



# The Chemical Record

Volume 47, Number 2 - March, 2005

Columbus Section of the American Chemical Society, Inc.

George W. Greene, Editor

[www.acscolumbus.org/](http://www.acscolumbus.org/)

## IN THIS ISSUE...

MEETING NOTICES.....	2
MEETING #801, MONDAY, APRIL 11, 2005.....	2
ABOUT THE TOPIC.....	3
ABOUT THE SPEAKER .....	3
MEETING #802, TUESDAY, APRIL 19, 2005 .....	3
ABOUT THE TOPIC.....	4
ABOUT THE SPEAKER .....	4
HELP WANTED:.....	5
CHEMISTS CELEBRATE EARTH DAY .....	5
MADELEINE JACOBS TO VISIT COLUMBUS SECTION.....	6
NATIONAL CHEMISTRY WEEK .....	6
ACADEMIC POSITION AVAILABLE .....	6
COLUMBUS TECHNICAL COUNCIL ANNUAL AWARDS BANQUET .....	6
2006 CENTRAL REGIONAL MEETING AND 39 <sup>TH</sup> SILICON SYMPOSIUM .....	7
“CHEMISTRY HEADLINES” – A NEW ONLINE FEATURE FROM CHEMISTRY.ORG.....	7
STAY IN TOUCH WITH THE EDUCATION DIVISION .....	7
COLUMBUS SECTION ACS CALENDAR OF EVENTS.....	8
ABOUT <i>THE CHEMICAL RECORD</i> .....	8
SECTION E-MAIL ROUTING .....	9
PLEASE SUPPORT OUR SPONSORS.....	9
MOLECULE OF THE MONTH .....	9
CHANGE OF ADDRESS.....	10



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 2

### MEETING NOTICES

Please note that there are two meeting notices in this edition of *The Chemical Record*.

#### MEETING #801, MONDAY, APRIL 11, 2005

COLUMBUS SECTION OF THE AMERICAN CHEMICAL SOCIETY, INC.

[www.acscolumbus.org](http://www.acscolumbus.org)

*Molecules to Mozzarella: The Chemistry of Cheese*

Ohio Dominican University

[www.ohiodominican.edu](http://www.ohiodominican.edu)

Program:

Michael H. Tunick

*Molecules to Mozzarella: The Chemistry of Cheese*

5:00-6:00 PM	Executive Committee Meeting in Room 301 of Erskine Hall.
6:00-6:30 PM	Social time at Ohio Dominican University in the Colonial Room in Sansbury Hall. Fruit, nuts, pretzels, soft drinks, water coffee and tea will be available.
6:30-7:30 PM	A cheese tasting will be held in the Colonial Room in Sansbury Hall at the Ohio Dominican University.
Menu	The fare will be bread, butter, fruit, nuts, crackers and, of course, cheeses. The latter will include Vermont Cheddar, Aged Gouda, Guggisberg Swiss, Creamy Havarty, Manchego and a number of others of note to be used by the speaker to illustrate various points during his talk. A cash bar for wine will be available during the tasting to complement the cheeses to be served.
7:30 PM	Program
Cost	Members and Nonmembers \$20.00 Retired and Unemployed Members \$18.00 Students \$8.00  Payment will be collected at the door; cash and checks accepted.
Reservations	Please use the voice mail reservations service by calling 614-447-3600 extension 7047. Follow template for reservations*. Alternatively, please send e-mail to The Columbus Section at the following e-address: <a href="mailto:acscols@cas.org">acscols@cas.org</a>
*Voicemail/e-mail Reservations Template	<ul style="list-style-type: none"><li>• First and last name: <b><i>Please spell last name.</i></b></li><li>• Membership category: member, nonmember, retired, emeritus, unemployed, student, other.</li><li>• Employer or, if student, college or university.</li><li>• Your phone number, in case we need to contact you.</li></ul>
Reservations Deadline	<b>Wednesday, April 6, 2005. Your reservation is a dinner order that must be paid. Please help us to control costs by honoring your order.</b>
Program Contact	Jodie Harper, 2Plus E-mail: <a href="mailto:jaharper29@hotmail.com">jaharper29@hotmail.com</a> Phone: 614-276-9959



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 3

### Directions

- From Route 71, take the exit for 670E towards Columbus Airport.
- Take the Fifth Avenue exit.
- Turn left at the bottom of the ramp onto Fifth Avenue heading west.
- Go through one set of traffic lights to the junction with Nelson Road.
- Turn right onto Nelson Road and proceed to the next set of traffic lights (Airport Road).
- Turn left and then bear right around the bend onto Sunbury Road.
- Turn left at the second set of traffic lights into the Ohio Dominican University parking lot.
- To get to Sansbury Hall, cross Sunbury Road at the car park entrance to the main campus.
- Sweeping from left to right are Sansbury Hall, St. Albert Hall in the middle and Erskine Hall on the right.
- Go through the entrance of Sansbury Hall and the Colonial Room is down a short passage on the right of the entrance hall.

### About the Topic

#### *Molecules to Mozzarella: The Chemistry of Cheese*

*Michael H. Tunick*

Coagulation of milk, removal of whey, and ripening are all required when making cheese, and chemistry is involved every step of the way. This non-technical talk describes the procedure from raw milk to final product, and illustrates the differences between cheese types, including the development of the many flavors in cheese.

### About the Speaker

*Michael H. Tunick*

Michael H. Tunick received a B.S. in Chemistry from Drexel University in 1977. He was a student trainee at the Eastern Regional Research Center of the U.S. Department of Agriculture in Wyndmoor, PA, and was hired as a chemist upon graduation. He performed research on treatment of tannery waste with the Hides and Leather Laboratory until 1983, when he was transferred to what is now the Dairy Products Research Unit. He pursued a Ph.D. in Physical-Analytical Chemistry on a part-time basis during this period, receiving the degree from Temple University in 1985. He also became a research chemist in that year and was involved in a number of projects, including detection of mislabeled cheese and development of low-fat Mozzarella for the National School Lunch Program. He currently relates the effects of processing to changes in composition, texture, and microstructure of cheese. He was the 2001 Chair of the ACS Division of Agricultural and Food Chemistry, and is Councilor and Past President of the Thermal Analysis Forum of Delaware Valley.

### MEETING #802, TUESDAY, APRIL 19, 2005

COLUMBUS SECTION OF THE AMERICAN CHEMICAL SOCIETY, INC.

[www.acscolumbus.org](http://www.acscolumbus.org)

*The History, Chemistry, and Identification of 19<sup>th</sup> Century Photographs*

*Dr. Anthony Winston*

Muskingum College, Boyd Science Center, Room 343

New Concord, Ohio

[www.muskingum.edu](http://www.muskingum.edu)



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 4

6:30 PM	Program: Dr. Anthony Winston, Professor Emeritus of Chemistry, West Virginia University, <i>The History, Chemistry, and Identification of 19th Century Photographs</i>
Cost	There is no charge to attend this meeting, but a reservation is requested because of room size constraints. Please contact Dr. Perera to make reservations.
<b>Reservations Deadline</b>	<b>Friday, April 15, 2005.</b>
Program/Reservations Contact	Deepa Perera, Chair, Chemistry Department E-mail: dperera@muskingum.edu Phone: 740-826-8232
Directions	<ul style="list-style-type: none"><li>• From I70 Take exit 169 (S.R. 83).</li><li>• Turn north on S.R. 83.</li><li>• Go one mile to traffic light (U.S. 40/22).</li><li>• Turn right on Main St. (U.S. 40/22), College entrance is on left.</li><li>• Go all the way up the hill, and turn left for visitor parking in front of Brown Chapel.</li><li>• Boyd Science Center is the orange brick building right after the chapel."</li></ul>

### About the Topic

#### *The History, Chemistry, and Identification of 19<sup>th</sup> Century Photographs*

The Daguerreotype, first announced in 1839 in Paris, was the first practical photographic process and was widely acclaimed as being a most wonderful and marvelous invention. Within only a few years Daguerreian photographic establishments sprang up all over the world. A few Daguerreotypists became eminently successful and today their work brings prices of thousands, and for some, hundreds of thousands of dollars. The Daguerreotype image is unique, unlike any modern photograph, and its formation is still not well understood. But the popularity of the Daguerreotype lasted for only about 15 years when it was succeeded by the wet plate process, which, unlike the daguerreotype, produced a negative that could be printed to give many copies - a definite advantage. The talk will include the invention and early history of photography from about 1835 to 1900, with specific attention to the types of images produced, characterization of the image, and distinguishing features important for their correct identification. Included will be an exhibit of daguerreotypes, ambrotypes, tintypes, cartes de visite, cabinet cards, stereoviews and other interesting photographic artifacts of the 19th century.

### About the Speaker

#### *Dr. Anthony Winston*

Dr. Anthony Winston is a native of Washington D.C. He received a B.S. Degree in chemistry from George Washington University in 1950, an M.S. degree from Duke University in 1952, and the Ph.D. in Organic Chemistry from Duke in 1955. In 1959, after five years of industrial research, he joined the faculty of the Department of Chemistry, West Virginia University, where he is now Professor Emeritus of Chemistry. His research is in the areas of organic and polymer synthesis, with particular interest in the design of polymers for medical applications and has numerous publications in chemistry journals. He was instrumental in introducing the use of microscale equipment in the undergraduate laboratory and for 10 years managed summer workshops in the application of microscale techniques.

Dr. Winston studies the early history of photography, particularly the chemistry of early processes, and recreates some of these processes in his home laboratory. He collects antique photographs and equipment, such as daguerreotypes, ambrotypes, stereoviews, and stereoviewers. His interest in photography goes back for more than 50 years. Both he and his wife Lois enter their color and black and white prints in international photographic salons and have received many awards in competition. A recent interest has been the photography of Wildflowers. He is a member of the American Chemical Society, the Photographic Society of America, the National Stereoscopic Association, and the Daguerreian Society.



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

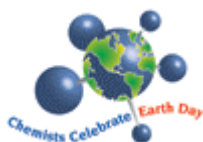
Page 5

### Help Wanted:

#### *Someone Who Wants to Help Shape the Future of the Columbus Section of the ACS*

The Nominations Committee Chair position is available. As chair of this committee, you will not be eligible to run for office. The requirement for this position is the willingness to talk to your fellow ACS members to encourage them to volunteer to be candidates for the Section's elections.

If you would like to volunteer for this position or would like to run for office, please contact Chair Jodie Harper, 614-276-9959 or jaharper29@hotmail.com.



### Chemists Celebrate Earth Day



#### The Unifying Event

The [Unifying Event](#) for Chemists Celebrate Earth Day 2005 is Kite Flying.

#### ACS Publications Celebrate Earth Day

In recognition of Earth Day, American Chemical Society Publications is providing open access to selected research throughout the month of April...

#### Contests

[Music Video Contest](#) - music video competition for children in Kindergarten - 12th grade.

#### Resources for...

[Students/Educators](#) - Activities & articles  
[Coordinators](#) - Templates, forms & guidelines  
[PR Chairs](#) - Press releases & templates  
[Events by State and Territory](#)

#### Related ACS Programs

[chemistry.org/kids](http://chemistry.org/kids)  
[National Chemistry Week](#)  
[WonderNet](#)  
[Kids & Chemistry](#)



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 6

### Madeleine Jacobs to Visit Columbus Section



Madeleine Jacobs, Executive Director of the American Chemical Society, will be the guest speaker at a very special meeting of the Columbus Section at Chemical Abstracts Service on Wednesday, August 17, 2005. Previously serving as the Editor-in-Chief of Chemical and Engineering News (C&EN), 2004 marks Ms. Jacobs' first year as Executive Director of the American Chemical Society. She worked for C&EN from 1969 until 1972 and returned again in 1993. She is a much-honored science journalist, an internationally sought after public speaker, and brings an extensive familiarity and understanding of Society programs, products, and services. Watch for more meeting details in July.

### National Chemistry Week

#### *“The Joy of Toys” – October 16-22, 2005*

National Chemistry Week (NCW), a community-based outreach program, is designed to reach the public with positive messages about chemistry and to make a positive change in the public's impression of chemistry. Activities include chemical demonstrations, hands-on activities, lectures, open houses, displays, contests and games. NCW is celebrated annually from Sunday through Saturday during the fourth week of October. For more information visit [chemistry.org/ncw](http://chemistry.org/ncw).

Note: The Columbus Section needs a Chair to coordinate local National Chemistry Week Activities. Please contact Jodie Harper ([jaharper29@hotmail.com](mailto:jaharper29@hotmail.com), 614-276-9959) or Tom Weeks ([tomweeks@aol.com](mailto:tomweeks@aol.com)) if you would like to help us with this important outreach activity.

### Academic Position Available

One year CHEMISTRY teaching position available at Otterbein College, a liberal arts institution in the Columbus, OH area. ACS-approved department seeks to fill a 30-contact hour position beginning Sept '05. Instruction responsibilities will involve participation in general chemistry and the candidate's area of specialization. A PhD and commitment to teaching excellence are required. All subfields will be considered. Please send application, including CV and names of references, to Jerry A. Jenkins, PhD, Chair, Chemistry Department, Otterbein College, One Otterbein College, Westerville, OH 43081. Review of applications will continue until position is filled.

### Columbus Technical Council Annual Awards Banquet

The CTC Annual Awards Banquet is a hallmark occasion for the technical community. It is the focal point for the Science Student of the Year and Technical Person of the Year awards programs. Both Society members and Corporate Sponsors use this opportunity to interact with outstanding high school students and their teachers.

This year's banquet will be held at the Clintonville Woman's Club on Wednesday, April 27, 2005 from 6 to 9PM. If you would like to attend the banquet, please fill out the reservation form. Students who submit technical papers or who are Outstanding Science Student nominees are admitted free, along with their sponsoring teachers. The dinner charge for all other banquet attendees is \$15.00, with all checks payable to the Columbus Technical Council.

If you require additional information, please contact the CTC President, Mark Farrell at (614) 255-3166 or by email at [mf Farrell@questline.com](mailto:mf Farrell@questline.com).



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 7

### 2006 Central Regional Meeting and 39<sup>th</sup> Silicon Symposium

In 2006, the American Chemical Society Central Regional Meeting together with the 39th Silicon Symposium will be hosted on May 16-20 in Frankenmuth, Michigan. We in the Midland local section of the ACS are honored and excited to host this scientific meeting. Based on past attendance, approximately 1500 individuals are expected to participate in technical sessions, award symposia, workshops, exposition, banquets, and educational outreach activities. Additional information may be obtained at the symposium website <http://crm2006.org/>.

This premier scientific event will highlight chemical and materials >research, development, and application activities at academic and industrial institutions. This meeting will promote interaction and provide opportunities for networking with the leaders in our scientific communities. Initial sponsors are The Dow Chemical Company, Dow Corning Corporation, and the ACS divisions. Additional sponsorship opportunities are available.

The technical program committee is committed to providing state-of-the-art symposia. Our committee is in the process of selecting session topics. This letter is to solicit your input for the technical program. As a key member of the scientific community within the central region we would value your suggestions for symposia topics.

Your input will help ensure that we are successful in achieving this goal. We would welcome the opportunity to discuss your participation in this meeting. Please email suggestions/questions to any of the technical program committee members:

Maneesh Bahadur, Ph.D. (989) 496-8902 [maneesh.bahadur@dowcorning.com](mailto:maneesh.bahadur@dowcorning.com)

David Moll, Ph.D (989) 636-9413 [djmoll@dow.com](mailto:djmoll@dow.com)

Mike Ferritto, Ph.D. (989) 496-3244 [m.ferritto@dowcorning.com](mailto:m.ferritto@dowcorning.com)

### “Chemistry Headlines” – A New Online Feature from chemistry.org

Would you like to visit one ACS web page and access links to current chemistry news headlines, journal article briefs, and features on chemical patents, research advances, historical events, and meeting updates from the American Chemical Society? A new online feature on [chemistry.org](http://chemistry.org), “Chemistry Headlines”, serves up all this and more. “Chemistry Headlines” is a compilation of headlines from external news sources and a variety of ACS magazines and journals, including C&EN Online, as well as headlines from Heart Cut, Patent Watch, Today in Chemical History, chemistry.org feature articles and other ACS products and resources. Staff members from chemistry.org, C&EN and ACS Publications have collaborated to help make a wide range of content available in this forum.

This new feature can be found at [www.chemistry.org/portal/a/c/s/1/newscenter.html](http://www.chemistry.org/portal/a/c/s/1/newscenter.html), the same URL that was used previously for the first generation of the chemistry.org Newscenter. Have questions or comments concerning “Chemistry Headlines”? Email [webmaster@acs.org](mailto:webmaster@acs.org) and include "Chemistry Headlines" in the subject line of your message.

### Stay in Touch with the Education Division

*ChemunityNews* is a bimonthly electronic newsletter that connects chemistry educators to the activities of the ACS Education Division. It provides updates on newly published resources and materials, programs for students and educators, and upcoming workshops and meetings. You may view a recent issues by visiting the *ChemunityNews* Archives at [chemistry.org](http://chemistry.org). To subscribe, simply email [education@acs.org](mailto:education@acs.org).



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 8

### Columbus Section ACS Calendar of Events

*Compiled by Maria Rosenthal, Jodie Harper, and George Greene*

2005	March	13-17	Sun – Thur	San Diego, CA	229 <sup>th</sup> ACS National Meeting
2005	March	22	Tuesday	Chemical Abstracts Service	Executive Committee, 5:30 PM
2005	April	11	Monday	Ohio Dominican University	Section Meeting #801: Speaker Dr. Michael Tunick will present <i>Molecules to Mozzarella: The Chemistry of Cheese</i> .
2005	April	19	Tuesday	Muskingum College, New Concord, OH	Section Meeting #802: <i>The History, Chemistry, and Identification of 19th Century Photographs</i> with Speaker Dr. Anthony Winston.
2005	April	22	Friday	Here, There, Everywhere	Chemists Celebrate Earth Day <i>Air – Here, There, Everywhere</i>
2005	April	27	Wednesday	Clintonville Woman's Club	Columbus Technical Council 2005 Awards Banquet. See details elsewhere in this edition of <i>The Chemical Record</i> .
2005	May	TBA	TBA	Dayton, Ohio	Patterson-Crane Award Banquet
2005	May	7	Saturday	Columbus—OSU French Field House	State Science Day; contact Bob Kroshefsky <a href="mailto:bobkro@urec.net">bobkro@urec.net</a> , 937-644-3979, if you would like to participate.
2005	August	17	Wednesday	Chemical Abstracts Service	Section Meeting with Madeleine Jacobs, ACS Executive Director
2005	August - September	08/28 – 09/01	Sun – Thur	Washington, DC	230 <sup>th</sup> ACS National Meeting
2005	September	7	Wednesday	TBA	Dr. Don Burns, <i>Counterfeiting: Catch 'em with Near-IR</i>
2005	October	16-22	Sun – Sat		National Chemistry Week: <i>The Joy of Toys</i>
2005	December	15-20	Thu – Tue	Honolulu	Pacificchem 2005
2006	March	26-30	Sun – Thu	Atlanta	231 <sup>st</sup> ACS National Meeting
2006	May	16-20	Tue – Sat	Frankenmuth, MI	Central Regional ACS Meeting and 39 <sup>th</sup> Silicon Conference
2006	September	10-24	Sun – Thu	San Francisco	232 <sup>nd</sup> ACS National Meeting
2007	March	25-29	Sun – Thu	Chicago	233 <sup>rd</sup> ACS National Meeting
2007	August	19-23	Sun – Thu	Boston	234 <sup>th</sup> ACS National Meeting

### About *The Chemical Record*

*The Chemical Record*, official newsletter of the Columbus Section of the American Chemical Society, is published monthly, September-December and February-May (eight issues per year.) Opinions expressed by editors or contributors do not necessarily represent the official position of the Columbus Section. We welcome your contributions to your *Chemical Record*. Please submit them via postal or electronic mail to George Greene, PO Box 360941, Columbus, Ohio 43236-0941, [george.greene@abbott.com](mailto:george.greene@abbott.com). Electronic mail contributions should be in MS Word file attachments (preferred) or plain-text messages. When preparing electronic documents, please remember that you are no longer using the old Remington typewriter so you do not need to add a carriage return at the end of each line. *Thank you very much!*



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 9

### Section E-Mail Routing

Please send items for distribution to the Section e-mail list to Stephen Renner ([srenner@cas.org](mailto:srenner@cas.org)) and Maria Rosenthal ([mrosentha@cas.org](mailto:mrosentha@cas.org)). Maria and Stephen will perform any necessary formatting then they will forward the message to Rich Dardis, Electronic Communications Coordinator, for distribution. If you would like to be added to the e-mail distribution list, please contact Rich Dardis ([rdardis@cas.org](mailto:rdardis@cas.org))

### Please Support Our Sponsors...

**HOGARTH**  
CHEMICAL  
CONSULTING

**SPECIALIZING IN:**  
Training  
Research & Development  
Laboratory Design & Safety

**HOGARTH**  
CHEMICAL  
CONSULTING

Lewis Hogarth, Ph.D.  
614.268.8534  
Fax 603.308.8133  
email: [westwood@infinet.com](mailto:westwood@infinet.com)

### HOGARTH CHEMICAL CONSULTING

#### SPECIALIZING IN:

Training  
Research & Development  
Laboratory Design & Safety

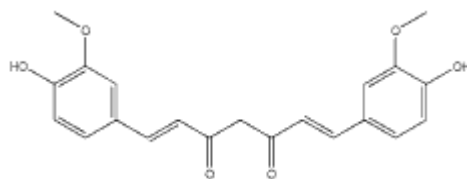
Lewis Hogarth, Ph.D.

Voice 614.268.8534

FAX 603.308.8133

email: [westwood@infinet.com](mailto:westwood@infinet.com)

### Molecule of the Month



**Curcumin**, the bright yellow pigment in turmeric, protects the stomach from tainted foods. It inhibits the growth of *Helicobacter pylori*, which has been implicated in gastric and colon cancers, but it can also reduce the effectiveness of chemotherapy. This molecule was suggested by Krishna Mallela and Gary & Sheila Baker.



## The Chemical Record

Columbus Section ACS - Volume 47, Number 2 – March, 2005

Page 10

### Change of Address

Changes in postal or e-mail address should be reported to the Membership Chair, George Noethlich, 2740 Bella Via Avenue, Columbus OH 43231-2305, e-mail [gnoethlich@wowway.com](mailto:gnoethlich@wowway.com). George will forward the change-of-address information to ACS Headquarters.



#### **THE CHEMICAL RECORD**

Columbus Section Of The  
AMERICAN CHEMICAL SOCIETY, INC  
P.O. Box 82181  
Columbus, OH 43202