



Chesapeake chemist

Maryland Section
American Chemical
Society

Molecules of Mozzarella

The Chemistry of Cheese

Dr. Michael Tunick

April 2003

Volume 59, Number 6

Congratulations to the 2003 student award winners

The Maryland Section congratulates its 2003 Student Award winners (pages 4 and 5). Each awardee receives a certificate, a one-year subscription to the Journal of Chemical Education, and a mouse pad with the periodic table, courtesy of Fisher Scientific.

MARM 2003 scheduled

The 36th Middle Atlantic Regional Meeting (MARM 2003), hosted by the Trenton Section, will be held from Sunday, June 8 through Wednesday, June 11, 2003, at Princeton University in Princeton, New Jersey. Major symposia are planned around the themes of Pharmaceutical and Medicinal Chemistry; Chemical Education from K-12 through College Undergraduate, and Solid State and Material Science, including Catalysis, Nanotechnology, and Energy concerns.

Other featured sessions include the role of Chemistry in Homeland Defense/Terrorism, General Chemistry and General Sessions focused on Education, Patent Law and Women in Chemistry. There will also be a session on Thermal Analysis & Study of Pharmaceutical Materials, sponsored by the Garden State Thermal Analysis Association. The Delaware Valley Chromatography Forum will present their 2003 student awards. Just preceding the MARM, the ACS division of Chemical Health and Safety is also sponsoring a session and will be holding a workshop with certification test. The ACS Regional Industrial Innovation Program will also be presenting their awards at MARM.

The meeting will feature an exhibition of scientific equipment products and services, and undergraduate research poster sessions sponsored by the Rider University Student Affiliate, and Chemagination, a poster and essay competition for high school students.

Special events planned for the MARM meeting include an opening evening (Sunday) wine and cheese reception, a Monday luncheon address by Dr. Elsa Reichmanis, the 2003 Chair of the ACS, on "Chemistry in the 21st Century," and that evening's barbecue will include an address by Nobel Laureate Dr. Alan G. Macdiarmid. On Tuesday there is a Women in Chemistry luncheon with a presentation by Dr. Tilghman, the President of Princeton University. Also on Tuesday, MARM will focus on education with a K-12 Teacher Day featuring a special session for high school teachers, a special hands-on workshop for K-8 teachers, and a presentation by Dr. Bassam Shakhshiri in the evening.

Abstracts are invited for both oral and/or poster presentations in all of the aforementioned areas as well as in organic, physical, analytical, and polymer chemistry. Abstracts must be submitted on-line through the MARM 2003 website: <http://www.membership.acs.org/T/Trenton/MARM03>. The deadline for abstract submission is April 1, 2003.

For further information and abstract submission, please visit the meeting website or contact either of the program chairs, Dr. Donna Bassolino, Donna@dbkonline.com, or Dr. Bing Zhou, zhou@htinj.com.

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To subscribe to the Maryland Section ACS Listserv, send an email to listserv@vm.cfsan.fda.gov with "subscribe acsmd-l <insert your name>" in the message. To send a message to the Listserv, relevant to the Maryland section (e.g. section notices, local chemistry seminars, job announcements), send email to ACSMD-L@vm.cfsan.fda.gov.

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2003 Student Awards



Miguel R. Balfour
Morgan State University



Sam Merenbloom
*University of Maryland,
Baltimore County*



Alicia M. Hitchcock
Loyola College



Rajan Pragani
Goucher College



Soe Thinzar Mon
*Community College of
Baltimore County, Essex*



Zuriashwork Nigatu
*Baltimore City
Community College*



Amanda Kussrow
Villa Julie College



2/C Eric Twerdahl, Jr.
United States Naval Academy



Titilola O. Jolaosho
Hood College



E. Bryan Buckingham
McDaniel College

Not Pictured

Bradley M. Hurst
*Anne Arundel
Community College*

Seferina Lozano
*Community College of
Baltimore County, Catonsville*

Kellie L. Taylor
Washington College

Rebecca Walker
Mount St. Mary's College



Cajetan Dogo-Isonagie
Coppin State College



Jenna Leschek
*College of Notre Dame
of Maryland*



Angela S. Feehley
Towson University



Tsunyin Bert Lai
Johns Hopkins University



Sarah A. Russell
St. Mary's College



Olufunmilayo Olugbode
Howard Community College

April 2003 Meeting

Thursday, April 3, 2003
McDaniel College, Westminster, Maryland

Schedule

5:30 - 6:30 pm	Registration & Social Reception, Eaton Hall
6:40 - 7:45 pm	Dinner, Forum Room, Decker College Center
7:45 - 8:00 pm	Presentation of Student Awards
8:00 - 8:45 pm	Molecules to Mozzarella: The Chemistry of Cheese Michael Tunick

Price of the dinner buffet is \$20.00; spouses, retired chemists and guests of awardees may attend for \$15.00, and students (other than awardees) may attend for \$10.00. For reservations, contact Dr. Shirish Shah at 410-323-0803(H) or via e-mail at dr.shah@juno.com.

About the speaker:

Michael Tunick graduated from Drexel University with a B.S. in chemistry and received a Ph.D. in physical-analytical chemistry from Temple University in 1985. Since then, he has been a research chemist at the Eastern Regional Research Center of the U.S. Department of Agriculture in suburban Philadelphia. He has been in the Dairy Processing and Products Research Unit since 1984, where he has investigated physical properties of cheese and helped to develop a low-fat mozzarella for the National School Lunch Program. He was the chair of the ACS Division of Agricultural and Food Chemistry in 2001 and is the secretary this year.

Directions to McDaniel College. Travel north on Route 140 to Westminster. Proceed around Westminster on Route 140 through six traffic lights until the divided highway reverts to a two-lane road. Turn left on to Route 31. At the first traffic light turn left on to Route 32 (Main Street). Turn right into the Harrison House parking lot.

Annual section picnic planned for July 13th.

The Maryland Section family picnic will be held from noon to dusk, Saturday, July 13, at the Patapsco State Park (Pavilion #501), McKeldin Area, Marriotsville Road. Entrance to the park is free for seniors (62 & up) and children under 16. There is a small fee for others.

The McKeldin Area has a ball diamond, basketball court, volleyball court, hiking trails, horseshoe pits, wading stream and more, so bring your sports equipment. There will also be a guided nature walk.

The cost for this year's picnic is \$15 per family or \$7.50 per individual. The section will provide hotdogs, hamburgers, soda, beer, condiments, paper goods, cups, utensils, etc. To make the picnic a special food fest, we are inviting participating families to bring other picnic dishes. In deciding what to bring, please use the initials formula shown below, based on the first letter of your surname: A-F, Snack; G-L, Salad; M-R, Side dish; S-Z, Dessert.

To make reservations, please send checks, payable to Maryland Section, ACS, to Alvin Bober, 9800 Middle Mill Drive, Owings Mills, MD 21117, by June 30th. Late reservations can be made by calling 410-323-0803.

April Historical Events in Chemistry

by Leopold May, The Catholic University of America, Washington, D.C.

- April 2, 1953 Fifty years ago on this day, Francis H. C. Crick and James D. Watson mailed a 900-word article on the structure of deoxyribonucleic acid (DNA) to *Nature*.
- April 3, 1902 The Electrochemical Society was organized on this date as the American Electrochemical Society.
- April 4, 1867 A pioneer in clinical chemistry, Otto Folin, was born on this day. He helped develop the Folin-Wu reagent for glucose analysis.
- April 6, 1927 Birthday of Edmond H. Fischer, a researcher on protein phosphorylation as a biological regulatory mechanism. He shared the Nobel Prize in Medicine in 1992 with Edwin G. Krebs for their discoveries concerning reversible protein phosphorylation as a biological regulatory mechanism.
- April 7, 1894 This is the birthdate of Louis P. Hammett, who developed the Hammett equation for the linear free-energy relationship and correlation of changes in chemical properties with chemical structures.
- April 9, 1971 Ignacio Tinoco, Jr., proposed a simple method for estimating secondary structure of ribonucleic acid (RNA) from sequence of nucleotides on this day.
- April 10, 1930 Collins synthesized polychloroprene on this day.
- April 13, 1899 Fifty years ago, Percy L. Julian founded the Julian Laboratories. He co-synthesized physostigmine in 1935 and prepared intermediates for commercial production of steroid hormones. He was born on this date.
- April 15, 1896 The birthday of Nikolai N. Semenov, who was a researcher in chemical kinetics. He shared the Nobel Prize in 1956 with Cyril N. Hinshelwood.
- April 16, 1728 Joseph Black, who was born on this date, developed the concept of latent heat and laid the foundation for modern quantitative analysis.
- April 18, 1924 Quantum Chemical was incorporated as National Distillery Products Corp.
- April 21, 1774 Jean-Baptiste Biot, who discovered optical activity, was born on this date.
- April 24, 1817 Birthdate of Jean C. de Marignac, who discovered gadolinium in 1880.
- April 28, 1753 Two hundred and fifty years ago, Franz K. Achard was born. He invented the process for extraction of sugar from sugar beets and opened first beet sugar factory in 1801. He was the first to prepare a platinum crucible in 1784.
- April 30, 1897 Joseph J. Thomson announced the discovery of the electron as a body smaller than an atom but a constituent of it.

Nominations for the 2003 Maryland Chemist Award

Nominations and recommendations for the 2003 Maryland Chemist Award may be sent to S. Munavalli, 700 Paige Circle, Bel Air, MD 21014, before April 15, 2003. Supportive documentation should include copies of the resume of the nominee and his/her list of publications. A short statement describing the outstanding contributions of the nominee to scientific research, education, industry, technology, etc will be helpful and appreciated.

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50-year membership luncheon scheduled

Congratulations to Maryland Section members who have reached the ACS 50-year membership milestone. This year's 50-year members are Dr. Clarence Broomfield, Dr. Patricia Clark, Dr. Carl Kaiser, Dr. Jean Gillian Smith, and Mr. Johnny Storey Magee.

The Maryland Section has arranged a luncheon to mark the event. The luncheon will be held at Belmont, the ACS retreat just off Route 1 in Elkridge, Maryland, on May 23, 2003, at noon. The afternoon program will include a brief introduction to each new 50-year member and the presentation to each of a plaque that the ACS has issued in his or her honor.

The directions to Belmont and a map are available on the internet at www.acs.org/Belmont. The price of the luncheon for members is \$25; for retired members, spouses and nonmembers, \$20. Anyone wishing to attend should contact Dr. Bober (410-581-5321) or Dr. Shah (410-532-5712) by April 15.



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