



October 2009
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Central Texas ACS

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<http://membership.acs.org/C/CentralTexas/index.html>

Newsletter of the Central Texas Section of the American Chemical Society

Monday, October 19th, 6:30 PM-9:00 PM (Dinner 6:30-7:30, Talk 7:30-9:00)

The Physiology and Chemistry of Breath Alcohol Measurement, or, Are You Too Drunk to Drive?

Dr. Gary Christian

The Saltgrass, 221 Sessoms Dr., San Marcos

For directions and parking, see p. 3

\$10 for members/adults, \$5 for students

Please RSVP to malcolmdprouty@gmail.com or by calling (512) 968-4750



Talk Abstract

Driving under the influence of alcohol is a serious offense in all states. In most states, a blood alcohol concentration of 0.08% (w/w) is by law deemed to indicate being under the influence. Normally, the blood alcohol level is determined by measuring the percent breath alcohol, assuming a partition ratio between blood and breath of 2100:1. The legal consequences of being convicted of driving while under the influence will be presented, along with the physiology of alcohol absorption and metabolism, the physiological effects as a function of alcohol, and ways to estimate your blood alcohol level. The principles, chemistry, and operations of breath alcohol measuring instruments will be described.

Biography

Gary D. Christian received his B.S. degree in 1959 from the University of Oregon and Ph.D. degree from the University of Maryland in 1964. He was a research analytical chemist at the Walter Reed Army Institute of Research from 1961 to 1967. He joined the University of Kentucky in 1967 and in 1972 moved to the University of Washington as Professor of Chemistry. He was Divisional Dean of Sciences in the College of Arts and Sciences, 1993-2001. He is the author of over 300 papers and has authored books on: Analytical Chemistry (6 editions); Instrumental Analysis (2 editions); Problem Solving in Analytical Chemistry; Quantitative Calculations in Pharmaceutical Practice and Research; Atomic Absorption Spectroscopy; and Trace Analysis. His honors include the ACS Division of Analytical Chemistry Award for Excellence in Teaching and the ACS Fisher Award in Analytical Chemistry. He was Chairman of the Division of Analytical Chemistry, 1989-90. He has been Editor-in-Chief of *Talanta* since 1989.

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Chair's Page

Present Your Research **at the 239th ACS National Meeting!**

You are invited to present your research at the 239th American Chemical Society National Meeting in San Francisco, CA, March 21-25, 2010.

ACS National Meetings offer scientific professionals like you a respected platform to present, publish, discuss, and exhibit the most exciting research discoveries and technologies in chemistry and its related disciplines.

Abstracts must be submitted before the deadline set by each programming division. Submission deadlines range from October 12 to November 5, 2009. View the complete list of programming divisions and submission deadlines.

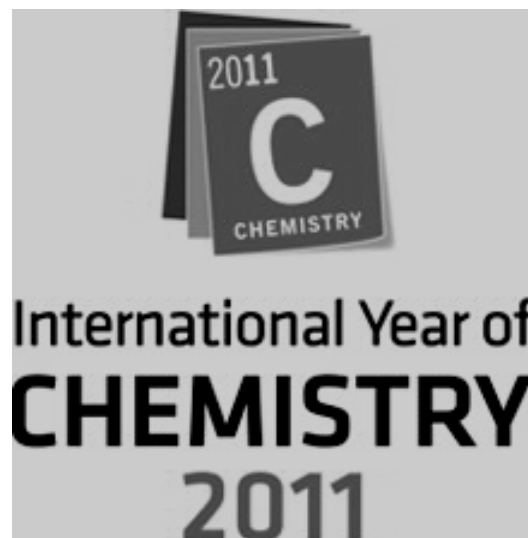
Don't miss the opportunity to present at one of the largest and most respected scientific meetings in the world!

About the New Abstract System

The Program & Abstract Creation System (PACS) is the new online abstract submission system that will make submitting your abstract easier than ever. Use PACS to view, modify, or withdraw an abstract or preprint, download a visa letter for ACS National Meetings, and carry out tasks as a program chair or symposium organizer. For resources, including instructional guides and webinars, visit the PACS resource page.

Thematic Program Overview

The theme for the 239th ACS National Meeting in San Francisco is "Chemistry for a Sustainable World." This timely theme is appropriately chosen for the host city, which has already established a city sustainability plan. This theme will educate attendees about current sustainability initiatives and how to use chemistry to improve our global environment.



IYC-2011 Commemorative Stamp Campaign

ACS is urging the US Postal Service to adopt chemistry as a theme for a commemorative stamp in 2011, in view of the contributions of chemistry to the well-being of humankind in the US and worldwide.

Sign the petition and learn more about International Year of Chemistry 2011 at www.acs.org: Home> Membership & Networks> ACS Membership> Get Involved, Stay Involved>International Year of Chemistry, 2011

Science Fair Judges Needed **Teravista Elementary School, Round Rock** **Thursday, January 21, 2010**

Judges must commit to judging that afternoon as well as attending a judges' meeting the week before in the evening. For more information or to volunteer, contact:

Amber Manzano, 704-0580
amber_manzano@roundrockisd.org

or

Stephanie Sheridan, 704-0530
stephanie_sheridan@roundrockisd.org

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Calendar of Events

Directions to the Saltgrass Restaurant for the October 19th Meeting

From Austin:

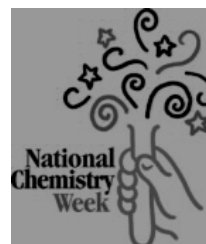
- Travel southbound on I-35 toward San Marcos.
- Take Exit 206 toward TX-82 Loop/Aquarena Springs Dr.
- Turn right on Aquarena Springs Dr.
- Turn right on W Sessoms Dr.
- The Saltgrass, 100 Sessoms Drive, will be on the right.

From San Antonio:

- Travel northbound on I-35 toward San Marcos.
- Take Exit 206 toward TX-82 Loop/Aquarena Springs Dr.
- Turn left on Aquarena Springs Dr.
- Turn right on W Sessoms Dr.
- The Saltgrass, 100 Sessoms Drive, will be on the right.



Central Texas ACS National Chemistry Week Celebration Sunday, October 18th, 3PM-5PM Austin Children's Museum



2009 NCW Theme: "Chemistry: It's Elemental!"

This community wide event is designed to educate kids and parents of how chemistry and science impacts our daily lives. Lab tables will be set up where kids can perform mini experiments, observe demonstrations, and participate in hands-on activities. Goodie bags will be given out with activities parents can do at home with the kids as well. We look forward to seeing you there!

Visit www.acs.org/ncw for more on how you can participate in National Chemistry Week!

Southwest Regional Meeting November 4-7, 2009 El Paso, Texas

Please visit the SWRM website at <http://www.swrm.info/>
Check this website often for updates to symposia listings and click on ABSTRACTS for more information.

Among the highlights of this event are many symposia covering a range of topics with emphasis upon US/Mexico chemistry interactions, collaborations and student exchanges. Presenters will include ACS President-Elect Joe Francisco (Atmospheric chemistry); Luis Echegoyen (New initiatives at NSF directed at chemistry); Jim Tour (Nano-vehicles).

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

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2009 Executive Committee: Officers and Program Directors

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Past-Chair	Betsy Shelton	Applied Nanotech, Inc.	pastchair@		636-1905
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Treasurer	Stan Hajost	Applied Analytical, Inc.	treasurer@		339-1462
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Councilor 2	Prof. Jim Boggs	University of Texas	councilor2@		466-9145
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Alt. Councilor 2	Dr. Denny Wagoner	AnalySys Inc.	altcouncilor2@		385-5886
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Boy Scout Program	Dr. Barry Streusand	Applied Analytical, Inc.	boyscouts@		339-1462
High School Coordinator	Dr. Neal Grice	Dept State Health Services	webmaster@		926-7844
Webmaster	Dr. Neal Grice	Dept State Health Services	webmaster@		926-7844
Newsletter Editor	Leila Henley	Haas TCM	editor@		519-3944

.....DR. HELEN FREE

“SERENDIPITY AND ME”

FOLLOWED BY A PANEL OF LOCAL ACS MEMBERS WITH DIVERSE CAREER BACKGROUNDS

National Inventors
Hall of Fame
Inductee

HELEN FREE INTENDED TO BECOME AN ENGLISH AND LATIN TEACHER, BUT SWITCHED HER MAJOR TO CHEMISTRY AT THE SUGGESTION OF A TEACHER WHO SAID WOMEN WERE NEEDED TO DO IMPORTANT RESEARCH DURING WORLD WAR II. AT MILES LABORATORIES, DR. FREE WORKED IN THE DIAGNOSTICS DIVISION, AND RECEIVED SEVERAL PATENTS FOR CLINICAL LABORATORY TESTS FOR GLUCOSE, BILIRUBIN, AND OTHER ANALYTES IN URINE AND BLOOD.

SHE AND HER COLLEAGUES DEVELOPED THE PRESENT-DAY SELF TESTING URINE AND BLOOD GLUCOSE SYSTEMS USED ALL OVER THE WORLD BY INDIVIDUALS WITH DIABETES TO CONTROL THEIR DISEASE.

FORMER PRESIDENT OF AMERICAN ASSOCIATION FOR CLINICAL CHEMISTRY AND PAST PRESIDENT OF THE AMERICAN CHEMICAL SOCIETY; SHE REMAINS INVOLVED IN THE INTERNATIONAL CHEMISTRY CELEBRATION, NATIONAL CHEMISTRY WEEK, NATIONAL SCIENCE AND TECHNOLOGY WEEK, THE NATIONAL HISTORICAL CHEMICAL LANDMARK PROGRAM AND MEDICAL LABORATORY WEEK.

Date: Saturday, October 24

Time: 11:30 AM

Location: UT Austin Campus

Room: Welch Hall 3.502

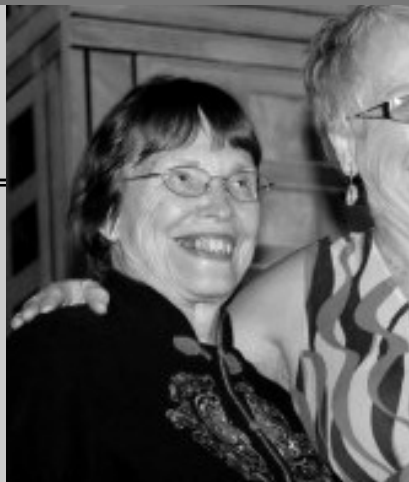
Parking: San Antonio Garage, 2420 San Antonio St. Austin, 78705

For more information and to RSVP call or email

Diane Kneeland at 512-577-0083,
kneeland@cns.utexas.edu

From San Antonio Parking Garage to Robert A. Welch Hall (walking time approximately 6 minutes):

Pull a parking ticket and bring it with you. Enter Welch Hall from Inner Campus Drive. To do this, walk south on San Antonio St., turn left on W 24th St and walk towards campus. Cross Guadalupe St and continue a short way on 24th, then turn right at the guard kiosk and after the Barbara Jordan statue. Stay on this curving road and bear left, with the greenhouse on your left and the Tower to your right. Walk half a block (you are on Inner Campus Drive) and you will be facing the back of Welch Hall. Room 3.502 is entered from the outside via a wide ramp that ascends to the double glass doors.



Bridging the Gap NanoGrant: The ACS has generously funded this event to bring together ACS members and student affiliate members, for the purpose of transforming student affiliates into student members. You can help by attending this interesting talk by a famous female chemist, and adding your own voice to the conversation.

Student affiliates are the future of the ACS. Students are interested in hearing about your career!

SPONSORED BY THE UNIVERSITY OF TEXAS AMERICAN CHEMICAL SOCIETY STUDENT AFFILIATE, THE CENTRAL TEXAS ACS, AND THE AMERICAN CHEMICAL SOCIETY “BRIDGING THE GAP NANO-GRANT “