

THE OCTAGON



Volume 86, No. 3, March 2003

Lehigh Valley Section of the American Chemical Society

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763rd LVACS Meeting:

Date: March 14, 2003

Location: DeSales University

Reception: 5:15 pm - Board Room - McShea Student Center

Dinner: 6:15 pm - Board Room - McShea Student Center

Meeting: 7:30 pm - Lecture Hall - Priscilla Payne Hurd Science Center

Talk: At conclusion of meeting -Lecture Hall - Priscilla Payne Hurd Science Center

Menu: Choice of Roast Beef, Stuffed Flounder or Spinach Tortellini, wild rice and vegetables, cheesecake or banana cream cake.

Cost: \$18, students \$10

Contact: Renee Fair by Monday, March 10th. Please provide name, affiliation, choice of entree and contact information.
[e-mail:rene.fair@desales.edu](mailto:rene.fair@desales.edu) phone 610-282-1100 x1386

Directions: Directions to DeSales can be found on the web at
<http://www.desales.edu/servlet/RetrievePage?site=Desalesu&page=aboutcardirections>. A campus map is available at
<http://www.desales.edu/servlet/RetrievePage?site=desalesu&page=campustourstart>

Speaker: Catherine M. Bentzley, Ph.D.

Dr. Bently received her B.S. degree from St. Joseph's University in Philadelphia, and followed with a Ph.D. from the University of Delaware. Her thesis work on analysis of oligonucleotide strands and their reactivities by Matrix-Assisted Laser Desorption Ionization was advised by Murray V. Johnston. She is currently an Assistant Professor at the University of the Sciences in Philadelphia where she supervise an active research group of graduate and undergraduate students. Her research interests include the analysis of protein-kinase catalyzed reactions using ESI-MS

Conformation changes in oligonucleotide strands using ESI-MS, degradation of oligonucleotide products during freezing/thawing and ALDI-TOF Analysis of Amiodarone in Human Heart Tissue

Talk: "Investigations of the Decomposition, Fermentation and Conformation of Biological Systems using Mass Spectrometry"

Abstract: The rapid and enormous expansion in the biotechnology revolution has caused increased interest in determining exact molecular weights of biological systems. Mass spectrometry offers a quick and convenient method for determining accurate molecular weights of biological samples including peptides, proteins, oligonucleotide and oligosaccharides. Matrix-Assisted Laser Desorption Ionization and Electrospray Ionization are the two predominant mass spectrometry techniques used for the development of biological assays.

During the MALDI process singly-charged analyte ions are produced after desorption/ionization from a matrix using a nitrogen laser. For example, in our laboratory we utilize MALDI to track the fermentation process of drug products. In another study MALDI is used to track the decomposition of PCR primers over various periods of time ranging from 1 day to 10 years. In contrast to MALDI, the ESI method ionizes an analyte to form charged species through desolvation of microscopic droplets. A resultant ESI spectrum contains a multiply protonated envelope of various mass-to-charge ratios. ESI can also be utilized to study the conformational changes of protein structures as they undergo desolvation. It is also possible to analyze the denaturing of oligonucleotide strands as the sample enters the gaseous phase.

2003 Budget - Treasurer's Report

Submitted by John Freeman

Income Categories		2003 Budget
1	Annual ACS Allotment	\$8,538.00
2	Local ACS Section Dues	\$2,400.00
3	Donations, Contributions	\$ -
4	Octagon Income (Advertising)	\$ -
5	Meal Income	\$ 4,200.00
6	Interest, Dividends	\$ 500.00
7	Councilor Travel Rebate	\$3,000.00
	Total Income	\$18,638.00
Expense Categories		
1	Administrations Expenses	
	Bank/Investment charges	\$ 65.00
	Executive Committee	\$ -
	Membership Committee	\$ -
	Office Supplies	\$ 25.00
	Program Committee	\$-
	Public Outreach	\$ -
	subtotal	\$ 90.00
2	Subsidies to Subsections	
	TEACHEM	\$ -
3	Continuing Education	
	Leadership Training	\$ 500.00
4	Local Meeting Speaker Expenses	\$ 200.00
5	Meal Expenses	\$ 5,000.00
6	Octagon/Webpage	
	Office supplies and printing	\$3,200.00
	Postage	\$ 2,400.00
	Editors Fee	\$4,000.00
	subtotal	\$9,600.00
7	Awards	
	50 Year	\$ 50.00
	Distinguished service Award	\$ -
	LVACS Scholarship	\$ 1,125.00
	Organic Chem. Schlrshp	\$ 1,125.00
	Past Chair	\$ -
	Student Awards	\$ 650.00
	subtotal	\$2,950.00
8	Travel	
	Councilors	\$ 4,000.00

	Officers	\$ -
	subtotal	\$ 4,000.00
9	Other Expenses	
	Chemistry Olympiad	\$ 200.00
	PJAS	\$ 200.00
	Reading/Berks Science Fair	\$ 250.00
	Miscellaneous	\$ 25.00
	subtotal	\$ 675.00
	Total Expenses	\$ 23,015.00
	Deficit	\$(4,377.00)

Budget Notes:

The bad news is we are currently facing a deficit in our budget. We also ran a deficit in 2002. Fortunately our surplus from past years cushions the current situation. Additionally our endowment will allow us to run the occasional deficit.

Obviously this is a long term problem. The one thing that you as a member of the section can do to help us the most is to sign up to receive your octagon on line. Current production and mailing costs amount to approximately a \$0.60 an issue/member over the course of the year this adds up to \$5800 dollars a year for the section. If 75% of our members receive the octagon on line then we save \$4350 or nearly all of our budget short-fall. If you can receive the octagon on line please do. If you know someone who could but doesn't talk to them about it.

If our short fall is not ameliorated, what suffers first will be our out reach efforts in the community. Sometimes in this world it is difficult to find a way to make a difference. By receiving the Octagon on line you will. Thank you.

2003 Spring Meeting Schedule:

(Please *pencil* these dates on your calendar)

March 14, DeSales University
 April 15, Moravian College
 May, Cedar Crest College (date TBA)

February Meeting Minutes:

The 762nd meeting of the LVACS was called to order by Chair Dr. Paul Bouis at 7:49 PM on Thursday, February 20, 2003. Lafayette College hosted the meeting on their campus. The items discussed prior to the lecture are as follows: The January minutes were approved. Dr. Bouis announced the annual report was submitted & approved, and asked John Freeman to discuss the budget. Please find the details in the March issue of the Octagon. John did note calculations revealed a deficit of \$ 5,577.00. This can be reversed in two major ways. One, it would be helpful if more members 'subscribed' to the on-line version of the Octagon. Please contact Michelle Jones-Wilson at mjwilson@po-box.esu.edu, or subscribe through the local section website <http://www.esu.edu/lvac/>. Second, the section presents two scholarships each year, and members are encouraged to support the programs by donating funds towards the scholarships. One of the scholarships is the Foundation in Chemistry Award. As in years past, this award is given annually to a high school senior from the LVACS boundary and will attend a four-year college in the Lehigh Valley area. Please encourage eligible students to apply, for only 5 students applied for this \$1000.00 award last year. Please see Dr. Bouis for additional information. Steve Weiner announced the second scholarship for a rising college junior. Award would be based on their performance on the ACS Organic Chemistry Exam. Supplemental information would include a 3-page essay, and a letter of recommendation from their organic chemistry professor. Minimum of 2 semesters of organic chemistry is required.

Next, the question of the month was answered. "Who was the first woman chemistry professor at Harvard?" The answer is Alice Hamilton, and Michelle Jones-Wilson provided some autobiographical information. She was born in 1869, received her undergraduate chemistry degree and MD at University of Michigan. Her areas of expertise include industrial toxicology; hazards of carbon monoxide, mercury, tetraethyllead, benzene, and others. Dr. Hamilton was appointed professor in 1919, and in 1995 she was featured on a first class stamp.

Dr. Carol Libby then described the Undergraduate Research Poster Session sponsored by the section. This event will be held prior to the Moravian meeting on April 15, 2003, from 5:00 to 6:15 PM. Meeting details will be published in the April Octagon; however, please see the local website for requirements and information. The deadline for abstract submission is April 1.

Dr. Bouis mentioned members can still comment on the by-laws. Please find the latest copy on the local website. Dr. Bouis also presented Dr. Joe Sherma with the Past-Chair award, noting his great dedication and service to the section during his 2002 term. Dr. Sherma thanked the members, executive committee, and Dr. Bouis for his mentoring and great assistance.

Dr. Chip Nataro introduced the speaker for the evening, Dr. Paul Bouis. The title of Dr. Bouis' talk was "The Legacy of a Zinc City." The members were taken on a historical trip of the life and demise of New Jersey Zinc (NJZ, Palmerton, PA). Dr. Bouis began by listing the physical and chemical properties of zinc, noting it's the 24th most common element in the Earth's crust, and the fourth most used metal. Zinc ore is converted to the oxide in order to be processed further. Uses for the resulting slab zinc include galvanizing sheet iron; as ingredient of alloys such as bronze, brass, silver, and special alloys for die-casting, certain paint pigments, household utensils, castings, etc. In addition, zinc processing creates a smoke screen used by the military, plus in small amounts for insulin human injection. Many sunscreens use zinc oxide, which is evident by the white residue on the skin after application. Dr. Bouis noted that BASF now makes a transparent zinc oxide sunscreen as well. The common by-product of generating slab zinc is sulfuric acid (H₂SO₄), a critical fact to state as Dr. Bouis ventured into the details of the deciduous foliage destruction

Dr. Bouis displayed a table of the historical similarities between New Jersey Zinc and Bethlehem Steel. Please see below:

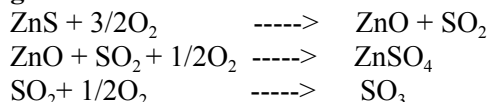
ERA	Bethlehem Steel	New Jersey Zinc
Beginning	1857	1848
Established	1904	1897
Growth	1920	1923
Glory Years	1960	1960
Slow Decent	1970	1970
Decay	1975	1975
End	1995	1980

Dr. Bouis showed the audience a number of telling satellite photos, starting with a large areal view, then subsequent closer views until a clear picture of the mountain range destruction was clearly evident. Next, ground photos of pure devastation were shown, evidence of the effects that off-gases from the roasting of sulfide-containing ores produce. The ores were mined in New Jersey, specifically at the Franklin and Sterling Hill Mines. The operation and research facilities moved to Palmerton, PA in the late 1890's.

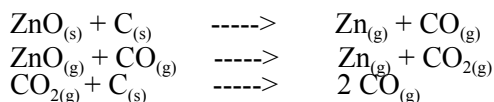
The Growth Period (1901 - 1917) continued the technological advances. The production of sulfuric acid began in 1916, and USP grade zinc oxide was first produced in 1917. Initially, the west plant was the sole facility, but soon another plant (east) was needed. Even then, demand over the years continued, and mine expansion still did not seem to meet the desire for these zinc products. Many pictures of the plants, Palmerton, and the stages of the mountain destruction were shown, including a dramatic photo of the area under a smoke screen. Soon, we could see the disappearance of the mixed oaks and chestnut trees that once populated the area.

Dr. Bouis detailed the chemistry, as shown:

Roasting



Reduction



Dr. Bouis also detailed the machinery, including the horizontal retorts and the difficulties with such a system. Next, we were told of the Glory Years (1926-1950), where die casting alloys were discovered and improved, and World War II increased demand dramatically. A major advancement was the advent of the vertical retort for continuous smelting of zinc (1929). These retorts were able to produce eight tons of slab zinc per day and NJZ's East and West plants had a total of 40 in use. This large volume also produced a large amount of off-gases and sulfuric acid, leading to the decay shown in the many photos Dr. Bouis displayed.

The Slow Decent (1954-1970) and The End (1975-1982) saw the resulting effects of years of by-product interactions with the Appalachian Mountain foliage. The EPA enforced restrictions on the manufacturing process, and in 1982 the Palmerton area was designated a "Super Fund Site." However, we were shown a number of photos where some trees were almost thriving in the toxic area, and why this was so was a question requiring additional research.

Next, Dr. Bouis turned our attention to Andrew Lock, who explained his research for the Lehigh Valley Science and Engineering Fair (to be held on March 22). He attempted to see what type of vegetation would grow in such soil, and noted that it may not be entirely the fault of heavy metals or acid rain/sulfuric acid, it may actually be due partly to inadequate or depleted soil. Granted, this inadequacy is conjectured to be from the plant emissions, and Andrew noted that the Canadian Hemlock seems to grow very well in the soil on the mountain. His work was displayed along with many books and maps Dr. Bouis provided relating to the history of "Zinc City."

Dr. Bouis concluded with a brief explanation of the Lehigh Gap Restoration Project. Afterwards, Dr. Bouis answered many questions. Dr. Sherma presented Dr. Bouis with a gift to express the section's appreciation for his continued service to LVACS, and his willingness to speak in addition to running the meeting. The meeting was adjourned at approximately 9:10 PM.

Additional information can be found at: www.sterlinghill.org/
<http://mineral.galleries.com/minerals/fablocal/franklin.htm>

Respectfully Submitted,
Tara S. Baney
Secretary, LVACS
20-February-2003

LVACS Organic Chemistry Undergraduate Scholarship Information

Submitted by John Freeman

The Lehigh Valley Section of the American Chemical Society's Scholarship for Organic Chemistry competition takes place on the 26th of April at Muhlenberg College. The competition entails taking the American Chemical Societies organic chemistry examination, a letter of recommendation from the students' organic chemistry professor, and a 3-page essay on a topic in organic chemistry. Details for the letter and the essay follow. The student should be a rising junior, attending college at an institution in the section. Students should indicate their interest in the scholarship in advance to John Freeman or Steven W. Weiner at the addresses below.

John Freeman 522 Raub St Easton PA 18042 jcf2@rcn.com	Steven W. Weiner Dept. of Chemistry Muhlenberg College 2400 Chew Street, Allentown, PA 18104. sweiner@muhlenberg.edu
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Letters of Recommendation: When writing a letter of recommendation on behalf of a student applying for the LVACS Scholarship, please speak to the student's skills in lecture and laboratory from Organic Chemistry I and Organic Chemistry II. In addition to performance on written exams and a course grade for Organic Chemistry I, it would be helpful to comment on the student's proficiency in organic lab and his or her participation in recitations. We would also like, if possible, the letter to address the student's quantitative skills by commenting on performance in quantitative analysis or its local equivalent. Please place your letter of recommendation in a sealed plain envelope and place your signature over the seal. The student will be required to bring the sealed letter to the ACS Organic Chemistry Standardized Exam on April 26, 2003.

Essay: The student should choose a molecule, a group of molecules or a process in organic chemistry. The essay should address the development of the molecule or process, its impact on society, and the student's personal interest in the process or molecule. The essay should run 3 pages \pm a quarter page either double-spaced typed or in a readable 12 point font with 1 inch margins on all sides. An additional page with references should be included. The Essay will be judged on:

CEase of reading, this includes items of grammar, spelling, and logical flow of the material. 25%
CAppropriate depth of coverage on both the development of the molecule and the impact on society. 60%
CAppropriate foot notes and references 5%
CAbility to follow the formatting rules 10%

LVACS Officers:

Chair: Paul Bouis

Mallinckrodt Baker Inc., Phillipsburg, NJ 08865
paul.bouis@tycohealthcare.com 908-859-9443

Chair Elect: Steve Weiner

Chemistry Department, Muhlenberg College
2400 Chew Street, Allentown, PA 18104
sweiner@muhlenberg.edu 484-664-3665

Immediate Past Chair: Joe Sherma

Lafayette College, Easton, PA 18042
shermaj@mail.lafayette.edu 610-330-5220

Secretary: Tara Baney

MRL, Clinical Genomics (BLX-13)
518 Township Line Road, Blue Bell, PA 19422
tara_baney@merck.com 484-344-3346

Treasurer: John Freeman

522 Raub St., Easton PA 18042
jcf2@rcn.net 610-923-3587

Councilor: Roger Egolf

Penn State LV Campus, Allentown, PA 18051
rae4@psu.edu 610-285-5110

Councilor: Pamela D. Kistler

Cedar Crest College, Allentown, PA 18104
pdkisttle@cedarcrest.edu
610-437-4471 x 3507

Alternate-Councilor: T-Michelle Jones-Wilson

East Stroudsburg University
East Stroudsburg, PA 18301
mjwilson@po-box.esu.edu 570-422-3446

Alternate-Councilor: Carol Baker Libby

Moravian College, Allentown, PA 18018
cblibby@cs.moravian.edu 610-861-1629

Question of the Month:

What common compound was originally called
apperative saffron of mars?

Come to the March Meeting for the Answer

This Month in the History of Chemistry:¹

March 1: *Antoine-Henri Becquerel discovered radioactivity in uranium salts, 1896.

*John Alexander Reina Newlands read a paper on the "Law of Octaves" before the Chemical Society, 1866; it was not well received.

March 3: *Louis Pasteur and Claude Bernard initiate a test of the idea of pasteurization by heating blood and urine in sealed flasks, 1862. The result of no observed fermentation or decomposition after 50 days supported the possibility of heating foods sufficiently to kill germs without significantly altering their chemical composition.

March 4: *Willard Libby and coworkers developed radiocarbon dating, 1947.

March 11: *Cato Guldberg and Peter Waage presented paper, "Studier over Affiniteten", describing law of mass action to the Norwegian Academy of Sciences and Letters in 1864.

March 12: *James D. Watson described the double helix structure of DNA in a letter to Max Delbrück, 1953.

March 16: *Susan Hayhurst was the first American woman to graduate from pharmacy school (Philadelphia College of Pharmacy), 1883.

First liquid-fueled rocket flight was made in Auburn, MA, under the direction of Robert Goddard, 1926.

March 20: *AZT is approved by the US Food and Drug Administration as a treatment of AIDS, 1987.

*Alessandro Volta writes letter to Joseph Banks, president of the Royal Society, describing a battery, 1800.

March 21: *Wolfgang Pauli's paper on the exclusion principle is published in Zeitschrift für Physik, 1925.

*Mikhail Tswett first described his chromatographic method to the Warsaw Society of Natural Sciences in 1903.

March 23: *William Crookes in 1895 identified a new gas isolated by William Ramsay as helium (He, element 2, which had been discovered in the sun some 27 years earlier.)

*Neil Bartlett prepares the first noble gas compound, XePtF₆, 1962.

March 24: *Exxon Valdez runs aground on a reef, 1989, spilling 11 million gallons of oil into the waters of Prince William Sound, Alaska.

March 28: *Glenn Seaborg and coworkers showed that plutonium-239 undergoes slow-neutron fission in 1941. Production of a plutonium bomb subsequently became a goal of the Manhattan Project.

March 30: *Crawford Williamson Long first used ether as an anesthetic in 1842 (commemorated as "Doctors' Day").

¹Thanks to Carmen Giunta, for his Classic Chemistry website <http://webserver.lemoyne.edu/faculty/giunta/>

Advertising/Article Policy

All articles of interest to LVACS members including local news and meeting details will be printed on a priority basis over ad copy. All ads for job openings and seminars with free admission of interest to LVACS members will be printed free as space is available. All ads for goods or services available at a cost will be printed for a fee. Please contact the editor for the fee structure. The editor reserves the right to reject inappropriate copy. All article copy must be submitted 5 weeks prior to the meeting date. Electronic format (ms word, word perfect email or simple text) is preferred but not required. Information can be emailed, posted or faxed to the editor. Images can be submitted electronically in either gif, jpg, tiff, or bmp format. Images submitted as hardcopy may be scanned and compressed for insertion. The editor reserves the right to make minor changes to copy in the interest of space prior to publication. Significant changes will be communicated to the author before print.

Article/Copy Submission Guidelines:

Please address all correspondence concerning this publication to the editor.

T. Michelle Jones-Wilson
East Stroudsburg University
Dept. of Chemistry
200 Prospect Street
East Stroudsburg, PA 18301
Phone: 570-422-3446
Email: mjwilson@po-box.esu.edu
Fax: 570-422-3908

Applications for membership in the American Chemical Society should be sent to the LVACS Secretary. This publication, founded in 1918 is devoted to the interests of the Lehigh Valley Section of the American Chemical Society. It is published eight times each year (January through May and September through November) and provided free to members of the local section: subscription fee to non members is \$10 yearly.

Call for Papers . . .

Undergraduate Research Poster Session

Sponsored by
The Lehigh Valley Section of
The American Chemical Society

April 15, 2003

at

Moravian College

5:00-6:15 PM

Preceding the 264th meeting of the Lehigh Valley Section of the ACS
(Meeting details will be published in the April Octagon)

Who may participate?

Undergraduates attending a college or university within the Lehigh Valley section of the ACS. Research may have been done at the student's home institution with a chemistry or chemical engineering faculty member or during a summer research experience elsewhere.

To participate

Submit an abstract by April 1, 2003, as a Microsoft Word attachment to an email to cblibbycs.moravian.edu. Please indicate "LV-ACS Poster Session" in the subject line of your email header.

Abstract format

TITLE (all capitals)

Authors names, authors institutions and addresses

Abstract of research, 150 words maximum

Other requirements and information

- Poster presenters must provide their own pins and poster board (preferably 30 x 40 inch foam core, available at A. C. Moore or Michael's craft stores or art supply dealers). Easels will be provided for displaying the posters.
- Abstracts will be acknowledged by an email message that will include details about meeting room and set-up time.
- Advice for making effective posters can be found at <http://www.swarthmore.edu/NatSci/cpurrin1/posteradvice.htm> and the links therein.
- Other questions? Contact Carol Libby, cblibby@cs.moravian.edu

MARM 2003



“Forging Linkages”

American Chemical Society

36th Middle Atlantic Regional Meeting

Hosted By The Trenton Local Section

With The Department of Chemistry

Princeton University, Princeton, New Jersey

June 8-11, 2003

Elsa Reichmanis, ACS President 2003

Keynote Speaker

Alan MacDiarmid, 2000 Nobel Laureate

Session on Conductive Polymers and Functional Nanomaterials

Bassam Shakhshiri, University of Wisconsin-Madison

The Joy of Learning and Exhortations of Good Teaching

Shirley Tilghman, President of Princeton University

Speaker at the Women Chemists Luncheon

Symposia

Pharmaceutical and Biotech

Drug Discovery
Computational Chemistry
Biophysical Chemistry
Biochemistry
Forensics Chemistry
Agricultural Chemistry

Nanotechnology, Environmental and Energy

Nanotechnology
Fuel Cells
Catalysis
Atmospheric Carbon Mediation
Solid State Chemistry
Environmental Chemistry

General Chemistry

Organic Chemistry
Analytical Chemistry
Physical Chemistry
Polymer Chemistry
Material Chemistry

Special Sessions

Chemical Education
High School Chemistry Teaching
K – 8 Chemistry Education
Patent Law
Women’s Symposium

You are invited to submit abstracts and posters for these and other symposia.

See the call for papers in the **C and E News**, January 20th '03.

General Chair
Peter Boughton

609 771 9173

PeteJBo742@Aol.com

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Jerry Goodkin

609 882 4763

Goodkin@erols.com

Program Chair
Donna Bassolino

609 259 0742

Donna@dbkonline.com

Program Chair
Bing Zhou

609 716 8438

zhou@htinj.com

News from National ACS

The American Chemical Society offers two types of continuing education courses online

Instructor-Led Courses-

ACS Webcast Short Courses

Now you can take an ACS Short Course at your desktop. Make your plans now to attend an ACS Webcast Short Course from the convenience of your office or home. These courses meet during scheduled times and are directly guided by expert instructors.

Webcast Short Courses scheduled for 2003:

- Interpretation of Mass Spectra
- Infrared Spectral Interpretation, I
- Effective Technical Writing

For more information visit <http://chemistry.org/elearning>.

Self-Paced Courses-ACS Internet Courses

Register in and start a course anytime. These courses are completely self-paced. Help from an instructor is available by e-mail.

ACS Internet Courses include:

- *Basic Statistical Analysis of Laboratory Data*
- NEW! Chemical Laboratory Techniques
- NEW! Starting with Safety-An Introduction for the Academic Chemistry Laboratory

To review a complete on-line catalog, visit the ACS Virtual Campus at <http://www.vcampus.com/acs>.

New Green Chemistry Education Materials Available

Green chemistry is sometimes called preventive medicine for the environment. It is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances. You can teach or learn more about green chemistry with relevant, stimulating, and hands-on materials from the ACS Education and International Activities Division.

A new lab manual for undergraduate chemistry, two beautiful poster designs, and a set of FREE introductory readings in green chemistry are now available. These products mark the conclusion of our cooperative agreement with the U.S. Environmental Protection Agency to develop materials that relate green chemistry to standard topics in the chemistry curriculum. Other products available from ACS include an introductory video, an activity book for introductory chemistry, green chemistry case studies, and a FREE searchable bibliography. Full descriptions of these products are available online at www.chemistry.org/education/greenchem, or contact us at 202-872-4523 or education@acs.org for more information.

Norris Award for the Teaching of Chemistry

Nominations are being solicited for the James Flack Norris Award for Outstanding Achievement in the Teaching of

Chemistry, one of the oldest national awards of the American Chemical Society, given annually by the Northeastern Section. The award, which consists of a citation and an honorarium of \$3,000, is given to a recipient selected from an international list of nominees who have served with special distinction as teachers of chemistry at any level and whose efforts have had a wide-ranging effect on chemical education. The 2002 award was recently presented to Zafra Lerman of Columbia College.

Nominees' achievements must be coupled with dedicated teaching of chemistry at the graduate, undergraduate, or high school level. The award has been given for a variety of achievements: for outstandingly effective textbooks, lecture demonstrations, or laboratory courses; for editing respected scholarly works and/or journals; for developing teaching tools for secondary school faculty distributed on a national level; and for developing new ways to teach chemistry to non-traditional students.

Nominations should focus specifically on the nominee's contribution to and effectiveness in teaching chemistry, as distinguished from research. The nominating letter should include a condensed curriculum vitae that demonstrates key achievements and be supported by as many seconding letters as are necessary to convey the nominee's qualification for the award. These letters may show the impact of the nominee's teaching in inspiring colleagues and students toward an active life in chemistry and/or related sciences, or may describe the influence of the nominee's other activities in chemical education, such as textbooks, journal articles, or other professional activity at the national level. Letters from students as well as colleagues of the nominee are helpful to the selection committee. Materials should be of 8 ½ by 11-inch size but should not include books, reprints, or software. The nomination must be limited to 30 pages in total. Questions about the content of a nomination should be directed to Dr. Patricia Samuel at graycote@acadia.net, or to Dr. Frederick Greene at fdg@mit.edu. Nominations for 2003 will be received until April 16th and should be sent to Ms. Marilou Cashman, NESACS, 23 Cottage St., Natick, MA 01760.

Spring Technical Symposium

The Louisville Society for Coatings Technology and The CDIC Society for Coatings Technology is pleased to host The 2003 Spring Technical Symposium April 16, 2003 at The Galt House in Louisville, Kentucky.

For more information please contact:

Jimmy Cockerill	Prakash Pradhan
Cone Solvents, Inc.	Color Corporation of America
502-448-9250	502-722-5511