CHICAGO SECTION AMERICAN CHEMICAL SOCIETY
Joint Meeting of Northwestern University Department of Chemistry and the Chicago Section ACS
Basolo Medal Award Lecture, Dinner and Presentation
FRIDAY, OCTOBER 20, 2006

BASOLO MEDAL LECTURE
Northwestern University
Technological Institute
2145 Sheridan Road
Evanston, IL
Lecture Room 3

DIRECTIONS TO THE TECH INSTITUTE:

From the city: Take Lake Shore Drive North to Sheridan Road into Evanston. Continue on Sheridan Road to the Tech Institute.

From the west: Take I-88 east to 294 north to Dempster east. Proceed east on Dempster into Evanston. Turn left onto Chicago Ave. and proceed to Sheridan Road. Take Sheridan Road north to the Tech Institute. The Technological Institute is at the intersection of Sheridan Road and Noyes Street in Evanston.

To those attending the Basolo Medal lecture, parking after 4:00 p.m. is available in the lot across from the Technological Institute at the corner of Noyes Street and Sheridan Road. Parking is also available on the side streets just west of this lot--however, observe the posted signs. Car-pooling is always encouraged.

Lecture room 3 is on the first floor of the Technological Institute and is most easily reached by entering through the main doors facing Sheridan Road. The lecture room is clearly marked and there will be signs at the entrance to guide you to the room.

Basolo Medal Lecture: 4:30 P.M. The Medalist Lecture is open to the public and admission is free to all those wishing to attend.

2006 Fred Basolo Medalist

Dr. Ivano Bertini, Department of Chemistry, University of Florence, Florence, Italy

Title: "Metal Ions in the Proteome"

Abstract: One of the problems today in proteomics is that of recognizing metalloproteins in the gene banks. Our contribution to the field through bioinformatic tools will be shortly reviewed. The case of the SCO protein family will be analyzed. Then a determination of the tridimensional structure is important. For this, we have pursued a development of new NMR technology based on protonless heteronuclear NMR

NOTICE TO ILLINOIS TEACHERS

The Chicago Section ACS is an ISBE provider for professional development units for Illinois teachers. Teachers who register for this month’s meeting will have the opportunity to earn up to 4 CPDU's.

DINNER LOCATION:
Zhivago Restaurant & Banquets
9925 Gross Point Road
Skokie, IL
847-982-1400

Directions to the restaurant: From the Northwestern University’s Tech Institute: Go North on Sheridan Rd. and turn left on Central St. Turn left on Gross Point Rd. and proceed to the restaurant.

From Edens Expressway: Take Dempster east to Gross Point Rd. Turn left on Gross Point Rd. and proceed to the restaurant.

(FOR DETAILS, SEE SECTION’S WEBSITE)

PARKING: Free in the lot. Parking is also available at Keeler and Gross Point Road.

JOB CLUB will meet at Zhivago at 5:30 p.m.

Reception for Ivano Bertini and Fred Basolo: 6:15 P.M.
Complementary wine, soft drinks, and hors d'oeuvres

Dinner: 7:15 P.M.
Dinner reservations are required and should be received in the Section Office via phone (847-647-8405), fax (847-647-8364), email (chicagoacs@ameritech.net) or website (http://chicagoacs.org) by noon on Tuesday, October 17. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinner orders. No-shows will be billed.

The dinner cost is $34. The cost to students and unemployed members is $17.00. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all orders.
spectroscopy and solid state NMR. So we could approach problems like copper mediated protein-protein interactions or study the selectivity of metal ions by living organisms in homeostasis and detoxification. Examples will be provided.

Biography: Ivano Bertini graduated in Chemistry at the University of Florence in 1964 and became full professor of Chemistry in 1975 at the same University. He is Director of the Magnetic Resonance Center (CERM) and of the Academia Europaea.

Dr. Ivano has over 600 papers and many books. He has received the Chugaev Diploma of Kurnakov Institute of the Academy of Science, URSS, in 1981; the Golden Medal of the Magnetic Resonance Group of the Italian Chemical Society, in 1991; Prize Accademia dei Lincei, Italy, in 1993; Bijvoet Medal, Utrecht, NL, in 1998; Sapior NMR Prize, Italy, in 1999; and the Cannizzaro Medal of the Italian Chemical Society in 2006. His special lectures include: A.D. Little Lecturer at MIT, Cambridge, MS, USA in 1997; E.L. Mütterties Lecturer at Berkeley, CA, USA in 1997; and FECS Lecturer, Athens in 2002. He has received three honorary doctorates and is a member of the Accademia Nazionale dei Lincei and of the Academia Europaea.

COME TO CHEMISTRY DAY!

Chemistry Day will be at Columbia College Chicago on Saturday, October 28, from 9:30am to 3pm. The theme this year is "Your Home - It's All Built on Chemistry". We have a full slate of activities of many different kinds. Children and older students will all find something to interest them.

Demonstrations conducted by high school teachers will catch your attention and amaze the children. There will be contests and hands-on fun for kids of all ages. Exhibitors from industry, academia and government agencies will show and tell what chemists do.

If you have scouts in your family, plan to bring them to Chemistry Day where they will have the opportunity to earn a Youth Activities badge and/or a Merit Badge.

For the most up-to-date information on the Chemistry Day activities, check out the Section’s web site and plan to join us.

dinner orders. No-shows will be billed.

Appetizer Course - Served Family Style: Fresh tomato and mozzarella salad, breads, fire cracker meat rolls with Asian sauce, calamari and fresh vegetables

Soup Course: Cream of Mushroom

Dinner Course: Choice of entrée: Beef Brochette (skewered beef tenderloin filet marinated in house marinade and grilled with an array of vegetables), Pork Chop (center cut marinated and baked), Salmon (broiled on a bed of spinach with Sonoma Curtier Russian River Sauce), or Vegetarian Pasta

Dessert Course - Served Family Style: Assorted pastries and fresh fruit

Beverage: Coffee, Tea, Soft Drinks

General Meeting: 8:30 P.M.:

- Opening remarks and announcements: Dr. Barbara Moriarty, Chair, Chicago Section American Chemical Society
- Presentation of the 2006 Basolo Medal: Professor Thomas V. O’Halloran, Chair, Department of Chemistry, Northwestern University
- Acceptance: Professor Ivano Bertini, 2006 Basolo Medalist for Outstanding Research in Inorganic Chemistry.
- Closing Remarks: Dr. Barbara Moriarty

In This Issue

Features

1 — Basolo Medal Lecture/Dinner Meeting
2 — Come To Chemistry Day!
3 — ChemShorts for Kids: Some Like It Hot; Some Like It Cold
4 — Another Comment on ChemShorts for Kids
4 — ACS Message to Capital Hill
4 — ALMA e-News: Don’t Forget the Lab People
5 — Basolo Medal
5 — Duties of Section Councilors
6 — In Memory of Louis Lerner
7 — WCC Column: Henrietta Leavitt
7 — 2006 Illinois State Fair Project
8 — Job Club
8 — Deadlines for Chemical Bulletin
9 — Symposium on Chicago-area Labs
9 — Job Search Workshop for Chemical Professionals
9 — Volunteers Needed
9 — National Historic Chemical Landmark: Tide
10 — 2006 ACS Scholarship Exam Results
11 — 2006 Section’s Election Slate
11 — 2006 US Chemistry Olympiad Results

Every Issue

1 — Notice to Illinois Teachers
3 — Contact the Chair
5 — Free T-Shirts
11 — Ad Index
12 — Calendar
Some Like it Cold
Some Like it Hot

Kids, would you believe that when something rusts, heat is produced? Or that when some compounds are mixed the temperature can go down? A chemical reaction that produces heat is called “exothermic” and one that needs heat is “endothermic.”

In our test on exothermic reaction, vinegar is used on to remove the protective coating from steel wool, allowing it to rust. When the iron combines with oxygen, heat is released. For supplies, you will need a thermometer, a clear jar with a lid, steel wool and vinegar. First, put the thermometer in the jar and close the lid. Wait about 5 minutes, remove the thermometer and record the temperature. Now soak a piece of steel wool in vinegar for 1 minute. Squeeze the excess vinegar out of the steel wool. Wrap the wool around the thermometer bulb and place the wool/thermometer in the jar, sealing the lid. Wait for another 5 minutes, then read the temperature and compare it with the first reading. What happened?

An endothermic reaction requires energy to proceed, which may be observed as a decrease in temperature during reaction. Once the reaction is complete, the temperature will return to normal. For our endothermic reaction example you will need: 25 ml citric acid solution (dissolved in water), 15 grams baking soda, a styrofoam cup, thermometer, and something to stir with. First, pour the citric acid solution into the cup. Record the initial temperature. Stir in the baking soda (sodium bicarbonate). Track the change in temperature as a function of time. When done, simply wash the cup out in a sink. The exact amounts of citric acid in water and baking soda are not critical, and you can vary them to test this.

TRIVIA: Rust is the common name for a very common compound, iron oxide. Iron combines quickly with oxygen, so quickly that pure iron is rarely found in nature. Iron (or steel) rusting is an example of corrosion, which is an electrochemical process. Did you know that liquids like acid rain (and our vinegar), seawater and the salt-loaded spray from snowy roads are better electrolytes than pure water, allowing them to speed the process of rusting on iron objects?

References:
The website version of this experiment includes chemical formulas and reactions. Dr. Anne Marie Helmenstine at http://chemistry.about.com/cs/howtos/ht/exothermic.htm and http://chemistry.about.com/cs/howtos/ht/endothermic.htm. Most large grocery/drug stores sell citric acid in capsule or tablet form. Also, the following link offers some commercial chemicals in small quantities at reasonable prices: www.chemistrystore.com/citric_acid.htm.

EDITED BY K. A. CARRADO,
ARGONNE NATIONAL LABORATORY

All past “ChemShorts”: http://membership.acs.org/C/Chicago/ChmShort/kidindex.html

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ANOTHER COMMENT ON CHEMSHORTS FOR KIDS

Here’s another note Katie Carrado, author of our ChemShorts for Kids column, has received this year.

..... Another nice endorsement - all the way from down under!

Kathleen,
I would just like to let you know how much I appreciate the wonderful ideas on ChemShorts for Kids, and your work in creating it.

My 8 year old daughter and I have been having a lot of fun learning about chemistry, and I feel the ideas we get from ChemShorts helps inspire her to learn more about science.

Thanks.

R. and R. Whitford
Sydney, Australia

CONTACT THE CHAIR

Do you have any questions, suggestions, recommendations, ideas, gripes, complaints, or pet peeves relating to the Chicago Section? Do you want to volunteer, help out, or lend a hand with Section programs or activities? Then contact your Chair. Simply log onto the Section’s Web Page at http://chicagoacs.org, find the green button “Contact the Chair”, and send me an e-mail. If I can answer your query I will respond personally. If I can’t I will forward your e-mail to someone who can, or try to provide you with a contact — all in a timely manner. The Section belongs to you and the other 4,600 ACS members who reside in the Chicago area (northeast Illinois and northwest Indiana). Only you can make it work for you by being involved. But you can also make it fail by not being involved. I look forward to hearing from you.

BARBARA MORIARTY
Chicago Section Chair
CAPITAL HILL CAREFULLY LISTENED TO ACS MESSAGE ON ALTERNATIVE ENERGY

In his State of the Union Message this year, President Bush actually said “physical sciences.” I am sure that all the members of the Committee on Chemistry and Public Affairs (CCPA) who went to the Hill last year to deliver our two-word message on “alternative energy” perked up their ears if they were listening to his speech. Last year we were asking our legislators to support the physical chemistry research conducted in the Office of Science in the Department of Energy. On the day before the visit to the Hill, an ACS consultant explained that a legislator can remember only two words, so our committee pared our message about science and math to “alternative energy.” This year our Senators and Congressmen and their staffs definitely were prepared for the same two-word message. We were carefully listened to. We learned that with the urging of our ACS leadership, the National Academy of Sciences was able to have nine paragraphs inserted into the President’s State of the Union Message. How about that!

In April of this year, the Chicago Section members of CCPA, Zafra Lerman, Jeffrey Gaffney, and myself, along with other ACS delegates (including ACS President Ann Nalley, and President-Elect Catherine Hunt) fanned-out across Capitol Hill to ask members of Congress to sustain United States innovation leadership by supporting President Bush’s American Competitiveness Initiative (that includes alternative energy). As always, we emphasized that our competitiveness depends on our ability to educate our brightest young people in math and science.

In preparation for the Hill visits, the ACS delegation attended a series of briefings by prominent members of the Washington science-policy community: Jonathan Epstein, aide to Senator Jeff Bingaman (D-NM); Courtney Schlieter and J.T. Griffin, aides to Representative Frank Wolf (R-VA); and Don Anthony, executive director of the Council on Chemical Research. On the morning of the visits, ACS held a breakfast featuring Representative Mark Udall (D-CO), who discussed Capitol Hill’s budget situation, STEM education, and the need for scientists to make their voices heard on Capitol Hill. By the end of the day the delegation had delivered our message to over 50 Senators and Congressmen. The Chicago Section Councilors visited the offices of Congressmen Mark Kirk (R-IL), Danny Davis (D-IL), Janice Schakowsky (D-IL), Tim Johnson (R-IL), Judy Biggert (R-IL): and Senators Richard Durbin (D-IL) and Barack Obama (D-IL).

CLAUDE LUCCHESI

Don’t Forget the Lab People

I received the following comment from Thomas Clarke (Stargate Consultants) concerning laboratory tours:

“When touring with the visitors, be careful not to dwell only on the exotic equipment in the lab and its performance. Don’t forget to talk about the high quality people in the lab. I have heard of situations where senior management talks profusely about all of the expensive equipment, and not one word is said about the quality of the people who run the equipment.”

Unfortunately, I have been guilty of committing this offense as have, I suspect, many of you. We can all do better.

If you have any comments, cost saving suggestions, or opinions, contact me at the email address below.

Past ALMA (Analytical Laboratory Managers Association) e-News articles by Dr. Wayne Collins, a former ALMA President, are available at the website http://www.labmanagers.org/. This one is from the April 2006 edition.

WAYNE COLLINS
wayne.collins@thermo.com
The Fred Basolo Medal is given for outstanding research in Inorganic Chemistry. It was established by the former students of Dr. Fred Basolo in appreciation of his contributions to inorganic chemistry at Northwestern University. Basolo arrived at Northwestern in 1946 and was able to help make the Department of Chemistry one of the very best in inorganic chemistry in the U.S., a position it still maintains today.

Basolo is internationally recognized for his original contributions to the syntheses and reaction mechanisms of transition-metal Werner complexes. He has also done innovative work in the developing fields of organometallic and bioinorganic chemistry.

Many of his former students occupy prominent academic and industrial positions. He has influenced students worldwide to study inorganic chemistry, and received the 1992 ACS Pimentel Award in Chemical Education.

Among his numerous awards are the 1996 Chicago Section Willard Gibbs Medal and the ACS 2001 Priestly Medal. It may interest members of the ACS to know that as part of his huge contribution to chemistry, Fred Basolo served on numerous ACS editorial boards, launched the ACS journal Inorganic Chemistry in 1962 and has held various ACS offices. He was elected to and served as National ACS President in 1983. For further information see www.fredbasolo.com. The ACS Chicago Section is proud to have Fred Basolo as a member and grateful for his participation and support.

Previous Basolo Medalists:

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**FREE T-SHIRTS**

The Hospitality Committee raffles one T-shirt at each monthly dinner meeting. The shirt has CHICAgO spelled out using the periodic table. So come to a monthly meeting and maybe you’ll win one!

**DUTIES OF SECTION COUNCILORS EXPLAINED**

This is a reprint of an article appearing in the April 1997 issue of the Chemical Bulletin. The article is updated annually to help you with your decision in electing councilors and alternate councilors in the upcoming Chicago Section election. Remember to cast your vote.

Have you ever wondered who and what ACS councilors and alternate councilors are and what they do for you and the Chicago Section? The two major structural components of the Society besides your national officers and Board of Directors are local sections and divisions. ACS local sections and divisions not only elect their own officers, but also elect representatives to the ACS Council, the deliberative body of the Society. This is your opportunity to have a voice in Society's governance.

The Council consists of the President, the President-Elect, the Directors, the Past Presidents, the Executive Director, the Secretary, and more than 400 voting Councilors representing Local Sections and Divisions. The Council convenes twice a year at the Society’s national meetings.

Councilors provide the principal contact between local section members and governance leaders in setting policies for the ACS that directly or indirectly affect you. Councilors are elected to serve a three-year term. Alternate Councilors represent the section when a Councilor is unable to attend a Council meeting.

Councilors also serve on National committees that meet during National meetings. Councilors are appointed to these committees by the President of the Society and are eligible to serve only three consecutive terms on the same committee. A councilor who accepts an appointment to a committee accepts an obligation to work year-round throughout that term. The Councilor is expected to attend meetings of the committee, and be willing to undertake special assignments that require time between meetings.


There are also Standing Committees of the Board of Directors: Grants and Awards, Professional and Member Relations, and Public Affairs and Public Relations.

The Chicago Section is fully represented by 14 councilors elected by you. Most of these councilors are active members (or associates) on National ACS committees. Long-time section councilor, Stephen Sichak, passed away this year. Your Chicago Section Councilors and their current committee appointments are: Roy H. Bible, Cherlynlavohnaugh Bradley (Committee on Committees), Charles E. Cannon (Economic and Professional Affairs), Mark C. Cesa, David S. Crumrine (Chemical Safety), Russell W. Johnson (Public Relations and Communications), Frank K. Kravitz (Economic and Professional Affairs; liaison to Technician Affairs), Thomas J. Kucera, Claude A. Lucchesi (Chemistry and Public Affairs), Barbara E. Moriarty (Divisional Activities; Chair, District V Caucus), Gayle E. O'Neil, Seymour H. Patinkin (Local Section Activities), and Marsha A. Phillips (Nomenclature, Terminology and Symbols, Chemical Safety).

Alternate Councilors for the Chicago Section are: Connie Buenvenida, Inara Brubaker, Herbert Golinkin, Jennifer Horne, Frank Jarzembowski, Margaret S. Levenberg, Mary Newberg, Susan Shih, Fred Turner, Michael Welsh, and Paul Young.

Several of our Councilors are involved in other activities related to the National Meetings. For example, Roy Bible (with LeRoy Johnson) teaches a 3-day NMR course before each National meeting. Claude Lucchesi teaches a course entitled “Managing the Chemical Analysis Support Laboratory.” Frank Kravitz is a career consultant who does resume reviews during each National meeting.

James P. Shoffner is Ex Officio, a consultant to the Education and Minority Affairs Committees.

Your Councilors and Alternate Councilors ask for your help, in providing your opinions about the Society and issues relating to the Society. This will help the Councilors better represent you during Council.

CHERLYN BRADLEY
IN MEMORY

Louis L. Lerner, emeritus and 50-year member of the American Chemical Society (ACS) died August 19, 2006 at the age of 91. Lou was active in the Chicago Section ACS, and, in particular, served as editor of The Chemical Bulletin, from 1966 through 1970, consulting editor from 1971 through 1976, and again as editor in 1991. Among his many contributions to the Chicago Section, ACS, Lou established the Distinguished Service Award (DSA), because he always appreciated the efforts of unsung volunteers who carry out the usually thankless job of running an organization, and he felt keenly that some tangible form of appreciation was warranted. He served on the DSA Committee from 1973-78.

Additionally, Lou served as Section Treasurer (1979-80); Director (1976-78); Alternate Councilor (1973-88); and in various capacities on Section committees for Gibbs Arrangements (1971-72, 74-75); Public Relations (1965-67, 69-72); Mutual Fund chair (1975-76); Ad Hoc Elections (1975-76); Expositions & Exposition Substitutes (1976); Nominating (1974, 1978-79); Tellers (1977-79); Professional Relations & Status (1966-67); Education (1965-66); College Education (1965); High School/Continuing Education (1965-66); and the Ad Hoc Committee on Funding Plan (1974).

In 1977, during the National Chemical Exposition Art Exhibit run by the Chicago Section for the national ACS meeting in Chicago, Lou personally funded the Louis L. Lerner Chemical Bulletin Cover Award given to the painting receiving the most popular votes cast by visitors to the show. That painting, entitled "Tunnel Vision" (an oil by Dolores Kenney) was reproduced on the cover of the December 1977 issue of The Chemical Bulletin.

Lou received his B.S. in 1942 from Central YMCA College and taught a course in engineering science and management war training in 1945 at Roosevelt University. He took graduate courses at University of Chicago (1945-46); Northwestern University (1955-56); and Roosevelt University (1965). In 2001, Roosevelt University gave Lou its Edward J. Sparling Alumnus Award.

Born February 25, 1915 into a family of modest means, he began his working career in his teens. Over the years, he worked at various chemical occupations, including CZ Chemical in Beloit Wisconsin, where he met his wife to be, Jean, and ran his own business. In 1949, Lou joined the Toni Company in Chicago as a research scientist, remaining with the company as a senior scientist and inventor after it became the Personal Care Division of the Gillette Company until 1974, when the Division was relocated to Boston. Lou then joined the Chicago office of the Federal Trade Commission in 1974 as a physical scientist, investigator and arbitrator of chemical complaint cases until his retirement in 1995.

Ever the inventor, Lou obtained about 97 patents during his working years in industry. His goal was to reach 100 patents, and he achieved it after his retirement. About two weeks before his death, Lou was still pondering other inventive concepts! In his retirement years, Lou became active in the cultural arts scene. He became a volunteer for the Lyric Opera of Chicago, eventually appearing on stage as a supernumerary in several operas, became a benefactor of education/outreach programs for children (Operakids) and sponsored singers in the Lyric Opera Center for American Artists.

His interest in music and theater also reconnected him with Roosevelt University where he helped provide the University's music students with season tickets to the Lyric Opera and generously funded theatrical productions and promoted the University's performing arts program. The December, 2005 issue of The Chemical Bulletin carried an article about how Lou was honored at a 90th birthday party given him by Roosevelt University, his alma mater, to both celebrate his life and his transformation of the University's performing arts program for the better.

Lou was, indeed, a hard-working, modest man and, until the very end, remained actively interested in the arts and sciences. He was enthusiastic and unselfish in his generosity, passionate in his quest to promote education and have justice done for, and bring joy to, others. In doing so, he created a legacy that has inspired others to do likewise.

Lou is survived by his wife, Jean, and his son, David. No local services were held and burial was private. Contributions in Lou's memory may be sent to Roosevelt University, Chicago College of Performing Arts, Attention: James Gandre, Dean, 430 S. Michigan Avenue, Chicago, IL 60605. Information for sending condolences to the family may be obtained by contacting Dolores Kenney at 312-567-1190, who was privileged to have been a long-time friend and former colleague of Lou.

DOLORES T. KENNEY

ATTENTION: PERSONS INTERESTED IN BECOMING SECOND CAREER CHEMISTRY TEACHERS

The Hach Scientific Foundation would like to offer second career chemical education scholarships to chemists. Scholarship money is available for second career chemistry teachers! The Hach Scientific Foundation is a private multi-million dollar foundation dedicated to chemistry and chemical education. The Hach Scientific Foundation is providing scholarships across the country to chemists interested in pursuing a Masters in education and teachers certificate. For more information, visit: http://www.hachscientificfoundation.org/teachers.shtml
Members of the Chicago Section’s Women Chemists Committee (WCC) are developing outreach plans for Chicago Area section members and the community. These plans include a column in The Chicago Bulletin covering topics such as networking, career development, and vignettes of women in chemistry. This month’s topic is about Henrietta Leavitt. She wasn’t a chemist, however, as the author of this article expressed, "...but there is something essential in her story. In a position where she was only supposed to be doing rote work that men found too boring to do, she discovered something vast and far-reaching..."

Henrietta Leavitt: a Star of the Brightest Magnitude

1902 was not a year that provided much opportunity for a woman with a good mind and a gift for science, particularly not a deaf woman. Deafness closed the door on two of the professions open to her gender: teacher or nurse. However, Edward Charles Pickering became the director of Harvard College Observatory in 1877 at a time when the collection of data far exceeded the capability of his staff of “computers” to catalogue. To solve his problem, he doubled his staff by hiring women at less than half the wage of men ($0.25 an hour).

Henrietta Leavitt (a young woman who had attended Oberlin College and the Society for Collegiate Instruction of Women before a severe illness destroyed her hearing) joined his staff in 1902. One of Leavitt’s tasks was to determine the magnitudes of stars, although there was not a standard at the time. She soon developed a standard of photographic measurement that was accepted by the International Committee on Photographic Magnitudes in 1913 and called the Harvard Standard. Her scale used logarithmic equations to order stars over seventeen magnitudes of brightness and was created using 299 plates from thirteen telescopes.

The achievement for which she is most noted enabled astronomers to calculate the distance to distant stars. In 1912, Leavitt found a way to determine the actual brightness of a certain type of star (known as the Cepheids). When the actual and apparent brightness of a star is known, its distance from earth can easily be calculated, since brightness decreases with the square of distance. Within the decade, Harlow Shapley used the Cepheid Variable Period-Luminosity relationship to produce the first map of the Milky Way.

Unlike Harlow Shapley, Henrietta was not allowed to choose what she studied. She was employed by Pickering as a computer, and as such, she discovered 10% of the 20,000 pulsating stars that we have currently mapped (half of all the known variable stars even in 1930). Despite the constraints of her career and its inherent lack of choice, she attained enough of a world-wide reputation that Professor Mittag-Leffler of the Swedish Academy of Sciences sent her a letter in 1925, declaring his intent to nominate her for the Nobel Prize in Physics the following year for her role in discovering the Period-Luminosity relationship.

Harlow Shapley, the director of Harvard College Observatory at that time, was forced to reply that she had died of cancer in 1921.

Henrietta Leavitt was a member of Phi Beta Kappa, the American Association of University Women, the American Astronomical and Astrophysical Society, the American Association for the Advancement of Science, and an honorary member of the American Association of Variable Star Observers. Her early death was viewed as a calamity by her colleagues for reasons that extended beyond her achievements. As Solon I. Bailey noted: “She had the happy faculty of appreciating all that was worthy and lovable in others, and was possessed of a nature so full of sunshine that, to her, all of life became beautiful and full of meaning.”

Website Sources:
- http://www.womanastronomer.com/
- http://harvard_computers.htm
- http://cwp.library.ucla.edu/Phase2/Leavitt_Henrietta_Swan@871234567.html
- http://hoa.aavso.org/posterswan.htm

JACKIE STEWART

HAVE YOU MAILED YOUR BALLOT?
Just a reminder that ballots are due in the Section office no later than noon, October 20. They were mailed in early September.

2006 ILLINOIS STATE FAIR PROJECT

The joint project of the Illinois sections of the ACS was a success again! The Chicago Section participated with the Rock River, Heartland, Mark Twain, East Central Illinois, Southern Illinois, Decatur-Springfield, St. Louis, Joliet, and the Illinois-Iowa Sections in a cooperative project at the Illinois State Fair in Springfield.

From August 10-19, forty-four "tireless" volunteers from these sections manned the Illinois Sections’ exhibition tent in Conservation World. The tent housed hands-on exhibits, demonstrations, information materials, poster displays, and teacher packets. By the end of the fair, over 13,000 people had visited and over 375 teacher packets had been handed out!

None of this could have been made possible without the generous financial help this year of Abbott Laboratories, NorthStar Credit Union, Robert Banzuly (attorney), BP, Ingredient Source Corporation, Northup RTS, Wizardcraft, Chicago Section ACS, East Central Illinois Section ACS, Rock River Section ACS, and Heartland Section ACS, and donations of materials from the American Chemical Council, Carus, Fran Kravitz, Richard Cornell, Illinois State University-Department of Chemistry, Chemical Heritage Foundation, the East Central Illinois Section ACS, Continental Cement, Flinn Scientific, BP Volunteers-Naperville chapter of retirees, ACS National, and the Illinois Department of Natural Resources.

We are already planning for next year's tent activities at the Illinois State Fair. In order to put together a project of such magnitude we continue to need financial help. We are asking for corporate and individual sponsors now. In return we will list sponsors on our website, which runs year round, and in our tent at the fair.

Also, won’t you please join us in volunteering your time on the planning committee or at the Fair? Student affiliates from the various colleges and universities have lots of energy, are quite enthusiastic, and are, therefore, most welcomed! For further information either visit our website at http://acsisillinoisstatefair.org or call our Section office at (847) 647-8405.

FRAN KRAVITZ AND CHERLYN BRADLEY

The mission of the Chicago Section of the ACS is to encourage the advancement of chemical sciences and their practitioners.
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JOB CLUB
The next meeting of the Chicago Section ACS Job Club will be held on Friday, October 20 at 5:30 p.m. at Zhivago Restaurant & Banquets. The meeting will include a review and discussion of some of the tools that a chemist can use to conduct a job search.

The Job Club provides a continuing opportunity for unemployed members of the Section to meet with one another, share their experiences and develop a network that may help in identifying employment opportunities. Bring plenty of resumes and business cards to distribute to your colleagues. Be prepared to talk about the kind of job you are seeking.

Several participants have received outsource help with resume preparation and marketing strategies to present their best attributes to prospective employers. The group has critiqued some individual resumes and made suggestions for improvements in a positive way!

The Job Club is also for employers seeking chemists. Employers need to be prepared to describe the positions to be filled and requirements for these positions.

Should you wish to attend the Section’s dinner meeting following the Job Club, the cost is $17 and you can continue your networking activities. Please call the Section office for reservations and indicate that you are eligible for a discount.

Also, the Chicago Section’s website has a link to the Job Club’s yahoo job forum group. If you can’t attend the Job Club, you can still find out about job openings and other information.

DEADLINES FOR CHEMICAL BULLETIN
Please submit all Chemical Bulletin copy to the editor before the deadlines listed below for each issue. Articles can be emailed to the editor, Cherlyn Bradley, cbrad1027@aol.com.

Since we like the Bulletin to be as timely as possible, we need the lead time indicated. You can help by early planning and submission of your information or articles.

<table>
<thead>
<tr>
<th>2006 Issue</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>November</td>
<td>September 22</td>
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<tr>
<td>December</td>
<td>October 13</td>
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</tbody>
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SYMPOSIA ON CHICAGO-AREA INDUSTRY, ACADEMIA, AND GOVERNMENT LABORATORIES

The History of Chemistry Division (HIST) and the Chicago Section have organized three symposia for the Spring ACS National Meeting in Chicago next March. These symposia cover the major types of organizations that employ chemists. The titles for the industrial and academic symposia are derived from Carl Sandburg's poem “Chicago.”

• Hog Butchers, Tool Makers, and Stackers of Wheat: Chicago-area Chemical Industry.

• Educating the Laughing, Stormy, Husky Youth of the Midwest: Chicago-area Colleges and Universities.

• Science for the People: Chicago-area Government-sponsored Laboratories.

Papers in the session on chemical industry could deal with the history of individual companies, significant technology developed, or accounts of interesting personalities employed by the companies. For the educational institutions, the papers could address the general history of the school and chemistry department, notable faculty, graduates or students, or significant research carried out at the school. The session on government-sponsored labs could cover the history, mission and philosophy of the labs, application of research developments, individuals who made an impact through their work at these labs.

The term "Chicago-area" is intended to be very broad, probably extending to the entire Midwest region of the country. I am hoping for several papers from organizations whose chemists are members of the Chicago section.

Would someone from your organization want to present a paper in one of these symposia? These presentations would call attention to the many diverse organizations in our area that provide professional development opportunities for chemists and chemical engineers. Abstracts can be submitted via the OASYS electronic submission under the HIST technical program for Chicago.

Let me know if you have any questions about these symposia. Thanks for your consideration.

KEN FIVIZZANI
CHAIR ELECT
Phone: (630) 305-2032
Fax: (630) 305-2982
Email: kfivizzani@nalco.com

JOB SEARCH WORKSHOP FOR CHEMICAL PROFESSIONALS

Saturday, November 4, 2006
9:00 am - 3:00 pm
University of Illinois at Chicago
Room 238, SES (Science and Engineering South)
845 West Taylor Street
Chicago, Illinois

This free workshop is a customized extension of the outstanding workshops provided by national ACS and will be presented by one of their highly trained Career Services experts. The workshop is specifically designed for chemists and provides the most useful and up-to-date information and advice.

The topics covered will include:

• Networking
• Targeting the Job Market
• Discovering Small Businesses
• Consulting and Entrepreneurship
• Challenges Facing Mid-Career Professionals

For directions to the workshop, go to the Chicago Section website, chicagoacs.org.
Contact Gail Wilkening, 847-647-8405, chocagoacs@ameritech.net or Paul Young, 630-653-5657, dadpry@uic.edu

NATIONAL HISTORIC CHEMICAL LANDMARK

The American Chemical Society will designate the development of Tide, the first heavy duty synthetic laundry detergent as a National Historic Chemical Landmark on October 25, 2006, in Cincinnati, Ohio. Tide was introduced after World War II by Proctor & Gamble. Tide cleaned heavily-soiled clothes in hard water without leaving a soapy residue, a problem with older, more traditional soaps. The detergent was introduced simultaneously with top-loading washing machines, saving consumers much time and effort in washing clothes.

The term “Chicago-area” is intended to go-area Colleges and Universities.

The History of Chemistry Division (HIST) and the Chicago Section have organized three symposia for the Spring ACS National Meeting in Chicago next March. These symposia cover the major types of organizations that employ chemists. The titles for the industrial and academic symposia are derived from Carl Sandburg's poem “Chicago.”

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VOLUNTEERS NEEDED

The ACS Illinois Sections Cooperative State Fair Project needs volunteers for Community Day at Carson Pirie Scott in Aurora, Illinois.

• The date is Saturday, November 11, 2006 at 970 Lake Street, Aurora, IL 60506.

• We will have a table to sell coupon booklets for $5 each.

• Carson Pirie Scott provides our organization with coupon booklet at no charge. Our organization keeps the money for the State Fair project.

• Each booklet contains a $10 coupon good on almost any merchandise item of $10 or more, eight 20% off coupons and offers for two great bonus items, available on Community Day only. All coupons are valid on top of the already low One Day Sale prices.

Please come and shop and volunteer to help at the table to help raise funds for the State Fair project! Carson Pirie Scott is open from 7am to 11pm.

Thank you,
MARSHA ANNE PHILLIPS
TREASURER, ACS ILLINOIS SECTIONS STATE FAIR PROJECT

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2006 ACS SCHOLARSHIP EXAM RESULTS

The Chicago Section of the American Chemical Society sponsored the 2006 Fifty-Second Annual Scholarship Examination in Chemistry. The exam was held at Loyola University on May 6, 2006. Dr. Daniel Graham, Professor of Chemistry at Loyola University, authored and hosted the exam. Funds for the scholarships were contributed by chemical industry and individuals. The results of the Scholarship Exam are listed below.

<table>
<thead>
<tr>
<th>PRIZE WINNER</th>
<th>TEACHER &amp; SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST $5,000 award</td>
<td>Winston Luo Preston Hayes Glenbrook South High School</td>
</tr>
<tr>
<td>SECOND PLACE TIE $2,750 award each</td>
<td>Christopher Ell Walter Pape Loyola Academy Wilson Ho Cheryl Rulis Oak Park River Forest High</td>
</tr>
<tr>
<td>FOURTH $1,500 award</td>
<td>Richard Kahn Ann Levinson Chicagoland Jewish High School</td>
</tr>
<tr>
<td>FIFTH $1,250 award</td>
<td>Dennis Kreiter Preston Hayes Glenbrook South High School</td>
</tr>
<tr>
<td>MARIE LISHKA* (a tie) $667 award each</td>
<td>Geetika Mehra Gillian Thomsen New Trier High School Kanjun Qiu Mark Rowzee Naperville North High School Chaoying Zhu Michelle Sachtelben Downers Grove South High School</td>
</tr>
<tr>
<td>MARSHALL S. SMOLER** $200 award</td>
<td>Alex Zorn Walter Payton College Prep</td>
</tr>
</tbody>
</table>

*To the highest scoring female in the examination. Additional funding for the Lishka Award was provided in memory of Stan Drigot.  **To the highest-scoring Chicago public high school student. Marshall S. Smoler's sister, Rachel, established this award in 1972 in his memory. Mr. Smoler was for many years a chemistry teacher in the Chicago public schools.

HONORABLE MENTIONS LISTED IN ALPHABETICAL ORDER
(These students were the next highest performers)

<table>
<thead>
<tr>
<th>Student</th>
<th>School &amp; Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Beierwaltes</td>
<td>Maine East, Tina Sabatello</td>
</tr>
<tr>
<td>Brian Chang</td>
<td>Naperville North, Elizabeth Brucker</td>
</tr>
<tr>
<td>Zoe Hilbert</td>
<td>Oak Park River Forest, Cheryl Rulis</td>
</tr>
<tr>
<td>Mike Hollowed</td>
<td>Brother Rice, Don Molenda</td>
</tr>
<tr>
<td>Harry Hsiao</td>
<td>Niles North, Najwa Dajani</td>
</tr>
<tr>
<td>Jeff Josken</td>
<td>Naperville Central, Dan Brown</td>
</tr>
<tr>
<td>Yishai Kamin</td>
<td>Chicagoland Jewish, Ann Levinson</td>
</tr>
<tr>
<td>Kelly Leung</td>
<td>Niles North, Najwa Dajani</td>
</tr>
<tr>
<td>Scott Marchi</td>
<td>Oak Park River Forest, Amy McGrail</td>
</tr>
<tr>
<td>Benjamin Steinhorn</td>
<td>New Trier, John Gridley</td>
</tr>
<tr>
<td>Matt Straus</td>
<td>Naperville North, Mark Rowzee</td>
</tr>
<tr>
<td>Caitlin Visek</td>
<td>Fenwick, Ramzi Farran</td>
</tr>
<tr>
<td>Jeff Wang</td>
<td>Naperville North, Elizabeth Brucker</td>
</tr>
<tr>
<td>Jason Xu</td>
<td>Naperville North, Beverly George</td>
</tr>
</tbody>
</table>

A total of 90 students were nominated to take the exam. Each chemistry teacher could nominate two students.

Awards were given to students at the September 29, 2006 ACS Education Night meeting at Benedictine University. Special thanks to Dr. Daniel Graham and all those who continue to support high school chemistry students.

AMI LEFEVRE
CHAIR, HIGH SCHOOL EDUCATION COMMITTEE
The Chicago Section ACS supported the United States National Chemistry Olympiad this year. Under the direction of Dr. David Crumrine, both the Local and National Exam were held at Loyola University. On March 17, 2006 the search for potential nominees took place. Forty-three students took a two-hour exam to identify the top students. The students who qualified to take the challenging five-hour National Exam on April 21, 2006 were:

- Alex Dyhdalo
- Aviva Loew
- Danny Kim
- Darnell Shawn
- Greg Rosic
- Issia Judeh
- Jonathan Thirman
- Josh Wunder
- Karen Li
- Kathleen Adamczyk
- Kevin Kalisz
- Kruti Shah
- Lawrence Tanzman
- Michael Chu
- Nayak Rajeve
- Omar Shaik
- Rebecca Shur
- RJ Erfmeyer
- Sarah Carden
- Vamsi Aribindi
- Vivek Raman
- Glenbrook South HS
- New Trier HS
- Niles West HS
- Schaumburg HS
- Evanston HS
- Reavis HS
- New Trier HS
- Naperville Central HS
- Libertyville HS
- Deerfield HS
- Fenwick HS
- Glenbrook South HS
- Walter Payton HS
- Naperville Central HS
- IMSA
- College Preparatory School of America
- Deerpark HS
- Lemont HS
- Naperville North HS
- Naperville North HS
- Libertyville HS

The top students (nationwide) from the National Exam attended a Study Camp from June 4-18, 2006 at the U.S. Air Force Academy in Colorado. Out of this group, four students entered the IChO held in Gyeong-san, Republic of Korea from July 2-11, 2006. I am proud to announce Jonathan Thirman (New Trier High School) received High Honors (top 50). Six additional students received Honors (top 100-150): Vamsi Aribindi (Naperville North HS), Kevin Kalisz (Naperville North HS), Sarah Carden (Naperville North HS), Kevin Kalisz (Fenwick HS), Danny Kim- (Niles West HS), Karen Li (Libertyville HS), Greg Rosic (Evanston HS).

Interested teachers and students can learn more about the USNCO exam by going to the ACS Chemistry Olympiad website at http://www.chemistry.org/portal/a/c/s/1/acsdisplay.html?DOC=education%5Cstudent%5Colympiad.html. Past exams and lab practicals can be found at this site. Please contact Ami LeFevre at amilef@niles-hs.k12.il.us for more information.

The Chicago Section would like to thank Dr. David Crumrine and Loyola University for sponsoring the competition this year.

AMI LEFEVRE
CHAIR-HIGH SCHOOL EDUCATION COMMITTEE
October 3 – November 14: Associated Colleges of the Chicago Area Chemistry Lecture Series on “Forensic Chemistry.” The sessions will be held on Tuesday nights, 7-9 p.m. at Benedictine University, Birck Hall of Science, Room 112. Attend any or all of the lectures. Olivet Nazarene University will offer graduate credit to anyone who already has a bachelor’s degree. For details contact Dr. Douglas Armstrong at darmstrg@olivet.edu or (815) 939-5393.

October 7: The last Adler Global Climate Change Forum is scheduled at Northwestern University - Chicago Campus, 303 E. Superior Ave. There will be two discussion sessions. The first session will be from 10:30 a.m. to 12:30 p.m.; the second session will be 1:30 p.m. to 3:30 p.m. Lunch will be provided.

October 11-13: Laboratory Safety and Health ACS Short Course in Chicago. Go to http://chemistry.org/shortcourses to register or to view an online brochure on this course.

October 20: Chicago Section/Northwestern University Joint Dinner Meeting. The Fred Basolo Medalist is Prof. Ivano Bertini, Dept. of Chemistry, University of Florence, Florence, Italy. Lecture at Northwestern University, Evanston; dinner at Zhivago’s Restaurant, Skokie, IL. See details in this issue.

October 25-27: Midwest Regional Meeting, Quincy, IL. For more information, go to chemistry.org/meetings/regional or call (217) 641-4554.

October 25-27: Analytical Laboratory Managers Association’s 27th Annual Conference, Portland, OR. For information, contact ALMA by phone, (505) 989-4683 or by email at alma@labmanagers.org.

October 28: Chemistry Day, Columbia College-Chicago, 623 S. Wabash Ave., 9:30am - 3pm. This year’s theme is “Your Home - It's All Built on Chemistry”.

November 4: Chicago Section’s Job Search Workshop for Chemical Professionals, 9:00 am - 3:00 pm, University of Illinois at Chicago, Room 238, SES (Science and Engineering South), 845 West Taylor Street, Chicago. See item in this issue.

November 15: Chicago Section’s Dinner Meeting/Julius Stieglitz Lecture. Prof. Samuel Danishefsky, Professor of Chemistry at Columbia University and Director of the Bioorganic Laboratory at Sloan - Kettering Institute for Cancer Research. Note that this is a Wednesday.

December 8: Chicago Section’s Holiday Dinner Party and Meeting. The after-dinner speaker is Bassam Z. Shakhashiri, University of Wisconsin-Madison. Dinner is at Fountain Blue Banquets, Des Plaines, IL.

January 27-31, 2007: The Association for Laboratory Automation (ALA) will hold its LabAutomation2007 Conference in Palm Springs, CA. For more information, contact Anne O’Day at (630) 305-0003 or aoday@labautomation.org.
