

NEWSLETTER

Oklahoma Section American Chemical Society

Volume 13 Number 5 September 1, 2007

Happy Science Fun Show!

Friday - September 14, 2007 Wood Science Building Oklahoma Baptist University Shawnee OK 84701

Sherry Marshall

Director of Education
Kirkpatrick Science & Air Space Museum At Omniplex
2100 NE 50th Street
Oklahoma City OK 73111
405.602.3688

ow do you beat the stereotype that science can be hard, even boring? You make it FUN!!! This amazing show explores the magic of science and how to make it amusing, exciting, and entertaining for all. Dive in and discover the science all around you in everyday life as we investigate matter, colors and even try an explosion or two! Exciting experiments will astound old and young as we react, concoct, mix and mash with chemistry!

[Reservation Information on Page 2]

Schedule: [Note: the "family night" meeting format.

Also a FRIDAY evening meeting]

6:00 PM Social Hour: Wood Science Building: Games [indoor/outdoor], soft

drinks. Social hour: volleyball & croquet.

7:00 PM Dinner: Wood Science Building: Tables/chairs set up inside or

folks can eat outside if weather permits.

8:00 PM Speaker: Wood Science Building - Large Lecture Hall.

Menu: Hamburgers, hotdogs, potato chips, pickles, cookies & brownies.

Cost: \$7.00-ACS Member; \$5.00-ACS Student Affiliate; \$3.00 Child < 12 years.

Deadline: Wednesday, 12 September, 2007 - 5:00 PM. Shawna York 405.878.2028

shawna.york@okbu.edu [Indicate # of adults & # children.]

Directions To Wood Science Building:

From I-40:

Exit at Kickapoo Interchange.

Head South on Kickapoo until you reach University [third traffic light].

Turn west onto University and then next right onto "The Oval".

Wood Science Building is the first building on the right. If spaces are available, attendees can park on "The Oval".

If not, follow "The Oval" back around to University and parking lots can be found on

both sides of the street west of "The Oval" on University.

From South:

Take **Kickapoo Spur Exit**off US 177. North on Kickapoo to University.

Sherry Marshall

former educator at Oklahoma State University and El Paso Community College, Sherry had her first experience with Omniplex at the age of nine as a student in a summer science workshop. That experience changed her life forever and convinced her that a career in informal science education was her calling. With a degree in physics and graduate work in chemistry, her passion is rooted in bringing science alive for students of all ages. Her impressive background convinced Omniplex to employ her as a museum educator in 1994.

n 2003, Sherry was promoted to director of education, and in 2007 received a Reynolds Discovery Center Network Initiative grant for a state-wide collaboration of five Oklahoma Museums. Sherry now serves as the Director of the Oklahoma Museum Network funded by the Donald W. Reynolds Foundation. By combining resources and dramatically improving those "ah-ha" learning moments for children at Oklahoma museums, the network's five museum partners will improve educational opportunities for Oklahoma's 624,875 elementary school children and their families, including those in rural areas. Between managing the Network and developing curriculum for students, teachers and families, she enjoys being the "mad scientist" that makes science crazy fun and "a blast" for all. is Director of Education at the Kirkpatrick Science & Air Space Museum at The Omniplex. She coordinates teacher workshops, science programs and classes for schools and for the general public. Students range from pre-K to adult: programs encompass different sciences including her favorites physics and chemistry

Newsletter Editor's Statement:

Many of the Section's Newsletters have contained authorized reprints of letters-to-the-editor and short articles. Some of the articles I have written – those that were unsigned Topics covered were ones I found interesting. By printing them in the Newsletter, I hoped they would be of interest to other Section members as well.

Section members' comments, criticisms, observations, objections, etc are always welcome. Include your name, address and phone number in your letter. The letter will be printed, either with or without the name of the writer – as the writer instructs. Remember: send letters to the Newsletter editor! Also, please note that just because a particular faculty member may not be "well respected" on a campus, it does not preclude his comments and views from being published in the Newsletter. Anyone who disagrees with this individual can send a letter explaining in as much detail as needed why he disagrees.

As long as the work and ideas of some are excluded because their work and ideas are at variance with the current, "accepted" views on some scientific topic, the science will be flawed. After all, Galileo was called a heretic by various individuals because he arrived at different conclusions than they did.

Student Awards

The Oklahoma Section has two awards for undergraduate students. The Terrill Smith Travel Award for undergraduates to travel to a regional or national ACS meeting to present a paper or poster. Two awards of up to \$600 are available each year, one for fall and one for spring travel. This award is named in honor of Dr. Terrill [Terry] Smith, longtime Oklahoma Section officer and councilor, who retired from UCO in 1999. Terry strongly supported undergraduate research and student affiliates at UCO and in the section.

The Roger Baldwin Graduate School Award is for undergraduate students accepted to graduate school in chemical sciences. One \$500 award will be presented each spring. This award is named in honor of Dr. Roger Baldwin, a longtime Oklahoma Section officer, retired from Kerr McGee Corporation. The section's able to offer these awards partially due to Roger's persistent fund-raising efforts associated with the Southwest Regional Meeting in 2003.

Award applications are available from the website, http://membership.acs.org/O/Oklahoma/Index.htm. For more information about these awards, contact Gordon Eggleton, geggleton@sosu.edu.

Oklahoma Chemist Award - 2008

Nominations for Oklahoma Chemist of the Year - 2008 are now being accepted.

Five [5] copies of a single nomination should be sent by no later than January 18, 2008 to:

Dr. K. Darrell Berlin-Chair Oklahoma Chemist Awards Committee Department of Chemistry Oklahoma State University Stillwater OK 74078 405.744.5950 kdb@okstate.edu

Criteria and Guidelines for the Preparation of the Nomination and For Selection of the Recipient of The Oklahoma Chemist Award.

- 1. A nomination letter for the candidate by a colleague, friend, etc.
- 2. A complete, up-to-date resumé of the candidate.
- 3. A two-page "highlight" of the candidate's major accomplishments.
- 4. Five [5] letters of support for the nominee.

- [a] Two [2] letters from colleagues at the candidate's place of employment.
- [b] Three [3] letters from outside the candidate's place of employment. Letters from individuals with expertise in the candidate's field are especially welcomed.
- 5. Special information on the candidate is also solicited, especially as to how the candidate has advanced chemistry in the state of Oklahoma.
- 6. Candidates may be involved in research or in chemical education within the state.

Section Officers/Committee Members.

The Section will hold a Fall 2007 election for Chair-Elect, Secretary and Councilor. Nominations for the positions are now being accepted! If you wish to nominate someone, or stand for one of these offices yourself, contact: Barry Lavine, Nominations Chair: 405.744.5945 bklab@okstate.edu The ballots should be mailed at the beginning of November, 2007.

John Gelder has agreed to replace Shawna York as the Chemistry Olympiad Coordinator for the section. He will be assisted by Lisa McGaw and Barry Lavine. Currently, a replacement for Gordon Eggleton as Chair of the Awards Committee is being sought. Both Shawna and Gordon have contributed many years of service to the section and everyone has benefited from their service. On behalf of the section, I thank Shawna and Gordon for their service [bkl].

Passenger Jet or Car - Which Is The Gas Guzzler?

This answer might seem obvious. But read on!

The ubiquitous term "gas guzzler" was probably first applied to SUVs and pickups. It seems to be affixed to any gasoline engine powered vehicle. Some eco-zealots have suggested passenger planes be eliminated due to their "gas guzzling". [It's "kerosene guzzling"] We all should be driving econo-boxes; they are much more fuel efficient!

Let's separate fact from eco-zealot fiction!

At a speed of 560 miles/hour ***, the Boeing 747 uses 12,000 liters or 3200 gallons of fuel/hour: 5.7 gal/mile or 0.18 mile/gallon. Your car may seem to do much better – say 30 mpg or 0.033 gal/mile. *** This is the normal cruise speed of a 747.

Remember the 747 can seat up to 400 people vs 4 for your car!

Let's now compare: fuel consumption per passenger mile!

A 747 with all 400 seats occupied consumes 0.014 gallons/passenger mile.

A fully occupied subcompact using 0.025 gallon/mile [40 mpg] manages 0.006 gallon/passenger mile

The 747 moves ten times as fast and carries 100 times as many people as an automobile at a comparable fuel cost!

Probably no other vehicle can top that kind of performance.

One more item: the 747 is also carrying about 30 tons of cargo!

Global Warming: Fact or Fiction?

If your mind in not yet made up on this matter, you may wish to read the following book.

Back cover: "Those who do not know their opponent's argument do not completely understand their own."

Global Warming

Opposing Viewpoints

Cynthia A. Billy Book Editor

Greenhaven Press

27500 Drake Road

Farmington Hills MI 48331-3535

ISBN 0-7377-2935-X [lib: alk paper] ISBN 0-7377-2936-8 [pbk: alk paper]

www.gale.com

House Bill Boosts Hydrogen Research***

The house voted 408-8 last week to approve legislation that would award cash prizes for hydrogen energy technology breakthroughs. The H-Prize Act of 2007 [H. R. 632] would authorize \$50 million over a decade to encourage innovations in production, storage, and distribution that would help make hydrogen fuel commercially viable. The bill directs the secretary of energy to contract with a private foundation or other nonprofit entity to establish criteria for the prizes and to administer the contest.

The house passed a similar measure last year, but the bill was never taken up by the senate.

*** Reprinted from the June 11, 2007 issue of C&E news

Pressure From Ethanol Boom Builds Inside Popcorn Market***

A trip to the movies may become even pricier soon, thanks to surging popcorn costs. U.S. popcorn prices have risen more than 40% since 2006 as soaring demand for feed corn to fuel the ethanol boom has spilled over into the favorite snack of American moviegoers.

Companies that purchase popcorn, as opposed to larger crops such as other types of corn and soybeans, are confined to choosing among a relatively small number of suppliers. This makes it important for popcorn companies to offer competitive prices and forge good relationships with farmers.

"I think [ethanol] is going to have a uniform effect on all geographical areas that produce popcorn," said Dennis Kunnemann, president of AK Acres Popcorn Co., which buys, processes and then sells popcorn to distributors, packagers and snack-food retailers. "This year, we've paid the highest price ever that I've contracted for, 13 cents a pound," compared with nine cents a pound last year.

The family-owned company in Imperial, Neb., has passed its increase cost on to customers by signing new contracts for between 18 and 20 cents a pound, up about 40% from 2006.

Americans consume four billion gallons of popcorn annually, totaling 13.5 gallons a person, according to the Popcorn Board, which promotes the industry. An estimated 70% of the snack food is consumed in homes, with the remaining 30% eaten at theaters, stadiums and schools.

At American Pop Corn Co., which makes Jolly Time Pop Corn, the 90-yer old company has increased the price tag for bulk items 20% from a year ago. Prices for smaller bags, between one and four pounds rose 10% in June.

*** Reprinted from Reuters News Service

The reprinted letters and articles as well as the editor's unsigned article[s] in this Newsletter do not necessarily reflect the views of the Oklahoma Section of the ACS.

Oklahoma Fall 2007 Section Meetings:

October: Monday October 8, 2007

Speaker: Dr. Eugene Stevenson Location: Noble Foundation - Ardmore

November: Date: Thursday, November 1, 2007

Speaker: Chemist of the Year 2007 - Dr. Ziad El Rassi

Location: OSU / Stillwater

September 2007 Section Meeting

Friday, 14 September, 2007

Oklahoma Baptist University

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