

THE Central Arkansas



CHEMIST

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

November, 2002

The Chemistry Department at Ouachita Baptist University has graciously invited the ACS local section to attend the lecture series being presented this month (see below).

"CSI K9 - Antiterrorism and the Accurate Location of Forensic Evidence Using Detector Dogs"

Recent high profile cases and top rated TV shows including "CSI: Crime Scene Investigation" and "CSI: Miami" have propelled forensic science into the public spotlight. While many may equate forensic investigations with such recent shows, crime investigations actually predate these mass media interpretations by many hundreds of years and many investigators over time were not even human. In fact, over the last few recent millenniums, the use of dogs in hunting has been perfected and in the last few centuries dogs have been utilized in wartime. Only in the most recent few decades have humans begun to fully capitalize on the unique abilities of canines in crime scene investigation. Hopefully, in the next few years, humans will determine exactly how these amazing biological detectors work and assist in the development of electronic detectors. In this presentation, the sense of smell will be discussed including the unique abilities of detector dogs and a comparison will be made between instrumental detection methods and detector dogs. A detailed comparison between instrumental detection methods and detector dogs shows that, overall, detector dogs still represent the fastest, most versatile, reliable real-time detection devices available for locating forensic evidence. The wide

variety of detector dogs now available will be discussed with bomb and drug dogs highlighted and a demonstration provided by a detector dog team.

Lecture

Thursday, November 14

Ouachita Baptist University
McBeth Recital Hall

7:30 p.m. Program
Kenneth G. Furton
"CSI K9- Antiterrorism and the Accurate Location of Forensic Evidence Using Detector Dogs."

There will be a reception following the talk and demonstration.

*To obtain driving directions, visit
membership.acs.org/c/centralarkansas*

Speaker's Biographical Sketch

Dr. Kenneth G. Furton is Professor of Chemistry, Associate Dean of Arts & Sciences and Director of the International Forensic Research Institute at Florida International University. He received a B.S. in Forensic Science at the University of Central Florida in 1983, a Ph.D. in Analytical Chemistry at Wayne State University in 1986 and completed Post-doctoral studies in Nuclear Chemistry at the University of Wales, Swansea in 1988. He is the author or co-author of more than 300 peer-reviewed

publications and presentations. Professor Furton's research program has focused on forensic science and separation science including the development of novel sample preparation methods and field analysis methods including studying the chemical basis of detector dog alerts.

Looking Ahead

We have some great lectures coming up for next Spring (February and March) and an awards banquet in April. We look forward to great turnouts for these events.

Remember that you can always stay informed by visiting the section website at <http://membership.acs.org/c/centralarkansas>

National News

In the October 7th issue of *Chemical and Engineering News*, six of our local section ACS Student Affiliates Chapters received awards. These awards are based on activities that the chapters participated in for 2001-2002. The ACS committee will award and honor 31 outstanding, 55 commendable, and 67 honorable mention awards at the ACS national meeting in New Orleans on March 23, 2003.

A commendable award was given to **Ouachita Baptist University** (2001-02 chapter president: Levi Simpson; Faculty advisor: Martin Perry).

Honorable mention awards were given to **Arkansas State University** (Jonesboro) (2001-02 chapter president: Deborah Pierce; Faculty advisor: Mark Draganjac), **Henderson State University** (2001-02 chapter president: Brandon Doss; Faculty advisor: Janice O'Donnell), **Hendrix College** (2001-02 chapter president: Meghan Williams; Faculty advisor: Warfield Teague), **Lyon College** (2001-02 chapter president: Jon Ball; Faculty advisor: Derek McDowell), and the **University of Arkansas at Little Rock** (2001-02 chapter president: Eric Hall; Faculty advisor: Jerry Darsey).

Local Section News

Be on the lookout for local section officer election ballots in November. Again, if anyone is interested in running for an office, please contact Cindy Moran (cindy.moran@ascl.state.ar.us).

Local Section Highlights

This month we would like to highlight activities that some chapters of our student affiliates and other groups did or have plans to do to celebrate National Chemistry Week.

The Student Affiliates at **Arkansas State University** celebrated NCW with a light display and balloons depicting a beaker spilling soap bubbles over the side of the building. "Chemists Keep Us Clean" and "NCW" were spelled out in four foot tall letters using Christmas tree lights.



The beaker was six feet tall. There were over 900 balloons inflated for the project. We also held a "Soap Drive", collecting cleaning materials for the Ronald McDonald House in Memphis.



Steve Zimmer from **Arkansas Tech University** will be presenting a program to all of the fifth grade students at Russellville Upper Elementary 5th Grade School on November 14th. There will be four presentations to about 125 students each time (total ~500 students + 9 teachers). The presentation will include the chemistry of polymers, the chemistry of the annealing process in steel manufacturing and a discussion of the effects of air pressure upon everyday life. Each science teacher will receive a periodic table showing the uses of each of the elements for display in their classroom.

Ouachita Baptist University's NCW activities included "Dress as Your Favorite Element Day" where the students dressed up to symbolize their favorite element.



The *Central Arkansas Chemist* is published as needed by the Central Arkansas Local Section of the American Chemical Society. Section Chair, Jeffrey Moran, Center for Toxicology and Environmental Health, L.L.C. 501-614-2834, jmoran@cteh.com; Chair-Elect, Cindy Moran, Arkansas State Crime Lab, 501-227-5747, cindy.moran@ascl.state.ar.us. Address all correspondence to Cindy Moran, Arkansas State Crime Lab, 501-227-5747, cindy.moran@ascl.state.ar.us Newsletter contributions should be sent directly to Cindy Moran in electronic form. The Central Arkansas Local Section Web site is <http://membership.acs.org/c/centralarkansas>

Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has.

--Margaret Mead

As always, visit the section's website: <http://membership.acs.org/c/centralarkansas> to stay informed about section events and activities.