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Volume 64

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2010

# 94th Annual Meeting, 2010. Secretary's Report and Financial Statement

Academy Editors

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Journal of the Arkansas Academy of Science, Vol. 64 [2010], Art. 4

# JOURNAL ARKANSAS ACADEMY OF SCIENCE

Annual Meeting April 9-10, 2010 University of Arkansas at Little Rock

Scott Kirkconnell President

> Mostafa Hemmati Treasurer

Jeff Robertson President-Elect Jeff Robertson Secretary

Mostafa Hemmati JAAS Editor-in-Chief Collis Geren Historian

#### Secretary's Report MINUTES OF THE 94th MEETING

#### ARKANSAS ACADEMY OF SCIENCE 94th ANNUAL MEETING SUMMARY OF BUSINESS MEETING University of Arkansas at Little Rock April 10, 2010

- 1. The meeting was called to order by President-elect Jeff Robertson substituting for President Scott Kirkconnell. The Academy membership and the LOC were met early Saturday morning with a campus-wide electrical outage thereby testing the resiliency and resolve of students, faculty and researchers alike. I am proud to say that we prevailed. Swapping the order of the business meeting for the scheduled talks to prolong our hope that city maintenance crews would restore power was valiant but in the end not enough. However, the individual session chairs and participants showed quite an astounding ability to improvise and adapt in holding their sessions after the business meeting anyway with a can-do attitude despite the lack of electron flow. Huddled around battery powered laptops and color PDF backup copies everyone gathered in their small groups for the exchange of scientific information and knowledge. It was quite epic and a testament to our dedication to the goals of the Academy and contributed to a memorable meeting!
- Local Arrangements Committee, 2010: Marc Seigar Registration information, campus orientation, and meeting schedules were presented by Marc Seigar, LOC chair. There were 232 registered participants, 78 oral presentations and 72 posters with a ratio of 2:1 students to faculty and researchers making presentations.

3. <u>Secretary's Report: Jeff Robertson</u> Minutes from the 2009 November Executive Committee Meeting were reviewed and accepted. There were currently 100 AAS members (48 of which are life members). This number continues the decline in membership over the past 10 years. More discussion on that topic follows later.

4. <u>Treasurer's Report: Mostafa Hemmati</u> An accounting of the AAS "net worth" for 2009 was presented and discussed by the membership. The report was reviewed by an Academy auditing team and accepted by the membership.

#### 5. <u>Historian's Report: Collis Geren</u>

The AAS annual meeting this year at UALR will be the 94<sup>th</sup> meeting of the AAS and the fifth time at UALR, previous meetings were in 1976, 1981, 1987, and 2002.

The Academy thanks UALR chancellor Joel Anderson as well as the LOC members March Seigar, Al Adams, Brian Berry, Hassan Elsalloukh, Jamey Jones, and Olga Tarasenko.

The Academy introduces the new AAS Undergraduate Research Awards Program headed by Dr. Kurt Grafton of Lyon College (AAS Vice President).

The proceedings of the Academy are published in the Journal, which is now available online at http://libinfo.uark.edu/aas/ and through the AAS membership pages at http://www.ArkansasAcademyofScience.org.

#### 6. <u>Newsletter Editor's Report: Jeff Robertson</u>

The newsletter was sent out completely electronically and distributed to members past and

present, to all academic science departments of 4year and 2-year institutions as well as related institutions throughout the state (e.g. Arkansas Game and Fish, US Forest Service, Natural Heritage Commission, etc).

7. Journal (JAAS #64) Report: Editor-In-Chief

Mostafa Hemmati & Managing Editor Ivan Still 30 manuscripts were submitted at the spring meeting for publication in JAAS #63 and sent to 3 independent reviewers. Papers were returned with commentary before the end of July 2009.

Authors received their feedback during July 15-28, 2009 and asked to submit their responses by August 31, 2009. This was also the deadline for page charges.

Three manuscripts were rejected because of unanimous rejection from the peer review process and three others were withdrawn.

Journal reviews, editing and payments were completed by the end of October of 2009.

Journal authors now play an important role as the final editor for their publication. Their final submission is the "galley-proof" for the Journal and how the manuscript will appear in publication.

213 copies of JAAS 63 were purchased from Russellville printing for \$3,144.08.

- 8. <u>Nominations Committee: Mostafa Hemmati</u> Nominees were accepted for AAS Vice-president (Marc Seigar-UALR, Bill Doria-College of the Ozarks) and in a close vote, Marc Seigar was elected.
- Science Fair Association's Report: Marc Bland (Christie Hicks) Support from the Academy of \$400 for student awards requested.
- 10. <u>Arkansas Junior Academy of Science Report:</u> Support from the Academy of \$250 for student awards requested.
- 11. <u>Arkansas Science Talent Search (ASTS):</u> <u>Wil Slaton</u>

Student Siteng Ma from Little Rock Central High won 1<sup>st</sup> place in the talent search and the award presented at the Arkansas State Science Fair awards banquet. Support from the Academy of \$100 for future student awards is requested. Web site http://faculty.uca.edu/wvslaton/ASTS/

- 12. <u>Junior Humanities and Science Symposium (JSHS)</u> <u>Linda Kondrick</u> Support from the Academy of \$100 for student awards requested.
- 13. <u>Arkansas Science Teachers Association (ASTA):</u> No Report
- 14. Committee Reports:

#### a. Biota Committee: Doug James

49 lists have been scanned and completed digitally on CD. 15 more animal and lower plant taxa lists are left to be completed including algae, mushrooms, liverworts, mosses, spiders and birds. Linking of the lists on the web from Univ. of Arkansas Fayetteville Biological Sciences to the Academy website is also planned.

b. Development Committee: Betty Crump

Two big tasks before us are 1) develop the search criteria for potential grant funding agencies, 2) hiring a grant writing specialist to assist in creating successful proposals, notwithstanding our membership decline issue.

Travis Duckworth was introduced as a potential, eager and enthusiastic grant writing candidate for the Academy. Compensation structure for grant writing needs to be explored and finalized for work to begin.

Annual \$1,000 institutional sponsorships from the Arkansas Natural Heritage Commission and the Ouachita National Forest are now in place. Need to have recognition in the JAAS. Other potential sponsors include but not limited to Arkansas Game and Fish Commission, US Geological Survey, Arkansas Nature Conservancy, etc.

A membership committee and perhaps a publicity committee need to be created. Perhaps improvements to the committee structure can be had by the Constitution and By-Laws revisions anticipated.

Remember to keep graduate awards on the radar as well as undergraduates.

15. Business Old and New:

a. The 95<sup>th</sup> annual AAS meeting will be April 8-9, 2011 at University of Arkansas at Monticello (UAM). The 96<sup>th</sup> annual meeting has been tentatively invited to Southern Arkansas University (SAU). Hosts for future meetings will be solicited, any takers?

- b. The inaugural undergraduate research awards went to Nicole Segear (Hendrix College), Charlette Felton (Arkansas Tech University) and Jacob Teffs (University of Central Arkansas).
- 16. Action Items:
  - a. Marc Seigar elected to Vice-president.
  - b. AAS constitution and by-laws need review at fall 2010 Executive Committee Meeting.
  - c. Non-JAAS budget approved:
    \$2,500 Undergraduate Research Grants
    \$2,750 Membership campaign (Kurt Grafton)
    \$1,200 AAAS representative travel (Betty Crump)
    - \$ 850 Affiliate Awards (i.e. ASTS, JSHS, Jr. Academy, Science Fair)
    - \$1,000 AAS Spring meeting student awards
    - \$8,300 TOTAL (excludes costs associated with JAAS publication)
  - d. Submit letter of recognition to \$1,000 institutional sponsoring officials and recognition in JAAS publication.
  - e. Need to solicit ideas from membership about activities the AAS should be pursuing in order to prioritize. Online survey to be developed and distributed to membership.
  - f. Invited talks at meetings
  - g. Pay for student travel and/or hotel room to AAS spring meeting
  - h. Increased amounts for student awards
  - i. Increased numbers of student awards
  - j. Scholarships
  - k. Web presence for spring meeting, earlier and including topics of talks
  - 1. Increase membership and participation from STEM "faculty" (i.e. NCTR, USGS, USDA, etc.) at non-academic institutions.
  - m. Research award money for students/faculty
  - n. College (student) chapters of the AAS
  - o. Workshops at meetings
  - p. Enhanced communication and promotion of AAS activities
  - q. Special sessions at meetings
  - r. Pursue institutional sponsorships
  - s. Pursue external grant sources to fund AAS activities
- 17. Motions:
  - a. Establish a membership committee.
  - b. AAS budget (outside of Journal costs) passed for 2010-2011.
  - c. Pending reports from these groups, approval of funding student awards is requested (Junior Science and Humanities Symposium \$100,

Arkansas Science Fair Association \$400, Arkansas Junior Academy of Science \$250, Arkansas Science Talent Search \$100).

Meeting Adjourned ~ 9:40 am

Jeff Robertson, AAS Secretary

#### Treasurer's Report ARKANSAS ACADEMY OF SCIENCE 2010 FINANCIAL STATEMENT December 16, 2010

Balance – December 16, 2010	\$73,303.29
Balance – December 28, 2009	\$66,296.30
Net Gain	\$7,006.99

#### **DISTRIBUTION OF FUNDS**

Checking Account Bank of the Ozarks, Russellville, AR, 12-16-2010	\$8,027.41
Certificate of Deposit Life Membership Endowment, Bank of the Ozarks, Russellville, AR, 12-16-2010 Previous CD + \$3,000 from the Bank of Ozark's Checking, New Maturity Date 09-11-2011	\$18,182.46
Dwight Moore Endowment (Dwight Moore's final balance of \$6,002.73 + Short term CD's final balance of \$4,157.77 + \$9,839.50 from the Bank of the Ozarks checking as The new CD will mature on 01-10-2011).	<b>\$20,415.46</b> ccount = \$20,000.
Phoebe and George Harp Endowment (\$7601 Harp+ \$6515.15CD+ \$3383.85Checking)= \$ 17500 CD + Interest Paid After maturity in Bank of America, opened a new CI Ozarks on 11-15- 2010.	
Short Torres CD	¢0 105 55

Short Term CD \$8,105.55 Bank of the Ozarks, Russellville, AR, 10-25- 2010 Maturity date 04-27-2011.

Combined interest on all accounts as of 12-16- 2010 was \$1,049.83

Total

\$73,303.29

#### **INCOME:**

1. Transfer from CD to Checking	g <b>\$1,338.40</b>	1. ST
2. GIFTS RECEIVED		2. La
a. Ouachita National Forest - Sponsorship	\$1,000	3. 0
b. Arkansas Heritage Central AD - Sponso		4. A 5. M
	\$2,000	6. Ri
		7. Sł 8. Sł
3. INTEREST (Interest Earned Year to	Date, ~ December 16, 2010)	9. A
a. Checking Account, Bank of the Ozarks,		10. V
b. CD1 (Bank of the Ozarks),594 c. CD2 (Bank of the Ozarks),929	\$137.16 \$219.80	11. 4
d. CD3 (Bank of the Ozarks),583	\$363.91	12. I 13. N
e. CD4 (Bank of the Ozarks)396	\$16.01	13.1 14. N
f. Checking Account, Bank of America	-0-	15. J
g. CD4, (Bank of America - Closed),7	7627 \$309.29	16. H
	φ1 0 40 0 <b>3</b>	17. F
All interest was added to the CI	Ds \$1,049.83	18. C 19. I
4. JOURNAL		
	\$6,250	
	\$200	2. AV
c. Subscriptions	\$1,550	a. Ju
	\$8,000	b. Ai c. Ai
		d. Ai
5. JOURNAL CONTRIBUTION	1 -0-	
6. MEMBERSHIP		3. UN
a. Associate	\$15	a. Di
c. Individual	\$1,780	b. Di
d. Institutional	\$200	c. Di
e. Life f. Sponsoring	\$225 \$90	
g. Individual from Annual Meeting (UAL)		
h. Sustaining	- \$35	4. JO
	\$4,730	4. JO a. Vo
	. ,	b. Jo
7. MISCELLANEOUS INCOM	Е	
a. Douglas James' Extra Page Charges	\$200	
b. Journal Royalty	\$107.67	5. NE
c. Contribution from UALR – Annual Me	•	
	\$1,390.46	6. MI
		1. Ha
TOTAL INCOME	\$17,458.86	2. Jo
		3. Di
		4. A
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		0. CC 7. V
		8. M
		9. Fa

#### **EXPENSES**

. STUDENT AWARDS	
1. Sarah Lewis	\$100
2. Lahiana Mohamed Hassen	\$50
3. Gail Bridges	\$50
4. Andrea Long	\$100
5. Maureen McClung	\$50 \$50
6. Richard Walker	\$50 \$100
7. Shane Sullivan 8. Sharon Pilla	\$100 \$50
9. Allan Thomas	\$50 \$50
10. William Griffin	\$100
11. Allison Chinn	\$100
12. Derek Karr	\$50
13. Melissa Kuehl	\$50
14. Nitish Narula	\$100
15. Joshua Brown	\$100
16. Kendall Barnett + Tori Jones	\$50 \$50
17. Roy Downs 18. Charlette Felton	\$50 \$100
19. Dawn Johnson	\$100 \$50
17. Duwn Johnson	\$1,350
	φ1,550
2. AWARDS (Organizations)	
a. Junior Science and Humanities Sym.	\$100
b. Arkansas State Science Fair	\$400 \$250
c. Arkansas Junior Academy of Science d. Arkansas Science Talent Search	\$250 \$150
d. Arkansas Science Talent Search	
	\$900
3. UNDERGRADUATE RESEARCH	AWARDS
a. Dr. Willyard, Hendrix College	\$500
b. Dr. Burris, UCA	\$400
c. Dr. Mebi, ATU	\$500
	\$1,400
. JOURNAL	
a. Volume 63 Printing Cost	\$3,144.08
b. Journal Editorial Cost	-0
	\$3,144.08
5. NEWSLETTER	-0-
	U
5. MISCELLANOUS EXPENSES	
1. Half of Dr. Kirkconnell's Trip	\$473.09
2. Journals Returned from Blackwell	\$150 \$48.40
<ol> <li>Dr. Kirkconnell's Plaque</li> <li>Awards' (Checks and Letters) Mailing Cost</li> </ol>	\$48.40 \$10.36
5. Returned Dr. James' Manuscript Payment	\$200
6. Cost of Checks Ordered	\$16.95
7. Volume 63 Journal Mailing Cost	\$113.45
8. Membership Campaign, Lyon College	\$2,750
9. Fall EXCOM (Jeff, \$19.53+Scott, \$19.55)	\$39.08
	<b>.</b>
	\$3,801.33
TDANSEED TO CD from Chooking	

# 7. TRANSFER TO CD from Checking Transferred \$300 to Cd # ......10929 \$3,000.00

#### TOTAL EXPENSES \$13,595.41

# ARKANSAS ACADEMY OF SCIENCE COST OF JOURNAL

VOLUME	COPIES	PAGES	PRINTER CHARGE	TOT. VOL. COST	COST/ COPY	COST/ PAGE
35 (1981)	450	96	\$3,694.68	\$4,620.99	\$10.27	\$48.14
36 (1982)	450	110	\$5,233.28	\$5,291.69	\$11.76	\$48.11
37 (1983)	450	103	\$5,326.91	\$5,944.44	\$13.21	\$57.71
38 (1984)	450	97	\$5,562.97	\$6,167.72	\$13.71	\$63.58
39 (1985)	450	150	\$7,856.20	\$8,463.51	\$18.81	\$56.42
40 (1986)	450	98	\$6,175.20	\$6,675.20	\$14.23	\$68.11
41 (1987)	450	116	\$7,122.79	\$7,811.25	\$17.36	\$67.34
42 (1988)	450*	116	\$7,210.79	\$7,710.15	\$17.13	\$66.47
43 (1989)	450*	119	\$8,057.24	\$8,557.24	\$19.02	\$71.91
44 (1990)	450*	136	\$9,298.64	\$9,798.64	\$21.77	\$72.05
45 (1991)	450*	136	\$9,397.07	\$9,929.32	\$22.06	\$73.01
46 (1992)	450*	116	\$9,478.56	\$10,000.56	\$22.22	\$86.21
47 (1993)	400	160	\$12,161.26	\$12,861.26	\$32.15	\$80.38
48 (1994)	450	270	\$17,562.46	\$18,262.46	\$40.58	\$67.63
49 (1995)	390	199	\$14,725.40	\$15,425.40	\$39.55	\$77.51
50 (1996)	345	158	\$11,950.00	\$12,640.75	\$36.64	\$80.00
51 (1997)	350	214	\$14,308.01	\$15,008.01	\$42.88	\$70.13
52 (1998)	350	144	\$12,490.59	\$13,190.59	\$37.69	\$91.60
53 (1999)	350	160	\$13,686.39	\$14,386.39	\$41.10	\$89.91
54 (2000)	350	160	\$14,149.07	\$14,849.07	\$42.43	\$92.81
55 (2001)	360	195	\$16,677.22	\$17,498.22	\$48.61	\$89.73
56 (2002)	350	257	\$18,201.93	\$19,001.93	\$54.29	\$73.94
57 (2003)	230	229	\$14,415.12	\$15,715.12	\$68.33	\$68.62
58 (2004)	210	144	\$7,875.76	\$9,175.76	\$43.99	\$63.72
59 (2005)	215	226	\$16,239.04	\$17,835.84	\$82.96	\$78.92
60 (2006)	220	204	\$11,348.06	\$12,934.30	\$58.79	\$63.40
61 (2007)	195	150	\$8,196.84	\$9,914.69	\$50.84	\$66.10
62 (2008)	220	166	\$2,865.00	\$2,967.49	\$13.49	\$17.88
63 (2009)	213	206	\$3,144.08	\$3,144.08	\$14.76	\$15.26

The Total Volume Cost equals the printer's charge plus the editor, editorial assistant, and other miscellaneous charges.

- On Volume 42 the Academy received 560 copies, but the printer did not charge us for the extra 110 copies. For comparison purposes the calculated cost/copy is based on 450 copies.
- On Volume 43 the Academy received 523 copies, but the printer did not charge us for the extra 73 copies. For comparison purposes the calculated cost/copy is based on 450 copies.
- On Volume 44 the Academy received 535 copies, but the printer did not charge us for the extra 85 copies. For comparison purposes the calculated cost/copy is based on 450 copies.
- On Volume 45 the Academy received 594 copies, but the printer did not charge us for the extra 144 copies. For comparison purposes the calculated cost/copy is based on 450 copies.
- On Volume 46 the cost was greater than usual due to the high cost of a second reprinting of 54 copies by a different printer.

#### APPENDIX A

2010 AAS Presentation Award Winners

#### GRADUATE STUDENT AWARDS

#### **Poster Awards**

- 1<sup>st</sup> Place: "Leaf Decomposition of a Non-Native Species in an Urban Stream" by Sarah E. Lewis and Art V. Brown of the University of Arkansas.
- 2<sup>nd</sup> Place: "Stimulatory and protective role of glycoconjugates on rice seeds from Bacillus spores infection during germination and growth" by Lahiana Mohamed Hassen and Olga Tarasenko of the University of Arkansas at Little Rock.
- 3<sup>rd</sup> Place: "Organics in Precipitation: Links to Carbonaceous Aerosols and Climate" by Gail L. Bridges, Jeffrey Gaffney and Nancy Marley of the University of Arkansas at Little Rock.

#### **Oral Presentation Awards**

#### **Graduate Life Sciences**

- 1<sup>st</sup> Place: "American Woodcock Migration Chronology and Clearcut use within Central Arkansas" by Andrea Long and Alexandra Felix-Locher of the University of Arkansas at Monticello.
- 2<sup>nd</sup> Place: "Fire affects food availability for birds: the response of leaf litter arthropods to woodland restoration in the Ozark mountains" by Maureen R. McClung and Kimberly G. Smith of the University of Arkansas.
- 3<sup>rd</sup> Place: "Movement patterns and environmental influences of two cyprinids in an intermittent reach of an Ozark stream" by Richard H. Walker, Ginny Adams and S. Reid Adams of the University of Central Arkansas.

#### **Graduate Physical Sciences**

- 1<sup>st</sup> Place: "Spectroscopic characterization and catalytic oxidation studies of a Fe complex of Tetraamidomacrocyclic Ligand" by Shane Z. Sullivan, Anindya Ghosh and Sharon Pulla of the University of Arkansas at Little Rock.
- 2<sup>nd</sup> Place: "Oxidation of alcohols to aldehydes using environmentally benign Iron(III) and copper-amide complexes" by Sharon Pulla, Anindya Ghosh and Shane Z. Sullivan of the University of Arkansas at Little Rock.

3<sup>rd</sup> Place: "p-type ZnO nanowires doped with Ag by a low temperature electrochemical process" by M. Allan Thomas and Jingbiao Cui of the University of Arkansas at Little Rock.

#### Graduate Environmental Sciences

1<sup>st</sup> Place: "Computational modeling of metal hydrides for use in hydrogen storage" by William O. Griffin and Jerome A. Darsey of the University of Arkansas at Little Rock.

#### UNDERGRADUATE STUDENT AWARDS

#### **Poster Awards**

- 1<sup>st</sup> Place: "Genetic analysis of regions on chromosone Z for contribution to pulmonary hypertension and Ascites in the chicken" by Allison M. Chinn, Nicholas B. Anothony, Gisela F. Erf, Robert F. Wideman and Doug D. Rhoads of the University of Arkansas.
- 2<sup>nd</sup> Place: "Bis(m naphthalene 2 thiolato) diironhexacarbonyl complex: A catalyst for hydrogen production" by Derek Karr and Charles A. Mebi of the University of Arkansas.
- 3<sup>rd</sup> Place: "Photosynthetic microorganisms from Ozark region caves" by Melissa Kuehl, Michael V. McQueen, Martha Moreno, Han Chuan Ong and David J. Thomas of Lyon College.

#### **Oral Presentation Awards**

#### **Undergraduate Life Sciences**

1<sup>st</sup> Place: "The CRABS CLAW (CRC) gene tree: A phylogenetic analysis of the Eudicots" by Nitish Narula and Shawn Krosnick of Southern Arkansas University.

#### **Undergraduate Physical Sciences**

1<sup>st</sup> Place: "Development of a double-isotope UPLC-MS/MS method for the determination of plasma citrulline concentration" by Joshua D. Brown of the University of Arkansas.

- 2<sup>nd</sup> Place: "Synthesis of dielectric measurement of potassium sodium tartrate" by Kendall A. Barnett, Tori R. Jones, Vernon D. Crowell and Stuart L. Hutton of Lyon College.
- 3<sup>rd</sup> Place: "Temperature controlled nano-indentation of graphen sheet" by Roy Downs, Sachin S. Terdalkar and Joseph J. Rencis of the University of Arkansas.

#### **Undergraduate Environmental Sciences**

- 1<sup>st</sup> Place: "Iron-carbonyl cluster coupled to mercaptobenzothiazole and a mimic of hydrogenase enzymes" by Charlette Felton and Charles A. Mebi of Arkansas Tech University.
- 2<sup>nd</sup> Place: "Use of geochemical proxies to identify watershed inputs to Lake Maumelle, Central Arkansas" by Dawn M. Johnson, Amelia C. Robinson, Jena P. Smith, Forrest E. Payne, Margaret E. McMillan and Courtney E. Stites of the University of Arkansas at Little Rock

#### APPENDIX B RESOLUTIONS

#### Arkansas Academy of Science 94<sup>th</sup> Annual Meeting, 2010 Resolutions

Be it resolved that we, the membership of the Arkansas Academy of Science, offer our thanks and appreciation to the University of Arkansas at Little Rock for hosting our 94<sup>th</sup> annual meeting. We especially thank the members of the Local Arrangements Committee for the time and effort they put in to the excellent organization of the meeting: Marc Seigar, chair, and Al Adams, both of the Department of Physics and Astronomy at UALR; Brian Berry from the Department of Chemistry; Hassan Elsalloukh from the Department of Mathematics and Statistics; Jamey Jones from the Department of Earth Science; and Olga Tarasenko from the Department of Biology. We also want to express our appreciation to Tiffany Baker, Laura Beck and Derek Bryce, the staff from the UALR Conference Services and Dining Services, and all the student workers who helped make the meeting possible: Amber Sierra, Liz Alvarez, Ismaeel Al-Baidhany, Jonathan Eller, and Casey Pavan. We thank Chancellor Joel Anderson for hosting the AAS and Provost and Vice Chancellor for Academic Affairs David Belcher for his gracious welcome.

The membership of the Academy are indebted to those who assumed the important role of session chairs: Brian Berry, Don Bragg, William Doria, Joyce Hardin, Mostafa Hemmati, Ronald Johnson, Forrest Payne, Jeff Robertson, David Saugey, Lynne Thompson, Patrick Treuthardt, and Brian Wagner. We are also grateful to all those who volunteered to serve as judges, without whom the awards and recognition of our student participants would not be possible. We congratulate all who presented papers and posters at this meeting, and we thank all the undergraduates who applied to our first annual Undergraduate Research Funding program. We appreciate the involvement of so many students since their work and success directly contributes to the future success of the Academy and the improvement and advancement of science in the state of Arkansas.

The membership of the Academy also recognizes that the work done by and through our organization takes place throughout the year, and we therefore thank the directors of the various science and youth organizations which are supported or supervised by the Mark Bland, Science Fair Association; Academy: Nolan Carter, Junior Academy of Science; Wil Slaton, Arkansas Science Talent Search: James Miller. Arkansas Science Teachers Association; and Linda Kondrick, Junior Science and Humanities Symposium. We also want to thank all those who helped organize and direct Regional Science Fairs and Junior Academy meetings. We also offer our sincere thanks to those who served in leadership positions within the Academy: Scott Kirkconnell (President), Jeff Robertson (President-Elect, Newsletter Editor, and Webmaster). Anthony Grafton (Vice-President). Mostafa Hemmati (Treasurer and Journal Editor-in-Chief), Ivan Still (Journal Managing Editor), Collis Geren (Historian), and Betty Crump (Development).

Respectfully submitted on this 10<sup>th</sup> day of April, 2010. Resolutions Committee Anthony K. Grafton, AAS Vice-President Marc Seigar, UALR LOC Chair

#### 2010-2011 MEMBERSHIP

#### LIFE MEMBERS

#### **REGULAR MEMBERS**

FIRST MI.	LASTNAME	INSTITUTION	FIRST MI.	LASTNAME	INSTITUTION
Edmond J.	Bacon	University of Arkansas-Monticello	Alois	Adams	UALR
Vernon	Bates	Ouachita Mountains	Abdel	Bachri	Southern Arkansas University
Floyd	Beckford	Lyon College	Claude	Baker	Southern Arkansas University
Wilfred J.	Braithwaite	University of Arkansas-Little Rock	Earl	Benjamin	Arkansas State University
Calvin	Cotton	Geographics Silk Screening Co.	Ellis	Benjamin	Arkansas State University
Betty	Crump	Ouchita National Forest	Brian	Berry	UALR
James	Daly	UAMS	Anwar	Bhuiyan	Arkansas Tech University
Leo	Davis	Southern Arkansas University	Viktoriya	Black	Southern Arkansas University
Mark	Draganjac	Arkansas State University	Pierre	Boumtje	Southern Arkansas University
Jim	Edson	University of Arkansas-Monticello	Don	Bragg	US Forest Service
Daniel R.	England	Southern Arkansas University	Morris	Bramlett	UA-Monticello
James H.	Fribourgh	University of Arkansas-Little Rock	Stephen	Chordas III	Ohio State University
Arthur	Fry	University of Arkansas	David	Clark	UALR
Linda	Gatti-Clark	Hendrix College	Matthew	Connior	South Arkansas Comm. Coll.
Collis	Geren	University of Arkansas	Bruce	Dietsche	Ozarka College
John	Giese	Ark. Dept. of Env. Qual. (ret)	William	Doria	University of the Ozarks
Walter	Godwin	University of Arkansas-Monticello	David	Dussourd	University of Central Arkansas
Anthony	Grafton	Lyon College	Alexandra	Felix-Locher	University of Arkansas-Monticel
Joe M.	Guenter	University of Arkansas-Monticello	Jeffrey	Gaffney	UALR
Joyce	Hardin	Hendrix College	David	General	University of Arkansas-Monticel
George	Harp	Arkansas State University	Stephen	Grace	UALR
Phoebe	Harp	Arkansas State University	Frank	Hahn	Philander Smith College
Gary	Heidt	UALR	Franklin	Hardcastle	Arkansas Tech University
Mostafa	Hemmati	Arkansas Tech University	John	Harris	AHTD
Philip	Hyatt	Retired	Jinming	Huang	University of Arkansas-Monticel
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Renn	Tumlison	Henderson State University	Matthew	Pelkki	UA-Monticello
Scott	White	Southern Arkansas University	Patrick	Pellicane	UALR
lames	Wickliff	University of Arkansas	Ruth	Plymale	Ouachita Baptist University
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Jim

Lynne Patrick Taylor Thompson

Treuthardt

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Brian	Wagner	Ark. Game and Fish
Anne	Willyard	Hendrix College
Bin	Zhang	Arkansas State University

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Halee	Burrow	University of Central Arkansas
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Chen	Chen	UALR
Heather	Clarke	University of Central Arkansas
Emily	Coffman	Ouachita Baptist University
Stephen	Crain	UALR
Vernon	Crowell	Lyon College
Cory	Davis	Southern Arkansas University
Nicholas	Davis	University of Central Arkansas
Abigail	Dekle	Ouachita Baptist University
Katherine	Docter	Southern Arkansas University
Robin	Doss	University of Arkansas
Roy	Downs	University of Arkansas
Jonathan	Eller	UALR
Charlette	Felton	Arkansas Tech University
Clay	Fitzhugh	Ouachita Baptist University
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Ujvala D.	Gadde	University of Central Arkansas University of Arkansas
Yashraj	Gartia	UALR
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Kyle	Hurley	University of Central Arkansas
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Dawn	Johnson	UALR
Drew	Jones	UAMS
Tori	Jones	Lyon College
Azhar	Kamel	UALR
Hom	Kandel	UALR
Derek	Karr	Arkansas Tech University
Wisam	Khudhayer	UALR
Amanda	Kilbourn	Arkansas Tech University
So-Young	Kim	UAMS
Ekaterina	Klishina	Arkansas Tech University
Edward	Kluender	University of Central Arkansas
Melissa	Kuehl	Lyon College
Signe	Larson	University of Central Arkansas
Sarah	Lewis	University of Arkansas
Jacob	Little	College of the Ozarks
Andrea	Long	UA-Monticello
Michael	Lowry	University of Central Arkansas

FIRST MI.	LAST NAME	INSTITUTION
Angie	Rivera	UALR
Darrell	Martin	University of Central Arkansas
Maureen	McClung	University of Arkansas
Brad ley	Meredith	UALR
Garrett	Mikel	UALR
Rizan	Mohsin	Pulaski Academy
Deborah	Moon	University of Central Arkansas
Martha	Moreno	Lyon College
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Nitish	Narula	Southern Arkansas University
Jessica	Needham	University of Central Arkansas
Asami	Nishikawa	University of Central Arkansas
Kasey	Nix	University of Central Arkansas
Jeremiah	Nuggett	Ouachita Baptist University
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Casey	Pavan	UALR
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Leigh	Reno	University of Central Arkansas
Sarah	Risher	Southern Arkansas University
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Jacob	Sawyer	Arkansas State University
Kyle	Shepherd	Arkansas Tech University
Amber	Sierra	UALR
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Colt	Swayze	UALR
Sachin	Terdalkar	University of Arkansas
Allan	Thomas	UALR
Sushma	Thotakura	UALR
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Richard	Walker	University of Central Arkansas
James	Ward	Ouachita Baptist University
Kelsey	Ward	Lyon College
Sarah	Webb	Arkansas State University
Kara	Weigand	University of Central Arkansas
Mackenzie	Willis	UA-Monticello
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The Arkansas Academy of Science is an essential component in the science, technology, engineering and math pipeline for Arkansas. As a coalition of Arkansas scientists, it provides a local vehicle for presentation and publication of early scientific accomplishments in Arkansas. By promoting the work of Arkansas students, the Academy increases collaboration among the scientific community and provides a comprehensive network for scientific academics. These endeavors promote a higher standard of education within Arkansas and will encourage and promote a higher quality of life through educational opportunities.

As an integral part of the development and promotion of the Academy's mission, we wish to recognize the commitment and continued support of our Institutional Sponsors, The Arkansas Natural Heritage Commission and the Ouachita National Forest.

# ARKANSAS NATURAL HERITAGE COMMISSION



Since 1973, the Arkansas Natural Heritage Commission (ANHC) has been working to conserve Arkansas's natural landscape. ANHC conducts research to determine which elements (species and natural communities) are most in need of protection. Field inventory documents the locations of elements of conservation concern. Information is also gathered from other sources, such herbarium and museum collection records, and scientific publications such as the Journal of the Arkansas Academy of Science. ANHC's current strategic planning goals include working to expand the ecological literacy of Arkansans. The Arkansas Academy of Science is a critical partner in helping to address this goal and, in the long term, protect the natural heritage of our state. For more information about the ANHC research, inventory and protection efforts, including the System of Natural Areas around the state, visit the agency website at www.naturalheritage.com. Here is a link to the enewsletter current featuring our support info as well. http://www.naturalheritage.com/enews/archive.aspx?mid=13361.

# **OUACHITA NATIONAL FOREST**



Stretching from near the center of Arkansas to southeast Oklahoma, the pristine 1.8 million acre Ouachita National Forest is the South's oldest national forest, established on December 18, 1907 by President Theodore Roosevelt. Rich in history, the rugged Ouachita Mountains were first explored in 1541, by Hernando DeSoto's party of Spaniards. French explorers followed, flavoring the region with names like Fourche la Fave River. "Ouachita" is the French spelling of the Native American word "Washita" which means "good hunting grounds." The Forest's ecosystem management policy guarantees its management regime as an ecological approach, based upon the most current knowledge and best science, for providing multiple benefits from the Forest and encouraging careful use of the forest for the future. The research local to Arkansas and the Forest published by the Journal of the Arkansas Academy of Science is critical to informing and supporting appropriate management decisions, environmental assessments and biological evaluations. The Ouachita National Forest extends support of the Academy's efforts through this sponsorship.

For more information about the Forest, visit our webpage at: http://www.fs.fed.us/r8/ouachita.