



American Chemical Society

Nebraska Section Newsletter

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Special thanks to Abby Jackson and Desiree Wineland for their help preparing this Newsletter.

ACS Nebraska Section News

Dear Local Section Members and Friends,

Read about some of the highlights from the Cambridge Elementary School Science Fair, an event supported by local section funding. Our thanks to Desiree Wineland, 2012 Alternate Councilor and ACS Chemistry Ambassador, for organizing the event and assembling the highlights. The local section officers are eager to consider requests to support other similarly worthwhile projects.

This past Spring, Dr. Fred Matters, Emeritus Professor of Chemistry from Hastings College, presented an interesting and informative seminar was entitled, "*Chemistry in the Service of Art*", at the University of Nebraska-Kearney. Dr. Hector Palencia was the host for this well attended event highlighted elsewhere in this newsletter. In August, I attended the Philadelphia ACS National meeting Council meeting as substitute councilor and gained a new appreciation for the important role local sections play in ACS governance.

In October, Dr. Rebecca Lai, UNL Associate Professor of Chemistry, entertained an enthusiastic crowd of chemists and students with her seminar entitled, "*A Professor's Guide to Harry Potter's Chemistry*". Dr. Lai's energy and infectious enthusiasm made for an interesting mix of history, alchemy and chemistry in relation to the chemistry of gold, the sorcerer's stone and the elixir of life. Also in October, Dr. Marinda Li Wu, 2012 President-elect American Chemical Society, visited UNL giving a seminar entitled, "*How Can We All Become Better Ambassadors for Chemistry?*" Dr. Wu's boundless energy, her interest in the role of women in chemistry, and her concern over the role of chemistry in addressing global issues promise to make her term as 2013 ACS President one that moves the ACS forward in important ways.

Now, it is your turn! Local section election ballots will be distributed via email shortly. Please take a minute to show your support for the section and vote. Equally important, the Nebraska Section Bylaws, last amended in 1977, are in need of update and revision. Revising the Bylaws requires the participation of both the officers and the members. I ask that, when the time comes, you assist in this important process.

If you or someone you know in the section would like to give a general interest chemistry talk at a future meeting, I would like to hear from you.

Jim Takacs
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CAMBRIDGE ELEMENTARY SCHOOL REVIVES SCIENCE FAIR WITH SUPPORT FROM ACS NEBRASKA SECTION.

BRANDON JONES FROM CAMBRIDGE ELEMENTARY SCHOOL CHALLENGES EACH CHEMIST BY ASKING "WHERE SHOULD YOU KEEP YOUR POPCORN? READ IF YOU'RE CORRECT AND WHAT ELSE YOU CAN LEARN FROM AMAZING ELEMENTARY SCHOOL SCIENTISTS.

CAMBRIDGE. Thanks to two amazing science teachers, Jessica Samuelson and Jason Sawyer the elementary students of Cambridge Elementary School who inspired an ACS Nebraska Section Member to submit a request for support. When ACS Nebraska Section President Jim Tackas wrote telling us the great news, we were all so excited to learn about the sections support of everyone's hard work with providing prize awards.



The two teachers came up with the idea and received approval for the end of the first semester. When the Kindergarten through 6th graders returned from Christmas Break, Ms Samuelson and Mr Sayer challenged all the students with creating a unique science project for the Science Fair.

The students had to come up with their own hypothesis, and follow scientific method and record their data in their science experience journal." said Ms Jessica Samuelson. "We had over 93 entries and overall competition was actually pretty tough. "

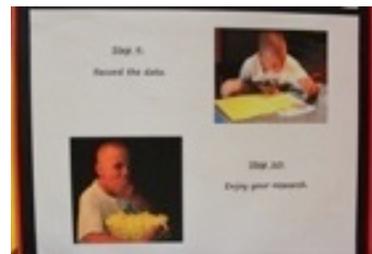
The overall winner was Brandon Jones, with his project titled, "Where Do You Keep Your Popcorn."



Brandon is a 3rd grader and after the competition, the writer learned that Brandon has difficulty reading, which shows us that a love for science runs deep and cant be stopped by any challenges.

"Brandon was so excited about doing a science project and really put allot of hard work into his project." commented Jason Sayer. Step 10 in the photo below is a lesson for all of us. "Enjoy Your Research" which Brandon clearly did.

In recognition for his hard work and providing a valuable answer to all of us, Brandon received a \$100 cash award and an ACS Certificate presented by Desiree Wineland, on behalf of the Nebraska ACS Section.



Step 10 in the photo below is a lesson for all of us. "Enjoy Your Research"

-Brandon Jones

CAMBRIDGE ELEMENTARY SCHOOL REVIVES SCIENCE FAIR WITH SUPPORT FROM ACS NEBRASKA SECTION.

Students starting as young as Kindergarten through 6th grade competed within their grade as well as overall winner.

The judges were Connie Hoeff, a retired science teacher from Arapahoe, Desiree Wineland, ACS Ambassador along with five student judges: Elizabeth Cope, Halie Westadt and Calvin Wineland (High School student judges), Addie Samuelson and Austin Wineland (Junior High judges).



Sometimes a picture is worth a thousand words, and in this case, showing photos of the “scientist” proudly standing in front of their experiment presentation boards, shows the amazing talents of these students.



All because of the belief of two science teachers.

Competition was tough between each grade and extremely different selecting the overall winner.

Each first place student received \$50, \$25 for second and \$10 for third. Each winner also received an ACS Nebraska Section “Certificate of Excellence.”



By Desiree Wineland
ACS Ambassador



Chemistry in the Service of Art

The ACS Nebraska local section organizes Seminars and Events to educate public and interested students. The April seminar was organized by Prof. Hector Palencia at the University of Nebraska-Kearney. The speaker, Dr. Frederic Mattes, is Emeritus Professor of Chemistry from Hastings College. His seminar was entitled "Chemistry in the Service of Art". Dr. Mattes presented at a level that made it accessible for students with little or no chemistry background by focusing on the science underlying questions relevant to art! Is that painting the "real thing"? How do art conservators know how to approach cleaning, preserving or restoring a work of art? What materials and techniques are the "best" for the question at hand? The role Chemistry and Chemical Instrumentation plays in the Conservation and Restoration of works of Art is extensive. Examples included revealing fake paintings by IR, Raman, UV, X-Ray or XRF identification of the blue pigment used and uncovering imminent damage to a rare painting by measuring the increase in CO₂ levels released by insects in a picture frame.

The talk was well attended, mostly by students from UNK. At the end several questions about the chemistry of painting were addressed by Dr. Mattes. Thank-you Dr. Mattes!



SCI Scholars--Summer 2013 Internships for Undergraduates

A joint program of the Society of Chemical Industry (SCI) America International Group, the American Chemical Society (ACS), and the American Institute of Chemical Engineers (AIChE), and was developed to introduce chemistry and chemical engineering students to careers in the chemical industry. Exceptional sophomores and juniors with a GPA of at least 3.5 and who are majoring in chemistry or chemical engineering are encouraged to apply. Program details:

- Thirty-five scholars will be chosen for internship positions in the summer of 2013.
- SCI Scholars receive \$6,000-\$10,000+ for a ten-week internship.
- Students will be awarded a certificate and an additional \$1,000, which can be used for any purpose, such as participation at an ACS or AIChE meeting.
- Scholars nominate a high school chemistry teacher for recognition. Teachers will be awarded a certificate from SCI and \$1,000, which can be used for professional development or classroom materials.

Applications are due **December 14, 2012** (December 15, 3 a.m EST). Interested students should visit www.acs.org/sci to fill out an application and get more information.