



April 2014
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Central Texas ACS

Established 1917

Newsletter of the Central Texas Section of the American Chemical Society
www.CentralTexasACS.org

Spring Awards Banquet – Monday, April 21st
Social Hour Begins at 6pm, Dinner begins at 6:30 pm

How Physical Sciences Thinking Informs Popular Music Analytics

Dr. William F. Carroll, Jr.
Occidental Chemical Corporation

Wyndham Garden Hotel
3401 South I-35, Austin, TX 78741
(512) 744-4829

Dinner is \$30 for non-members/adults, \$20 for members/adults and \$15
for students/high school teachers

RSVP by April 16th using any of the following methods below:
[RSVP link](#)

Abstract

Human beings love lists, especially lists of the “Best of All Time.” But very seldom can direct comparison be made between things that had their heydays in different times—whether football teams, boxers or even songs. So how might you get to a list of the “Best” songs of all time? Is that only a subjective determination—“It’s what I like”—or are there objective measures that could be used?

This talk starts that analysis by comparing the history on the Billboard charts of songs that were popular between 1958 and 1975, including the methodology for creating the charts and how it varied with time. Then various schemes for determining the strongest charting songs are compared.

In the end we’ll learn how various data handling and thinking techniques used in the physical sciences help with the analysis of music charts, and how a number of different approaches can be brought to consensus by these techniques.

Speaker Bio

Dr. William F. Carroll, Jr. holds a Ph.D. in Organic Chemistry from Indiana University, Bloomington, IN. He received an M.S. from Tulane University in New Orleans, and a B.A. in chemistry and physics from DePauw University in Greencastle, IN. He is currently Vice President, Industry Issues for Occidental Chemical Corporation and also Adjunct Professor of Chemistry at Indiana.

Bill is Chair of the Board of Directors of the American Chemical Society, and also a Past President (2005). He is a Fellow of the Royal Society of Chemistry, and a member of the advisory board for the Tulane School of Science and Engineering. In 2009 he was chair of the Council of Scientific Society Presidents.

On behalf of OxyChem he has chaired numerous committees for industry associations, and served on expert groups commissioned by the United Nations Environment Programme, the US Environmental Protection Agency and three states--most recently the California Green Ribbon Science Panel.

Bill has received the Harry and Carol Mosher Award from the ACS Santa Clara Valley Section, The Public Affairs Award from the Chicago Section, the Henry Hill Award, sponsored by the ACS Division of Professional Relations, the Michael Shea Award from the Division of Chemical Technicians and Distinguished Alumni Awards from both Indiana and DePauw.

He holds two patents, and has over sixty-five publications in the fields of organic electrochemistry, polymer chemistry, combustion chemistry, incineration and plastics recycling.

2014 ACS Scholars

ACS awards renewable scholarships to underrepresented minority students who want to enter the fields of chemistry or chemistry-related fields. Awards of up to \$5,000 are given to qualified students. African American, Hispanic, or American Indian high school seniors or college freshman, sophomores, or juniors pursuing a college degree in the chemical sciences or chemical technology are eligible to apply.

Congratulations on your hard work!!!

St. Edwards University:

Eryn Lee

University of Texas at Austin Chemistry:

Sebastian Munoz

University of Texas at Austin Chemical Engineering:

Betsy Gamboa,
Unyimeabasi Nwoko,
Sandra Paredes,
Oluwatoyosi Shusi,
Mikael Vincente

University of Texas at Austin Petroleum Engineering:

Henry Mersch

Central Texas ACS: April 2014



Chemists Celebrate Earth Day

Earth Day 2014 is almost here, and this year's theme is [The Wonders of Water](#). Central Texas ACS will celebrate with hands on activities for kids of all ages on Saturday, April 12 from 11:30 am - 4:30 pm. There will be free food for our volunteers. So stop by to celebrate!

Come and be part of the fun! We would love for you to come and help us put on this family friendly event. There are 2 shifts for volunteering 11:30am-2pm or 2pm-4:30pm [Volunteer Here](#). Tables will be set up inside and around the Splash! Exhibit, in the historic Barton Springs Pool bathhouse (right next to the pool) in the heart of Zilker Park: 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!!

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

ACS Project SEED

The ACS Project SEED summer research program opens new doors for economically disadvantaged students to experience what it's like to be a chemist. Students entering their junior or senior year in high school are given a rare chance to work alongside scientist-mentors on research projects in industrial, academic, and federal laboratories, discovering new career paths as they approach critical turning points in their lives. We will be having 2 students this summer. If you would like to make a donation towards helping these students, please send checks to Central Texas ACS P.O. Box 9811, Austin, TX 78766

In kind, we will gladly provide a letter receipt of donation for tax purposes.

ACS on Campus

The University of Texas at Austin will host ACS on Campus

Monday, April 28 from 6:00 pm-8:00 pm (Location: Gabriel's Cafe, AT&T Executive Conference Center) and
Tuesday, April 29 from 8:00 am-4:00pm (Location: Avaya Auditorium in the Peter O'Donnell, Jr. Building (POB)).

Students and faculty are invited to learn about topics such as the basics and ethics of scholarly publishing, SciFinder as well as tips and tools for writing an effective resume. Complimentary food and drinks will also be provided for registered attendees each day. This event is not just for chemists. Sessions are appropriate for researchers in all fields of science.

Please visit the website for location and speaker information as well as additional details. The event is free, but advance registration is required. Register now for the event on the ACS on Campus website.

Event page: <http://acsoncampus.acs.org/events/austin-texas-04-28-2014/>

Registration: <http://acsoncampus.acs.org/event/?ee=108>

Parking: <http://www.utexas.edu/parking/maps/>

Central Texas ACS: April 2014

2014 Chemistry Olympiad

We have 6 schools participate in this year's Chemistry Olympiad. This is 30 years in a row for Central Texas. More than 330 local exams were given. The top ten students will participate in the national chemistry exam on Friday, April 25th at St. Edwards University. Schools and teachers participating are listed.

Westwood High School - Michele Acker/ Wieland
 Vandegrift High School - Rachel Eustice
 Westlake High School - Denise DeMartino/ Kelly Rosier
 Liberal Arts and Science Academy - Amy Moore
 Cedar Ridge High School - LeAnn Rowe
 Lago Vista - Karen Green

ACS Senior members

Congratulations for all your years as ACS Members!!!

50 years

Mr Charles Christopher
 Dr. Charles Greenlief
 Dr. Bruce Leach
 D. Ronald Martin

Dr. John Massingill, Jr.
 Dr. Walter Panko
 Dr. Donald Paul
 Dr. Lewis Watts, Jr.

60 Years

Dr. William Brown
 Mr. Carlyle Le Bas
 Dr. Reeves Perry
 Dr. Robert Soulen

Councilor's Corner

Report on the 2014 Spring ACS Meeting, Dallas, TX

Both Councilors were present at the meeting in Dallas, TX.

New! American Association of Chemistry Teachers-AACT: The American Chemical Society has approved the formation of the American Association of Chemistry Teachers, which will support K-12 teachers of chemistry by providing them with a professional home that addresses and is responsive to their needs. For a description and details, click [here](#).

Meeting Statistics: The meeting attracted 13,680 participants, of whom 6,853 were regular registrants, and 5,140 were students. Others included guests, expo only participants, and exhibitors. There were 376 booths with 246 companies. Over 10,050 papers were presented. In the Career Center, 30 employers conducted more than 400 interviews for 91 jobs. There were approximately 770 job seekers.

Elections: Peter K. Dorhout and William A. Lester, Jr. were chosen as the candidates for 2015 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

Candidates to serve as Directors-at-Large for a 2015-2017 term are: Dawn A. Brooks, William F. Carroll, Jr., Barbara A. Sawrey, and Ellen B. Stechel. The election of two Directors-at-Large from among those candidates and any selected via petition will be conducted in the fall.

Member Dues in 2015: The Council voted to set member dues to \$158 in 2015, the rate being established by an inflation adjustment formula outlined in the ACS Constitution and Bylaws.

New International Chemical Sciences Chapter: Council voted to approve petitions to charter the South Korea International Chemical Sciences Chapter and the Malaysia International Chemical Sciences Chapter. A pilot program has also been approved to form ACS International Student Chapters.

Central Texas ACS: April 2014

(Councilor's Corner continued)

Safety Alert-Stop using "The Rainbow Demonstration": a Safety Alert concerning the Rainbow Demonstration, can be found in [Chemical and Engineering News, March 17, 2014](#). Please help to spread the word to high school science teachers! Click [here](#) for links to alternative demonstrations, found at the bottom of the page.

Students with Disabilities: A new version of the guide Teaching Chemistry to Students with Disabilities will be available [here](#) in April 2014. The Chemists with Disabilities homepage can be found [here](#).

Chemists Celebrate Earth Day 2014 – The Wonders of Water: The ACS publication, *Celebrating Chemistry*, includes fun articles and activities for elementary school children on a theme related to Earth Day. Download the 2014 CCED publication [here](#). P.S. Join the Central Texas Section at the Barton Springs Pool area on April 12 to bring the activities to the local community! [RSVP here](#).

ACS Scholars Program: [ACS Scholars Program](#) is celebrating its twentieth anniversary in 2015. The program has enabled 1,400 students to achieve university degrees in the chemical sciences. ACS Scholars from Central Texas will be recognized at the Spring Awards Banquet on April 21.

Respectfully Submitted:
Diane Kneeland (author)
Barry Streusand
Central Texas Section Councilors

2014 Outstanding Senior Award

Each university in our section is given the opportunity to nominate seniors that have shown they are exceptional students. Congratulations to each of the following students for their hard work and dedication to their schools! Best of luck in your future endeavors!!

Huston-Tillotson University: Isom B. Kelly & Megan E. Gonzales
St. Edwards University: Anthony Bui
Texas State University: Jeffrey Dylan Hall & Zachary Iszard
Southwestern University: Zachary Jenner
University of Texas at Austin Chemical Engineering: Anthony Thio
University of Texas at Austin Chemistry: James Logan Bachman

Texas State team advances to Rice Business Plan Competition

A multi-disciplinary team of graduate students from Texas State University has been invited to participate in the 14th Annual Rice University Business Plan Competition in Houston April 11-12. The Rice University Business Plan Competition is the world's richest and largest graduate-level student startup competition. Forty-two teams from around the world will compete for more than \$1 million in cash and prizes in front of over 250 judges. The Texas State team includes Haoran Chen, the Materials Science, Engineering and Commercialization (MSEC) Program Ph.D. graduate and inventor of the technology that the company is based upon; Marcus Goss, MSEC student; Ash Kotwal, MSEC Student; Lisa Taylor, MBA student; and Cesar Rivera, MFA student. The team is headed by Gary Beall, a local section member.