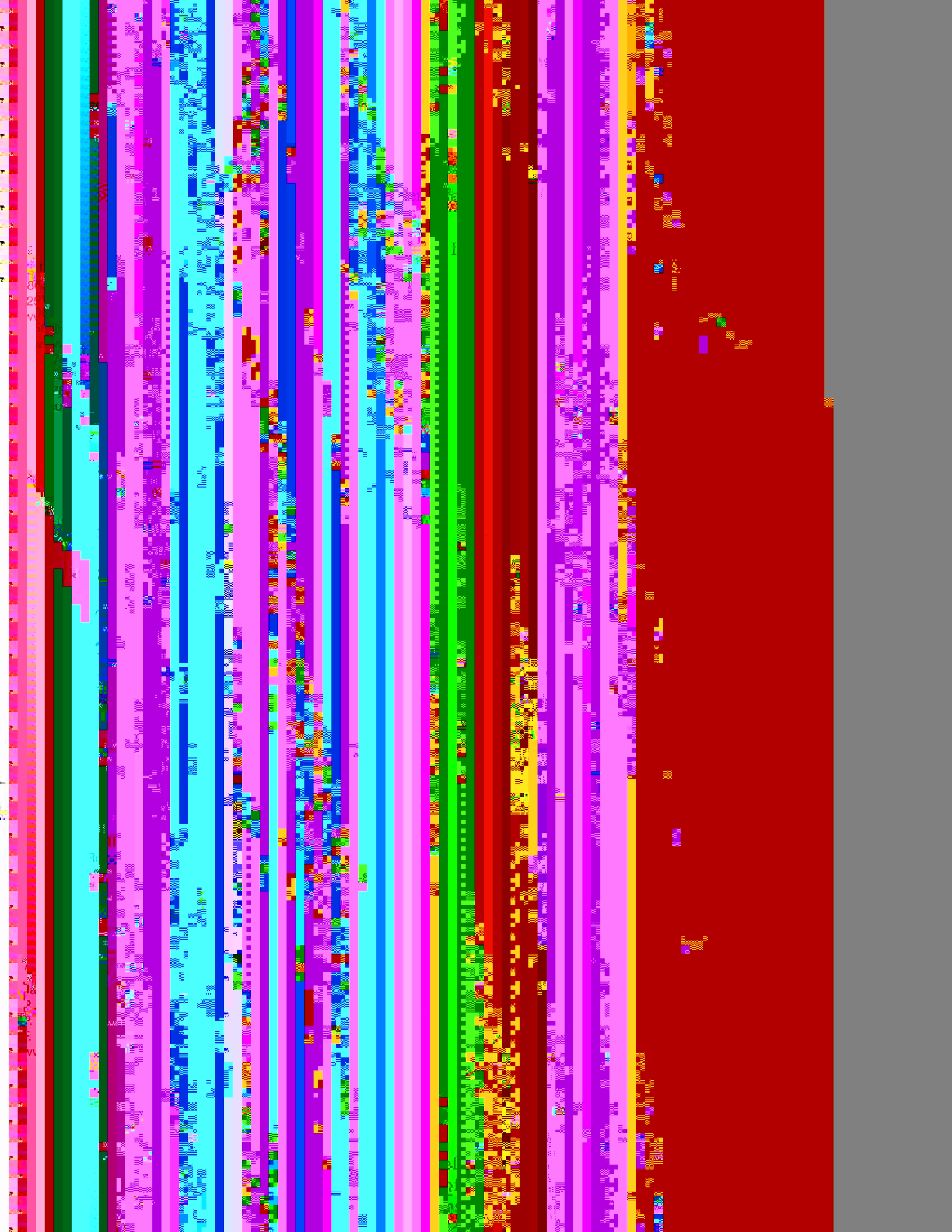


# PROGRAM











## **LOCAL ARRANGEMENTS COMMITTEE**

The officers and members of the Academy express their appreciation to Jacksonville State University and the Local Arrangements Committee for their efforts in planning and hosting this 88<sup>th</sup> Annual Meeting.

### **Local Chairs**

George Cline

256-782-5798, [gcline@jsu.edu](mailto:gcline@jsu.edu)

Mark Meade

256-782-5638, [mmeade@jsu.edu](mailto:mmeade@jsu.edu)

James Rayburn

256-782-5803, [jrayburn@jsu.edu](mailto:jrayburn@jsu.edu)

### **Registration:**

Roger Sauterer

256-782-5963, [sauterer@jsu.edu](mailto:sauterer@jsu.edu)





1:00 – 5:00 PM Academy of Science Program Sessions.....Martin Hall & Wallace Hall

*Program Sessions:*

**Friday Morning**

7:00 – Noon

Registration..... 1<sup>st</sup> Floor Main Entrance

Refreshments..... 1<sup>st</sup> Floor Main Entrance

8:00 – Noon SYMPOSIUM..... Martin Hall, Room 122

- 10:15 Oil spill impact on sea turtles in the Gulf of Mexico. *Ken Marion*, Andy Coleman, and Thane Wibbels, University of Alabama at Birmingham, Biology Department.
- 10:30 Measuring marsh plant productivity and micro-, meio-, and macrofaunal abundance and diversity in response to oiling in a northern Gulf of Mexico salt marsh. *Lee Stanton*, John McCall, Brian Burnes, University of West Alabama, Biology Department.



**PROGRAM of the  
ALABAMA JUNIOR ACADEMY OF SCIENCE  
Catherine Shields, Interim State Counselor**







*Lytechinus variegatus*. Roberta Challener, Grant D Hinkle, and James B McClintock, University of Alabama at Birmingham.

- \*23. Use of physiological indices in monitoring fish stress. *Megan E Cordle*, Al Nichols, and Mark E Meade, Jacksonville State University.
- 24. Population dynamics of sugar maple (*acer saccharum* marsh.) at the southern

31. 4:15



11:00 Evaluating the changing surfactant capabilities in the Gulf of Mexico. *David Steffy*,  
Jacksonville State University, Department of Physical and Earth Science.

**SECTION I – BIOLOGICAL SCIENCES**

**Paper Session III**

**Friday Afternoon 2:00 – 4:00 PM**

**Room 130, Martin Hall**

**Lori Tolley-Jordan, Presiding**

- 37. 2:00 Distribution of *Amphianthus pusillus* and *Diamorpha smallii* in Alabama. *David M Frings* and L. J. Davenport, Samford University.
- 38. 2:15 Use of allozyme markers to detect genetic variation in walleye populations. *Aala A Abulfaraj*

**SECTION II – CHEMISTRY**  
**Session I**

undergraduate biochemistry labs. Lauren R. Collins and Catrina D. Mize, Dept. of Physical and Earth Sciences, Jacksonville State University.

11. LC-MS analysis of the breakdown of ethinylestradiol by fungal enzymes. Laura Bedsole, Denise J. Gregory, Lisa A. Nagy, Samford University.
- \*12. Metal concentrations in scad mackerel, *trachurus lathami*, collected from the northern Gulf of Mexico. Meriem Zettili, Al Nichols, and David Steffy, Jacksonville State University.



**SECTION III – PHYSICS AND MATHEMATICS**

**Paper Session, II**

**Thursday Afternoon, 1:30 – 2:30 PM**

**Room 122, Martin Hall**

**M.D. Aggarwal and Akshaya Kumar, Presiding**

8. 1:30 Synergistic effects of multiwalled carbon nanotubes and niobium oxide nanoparticles for reversible hydrogen storage in novel complex hydrides. *Sesha S Srinivasan*, Prakash C. Sharma, Dervis E. Demirocak, Elias K. Stefanakos, and D. Yogi Goswami, Tuskegee University, University of South Florida.
9. 1:50 MOS properties of 4H-SiC Carbon face. *Zengjun Chen*, P. C. Sharma, Physics Department, Tuskegee University, and John Williams, Physics Department, Auburn University.
10. 2:10 Altering Raman spectroscopy variables used for chemical detection. *Sabiha Runa*, A. Kassu, P. Guggilla, and M. Dokhanian, Alabama A&M University.

**SECTION III – PHYSICS AND MATHEMATICS**

**Poster Session**

**Thursday Afternoon Akshaya 5.10 -1.17 TD. Tc0 Tw( 1T7.78 0 0 1.78 0**

- \*18. Optical properties of Nd<sup>3+</sup> ions doped in glass. *Bria M. Moore*, Akshaya Kumar, and Prakash C. Sharma, Tuskegee University.



Jacksonville State University.

- \*10. 2:00 Supporting aspect-oriented modeling through a demonstration-based model

**SECTION V – SOCIAL SCIENCES**  
**Thursday Afternoon, 1:00 PM – 3:40 PM**  
**Room 338, Martin Hall**  
**Richard A. Hudiburg, Presiding**

1. 1:00 A matter of trust: a case study on decision making under pressure. *Thomas Pieplow*, Bryan Kennedy, Susan Herring, Michael Essary, and Linda Shonesy, Athens State University.
2. 1:20





**SECTION VI – ANTHROPOLOGY**  
**SPaper Session I**

**SFriday Morning, 9:00– A10:45 AM**

**SRoom 250, Martin Hall**

**Harry Holstein Presiding**

- \*12. 2:15 Ethnoarchaeology of fire features and ritual in Fiji's Lau group. *Mallory Messersmith*



**SECTION VIII – INDUSTRY, ENVIRONMENTAL, AND EARTH SCIENCE**

**Session I**

**Thursday Morning**

**Room 334, Martin Hall**

**Janie Gregg, Presiding**

**SECTION IX – HEALTH SCIENCES**  
**Thursday Morning, 9:00 – 11:00 AM**  
**Room 338, Martin Hall**  
**Bettina Riley, Presiding**

1. 9:00 Clinical simulation: an innovative teaching tool. *Beverly Myers*, Lucille Irby,

**SECTION X – BIOETHICS & HISTORY & PHILOSOPHY OF SCIENCE**

**SOUTHEASTERN SOCIETY OF ENVIRONMENTAL TOXICOLOGY AND  
CHEMISTRY**

**Friday Afternoon, 1:15 – 4:15 PM**

**Room 111, Martin Hall**

**James Raybur, Presiding**

**3**

**SOCIETY OF ENVIRONMENTAL TOXICOLOGY AND CHEMISTRY**  
**Poster Session**

**GORGAS SCHOLARSHIP COMPETITION**

**Poster Session**

**Friday Afternoon**

**Authors Present, 12:00-1:30 PM**

**11**



## **2011 REGIONAL SCIENCE FAIRS**

**North Alabama Regional Science & Engineering Fair**, The University of Alabama in Huntsville, March 2-4, 2011, Barbara Lucius,





~~SAWH. Ms STEFF and Dr MURRAY. CHAIR Dr THOMPSON. SAHAR~~

- 1990 Max Cooper, Medicine and Immunology, University of Alabama at Birmingham  
1991 Dan Urry, Biochemistry, University of Alabama at Birmingham  
1992 Gail Cassell, Microbiology, University of Alabama at Birmingham



- Vice Chair: (2012) Yong Wang, Center for Forestry and Ecology, Alabama A&M Univ., Normal, AL 35761, [yong.wang@aamu.edu](mailto:yong.wang@aamu.edu).

## **ELECTED OFFICERS, 2010-2011**

**President:** Brian Burnes (2011), Dept. of Biology, University of West Alabama, Livingston, AL 35470, (205) 652-3442, [bburnes@uwa.edu](mailto:bburnes@uwa.edu)



## APPOINTED COMMITTEES, 2010-2011

### Archives:

-

- David Nelson, (2012), Dept. of Biology, Univ. of South Alabama, Mobile, AL 36688, [dnelson@usouthal.edu](mailto:dnelson@usouthal.edu).
- Robert Pitt, (2013), Civil & Environmental Engineering, Univ. of Alabama, PO Box





- Anne Cusic, (2012), Dept. of Biology, Univ. of Alabama at Birmingham, Birmingham, AL 35294, [acusic@uab.edu](mailto:acusic@uab.edu).
- Barrett Bryant, (2013), Dept. of Computer and Information Science, Univ. of Alabama at Birmingham, Birmingham, AL 35294, [Bryant@cis.uab.edu](mailto:Bryant@cis.uab.edu).
- Gene Byrd, (2012), Dept. of Physics, Univ. of Alabama, Tuscaloosa, AL 35487, [byrd@possum.astr.ua.edu](mailto:byrd@possum.astr.ua.edu).



H. Ellsworth Steele .....	1967-68
Ruric E. Wheeler .....	1968-69
Wilbur B. DeVall .....	1969-70
W.L. Furman .....	1970-71
G.O. Spencer .....	1971-72
Joseph C. Thomas .....	1972-73
Robert T. Gudauskas .....	1973-74
Reuben B. Boozer .....	1974-75
Thomas E. Denton .....	1975-76
Urban L. Diener .....	1976-77
James C. Wilkes .....	1977-78
William F. Arendale .....	1978-79
Jack H. Moore .....	1979-80
Geraldine M. Emerson .....	1980-81
Kenneth Ottis .....	1981-82
Charles M. Baugh .....	1982-83
Raymond E. Isbell .....	1983-84
John F. Pritchett .....	1984-85
Stanley T. Jones .....	1985-86
Philip G. Beasley .....	1986-87
H. Dean Moberly .....	1987-88
Richard L. Shoemaker .....	1988-89
Adriane G. Ludwick .....	1989-90
Michael E. Lisano .....	1990-91
Ken R. Marion .....	1991-92
Michael B. Moeller .....	1992-93
Prakash Sharma .....	1993-94
Eugene Omasta .....	1994-95
Dan C. Holliman .....	1995-96
Thomas S. Jandebour .....	1996-97
Ellen B. Buckner .....	1997-98
Moore Asouzu .....	1998-99
Larry R. Boots .....	1999-00
Richard Hudiburg .....	2000-01
Roland Dute .....	2001-02
Stephen A. Wat.....4o.....	2001-02

GeraldCusicDiener .....S--elle.3-042000-01  
1994-95

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KRoblee. Boots.....nts8-091993-94  
.....nts9-101994-95

## **Hosts for Future Alabama Academy of Science Meetings**

2012 – Tuskegee University

2013 – Open

2014 – Open

2015 -- Open





