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# the Catalyst

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**June 2006** 



A Luncheon with Madeleine Jacobs and Wine Tasting Tour of the Chaddsford Winery in Honor of the 2006 Fifty-Year Members

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# the Catalyst

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# ADVANCE NOTICE

# SEPTEMBER MEETING

Dr. Scott Woodward Sorenson Molecular Geneaology Foundation

University of Pennsylvania Museum THURSDAY, September 21st, 2006

See the SEPTEMBER issue of *the Catalyst* for details, call the Section Office at (215) 382-1589, email PhilaACS@aol.com

# From The Chair

# Deborah E. Kilmartin

Wonderful things happen in June each year! We have our special June meeting, where our new 50-year members are honored with a luncheon. This year we have Dr. Madeleine Jacobs, the Executive Director of the American Chemical Society, as our speaker. I have been honored to hear Dr. Jacobs speak on several occasions and I hope that when you hear her, you will agree that she is a wonderful and engaging speaker. We will hold this meeting at the Chaddsford Winery again this year with the option of taking the winery tour and wine tasting following lunch being one of its attractive benefits. Please consider taking a mental health day and join us!

June is also the month that children get out of school for the summer. As I wondered what to write for my column, I remembered my own summers and how special they were. I was lucky enough to have a stayat-home mom, a rarity in these days. Mom enjoyed our summers as much as or maybe even more than we did, delighting in having someone new to play with, I think looking back. We had our own fruit trees where something always seemed to be in season, and a large yard to play in. I would work the garden with my family each year; talk about organic foods!

My nieces and nephew never seem to enjoy the idleness that I enjoyed in my summers. It's baseball camp, and cheerleading camp, and football camp and who know what else camp. There never seems to be time with parents camp. But what really seems to be missing in my nieces' and nephew's lives these days isn't just time with their parents but a lot of the exploration together that I realize now made my childhood so special. Besides cleaning house each Saturday to the

tunes of belly dancing music (our version of salsa in those days), my parents took the time to show us the world. My dad taught me my first chemical name: I learned that Freon 12 was dichlorodifluoromethane and it was really really cold long before I learned that table salt was sodium chloride. I learned about centripetal forces by swinging a bucket of water over my head, getting drenched many times until I learned to swing it fast enough. We blew homemade bubbles while munching homemade cherry jam sandwiches. We played with dry ice, something nearly unheard of in these days. I guess that's where my fondness for dry ice in my demonstrations comes from.

Many books on crafts and on chemical demos are available at any bookstore and library. Why not pick a few up and wow your kid, grandkid, niece or nephew with them this summer? Make your own sidewalk chalk using the tubes inside toilet paper or some other mold lined with wax paper, plaster of Paris, and tempura paint. Let the kids make their own super bubble formula using one of the many recipes on the Internet. You can start the younger kids on plain dish detergent and water and let older kids research their formulas and try to outdo each other with the biggest and longest lasting bubbles. Let them play with your supervision with additives such as sugar, Karo syrup, and glycerin (in many pharmacies). Have bubble competitions with multiple kids or within the neighborhood.

I plan to work on making ice cream with mine in the next few days, courtesy of directions from fellow member and teacher George Cowperthwaite. To help you out, here's his recipe that you can make using small baggies for the milk components inside larger baggies with the rock salt and ice. With some modifications, mainly in the frequency of temperature measurement and in flavoring, and requiring proper gloves, I intend to use this as part of my hands-on activities in schools

Continued on page 87

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# JUNE MEETING

# THE PHILADELPHIA SECTION, AMERICAN CHEMICAL SOCIETY

# presents

# The Challenges Facing ACS in its 130th Year and Beyond Madeleine Jacobs

Madeleine Jacobs Executive Director, ACS

Luncheon in Honor of the 2006 Fifty-Year Members and
A Wine Tasting Tour of the Chaddsford Winery

Thursday, June 15th, 2006 12:00 Noon

Chaddsford Winery 632 Baltimore Pike (US Route 1) Chadds Ford, PA

Cost: \$45 for tour and lunch; students with reservations and ID: \$23 (starting at 12:15 PM). \$25 for lunch only; students with reservations and ID: \$13 (starting at 12:45 PM)

LUNCHEON RESERVATIONS should be made by calling Mrs. Libby Harper at the Section Office, (215) 382-1589, or emailing PhilaACS@aol.com by 5:00 PM on Thursday, June 8th. Cancellations, if necessary, cannot be accepted after NOON on Tuesday, June 13th. UNCANCELLED RESERVATIONS WILL BE BILLED.

The Board of Directors will meet at 3:00 PM at the Winery.

## **SPEAKER BIOGRAPHY**

Madeleine Jacobs, Executive
Director & Chief Executive Officer
American Chemical Society



Madeleine
Jacobs is Executive
Director and Chief
Executive Officer
of the American
Chemical Society
(ACS), the world's
largest scientific
society, with more
than 158,000 mem-

bers worldwide. She assumed her post on January 1st, 2004.

As Executive Director and CEO of the American Chemical Society, Jacobs has worked closely with the Society's 1,900 employees and the ACS Board of Directors to help reinvent ACS and prepare it to serve its members and the chemical profession during a time of radical change in the chemical enterprise. She is working closely with other organizations around the world to enhance ACS collaboration in the chemical sciences.

In 2005, the ACS had revenues of more than \$400 million and managed approximately \$1 billion in assets, including \$525 million in the Petroleum Research Fund. PRF distributes \$20-25 million a year in peerreviewed research grants, making it one of the largest private philanthropies devoted to chemical research. ACS publishes 35 scientific journals through its Publications Division and numerous scientific literature and patent databases through the Chemical Abstracts Service Division.

Jacobs received a BS in chemistry at George Washington University (with honors and distinction) in 1968. She completed course work for a MS in organic chemistry at the University of Maryland in 1969. Jacobs received an honorary Doctor of Science from George Washington University in 2003.

Prior to her selection by the ACS Board of Directors as Executive Director and CEO,

Jacobs served for eight and a half years as Editor-in-Chief of *Chemical & Engineering News* magazine, the weekly news magazine of the chemical world published by ACS, and two years as Managing Editor. She has held other senior management positions in a wide variety of scientific and educational organizations including the National Institutes of Health, the National Institute of Standards and Technology, and the Smithsonian Institution, where she served as the director of Public Affairs at the world's largest museum complex.

Major honors include the Smithsonian Institution Secretary's Gold Medal (1993), the New York Academy of Sciences Women History Month Award (2001), the 75th Canadian Society for Chemistry Conference Lecturer (2002), the ACS Award for Encouraging Women into Careers in the Chemical Sciences (2003), and the American Crystallographic Association Public Service Award (2004). A much-honored science journalist, she has also received more than three dozen awards for outstanding science writing from national organizations. She is a Fellow of the American Association for the Advancement of Science and a member of the Board of Directors of the American Chemical Society and the Council for the Advancement of Science Writing. She is also a member of the Board of Governors of the New York Academy of Sciences.

Jacobs' professional interests include trends in the chemical industry, the public image of chemistry, employment trends, minority representation, and gender equality of scientists. She has given speeches on these topics for more than 30 years and is a sought-after speaker.

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**Concepts:** freezing point depression, colloids

**Demonstrations:** ice cube and string: using salt the string becomes "stuck" to the ice cube.

Milk and lemon juice concentrate, adding acid to milk precipitates out milk solids.

**Materials:** whole milk, 1 cup; vanilla extract, 1/2 tsp; sucrose, 1/4 cup; 1 qt Ziploc type baggie; 1 gal Ziploc type baggie; gloves or mittens (optional); thermometer; rock salt, 1 cup; ice, 1/2 gallon; 2 cups; 2 spoons; sink or basin; water.

#### Procedure:

- 1. Place the milk, vanilla, and sucrose in the small Ziploc bag. Try to remove as much air as possible from the bag before sealing it. Mix the contents by shaking and kneading the bag without breaking it open.
- 2. Check that the bag is well sealed then place it inside the large Ziploc bag.
- 3. Place the ice into the large Ziploc bag, add 1 cup of rock salt to the ice. Close the large Ziploc bag.
- 4. Gently roll, knead, or toss the large Ziploc bag for 10-15 minutes. As the bag gets cold, hold the bag by the corners or wear the gloves. Take care not to break the bag open.
- 5. After 10-15 minutes, place the large Ziploc bag in a sink or basin. Carefully open the bag and remove the smaller Ziploc bag.
- 6. (Optional) Record the temperature of the salt-ice water mixture.
- 7. If the ice cream is solid, proceed to step 8. If the ice cream is not solid, then place it back into the salt-ice water mixture and continue cooling. Additional salt or ice may have to be added.
- 8. Rinse the saltwater off the outside of the ice cream bag.
- 9. Transfer the ice cream to cups and enjoy.

After all, do you want your kids to remember the summer with Mr. Smith at baseball camp or the summer the neighborhood children enjoyed bubble wars?

#### **NEWS ATOMS**

Audra Wolfe joins the Chemical Heritage Foundation as editor of its news magazine *Chemical Heritage*. Ronald S. Brashear is named director of the Othmer Library of Chemical History at the foundation.

### **HONORS**

Gary Molander, Allan Day professor of chemistry at the University of Pennsylvania, received a Lindback Award for distinguished teaching at Penn. The awardees are selected by a panel of previous Lindback winners and current students.

#### **DEATHS**

Charles J. Levesque, retired chemist formerly with Rohm and Haas, March 28th at 93. He worked for Rohm and Haas for over 30 years in process R&D and helped develop anti-tank rocket fuel for the Army's Redstone Arsenal. After retiring in 1971, Levesque became a visiting professor of chemistry and director of continuing education for Ursinus College for the next ten years. He served on several committees of the Philadelphia Section and was president of the Philadelphia Organic Chemists Club in the 1940s.

Have a contribution for News Atoms? Email Philcatalyst@aol.com.

# ARE YOU INTERESTED IN VOLUNTEERING FOR ACS ON THE LOCAL OR NATIONAL LEVEL?

We're drawing up the slate of candidates for the fall 2006 election. Specifically, there are openings for directors, councilors, the treasurer and chair-elect. If you would like to run, please get in touch with with Libby Harper in the section office at PhilaACS@ aol.com or 215-382-1589.

### **BOOK REVIEW**

Alan Warren

*In the Footsteps of the Bard* by Andrew Roxburgh McGhie. 122 + xii pages, perfect bound, 6 by 9 inches, soft covers, Author House, Bloomington IN, 2004, ISBN 1-4184-3038-2, \$9.50 plus shipping. Order toll free 1-888-280-7715.

Most researchers have a life beyond the lab, and Andrew McGhie, associated with the University of Pennsylvania's Laboratory for Research on the Structure of Matter, has spent many years creating humorous verse. Although most poems and ditties were precipitated by events such as birthdays, graduations, retirements, marriages, or the birth of children, others are devoted to quite disparate topics.

This book is a selection from the hundreds of poems written over many years and includes a few limericks (that can be read to children!). An example of one such:

There was an old man from Piscataway Who felt the wild wind snatch his hat away He was fit to be tied For no matter how hard he tried It kept blowing this way and that-a-way.

Although chemistry is seldom the focus of McGhie's delightful rhymes, he occasionally regales the reader with a sobering observation such as the beginning of his poem "pH 5 to 3."

The dogwood he has lost his bark
The pussy willow her miaow
The spurs have fallen from the lark
The poplar is not so now
For S-O-2 is everywhere
Polluting far and wide
Invisible as the wind borne air
Death follows swiftly on its heels.

The final section of the book is a wonderful collection of copyrighted song lyrics, a few of them set to recognized tunes. This book is a delightful read and has something of interest for everyone. In addition to the print version there is also an electronic version available. Details can be found at the publisher's website www.authorhouse.com



Volunteers taking a break from hands-on activities during a visit to St. Christopher's Hospital for Children in February, 2006, I to r: Jeffrey Schubert of Villanova University; Grace Hall, retired chemist; Jaime Gonzalez and Karen Chiang, also of Villanova. (Photo reprinted from May issue with corrected caption.)

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# **Honoring Our 50-Year Members**

At our June Section meeting, we honor our 50-year members, presenting them with a certificate and luncheon at the Chaddsford Winery in recognition of their long and faithful service to the Society. Those being honored include the following:



### J. Russell Bishop

After graduating from Lansdale, PA High School in 1938 I attended Ursinus College in Collegeville, PA where I graduated with a BS in Chemistry in May 1942.

I began my career in chemistry that same month with American Chemical Paint Co. (ACP) in Ambler, PA. ACP was a small specialty chemical company with an Agricultural Chemical Division and a Metal Treatment Division. My employment began in their Ag Chem. Division, which was a pioneer in the field of Plant Growth Regulators and Herbicides. I was involved in the synthesizing of small batches of plant growth chemicals such as  $\alpha$ -naphthalene, acetic acid, its amide,  $\beta$ -naphthoxy acetic acid and other chemicals used in products such as Rootone, Transplantone, Amid Thin-W and others.

In the late '40s I was involved in research leading to the discovery and patenting of the herbicide activity of 2,4-D and 2,4,5-T. This discovery led to the sale of many 2,4-D and 2,4,5-T products as the Weedone, Weedar and others

In 1951, I was the co-author, with J.M.F. Leaper, of a pioneer publication involving the "structure-activity" relationships among the mono, di, and tricholor phenoxy acetic acids. It was entitled, "Relationships of Halogen Position to Physiological Properties in the Mono, Di, and Trichloro Phenorxy Acetic Acids," published in *Botanical Gazette* Vol. 112, No. 3, March 1951.

Many other publications and patents followed in my 40 years with the company. Another landmark discovery in my career was the synthesizing and patenting of the chemical 3-amino-2,5-dichlorobenzoic

acid as a composition of matter and as a herbicide. It was marketed as Amiben, the first commercially available herbicide for use in soybeans.

During the later part of my career the discovery of the growth regulator properties of 2-chloro-ethyl phosphonic acid resulted in the patenting and marketing of it as "Ethrel." It is used throughout the world today to increase yields in cotton, pineapple, rubber trees and many other crops.

My entire years as a research chemist in the Ag Chem. world were spent with ACP although its name changed many times. It was changed to Amchem, then to Rohrer-Amchem, then to Union Carbide Ag Div., to Rhone-Poulenc and today the remnants are part of Dow Chemical. Likewise, my title changed from Research Chemist to finally Director of R&D. I retired from U.C.C. in 1982.

Ienjoyedmy many academic, governmental, and industrial colleagues in the field of AG Chemistry – it was a thrilling field to pioneer in!

#### Dr. Gerald S. Brenner



I am currently a consultant focusing primarily on the pharmaceutical industry and providing technical guidance to attorneys in the area of intellectual property.

My chemistry education started at the City College of New York where I received a BS in Chemistry. Upon graduation, I continued studies at the University of Wisconsin where I was awarded a PhD in organic chemistry. My graduate work involved the elucidation of organic reaction mechanisms.

Upon completion of my PhD, I joined the research laboratories of Merck in Rahway, NJ

and was put to work in the Process Chemistry department with responsibility for developing syntheses of new chemical entities displaying promising pharma-cological activity. After 10 years in this position, I moved to Merck's research facility in West Point, PA. Over the next 25 years until my retirement in 1995, my responsibilities spanned a wide spectrum of activities related to drug development including physicochemical characterization, pharmaceutical analysis, biopharmaceutics and formulation development.

Since retirement my life has been a wonderful mix of professional, family and leisure activities. My wife of 47 years (Linda Byer of Oak Park, IL) and I spend considerable time with our 3 children, their spouses and 12 grandchildren. I personally enjoy gardening, nature, learning and travel. My wife and I have resided in Plymouth Meeting, PA for the last 35 years.

#### Dr. D. Peter Carlson



D. Peter Carlson was born and raised in Red Wing, MN, where he first became interested in pursuing a career in chemistry. He graduated from the University of Minnesota in 1953

with a BS in Chemistry. He then attended Carnegie-Mellon University in Pittsburgh where he obtained his MS (1956) and PhD (1957) in Organic Chemistry. Upon graduation from Carnegie, he accepted a research position with E. I. duPont de Nemours and Co. at the Experimental Station in Wilmington, DE. Except for a 12-year period in the '70s and '80s, when he worked on fluoroplastic research at the DuPont laboratory in Parkersburg, WV, he spent the remainder of his 38+ years career at DuPont's Experimental Station Laboratories.



Undergraduate January Poster Session winners: L. to R.: Kendall Mahanna, Kerry Salandria, Allison Pymer, Huyen Tran, and Ryan Centafont.



Graduate winners: L. to R.: Alpa Patel, Esther Lee, Catherine Faler, Sara E. Mason, and Mohamed Aflal. (This photo and the one above are reprinted from the March issue with corrected captions.)

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During most of that time he was involved in research and development in the areas of fluorocarbon monomers and polymers. His work led to the commercialization of a new fluoroplastic called "Tefzel" ETFE resin. He also carried out research on other fluoroplastics such as "Teflon" FEP and PFA. Later, his work in the area of fluoroelastomers laid the groundwork for the development of a new class of fluoroelastomers, which were recently commercialized under the trade name "Viton" APA.

Since his retirement from DuPont he has been kept busy with his interests in music (choral singing), genealogy, traveling and grandchildren, among others. In January 2006, he and his wife Shirley celebrated their 50<sup>th</sup> wedding anniversary. They have four children and six grandchildren. They reside in Chadds Ford. PA.

#### Dr. Charles W. Fleischmann



Charles was schooled in New York City as was his wife, Claudette. He received a BS (Chem.) from Queens College, and an MS (Chem., 1965) and a PhD (Chem., 1970) from

the Polytechnic Institute, Brooklyn, under a NASA Traineeship. He also took graduate courses at the University of Denver (1959-1970). He satisfied an ROTC commitment in the Air Force (1959-1962) as a technical instructor (Denver); other assignments: ammunitions officer, Korea, and contract monitor, Cape Canaveral.

His academic research was on crystalline magnetic anisotropy (MS) and electrosynthesis of tungsten bronzes from molten salts (PhD). His industrial experience was mostly on electrochemical power sources, at the bench with Leesona (Great Neck, NY), and Mallory (Tarrytown, NY), NL Industries (Hightstown, NJ); and in technical management with C&D Batteries (Plymouth Meeting, PA), Honeywell (Horsham, PA),

and Exide (Reading, PA). In 1991, he joined Advanced Technology & Research (ATR) (Burtonsville, MD), under a contract to the Navy, to consult (on bases in the D.C. area) to the Navy's batteries group. Since 2002, he continues to work for ATR, part time. In 2005, he joined Hydrocarbon Publishing Co. (Frazer, PA), part time. Charles enjoys gardening and his six grandchildren.

# Dr. Philip George



After an early start in 1927 with a Gilbert's chemistry set, I pursued more traditional studies at St. Michael's School, Maidstone, Kent, England, and at Maidstone Grammar School from which I won a

major open scholarship to Christ's College, Cambridge, that led in 1940 to a BA. During the war years I was engaged in research, first for the Petroleum Warfare Department, and then for a special committee of the Chemical Society (London) that was considering the feasibility of producing edible fatty acids by the oxidation of long-chain liquid hydrocarbons. In later years this became the basis for my PhD thesis.

The use of heavy metal catalysts introduced me to the remarkable specificity of hemeproteins, which shortly became my first major research field. A college fellowship (1944) supported the work at the Molteno Institute for Parasitology in Cambridge, and a Rockefeller Fellowship (1951) supported the work at the Johnson Foundation for Medical Physics at the University of Pennsylvania. Meanwhile, I had held the Brotherton Research Lectureship in Physical Chemistry at Leeds University in Yorkshire, and an Assistant Directorship of Research in the Department of Colloid Science back in Cambridge. These faculty appointments were followed by a Professorship in Biophysical Chemistry in the Chemistry Department at Penn (1955). In 1972, with

a shift in research interest, I moved over to the Biology Department, where I remained until retirement in 1987. In particular, I came to question the simplistic explanation of the reactivity of ATP and like molecules as "high-energy" compounds, focusing instead on the reactions in their entirety.

My administrative activities at Penn have included serving as the first Director of the General Honors Program for especially able students in the Undergraduate College, and as Group Chairman for Molecular Biology and the newly created History and Philosophy of Science Program, with the support of Swarthmore College, the American Philosophical Society, and the Smithsonian Institution.

In 1970-71, I served as "Chief of Party" for the Penn team at Pahlavi University in Shiraz, Iran, which was assisting the reorganization of the older Technical Institute in becoming an American-style university.

In post-retirement, I joined a research group at the Fox Chase Cancer Center with the title "Visiting Scientist," carrying out molecular orbital calculations on benzene and polycyclic aromatic hydrocarbons. Classical resonance energies were recognized as reaction energies set up with structural elements more or less matched in reactants and products. Strain energies in non-aromatic ring molecules were regarded similarly.

Had I not become a chemist, I would have opted for archaeology and anthropology. These latent interests have been well-met by working as an inventory and accessions volunteer in the University Museum – Tuesday and Wednesday mornings in the Near East Section and Thursday mornings in the African Section

#### Dr. James H. O'Mara



Born in Michigan, Dr. O'Mara grew up in the Washington, D.C. area and graduated from George Washington University with BS and MS degrees in

chemistry. For six years he was employed at the National Bureau of Standards (now the National Institute of Standards and Technology) in Washington, D.C. working on determining the molecular weights and molecular weight distributions of high polymers. He then left government service to attend Duke University and received the PhD degree in physical chemistry from Duke in 1968.

He was then employed as a senior chemist at the Rohm and Haas Co., Spring House, PA Research Labs in the Petroleum Chemicals Research Department for the next 27 years. His work centered primarily on evaluation of engine oil additives and viscometric properties of engine oils, especially at low and high temperatures. For over 20 years he also represented the company in ASTM International Committee D02 (Petroleum Products and Lubricants). Today he is an honorary life member of ASTM and Committee D02

Now retired, he continues his life-long hobby of stamp collecting and is active in the group that presents the yearly Philadelphia National Stamp Exhibition. His other interests include national and international travel and membership in SABR, a national group that studies the history of baseball.

### Sydney W. Porter, Jr.

I've had a love affair with Chemistry since the age of 10 when I discovered how easy it was to create explosives from simple chemical compounds. My chemistry career was temporarily cut short at the age of 12 when I created more than two dozen one-foot craters in the rear driveway of my home in Mount Washington, Baltimore. Chemistry was and is fun.

My first 'real' job after graduate school was as a physical chemist for the Glenn L. Martin Aircraft Company Nuclear Division, Middle River, Maryland. Although working as a physical chemist on the classified Vanguard satellite project, my official job title was 'Nuclear Engineer.' The study of radiation effects on rocket propellants fascinated me and led to further graduate study in radiation

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measurements and radiobiology. Since I was on the bottom of the totem pole in my first few jobs, I was often given responsibilities in radiation protection since none of the other chemists seemed interested. My second job was at Electric Boat Company in Groton, CT where I was a Radiochemist but later became Coordinator of Health Physics for all of the prototype Navy nuclear submarines.

Successive challenging jobs in health physics required a strong background in radio analytical chemistry and sample preparation for environmental radioactivity counting measurements. I am never so happy as when I am in a laboratory applying the many chemistry disciplines to practical radioactivity counting techniques. Owning my own consulting company allows me to be a quasi chemist into my golden years!

#### Dr. Donald Nellis Robinson



I earned a BA in chemistry at Cornell University in 1955 and a PhD in organic chemistry at University of Minnesota in 1959. From 1959-1964, I was a Research Chemist at DuPont Company in Wil-

mington, DE; from 1964-1967, I was a DuPont Developmental Chemist in Louisville, KY. In 1967-1969 I became an Assistant Professor of Chemistry at Kentucky Southern College, serving as Acting Chairman of Chemistry from 1968-69.

Moving to King of Prussia in 1969, I joined Pennwalt Co. (which became Elf Atochem, then Arkema) as Senior Research Chemist, then Staff Chemist. There I authored or co-authored 10 patents in the field of thermoplastics and elastomers, including the commercial product "KYNAR."

After retirement in 1996 I have spent much time as a volunteer pianist, guest organist and choir singer in my church (Trinity United Church of Christ, Collegeville) and in Dock Woods Community, Lansdale, where I presently reside.

I have been married to Joan Lundy Robinson for 45 years; we have two sons and four granddaughters. My hobbies are piano and organ playing, travel, gardening and photography.

## Dr. Stephen T. Ross



"You're still working?" The questioner draws close, expecting to verify clear symptoms of dementia. Where is your prepared list of glib and witty responses to leave your audience relieved

and amused simultaneously? Well, a smile and nod will have to suffice for now. Chemistry is still a challenge and fun even after 50 years! What led to this chemist's choice? Youthful reading of the exploits of legendary scientists and chemists, an A.C. Gilbert chemistry set, a Michigan PhD as our high school Chem. Teacher, study at the University of Illinois with Marvel, Corey, Taylor. An Army stint in Korea intervened and then to Johnson and Johnson for surfactant work and night program study at Rutgers. Full-time then at RU with Don Denney on organophosphorus chemistry and a first publication leading to a PhD. Then to the dreamed-of-goal - Medicinal Research at Smith, Kline and French Labs in Philadelphia. Now, many programs, compounds and corporate mergers later, to GlaxoSmithKline's labs in Upper Providence, PA. Has it been occasionally a roller-coaster ride? Must admit! Do you have a "Wonder Drug" with your initials? No, not yet! But the joy of the chase still calls! Chained to the bench? Hardly – 50- plus years of marriage to dear Jean, two children and three grandsons, home ownership, tennis, softball and swimming. Thank You, God, for these precious gifts!

### Dr. Michael C. Seidel



Dr. Seidel was born in Berlin, Germany. After graduating from the Maxgymnasium in Munich, he studied chemistry at the University of Munich. In 1956

he earned an MS in organic chemistry as a Fulbright scholar at Cornell University with Jerrold Meinwald. Back in Munich he completed a Dr. rer. nat. with Rolf Huisgen, where he made seminal contributions in the area of 1,3-dipolar addition chemistry. A year at the University of Illinois with Harold Snyder on a postdoctoral fellowship followed.

In 1961 he joined Rohm and Haas Company, working in R&D until 1977, first in pesticides and then in an ill-fated pharmaceutical venture there. From 1978-1988 he was a member of the New Ventures group of Rohm and Haas. He took early retirement in 1989 and started Matreya Inc., a company preparing and supplying high quality lipids and related reagents for the research community. This venture was a pleasant return to the lab bench made more interesting by the challenge of developing a business. At age 68 he retired once again, selling the company. He is now engaged in writing biographies of family members and translating family papers for his two sons and four grandchildren. The winter months are mostly spent in California, close to his children who are totally smitten by this sunny state.

#### Dr. Gilbert Witschard

I received my BS in Organic Chemistry from Queens College in New York City and my PhD in Organic Chemistry from the University of Pittsburgh. I worked for Hooker Chemical Corp. and subsequently for Occidental Chemical. I worked as a research chemist for 20 years at the Research Center at Grand Island, NY. I transferred to the OxyChem vinyl plant in Burlington, NJ and worked there for 6 years in various capacities, including Compound Development Manager before I retired. I worked for Rimtec Corporation, in Burlington, NJ for seven years as an outside contractor.

My wife (Betty) and I have three children and three grandchildren. We enjoy traveling and in the last four years have gone to Alaska twice, Portugal, Ireland, Eastern Europe, Brazil and Costa Rica.

I have several hobbies including gardening, photography, model railroading and shooting.

I enjoyed being a chemist and especially research which I found to be extremely stimulating.

#### Other 50-Year Members

Also celebrating 50 years of membership: Dr. Victor Hugo Auerbach, Robert E. Barber, Irwin Becker, Wira R. Bilinsky, Ray A. Dietrich, Dr. M.P. Fisher, Dr. Robert D. Fox, Dr. James Philip Friend, Dr. Jack G. Kay, Carl Joseph Lindemann, Oliver G. Ludwig, William D. Melcher, Dr. Andrew Mercurio, Dr. Walter A. Platek, Joseph M. Platt, Robert Anthony Przedzial, Robert Raymond Rowe, Harold A. Sorgenti.

# 2005 Nomination Campaign Winner - Nurtay Urdabayev

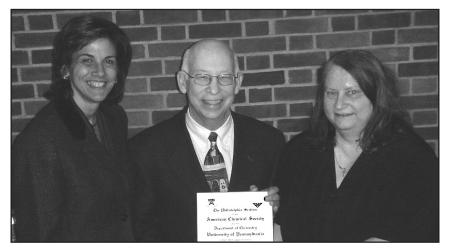
A graduate student at Bowling Green University, Nurtay Urdabayev, is the winner of the American Chemical Society (ACS) 2005 Nomination Campaign. Mr. Urdabayev won his prize by submitting the most names of prospective new members of the ACS. As the winner he will receive a trip to the 232<sup>nd</sup> National Meeting in San Francisco, CA, September 2006.

Born and raised in Shymkent, Kazakhstan, Nurtay says while in 8<sup>th</sup> or 9<sup>th</sup> grade he read a Russian translation of Isaac Asimov's *World of Carbon* ... "this event predetermined my career interests and changed my world."

Nurtay is currently working towards his PhD at the Center for Photochemical Sciences at Bowling Green State University in OH, but in the meantime he has accepted a job offer at Surtec, Inc. in Valparaiso, IN.

Congratulations and Good Luck to Nurtay Urdabayev our 2005 Nomination Winner!

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Presentation of Edgar Fahs Smith Scroll: Dr. Marsha Lester, Chair of the Department of Chemistry, University of Pennsylvania (left) and Deborah Kilmartin, Chair of the Philadelphia Section, presenting the Edgar Fahs Smith Scroll to 2006 lecturer Dr. Robert G. Bergman on March 23<sup>rd</sup>.

#### **BOOK REVIEW**

Alan Warren

Catalytic Antibodies, ed. Ehud Keinan. 586 + xxx pages, hardbound, 7 by 9 3/4 inches, Wiley-VCH, Weinheim, Germany, 2005, ISBN 3-527-30688-9, \$215.

Drawing on the expertise of pioneers in the science of antibody catalysis, each chapter is authored by specialists in a particular field. The book opens with the immunological evolution of catalysis that parallels enzyme evolution. The achievements in the field are analyzed and some challenges are identified such as optimizing catalytic efficiency and promoting more demanding transformations. Theoretical studies of antibody catalysis and such tools as model systems and computational investigations set the stage for a fuller understanding of the field.

Further chapters examine the subject from an historical perspective, review the use of catalytic antibodies in the synthesis of natural products, describe structural studies to determine mechanisms, and suggest screening studies. Other topics addressed include medicinal application of catalytic antibodies, reactive immunization, catalyzing photochemical reactions, and transition state mimicry vs. enzymes.

Polyclonal catalytic antibodies play an important role in studying reactions and understanding how the immune system works. Another chapter looks at the production of monoclonal catalytic antibodies and the final chapter suggests that catalytic antibodies are important mediators of immunological defense, regulation, and autoimmune dysfunction. The editor admits that this volume does not cover the entire science of catalytic antibodies, but hopes that it will stimulate additional research.

References appear at the end of each chapter and a subject index concludes this important volume that should be of interest to medical researchers, biochemists, organic chemists, and students of biotechnology in general.

# CHEMICAL CONSULTANTS NETWORK

Visit our web page at www. chemconsultants.org

# Annual Picnic Followed by a Members Forum

# What are the CCN's Critical Success Factors?

**Date & Time**: Wednesday, June 14<sup>th</sup>, 2006. Networking, 5:30 PM; Picnic, 6:30 PM.

**Reservation:** To make or cancel a dinner reservation, email CCNReservations@ aol. com or call the Section Office at (215) 382-1589. Fee, including food and beverages, is \$30. Early Bird discount price is \$20 if reserved by Thursday, June 8th.

**Location:** The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA.

# 580th Board of Directors Meeting University of Pennsylvania Philadelphia, PA Thursday, March 23rd, 2006

This is the edited version of the minutes. A full copy can be obtained from the Section Office.

**Present:** D. Kilmartin, V. Tortorelli, D. Cichowicz, T. Straub, C.J. Bruner, A. DeMasi, D. Cook, E. Davis, K. Shaginaw, J. Nikelly, D. Thomas, D. Voet.

**Excused:** C. Bentzley, R. Gates, J. Summers-Gates, M. Cichowicz, Sr. R. Mulligan, A. Templeton, G. Molander, C. Rulli.

### Also Present: L. Harper.

The meeting was called to order by Chair Kilmartin at 4:18 PM.

**February minutes:** The minutes of the February 2006 meeting were discussed, and a motion was made and seconded to approve; minutes were unanimously approved.

#### **COMMITTEE REPORTS:**

**Philadelphia Section Awards:** D. Cichowicz reported on the status of several Philadelphia Section Awards. Jeff Winkler has notified Dave that three nominees have been selected for the 2007 Edgar Fahs Smith Lectureship. The Board

requested that Dave let him know that the first nominee is acceptable. April 3<sup>rd</sup> is the deadline for the Philadelphia Section Award.

#### OFFICER REPORTS:

Chair: D. Kilmartin announced that Dr. Scott Woodward will be the speaker at the University of PA Museum of Archaeology. Also, Deb has brochures for 2006 Chemists Celebrate Earth Day; there is a contest for K-12 (illustrated haiku) and college (video). The 2006 summer school program in Green Chemistry will take place in Washington, D.C. from June 22-26. Applications are available. The Section has received a check for \$27,955 from National (local section allotment).

Chair-Elect: D. Cichowicz is still waiting for information on National's On-Line balloting process. He pointed out that we can have cumulative voting for Directors according to the bylaws. He also discussed the January meeting for 2007. The research poster session went well last year at Villanova. It is expected to be repeated for 2007, Dave will work out budget details.

### Secretary (A. DeMasi): no report.

**Treasurer (C.J. Bruner):** Along with the allotment which Deb mentioned, Carol Jean noted that we also received a check for \$5,608 from National for the 2004 National meeting held in Philadelphia. The Delaware Valley Science Council sent a thank you note for the support we gave this year. Motion to approve the Treasurer's report passed unanimously.

#### OTHER BUSINESS:

- 1. A. DeMasi mentioned that a reception was held at CHF honoring Katie Hunt (President Elect, ACS) and James Burke (Chairman of the Board, ACS). Anne chaired a teleconference held prior to the Council meeting in Atlanta. She will represent Rohm and Haas Company as the Corporation Associates liaison.
- 2. K. Shaginaw reported that the Expand Your Horizons program was a huge success. 112 students representing 37 schools attended. There were 42 volunteers for the event.
- 3. D.Cichowicz mentioned that the local Section dues remain at \$10/year. This topic will be addressed at a later meeting.
- 4. The Board discussed potentially piloting the use of teleconferencing at the June meeting.

There being no other business, the Board meeting was adjourned at 5:18 PM.

Respectfully submitted, Anne S. DeMasi, Secretary

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Committee details can be found at: http://www.membership.acs.org /p/philadelphia

or by calling Mrs. Libby Harper at the Philadelphia section office 215-382-1589.

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#### PHILADELPHIA SECTION, ACS 2006 CALENDAR OF EVENTS

June 4-7	ACS Middle Atlantic Regional Meeting (MARM)	Hershey, PA
June 14	Chemical Consultants Network	Cynwyd Club Bala Cynwyd, PA www.chemconsultants.org
June 15	Madeleine Jacobs, Executive Director,	Chaddsford Winery
l	ACS	Chadds Ford, PA
l	Fifty-Year Member Recognition	
Sept. 10- 14	ACS Fall National Meeting	San Francisco, CA
Sept. 21	Dr. Scott Woodward	University of Pennsylvania
	Sorenson Molecular Geneaology	Museum of Archaeology
l	Foundation	and Anthropology
l	DNA of Royal Egyptian Mummies	Philadelphia, PA
Oct. 19	Philadelphia Section Award	TBA
Oct. 21	Expand Your Horizons Mini-conference for Sixth Grade Girls	Chestnut Hill College
Oct. 22–	National Chemistry Week	All over the Delaware Valley
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Nov. 16	Ullyot Public Affairs Lecture	Chemical Heritage
	Dr. Ralph Cicerone, President,	Foundation
	Dr. Ralph Cicerone, President, National Academy of Sciences	Foundation Philadelphia, PA
Dec. 9		- 0

