



February 2015
Vol. 100, Issue 1

Central Texas ACS

Established 1917

Newsletter of the Central Texas Section of the American Chemical Society
centraltexasacs.sites.acs.org

Local Section meeting – Tuesday, March 3rd
Social Hour, pizza buffet and preshow begins at 6:15,
Dinner/presentation begins at 7:00pm

Stratospheric Ozone: Why Crutzen, Molina and Rowland deserved the Nobel Prize

Dr. Donald H. Stedman

John Evans Professor
Department of Chemistry and Biochemistry University of Denver

Alamo Drafthouse – Slaughter Lane
5701 W. Slaughter Ln, Austin, TX 78749
(512) 861-7060

Dinner is \$10 for members/adults, \$5 for students.

RSVP by February 23rd using any of the methods below:
RSVP link will be sent out via email and posted on website
Email Neal Grice at njgrice@grandecom.net
With full name, number attending, and email

Speaker Presentation

The short version is "Because I had all the same data that they had but they put it together"

Key words: Solar UV, sunburn, Fluorocarbons, atomic chlorine and other halogens, skin cancer, the ozone hole and its equally fascinating chemistry

In the 1960s the chemistry of atomic chlorine, which happened to be the topic of my PhD thesis, was of interest to at most a half dozen chemical kineticists. By the mid 1970s there were senate subcommittee hearings on the importance of the chemistry of atomic chlorine to stratospheric ozone depletion. The history of ozone, the discovery of the ozone layer in the stratosphere and the subsequent understanding of its fascinating kinetics and photochemistry are the topic of this talk with particular emphasis on the insights which lead Crutzen, Molina and Rowland to become the 1995 Nobel Prize award winners. Today, thanks to concerted international wisdom and interesting commercial flip flops, the ozone layer is indeed slowly recovering from our attempts to destroy it.

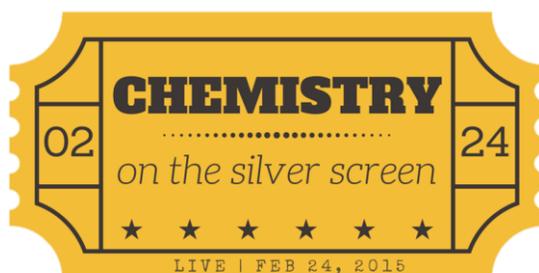
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Speak Bio

After a short stint at Ford Motor Co. Scientific Laboratories, Prof Stedman taught at the University of Michigan for twelve years and the University of Denver for thirty. He has studied interesting chemicals and invented detectors for such things as atomic chlorine involved in stratospheric ozone depletion, nickel carbonyl, one of the most toxic industrial chemicals known to man, nitrogen trichloride, a touch sensitive explosive liquid and the oxides of nitrogen which involved him in many studies of air quality and photochemical ozone pollution in the troposphere. For the last couple of decades his invention, with his colleague Dr. Gary Bishop, of technology to determine automobile emissions as the car drives by has revealed the fact that most of our on-road pollution comes from a very few gross emitting cars, many of which have managed to avoid or circumvent state emission testing requirements. He believes that his most important contribution to society was his membership of the NRC Committee on Airliner Cabin Air Quality which, in 1986, recommended the ban on smoking in airliners.

ACS Program-in-a-Box Webinar: Chemistry on the Silver Screen



YCC invites all members to attend on February 24 at 5:30pm to the University of Texas at Austin campus to view and participate in the ACS webinar sponsored by Procter & Gamble.

Join us to learn how chemists and chemistry have influenced movies and TV shows like *Breaking Bad*, *Gravity*, *Battlestar Galactica*, and *Eureka*. Speakers include Dr. Donna Nelson, Alexis Gambis, Kevin Grazier, and Ann Merchant.

Light dinner along with networking will be provided starting at 5:30pm. The webinar will start at 6pm with the live Q&A at 6:30pm.

For more information please [click here](#).

**The University of Texas at Austin
Welch Convocation Center (WEL 2.122)
Tuesday 24th, 5:30-7pm.**

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Councilor's Corner

This spring the Central Texas Local Section of the ACS welcomes Neal Grice as Chair. Following 17 years work at Texaco Chemical Company, Austin R&D lab and two years teaching chemistry at Austin Community College, Dr. Grice worked with the Texas DSHS in the Environmental Chemistry section from which he is retired after 15 years service.

Several events are planned beginning this month, so read on and join us!

Our first local section meeting will feature Dr. Donald Stedman, who now resides here in Austin. Many of you attended his talk on automobile pollution studies last year. His studies are discussed in part two of the excellent book by [Malcolm Gladwell](#), entitled *What the Dog Saw*. At this meeting, Dr. Stedman will discuss the fascinating history of our understanding of the ozone layer at the top of the atmosphere.

At the awards banquet in April, we take the opportunity to honor our 50 year (and greater) members, outstanding high school seniors and other individuals from the local section who have won awards. The Young Chemists Committee (YCC) will host a webinar on chemistry consulting to television and movies on **February 24**. Watch for other YCC events this spring-all are welcome to attend! YCC represents chemists under 30 years of age. If you'd like to get involved, contact our local section chair, Ms. Cotton Starr at cmnstarr@gmail.com.

Don't forget to come and help with community outreach at Zilker Park on **April 18** for **Chemists Celebrate Earth Day**. Our CCED coordinator, Ms. Dodie Wells, is preparing activities for children aged 4-40. There is always a need for volunteers and for those who can conduct demonstrations.

Do you want to share your knowledge, learn skills or just have fun doing chemistry related activities? The ACS provides funding, training, and support for individuals who would like to volunteer.

Diane Kneeland and Barry Streusand, Councilors

Diane Kneeland serves on the ACS [Committee for Economic and Professional Affairs](#) (CEPA). Her subcommittee within CEPA provides oversight and recommendations about ACS career programs, products and services.

Barry Streusand serves on the [Committee on Science](#) (COMSCI). His subcommittee within COMSCI writes and reviews public policy statements which are used to promote ACS positions to Congress and other government entities. CEPA and COMSCI are two of approximately 30 volunteer committees that provide advice and service to the ACS (the Society).

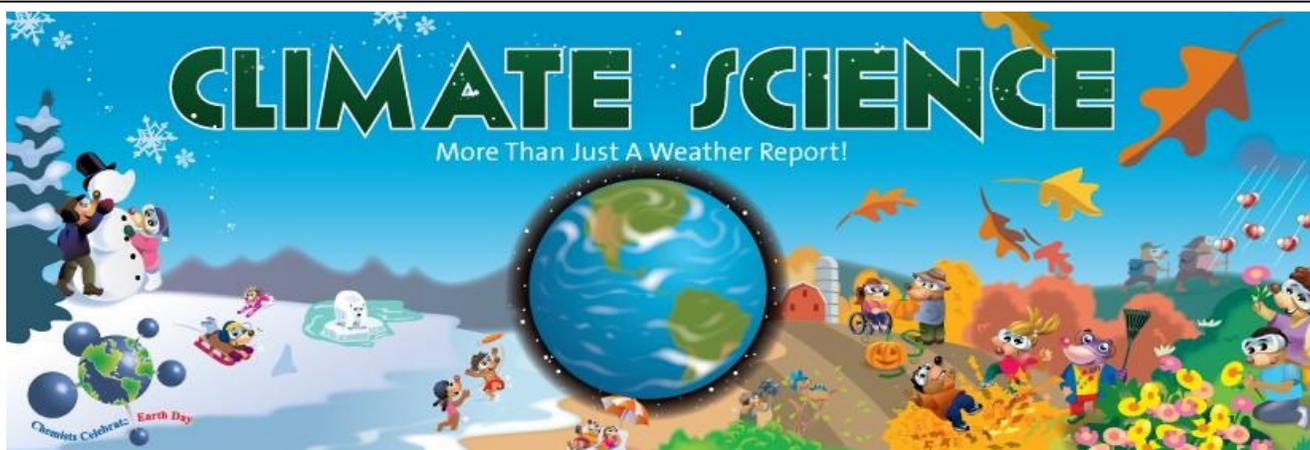
Chemistry Olympiad

The 47th International Chemistry Olympiad competition held in Baku, Azerbaijan, July 20-28, 2015. Please join us for our 31st consecutive year in this competition. We will again hold a local section competition to select our 10 participants on the National level Chemistry Olympiad competition, and would like to invite you and your students to join in. The National Exam will be administered April 18 at St. Edwards University. Thus far 6 schools are participating in the local section competition in March.

For more information please contact our local section Chemistry Olympiad coordinator:

Carmen L. Velez, PhD
 Visiting Assistant Chemistry Professor
 St. Edward's University
cvelez1stedwards@gmail.com
 512-637-1985

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VOLUNTEERS NEEDED!

Come help Chemists Celebrate Earth Day at Zilker Park on Saturday, April 18

The CCED 2015 theme is "**Climate Science – More Than Just A Weather Report!**", exploring climate science and the role chemistry plays in the environment. Central Texas ACS will celebrate with hands on activities for kids of all ages on Saturday, April 18 from 12 noon to 4 PM at the Zilker Park, Beverly S. Sheffield Education Center, formerly Splash Exhibit.

Come and be part of the fun!

There are 2 shifts for volunteering: 11am-2pm or 2pm-4:30pm. Hands on activities and demonstrations.

No training necessary, just enthusiasm, enjoyment of chemistry and of kids.

The location is 2201 Barton Springs Road, Austin, TX 78746 Please remember that if you volunteer at any of our local chapter events, you are invited to a fall meeting for a free meal and talk. So make sure to sign up!!

[11am-2pm sign up time](#) & [2pm-4:30pm sign up time.](#)

Contact Dodie Wells with questions or for more information – dodiewells4@hotmail.com

**American Chemical Society
Central Texas Section
P.O. Box 9811
Austin, TX 78766**

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**Central Texas ACS: February 2015
2015 Executive Committee: Officers and Program Directors**

Chair, Webmaster & High School Coordinator	Dr. Neal Grice	Retired	Alternate Councilor 1	Malcolm Prouty	SMRC
Chair-elect	Vacant		Alternate Councilor 2	Dr. Denny Wagoner	Retired
Past-Chair	Dr. Sandra Loudwig	Luminex	Younger Chemist Committee Chair & Newsletter Editor	Cotton Starr	University of Texas
Secretary	Margaret Connor	Huntington-Surrey High School	Awards Chair	Vacant	
Councilor 1, Treasurer, & Nominations Chair	Dr. Diane Kneeland	Retired	EHS Chair	Katherine Cross	
Councilor 2, Boy Scout Program, & Membership Chair	Dr. Barry Streusand	Texas State University	National Chemistry Week & Earth Day	Dodie Wells	Retired