



# NEWSLETTER

## Oklahoma Section American Chemical Society

Volume 16 Number 3

<http://oklahoma.sites.acs.org/>

Oct 2010

Section Meeting  
Thursday 14 Oct 2010

### AMERICAN SCIENCE POLICY HOW THE SAUSAGE IS MADE

Dr. Donald M. Burland  
National Science Foundation  
(retired)



The mechanisms by which the Federal Government supports basic scientific research and education can seem to the outsider to be confusing and untidy. Support is spread over a number of agencies including the National Science Foundation, the Department of Defense, the Department of Energy, and the National Institutes of Health to name only a few. In this presentation, the history of science funding in the U.S. will be outlined, the mechanisms by which funding is authorized and appropriated by Congress described, and the rationale for Government support of basic research detailed.

6:00-6:30 pm Social Hour  
6:30-7:30 pm Dinner  
7:30-8:30 pm Presentation

Stillwater Plaza Hotel & Conference Center  
600 E McElroy Rd  
Stillwater, OK 74075  
<http://www.stillwaterplaza.com>

#### Dinner Reservation Information

Menu  
Mexican Buffet

Cost  
\$20 members  
\$5 students

RSVP Deadline  
Monday 11 Oct 5 pm  
Contact: Nick Materer  
405-744-8671  
[materer@okstate.edu](mailto:materer@okstate.edu)

*RSVP is NOT required to attend the presentation.*

See page 2 for the speaker's biographic sketch. →

## NATIONAL CHEMISTRY WEEK 16–23 October



### Behind the Scenes with Chemistry!

*We are kicking it off early this year to head off fall break.*

When: Saturday 16 October 2010  
(10:00 am to 3:00 pm)

Where: Macy's Court area  
Quail Springs Mall.

*hands-on activities*

+  
*stuff to take home*

+  
*chemistry shows!*



contact for details or to volunteer  
Michael Ferguson (405-974-5391) [jferguson@uco.edu](mailto:jferguson@uco.edu)

## OK ACS OFFICER NOMINATIONS

We are seeking nominations for 3 positions.

- Chair Elect (3 year term chair elect/chair/past chair)
- Treasurer (2 year term)
- Councilor (3 year term)

Please send nominations to:

Nick Materer—Section Chair—[materer@okstate.edu](mailto:materer@okstate.edu)

### get involved • make a difference

Election schedule

Nominations due 20 Oct

Ballot mailing 22 Oct

Cast Ballots due on or before 05 Nov

## Councilor's Report from the Fall 2010 National Conference

Allen Aplett (Oklahoma Section Councilor)

The following is a summary of the key actions of the ACS Council at the 2010 fall national meeting.

### Election Results

Committee on Committees, 2011-2013 term. Council elected Janet L. Bryant, H. N. Cheng, Amber S. Hinkle, V. Michael Mautino, and Yorke E. Rhodes

Council Policy Committee, 2011-2013 term. Council elected John E. Adams, Alan M. Ehrlich, Mary Virginia Orna, and Dorothy J. Phillips

Committee on Nominations and Elections, 2011-2013 term. Council elected Jeannette E. Brown, Martha L. Casey, D. Richard Cobb, Lissa Dulany, and Angela K. Wilson

### Petitions to Amend the Constitution and Bylaws

The Council received one amendment to the ACS Constitution and Bylaws for action: The Petition on Recorded Votes. The Council VOTED to approve the Petition on Recorded Votes. This petition provides for additional voting methods, e.g., electronic clickers that have been recently used at Council meetings, when conducting recorded votes. The Board of Directors will vote within 90 days on whether to ratify the approved petition.

### Committee Review

As part of a regular performance review, the Council VOTED to continue the Committee on Science. Continuation of the Committee on Science also requires Board of Directors concurrence.

### Membership Activity

The 2010 membership numbers are on track to meet year-end goals. The Student Member community has continued to grow since creation of this new member category in June 2009. The number of Student Members was 12,815 as of July 31, 2010.

### Local Section Changes in Territories and Dissolution

Northeast Oklahoma absorbs North Central Oklahoma. The Council VOTED to change the territory of the Northeast Oklahoma Local Section to include all members residing in the North Central Oklahoma Local Section territory. The North Central Oklahoma Local Section will be dissolving on December 31, 2010 because its membership has fallen below the minimum requirement. This change in local section territory allows all members residing in the North Central Oklahoma territory to remain assigned to a local section.

Binghamton absorbs Norwich. The Council also VOTED to change the territory of the Binghamton Local Section to include the Norwich Local Section, which will dissolve on December 31, 2010 because its membership also has fallen below the minimum membership requirement. This territory change will allow members residing in the Norwich territory to remain assigned to a local section.

(continued from front page)

### Dr. Donald M. Burland Biographical Sketch

Dr. Burland received an A.B. degree from Dartmouth College and a Ph.D. degree in chemistry and physics from the California Institute of Technology. After a two year post-doctoral stint at the University of Leiden, The Netherlands, he joined IBM's Research Division where he served in various research and management positions for 26 years. In 1997, he joined the National Science Foundation's Division of Chemistry where he was Executive Officer and Acting Division Director. He has been a Consulting Professor in the Chemical Engineering Department at Stanford University and is currently a Visiting Scientist in the Chemistry Department at the University of Virginia. He is a Fellow of the American Physical Society, has been a member of the National Academy of Science's Chemical Sciences Roundtable and the ACS's International Affairs Committee. His research interests have included charge transport in crystalline and amorphous systems, nonlinear optical properties of polymers and femtosecond laser spectroscopy. He has also directed groups studying the physics and chemistry underlying electrophotographic printing and magnetic storage.

### ***Did you know we also distribute the newsletter and information on section activities by email?***

The Oklahoma Section communicates with its membership through several channels, including: email, this printed newsletter, and our web page. If you haven't been getting notifications of up coming meetings and other section activities by email, perhaps we do not have your current email address.

We use the email address list obtained from and maintained by the ACS. There are 3 different ways you can update your information.

- 1) Log in to the ACS website ([www.acs.org](http://www.acs.org)) and edit your profile  
—via the *Edit My Profile* link located under the welcome banner after you login.
- 2) Phone the ACS Customer Service team (1-800-333-9511).
- 3) Send an email to the ACS Customer Service team ([service@acs.org](mailto:service@acs.org)).

Help us keep in touch!

—The Oklahoma Section of the ACS Executive Commit-

**Our Website has recently changed. Check out the new site!**

**<http://oklahoma.sites.acs.org/>**

**56TH ANNUAL PENTASECTIONAL MEETING**  
**Saturday 12 Mar 2011**  
**ConocoPhillips Bartlesville Technology Center**  
**Bartlesville, OK**

***Petrochemicals and Beyond:***  
***Chemical Technology for the 21<sup>st</sup> Century***

Hosted by the Northeast Oklahoma Section (Bartlesville).

keynote speaker: Nancy Jackson, ACS President

Symposium Session Topics

Renewable Fuels and Chemicals

Nanotechnology

Catalysis

Polymer Chemistry

Biochemistry/Organic Chemistry

Analytical Chemistry

General Session

*WWW site coming soon*

**Household Mineralogy: Emery**

Emery in the form of emery boards and emery paper is a common enough household item and we are told that emery is just a variety of corundum (hexagonal  $\text{Al}_2\text{O}_3$ ). This is true up to a point, but naturally-occurring emery is usually a mixture of minerals. The predominant mineral is corundum, which is quite hard ( $H = 9$ ). But other minerals occur intimately mixed with the corundum in the emery. Iron-bearing spinel minerals such as magnetite (cubic  $\text{Fe}_3\text{O}_4$ ) and hercynite (cubic  $\text{FeAl}_2\text{O}_4$ ), and rutile (tetragonal  $\text{TiO}_2$ ) contribute to making emery a dark gray to black material. Because these minerals are softer than corundum, the effective hardness of emery is something less than nine.

Formerly, the Greek island of Naxos was the most important source of this industrial abrasive, but the widespread manufacture of cheaper synthetic abrasives has cut into demand for emery.

©2010, Andrew A. Sicree, Ph.D.

**2010 MIDWEST REGIONAL ACS MEETING**

27–30 October 2010—The Marriott Wichita—Wichita, Kansas

**the ENERGY OF CHEMISTRY**

<http://2010mwrmsites.acs.org/>

**Oklahoma Chemist Award**  
**2011 Call for Nominations**

Five (5) copies of a single nomination should be sent no later than 29 January 2011 to:

Dr. K. Darrell Berlin  
 Chair, Oklahoma Chemist Awards Committee  
 Department of Chemistry  
 Oklahoma State University  
 Stillwater, OK 74078  
 (405) 744-5950  
[kenneth.d.berlin@okstate.edu](mailto:kenneth.d.berlin@okstate.edu)

***Criteria and Guidelines for the Preparation of the Nomination and for Selection of the Recipient***

1. A nomination letter for the candidate by a colleague, friend, etc.
  2. A complete, up-to-date resume 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.

**CHEMISTRY OLYMPIAD**

information coming in November

**2010 Oklahoma ACS Section Officers**  
**and**  
**Standing Committee Chairs**

Nicholas F. Materer	Chair
Amanda J. Nichols	Chair Elect
Lloyd A. Bumm	Immediate Past Chair + Secretary + interim Newsletter editor
Kenneth H. Brown	Treasurer
Allen Applett	Councilor + Nominations Com.
Donna J. Nelson	Alternate Councilor
Charles V. Rice	Awards Com.
Nathan Malmberg	Chemistry Olympiad Com.
Valerie Ferguson	National Chemistry Week Com.
Cheryl Frech	Public Relations
Jim Dechter	Web Master



L. A. Bumm  
Oklahoma Section of the ACS  
Homer L Dodge Dept of Physics & Astronomy  
The University of Oklahoma  
440 W Brooks St  
Norman, OK 73019-2061

Nonprofit Organization  
U.S. Postage Paid  
The University of Oklahoma  
Norman, OK  
Permit No. 88

## Oklahoma ACS 2010 Calendar of Events.

Visit the Oklahoma ACS WWW site for the latest information.

<http://oklahoma.sites.acs.org/>

**Oct 14 (Thu)** local section meeting  
Stillwater Plaza Hotel & Conference Center  
Speaker Donald Burland, *National Science Foundation (retired)*  
*American Science Policy: How the sausage is made*

### Oct 16–23 NATIONAL CHEMISTRY WEEK

**Oct 27–30** 2010 Midwest Regional ACS Meeting  
The Marriott Wichita, Wichita, Kansas

**Nov 10 (Wed)** local section meeting  
Southwestern Oklahoma State University, Weatherford, OK  
Speaker John Fortman, *Wayne State University*  
*Updated Versions of Some of Faraday's Demonstrations Used with*  
*His Christmas Lectures on the Chemical History of a Candle*

**Mar 12 (Sat) 2011** 56th Annual Pentasectional Meeting  
Bartlesville Technology Center, Highway 60 & 123, Bartlesville, OK



**National  
Chemistry  
Week**