Dr. Zafra Lerman

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ADVANCE NOTICE

JUNE MEETING
Madeleine Jacobs, Director and CEO, ACS
and
50-Year Awards Luncheon and Wine Tasting at the Chaddsford Winery
THURSDAY, June 15th, 2006

See the JUNE issue of the Catalyst for details, call the Section Office at (215) 382-1589, email PhilaACS@aol.com
First of all I would like to thank Dr. Marsha Lester and the Chemistry Department of the University of Pennsylvania for their fine social hour and sponsorship of the Edgar Fahs Smith Memorial Lecture in March. Dr. Bergman is an accomplished speaker; many of you missed a wonderful event.

Second, our May speaker is Dr. Zafra Lerman, an educator recently honored by the British Royal Society of Chemistry for her distinct teaching method. It would be wonderful if you and all the educators you know were to show up for her lecture. She teaches that scientific principles can be expressed through the arts and it’s in artistic expression that non-science majors can embrace the sciences and make them a part of their lives, not just passing a course.

Next, in June we will honor our 50-year members with a special luncheon at the Chaddsford Winery. Our speaker will be Madeleine Jacobs, the Executive Director of the ACS. A wine tasting and a winery tour will complete the day. All those able to attend are certainly welcome to do so. September will also be a special meeting. For the first time in five years, we will be meeting in the Lower Egyptian Room of the Museum of Archeology and Anthropology of the University of Pennsylvania. Our speaker will be Dr. Scott Woodward, featured on the History Channel for his work on extracting and analyzing DNA from the Egyptian royal mummies, including the father of King Tut. Space is limited for this event, so only the first 100 to sign up will be admitted. I hope to have among that hundred some of the student affiliate groups and high school students I have met in my travels doing demos and hands-on in the schools. Hope you will join us!

Finally, to paraphrase the old JFK saw: “Ask not what Philly ACS can do for you, ask what you can do for Philly ACS.” As Chair, I am getting all sorts of comments, which I generally welcome, but I feel powerless in the face of people informing me, “Choosing a chemical career was the biggest mistake of my life.” More than one person has taken the time and effort to tell me some variation of this, I don’t know why. And surprisingly, not one has told me what happened or didn’t happen to make them feel this way. What can I do, or for that matter, what could ACS have done for these people to change this statement? I’m not sure. But what I am sure of is that none of these people are, or have been, active in the local Section in the last 25 years. Is there a connection here? I think so. As I keep saying this year, Enhance your Career—Volunteer. It might be that had these people taken part in Section activities they might have learned the skills and found the mentoring that can turn a job into an exciting career!

Invitation for Feedback on the ACS Approval Guidelines

The ACS Committee on Professional Training (CPT) is undertaking a major revision of the ACS Guidelines for approval of bachelor’s degree programs in chemistry. The goals of revising the ACS guidelines include: simplifying the ACS guidelines for approval of chemistry programs; allowing greater flexibility for departments to develop certified degree tracks; encouraging department-initiated innovation and curriculum improvement and, providing faculty and infrastructure requirements that support excellent chemistry programs.

The overview of the proposed revisions to the ACS guidelines that CPT is considering can be accessed at www.chemistry.org/education/cpt.

CPT invites you and your department to respond to these proposed changes by June 1, 2006, and thereby contribute to the ACS guidelines revision process. Please send comments to CPT by email to cpt@acs.org with a subject of “ACS Guidelines Revision.”
THE PHILADELPHIA SECTION,
AMERICAN CHEMICAL SOCIETY

presents

Innovative Teaching Methods
to Make Chemistry Accessible to All

Dr. Zafra M. Lerman
Columbia College Chicago

Thursday, May 25th, 2006
7:00 PM

McCall Meeting and Conference Center
201 North Lynn Boulevard
Upper Darby (Highland Park section), PA

6:00 PM Dinner in the Windows Room
Dinner cost: $35.00; students with reservations and ID: $18.00

DINNER 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, May 18th. Cancellations, if necessary, cannot be accepted after NOON on Tuesday, May 23rd. UNCANCELLED RESERVATIONS WILL BE BILLED. For directions, visit www.meetatmccall.com/map.html.

The Board of Directors will meet at 4:00 PM in the Putting Green, McCall Center.
Abstract: Innovative Teaching Methods to Make Chemistry Accessible to All. In the Science Institute at Columbia College Chicago, we developed over the past 25 years a unique method to teach and assess students in chemistry. This student-centered method uses the arts as a vehicle to learn chemistry, and has been proven successful at all levels: grades 7-12, college non-science majors, and teachers. The class moves from the concrete and relevant to the abstract. Introducing the familiar topic of nuclear power plants, for example, permits introduction of the atom and the nucleus. Students visualize the scientific concepts by using the media of their choice, and they are encouraged to incorporate their interests, hobbies, talents and cultural backgrounds. These visualization projects have taken many forms, including dance, music, visual and performing arts, and computer animation, to name only a few. An advantage of these projects is that they can be used as an alternative assessment method, in which the entire class participates in the assessment process in a constructive way. These methods have been adopted by many schools and universities in the US and around the world. Examples will be shown in the lecture.

Biography: Zafra Lerman is Distinguished Professor of Science and Public Policy, and Head of the Institute for Science Education and Science Communication at Columbia College Chicago.

She received her PhD from the Weizmann Institute of Science, and conducted research in isotope effects at Cornell University, Northwestern University, and at the Swiss Polytechnic in Zurich, Switzerland.

Prof. Lerman developed an innovative approach of teaching science to non-science majors, which has received national and international recognition. She has been invited to lecture on her methods all over the US and in many other countries, including Brazil, Turkey, Hungary, Australia, England, Russia, Germany, Mexico, China, Japan, Taiwan, Cuba, Egypt, Kenya, South Africa and Israel. She has received over $5,000,000 in the past few years to work with Chicago inner-city teachers, parents and students.

Prof. Lerman received the 1998 American Chemical Society Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences. In 1999 she received the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring from President Clinton. In 2000 she was presented with the World Cultural Council’s Jose Vasconcelos World Award for Education in Johannesburg, South Africa (the first international award presented in the new democratic South Africa), and in February 2001, she was elected a Fellow of the American Association for the Advancement of Science. She is the 2002 awardee for the James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry from the American Chemical Society — Northeastern Section, and is the 2003 recipient of the American Chemical Society’s Charles Lathrop Parsons Award in recognition of outstanding public service to chemistry. The Royal Society of Chemistry in England awarded her with the 2005 Ronald Nyholm Lectureship – Education Division award, and the New York Academy of Sciences presented her with the 2005 Heinz Pagels Human Rights for Scientists Award. She has also been featured by newspapers, magazines, and radio and television stations around the world.

Prof. Lerman remains very active professionally with national and international associations in the fields of science, science education, and scientific freedom and human rights. It remains Dr. Lerman’s tenet that free and equal access to science education is a basic human right that belongs to all.
NEWS ATOMS

AWARDS AND HONORS

Vaclav Vitek, professor of materials science and engineering at the University of Pennsylvania, was elected to the National Academy of Engineering.

Joel R. Huff is honored with the ACS Alfred Burger award in medicinal chemistry for his work on protease inhibitors at Merck Research Laboratory. He received the Philadelphia Section award in 2002.

Franklin A. Davis, professor of chemistry at Temple University, will receive an ACS Arthur C. Cope Scholar award for his work in developing organic reagents based on sulfur and fluorine complexes.

DEATHS

Kenneth A. Kun, former research chemist with Rohm and Haas, July 2004. Following his research and international division work at Rohm and Haas he went on to become research director of a water treatment company, vice president of R&D for a photographic films firm, and then president and CEO of Syracuse Research Corporation before retiring in 1993. He authored several patents and technical publications and was a 50+ year member of ACS.

William C. Forsman, emeritus professor of chemical and biomolecular engineering at the University of Pennsylvania, July 12th, 2005 at 75. Following employment at Hercules Chemical Co., he joined the Penn faculty in 1964 and was named emeritus professor in 1994. He authored and co-authored many technical articles and supervised more than 20 doctoral candidates as a thesis advisor.

Robert V. Peruzzi, August 30th, 2005 at 88. He was a 62-year member of ACS.

Richard Donald Ross, chemical engineering consultant, November 13th, 2005 at 77. He authored many technical publications and was founder and president of several consulting organizations including 60+ Environmental. He worked in the fields of combustion, incineration, and pollution control.


Evelyn A. Clarke, former professor of chemistry at Philadelphia Community College, February 21st at 84. After working as an industrial chemist at Sadler Laboratories she joined the Community College faculty in 1970, retiring in 2003. She was also a licensed private pilot, skilled photographer, and cycling enthusiast.

Frederick John Walter, former chemist with DuPont, March 14th at 89. He worked as a chemist on the Manhattan Project during WW II and joined DuPont in 1946, retiring in 1975.

National ACS advised of the passing of Philadelphia Section members David H. Rest, John A. Ruth, and Dominic P. Suarez. No further details were available.

National Chemistry Week
Your Home—It’s All Built on Chemistry

October seems far away, but it and National Chemistry Week (NCW) will be here before we know it. Each year the American Chemical Society’s NCW campaign reaches millions of people with positive messages about the contributions of chemistry to their daily lives. It is the one time during the year that chemists unite with the common goal of spreading the word that chemistry is good for our economy, our health, and our well-being. The celebration dates for 2006 are October 22 – 28 with the theme, “Your Home—It’s All Built on Chemistry.”

Some ways that you can contribute to the NCW campaign are: helping at an event planned by the NCW coordinator; performing chemical demonstrations at a neighborhood school; conducting hands-on activities with children at museums, malls, or libraries; or writing articles or letters to the editor of the local paper.

NCW is sponsored by the Office of Community Activities (800-227-5558 ext. 6097, new@acs.org). Visit http://chemistry.org/ncw over the summer as more content is added!

Please join the celebration!
Realigning Our Commitment to Science and Technology

Dr. Catherine T. Hunt

Abstract: Dr. Hunt will share her thoughts and ideas about realigning our commitment to science and technology through education, collaboration, and innovation.

Biography: Dr. Catherine T. (Katie) Hunt graduated from Smith College with honors in Chemistry. She received a PhD in Chemistry from the Univ. of California, Davis with Professor Alan Balch. As an NIH Postdoctoral Fellow at Yale University in Molecular Biophysics and Biochemistry, Katie extended her working knowledge of NMR to biological systems. Katie is 2006 President-elect of ACS. During her three years in ACS governance, Katie will focus on three central themes: Education: educating legislators and engaging students; Collaboration: building strong, working partnerships across the US and around the world; Innovation: re-creating our companies, our universities and ourselves. Katie is also the Leader for Technology Partnerships (Emerging Technologies) at the Rohm and Haas Company, Spring House, PA. In this role, she champions technology partnerships across industry, academia and national labs, working with foundations and government agencies.

Date & Time: Wednesday, May 10th, 2006. Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 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 $35. Early Bird discount price is $25 if reserved by Thursday, March 30th.

Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA.
This is the edited version of the minutes. A full copy of the minutes can be obtained from the Section Office.


Also Present: L. Harper.

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

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

COMMITTEE REPORTS:

Finance, Budget and Audit:

C. Bruner and G. Cowperthwaite have agreed to serve on the Financial Committee. This committee was to be formed following the disbanding of the IVBT. Discussion about whether these activities should be included as Finance, Budget & Audit activities rather than forming a new committee. The Bylaws and Work Manual will have to be reviewed. R. Gates, J. Summers-Gates and D. Cichowicz have agreed to serve on the Bylaws Committee.

OFFICERS’ REPORTS:

Chair (D. Kilmartin):

Deb discussed the 2004 National Meeting allotment with Katie Hunt who asked for more information so she could follow up. Deb requested assistance with the Program and announced that the April meeting date will be April 19th at the McCall Conference Center in Upper Darby. The May meeting will be held at the same location as the cost of using this facility is very reasonable. A discussion around the allocation of costs for guests and speakers at monthly meetings followed. Deb noted that for the March meeting, we have budgeted for three guests under the Program Committee. The costs will not need to be made up as is the case with the Social Committee as stipulated by the Work Manual. D. Cichowicz made a motion to include the costs of dinner for the Administrative Secretary, Chair and Speaker be covered under the Program Committee. M. Cichowicz seconded. All were in favor.

Chair-Elect (D. Cichowicz):

Reported that he attended the Leadership Conference in Baltimore. He met with Katie Hunt and invited her to speak at the 2007 meeting honoring 50-year members. Katie has also indicated that she is willing to assist with the MARM. Dave will follow-up with National on the On-Line Election Process.

Secretary (A. DeMasi): no report.

Treasurer (C.J. Bruner):

The monthly report was discussed. Villanova picked up some of the costs for food at the January meeting, though Carol Jean needs to review additional invoices. The funding will come from the Social Committee budget line item. D. Cook moved to accept the Treasurer’s report. All were in favor.

Immediate Past Chair (D. Cook):

D. Cook submitted the Annual Report for 2005 via the SOLAR system on Friday, February 10th. She submitted some appendices on February 14th. The report was submitted prior to the deadline. Several programs were submitted for Chemluminary Awards.

OTHER BUSINESS:

Student Affiliate Grant Request – The Board reviewed a request from students at West Chester University for monetary assistance for travel and lodging at the Atlanta meeting. D. Cook motioned to provide up to $250.00 from the Student Affiliate Travel Grant budget line item to be given to the students upon presentation that they participated at the Sci-Mix in Atlanta. Motion passed with one opposed.

Local Section Councilors – A. DeMasi reported that the Councilors will meet via teleconference prior to the Atlanta meeting. As of this date, C. Burcham has agreed to serve as an Alternate Councilor for G. Cowperthwaite.
National Chemistry Olympiad – T. Straub reported that the local examinations will take place at LaSalle on April 22nd. The International Olympiad will be held in Korea.

L. Harper commented that the Section has received a thank-you note from the Coriell Institute Science Fair for the Section’s support.

There being no other business, the Board meeting was adjourned at 5:25 PM.

Respectfully submitted,
Anne S. DeMasi, Secretary

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A Volunteer Success Story
—Alex Pak, Volunteer Reporter

As a volunteer for the Junior Achievement program, I instruct 6th grade students at Bridesburg Elementary School in Philadelphia about basic business concepts for one day. Under the supervision of their teacher, I instruct students on the following lessons: how business works, its necessary resources, where’s the money, and the bottom line. After students learn these business concepts we use them in a game. Students love to exhibit what they learned.

Principal Elmer Boehringer’s feedback has been positive. The first time I volunteered, I noticed that he was very thankful. The next time, he communicated to me that students and teachers were very pleased with the results. Students have fun with my lessons and teachers believe that this interactive learning method helps students to learn in a “fun fashion.”

I told the teachers that I am honored and humbled by this experience. In fact, I respect their work very much. That is a challenging job - discovering a teaching method that captures students’ interests, identifies those who did not learn, and effectively teaches them.

As a result, I told teachers that I will continue to volunteer for this great program, and that is what I do… In fact, I am a proud Junior Achievement Volunteer!

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MARM 2006 SPOTLIGHT
Capillary Electrophoresis of Cells, Single Fly Heads and Populations of Flies: Towards Understanding Behavior, Addiction and Drugs of Abuse

A major technical area for MARM 2006 is analytical chemistry. As part of this program, a symposium on the principles and emerging applications of capillary electrophoresis (CE) will be held. MARM 2006 is honored that the keynote lecture in this symposium will be presented by Andrew G. Ewing, J. Lloyd Huck Chair and Professor of Chemistry and Neural and Behavioral Sciences at Penn State University. Professor Ewing is internationally known for excellence in applying numerous analytical techniques to the study of chemistry in and around neuronal micro- and even nano-environments to further the understanding of single-cell neurochemistry and neurophysiology. Professor Ewing has received numerous awards and distinctions, including being named a Guggenheim Fellow (1999), and an AAAS Fellow (2004). He has also received the Benedetti-Pichler Award (2000), and The Frederick Conference Award for Outstanding Achievements in the Field of Capillary Electrophoresis (1999). His lecture at MARM will focus on recent results from his research group on the determination of neurotransmitters in and around single cells, in fly head homogenates and in single fly heads by CE, and how these data can be used to aid our understanding of how the brain functions.

MARM ’06 will be held in Hershey, PA, June 4-7, 2006. Check the website www.MARM2006.org for details.

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MARM 2006 SPOTLIGHT
Targeting Heterodimeric G Protein-coupled Receptors as an added Dimension in Drug Design

A major technical program for MARM 2006 centers on medicinal chemistry. As part of this program, a full-day symposium in honor of the Alfred Burger Award in Medicinal Chemistry will be held, featuring past award recipients and the rising stars in medicinal chemistry. MARM 2006 is honored that the keynote lecture in this symposium will be presented by the Distinguished Professor Philip Portoghese from the University of Minnesota. Professor Portoghese is internationally well known for excellence in medicinal chemistry and has received numerous awards, including the Oak and the Tulip Medal (European Federation of Medicinal Chemistry), Edward E. Smissman-Bristol-Myers-Squibb Award (ACS Division of Medicinal Chemistry), Nathan B. Eddy Award for Excellence in Drug Abuse Research (NAS-National Research Council), Research Achievement Award in Medicinal Chemistry (American Association of Pharmaceutical Scientists), and the Alfred Burger Award in 2000. His research has made positive contributions to understanding opioids and opioid antagonists, the conformational and configurational analysis of biologically active compounds, and the design and synthesis of affinity labels as receptor probes. His lecture at MARM will focus on recent results from this research group on heterodimeric G protein-coupled receptors in medicinal chemistry.

HIGHLIGHTS FROM THE SPRING ACS COUNCIL MEETING

—A.W. Addison, Drexel University


Four nominees appeared for the post of President-Elect for 2007 (President for 2008): B. E. Bursten, R. Eisenberg, B. Z. Shakhashiri and M. V. Tirrell. After the nominees gave presentations, Council voted to put Bursten (Dean of Arts & Sciences, University of Tennessee, Knoxville) and Shakhashiri (Professor of Chemistry, University of Wisconsin, Madison) forward as Candidates. There was an indication, however, that a petition candidate may emerge later in 2006.

Council approved the new membership fee for 2007: the current $127 was escalated at the normal 3.95% rate, and the Special Assessment was applied for its final year, at a reduced rate of $4 (instead of $7), giving a total 2007 fee of $136.

Immediate Past President W.F. Carroll gave a highly entertaining report, which included a reference to the website www.chemistry.com that he had recently encountered.

There was a lengthy discussion, introduced by incoming President E. Ann Nalley and led by Carroll, and Board Chairman James Burke regarding the criteria for membership and their relevance to the population, function and future of the Society. Several Councilors addressed the topic from the floor. Jim Burke also announced his resignation from the Board, as of the end of 2006. It is currently intended that his term will be completed by one of the Directors elected during 2006.

Past President A. Pavlath noted that ACS honors its 50-year members, but not, for example, its 60-year members. The Membership Committee acknowledged the desirability of examining his proposal to do so.
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 Libby Harper in the section office at PhilaACS@aol.com or 215-382-1589.

The spring “Expand Your Horizons Program” for Sixth Grade Girls took place on Saturday, March 18th at Chestnut Hill College. Cheryl Teich of Rohm and Haas Company was the keynote speaker. Forty-two volunteers led experiments with 112 girls from 37 schools.—Kathleen Thrush photos
Volunteers taking a break from hands-on activities during a visit to St. Christopher’s Hospital for Children in February, 2006, l to r: Jaime Gonzalez of Villanova University; Grace Hall, retired chemist; Jeffrey Schubert and Karen Chiang, also of Villanova.
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<td>Oct. 19</td>
<td>Philadelphia Section Award</td>
<td>TBA</td>
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<tr>
<td>Oct. 21</td>
<td>Expand Your Horizons</td>
<td>Chestnut Hill College</td>
<td>Philadelphia, PA</td>
</tr>
<tr>
<td>Oct. 22-28</td>
<td>National Chemistry Week</td>
<td>All over the Delaware Valley</td>
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<tr>
<td>Nov. 16</td>
<td>Ullyot Public Affairs Lecture Dr. Ralph Cicerone, President, National Academy of Sciences</td>
<td>Chemical Heritage Foundation Philadelphia, PA</td>
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<tr>
<td>Dec. 9</td>
<td>Herb Bassow Memorial Demos for All Ages</td>
<td>TBA</td>
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<tr>
<td>Dec. 14</td>
<td>Board of Directors Meeting</td>
<td>TBA</td>
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