



ACS
Chemistry for Life®

American Chemical Society Wichita Section

October 2010 Newsletter
Stephen Donnelly, Editor

Section Meeting
Tuesday, 12 October, 7:30 PM
College Center Conference Room
Kansas State University at Salina
Salina, Kansas

Meal (optional): 6:00 p.m.

We will have a family style meal at Martinelli's Little Italy restaurant in Salina. The meal will include two pastas, salad, bread, dessert and a drink. The cost is \$13.00 per person and the section will pick up half the cost for students attending the dinner and presentation. Cash or checks made out to the ACS Wichita Section will be collected before the meal. RSVP to Robin Jackson by Friday, 8 October – Robin's contact information is listed below.

Meeting: 7:30 p.m.,

The meeting will take place in the College Center Conference Center on the campus of KSU-Salina. Dr. Donald M. Burland, former NSF Division of Chemistry Executive Officer and Acting Division Director, will present a talk on the search for the molecular origins of life.

Directions:

Martinelli's Little Italy
158 S. Sante Fe Ave.
Salina, KS 67401
785-826-9190

From I-135 take the Crawford Street exit (Exit 92) east approximately 1.5 miles east to Santa Fe Avenue. Turn left (north) onto Santa Fe and proceed approximately 0.8 miles to Walnut Street. The restaurant is on the northwest corner of Santa Fe and Walnut.

See also: <http://www.martinellisonline.com>

College Center Conference Room
Kansas State University at Salina
<http://www.salina.k-state.edu>
Contact: Dr. Jung Oh
785-826-2915
jroh@k-state.edu

From I-135 take the Magnolia Street exit (Exit 90) west about ¼ mile to Centennial Road. Turn right (north) onto Centennial and then left after about 500 feet onto the K-State Salina campus. The College Center and parking will be ahead to the left.

From Martinelli's take Sante Fe south to Crawford Street and turn right (west). Follow Crawford to Centennial Road and turn left (south). Approximately 0.3 miles south of Tony's Road turn right (west) onto the campus of K-State Salina. The College Center and parking will be ahead to the left.

Speaker: Dr. Donald M. Burland

Title: *What Happened in That "Warm Little Pond"*
– *The Search for the Molecular Origins of Life*

The search for the origin of life has fascinated mankind throughout history. The ancient Greeks had their ideas, Renaissance philosophers theirs, and modern scientists theirs. In this presentation we will follow the history of this quest concentrating on research stimulated by the primordial soup experiments of Miller and Urey. These laboratory experiments introduced the idea that life's origins might be understood in the laboratory and at the molecular level. We will explore the strengths and weaknesses of the currently popular theory of an RNA world, a world preceding the protein-RNA-DNA world that we know today. In exploring this subject a number of more general questions will arise: Will it ever be possible to know how life started? How do we know when an area is worth investigating and when it is beyond our current scientific prowess? Are there short term advances that will be made in this pursuit that will be of interest on their own?

Speaker Bio:

Dr. Burland received a Ph.D. in chemistry and physics from the California Institute of Technology. After a 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. From 1997 to 2005, he worked for National Science Foundation Division of Chemistry as Executive Officer and Acting Division Director. He was also a Consulting Professor in the Chemical Engineering Department

at Stanford University. 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 femto-second laser spectroscopy. He has also directed groups studying the physics and chemistry underlying electrophotographic printing and magnetic storage.

Chair's Message

Greetings to the Wichita Local Section of the American Chemical Society!

Fall brings many changes here in Kansas. We experience a change in the weather, the "natural décor" (leaves changing), and some great events for American Chemical Society in our local section. We are once again hosting a National American Chemical Society speaker, Dr. Donald Burland who is a past director of the chemical division for the National Science Foundation. Dr. Burland's talk will be: *What Happened in That Warm Little Pond*, *the Search for the Molecular Origins of Life*. The public is being invited as well, and this should be a highly interesting talk. Details for the meeting are listed above.

Also on the horizon here in the Midwest and in our local section is the upcoming Midwest Regional Meeting to be held in Wichita, October 27-30. Details for the meeting are available on the website: 2010mwrmsites.acs.org. Be sure to take advantage of early registration.

The fall must have been a prolific time for the birth of great chemists and events dealing with chemistry! Here is a partial listing of some interesting events in the history of chemistry that occurred in September and October:

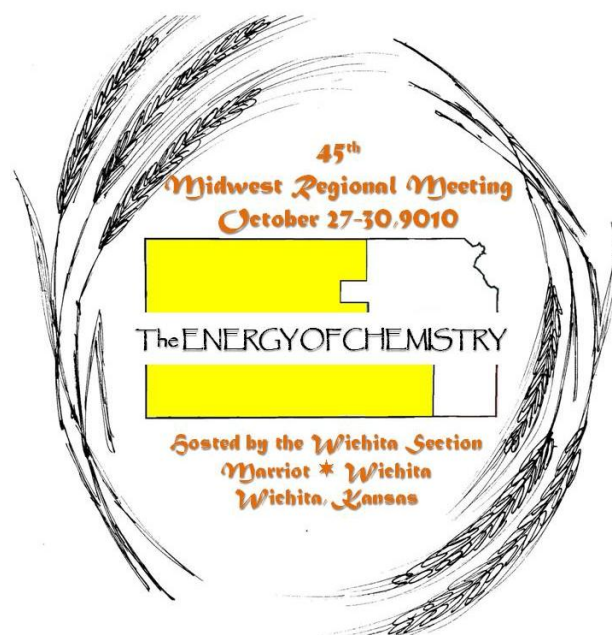
- In September of 1873, B. Smith Hopkins, a researcher of rare earth elements, discovered the long sought element 61, which was named ILLINIUM originally, but later changed to the element that we now know as Technetium.
- Henry Cavendish discovered Hydrogen in September, 1766.
- In October, 1861, The Chemistry Society of Union College was founded, which later became the American Chemical society.
- Sir Humphrey Davy at the Royal Institution isolated Potassium in October, 1807.

- October 15, 1608, is the birth date of Evangelista Torricelli, early chemist and researcher who discovered barometric principles and gave us the Torricelli barometer.
- October 7, 1885, Niels Bohr was born. Bohr, of course is well known for early quantum physics and chemistry research and won the Nobel Prize in 1922 for his work.

Don't "fall" behind: get involved in your local section of the American Chemical Society!!

Sincerely,
Robin Jackson, Chair ACS Wichita Section

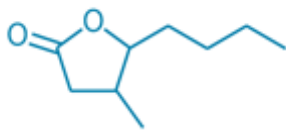
Our section is hosting the **Midwest Regional Meeting** in October at the Marriot Convention Center in Wichita. See <http://2010mwrmsites.acs.org/> for more information.



Celebrate National Chemistry Week 2010 Behind the Scenes with Chemistry October 17 – 23

Chemistry is everywhere, whether prominent as a science fair project or tucked behind the scenes of a movie set or book. Explore the special effects in movies to appreciate that it is not magic, but rather common chemical concepts which explain the mystery behind the "magic" that is shown. For more information go to www.acs.org and follow the "Education" menu tab.

Molecule of the Week



Whiskey lactone

All four stereoisomers of whiskey lactone, or β -methyl- γ -octalactone, are found in nature—specifically, in oak wood used to make barrels for aging whiskeys, wines, and brandies. The (+)-*trans* isomer is shown. Recently, whiskey lactone was [identified as the source of coconut-like odors](#) in grape-based brandies such as Cognac and Armagnac.

Wichita Section Web Site:

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

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Councilor's Report

Paul Rillema [paul.rillema@wichita.edu]

The following summarizes key actions of the ACS Council and Board of Directors at the 240th ACS National Meeting in Boston, August 22-26, 2010.

ACTIONS OF THE COUNCIL

Candidates for President-Elect and Board of Directors

- The candidates for the fall 2010 ACS national election were announced as follows:

President-Elect 2011

Luis A. Echegoyen, Professor, University of Texas at El Paso, El Paso, TX

Bassam Z. Shakhashiri, Professor, University of Wisconsin, Madison, WI

Directors-at-Large - 2011-2013

Janan M. Hayes, (Retired) Professor Emeritus, Merced College, Sacramento, CA

Robert L. Lichter, Principal and Co-Founder, Merrimack Consultants, LLC, Barrington, MA

Kathleen M. Schulz, President, Business Results Inc., Albuquerque, NM

Kent J. Voorhees, Professor, Colorado School of Mines, Golden, CO

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.

Meeting Registration Report

- As of August 24, 2010, the ACS fall national meeting had attracted 14,059 registrants. Totals in select categories are as follows: Regular attendees 8,211; Students 3,230; Guests 393; Exhibit Only 733; and Exhibitors 1,492.

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

- 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.

- 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.

ACTIONS OF THE BOARD OF DIRECTORS

- On the recommendation of the Committee on Budget and Finance, the Board VOTED to approve an advance member registration fee of \$355 for national meetings held in 2011. The Board also considered three program funding requests, and on the recommendation of B&F VOTED to take the following actions:
 - to include funding for the *ACS Global Research Experiences, Exchanges and Training (GREET)* program in the Society's 2011 Proposed Budget;
 - to include funding for the *State Government Affairs Program* in the Society's 2011 Proposed Budget and 2012-2013 Forecast; and
 - to include funding for the *Department of Professional Education* in the 2011 Proposed Budget and 2012-2013 Forecast, subject to annual review. (The *Department of Professional Education* request was treated as a new program request rather than a reauthorization because the focus of the program is being redirected to a customized electronic format.)
- The American Chemical Society and the German Chemical Society (Gesellschaft Deutscher Chemiker – GDCh) agreed to enter a three-year collaboration alliance with a strategic focus on communicating the value of chemistry to the general public and the role chemistry plays in addressing global challenges, as well as to identify and support other mutually beneficial services to ACS and GDCh. The signing of this memorandum of understanding took place during a special ceremony at the Board's regular session.