PROGRAM

EIGHTY-FOURTH ANNUAL MEETING

of the

ALABAMA ACADEMY OF SCIENCE, INC.

Meeting Jointly With

ALABAMA JUNIOR ACADEMY OF SCIENCE

GORGAS SCHOLARSHIP COMPETITION

ALABAMA STATEWIDE CHEMISTRY UNDERGRADUATE RESEARCH SYMPOSIUM

February 28 - March 2, 2007
Tuskegee University
Tuskegee, AL

www.alabamaacademyofscience.org
Tips for a safe stay:

*When walking, stick to the main thoroughfares and well-lit areas.

*If walking, don't wear fancy jewelry in plain sight.

*Don't wear your meeting badge outside the motels.

*Be cognizant and alert to surroundings.  Look alert.

*When walking after dark, don’t hug the buildings or cars; walk in the open or near the curb

*Carry your purse close to your body.

*Don't leave valuables in your room.  Get a motel safe deposit box.

*Travel in groups.  Don't be a loner, particularly in the evening.

*Abide by common sense:  If something looks suspicious, report it and/or avoid it.

*On-campus police, fire, medical service:
  Tuskegee University police/Security number:  727-8757
  Campus Emergency:  727-4911
  Emergencies (Police, Fire, Medical):  9-911

*Off-campus emergencies (Police, Fire, Medical):  911 or 724-0083
*East Alabama Medical Center, Auburn:  334-749-3411
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Tuskegee University

Founded by Booker T. Washington

Office of the President

February 28, 2007

Dear Academy Participants,

On behalf of the Tuskegee University administration, faculty, staff and students, it is my pleasure to welcome you to the annual meeting of the Alabama Academy of Science, the Alabama Junior Academy of Science and Gorgas Scholarship Program. We are honored to host this prestigious event on the Tuskegee University campus. I encourage you to attend the Academy sessions, presentations and activities while enjoying the hospitality of our historic campus, an institution founded in 1881 under the leadership of Dr. Booker T. Washington, one of the nation’s great educators. The University regards its history with considerable pride and this academic year is celebrating 125 years of excellence and service.

We welcome you to Tuskegee University and wish for each of you a productive and enjoyable 2007 annual meeting of the Alabama Academy of Science and affiliated entities.

Sincerely,

Benjamin F. Payton
President

Tuskegee, Alabama 36088
(334) 727-8501
Fax (334) 727-9276
February 28, 2007

Friends and Colleagues

Tuskegee University is delighted to welcome you to the campus for the 2007 annual meeting and I extend our hospitality to fellow scholars, professors, investigators and students engaged in the discovery and learning processes bearing on various facets of science. You have a carefully designed, intellectually rich and diverse annual meeting program and we consider it a privilege to host the Eighty - Fourth Joint Annual Meeting of Senior and Junior Alabama Academy of Science. In particular, I direct your attention to the many scientific session and presentations, inclusive of symposia that highlight topics of critical importance to local, state and national interests. Thus, please enjoy the meeting sessions as well as the University's facilities and historic grounds.

We have sought to make your stay a productive and comfortable one and wish you a successful annual meeting.

Sincerely,

Luther S. Williams

Tuskegee, Alabama 36088
Dear AAS Members and Guests;

Welcome to the 84th annual meeting of the Alabama Academy of Science. Since 1924, scientists in Alabama have met each year to exchange knowledge and promote science education in the state. This year we continue this fine tradition as we meet with the community of scholars at Tuskegee University. Science and science education are indeed timely, relevant issues that affect us all. Our academy participants have convened here from across the state to share scientific knowledge and interests, and to renew long-term friendships. Academy membership fosters professional comradery, collegiality and cooperative ventures within our state. Informative papers and posters will be presented in twelve different sections of the Senior Academy. Young scientists will gather to meet and read papers in the Junior Academy of Science and in the Alabama Undergraduate Research Symposium (Chemistry). Paper competitions, travel awards, and research grants will be awarded to students. Other outstanding students will gather to participate in the research competition of the prestigious Gorgas Scholarship Program.

On Friday morning we will feature a Symposium: “Hurricane Impacts along the Gulf Coast.” Everyone is invited to attend and participate in this timely forum. It is good to see those of you who attend the meetings each year; it is you who give the academy its identity. If you are attending for the first time, hopefully you will find informative presentations and make friends with colleagues from other institutions. All of us will share the excitement of the first-time presenters, whom we always seek to encourage.

Meetings such as this require considerable planning. I want to thank the trustees, officers, committee members and section chairs for their help in making this meeting a successful reality. Special thanks go to Dr. Prakash Sharma and the members of the local arrangements committee at Tuskegee University for their fine planning and coordination. We owe a debt of gratitude to Dr. Larry Krannich (AAS executive director) for his commitment and hard work. I trust that the meeting will be a valuable, challenging and informative experience. Hopefully, you will be inspired to continue your interest in scientific research and education. As you return to your institution, spread the word about the Alabama Academy of Science and plan to participate again next year.

Sincerely,

David H. Nelson, Ph. D.
President: Alabama Academy of Science
LOCAL ARRANGEMENTS COMMITTEE

The officers and members of the Academy express their appreciation to Tuskegee University and the Local Arrangements Committee for their efforts in planning and hosting this 84th Annual Meeting.

Local Chairperson
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GENERAL INFORMATION

• Registration badges will be required for admission to all scientific paper sessions, the Thursday evening social, and the banquet.

• Applications for membership and payments of annual dues will be accepted by the Secretary in the registration area. At least one of the authors of a presented paper or poster must be a member of the Academy.

• Tickets for the Joint AJAS/AAS banquet may be purchased at the registration desk until 9:30 Friday morning.

• Computers will be provided where needed for presentations. If presenters bring their own, they are responsible for their computer.

POSTERS

Posters are to be available for viewing in Kellogg Conference Center Atrium. Authors for the session posters should be present for discussions with viewers as follows:

Thursday:
- 10:30 AM – 12:30 PM, Chemistry (Section II) and Chemistry Undergraduate Research Symposium
- Noon – 1:30 PM, Biological Sciences (Section I)
- 2:30 – 3:30 PM, Geography, Forestry, Conservation & Planning (Section IV)
- 3:00 – 4:00 PM, Physics and Mathematics (Section V)
- 3:30 – 4:30 PM, Health Sciences (Section IX)
- 3:45 – 4:30 PM, Engineering and Computer Science (Section X)

Friday:
- 2:30 – 3:45 PM, Biological Sciences (Section I)

Posters should be removed as soon as your respective poster session has concluded and must be removed by 5:30 P.M. of the respective day.
PROGRAM
of the
ALABAMA ACADEMY OF SCIENCE
February 28 – March 2, 2007

Wednesday

4:00 - 6:00 PM   Registration......................................... Kellogg Conference Center (KCC) Lobby
6:30 - 10:00 PM  Executive Committee Dinner/ Meeting................................. KCC Restaurant

Thursday Morning

7:00 - Noon  Registration...............................................................................................KCC Lobby
Continental Breakfast ...................................................................................... Kellogg Conference Center
8:30 AM  Academy of Science Program Sessions ........................................ Kellogg Conference Center

Section Program Sessions:
8:30 Chemistry (Section II).................................................................................KCC Room G
9:00 Biological Sciences I (Section I)..............................................................KCC Auditorium
9:00 Physics and Mathematics I (Section V) .................................................KCC Room A
9:00 Health Sciences I (Section IX) .......................................................... KCC Room B
9:00 Engineering and Computer Science(Section X)..................................KCC Room D
10:00 Geography, Forestry, Conservation, & Planning (Section IV) ......... KCC Room E
10:20 Industry and Economics I (Section VI) ..............................................KCC Ball Room A1

Slide Preview Room .................................................................................. KCC TeleConference Room

10:30 AM – 12:30 PM  Poster Viewing ..........................................................KCC Atrium
Authors present to discuss these section posters from
10:30 AM – 12:30 PM ................................................................. Chemistry (Section II)
10:30 AM – 12:30 PM .................................................. Chemistry Undergraduate Research Symposium

Noon – 1:00 PM
Lunch ............................................................. Kellogg Conference Center Ball Room B
Lunch (Trustees, Elected Officers, Exec. Dir.)............................................... KCC Ball Room A2

12:45 PM Group Picture ..............................................................KCC Main Entrance at the Statue

Thursday Afternoon

1:00 - 4:00 PM  Registration.................................................................KCC Lobby
Snacks ................................................................................................. Kellogg Conference Center
1:00 - 5:00 PM  Poster Viewing ..................................................................................KCC Atrium
Authors present to discuss these section posters from
Noon – 1:30 PM ...........................................................................................................Biological Sciences
2:30 - 3:30 PM ................................................... Geography, Forestry, Conservation & Planning
3:00 – 4:00 PM .............................................................. Physics and Mathematics
3:30 – 4:30 PM .............................................................. Health Sciences
3:45 – 4:30 PM .............................................................. Engineering and Computer Science

1:00 – 5:00 PM  Academy of Science Program Sessions................. Kellogg Conference Center

Program Sessions:

1:00 Biological Sciences II (Section I)..............................................KCC Auditorium
1:00 Alabama Statewide Chemistry Undergraduate Research
    Symposium (Section II) ........................................... KCC Room G
1:00 Health Sciences II (Section IX)................................................. KCC Room B
1:00 Engineering and Computer Science (Section X)....................... KCC Room D
1:00 Geography, Forestry, Conservation, & Planning (Section IV)......KCC Room E
1:20 Chemistry (Section II)............................................................ KCC Room G
1:30 Physics and Mathematics II (Section V).................................... KCC Room A
1:40 Industry and Economics II (Section VI)................................. KCC Ball Room A1
1:00 Behavioral and Social Sciences II (Section VIII)...................... KCC Ball Room A3
2:00 Bioethics and History & Philosophy of Science (Section XII).....KCC Room F

Thursday Evening

5:00 PM  Section Officer’s Meeting .................................................. KCC Room F & G
6:00 AJAS/AAS Annual Business Meeting ....................................... KCC Room F & G
7:00 Joint AJAS/AAS Banquet............................................... Kellogg Conference Center Ballroom

David Nelson, Presiding

Dr. Bruce J. Tatarchuk
Director of Microfibrous Material Manufacturing Center
Grin Distinguished Professor, Auburn University

Energy Assurity And The Environment

Presentation of the Academy Awards
David Nelson
Friday Morning

7:00 – Noon  Registration.................................................................KCC Lobby
Continental Breakfast .............................................................. Kellogg Conference Center

8:15 – Noon  SYMPOSIUM.................................................................KCC Auditorium

８:１５ AM to １２:００ noon
Kellogg Conference Center Auditorium

Symposium Sponsored by Biological Sciences (Section I); Geography, Forestry,
Conservation, and Planning (Section IV); Science Education (Section VII), and
Health Sciences (Section IX)

“Hurricane Impacts Along the Gulf Coast”

Welcome To Tuskegee:  Dr. Benjamin F. Payton, President

8:15  JSU’s Advanced Technology Integration Center.  W. Peter Conroy, Jacksonville State
University, Jacksonville, Alabama.

8:45  Some Devastating Structural Aspects of Recent Land falling Hurricanes on the Northern
Gulf Coast, Keith Blackwell, University of South Alabama, Mobile, Alabama.

9:15  Hurricanes Ivan and Katrina Impacts on Environmental Assessments in the Lower
Mobile-Tensaw Delta, John Valentine, Dauphin Island Sea Lab, Dauphin Island,
Alabama.

9:45  INTERMISSION

10:00  Hurricane Katrina Impact on Nesting Birds, John Dindo, Dauphin Island Sea Lab,
Dauphin Island, Alabama.

10:30  The Status of Disaster Preparedness Plans in Hospitals, Pamela Autrey and Erica Pryor,
University of Alabama at Birmingham, Birmingham, Alabama.

11:00  Care for the Caregiver, Jeanne Picariello, Colonel (retired), US Army Nurse Corps,
Auburn University at Montgomery, Montgomery, Alabama

11:30  The Geography of Recovery: Monitoring Change on the Hurricane Katrina Landscape
using Remotely Sensed Imagery, Lisa Keys-Mathews, University of North Alabama,
Florence Alabama.
8:30 - 11:30 AM  Academy of Science Program Session ............... Kellogg Conference Center

Program Sessions:

9:00  Physics and Mathematics III (Section V) ....................... KCC Meeting Rooms F & G
9:00  Science Education I (Section VII) ................................. KCC Meeting Rooms F & G
9:00  Anthropology I (Section XI) .......................................................... KCC Meeting Room D

Noon – 1:00 PM Lunch ............................................................. Kellogg Conference Center Ball Room B

Friday Afternoon

1:00 - 2:00 PM  Registration................................................................. KCC Lobby

1:00 - 4:30 PM  Poster Viewing ............................................................... KCC Atrium
    Authors present to discuss these section posters from
    2:30 -- 3:45 PM ............................................................... Biological Sciences

12:30 – 5:00 PM  Academy of Science Program Sessions .......... Kellogg Conference Center

Program Sessions:

12:30  Biological Sciences III (Section I) ............................................ KCC Auditorium
1:00  Science Education II (Section VII) ............................................. KCC Room B
2:00  Bioethics and History & Philosophy of Science (Section XII) .... KCC Room F
1:00  Physics and Mathematics IV (Section V) ................................. KCC Room A

Slide Preview Room ...................................................................... KCC TeleConference Room
PROGRAM of the
ALABAMA JUNIOR ACADEMY OF SCIENCE
B.J. Bateman, State Counselor
March 1 and 2, 2007

Thursday

3 - 5:00 PM Early Arrival Registration ......................... Kellogg Conference Center (KCC)
6:00 AJAS/AAS Annual Business Meeting .......................................................... KCC
7:00 Joint AJAS/AAS Banquet ........................................ Kellogg Conference Center Ballroom

Friday

7:00 AM Continental Breakfast ................................................................. KCC
7:45 PM Registration ......... Luther H. Foster Hall (Eng. Bldg.) 223
7:45 AM Paper Reading
Orientation ................................ Luther H. Foster Hall (Eng. Bldg.) 223
Judges Orientation ............... Luther H. Foster Hall (Eng. Bldg.) 328
8:15 AM Paper Competition .......... Luther H. Foster Hall (Eng. Bldg.)
Biology ....................... Luther H. Foster Hall (Eng. Bldg.) 325
Humanities ...................... Luther H. Foster Hall (Eng. Bldg.) 326
Mathematics/Engineering ... Luther H. Foster Hall (Eng. Bldg.) 329
Physical Science .............. Luther H. Foster Hall (Eng. Bldg.) 330
11:30 AM Caucus ......................... Luther H. Foster Hall (Eng. Bldg.) 327
12:00 Noon Lunch ......................... Luther H. Foster Hall (Eng. Bldg.) 528
2:00 PM Paper Competition Finals ....... Luther H. Foster Hall (Eng. Bldg.) 223
3:30 PM Elections and Business Meeting .... Luther H. Foster Hall (Eng. Bldg.) 223
Group Photograph ..........................................................
4:00 PM Awards Reception, Joint AJAS/Gorgas ................. Auditorium (223)
Luther H. Foster Hall, Engineering Building
GORGAS SCHOLARSHIP COMPETITION
Thursday, March 1, 2007
Kellogg Conference Center

Ellen Buckner, Chair, Judges

7:00 PM Joint AJAS/AAS Banquet...................... Kellogg Conference Center Ballroom
Joint Banquet and Recognition of Gorgas Finalists

Friday, March 2, 2007
Final Competition: Finalists” Presentations to Judges and Interviews
Luther H. Foster Hall, Engineering Building
Ellen Buckner, Chair, Judges

10:00 – 10:30 Set Up Science Exhibits................................. Rooms 404 & 405
10:30 – 11:30 Demonstrations for Judges ......................... Rooms 404 & 405
11:30 – 12:00 Refreshment Break
12:00 – 2:00 Individual Interviews with Judges ...................... TBA (offices)
11:30 – 2:00 Public Showing of Exhibits ......................... Rooms 404 & 405
4:00 Awards Reception, Joint AJAS/Gorgas ..................... Auditorium (223)
Luther H. Foster Hall, Engineering Building
Announcement of Winners

The Alabama Science Scholar Search and Gorgas Scholarship Competition is supported by the
Alabama Power Foundation, Incorporated, and administered by the Alabama Academy of
Science, Inc.

The Gorgas Scholarship Competition website
www.GorgasScholar.org
contains detailed information on the annual competition and awards available to winners and
finalists.
SECTION I – BIOLOGICAL SCIENCES

Session I

Thursday Morning
Kellogg Conference Center Auditorium
Brian Burnes, Presiding


2.  9:15  Vascular flora of Coon Creek Forever Wild Tract, Tallapoosa County, AL. T. Wayne Barger and Dan Tenaglia. State Lands Division, ALDCNR Natural Heritage Section.


5.  10:00  The anourethral slit and the necropsy of a bottlenose dolphin. Gerald T Regan. Marterra Foundation Inc.

10:15 INTERMISSION


8.  11:00  Variation of fecal coliform antibiotic resistance patterns. Margaret Audley and Brian Burnes. Judson College.


11:45 LUNCH

SECTION I – BIOLOGICAL SCIENCES
Poster Session  
Thursday Afternoon  
Noon – 1:30 PM PM, Kellogg Conference Center Atrium

11. Analysis of Sarcoidosis T cells for recognition of Mycobacterium antigens. Whitney S. Evans, Allison Wright, Michele Nadaf, and Wonder P Drake, Oakwood College; Vanderbilt University.


13. Differential localization of Rin 1. Natalie N King, Jin Cui, Dr. Bruce Horazdovsky, and Wonder P Drake, Oakwood College & Mayo Clinic; Mayo Clinic; Mayo Clinic.


16. Analysis of Sarcoidosis T cells for recognition of Mycobacterium antigens. Whitney S. Evans, Allison Wright, Michele Nadaf, and Wonder P Drake, Oakwood College; Vanderbilt University.


18. Twist inhibits insulin-like growth factor binding protein-6 (IGFBP-6) expression by a transcriptional mechanism in prostate cancer cells. Kassidy N Alexander, Tom A Linkhart, Donna D Strong, and Cassi A Strohbach, Oakwood College, Huntsville, Alabama; City of Hope, Beckman Research Institute, Duarte, CA; Loma Linda University, Loma Linda, CA.

19. Differential localization of Rin 1. Natalie N King, Jin Cui, Dr. Bruce Horazdovsky, and Wonder P Drake, Oakwood College & Mayo Clinic; Mayo Clinic; Mayo Clinic.

20. S43126 (Compound I) activates the PI3K/AKT signaling pathway in PC12 cells. Shammah O Williams, Terry A Brown-Bryan, Wentsworth B. Kennedy, Chereé L Rivers, and Lincoln P. Edwards, Oakwood College; Department of Physiology and Pharmacology, Loma Linda University School of Medicine; Dentistry, Loma Linda University School of Dentistry.
21. Occurrence of Chaetogaster sp. (Oligochaeta) among Physa sp. (Gastropods) from Lake LU in Livingston, Alabama. Tracy W. Duckworth, University of West Alabama.

22. eGFP fusions to identify determinants for dimerization and polar clustering in the Aer aerotaxis protein of Escherichia coli. Melissa S Charles, Daniel Salcedo, Mark Johnson, and Barry L Taylor, Oakwood College, Loma Linda University, Loma Linda University, Loma Linda University.

23. Snorkel/scuba survey of historic hellbender streams (What to do when hellbenders don’t come?). James R. Rayburn, George Cline, Cliff Web, and Chereé L Rivers, Jacksonville State University.

24. Mechanism of bafilomycin induced neuroprotection against autophagic stress. Fernand D Samson, Enfu Bi, Kevin A Roth, and John J Shacka, Oakwood College; University of Alabama, Birmingham; University of Alabama, Birmingham; University of Alabama, Birmingham.


Session II
Thursday Afternoon
Kellogg Conference Center Auditorium
Phillip Reynolds, Presiding


29. 2:00 Stable Expression of the androgen receptor in HeLa cells. Philip D. Reynolds. Troy University.

30. 2:15 Pit membrane ontogeny in two gymnosperm species. Roland Dute, LaToya Hagler, and Adam Black. Auburn University.

2:30 INTERMISSION

32. 3:00 Effects of carbon dioxide, genotype, and fertilizer on wood growth in Pinus elliottii. Roland Dute, Ural Walker, Charles Williams, and Tiffany Grant. Auburn University.


*34. 3:30 Sponge diversity on mangrove roots: Does size matter? Steven J.A. Kimble, Robert W. Thacker, and Diaz M. Christina. University of Alabama, Birmingham (Kimble and Thacker); Museo Marino de Margarita, Nueva Esparta, Venezuela (Diaz).

35. 3:45 Variation in human fecal coliform antibiotic resistance patterns over three years. Margaret Audley and Brian S. Burnes. Judson College


37. 4:15 Water quality and habitat assessment of Cathy's Creek, Cleburne County, Alabama. R. Tyler Greer, Jonathon Adams, and Frank A. Romano, III, Jacksonville State University.

4:30 BUSINESS MEETING

*Denotes presentation is entered in competition
SECTION I – BIOLOGICAL SCIENCE
Friday Morning
8:15 AM to 12:00 noon
Kellogg Conference Center Auditorium

Symposium Sponsored by Biological Sciences (Section I); Geography, Forestry, Conservation, and Planning (Section IV); Science Education (Section VII), and Health Sciences (Section IX)

“Hurricane Impacts Along the Gulf Coast”

8:15 JSU’s Advanced Technology Integration Center. W. Peter Conroy, Jacksonville State University.

8:45 Some devastating structural aspects of recent land falling hurricanes on the Northern Gulf Coast, Keith Blackwell, University of South Alabama.

9:15 Hurricanes Ivan and Katrina impacts on environmental assessments in the lower Mobile-Tensaw Delta, John Valentine, Dauphin Island Sea Lab, Dauphin Island, Alabama.

9:45 INTERMISSION

10:00 Hurricane Katrina impact on nesting birds, John Dindo, Dauphin Island Sea Lab, Dauphin Island, Alabama.

10:30 The status of disaster preparedness plans in hospitals, Pamela Autrey and Erica Pryor, University of Alabama at Birmingham.

11:00 Care for the caregiver, Jeanne Picariello, Colonel (retired), US Army Nurse Corps, Auburn University at Montgomery.

11:30 The geography of recovery: Monitoring change on the Hurricane Katrina landscape using remotely sensed imagery, Lisa Keys-Mathews, University of North Alabama.

SECTION I – BIOLOGICAL SCIENCES
Session III
Friday Afternoon
Kellogg Conference Center Auditorium
Paul M Stewart, Presiding


44. 2:00 Genetic structure of Montana sauger populations. *Rachael N. Koigi*, Neil Billington, Jingyuan Xiong, Brian L. Sloss, Ryan Francowiak, and William Gardner. Troy University (RNK, NB, JX); University of Wisconsin-Stevens Point (BLS, RF); Montana Dept. Fish, Wildlife & Parks (WG).

*45. 2:15 Hybridization between sauger and walleye. *Amy M. Barr* and Neil Billington. Troy University.

2:30 INTERMISSION AND POSTER SESSION


47. 4:00 Ecological relationships of sarcophagid larvae with the white-topped pitcher plant (*Sarracenia leucophylla*). *Angela M. Spano* and Debbie R. Folkerts. Auburn University.


*Denotes presentation is entered in competition

SECTION I – BIOLOGICAL SCIENCES

Poster Session
Friday Afternoon
2:30 – 3:45 PM, Kellogg Conference Center Atrium


56. Effects of tumor suppressors MENIN and MAD1 on hTERT transcription in MCF-7 breast cancer cells.  Joseph T DeAngelis, Sharla M.O. Phipps, Trygve O Tollefsbol, and Wonder P Drake, University of Alabama Birmingham.

57. Enrichment and isolation of Cr(VI) resistant bacteria for Cr(VI) bioremediation in water.  Benedict C. Okeke, Charles Oji, Shakena Crenshaw, and Jeffrey Laymon, Auburn University Montgomery.


60. Mating studies of Agaricales from Mobile, Alabama. *Peter F. Murphy*, Juan L. Mata, University of South Alabama.


63. The developmental toxicity of hand soap to Palaemonetes pugio embryos. *Justin B Whisante*, James R Rayburn, Diaz M. Christina, and Chereé L Rivers, Jacksonville State University.
SECTION II – CHEMISTRY
Session I
Thursday Morning
Kellogg Conference Center Meeting Room G
Houston Byrd, Presiding

9:15 Opening Remarks


2. 9:40 Selective protection of diamines for application in the synthesis of molecular devices. Jeanne L. Kuhler and Michael V. Koduri, Auburn University Montgomery.

3. 10:00 Improving the general chemistry experience for non-science majors. Nichole L. Powell and Gregory Pritchett, Tuskegee University.

SECTION II – CHEMISTRY
Joint With
Alabama Statewide Chemistry Undergraduate Research Symposium
Co-Sponsored by Alabama American Chemical Society Local Sections
Poster Session
Thursday Morning
10:30 AM – 12:30 PM, Kellogg Conference Center Atrium


5. Efficient synthesis of carbamates via the curtius rearrangement. Jeanne L. Kuhler and Michael V. Koduri, Auburn University Montgomery.


††13. Processing effects on percent cis/trans lycopene content in tomato and tomato products. Lonnie Craft, Tahirah Farrer-Bradley and Pamela M. Legget-Robinson, Tuskegee University.


††15. Fatty acid profiles in beef from forage-finished. Tiffani Fletcher, Kyle Willian, and Chris Kerth, Tuskegee University and Auburn University.


†††Denotes presentations from Alabama Statewide Chemistry Undergraduate Research Symposium

SECTION II – CHEMISTRY
Session II  
Joint With  
Alabama Statewide Chemistry Undergraduate Research Symposium  
Co-Sponsored by Alabama American Chemical Society Local Sections  
Thursday Afternoon  
Kellogg Conference Center Meeting Room G  
Houston Byrd, Presiding

*††19. 1:20 Investigation of algorithms for straight line least squares analysis with errors in both X and Y values. Edward B. Garner III and Michael B. Moeller, University of North Alabama.

††20. 1:40 Ab initio studies of filled fullerenes. Sharon Cowing, Jacksonville State University

††21. 2:00 Value-Added bagasse using components of the pomegranate. Shirron N. LeShure and Adriane G Ludwick, Tuskegee University.

††22. 2:20 A systematic study on the effect of temperature, concentration and reagents/catalysts in the addition versus isomerization reactions of maleic acid and its methyl ester. Ashley Casey, Nagarajan Vasumathi, and Jill Lott, Jacksonville State University.

2:40 INTERMISSION

††23. 3:00 Investigating carbon nanotube cytotoxicity in African American breast cancer. Tiffany N. Taylor, Brittani Batts, Derrick Dean, Roberta Troy and Pamela M. Leggett-Robinson, Tuskegee University and University of Alabama at Birmingham.


4:00 BUSINESS MEETING (election of Section II Vice-Chair)

††Denotes presentations from Alabama Statewide Chemistry Undergraduate Research Symposium

*Denotes presentation is entered in competition
SECTION IV – GEOGRAPHY. FORESTRY, CONSERVATION, AND PLANNING

Session I
Thursday Morning
Kellogg Conference Center Meeting Room E
Greg Gaston, Presiding

1. 10:00 Trend analysis of Alabama black belt economic base. LaToya A Feagin, Adande K Piggttt and Chukudi Izeogu, Alabama A&M University

2. 10:20 The spatial distribution of small town decay in rural Alabama: Ryan Brown and Francis Koti, University of North Alabama

3. 10:40 Disparities in homeownership in Alabama: a case study of Huntsville and Decatur metropolitan statistical areas. Angeleta M. Toney and Chukudi Izeogu, Alabama A&M University

11:00 INTERMISSION

4. 11:20 Multi-Temporal pattern analysis of land cover change in Madison County, Alabama. Berneece S Herbert, Alabama A&M University.

5. 11:40 Sustainable transport problems in the urban third world: A study abroad experience in Ghana West Africa. Kenneth R Gilbert, The University of Alabama

12:00 LUNCH

Session II
Thursday Afternoon
Kellogg Conference Center Meeting Room E
Greg Gaston, Presiding

6. 1:00 Regional patterns in the joint structure of Northwest Alabama. Chris R. Terry and Greg Gaston, University of North Alabama


8. 1:40 Is there a Beer Terroir? W.T. Sealy, University of North Alabama

2:00 BUSINESS MEETING (Elect a Section Vice-Chair)
SECTION IV – GEOGRAPHY, FORESTRY, CONSERVATION, AND PLANNING
Poster Session
Thursday Afternoon
2:30 -3:30 PM, Kellogg Conference Center Atrium

   University
   University of North Alabama

SECTION IV – GEOGRAPHY, FORESTRY, CONSERVATION, AND PLANNING
Friday Morning
8:15 AM to 12:00 noon
Kellogg Conference Center Auditorium

Symposium Sponsored by Biological Sciences (Section I); Geography, Forestry,
Conservation, and Planning (Section IV); Science Education (Section VII), and
Health Sciences (Section IX)

“Hurricane Impacts Along the Gulf Coast”

8:15  JSU’s Advanced Technology Integration Center. *W. Peter Conroy*, Jacksonville State
       University.

8:45  Some Devastating Structural Aspects of Recent Land falling Hurricanes on the Northern
       Gulf Coast, *Keith Blackwell*, University of South Alabama.

9:15  Hurricanes Ivan and Katrina Impacts on Environmental Assessments in the Lower
       Mobile-Tensaw Delta, *John Valentine*, Dauphin Island Sea Lab, Dauphin Island,
       Alabama.

9:45  INTERMISSION

10:00 Hurricane Katrina Impact on Nesting Birds, *John Dindo*, Dauphin Island Sea Lab, Dauphin Island,
      Alabama.

10:30 The Status of Disaster Preparedness Plans in Hospitals, *Pamela Autrey and Erica Pryor*,
      University of Alabama at Birmingham.

11:00 Care for the Caregiver, *Jeanne Picariello*, Colonel (retired), US Army Nurse Corps,
      Auburn University at Montgomery.

11:30 The Geography of Recovery: Monitoring Change on the Hurricane Katrina Landscape
SECTION V – PHYSICS AND MATHEMATICS
Session I
Thursday Morning
Kellogg Conference Center Meeting Room A
D. Brian Thompson, Presiding

1. 9:00  Modeling over dispersed count data. Bayo H Lawal, Auburn University
Montgomery

2. 9:30  Antipodal-like theorems and symmetric continua in Euclidean spaces. Jan P
Boronski, Marian Turzanski, Auburn University, Cardinal Stefan Wyszynski
University.

3. 9:50  Some properties of twice continuously differentiable functions. Hussain
Elalaoui-Talibi, Aaron Benson, Tuskegee University.

10:10  INTERMISSION

4. 10:30  Basic problems of realization theory. Sergey Belyi, Troy University.

5. 11:00  Laser induced breakdown spectroscopy in liquid and solid media. Akshaya
Kumar, Prakash C. Sharma, Tuskegee University.

11:30  LUNCH

SECTION V – PHYSICS AND MATHEMATICS
Session II
Thursday Afternoon
Kellogg Conference Center Meeting Room A
D. Brian Thompson, Presiding

6. 1:00  Microwave plasma diagnostics with electrical probes. Anastasia V Tarasova,
Nirmol K Podder, Troy University.

7. 1:30  Optical tweezers: current status and future prospects. D. Brian Thompson,
Megan E Stout, Martin S Heimbeck, University of North Alabama.

8. 2:00  Parameterization of chaotic behaviors in nonlinear systems. Ralph B. Wilson IV,
Nirmol K. Podder, Troy University.

9. 2:30  Shock wave structure and velocity in glow discharge plasma. Nirmol K. Podder,
Anastasia V. Tarasova, Ralph B. Wilson IV, Troy University.

3:00  BUSINESS MEETING


15. Heat conduction in pure semiconducting systems. Akshaya Kumar, Prakash C. Sharma, Tuskegee University.


18. Types of lasers. Dennis Robinson, Akshaya Kumar, Tuskegee University.
SECTION V – PHYSICS AND MATHEMATICS
Session III
Panel Discussion
Friday Morning
Kellogg Conference Center Meeting Rooms F & G
D. Brian Thompson, Presiding

19. 9:00 TEAM-Math - A Partnership of School Systems and Universities to Improve Mathematics Education in East-Alabama. Gayle Herrington, Catherine Jones, W. Gary Martin, Michele Matin, John C. Painter, Mohammed A. Qazi, Chris Rodger, Marilyn Strutchens, Steve Stuckwisch, Nancy Washburn, Judy Welch, Phil Zenor, Auburn University, Wetumpka High School, Auburn University, Auburn Junior High School, Lee County Schools, Tuskegee University, Auburn University, Auburn University, Auburn University, Alexander City Schools, Wetumpka Elementary School, Auburn University.

12:00 LUNCH

SECTION V – PHYSICS AND MATHEMATICS
Session IV
Friday Afternoon
Kellogg Conference Center Meeting Room A
D. Brian Thompson, Presiding

20. 1:30 The planetary status of Pluto by a quantitative analysis. Arjun Tan, Tian Xi Zhang, Mostafa Dokhanian, Alabama A&M University

21. 1:45 Prime numbers connected to the Stirling numbers of the second kind. Carolyn H Gathright, Herman L Windham, Tuskegee University

22. 2:00 Synthesis, growth and properties of piezoelectric lead magnesium niobate-lead titanate single crystals. Faris A Kochary, Mohan D Aggarwal, Ashok K. Batra, Ravindra B Lal, Alabama A&M University

23. 2:15 Growth of cerium-based Cs$_2$CeBr$_5$, K$_2$CeBr$_5$ new scintillators. Rastgo H Hawrami, Mohan D Aggarwal, Faris A Kochary, Ashok K Batra, Alabama A&M University

24. 2:30 Generalized direct sum and Kronecker product of matrices. BhuDev Sharma, Clark Atlanta University
SECTION VI – INDUSTRY AND ECONOMICS  
Session I  
Thursday Morning  
Kellogg Conference Center Meeting Ball Room A1  
Marsha D. Griffin, Presiding  

1. 10:20 Comparative advantage: Trade growth or trade decline. Seyi Kuforiji, Tuskegee University.  


3. 11:00 The socio-economic status of Alabama’s African American population during reconstruction (1866 – 1877). Teshome Gabre, Constance J. Wilson, Gete Bekele, and Christopher I. Stuckey, Alabama A&M University.  

4. 11:20 Impact of economic incentives of the No Child Left Behind ACT on public education. Eric Rahimian and Fesseha Gebremikael, Alabama A&M University.  

11:40 LUNCH  

SECTION VI – INDUSTRY & ECONOMICS  
Session II  
Thursday Afternoon  
Kellogg Conference Center Meeting Ball Room A1  
James G. Alexander, Presiding  

6. 1:40 Analysis of the factors that impact growth and productivity in the Black Belt counties of Alabama, Fesseha Gebremikael and Eric Rahimian, Alabama A&M University.  

7. 2:00 Rethinking consumer sovereignty. James G. Alexander and Marsha D. Griffin, Alabama A&M University.  


2:40 BUSINESS MEETING (Elect a Section Vice-Chair)
SECTION VII – SCIENCE EDUCATION
Session I
Panel Discussion
Friday Morning
Kellogg Conference Center Ball Rooms F & G
D. Brian Thompson, Presiding

1. 9:00 TEAM-Math - A Partnership of School Systems and Universities to Improve Mathematics Education in East-Alabama. Gayle Herrington, Catherine Jones, W. Gary Martin, Michele Matin, John C. Painter, Mohammed A. Qazi, Chris Rodger, Marilyn Strutchens, Steve Stuckwisch, Nancy Washburn, Judy Welch, Phil Zenor, Auburn University, Wetumpka High School, Auburn University, Auburn Junior High School, Lee County Schools, Tuskegee University, Auburn University, Auburn University, Auburn University, Alexander City Schools, Wetumpka Elementary School, Auburn University.

12:00 LUNCH

SECTION VII – SCIENCE EDUCATION
Session II
Friday Afternoon
Kellogg Conference Center Room B
Loretta A. Cormier, Presiding

1. 1:00 Formal and Informal Science Teaching in an Upgraded Planetarium. Laura M Weinkauf, Jacksonville State University.


4. 2:00 Using Current Research Themes to Teach Cell Biology Concepts to Science Undergraduates. Roberta M. Troy, Marcia T. C. Martinez, Gregory Pritchett, and Pamela M Leggett-Robinson, Tuskegee University.

2:20 BUSINESS MEETING (Elect a Section Chair & Vice-Chair)
SECTION VIII -- BEHAVIORAL & SOCIAL SCIENCES

Thursday Afternoon
Kellogg Conference Center Meeting Ball Room A3
Cheryl Bullard, Presiding

1. 1:00 The value of civic engagement and a model for enhancing community dialogue. Constance J Wilson, Alabama A&M University.


*5. 2:30 Food for thought. Leslie N Calloway and Jan O. Case, Jacksonville State University.


3:15 BUSINESS MEETING (Elect a Section Vice-Chair)

*Denotes presentation entered in competition
SECTION IX – HEALTH SCIENCES

Session I

Thursday Morning

Kellogg Conference Center Meeting Room B

Virginia C. Hughes, Presiding

1. 9:00 Opening Remarks

*2. 9:05 Impact on the family of a child experiencing the process of epilepsy. Kristen M. Chappell and Ellen Buckner, University of Alabama, Birmingham.

3. 9:15 Writing as therapy: feasibility and expressivity in teens with cystic fibrosis. Christine A. Feeley and Ellen B. Buckner, University of Alabama, Birmingham.

4. 9:30 NMDA receptor associated abnormalities in schizophrenia. Basil S. Bakir, Lars V. Kristiansen, and James H. Meador-Woodruff, University of Alabama, Birmingham.

*5. 9:45 Psychosocial responses and unique needs as perceived by fathers of preterm infants in the neonatal intensive care unit. Katie B. Wilson, University of Alabama, Birmingham.

10:00 INTERMISSION


8. 10:45 Sweet potato greens effect on reducing cardiovascular risk factors. Seokjoo Yoon, Norma L. Dawkins, Baowu Wang, Zhiliang Huang, and Ralphenia D. Pace, Tuskegee University.

*9. 11:00 Technology communication needs as perceived by adolescent and young adult cancer survivors. Chrystal L. Sullivan, Richard Brown, and Ellen Buckner, University of Alabama, Birmingham.


12:00 LUNCH
SECTION IX- HEALTH SCIENCES
Session II
Thursday Afternoon
Kellogg Conference Center Meeting Room B
Virginia C. Hughes, Presiding

11. 1:00 Medical evaluation of symptomatic hypocalcemia. Alan J. Pernick and Robert E. Pieroni. UASOM, Tuscaloosa Program.

12. 1:15 Delirium secondary to a notable drug interaction. Robert Pieroni and Tim Presley. UASOM, Tuscaloosa Program.


14. 1:45 Stakeholder perceptions of community based support for diabetics in a rural Alabama community. Leana D. Mitchell and Ellen Buckner, University of Alabama, Birmingham.

*15. 2:00 Determination of a factor for the white blood cell estimate. Lucinda A. Utz and Virginia Hughes, Auburn University at Montgomery.


*17. 2:30 Problem behaviors of adolescents adopted from the former Soviet Union. Kristina M. Schneider and Teena M. McGuinness, University of South Alabama.

18. 2:45 Results and analysis of elementary school physical fitness testing trends compared to national norms from a five year project (2002-2007) in a Pike country school. Gayle L. Bush and Candice Howard-Shaughnessy, Troy University.

19. 3:00 Developmental status of methamphetamine-endangered children. Teena M. McGuinness, Sara Majors, and Sarah Haigler, University of South Alabama.

20. 3:15 Influence of racial identity and social support on employment status of African American women. Kate Jackson, Tuskegee University.

3:30 BUSINESS MEETING

*Denotes presentation is entered in competition
SECTION IX – HEALTH SCIENCES
Poster Session
Thursday Afternoon
3:30 – 4:30 PM, Kellogg Conference Center Atrium


SECTION IX – HEALTH SCIENCES
Friday Morning
8:15 AM to 12:00 noon
Kellogg Conference Center Auditorium

Symposium Sponsored by Biological Sciences (Section I); Geography, Forestry, Conservation, and Planning (Section IV); Science Education (Section VII), and Health Sciences (Section IX)

“Hurricane Impacts Along the Gulf Coast”

8:15 JSU’s Advanced Technology Integration Center. W. Peter Conroy, Jacksonville State University, Jacksonville, Alabama.

8:45 Some devastating structural aspects of recent land falling hurricanes on the Northern Gulf Coast, Keith Blackwell, University of South Alabama, Mobile, Alabama.

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9:45 INTERMISSION

10:00 Hurricane Katrina impact on nesting birds, John Dindo, Dauphin Island Sea Lab, Dauphin Island, Alabama.

10:30 The status of disaster preparedness plans in hospitals, Pamela Autrey and Erica Pryor, University of Alabama at Birmingham, Birmingham, Alabama.
11:00  Care for the caregiver, Jeanne Picariello, Colonel (retired), US Army Nurse Corps, Auburn University at Montgomery, Montgomery, Alabama

11:30  The geography of recovery: monitoring change on the hurricane Katrina landscape using remotely sensed imagery, Lisa Keys-Mathews, University of North Alabama, Florence Alabama.
1. 9:00 Thermo-mechanical property characterization of silca epoxy nano-composite. *M.G.K. Khan*, S. Salekeen, and S. Jeelani, Tuskegee University.


4. 10:00 Stab properties of novel thermoplastic and shear thickening fluid kevlar. *Jessie B. Mayo Jr*. Tuskegee University, Army Research Laboratory.

5. 10:20 INTERMISSION

6. 10:40 Modeling nonlinear friction in a mass-spring-damper system. *Saiful Islam*, Randy Johnson, Marc Karam, Tuskegee University

7. 11:00 A polymer microfluidic spotter. *Naga S. Korivi* and Li Jiang, Louisiana State University and Tuskegee University.


9. 11:40 Substrate bonding for micro-electromechanical systems and microfluidic devices. *Naga S. Korivi* and Li Jiang, Louisiana State University and Tuskegee University.

10. 12:00 LUNCH

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9. 1:00 Extracting camera parameters from images. *Lin Yang* and John Johnstone, University of Alabama at Birmingham.

11. 1:40  Language for describing application software in grid computing. Enis Afgan and Purushotham Bangalore, University of Alabama, Birmingham

12. 2:00  A comprehensive survey on software security. Chuang-Han Chen and Hira Narang, Tuskegee University.

13. 2:20  Design and performance issues of non-blocking algorithms in JAVA. Srinivasarao Krishnaprasad, Jacksonville State University.

2:40  INTERMISSION

14. 3:00  Sidestepping the Chinese Room: Aspects of Self-Awareness. Jason Gruber and Steven F. Donaldson, Birmingham-Southern College and Samford University.

15. 3:20  Creating and developing an easiest shot algorithm. Daniel Mills and Brian Toone, Samford University.

4:00  BUSINESS MEETING

SECTION X – ENGINEERING AND COMPUTER SCIENCE
Poster Session
Thursday Afternoon
3:45 – 4:30 PM, Kellogg Conference Center Atrium


17. Software engineering perspective on secure electronic voting systems. Andrea Senigar and Brian Toone, Miles College; Samford University.
9:00 Opening Remarks: Harry Holstein

1. 9:05 A ceramic assemblage from a protohistoric domestic structure at Hickory Ground 1EE89, Cameron Gill, Auburn University.

2. 9:20 A summary of the recent archaeological investigations of Hickory Ground 1EE89 Elmore County, Alabama. John Cottier, Auburn University.


4. 10:00 The DeBardeleben Mine: An example of architectural history within the section 106 process, Marcus Ridley and Harry O. Holstein, Jacksonville State University Archaeological Resource Laboratory.

10:20 INTERMISSION


6. 10:55 Interpreting the Shelton Stone Mound Complex, Rebecca Ridley and Harry O. Holstein, Jacksonville, State University.

7. 11:10 1Wx15: theoretical considerations in a middle woodland environment. Megan Henry, Auburn University.

11:30 BUSINESS MEETING

12:00 LUNCH
1. 1:30 Neuroscience and free will – Gerard Elfstrom, Auburn University.
2. 2:30 Solving the Frame Problem: What teaching machines can teach us about ourselves. Keith Gibson and Joanna Phillips, Auburn University.
3. 3:00 Remediating metaphors from biology in the nanotechnology debate. Michelle Sidler, Auburn University.
4. 3:30 Pluripotent stem cells without embryo destruction: can technology solve the moral dilemma? James Bradley, Auburn University.

4:00 BUSINESS MEETING (Elect a Section Vice-Chair)
OBJECTIVES OF THE ALABAMA ACADEMY OF SCIENCE

The objectives of the Academy are to:
- Promote the development of interest in scientific matters in the state,
- Provide means for publication of papers and abstracts,
- Provide opportunity for increased cooperation and fellowship among its members,
- Cooperate with other organizations having similar aims,
- Render public service in scientific matters,
- Promote the interest in and study of science by the youth of Alabama,
- Provide for and award scholarships to deserving youth of Alabama.

In fulfilling these objectives, the Academy is devoted to nearly all aspects of science and science education.

EDUCATIONAL ACTIVITIES OF THE ACADEMY

The Academy sponsors
- Alabama Junior Academy of Science, a statewide organization of high school science clubs
- Junior Science and Humanities Symposium, an activity supported by the United States Army, U.S. Navy, U.S. Air Force, and the U.S. Coast Guard
- Seven Regional Science Fairs at which high school students exhibit the results of their research or study projects. Regional Finalists compete in the Alabama State Science & Engineering Fair. Winners go to the International Science and Engineering Fair (ISEF)
- Science Olympiads in which regional winners compete at the state level. Alabama winners go to the National Competition.
- Visiting Scientist Network in which volunteer members, upon invitation by a teacher, go to high schools to present talks, demonstrations, or workshops
- Travel grants to enable students to attend the annual meetings where they can present their research results in the Student Research Award Competition
- Research grants to enable students to carry out mentored research
- Annual Science Teacher Fellowships ($1,000) to individuals in the fifth year program leading to Class A certification.
2007 REGIONAL SCIENCE FAIRS

N Alabama  March 7-9  University of Alabama in Huntsville, Jorge Aunon 205.824.3590, dean@eng.uah.edu; web site: www.narsef.uah.edu

W Alabama  March  University of West Alabama, Becky Graham 205.652.3804, bbg@uwa.edu

Central  March 10  University of Alabama at Birmingham, J. Michael Wyss 205.934.5171, jmw@uab.edu; web site: www.uab.edu/cord

Mobile  March 2-3  University of South Alabama, James J. Connors, 251.460-7575, jjconnors@usouthal.edu; web site: http://www.mrsf.net

Northeast  Feb. 23-24  Talladega College, Mrs. Gladys Mayers Swain 256.761.6308, gswain@talladega.edu

Greater East  March 9-10  Chattahoochee Valley Community College, Phoenix City, Susan M. McCollum, 334.291.4953, susan.mccollum@cv.edu

2007 ALABAMA STATE SCIENCE AND ENGINEERING FAIR

April 5 – 7, The University of Alabama in Huntsville; Coordinator, Richard Miller, Physics, 256.824.2454, richard.s.miller@email.uah.edu.

Alabama Science and Engineering Fair web site: http://www.uah.edu/ASEF/asef.htm

2007 INTERNATIONAL SCIENCE AND ENGINEERING FAIR

ALABAMA SCIENCE OLYMPIAD 2006-2007

Division A2 Grades 3-6 Olympiad Tournaments

University of West Alabama, Saturday, November 4th. Grades 3-6, Dr. Ketia L. Shumaker, Department of Biology, Univ. of West Alabama, Station 7, Livingston, AL 35470. (205) 652-3406, kshumaker@uwa.edu, ESO@UWA.edu.

Jacksonville High School, February 24, Grades 3-6, David Peters, 1000 George Douthit Drive SW, Jacksonville, AL 36265 (256) 435-4177, www.esoatjhs.org

Auburn University, March 10. Grades 3-6, Greg Harris & Terry Tidwell, Department of Mathematics, 218 Parker Hall, Auburn, AL 36830 harriga@auburn.edu or tidweto@auburn.edu

Division B Grades 6-9 Olympiad Tournaments

University of Alabama, March 3. Dr. Kevin Whitaker, College of Engineering. (205) 348-2357. Contact Becky Snow, (205) 348-1598, bsnow@coe.eng.ua.edu.

Auburn University, February 25, Dr. Steve Stuckwisch, Department of Geology, 108 Tichenor Hall, Auburn University, AL 36830. (251) 844-6575 sstuckwisch@charter.net; http://www.auburn.edu/~stuckse/ScienceOlympiad/

University of Alabama at Huntsville, February 18, Mrs. Vanessa Colebaugh, 5019 Willow Creek Drive, Owens Cross Roads, AL 35763. (256) 922-5747 nessacita@comcast.net, http://www.uah.edu/sciolympiad/index.php

University of South Alabama, February 10, Dr. Cindy Stanfield, Dept. of Biomedical Science, UCOM 6000, Univ. of South Alabama, Mobile, AL 36608 (251) 380-2710 ethursto@usouthal.edu, http://www.southalabama.edu/alliedhealth/biomedical/SO/Index.htm

Division C Grades 9-12 Olympiad Tournaments

University of Alabama, March 3. Dr. Kevin Whitaker, College of Engineering. Tuscaloosa, AL 35486 (205) 348-2357. Contact Becky Snow, (205) 348-1598, bsnow@coe.eng.ua.edu.

Auburn University, February 25, Dr. Steve Stuckwisch, Department of Geology, 108 Tichenor Hall, Auburn University, AL 36830. (251) 844-6575 sstuckwisch@charter.net; http://www.auburn.edu/~stuckse/ScienceOlympiad/

University of Alabama at Huntsville, February 18, Mrs. Vanessa Colebaugh, 5019 Willow Creek Drive, Owens Cross Roads, AL 35763. (256) 922-5747 nessacita@comcast.net, http://www.uah.edu/sciolympiad/index.php
State Science Olympiad Tournaments

**Huntingdon College**, March 17, Division B, Dr. Sidney Stubbs, 1500 E Fairview Ave, Montgomery, AL 36106 (334) 833-4430 sstubbs@huntingdon.edu

**Samford University**, March 31, Division C, Dr. Brian W. Gregory, Department of Chemistry, Samford University, 800 Lakeshore Drive, Birmingham, AL 35229-2245, FAX (205) 726-2479, bwgregory@samford.edu.

National Science Olympiad Tournament


State Director: Jane Nall, 31110 Wakefield Drive, Spanish Fort, AL 36527 (251) 621-2911, email drnall@hotmail.com

Alabama Science Olympiad web page: [http://aso.jsu.edu/](http://aso.jsu.edu/)
WILLIAM H. MASON SCIENCE TEACHER FELLOWSHIPS

The William H. Mason Science Teacher Fellowship Fund honors the late Dr. Mason's dedication and leadership in the Academy. Contributions to support this fund may be sent to Dr. Betsy Dobbins, Biology Department, Samford University, Birmingham, AL 35229, Treasurer, AAS. Gifts are tax deductible. Dr. Michael B. Moeller is Chair of the Mason Science Teacher Fellowship Committee, UNA, Box 5049, 256.765.4479, mbmoeller@una.edu. Downloadable applications and further information can be found on the Academy web site, www.alabamaacademyofscience.org.

Fellowships have been awarded to the following:
1990 - 1991 Mrs. Amy Livengood Sumner, UAB
1991 - 1992 Mrs. Leella Holt, UNA.
1995 - 1996 Laura West Cochran, University of Montevallo.
1996 - 1997 Tina Anne Beams, UAT.
1997 - 1998 Carole Collins Crabbe Clegg, UAB
1998 - 1999 Cynthia Ann Phillips, UNA
1999 - 2000 Ruth Borden, UAB
2000 - 2001 Amy K. Murphy, UAB, Karen L. Celestine, AL A&M
2001 - 2002 Jeannine Ott, Eubanks, Auburn University
2002 - 2003 Not Awarded
2003 - 2004 Kanessa Miller, Auburn University
2004 - 2005 Not Awarded
2005 - 2006 Mary Busbee, UAB, and Bethany Knox, UAB
2006 - 2007 Kelly Harbin, UAB

WRIGHT A. GARDNER AWARD RECIPIENTS FOR OUTSTANDING CONTRIBUTIONS TO SCIENCE WHILE IN RESIDENCE IN ALABAMA

1984 Robert P. Bauman, Physics, University of Alabama at Birmingham
1985 Nolan E. Richards, Research Scientist, Reynolds Metals Company, Sheffield
1986 S. T. Wu, Mechanical Engineering and Aeronautic Research, University of Alabama at Huntsville
1987 Herbert H. Winkler, Microbiology, University of South Alabama
1988 Richard W. Compans, Microbiology and Senior Scientist, University of Alabama at Birmingham
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
1994 Frank Rose, Electrical Engineering, Space Power Institute, Auburn University
1996 Prakash Sharma, Physics, Tuskegee University
1997 Robert E. Pieroni, Internal and Family Medicine, University of Alabama, Tuscaloosa
1998  Thomas J. Wdowiak, Physics and Space Exploration, University of Alabama at Birmingham
1999  Samuel B. Barker, Physiology, and Dean Emeritus, University of Alabama at Birmingham
2000  George Crozier, Dauphin Island Sea Lab, Mobile
2001  James B. McClintock, University of Alabama at Birmingham
2002  Sara C. & Wayne H. Finley, University of Alabama at Birmingham Medical School
2003  Leven S. Hazlegrove, Samford University, Executive Director, Alabama Academy of Science
2004  William J. Barrett, Southern Research Institute, Retired, Birmingham
2005  Eugene Omasta, Professor Emeritus, Troy University.
## ALABAMA ACADEMY OF SCIENCE 2006-2007 SECTION OFFICERS

<table>
<thead>
<tr>
<th>Section Officers</th>
<th>Chairs</th>
<th>Vice Chairs</th>
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<tbody>
<tr>
<td>Judson College</td>
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<td>Marion, AL 36756</td>
<td>Univ. of AL at B’ham</td>
<td>Birmingham, AL 35294</td>
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<tr>
<td><strong>II. Chemistry</strong></td>
<td>Houston Byrd (2008)</td>
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<tr>
<td>University of Montevallo</td>
<td>Dept. of Chemistry</td>
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<td><strong>III. Earth Science</strong></td>
<td>Mark Puckett (2007)</td>
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<td>Univ. of North AL</td>
<td>Dept. Physics &amp; Earth Science</td>
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<td><strong>IV. Geography</strong></td>
<td>Greg Gaston (2008)</td>
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<tr>
<td>Univ. of N. Alabama,</td>
<td>Department of Geography</td>
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<td>UNA Box 5112</td>
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<tr>
<td><strong>VI. Industry and Economics</strong></td>
<td>Marsha Griffin (2007)</td>
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<td>AL A&amp;M University</td>
<td>Dept. Econ/Finance/OSM</td>
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<td>VII.</td>
<td>Lori Cormier (2006)</td>
<td>Science</td>
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<td>Cheryl Bullard (2008)</td>
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<td>Melinda Lawson (2007)</td>
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<td>Montgomery, AL 36124</td>
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<td><a href="mailto:vhughes@mail.aum.edu">vhughes@mail.aum.edu</a></td>
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<td>X.</td>
<td>Marietta Cameron (2007)</td>
<td>Engineering and Computer Science</td>
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<td>Brian Toone (2007)</td>
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<td><a href="mailto:brtoone@samford.edu">brtoone@samford.edu</a></td>
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<td>XI.</td>
<td>Harry Holstein</td>
<td>Anthropology</td>
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<td>Phillip E. Koerper</td>
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<td>Jacksonville State Univ.</td>
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<td><a href="mailto:holstein@jsu.edu">holstein@jsu.edu</a></td>
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<td>XII.</td>
<td>Keith Gibson (2008)</td>
<td>Bioethics, &amp; History &amp; Philosophy of Science</td>
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<td>English Department</td>
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**President:** David Nelson (2007), Dept. of Biology, University of South Alabama, Mobile, AL 36688, dnelson@usouthal.edu

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• VACANCY
• VACANCY
• VACANCY

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VACANCY

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<table>
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<td>J.F. Duggar</td>
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<td>Russell S. Poor</td>
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<td>James L. Kassner</td>
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<td>Harold E. Wilcox</td>
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<td>James F. Sulzby. Jr.</td>
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<td>David L. DeJarnette</td>
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H. Ellsworth Steele ......................................................................... 1967-68
Ruric E. Wheeler ......................................................................... 1968-69
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W.L. Furman ............................................................................... 1970-71
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Jack H. Moore ............................................................................ 1979-80
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Adriane G. Ludwick ...................................................................... 1989-90
Michael E. Lisano ........................................................................ 1990-91
Ken R. Marion ............................................................................. 1991-92
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Dan C. Holliman .......................................................................... 1995-96
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Richard Hudiburg ....................................................................... 2000-01
Roland Dute ................................................................................ 2001-02
Stephen A. Watts ........................................................................ 2002-03
Anne M. Cusic ............................................................................ 2003-04
Ronald L. Jenkins ........................................................................ 2004-05
Larry Davenport .......................................................................... 2005-06
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2008 – Samford University
2009 – Judson College
2010 – Host Needed

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of the

ALABAMA ACADEMY OF SCIENCE, INC.

JOINT MEETING

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GORGAS COMPETITION AWARDS

March 2008

Samford University
Birmingham, AL