



SCALACS

October 2013

A Joint Publication of the Southern California and
San Gorgonio Sections of the American Chemical Society

**Southern California Section
National Chemistry Week
October 20-26, 2013**

See Page 4 for our Outreach Activities

**High School Chemistry Teachers Meeting at
Occidental College
November 2, 2013**

See Page 3

**San Gorgonio Section
Family Science Festival**

Saturday, October 26, 2013

10:00 am to 2:00 pm

FREE Public Event!

Mt. San Antonio College

See Page 11

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TABLE OF CONTENTS

So. Cal. Chair's Message	2
So. Cal. Meetings & Notices	3-8
This Month in Chemical History	9-10
S. G. Chair's Message	11
S. G. Meeting Notice	12
Chemists' Calendar	bc

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Southern California Section



Chair's Message

Greetings. Welcome to Fall. Our section's fall activities are off to a great start with our successful luncheon for the 50/60/70 year members and presentations by our Project SEED students. Our councilors and many other section members are now back from the ACS National meeting in Indianapolis.

October promises to be an eventful month as well. The month will start off with the 44th ACS Western Regional Meeting, October 3-6 in Santa Clara, CA. The theme is "The Many Elements of Chemistry," You can find more information on the meeting at the website, <http://www.wrm2013.org/>. National Chemistry Week is coming up, October 20-26. The theme is "Energy: Now and Forever!" Our section has several activities planned; see the SCALACS website, or the rest of this issue for details.

Ballots for the election of section officers will be mailed out shortly. Please read the statements carefully and select the most qualified candidates. We rely on our section membership to keep the section strong and active. If you are interested in helping out, consider running for an office next year.

November will be starting strong as well, with the High School Chemistry Teachers Meeting on November 2nd at Occidental College.

Have a great fall.

- Brian Brady,
Chair

Southern California Section

SCALACS High School Chemistry Teacher Meeting

Saturday, November 2, 2013

Occidental College

Mosher Room 1
1600 Campus Road
Los Angeles, CA 90041

9:00 a.m. to 3:00 p.m. (lunch included)

**2013 theme of National Chemistry Week is
“Energy: Now and Forever!”**

For many years the Occidental Chemistry Teachers Meeting sponsored by the Southern California Section was the premier place in Los Angeles for teachers to learn from teachers. Please consider coming and sharing your favorite lesson, demo, or trick with us. Already confirmed speakers include Richard Erdman, Caroline Morgan, Debbie Bennett, Paul Groves, Michael Morgan, and more! Anyone interested in presenting please contact the program chair, Michael Morgan at mmorgan@lausd.net. A detailed presentation of the reworked AP Chemistry courses will be included.

Cost: There is a \$25 cost for the program which includes lunch (cash or check). For pre-service teachers, the fee is \$5. There is free parking on campus.

Registration: The registration form is available at www.scalacs.org/2013OxyMeetingRegForm.pdf. Please download the form and return it with the fee to: SCALACS, 14934 S. Figueroa Street, Gardena, CA 90248 by **Thursday, October 31st**. You can also contact Nancy Paradiso at office@scalacs.org.

**Sponsored by SCALACS, Occidental College and
TOPS Program**

Southern California Section



NCW Outreach Activities “Energy: Now and Forever!”



October 20-26, 2013 (Varying Times) **National Chemistry Week Activities at the California Science Center**, 700 Exposition Park Drive, Los Angeles, CA 90037, website: www.californiasciencecenter.org. We will be having hands-on activities for visitors at the California Science Center on **Saturday, October 19th and Sunday, October 20th**. The theme for NCW2013 is “**Energy: Now and Forever!**” For more information visit: www.acs.org/ncw. If you would like to volunteer or have questions, please contact Henry Abrash at: abrash8@aol.com.

October 21-25, 2013. NCW Activities at Pasadena City College. See our website, www.scalacs.org, for complete details for the week. **On Tuesday, October 22, Dr. Nate Lewis from Cal Tech will be giving a talk about artificial photosynthesis.** The talk will be at 4:30 in the Vouch Forum. **Wednesday is National Mole Day!** There will be a campus-wide scavenger hunt for moles. Prizes will be raffled off for those who find the moles. Thursday is a Magic Show in the amphitheater at 5:00 pm. Faculty members will be teamed up with students to conduct mysterious demonstration that involve chemistry.

Friday, November 1, 2013, noon at Cal State Dominguez Hills. Prof. G. K. Surya Prakash of the Loker Hydrocarbon Research Institute will be speaking on “Beyond Oil and Gas: The Methanol Economy”. The Methanol Economy concept was developed with Nobel Laureate George Olah and is expected to solve the energy and material problems in the long run as well as address the issue of global warming. A buffet lunch (\$5) will be served in the Japanese Gardens Courtyard, SBS Building, 1000 E. Victoria Street, Carson, CA 90747 with the presentation following in an adjacent meeting room. Enter the campus at Victoria Street and Tamcliff and park in Lot 2 (\$5 parking permit). Directions and campus map are available at <http://www4.csudh.edu/campus-map-directions/>. For Prof. Prakash’s abstract and more information about the event, please see our website at www.scalacs.org.

Southern California Section

Western Regional Meeting Awards Santa Clara, CA October 3-6, 2013

We would like to congratulate two Southern California Section members who will receive awards at awards banquet at the Western Regional Meeting on Friday, October 4th.



Rita Boggs is the recipient of the 2013 E. Ann Nalley Western Regional Award for Volunteer Service.



Michael Morgan is the recipient of the 2013 ACS Division of Chemical Education Western Region Award for Excellence in High School Teaching.

Congratulations to all the recipients!

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Southern California Section

NACT Program

During the ACS Indianapolis National Meeting in September, The ACS Board of Directors voted to support the formation of a national organization for teachers of chemistry. With strong support from DivCHED (ACS Division of Chemical Education) and SOCED (ACS Society Committee on Education), NACT (National Association of Chemistry Teachers) will be housed in ACS Education.

All those interested in K-12 chemistry teaching will be welcome to join. Members will be encouraged to publish in an online, peer-reviewed periodical produced by ACS Education. Some of the membership benefits will include subscriptions to the NACT periodical and *ChemMatters* magazine, access to customized curriculum resources including opportunities for networking and information exchange, webinars and conference seminars that provide CEUs (Continuing Education Units), and access to expert chemistry-related support and mentoring from experienced teachers. Now, there is much work to be done to develop and launch the NACT governing structure, website, and periodical. The target date for the membership drive to begin is fall 2014. Look for further announcements as we continue to work on this exciting project.

- Barbara Sitzman, Chair, NACT Advisory Board;
Councillor, SCALACS (sitzman@usc.edu)

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Southern California Section

Call for Nominations 2013 Richard C. Tolman Medal

The Tolman Medal is awarded each year by the Southern California Section of the American Chemical Society in recognition of outstanding contributions to chemistry. These contributions may include achievements in fundamental studies; achievements in chemical technology; significant contributions to chemical education; or outstanding leadership in science on a national level. The nominee need not be a Southern California resident; however, most of the award-related accomplishments must have been made in this area.

The Southern California Section of the American Chemical Society and the Tolman Award Committee are now seeking nominations for the 2013 award. There is no official nominating form for this award; nominations are accepted from any member of this Section or of cooperating Sections. The nomination package should include:

- an up-to-date curriculum vitae or resume of the candidate
- letters of support from colleagues in the profession describing the candidate's major achievements
- if the candidate is being considered for outstanding teaching, letters of support from former students should be included.

Please submit nomination packages electronically to the Chair of the Tolman Committee at office@scalacs.org. We are also deleting the requirement for copies of publications. Rather, a list of representative publications would suffice. **The deadline for receipt of nominations is December 16, 2013.** Inquiries should be directed to the Chairperson at (310) 327-1216 or via e-mail at office@scalacs.org. A list of winners appended here demonstrates the caliber of awardee sought by the committee.

1960 William G. Young	1978 Thomas C. Bruice	1996 Larry R. Dalton
1961 Anton B. Burg	1979 Harry B. Gray	1997 Ahmed H. Zewail
1962 Ernest H. Swift	1980 Herbert D. Kaesz	1998 Kendall N. Houk
1963 W. Conway Pierce	1981 Paul D. Boyer	1999 Peter Dervan
1964 A.J. Haagen-Schmidt	1982 Donald T. Sawyer	2000 William A. Goddard III
1965 Thomas Doumani	1983 James N. Pitts	2001 Peter M. Rentzepis
1966 Arthur W. Adamson	1984 Donald C. Cram	2002 Robert H. Grubbs
1967 Ulric B. Bray	1985 Arnold O. Beckman	2003 Arieh Warshel
1968 Francis E. Blacet	1986 M. Frederick Hawthorne	2004 Christopher Reed
1969 Robert Vold	1987 Clifford A. Bunton	2005 Fred Wudl
1970 Robert L. Pecsok	1988 John D. Baldeschwieler	2006 G. K. Surya Prakash
1971 Roland C. Hansford	1989 Mustafa A. El-Sayed	2007 Barbara Finlayson-Pitts
1972 James Bonner	1990 Linus Pauling	2008 Joan S. Valentine
1973 Howard Reiss	1991 George A. Olah	2009 Richard B. Kaner
1974 John D. Roberts	1992 Peter C. Ford	2010 Dennis Dougherty
1975 Corwin Hansch	1993 Charles L. Wilkins	2011 Karl O. Christie
1976 F. Sherwood Rowland	1994 Jacqueline K. Barton	2012 John E. Bercaw
1977 Sidney W. Benson	1995 Christopher S. Foote	

Southern California Section

Call for Nominations OUTSTANDING HIGH SCHOOL CHEMISTRY TEACHER OF THE YEAR AWARD

If you know of a local high school chemistry teacher who is making a difference, please make the effort to show how important his/her work is to you and the students. Self-nominations from those who feel they fit the requirements are accepted as well. It's teachers like the recipients of this award who make learning chemistry rewarding. Plus, there is a financial component of \$500. The \$500 will be an unrestricted award directly to the teacher. The winner of the Section Award will also be entered at the National ACS level for the James Conant Bryant Award and the Western Regional High School Teacher of the Year Award. Having won a previous award does not necessarily exclude a nominee, however, the nomination would need to be based on different criteria than the first award.

Nomination Package should include: Biographical sketch of nominee with date of birth, list of any publications, statement (no more than 1,000 words) of nominee's achievements as a high school chemistry teacher including quality of teaching, effective methods, nominee's ability to challenge and inspire students, extracurricular work (science fairs, clubs, etc.). Seconding letters are not essential, but up to five may be included. **Nominating documents may be submitted via email to office@scalacs.org.** Note that signed documents that have been scanned are acceptable.

The deadline for nominations is **November 15th, 2013**. Please feel free to contact Michael Morgan of the Educational Affairs Committee at mmorgan@lausd.net if you have any questions.

Councilor Talking Points Highlights Spring National Meeting in Indianapolis

Due to space constraints, we are not printing the Councilor Talking Points from the ACS National Meeting in Indianapolis. Please go to our website, http://scalacs.org/?page_id=44 for the complete report.



This Month in Chemical History

Harold Goldwhite, California State University,
Los Angeles
hgoldwh@calstatela.edu

About a year ago I contributed to an exhibition and seminar celebrating the 100th. anniversary of the Southern California ACS Section. This prompted a review of some early 20th. century chemistry textbooks. In this column I will look at the origin of one of these texts, a quite popular one in its time: "Introduction to Inorganic Chemistry" by Alexander Smith, Professor of Chemistry and Head of the Department of Chemistry in Columbia University, New York. This general chemistry text was first published in 1906. My copy is of the third edition, "Rewritten", of January 1917.

Some of the following biographical information was obtained from an extensive memoir by William A. Noyes, a distinguished American chemist, published in Volume XXI of the memoirs of the National Academy of Sciences. Alexander Smith (1865 – 1922) was born in Edinburgh, Scotland, into an artistic family, and earned his bachelor's degree from Edinburgh in 1886 where his initial interests in astronomy were supplanted by the more practical field of chemistry. Like many chemists of the period he moved to Germany for advanced training; he worked in the laboratory of Baeyer and received his doctorate at Munich in 1889. His work there was in organic chemistry; in collaboration with Claisen he studied reactions of 1,3 diketones including tautomerism and condensations. In 1889 he met Noyes in Munich.

After a year as an assistant at Edinburgh, Smith realized that prospects of promotion there were poor. He wrote to Noyes about finding a position in the United States and as a result was appointed Professor of Chemistry and Mineralogy at Wabash College, a Presbyterian institution in Crawfordsville, Indiana in 1890. His 4 years there were marked by his development as a teacher, and by further research on condensations and on benzoin. His reputation led to an offer in 1894 from the University of Chicago to become Assistant Professor there in charge of the teaching of elementary inorganic chemistry, as general chemistry was termed at that time. Along with the move Smith changed his interests from organic to physical chemistry, a fairly new field at that period. He began an extensive series of researches, published in 7 articles, on the various forms of elemental sulfur. (In 1912 this work earned him the Keith Medal of the University of Edinburgh).

(Continued on Page 10)

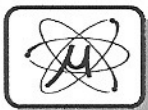
This Month in Chemical History

(Continued from Page 9)

From the earliest years of his career Alexander Smith was interested in the best ways to present chemistry in the classroom. This led to his many textbooks. The first, "Laboratory Outline of General Chemistry", was published in 1899. It was an immediate success. By the sixth edition, in 1917, 66,000 copies of this book had been sold. It was translated into German, Russian, and Italian. The second, in 1902, requested by the Dean of Teachers' College at Columbia University, was an introduction to chemistry (Smith's work) and physics (by Professor E. H. Hall of Harvard). The "Introduction to Inorganic Chemistry" was developed from 1903 to 1905, and was published in February 1906. Its success surprised and pleased both author and publisher; over 6,000 copies were sold in its first six months. It was translated into German, Russian, Italian, and Portuguese. Further texts appeared in 1908 and 1914.

Smith became President of the American Chemical Society for 1911. He gave his Presidential Address on "Lomonosoff, an early physical chemist" an unusual subject for an ACS Presidential address; a historical look at a pioneer Russian scientist. He was awarded many honors including election to scientific societies in Edinburgh, and Madrid. He became a member of the National Academy of Sciences in 1915. His published research includes 10 papers on organic chemistry; 26 on physical chemistry; 4 on astronomy. In addition to his textbooks he wrote 21 articles on pedagogy and the teaching of chemistry.

In a subsequent column I will examine his most significant textbook, "Introduction to Inorganic Chemistry".



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San Gorgonio Section

Chair's Message Getting to Know the Executive Board Positions

Are you looking for an opportunity to work with some amazing people and give a little something back to the Chemistry community? Here is an opportunity for you! It's time to begin the nomination of a slate of candidates for the 2014 San Gorgonio Executive Board positions! The continued success of the Section depends on the willingness for members to volunteer a few hours a month. The Executive Board is made up of the following positions:

Immediate Past Chair
Chair
Chair-Elect
Treasurer
Secretary
Councilors (2)
Alternate Councilor

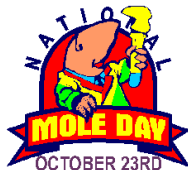
The specific duties are spelled out in the Section bylaws (available on the ACS website) but I thought I would give you a brief "insider's" description. The Board meets ten times a year for about two hours at a time to plan events, review the budget and take care of any other business. These meetings usually involve food and excellent camaraderie. The Section holds about six events a year, including the Chemistry Olympiad, National Chemistry Week, and an annual Section meeting. All of the Board members help with planning and organizing the meetings. Duties are divided up, depending on each person's schedule.

The Chair-Elect position is up for election every year and is a three-year progression. The Chair-Elect serves in that position for one year and then accedes to the position of Chair. Following the year in the Chair position (sounds like cyclohexane!), he/she assumes the "Immediate Past Chair" position. The two councilors and the alternate councilor serve for three year terms, with their terms overlapping. The Councilor(s) represent the Section at both of the National Meetings each year in addition to attending Executive Board meetings.

I have been involved with the Executive Board for four years and it has been incredibly rewarding! The Board members are extremely supportive and the atmosphere of meetings has been truly enjoyable. The positions up for election this year are Secretary (David Srulevitch is running), and Councilor (Ernie Simpson is running). The Chair-Elect position is still up for grabs. The slate of candidates will be finalized at the November annual meeting. I strongly encourage all Section members to seriously consider getting involved! Please contact me (edimauro@mtsac.edu) if you have any questions.

- Eileen DiMauro, Chair

San Gorgonio Section



San Gorgonio Section Family Science Festival



**Saturday, October 26, 2013
10:00 am to 2:00 pm
FREE Public Event!**

**Mt. San Antonio College,
Natural Science Complex (Bldg. 7, 60, 61)
1100 N. Gran Avenue, Walnut, CA 91789**

Science activities, games and crafts for children and adults. Hands on experiments, Chemistry Demonstrations, MEEK Wild Animal Museum, Fossil and Mineral Exhibits, gifts and door prizes!

Parking: Park in Lot D. Purchase a daily permit (\$3) from the dispenser.

Directions: For directions and map, visit <http://mtsac.edu>

Questions: Eileen DiMauro, edimauro@mtsac.edu

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**SOUTHERN CALIFORNIA SECTION
AMERICAN CHEMICAL SOCIETY**

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GARDENA, CA 90248

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Contains Dated Meeting Announcement

PERIODICAL

Bi-Section Chemists' Calendar

October

- 3-6 Western Regional Meeting in Santa Clara
20-26 National Chemistry Week—Theme "Energy: Now and Forever!"
SC events—see page 4
19-20 NCW Events at California Science Center—see page 4
22 NCW Event at PCC with Dr. Nate Lewis—see page 4
26 SG NCW Event—Family Science Festival at Mt. SAC—see
page 12

November

- 1 NCW Event at CSUDH with Prof. Surya Prakash—see page 4
2 SC High School Chemistry Teachers Meeting at Oxy—see
page 3
15 Deadline for SC Teacher of the Year Award—see page 8

December

- 15 Deadline for R. C. Tolman Medal nominations—see page 7