



ISOTOPICS

The Cleveland Section of the American Chemical Society

Volume 91 Issue 6

September 2015

On Deck:

September 21, 2015

BASF, Beachwood

Cleveland ACS Officers

Chair:

Theresa Nawalaniec
Cleveland State University
(216) 687-3504
t.nawalaniec@csuohio.edu

Chair-Elect:

David Orosz
Notre Dame College
(216) 373-5322
dorosz@ndc.edu

Treasurer:

John Moran
Notre Dame College
(216) 373-6380
jmoran@ndc.edu

Secretary:

Anna Cronin
Great Lakes Science Center
(216) 696-4286
cronina@glsc.org

Isotopics

Interim Editor:

Anna Cronin
(see contact info above)

Cleveland Section Web Site:

http://www.csuohio.edu/sciences/dept/cleveland_acs/

September Meeting Notice

59th Joint Meeting with Akron and Northeast Ohio Local Sections

Wednesday, September 16, 2015

Ursuline College, Pepper Pike, OH 44124

4:30 pm Dr. Carroll meets students/Executive Committee Meeting
5:30 pm Social/Networking
6:15 pm Dinner
7:00 pm Presentation

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

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, home run hitters, boxers or even records. 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 the history on the Billboard charts of records that were popular between 1958 and 1980, 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.

DINNER RESERVATIONS REQUIRED:

Please RSVP to Dr. David Orosz at dorosz@ndc.edu with the names and number of people in your party by 5:00 p.m. on Wednesday, September 9. A buffet style dinner will be offered with vegetarian options. We now can take credit card payments, checks made out to “Cleveland ACS,” or cash. \$20 for members and guests, \$10 for retirees or unemployed, \$5 for students.

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 a member of the Board of Directors of the American Chemical Society, 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 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, plastics recycling—and popular music.

National Chemistry Week – GAK Day

The Cleveland Section will host GAK Day on Sept. 12 from 8:30 to 4 in room W318 at the Dolan Center at JCU.

GAK (Grand Assembly of Kits) Day is the day in which volunteers get together to count, sort, weigh and measure the components for our National Chemistry Week demonstration kits. We always have a good time, share camaraderie, create the kits and enjoy snacks all day and our Great Pizza Lunch (no acronym for this one). No special expertise is required, so come for a little while and bring a friend.

History of Chemistry

A three-hour HD documentary/drama series exploring the history of chemistry from the Enlightenment to the 20th century is about to be broadcast nationally on the PBS network. Entitled "The Mystery of Matter: Search for the Elements," the program has been in development over ten years by Moreno/Lyons Productions. The series features reenactments with actors working on period instructions and speaking words of the scientists whom they portray, woven together with host narrative, animations, and talking-head commentary by historians of science. The production values are superb, and the historical accuracy is first-rate. It (and other "Mystery of Matter" elements) will be used over the coming months and years for science education. See www.pbs.org/mysteryofmatter.

Our local chemistry historian, Alan Rocke (Department of History, Case Western Reserve University, Distinguished University Professor and Henry Eldridge Bourne Professor of History) served as one of the two chief historical consultants for this series, and also appears as an on-camera commentator. WVIZ will broadcast the series on three successive Sunday afternoons at 2-3 pm, beginning August 23, continuing on Aug. 30 and Sept. 6. (It will be available for free on-demand streaming after broadcast, on the PBS website.)

ACS Fellows

Congratulations to Dr. Linda C. Brazdil, Loyola University Chicago, who was named as a 2015 ACS Fellow. She is involved in the development and mechanistic studies of industrial catalysts and

is a leader in chemistry education innovation to make chemistry concepts accessible, relevant, and interesting for students. Dr. Brazdil inspired and supported young people in science both locally and nationally through National Chemistry Week and other enrichment programs and through positions as Cleveland Local Section Treasurer, Chair, and Director. She previously taught at JCU and worked at BP Warrensville. She also was active in the Fluorine chapter of Iota Sigma Pi and on the national level.

Past NCW Winner

If you have ever wondered what happens to our NCW contest winners, then meet Noelle Kaufman. Noelle graduated from the Naval Academy on May 22, 2015. She was commissioned an ensign and will serve on the USS Philippine Sea. She majored in Chemistry and presented at the ACS spring meeting in Denver. She won our contest as a High School Junior.

