The Chemical Record
Volume 55 — Number 1 — February 2013
Columbus Section of the American Chemical Society, Inc.
David Speth, Section Chair — drspeth@sbcglobal.net
George Greene, Editor — george.greene@abbott.com
Section Website: columbus.sites.acs.org

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About the Columbus Section

The Columbus Section of the American Chemical Society comprises approximately 1,500 members who live and work in the following central Ohio counties: Delaware, Fairfield, Fayette, Franklin, Hocking, Knox, Licking, Madison, Marion, Morrow, Muskingum, Perry, Pickaway, Ross, and Union.

The Mission of the American Chemical Society (ACS) is to encourage in the broadest and most liberal manner the advancement of the chemical enterprise and its practitioners. Toward that end, the ACS advances scholarly knowledge, provides professional services and support, communicates with varied audiences, and is actively involved in the science, education, and public policy arenas.

The Columbus Section of the ACS adheres to this mission and the strategic thrusts of the national organization and leadership by providing programs and networking opportunities for Chemistry professionals in Central Ohio.

We invite ACS members and scientists in the community to lend their expertise and talents to our activities in science education, government and legislative policy issues, safety in our industrial plants and in our communities, and care of our land.
MEETING NOTICE

Columbus Section of the American Chemical Society, Inc.
Meeting #861
columbus.sites.acs.org

Dr. Michael Tunick
US Department of Agriculture

Molecules to Mozzarella: The Chemistry of Cheese

Wednesday, February 20, 2013

Spaghetti Warehouse
397 West Broad Street
Columbus, Ohio 43215
(West of COSI between the tracks)

<table>
<thead>
<tr>
<th>TIME</th>
<th>PROGRAM DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>5:15 – 6:00 PM</td>
<td>Executive Committee Meeting – All members are welcome to attend.</td>
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<tr>
<td>6:00 – 7:00 PM</td>
<td>Social Hour</td>
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<tr>
<td>7:00 – 7:45 PM</td>
<td>Dinner – including salad and freshly baked bread</td>
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<tr>
<td></td>
<td>Spaghetti and Meatballs</td>
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<tr>
<td></td>
<td>Incredible 15 Layer Lasagna</td>
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<tr>
<td></td>
<td>Four Cheese Manicotti</td>
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<td></td>
<td>Fettuccini Alfredo</td>
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<tr>
<td></td>
<td>Grilled chicken Caesar Salad</td>
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<tr>
<td></td>
<td>Dessert</td>
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</tbody>
</table>

COLUMBUS SECTION OF THE AMERICAN CHEMICAL SOCIETY, INC. — PO BOX 82181 — COLUMBUS, OH 43202 — columbus.sites.acs.org
7:45 – 8:45 PM  

Program:  
*Molecules to Mozzarella, Dr. Michael Tunick*

Cost  
$20 per person members and non-members, $10 for retired and unemployed members, $5 per student. New members are free! Payment will be collected at the door; cash and checks accepted. There is no cost to attend the program only. *Remember that this is a dinner order and must be paid. Please help control costs by honoring your order.*

RSVP  
Please use the voice mail reservations service by calling 614-447-3600 extension 7047. Follow the template for reservations*. Alternatively, please send e-mail with the same information to The Columbus Section at the following e-mail address: acscols@wowway.com or use the Meeting Reservation Form on the Section’s website.

*Voicemail/e-mail Reservations Template  
- First and last name: Please spell last name.
- Membership category: member, non-member, retired, emeritus, unemployed, student.
- Employer
- Your choice of entrée
- Please indicate if you will join us for the Dinner & Program OR Program Only
- Your phone number, in case we need to contact you.

Reservation Deadline  
Friday, February 15, 2013

Program Contact  
David Speth, 989-430-5123; drspeth@sbcglobal.net

Directions & Parking  
There is construction on several freeways in downtown Columbus. Please check the internet before leaving home.

*From the North*  
Take I 71 South to Exit 108B for US40/Broad Street. Turn right onto US 40/Broad Street. Restaurant will be on the left west of COSI between the railroad tracks.

*From the South*  
Take I 71 North to exit 106A/106B on the left and merge onto OH 315 North. Take US 62/OH 3/Rich Street exit toward Town Street. Turn right onto OH 3/US 62/West Rich Street. Turn left at the 3rd cross street onto South Gift Street. Turn right onto West Broad Street/National Road Southwest. The restaurant will be on your right between the tracks before you reach COSI.

*From the East*  
Take I 70 West to exit 100B for Fourth Street (toward US 23 North). Turn right onto South 4th Street. Turn left onto West Broad Street. Restaurant will be on your left west of COSI between the railroad tracks.

*From the West*  
Take I 70 East to Exit 97 for US 40 West Broad Street. Turn left onto US 40/West Broad Street/national road Southwest. Restaurant will be on your right between the railroad tracks.

Destination will be on the left. Parking is free.
ABOUT THE TALK:
*Molecules to Mozzarella*

Coagulation of milk, removal of whey and ripening are all required when making cheese and chemistry is involved in every step of the process. This talk will describe the process for making cheese from raw milk to final product and illustrate the difference between cheese types including the development of the many flavors in cheese.

ABOUT THE SPEAKER:
*Dr. Michael Tunick*

Michael Tunick received his B.S. in chemistry from Drexel University in 1977. During his undergraduate career he was a student trainee at the Eastern Regional Research Center of the U.S. Department of Agriculture in Wyndmoor, PA. Upon graduation he was hired as a chemist in the Hides and Leather Laboratory where he worked on treatment of tannery waste until 1983 when he transferred to the Dairy Processing and Products Research Unit. While working at USDA he pursued a Ph.D. degree in Physical Analytical Chemistry receiving his degree from Temple University in 1985. Since that time he has been involved in a number of research programs including the detection of mislabeled cheese and the development of low-fat Mozzarella for the National School Lunch Program. He currently relates the effects of processing to changes in the composition, texture, and microstructure of cheese and extruded whey protein. Dr. Tunick is the Secretary and Past Chair of the ACS Division of Agricultural and Food Chemistry and is Councilor and Past President of the Thermal Analysis Forum of Delaware Valley.

SILVER CIRCLE NEWS
*By Tom Weeks*

Silver Circle maintained an active program in 2012, and attendance continued to slowly increase. We had four events, which consisted of a luncheon, a technical talk, and often a facility tour. We have a mailing list of about 50 people, 30 of whom show up for meetings at various times. Typical attendance is about 20.

We had meetings at the following locations: Owens Corning Technical Center in Granville, Nestle Quality Assurance Center in Dublin, the Ohio Department of Transportation Materials Division in Columbus, and Upper Arlington Public Library where we heard a presentation on spending a Fulbright year in Indonesia.

This year I plan the following: (a) update our email list by reaching out to members who turned 55 within the last 5 years (b) post notices of our meetings on the Section website for those who are not on our email list (c) increase our meetings from four to six a year.

Our meetings started growing in attendance once we began charging only $5 for lunch thanks to a Section subsidy. Other reasons for the increased attendance include: we encourage spouses to attend; we vary the program and the meeting day (some attendees teach part time, so no day fits all people); and we reach out to the larger technical community by word of mouth.

I would like to thank Priscilla Ratliff for running the program while I was in Indonesia.

Silver Circle programs will resume in April.
IN MEMORIAM: JERRY TIMMONS

Dr. Richard Jerome “Jerry” Timmons, age 77, of Marysville, Ohio, and Venice, Florida, passed away on Friday, December 14, 2012, at Tidewell Hospice, Venice, Florida, after a long and valiant fight against Parkinson’s Disease.

An accomplished and intelligent, gentle man, Jerry enjoyed a 40-year career as a research chemist with the Scotts Company. He graduated in 1953 from Arthur Hill High School in Saginaw, Michigan, completed undergraduate studies at Albion College graduating with honors and a BS degree. He was a four-year letterman in track and past president of Delta Tau Delta fraternity. He earned a Ph.D in Chemistry from the University of Wisconsin. He enjoyed his 55 year affiliation with the American Chemical Society where he served as National Chairman of the Agricultural Section, and also served as a judge for the Ohio High School Science Competition.

He was a longtime usher and faithful member of the Marysville First United Methodist Church and served as president of the United Methodist Men, especially enjoying their annual Strawberry Festival. He served as a precinct committeeman with the Union County Republican Party and enjoyed sailing, traveling, and the title of “Granddad”. Afflicted with Parkinson’s disease for 13 years, Jerry became an active and beloved member of the Central Ohio Parkinson Society. He was most proud of his children and grandchildren and treasured the love of his wife and family.

He was born April 20, 1935, in Saginaw, Michigan, to the late Earl J. and L. Louise Cramer Timmons. He was preceded in death by an infant son, Robert Timmons.

Survivors include his wife of 55 years, Barbara Wells Timmons, to whom he was married on June 22, 1957, in Saginaw; his children, Dr. Richard “Rick” (Libbie) Timmons, Green Bay, WI; Victoria “Tori” (Randy) Guyer, Fishers, IN; and Christopher (Kelly) Timmons, Atlanta, GA; 6 grandchildren, Zack Timmons, Emily Timmons, Elizabeth Guyer, Jack Guyer, Caroline Timmons, and Lucy Timmons; a sister, Ellen (Edward) Lenhart, Issaquah, WA; a brother, James (Karen) Timmons, Brighton, MI; a sister-in-law, Mary Ellen (Dennis) Poyhonan, Saginaw, MI; 2 brothers-in-law, Bill Wells, Mount Airy, NC; and John (Karen) Wells, Traverse City, MI; and several nieces and nephews.

Ever the research scientist, he unselfishly made an anatomical donation to The University of Miami/National Parkinson Foundation Brain Endowment Bank in hopes of helping to find a cure for this disease.

Memorial contributions may be made to the Central Ohio Parkinson’s Society or Marysville First United Methodist Church in care of Mannasmith Funeral Home who is serving the family. Condolences may be expressed at www.mannasmithfuneralhome.com.

Editor’s Note: Jerry was a past Chair of the Columbus Section. He was a true gentleman and I enjoyed working with him on Section activities very much. He will be greatly missed.
ELECTION RESULTS

Winners of the recent Columbus Section election are as follows:
- Chair-Elect: WENBIN QI
- Secretary: WENDY GIFFORD
- Treasurer-Elect: JONATHAN C. RAISTLIN NEWTON
- Councilor: DONALD SONGSTAD
- Alternate Councilor: JEFFREY TRENT

WELCOME NEW MEMBERS!

BY DAVID SPETH, SECTION CHAIR

Please join us in welcoming the following members who have joined the Section recently. The Columbus Section cordially invites new members to our monthly meetings. The Section will pay for new members’ meals the first time they attend a meeting.

KATHERINE BABBITT
BRADLEY BEVER
KEVIN BOND
SAMANTHA BOUHALL
QUINTEN DENMAN
ANDRE DOUB
JAMES FICKER
THOMAS FISHER

VICTORIA GOUDY
JONATHAN GRIFFIN
Tzu_CHIANG HAN
LATONYA HOBSON
WILLIAM HORN
JASON HOY
ERIN KELLY
CHRISTIAN KISSIG

ERIN LITCHFIELD
CHRISTOPHER MADDEN
DENNIS MILLER
JUSTIN SEFFERNICK
ELIZABETH SHELL
PATRICK STILL
BRESHA SUMERSET
CHERYL TRAN

COLUMBUS SECTION ACS CALENDAR OF EVENTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Date</th>
<th>Day</th>
<th>Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>February</td>
<td>15</td>
<td>Fri</td>
<td>Deadline for reservations for monthly Section meeting.</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>February</td>
<td>20</td>
<td>Wed</td>
<td>Spaghetti Warehouse</td>
<td>Monthly Section meeting. See details elsewhere in this issue of The Chemical Record.</td>
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<tr>
<td>2013</td>
<td>March</td>
<td>17-21</td>
<td>Sun-Thu</td>
<td>Pennsylvania Convention Center, Philadelphia</td>
<td>PITTCON™ Conference and Expo, the world’s largest annual premier conference and exposition on laboratory science.</td>
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<tr>
<td>2013</td>
<td>April</td>
<td>7-11</td>
<td>Sun-Thu</td>
<td>New Orleans</td>
<td>245th ACS National Meeting and Exposition</td>
</tr>
<tr>
<td>2013</td>
<td>September</td>
<td>8-12</td>
<td>Sun-Thu</td>
<td>Indianapolis</td>
<td>246th ACS National Meeting and Exposition</td>
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COLUMBUS SECTION ACS CALENDAR OF EVENTS

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<th>Day</th>
<th>Location</th>
<th>Comments</th>
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<tr>
<td>2013</td>
<td>October</td>
<td>20-26</td>
<td>Sun-Sat</td>
<td>Here, There, Everywhere!</td>
<td>National Chemistry Week 2013. This year’s theme is Energy: Now and Forever!, exploring chemistry and energy with a focus on sustainable resources Stay tuned for information on Columbus Section activities and volunteer opportunities!</td>
</tr>
<tr>
<td>2014</td>
<td>March</td>
<td>16-20</td>
<td>Sun-Thu</td>
<td>Dallas</td>
<td>247th ACS National Meeting and Exposition</td>
</tr>
<tr>
<td>2014</td>
<td>August</td>
<td>10-14</td>
<td>Sun-Thu</td>
<td>San Francisco</td>
<td>248th ACS National Meeting and Exposition</td>
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The 44th Central Region Meeting (CERM2013) of the American Chemical Society will be held on May 15-17, 2013 on the campus of Central Michigan University in Mt. Pleasant, Michigan. The theme of the meeting is “Building Blocks for a Sustainable World.”

Papers are requested for symposia covering chemical education, analytical, biological, computational, environmental, inorganic, organic, medicinal, physical, and polymer chemistry, and more.

Abstract submission is now open. Abstracts may be submitted online at [http://abstracts.acs.org](http://abstracts.acs.org). The deadline for abstract submission is March 20, 2013.

Technical program highlights will include poster sessions, undergraduate research symposia, a beer and wine making symposium with a related visit to a brewery, a silicon science symposium to celebrate the 150th anniversary of the discovery of organosilicon compounds and the 70th anniversary of Dow Corning Corporation, a sustainability symposium, materials-related (including nanotechnology) symposia, symposia about chemistry and global health, re-examining water fluoridation, also water-biogeochemistry, an exhibition showcasing the latest products and materials from a range of vendors, and technical and career workshops.

Special events will include chemistry related art and history exhibits (“History of The Dow Chemical Company Plant in Mt. Pleasant - 1903-1930” and “Images of The Dow Chemical Company from the Brush of Arthur Knighton-Hammond”, and “History of the Midland ACS Section, 1919-2013”) with an art reception, and plenary lectures highlighting the theme of sustainability with guest speakers including Dr. Martine Vermeulen, Dow Corning Global Manager of Product Safety and Regulatory Compliance (retired), and Dr. Kishor Wasan, Professor of Pharmaceutical Sciences at the University of British Columbia.

The Awards Banquet on Thursday night will feature presentation of the ACS Division of Chemical Education Regional Award for Excellence in High School Chemistry Teaching, the E. Ann Nalley Regional Award for Volunteer Service to ACS, and the Stanley C.
Israel Regional Award for Advancing Diversity in the Chemical Sciences. The featured speaker will be Dr. Mary Kirchhoff, ACS Director of Education.

Advance registration for the meeting will end on April 19, 2013. Regular registration will continue through May 17, 2013. Please visit the CERM 2013 website for registration and contact information, useful Web links, and up-to-date details on events as they become available. [http://2013cerm.sites.acs.org/](http://2013cerm.sites.acs.org/)

__ABOUT THE CHEMICAL RECORD__

_The Chemical Record_, official newsletter of the Columbus Section of the American Chemical Society, Inc., is published monthly, February-May and September-December (eight issues per year.) Opinions expressed by editors or contributors do not necessarily represent the official position of the Columbus Section or of the editorial staff. We welcome your contributions to your Chemical Record. Please submit them via postal or electronic mail to George Greene, PO Box 360941, Columbus, Ohio 43202-0941, george.greene@abbott.com. Electronic mail contributions should be in MS Word file attachments (preferred) or plain-text messages. Thank you very much!

__CHANGE OF ADDRESS__

Changes in postal or e-mail address should be reported to the Membership Chair, David Speth, 614-688-5162, drspeth@sbcglobal.net. David will forward the change-of-address information to ACS Headquarters.

__ADVERTISING RATES__

Advertising rates for _The Chemical Record_ are as follows (per single insertion): Full Page, $250; Half page, $150; Quarter Page, $120; Eighth Page: $60; Business Card, $50. Discounts: 5% for four insertions or 10% for eight insertions during a calendar year. There is no charge for "help wanted" ads.

__PLEASE SUPPORT OUR SPONSOR…__

_The Chemical Record_ is brought to you by the Columbus Section of the American Chemical Society and our fine sponsor, Hogarth Chemical Consulting:

![Hogarth Chemical Consulting](image)