



**American Chemical Society**  
***East Texas Section***  
**March 2017**

**Next Section Meeting**

Date: Thursday, March 23  
Place: Duvall Student Center Ballroom  
Kilgore College  
Kilgore, TX  
  
Dinner: On your own  
Time: Speaker 7:00 P.M. (No charge for the talk)

**Statistics and the Shirelles:**

**How Physical Sciences Thinking Informs Popular Music Analytics**

William F. Carroll, Jr. Ph.D.  
ACS President, 2005; Board Chair 2012-14

Yes, that's right. It's Moneyball for popular music.

People love lists, especially lists of the "Best of All Time." But very seldom can direct comparisons be made between things that happened in different times—whether football teams, home run hitters, boxers or even songs. So how might you get to a list of the "Best" records 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 Billboard chart histories of records popular between 1958 and 1989, including the methodology for creating the charts and how it varied with time. Then various schemes for determining the strongest charting songs are compared.

Oh yes—and there will be some audio lists including the 20 strongest charting records of those 32 years. And some surprises: the strongest charting songs are not evenly distributed across that time span. The reasons are kind of surprising.

In the end we'll learn how various data, analysis, handling and thinking techniques used in the physical sciences help with the analysis of other kinds of data—like music popularity 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 retired from Occidental Chemical Corporation in 2015 as Vice President, Industry Issues after 36 years with Oxy, and now heads his own company, Carroll Applied Science, LLC. He is also Adjunct Professor of Chemistry at Indiana.



Bill is a member of the Board of Directors of the American Chemical Society (ACS), having served as Chair between 2012 and 2014. He is also a Past President (2005), one of three living members to hold both offices. He is a Fellow of the AAAS and the Royal Society of Chemistry. In 2009 he was chair of the Council of Scientific Society Presidents.

Bill has received Distinguished Alumni Awards from both Indiana and DePauw as well as the numerous ACS Division and Local Section Awards.

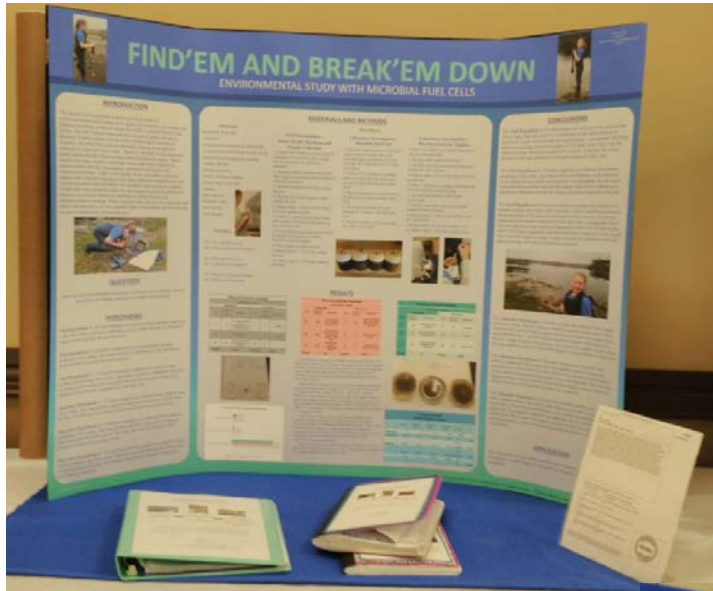
He holds two patents, and has over seventy-five publications in the fields of organic electrochemistry, polymer chemistry, combustion chemistry, incineration, plastics recycling—and popular music history.

### **Upcoming Dates**

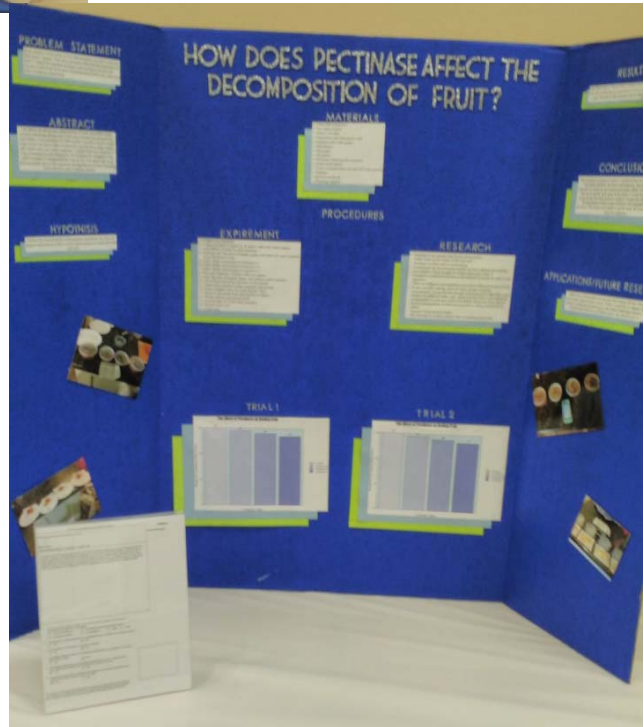
April 2-6	ACS Spring National Meeting, San Francisco, CA
April 6	Student Research Presentations, LeTourneau University, Longview
August 20-24	ACS Fall National Meeting, Washington, DC
September	Student Research Presentations, UT-Tyler, Tyler
October	TBD, East Texas Baptist University, Marshall
October 29- November 1	Southwest Regional Meeting, Lubbock, TX
November	Joe Jeffers, Panola College, Carthage

## 2017 East Texas Regional Science Fair Winners!

### Jr. Division



Madison Perkins, Gilmer Intermediate School, Gilmer, TX

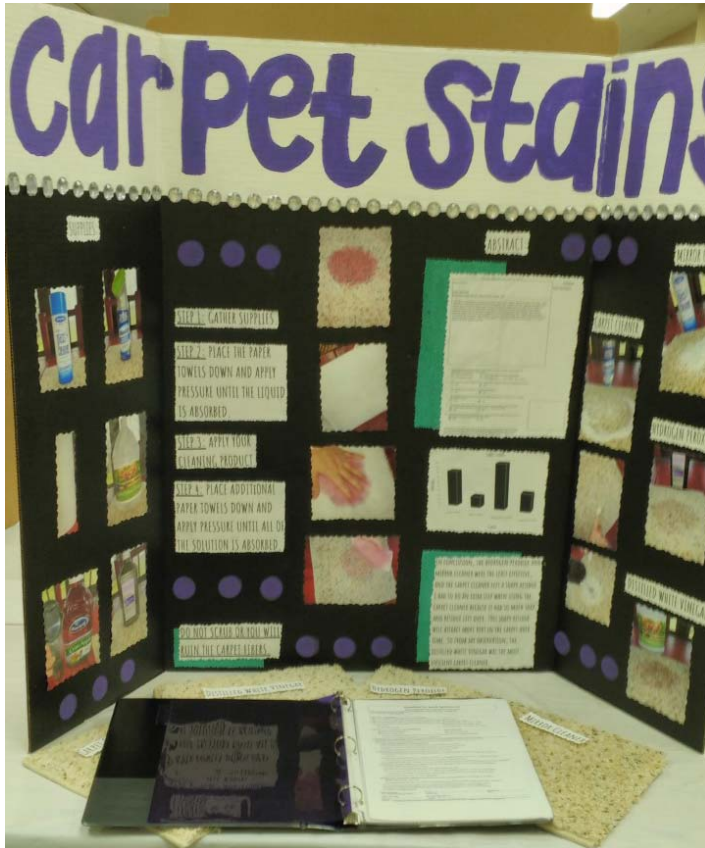


Macy Sloan, Texas Middle School, Texarkana, TX

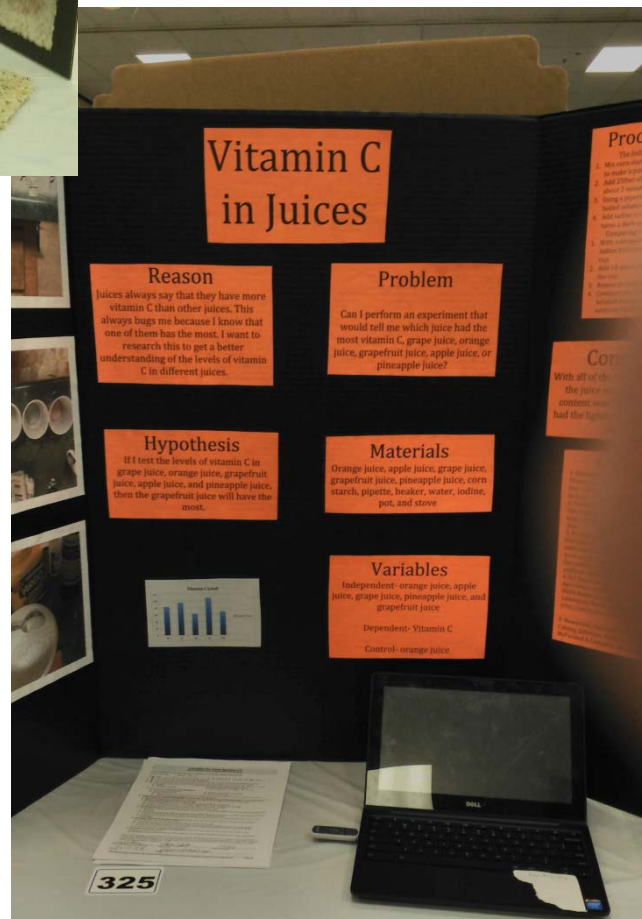


Madison Perkins and Macy Sloan

Sr. Division



Cooper Rast, NLISD, Paris, TX



Peyton Wiseman, North Zulch High School, North Zulch, TX

We will try to get them to attend a section meeting this year.

## 2017 Section Officers

Chair	Mike Sheets	<a href="mailto:mike.sheets@texarkanacollege.edu">mike.sheets@texarkanacollege.edu</a>
Chair-elect	Jerome Stavinoha	<a href="mailto:jstavinoha@gmail.com">jstavinoha@gmail.com</a>
Treasurer	Paul Zhang	<a href="mailto:pzhang@ana-lab.com">pzhang@ana-lab.com</a>
Secretary	Mike Sheets	<a href="mailto:mike.sheets@texarkanacollege.edu">mike.sheets@texarkanacollege.edu</a>
Councilor	Philip Verhalen	<a href="mailto:philip.verhalen@gmail.com">philip.verhalen@gmail.com</a>
Alt. Councilor	Mike Sheets	<a href="mailto:mike.sheets@texarkanacollege.edu">mike.sheets@texarkanacollege.edu</a>
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**Section Website:** <http://easttexasacs.sites.acs.org/>

### About ACS Webinars™

ACS Webinars™ is a free, weekly online event serving to connect ACS members and scientific professionals with subject matter experts and global thought leaders in chemical sciences, management, and business. The ACS Webinars are divided into several series that address topics of interest to the chemical and scientific community; these series include careers, business and innovation, professional growth, joy of science, extreme chemistry, entrepreneurial initiative, green chemistry, and more. Each webinar is 60 minutes in length, comprising a short presentation followed by Q&A with the speaker. The live webinars are held on Thursdays from 2-3pm ET. Recordings of the webinars are available online and upcoming events are posted at <http://acswebinars.org/>.

### Upcoming ACS Webinars

#### March 16

#### Exploring Alternative Careers in Chemistry

<https://www.acs.org/content/acs/en/acs-webinars/professional-development/alt-careers.html>

With more uncertainty in the job market for traditional research jobs than in the past, alternative career paths are becoming more attractive. Join us for this first part of a two-part series as we gather a diverse panel to discuss the various options out there for chemists. The panelists will expose you to several distinct fields that rely fundamentally on chemistry. If you have not been thinking about such possibilities, this broadcast will give you the opportunity to hear from chemists working in nontraditional positions. Join us to hear from a wide array of voices and add your own voice to the discussion.

**March 23**

**Fighting Cancer: Allosteric and Targeting Cancer Cell Metabolism**

<https://www.acs.org/content/acs/en/acs-webinars/drug-discovery/metabolism.html>

The development of cancer is driven by the acquisition of multiple alterations in normal human cells that allow dysregulated proliferation. Join Stefan Gross of Agios Pharmaceuticals and Scott Edmondson of AstraZeneca as they discuss how targeting these unique adaptations could lead to drugs with potential to transform clinical outcomes across many cancer types.

**April 13**

**The Good, the Bad and the Uncertain: Public Perception of the Chemical Enterprise**

<https://www.acs.org/content/acs/en/acs-webinars/business-entrepreneurship/public-perception.html>

Chemistry enables the best of the modern world, keeping us better fed, more healthy and with more leisure activities than at any time in history. Yet, we live in a time when much of society is averse to chemicals. Mark Jones will join us to share some examples of good done by the chemical enterprise and lead a discussion of the origin of chemistry's bad reputation. Chemists, dating back to the alchemists, expand what is possible in nature and, in so doing, made great improvements. Unpleasant surprises have come with the advances, fueling negative views of chemistry. More commonly, ambiguity in what constitutes acceptable risks creates uncertainty that taints the enterprise. Chemistry's unique position as the only science that alters the natural world is changing. Chemists, with centuries of experience, provide the experience base to guide future development.