

Arkansas Academy of Science

AAS Newsletter 2015

Editor: R. Panneer Selvam

January 2015

Of Special Interest...

CALL FOR PAPERS

- 99th Annual Meeting of the Academy
- AAS student research grants
- Members Corner
- Editorial Note & Liaison officers



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***You are encouraged to duplicate all or part of this document for dissemination amongst your colleagues. Encourage them to become members and to attend the annual meeting including the business meeting.

99th Annual Meeting of the Academy at HSU!

The 99th annual meeting of the Arkansas Academy of Science will be held with the 22nd Arkansas Undergraduate Research Conference April 10-11, 2015, hosted by the Henderson State University at Arkadelphia, AR.

Friday afternoon and evening will feature an informal mixer, poster presentations, dinner and keynote speaker (Dr. Mark A. Williamson, of Geochemical Solutions, LLC, Loveland, CO). Oral presentations will be given Friday afternoon and Saturday morning, and poster presentations will be Friday afternoon.

Participants will have the option of making an oral or poster presentation. Both electronic registration and abstract(s) must be received no later than March 8, 2015. Registration and abstract submission is online at: <http://www.hsu.edu/Provost/UGResearch/index.html>

For further information you can contact Dr. Martin J. Campbell, ph:870-230-5150 email: campbem@hsu.edu



April 10-11: Journal Manuscripts due to Managing Editor or Editor-In-Chief at the meeting for inclusion in the JAAS Volume 69. Editorial staff will have a table near registration. **PLEASE read instructions for prospective authors** found at the Academy website. <http://arkansasacademyofscience.org> (meetings tab) or meeting website above.

AAS Business Meeting for Everyone

The annual business meeting for ALL members of the Academy will take place Saturday at 11:45 am in the Lecture Hall of Garrison Activity Center after the final session.

Please make travel plans that will allow you to stay and attend the business meeting. The meeting is for you, and your

attendance, contributions, expertise and insights make the Academy better.

Academy Officers on the AAS Executive committee will convene on Friday, April 10th at 10:00 am in Garrison, Galloway room before the start of the AAS meeting sessions.

Information For Presenters

Presenters should clearly communicate any special equipment needs at the time of their registration. Computer projection systems for PowerPoint will be available.

All PowerPoint presentations must be on CD or USB flash drive (preferable) and must be loaded onto the computer available in the session room **prior to the start of the session.** Therefore, if you plan to use PowerPoint, you must be at the session at least 30 minutes prior to the start of the session (i.e., if your talk is at 10:15, then you are in a morning session that begins at 9:00 a.m. You must be there at 8:30 AM to load your talk onto the computer).

Abstract submission will be open for the 2015 AAS meeting soon. Abstracts must be submitted for both oral and poster presentations. Oral presentations are limited to 15 minutes (12 minute talk, 3 minutes for questions).

Posters are limited to 3 feet 9 inches in both width and height. Vertical display boards of a cork-like material will be available for poster displays. Poster sessions for all disciplines will be Friday afternoon.

Abstract submission and registration are online. Abstracts will be posted online within one week after they are received. Abstracts must be received

by end of March 8th for both oral presentations and posters! Be sure to submit your registration form as well.

At this time the web site is not ready for submission and that will be informed by HSU soon.

JAAS Publication

Manuscripts for publication in the Journal, based on a presentation given at the meeting, are due at the time of the presentation. Manuscripts should be e-mailed to the Managing Editor of the Journal (Dr. Ivan Still, istill@atu.edu) two days before the meeting. An electronic copy (on CD or flash drive) and hard copy should be handed to the editorial staff the day of the meeting. One of the authors must be an AAS member to publish in the Journal.

PLEASE read instructions for prospective authors found on the Academy website

**<http://www.ArkansasAcademyofScience.org>
(Journal tab)**

LOCAL ORGANIZING COMMITTEE AT HSU

Martin J. Campbell, Chair, 870-230-5150, campbem@hsu.edu
T. David Bateman, Co-Chair, 870-230-5306, batemat@hsu.edu
Renn Tumlison, 870-230-5152, tumlison@hsu.edu
Jess Kelly, 870-245-4187, kellyj@obu.edu

<http://www.ArkansasAcademyofScience.org> (Meetings tab)

Keynote Speaker

Our guest speaker is Mark A. Williamson, PhD, CEO of Geochemical Solutions a privately held consulting practice in Loveland, Colorado. He specializes in the application of geochemistry to resolve environmental, forensic and engineering challenges.



settings. He has been involved in geochemical studies and site evaluations across the United States involving field, laboratory, and computational components. Mark works with both natural and engineered systems and engages in projects in support of pragmatic solutions for industrial, academic and educational efforts using geochemical knowledge and techniques. Mark routinely provides support and guidance for geochemical studies and programs aimed at protection of water resources, including diagnosis of controlling mechanisms, quantification of geochemical processes for engineering design, impact analysis, and forensic interpretation. His background includes extensive work with acid mine drainage, metals in aquatic environments, geochemical engineering, and the fate and transport of chemicals in the environment.

Biography: Dr. Williamson is an environmental geochemist with over 25 years of experience in consulting, basic/applied research and educational

Editors Corner

I am very pleased to take the challenge of being the AAS News Letter Editor. I have introduced several new items. Please give your inputs to improve.

Also I have been contacting different Universities for an Liaison Officer to AAS. At this time I have names from ATU, HSU, OBU, PSC, SAU, UA-Fayetteville and UO. So if you are from any other University and is interested to serve the AAS please feel free to contact me:

R. Panneer Selvam, UA-Fayetteville, email: rps@uark.edu, ph: (479)575-5356

Tentative Schedule of Events

2015 AAS Executive Officers

Time Event Location

Friday April 10

10:00	Executive Committee Meeting	GAC Galloway Room
11:00 -5:00	Registration and Payments	GAC
12:00-12:30	Judges and Session Chairs	REY
2:00 – 5:00	Poster Session	GAC Banquet Room
1:00 – 2:30	Oral Session 1	GAC and REY
2:30-3:00	Break -Refreshments	REY Lobby and GAC
3:00 – 4:30	Oral Session 2	GAC and REY
4:30 - 5:30	Mixer	GAC tba
6:00 – 8:30	Banquet and Keynote Address	GAC Ballroom

Saturday April 11

8:00 – 9:30	Continental Breakfast	GAC
8:00 – 10:00	Registration and payment	GAC
8:30 – 10:30	Oral Session 3	GAC and REY
10:30 – 11:00	Meeting of Judges	REY
11:00 – 11:30	Break	GAC
11:30-11:45	Awarding of Prizes	GAC Lecture
11:45-12:30	Membership Meeting	GAC Lecture

****All members of the Academy are invited and strongly encouraged to participate in the AAS business meeting.****

A copy of this Newsletter as well as previous editions are available ONLINE in the AAS members web pages accessed through the public portal at URL

<http://www.ArkansasAcademyofScience.org>

Dr. Abdel Bachri President (2014-2015)

Department of Chemistry & Physics
Southern Arkansas University
100 East University Road, Magnolia, AR 71753
ph: (870)235-4283, email: agbachri@saumag.edu

Dr. Ann Willyard President-Elect

Department of Biology , Hendrix College
1600 Washington Ave, Conway, AR 72032
ph: (501)450-1376, email: willyard@hendrix.edu

Dr. Edmond Wilson Vice-President

Department of Chemistry , Box 10849
Harding University, Searcy, AR 72149-5615
ph: (501)279-4513, email: willyard@hendrix.edu

Dr. Jeff W. Robertson Past President

Department of Physical Sciences, Arkansas Tech University
Russellville, AR 72801-2222
ph: (479)968-0293, email: jrobertson@atu.edu

Dr. Mostafa Hemmati Treasurer

P.O. Box 1950, Russellville, AR 72811
Phone: (479) 968-0340, email: mhemmati@atu.edu

Please mail membership dues to the above address!!!.

Dr. Mostafa Hemmati Editor-in-Chief, AAS Journal

Department of Physical Science, Arkansas Tech University
1701 N. Boulder Ave., Russellville, AR 72801
Phone: (479) 968-0340, email: mhemmati@atu.edu

Dr. Ivan Still Journal Managing Editor

Dept. of Biological Sciences, Arkansas Tech University
1701 N. Boulder Ave., Russellville, AR 72801-2222
Phone: (479) 968-0294, email: istill@atu.edu

Dr. Jeff Robertson Secretary

Dept. of Physical Sciences, Arkansas Tech University
1701 N. Boulder Ave., Russellville, AR 72801-2222
Phone: (479) 968-0293, email: jrobertson@atu.edu

Dr. Collis Geren Historian

16116 Pin Oak Road, Fayetteville, AR 72704
ph: (479) 521-5311, email: cgeren@uark.edu

Dr. Salomon Itza Webmaster

Division of Sciences and Mathematics
University of the Ozarks, Clarksville, AR 72830
Phone (479) 979-1365, email: sitza@ozarks.edu

Dr. R. Panneer Selvam Newsletter Editor

BELL 4190 University of Arkansas
Fayetteville, AR 72701
Ph: (479) 575-5356, email: rps@uark.edu

Aren't you the right person to step up to a leadership role?

Journal of the AAS (JAAS):

Reviewers Solicited

Persons interested in acting as Associate Editors of the Journal or Reviewers in their field of expertise of manuscripts submitted for publication in the AAS Journal are needed.

Please contact Mostafa Hemmati (mhemmati@atu.edu) or Ivan Still (istill@atu.edu) by e-mail and provide your contact information and area(s) of expertise. Please be specific about the individual subjects you wish to review. (e.g. not just Botany, but herbaceous plants, or woody plants, or aquatic plants; and not just vertebrates, but reptiles, particularly snakes.)

Comments for Prospective Authors

Authors are required to use the instructions found on the AAS website in preparing manuscripts submitted for publication in the Arkansas Academy of Science's Journal. The figures, graphs, diagrams, pictures, etc. must be inserted inside the manuscript. The electronic copy of the manuscript should be a single file. A caption should be written under each figure and above each table. To view and/or download new instructions visit the Academy website.

This new process means that a significant reduction in typing and editing takes place away from the authors direct control. **The final product submitted by the authors will be the published document in the Journal** (What-You-See-Is-What-You-Get, WYSIWYG). Or more to the point, what authors submit is what gets published. The editor and printer does no typing or editing and only acts to copy and bind the Journal.

Awards competition for student presentations at the AAS Meeting

Students commonly present results of their research at the annual meetings of the Arkansas Academy of Science. Our award competition seeks to recognize outstanding presentations made by those competing students. Categories for oral presentations include Environmental Science, Life Science, and Physical Science, at both Undergraduate and Graduate levels of competition. Certificates and cash awards may be given for first place (\$100), second place (\$50), and third place (\$50).

Awards for best Undergraduate and Graduate Poster (\$100) were added by the Academy, in response to the increasing popularity of that form of presentation as well.

Student presenters interested in any of these competitions should mark the appropriate category on the abstract submission form, to indicate their desire to compete. Presentations not specifically entered into the competition will not be judged, nor will be eligible for an award.

Arkansas Academy of Science PERMANENT ONLINE HOME:

AAS Web Pages: The official website of the Academy now has a permanent public portal whose web address will never change although internal links for member pages might whenever the host migrates. Always access the online Academy pages from the permanent public portal...

<http://www.ArkansasAcademyofScience.org>

Arkansas Academy of Science

Undergraduate Research Awards (up to \$500)

Applications available at
<http://www.arkansasacademyofscience.org/>

Applications are due: March 1, 2015

To send applications or for more information
contact:

Dr. Jeff Robertson jrobertson@atu.edu
(479) 964-0548



Members Corner

Vintage Copies of the AAS Journal paper copies will be available in the 99th AAS meeting as per the information provided by Dr. Jeff Robertson

Photos from the 98th 2014 AAS meeting (Harding University) will be available at: <https://www.dropbox.com/sh/4buvnqhfbtociyy/AACUscAwIx9x-49YrxhImala?dl=0>

2014 AAS PRESENTATION AWARD WINNERS

ORAL PRESENTATION AWARDS

Life Science

"Pleistocene Seed Dispersal of Anachronistic Fruits: Using Elephants to Test Ancient Plant-Animal Interactions" by Charlie N. Davis, Madison J. Boone, and Laura Klasek. Hendrix College

"Evaluating the role of meiotic genes in DNA repair using RNAi" by Younna E. Moufarrej, Sydney L. Haldeman, Emily R. Cariker, and Andrew M. Schurko. Hendrix College

Chemistry & Biochemistry

"Acetaminophen increases styrene bioactivation to a toxic metabolite by CYP2E1" by Jessica H. Hartman, and Grover P. Miller. University of Arkansas for Medical Sciences

Physics & Engineering

"The crystal structure effect of the synthesis of cobalt oxide nanoparticles using multiple iterations of a recyclable precipitation reaction" by J.S. Pennington, and R. J. Tackett. Arkansas Tech University

"Software Development for a Diode Laser Spectrometer" by Amlam Niragire, Chih Hao Wu, and Edmond Wilson. Harding University

POSTERS AWARDS

Life Science

"Sarcophagous Insect Associations and Succession on Pig Carrion During the Summer in Central Arkansas" by Tyler Files, Brianne Baley, and Jess Kelly. Ouachita Baptist University

"Selection of fatty acid desaturase 7 (fad7-1) single mutant plants in *Arabidopsis thaliana* using SNP-PCR primer" by Kaleb L. Vaughn¹, Carlos A. Avila², and Fiona Goggin². ¹Harding University, ²University of Arkansas

Chemistry & Biochemistry

"Molecular Modeling Studies of Phylogenetically Significant Carotenoids of Oxygenic Phototrophs" by Ryan Reyes, and M. Jeffery Taylor. University of Arkansas-Monticello

"Neutralization and pH Effect of Milk on Aspirin Solutions" by Jordan Miller, Nikisha West, Fontaine Taylor, and Insu 'Frank' Hahn. Philander Smith College

Physics & Engineering

"X-Ray Fluorescence and Moseley's Laws of Nuclear Radiation Spectra" by T. Ryan Rogers, Hunter P. Ward, Nicholas L. Frederickson, Anthony D. Mitchel, Azida Walker, and Rahul Mehta. University of Central Arkansas

"Stable fuzzy logic control for nonlinear simple chaotic maps" by Christopher Gillison, and Juan D. Serna. University of Arkansas at Monticello

(This year, Harding University, and the Academy broke with tradition and did not distinguish between 1st and 2nd Places. We send our congratulations equally to our student presenters)

Undergraduate Research Grant Award:

Dr. Campbell/Brownmiller, Henderson State University

[The award information is provided by: Dr. Ivan Still, ATU]

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