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# THE Central Arkansas



## CHEMIST

The Newsletter of the Central Arkansas Local Section of the American Chemical Society

September 2004

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### Meeting

**Thursday September 30, 2004**

Location: Henderson State University  
Caplinger Airway Lecture  
Hall  
Arkadelphia AR

5:30 pm Dinner - **Fish Net  
Restaurant**

7:30 pm Program  
**Mr. Ryan Black**  
*GC-MS and the Arkansas  
State Crime Laboratory*

*To obtain driving directions, visit  
[membership.acs.org/c/centralarkansas](http://membership.acs.org/c/centralarkansas)*

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### About the Speaker:

Ryan Black is the Chief Forensic Toxicologist at the Arkansas State Crime Laboratory. He has worked professionally in several forensic disciplines, including forensic toxicology, drug analysis, and ignitable liquids analysis. Mr. Black received a B.S. in chemistry from Texas

Christian University and a thesis Master's in chemistry from the University of North Carolina at Chapel Hill.

Gas chromatography-mass spectrometry (GC-MS) is used in several different disciplines at the Arkansas State Crime Laboratory. Its broad applicability and specificity make it useful for general identification of unknown compounds.

This talk will cover the basic theory of GC-MS and cover its practical use at the Arkansas State Crime Laboratory, focusing on forensic toxicology, drug analysis, and trace evidence.

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### From The Chair:

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Welcome back! I hope everyone had a good summer.

We have several important events coming up this fall. First off, it's that time again! Yes, officer elections are coming up. Our nominating committee (Jerry Manion, Cindy Moran, and Jeff Moran) are soliciting nominations for the offices of Chair-elect and Secretary. If you would be willing to serve our section or would like to nominate someone else, please notify Jerry ([jerrym@mail.uca.edu](mailto:jerrym@mail.uca.edu)), Cindy ([Cindy.Moran@ascl.state.ar.us](mailto:Cindy.Moran@ascl.state.ar.us)), or Jeff ([jmoran@HealthyArkansas.com](mailto:jmoran@HealthyArkansas.com)) ASAP. The slate of candidates will be presented at the October meeting, and we will announce the winners at our November meeting.

Cheryl Lichti



NCW-2004 Theme: Health and Wellness  
Celebrate: October 17-23, 2004



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## Local Section News

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### *Henderson State University Chemistry Club in Anaheim CA.*



Henderson State University Chemistry Club students and faculty sponsor recently returned from Anaheim, California, where they attended the American Chemistry Society national meeting.

Students presented research results, received a club award, attended the meetings, and took advantage of opportunities to meet professionals from all areas of the chemical industry and academia. There were about 13,000 attendees at this conference.

Those attending from Henderson were Eric Hartman, Josh Dilley, Nathan McLeod, J. R. Arnold, Benison Forfeke, Sharetta Glover, Greg Kerr, Janice O'Donnell (Sponsor), and Dr. Martin Campbell. Students received travel grants from Henderson State University Undergraduate Research and the Central Arkansas Local Section of the ACS to go to the national convention they were presenting research posters and chemical demonstrations for K-12 teachers.

Seven students presented their undergraduate research projects at a national poster session in the Anaheim Convention Center. Their research is under the guidance of professors in the chemistry department at HSU and included studies in environmental, biochemical, organic, and superconductor chemistry.

All of the students participated in a special presentation of science demonstrations for primary and secondary school teachers. The club members showed a simple method for extracting DNA from strawberries using household chemicals. The Henderson demonstrations were one of only about 30 chosen for presentation to the attendees.

Henderson's Student Affiliate Chapter of the American Chemical Society received a Commendable Award for their chemistry club at the convention. HSU was one of about 120 local clubs that received awards out of more than 900 chapters nationwide.

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## Attention High School Educators



Chemagination, a science essay and poster contest for 9-12 grade chemistry students is held annually by American Chemical Society local sections and regions. Students write an article in the style of *ChemMatters* magazine. They answer the question, "What innovation or breakthrough in chemistry will be important in the lives of teenagers 25 years from now?" Students compete in four categories for shared team prizes in U.S. Savings Bonds.

### 2003 National Chemagination Contest Winners

#### Biotechnology

**Eazy Eyez -- Contact lenses that are dissolvable.**  
Damascus High School, Damascus, MD

Students: Elizabeth Barry, Nicole Corrado, and Amanda Harris  
Advisor: Elena Pisciotta

### Medicine/Healthcare

#### **Sleep Smarter Not Harder -- A study of sleep cycles for the purpose of perfecting sleep.**

North Springs High School, Atlanta, GA  
Students: Simon Cartoon, Michael D. Moxley, Jr., and Heather Post  
Advisor: Sol Aboulafia

### New Materials

#### **Self-Healing Fabric -- Fabric that when it's ripped, seals the rip back up on its own.**

Damascus High School, Damascus, MD  
Students: Joe Crane, Brice Farrell, and Katie Goldstein  
Advisor: Elena Pisciotta

### Transportation/Environment

#### **Algae + Bioethanol + Carbonal = 1 Xtreme Car - - The invention of carbonal, which increases the vapor pressure of ethanol and helps reduce pollution.**

Albert Einstein High School, Kensington, MD  
Students: Daniel Mosier and Christopher Odell  
Advisor: Ann Coren

For information about the contest, visit [www.chemagination.com](http://www.chemagination.com). To help coordinate a contest in this area, contact Cheryl Lichti at [lichticheryl@uams.edu](mailto:lichticheryl@uams.edu).

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## National News

### REGIONAL MEETINGS FOR 2004

MEETING *	DATE	LOCATION
60th Southwest Regional Meeting 2004	September 29 – October 2	Fort Worth, TX
39th Midwest Regional Meeting 2004	October 19 - 22	Manhattan, KS

Visit the ACS Office of Regional Meetings website to link with all the 2004 meetings for more details at [www.chemistry.org/meetings/regional/](http://www.chemistry.org/meetings/regional/). Some very exciting programming has been planned; so plan to be part of it.

If you have an article or job posting that you would like to have considered for publication in our newsletter, send it to [hendricksonhowardp@uams.edu](mailto:hendricksonhowardp@uams.edu) for review.

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The *Central Arkansas Chemist* is published as needed by the Central Arkansas Local Section of the American Chemical Society. Section Chair, Cheryl Lichti, University of Arkansas for Medical Sciences, 501-526-6924, [lichticheryl@uams.edu](mailto:lichticheryl@uams.edu). Chair-Elect, Steve Zimmer Arkansas Tech University Russellville, AR 72801-2222, 479-964-0825 Address all correspondence to the Section Secretary, Howard Hendrickson, University of Arkansas for Medical Sciences #611, 501-603-1547, [hendricksonhowardp@uams.edu](mailto:hendricksonhowardp@uams.edu). Newsletter contributions should be sent directly to the Section Secretary in electronic form. The Central Arkansas Local Section Web site is <http://membership.acs.org/c/centralarkansas>

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