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William H. Nichols Medalist for 2005

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Manager / Editor  
MALCOLM STURCHIO  
1 Cable Court, Montville, NJ 07045  
973-331-5142; Fax 973-331-5143  
e-mail: sturchio@optonline.net

**Advertising Manager**  
VINCENT GALE  
MBO Services, Inc.  
PO Box 1150, Marshfield, MA 02050-1150  
781-837-0424; Fax 781-837-8792  
e-mail: vincegal@adelphia.net

**INDICATOR COMMITTEE**  
**New York Section Rep.**  
EVELYN SARNOFF  
97-37 63rd Road, Rego Park, NY 11374-1624  
718-459-3097

**North Jersey Section Rep.**  
DIANE KRONE  
Northern Highlands Regional High School  
298 Hillside Avenue, Allendale, NJ 07401  
e-mail: kroned@optonline.net

**Web Master**  
ED HARRIS — e-mail: harris7@optonline.net

**NEW YORK SECTION**  
<http://newyorkacs.org>

**Chair**  
JAMES W. CANARY  
Department of Chemistry, New York University  
New York, NY 10003  
212-998-8422  
e-mail: james.canary@nyu.edu

**Chair-Elect**  
JILL REHMANN  
Department of Chemistry, St. Joseph's College  
245 Clinton Avenue, Brooklyn, NY 11205  
718-636-6823  
e-mail: jrehmann@sjcnj.edu

**Secretary**  
CHRISTIAN ROJAS  
Dept. of Chemistry, Barnard College  
3009 Broadway, New York, NY 10027  
212-854-5480  
e-mail: crojas@barnard.edu

**Section Office**  
St. John's University, Chemistry Dept.  
8000 Utopia Parkway, Jamaica, NY 11439  
516-883-7510; Fax 516-883-4003  
e-mail: njesper1@optonline.net

**NORTH JERSEY SECTION**  
<http://www.njacs.org>

**Chair**  
JACQUELINE ERICKSON  
GSK, 1500 Littleton Road, Parsippany, NJ 07054  
973-889-2368  
e-mail: jacqueline.a.erickson@gsk.com

**Chair-Elect**  
STEPHEN WALLER  
Fairleigh Dickinson University, 285 Madison Ave.,  
M-581-01, Madison, NJ 07940  
973-443-8783  
e-mail: stephen\_waller@fdi.edu

**Secretary**  
BETTYANN HOWSON  
49 Hillside Avenue, Madison, NJ 07940-2612  
973-822-2575  
e-mail: chemphun@optonline.net

**Section Office**  
4 Cameron Road, Piscataway, NJ 08854  
732-463-7271

# THE Indicator

CIRCULATION: 8,500

The monthly newsletter of the New York & North Jersey Sections of the American Chemical Society. Published jointly by the two sections.

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**POSTMASTER:** Send address changes to American Chemical Society, Department of Member and Subscriber Services, *THE INDICATOR*, P.O. Box 3337, Columbus, OH 43210, or e-mail: [service@acs.org](mailto:service@acs.org). Periodicals postage paid at Montville, NJ and additional mailing offices.

Published monthly except July and August. All views expressed are those of the editor and contributors and do not necessarily represent the official position of the New York and North Jersey Sections of the American Chemical Society unless so stated. Subscription price included in dues paid by New York and North Jersey Section members. **Subscription price to non-members of either Section \$20.00 per year. To subscribe, make checks payable to The Indicator and mail to the Manager/Editor (see top of left column on this page).**

**Address advertising correspondence to Advertising Manager. Other correspondence to the Editor.**

## April Calendar

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**Thursday, March 31, 2005**  
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**Thursday, April 7, 2005**  
Long Island Subsection  
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**Thursday, April 14, 2005**  
Chemical Marketing & Economics Group  
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**Friday, April 15, 2005**  
Hudson-Bergen Chemical Society  
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High School Teachers Topical Group  
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**Tuesday, April 26, 2005**  
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### NORTH JERSEY SECTION

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**Monday, April 25, 2005**  
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Deadline for items to be included in the  
June 2005 issue of *The Indicator* is April 15, 2005.



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### RICHARD N. ZARE — 2005 NICHOLS MEDALIST

The ACS New York Section congratulates and extends its best wishes to Professor Richard N. Zare who will receive the William H. Nichols Medal Award on Friday, April 1, 2005 in White Plains, NY. The Medal will be presented at an award dinner following the Nichols Distinguished Symposium. Professor Zare will be honored "For Pioneering Studies of Chemical Reactions on the Molecular Level."

Professor Richard N. Zare is the Marguerite Blake Wilbur Professor in Natural Science at Stanford University. He was born on November 19, 1939 in Cleveland, Ohio, and is a graduate of Harvard University, where he received his B.A. degree in chemistry and physics in 1961 and his Ph.D. in chemical physics in 1964. In 1965 he became an assistant professor at the Massachusetts Institute of Technology, but moved to the University of Colorado in 1966, remaining there until 1969 while holding joint appointments in the departments of chemistry, physics and astrophysics. In 1969 he was appointed to a full professorship in the chemistry department at Columbia University, becoming the Higgins Professor of Natural Science in 1975. In 1977 he moved to Stanford University.

Professor Zare is renowned for research in the area of laser chemistry, resulting in a greater understanding of chemical reactions at the molecular level. By experimental and theoretical studies he has made seminal contributions to our knowledge of molecular collision processes and contributed very significantly to solving a variety of problems in chemical analysis. His development of laser induced fluorescence as a method for studying reaction dynamics has been widely adopted in other laboratories.

Professor Zare has received numerous honors and awards. They include: the National Medal of Science, The Welch Award in Chemistry, The Harvey Prize, The National Academy of Sciences Award in Chemical Sciences, NASA Exceptional Scientific Achievement Award, National Science Board's Distinguished Service Award, California Scientist of the Year, Royal Society of Chemistry Faraday Medal, the APS Earle K. Plyler Prize, the APS Arthur L. Schawlow Prize in Laser Science, the APS Irving Langmuir Prize, The ACS E. Bright Wilson Award in Spectroscopy, Harvard University's Centennial Medal, ACS Award in Analytical Chemistry, ACS Peter Debye Award in Physical Chemistry, the ACS Charles Lathrop Parsons Award, ACS Nobel Laureate Signature Award for Graduate Education, ACS Division of Analytical Chemistry Award in Chemical Instrumentation, the ACS (North Alabama Section) Madison Marshall Award, ACS (Auburn Section) G. M. Kosalapoff Award, ACS (New Haven Section) Kirkwood Award Medal, ACS (Rochester Section) Harrison Howe Award, ACS (Maryland Section) Remsen Award, ACS (Chicago Section) Willard Gibbs Medal, the ACS (Northwestern Section) Pauling Award, the Dannie-Heineman Preis, ISCO Award for Significant Contributions to Instrumentation for Biochemical Separations, Ohio State University's Evans Award, Michael Polanyi Medal, Michelson-Morley Award, Spectroscopy Society of Pittsburgh Award, Phi Lambda Upsilon's Fresenius Award, and the Eastern Analytical Symposium Award for Outstanding Achievements in the Field of Analytical Chemistry.

His teaching awards include: Laurance and Naomi Carpenter Hoagland Prize for excellence in undergraduate education, Stanford University's Dean's Award for Excellence in Teaching, the Allan V. Cox Medal for Faculty Excellence Fostering Undergraduate Research, and the Bing Fellowship Award, "to recognize excellence in teaching and commitment to undergraduate education."

Professor Zare holds honorary degrees from: Paul Sabatier University, Hunan University, The University of York, the State University of West Georgia, Uppsala University, Columbia University, Northwestern University, the University of Arizona, and Eidgenossische Technische Hochschule Zurich. He is a member of the American Philosophical Society, the National Academy of Sciences, the American Academy of Arts and Sciences, The American Chemical Society, Fellow of the American Physical Society, American Association for the Advancement of Science, California Academy of Sciences. Foreign Member Royal Society, Honorary Fellow of the Royal Society of Chemistry. Non-resident Fellow, Joint Institute of Laboratory Astrophysics (JILA), the World Jewish Academy of Sciences, Foreign member of the Chinese Academy of Sciences.

Professor Zare served as the Chair of the President's National Medal of Science Selection Committee 1997-2000, chaired the National Research Council's Commission on Physical Sciences, Mathematics, and Applications, 1992-1995, and was Chair of the National Science Board the last two years of his 1992-1998 service. He currently acts as Chairman of the Board of Directors at Annual Reviews, Inc. Professor Zare has given named lectures at numerous universities, has authored and co-authored over 650 publications and more than 50 patents, and he has published four books.

**WILLIAM H. NICHOLS MEDAL — DISTINGUISHED SYMPOSIUM  
AND AWARD BANQUET**

**Symposium: SHINING LIGHT ON CHEMICAL PROCESSES**

**Award Recipient:** Professor Richard N. Zare  
Marguerite Blake Wilbur Professor in Natural Science  
Stanford University, Stanford, California



**Date:** Friday, April 1, 2005  
**Time:** 1:00 PM Registration, 1:30 PM – 5:30 PM Symposium  
5:45 PM Reception, 6:45 PM Award Dinner  
**Place:** Crowne Plaza Hotel, White Plains, NY

**PROGRAM**

1:30 PM	Welcome	Professor James W. Canary 2005 Chair, ACS, New York Section New York University
1:35 PM	Opening of the Distinguished Symposium	Professor Jill K. Rehmman 2005 Chair-elect ACS, New York Section St. Joseph's College
1:45 PM	Molecular Perspectives of Water through Nanomatrix Spectroscopy	Professor Mark A. Johnson Professor of Chemistry Yale University
2:30 PM	Time Resolved Solvent Rearrangement Dynamics	Professor W. Carl Lineberger E.U. Condon Distinguished Professor University of Colorado
3:15 PM	Coffee Break	
3:45 PM	Chemistry at Reaction Thresholds	Professor John I. Brauman J.G. Jackson–C.J. Wood Professor of Chemistry Stanford University
4:30 PM	Reaction Dynamics: Seeing the Light	Professor Richard N. Zare NICHOLS MEDALIST
5:45 PM	Social Hour	
6:45 PM	William H. Nichols Medal Award Dinner	

More information regarding the Symposium is available on the New York Section's website at <http://www.newyorkacs.org>

Tickets may be reserved using the following form:

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(For table reservations of 8 or more, use the ACS member \$85/person rate for combination tickets.)

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**RESERVATION DEADLINE — March 18, 2005**

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**PROGRAM AREAS**

Analytical Chemistry Frontiers  
ADMET at the Crossroads of Drug Discovery  
Bench to Pilot Plant  
Biological Chemistry  
Celebrating Chemists & Chemistry  
Chemical Engineering/AIChE Short Courses  
Chemistry and the Law  
Computers in Chemistry  
Discovery to Commercialization  
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High School Education  
Green Chemistry  
Inorganic Chemistry  
Medicinal Chemistry  
Organic Chemistry  
Nano and Materials Science  
Physical Chemistry  
Polymers and BioMaterials  
Strategies for Company Growth

**MEETING HIGHLIGHTS** include a Sunday dedicated as **Science Education and Career Day**. Eminent Scientists will make the latest discoveries exciting and understandable for the public and our honored teachers, HS students and parents. **Career Development** programming will appeal to scientists at all levels.

**There will be Workshops, Short Courses, Vendor Exhibitions, WCC, Student Affiliate, YCC events and Symposia from other societies including RSC AAPS & AIChE. Don't miss the “Roving Feasts” & many award presentations.**

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## SCIENCE, MEDICINE, AND A MURDER MYSTERY MEET AT THE CHEMISTS' CLUB (1898 – 1904)

by Daniel T. Mallin

In 1898, a series of seemingly unrelated events came together in a way that would bring chemists, doctors, and lawyers together for years to come.

On November 29, 1898, Roland Molineux, a charter member of The Chemists Club and supervising chemist at the Morris Hermann Dry Color Company, got married.

On December 9, 1898, The Chemists Club submitted its articles of Incorporation to the State of New York.

On December 26, 1898, Harry Cornish, athletic director at the nearby Knickerbocker Athletic Club received a package of "Bromo Selzer" in the mail.

On December 27, 1898 Dr. William McMurtrie welcomed several hundred chemists from around the country for the annual meeting of The American Chemical Society. The meeting was the first to take place at the newly organized Chemists' Club, at its rented facility on West 55th Street. Randolph Guggenheimer, representing the Department of Health of the city of New York, continued the opening ceremonies by acknowledging the important contributions made by analytical chemistry to the emerging studies of medicine, forensic science and prosecutorial law:

"The study of medical jurisprudence has developed into one of the most important branches of legal training. Justice herself would in many cases be thwarted and murder unavenged but that chemical analysis more unerring than the sleuth hound demonstrates the commission of crime and points out the guilty."

On December 28, 1898, Harry Cornish administered the "Bromo Selzer" he had received a few days earlier to his landlord, Katherine Adams. Adams died within hours, victim of an apparent poisoning. Police began to suspect Roland Molineux almost immediately of having sent the package to Cornish. He had been involved in a very open dispute with him some months earlier at the Knickerbocker Athletic Club. Professor Randolph Witthaus, an expert toxicologist and an early member of The Chemists' Club reported within days that the "Bromo Selzer" bottle contained a mixture of bromo seltzer and mercury cyanide.

On February 27, 1899, after a very dramatic and public Coroner's Inquest, Molineux was arrested and charged in the murder of Katherine Adams. His trial began in November of 1899 and would last for over 4 months. This was the OJ Simpson case of its day, and would ultimately be remembered as a tour de force in the annals of criminal law. Huge crowds appeared in court each day, and reports appeared in newspapers all around the world. The case against Molineux was largely circumstantial, and relied heavily on testimony from handwriting experts, tying the known writings of Molineux to the address on the package sent to Cornish. Eventually, evidence was introduced suggesting that Molineux was responsible for the killing of Henry Barnet. Barnet was a friend of Molineux's who died just 7 weeks prior to Katherine Adams under similar circumstances. Prosecutors suggested that Barnet showed a little too much interest in Molineux's fiancée. Barnet's body was exhumed during the coroner's inquest and analyzed by several doctors and toxicologists. Professor Witthaus and Dr. H. Loomis testified at the trial that the cause of Barnet's death was also mercury cyanide poisoning. The poison was found as well mixed in with a known remedy for indigestion, "Kutnow Powder", which Barnet had received anonymously by mail and taken shortly before falling ill.

John H. Yokum, yet another early member of The Chemists' Club also testified in the case. Yokum described how mercuric cyanide can easily be synthesized by mixing Prussian Blue (cyanide of iron) with mercury oxide, materials found in abundance at Roland's lab at the dry color factory. Roland thus had the knowledge, skill, tools and opportunity to produce the poison used in the Adams case.

Molineux's defense team never mounted a defense, and he was found guilty in the murder of Katherine Adams and sentenced to death by electrocution. The defense immediately

appealed, citing numerous irregularities during the trial. After a year and a half the case was eventually overturned by the Supreme Court of New York State. In the appeal, Judge William E. Werner held that the state may not generally "prove against a defendant any crime not alleged in the indictment" thus criticizing the prosecution for unfairly biasing the jury against the defendant by introducing evidence of the Barnet poisoning at trial, a crime for which Roland had not been formally charged.

In 1902, Molineux was once again tried for the murder of Katherine Adams. This time however, no evidence of the Barnet poisoning could be introduced, and the handwriting evidence was much curtailed. In his defense, Molineux testified that he could not possibly have mailed the poison package to Cornish. He claimed to have spent the entire day in question with two Professors from Columbia University - Professors Vulte and none other than Charles Chandler, the first President of The Chemists' Club. The defense even went as far as to suggest that Cornish himself had sent the package, with help from the chemist Yokum.

In November of 1902 Molineux was found not guilty and released. His wife Blanche, who had faithfully stood by him throughout the entire affair, immediately left him and filed for a divorce. Molineux gave up his career as a chemist to become a writer, a skill he had refined during his almost two years on death row at New York's Tombs prisons. He eventually died in 1916 of a "cerebral syphilis infection", which had reduced Roland to a raving maniac by the time of his death at the age of 51.

This case would ultimately become one of the most important of the century, and served as a precedent setting case regarding the rules of evidentiary handling, handwriting analysis, and forensic analysis. This very public affair was no doubt the talk of the club in the early years. In 1904, Leo Baekeland invited lawyers and medical men to a series of informal lectures at the club entitled "Chemistry and the Law".

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## New York Meetings

### HUDSON-BERGEN CHEMICAL SOCIETY — JOINT MEETING WITH SIGMA XI

#### Are America's Beaches All Washed Up?

*Speaker:* Dr. Nicholas Coch  
Queens College, CUNY

Extensive coastal development, lack of hurricane danger perception, modification of shorelines with engineering structures and a rising sea level have increased the danger to coastal inhabitants and their structures. This talk describes how coastal systems work and evolve naturally as well as how anthropogenic and natural changes are causing problems on our coasts. Major problems will occur as we continue to build fixed structures on a moving shoreline. What are our options?

**Date:** Monday, March 28, 2005  
**Times:** Social 5:30 PM

Dinner 6:00 PM  
Seminar 7:00 PM  
**Cost:** \$20, \$10 for students  
**Place:** Ramapo College of New Jersey  
Trustees Pavilion, Room 3  
Mahwah, NJ



### LONG ISLAND SUBSECTION

#### ACS Presidential Agenda 2005: An Invitation to Dialogue

*Speaker:* Dr. William Carroll  
ACS 2005 President

After a successful election, the person designated as ACS President-Elect starts the process of defining an agenda and preparing for an active year as President. Over the course of 2004 I have carried on a discussion with members on issues that they perceive are important. Based on that input, here are some things I'd like to focus on next year.

The Public Perception of Chemistry. While we all know that chemistry has arguably

brought more benefit to humanity than any other scientific discipline, the public and occasionally the government forget. How can we unite the chemistry enterprise in actions to bring the benefits of chemistry back to the public eye?

Pre-college Education and Educators. 60 percent of high school students take chemistry, but few will take it from a chemist. On the other hand, many if not most career chemists cite an early teacher as their inspiration for their career. When we engage students in chemistry we increase the chances that bright students make it a career; but even for those who do not, a working appreciation for chemistry makes them more knowledgeable citizens. How do we get more chemists into the classroom?

The Chemistry Enterprise in the US is Changing. Whether it relates to the shift in chemistry from small molecules to very large, the commoditization of specialty chemicals, or natural gas pricing, the next ten years will bring sea change to the chemistry enterprise in the US. How do we prepare our current and future members for the state of chemistry, 2015?

Think of this presentation as an invitation to dialog on issues facing chemists and chemistry.

#### **Date:** Thursday, March 31, 2005

**Times:** Coffee 5:30 PM  
Presentation 6:00 PM  
Dinner 7:00 PM

**Place:** Hofstra University  
New Science Building  
California Avenue  
Hempstead, NY

**Contact:** Sasan Karimi at (718) 631-6280  
[skarimi@qcc.cuny.edu](mailto:skarimi@qcc.cuny.edu)



### LONG ISLAND SUBSECTION

#### Studies Directed Toward the Design and Synthesis of New Foldamers and Estrogen Receptor Ligands

*Speaker:* Dr. Rajeev S. Muthyala  
Queens College and the  
Graduate Center of the City  
University of New York

The overarching goal of our laboratory is to use the tools of organic chemistry to address problems at the interface of chemistry and biology. This talk will focus on two

projects that are of current interest to us. The first part of the talk will focus on the control of secondary structure of peptides via backbone engineering. We are particularly interested in altering the natural amide backbone of peptides to vinylogous tertiary amides. We are keen on using such altered peptides as stimuli-sensitive probes in cell and plant biology. Conformational studies on some minimalist model peptides will be presented. The second part of the talk will focus on estrogen receptor (ER) - a transcription factor whose role in breast cancer is of major contemporary interest. The design and synthesis of new ER ligands will be presented.

#### **Date:** Thursday, April 7, 2005

**Times:** Coffee 5:30 PM  
Seminar 6:00 PM  
Dinner 7:00 PM

**Place:** Queensborough Community  
College  
Science Building, Room S-111



### CHEMICAL MARKETING AND ECONOMICS GROUP

#### Current Patent Issues of Concern to the Chemical Industry

*Speaker:* Charles E. Miller  
Partner  
Dickstein Shapiro Morin &  
Oshinsky LLP, NYC

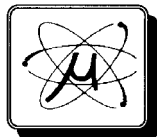
#### **Date:** Thursday, April 14, 2005

**Times:** Cocktails 11:30 AM  
Luncheon 12 noon  
Presentation 1:15 PM

**Place:** The Chemists' Club  
40 West 45th Street  
New York City

**Fees:** \$35 discount price for Members who reserve by **Tuesday, April 12** (12 noon). \$50 for Guests and Members (at the door without reservations)

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## THE HUDSON-BERGEN CHEMICAL SOCIETY AND THE SCHOOL OF NATURAL SCIENCES OF FAIRLEIGH DICKINSON UNIVERSITY

### The 7th Annual Undergraduate Research Symposium

The chemistry programs of the following colleges are members of the Hudson-Bergen Chemical Society

- Essex County College
- Fairleigh Dickinson University
- New Jersey City University
- Ramapo College of New Jersey
- St. Peter's College
- Stevens Institute of Technology

This is a forum for undergraduate students and their faculty mentors from colleges and universities that participate in the subsection's activities to present the results of their research. Outstanding graduating students are also being recognized (they receive the Hudson-Bergen Chemical Society Award consisting of a certificate and a book, courtesy of John Wiley and Sons and McGraw Hill). High school students from our area with outstanding research results are invited for the symposium as well. They are going to present results obtained in research programs designed for secondary school students. All the presenters will receive certificates.

Students who wish to present posters must send an abstract via e-mail to [standers@ramapo.edu](mailto:standers@ramapo.edu) by **April 8, 2005**. The abstract should be in MS Word format and must include the names and addresses of the student(s) and their faculty adviser(s) in addition to the title of the abstract. The abstract should not exceed 200 words. The

name of the student presenting the poster should be underlined. There is no registration fee.

### Finding the Chemistry in Forensic Science

*Speaker:* Mrs. Mary Eustace  
Westchester County Forensic  
Laboratory

The lecture will focus on the chemistry involved in different fields of forensic science. Applications to testing of biological fluids, gunshot and primer residue detection techniques, chemical enhancement of footwear impressions, toxicology, and drug analysis will be discussed.

Mary Eustace is a forensic scientist and a graduate of Fairleigh Dickinson University (chemistry, Teaneck). She has worked for seventeen years in the Westchester County Forensic Laboratory, specializing in DNA analysis. She worked on many well-publicized cases. Ms. Eustace also teaches a Forensic Chemistry course for undergraduate students which runs always at full capacity.

**Date:** Friday, April 15, 2005

**Times:** Social/Poster Session 5:00 PM  
Dinner 6:00PM  
Awards/Lecture 7:00PM

**Place:** Dickinson Hall Caf e  
Fairleigh Dickinson University  
Teaneck, NJ

**Cost:** \$20.00 for faculty and \$10.00 for student. The lecture is free.  
(Dinner cost for student presenters and awardees is waived.)

**Reservations:** Dr. Mihaela Leonida (201) 692-2338, email: [mleonida@fdu.edu](mailto:mleonida@fdu.edu) by **April 11, 2005**.

## HUDSON-BERGEN CHEMICAL SOCIETY MEETING ON 2/11/05 AT NEW JERSEY CITY UNIVERSITY

Dr. Cindy Jo Arrigo, NJCU, spoke on "Nucleic Acid and Protein Interactions — More Chemistry and Biology Than Meets the Eye."



Dr. Stephen Anderson, Chair HBCS and Prof. at Ramapo, presents HBCS paperweight to Dr. Cindy Jo Arrigo.

## Education

## HIGH SCHOOL TEACHERS TOPICAL GROUP

### Demo Derby

An evening of non-stop demonstrations suitable for the science classroom by members of the Chemistry Teachers' Club of New York and the Physics Teachers Club of New York.

**Date:** Friday, April 15, 2005

**Time:** Social and Dinner 5:45 PM

**Place:** Caff e Pane e Cioccolato  
10 Waverly Place at Mercer St.  
(southwest corner)  
New York, NY

**(You eat, you pay, cash only,  
no credit cards)**

**Time:** Meeting 7:15 PM

**Place:** New York University  
Silver Center Room 207  
32 Waverly Place (southeast  
corner Washington Square East)  
New York, NY

Security at NYU requires that you show a picture ID to enter the building. In case of unexpected severe weather, call John Roeder (212) 497-6500, between 9 AM and 2 PM to verify that meeting is still on; (914) 961-8882 for other info.

Note: For those who prefer indoor attended parking, it is available at the Melro/Romar Garages. The entrance is on the west side of Broadway just south of 8th Street, directly across from Astor Place. It is a short, easy walk from the garage to the restaurant or meeting room.



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## H. Martin Friedman Lecture

April 15, 2005

### Self-Assembly Routes to Molecule-Based Organic Electronics

Tobin Marks

Department of Chemistry  
Northwestern University

The lecture will be held on Friday, April 15 at 11:30 in Hill Hall, room 108, on the Newark Campus of Rutgers. A coffee social will precede the lecture at 11:00 in 338 Olson Hall. See <http://chemistry.rutgers.edu> for directions to the campus.

## RICHARD GOODMAN RECEIVES THE NICHOLS FOUNDATION HIGH SCHOOL CHEMISTRY TEACHER AWARD

The New York Section's 2004 Nichols Foundation High School Chemistry Teacher Award was presented to Richard Goodman at the Section Wide Conference at Fordham University.

Richard has been an educator for the past 25 years; the last 20 years at the Chappaqua Central School District - Horace Greeley High School. His program includes Regents Chemistry and Advanced Placement Chemistry, as well as serving as Department Chairperson.

Richard Received his BA from SUNY-Buffalo and an MA from Columbia University's Teacher's College.

He is a demonstrator par excellence, having attended numerous Woodrow Wilson, ChemEd and AlChEmIE workshops. Richard volunteered to do a program for the High School Teacher Workshop of the 2003 ACS National Conference. His workshop was so popular that there was standing room only.

Richard utilizes many resources in his teaching. He continues to modify and adapt laboratory investigations to suit the needs of his students. Of course, he celebrates Mole Day, October 23, with moles, artwork, poetry, etc. of his students.

Richard's students participate in the Local Chemistry Olympiad. Jennifer Ladd and Joshua Feintuch earned the privilege of being recommended to sit for the National Exam. Jennifer achieved high honors and Joshua, honors recognition.

Six of his students were selected to participate in the IBM Peer Teaching Institute at the Watson Research Center in Yorktown. They worked with IBM scientists to foster the scientific growth and development of local elementary school children in IBM's Saturday Outreach Program.

Dr. John Prignano, a fellow teacher at Horace Greeley comments: "Richard Goodman is an effective and fair professional with an admirable work ethic; a role model; provides perspective and insight without bias or prejudice; a master teacher and the consummate teacher."

Ross Liemer, one of Richard's students writes: "The exploding bubble tower certainly helped, but it was really the teacher that set it abloze, who first sparked my interest in science. Until the 10th grade, I considered science was just for students who wanted to be engineers or doctors. Then in sophomore year, I found myself in a chemistry course taught by Mr. Goodman. I soon discovered that he had more energy than a sliver of sodium dropped in water. Mr. Goodman has a teaching style as dynamic and effective as his demos. I soon excelled in chemistry. The next fall, I enrolled in Chemistry AP and joined the Math and Science Club. That February, I traveled to Brookhaven National Laboratory with three club members and my chemistry classmates to participate in the Regional Science Bowl. This was our first tournament and we placed third. Our team succeeded because of the enthusiasm for science our teacher had instilled in us."

Congratulations Richard Goodman.



Dr. James Canary, Mrs. Joan Laredo-Liddell, Mr. Richard Goodman and Mrs. Jean Delfiner.

## METROWOMEN CHEMISTS

MetroWomen Chemists, the New York-North Jersey Women Chemists Committee, is co-sponsoring the annual Outstanding Women Scientist Awards ceremony, organized and co-hosted by the Metropolitan New York Chapter of the Association for Women in Science and the Women Investigator's Network of the New York Academy of Sciences. This honoree includes chemists, Susan Fahrenholtz and Joan Roberts, recognized for their contributions to science and for their support of students and of women in science. Both are affiliated with Fordham University. Lakshmi Devi, Mt. Sinai Medical Center will also be honored.

**Date:** Tuesday, April 26, 2005

**Times:** Reception with hors d'oeuvres 6:00 PM

Awards Ceremony 7:00 PM

**Place:** New York Academy of Sciences  
2 East 63rd Street  
New York City

**Cost:** Cost of the reception is \$25 per person [\$10 students and postdoctorals] cash or check only. The Awards Ceremony is free and open to all interested.

Payment for the reception must be received in advance. Please send checks to Dr. Marjorie Zucker, 333 Central Park West, New York, NY 10025. Checks should be received no later than **Thursday April 21st**. Limited financial support for students and postdoctorals is available. For information contact Nancy Tooney at (718) 855-5020 or [nmt02@att.net](mailto:nmt02@att.net) ASAP.

## NY-ACS BIOCHEMICAL TOPICAL GROUP — JOINT MEETING WITH THE NYAS BIOCHEMICAL PHARMACOLOGY DISCUSSION GROUP

**The Blood Brain Barrier: Getting Drugs into the Brain**

**Organizers:** Robert L. Martone  
Wyeth Research

Kenneth J. Rhodes  
Johnson & Johnson  
Pharmaceutical

The blood brain barrier (BBB) separates the mammalian brain from the systemic circulation, and plays a vital role in the homeostasis of the central nervous system (CNS). While disturbances of the BBB have been implicated in several important neurological diseases, including multiple sclerosis and Alzheimer's disease, the barrier poses an obstacle to the use of many drugs for therapeutic interventions in the CNS. Modeling of the barrier for drug discovery efforts remains a significant challenge. This symposium will review the role of the BBB in disease, modeling of the BBB for drug discovery, and manipulation of the BBB to enhance drug delivery to the CNS.

**"Overview: The Blood Brain Barrier in Health & Disease"**

**Speaker:** William A. Banks  
Washington University  
St. Louis

**"Drug Delivery to the Brain: Using Physiology to Treat Pathology"**

(continued on page 16)

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John Arnett, Ph.D., Director of Operations



## BIOCHEMICAL TOPICAL GROUP

(continued from page 15)

**Speaker:** William A. Banks  
Washington University  
St. Louis

### "Drug Delivery to Central Nervous System Targets: Challenges and Opportunities"

**Speaker:** Gary M. Pollock  
University of North Carolina  
Chapel Hill

### "Intranasal Delivery: Bypassing the Blood-brain Barrier to Deliver CNS Therapeutic Agents to the Brain and Spinal Cord"

**Speaker:** William H. Frey II  
University of Minnesota  
St. Paul

### "Recent Advances in the Role of Matrix Metalloproteinases in Neuroinflammatory Diseases"

**Speaker:** Gary A. Rosenberg  
University of New Mexico  
Albuquerque

**Date:** Tuesday, April 26, 2005

**Time:** 1:00 – 5:00 PM

**Place:** New York Academy of Sciences  
2 East 63rd Street  
New York, New York

Space is limited. To reserve a seat, go to the calendar at [www.nyas.org](http://www.nyas.org) and fill out the online reservation form, e-mail [BPDG@nyas.org](mailto:BPDG@nyas.org) or call (212) 838-0230 x322.

NYAS Members and BPDG Affiliates may attend BPDG meetings free of charge. Non-members may attend for a fee of \$20 per event. To become a Member of the Academy, visit

<http://www.nyas.org/landing.html>



## CANDIDATES FOR THE NEW YORK SECTION 2005 ELECTIONS

At the January General Meeting and Section-wide Conference, the Nominating Committee presented the following candidates for the New York Section 2005 elections. ACS, New York Section members will receive a ballot in April. The ballot must be returned by **May 31, 2005**. If a ballot is not

received by May 12th, please contact the New York Section Office at (516) 883-7510 or [njesper1@optonline.net](mailto:njesper1@optonline.net). The Section extends a sincere thank you to the following candidates for accepting the nomination to run for office.

**Chair-elect for 2006**  
Joan A. Laredo-Liddell  
Ralph Stephani

**Treasurer for 2006-2007**  
Stephen Z. Goldberg

**Directors-at-Large for 2006**  
Pamela Brown  
Rolande R. Hodel  
Mark Kobrak  
Kalle Levon  
Paris Svoronos

**Councilors for 2006-2008**  
Terry L. Brack  
Donald D. Clarke  
Stephen Z. Goldberg  
Barbara R. Hillery  
Neil D. Jespersen  
Joan A. Laredo-Liddell  
Robert P. Nolan  
David N. Rahni

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## NEW YORK CHEMISTRY STUDENTS' ASSOCIATION

### 53rd Annual Undergraduate Research Symposium

#### "Scale Your Enthusiasm"

**Keynote Speaker:** Dr. Stephen O'Brien  
Department of Applied  
Physics and Applied  
Mathematics  
Columbia University

The New York Chemistry Students' Association of the ACS, NY-Section will hold its 53rd Annual Undergraduate Research Symposium at Stony Brook University, Stony Brook, NY, on **Saturday, May 7, 2005**. Information regarding the symposium including electronic submission will be available on the following website: [http://www.newyorkacs.org/grp\\_students.html](http://www.newyorkacs.org/grp_students.html).

The deadline for submission is **April 5, 2005**.

The highlight of this year's symposium is the keynote address, "Scale Your Enthusiasm", to be delivered by Dr. Stephen O'Brien of Columbia University. Dr. O'Brien's research involves the synthesis and characterization of nanostructured materials, self-assembled organic-inorganic materials, and nanotechnology. Dr. O'Brien will discuss some aspects of nanoscale science and engineering of materials, its effect on existing technologies, and the integration of future technologies.

Faculty who are directing the research efforts of undergraduate chemistry students are asked to encourage their students to participate in this worthwhile event. Guests are welcome to attend this event and should register at the above website.

**Date:** Saturday, May 7, 2005

**Times:** Registration 9:30 AM  
Symposium to follow

**Place:** Stony Brook University  
Stony Brook, NY

For further information contact: [rkabbani@pace.edu](mailto:rkabbani@pace.edu) or [jrehmann@sjcny.edu](mailto:jrehmann@sjcny.edu).

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## LONG ISLAND SUBSECTION

### Ninth Annual Frances S. Sterrett Environmental Chemistry Symposium

#### "Long Island Air Quality – To Breathe or Not To Breathe?"

**Speakers to include:**

Lucy Zurek  
OSHA Region II  
"Indoor Air Quality"  
Ajay Shah  
NYS DEC Region I  
"Air Monitoring on LI"

**Date:** Thursday, May 26, 2005

**Place:** Hofstra University  
California Avenue  
Hempstead, NY

Reserve the date now!

The annual Frances S. Sterrett Symposium is dedicated to presenting the public with up-to-date, factual scientific information on environmental topics. Watch for program updates at <http://www.newyorkacs.org>.

Email questions to Dr. Barbara Hillery at [hilleryb@oldwestbury.edu](mailto:hilleryb@oldwestbury.edu).

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## North Jersey Meetings

<http://www.njacs.org>

### EXECUTIVE COMMITTEE AND SECTION MEETING

All ACS members are welcome to attend. Note that there will be a special discussion of the new Section bylaws and all members are invited to this meeting to comment on the bylaws.

**Date:** Monday, April 25, 2005  
**Time:** 5:30 PM  
**Place:** Fairleigh Dickinson University  
Rice Lounge  
New Academic Building  
Madison, NJ  
**Cost:** Dinner \$10.00 (Pizza and Soda)

For reservations, call (732) 463-7271 or email [jppenna@aol.com](mailto:jppenna@aol.com) and state your wish to make reservations for the ACS Dinner before Wednesday, April 20, 2005.



### NORTH JERSEY BYLAWS CHANGES

The North Jersey SEction is in the process of revising its bylaws. This has been necessitated as a result of changes in the National ACS documents as well as changes in the Section's activities since the last revision approximately 30 years ago. The complete document is available on the Section's web site, <http://www.njacs.org> or if you would prefer a hard copy, please contact the Section Secretary, Bettyann Howson, at (973) 822-2575. A ballot will appear in a future issue of *The Indicator* for a section wide vote on the revised bylaws.



### YOUNGER CHEMISTS' COMMITTEE

Come join the North Jersey YCC and the Jersey Association of Home Brewers for a Brewery Tour and lunch with Beer Sampling.

We will visit the Climax Brewery for a tour, an introduction to the brewing process by the master brewer David Hoffmann and a beer sampling.

We will then meet at J.J. Bitting Brewery and Restaurant for a tour of their brewing facility by head brewer August Lightfoot, lunch and beer tasting.

21 with I.D. to drink. Open to all ACS members and guests.

**Date:** Saturday, April 2, 2005  
**Time:** 12 Noon for Tour of Climax Brewery  
**Place:** Climax Brewery  
112 Valley Road  
Roselle, NJ  
**Time:** 2:00 PM for prix fix lunch with beer sampling at J.J. Bitting Brewing Company  
**Place:** J.J. Bitting Brewing Company  
33 Main Street  
Woodbridge NJ  
**Price:** \$20 (plus tax & gratuity) includes lunch and beer sampling

Registration: contact Ken Clune at [kenneth\\_clune@msn.com](mailto:kenneth_clune@msn.com) or (201) 739-6983 or please visit our web page at <http://www.njacs.org/ycc.html>



### NORTH JERSEY CHROMATOGRAPHY GROUP

**Electronic Laboratory Notebooks (ELNs) in a cGMP Environment – the Paperless QC/QA Lab**

**Speaker:** John Helfrich  
VelQuest Corporation

Pharmaceutical R&D and Manufacturing has not changed its fundamental paper-based infrastructure in decades. The principle reason is that science by nature and regulatory requirements resist change. Recently, industry and FDA have been more aligned with respect to utilizing innovation and technology to bring manufacturing processes into the 21st century. Leading companies are adopting a new approach to "automating R&D and compliance"; that is, utilizing innovative technologies (such as ELN strategies) and building quality into the research, quality and compliance infrastructure.

The talk will discuss the current situation in cGMP lab operations relative to FDA initiatives in manufacturing and the broad opportunity for electronic lab notebook processes. The talk will profile an innovative "method-centric" software platform, designed to electronically execute and manage laboratory protocols, yielding significant reductions in overall method execution cycle times and electronically capture all data and metadata in a common repository. This technology can be defined as PAT (process analytical technology) for R&D and QC laboratory processes.

**Date:** Wednesday, April 6, 2005  
**Times:** Dinner 6:30 PM  
Seminar 7:30 pm  
**Place:** Somerset Marriott  
**Cost:** \$30.00 for Dinner (\$15.00 for Students). To register online, go to [www.njacs.org/chroma.html](http://www.njacs.org/chroma.html). Open seating for those not attending dinner.

### CAREERS IN TRANSITION GROUP

#### Job Hunting??

Are you aware that the North Jersey Section holds monthly meetings at Fairleigh Dickinson University in Madison to help ACS members? Topics covered at these cost-free workshops are:

- The latest techniques in resume preparation
- Ways for improving a resume
- Answers to frequently asked interview question and
- Conducting an effective job searching.

The next meeting for the Careers In Transition Group will be held **Thursday, April 7, 2005**, in the Rice Lounge on the first floor of the New Academic Building. The meeting will start at 5:30 PM and end at 9:00. There will be a Dutch-treat dinner. To get the most from the meeting, be sure to bring transparencies of your resume.

This will be the last time you will be able to get advice on your resume prior to the Regional Clearing House that will be part of MARM, May 23-25, 2005 at Rutgers University.

Please contact [vjkuck@yahoo.com](mailto:vjkuck@yahoo.com), if you plan on attending this meeting.



### DRUG METABOLISM DISCUSSION GROUP

**2005 Spring Symposium and Vendor Exhibition: "Contemporary Topics in Drug Metabolism and Pharmacokinetics"**

**Date:** Thursday, April 7, 2005  
**Times:** Registration 8:00 AM  
Symposium 8:50 AM - 4:45 PM  
**Place:** Somerset Marriott Hotel  
Somerset, NJ  
**Cost:** Pre-registration \$125 (by March 31, 2005); \$150 at the door. Pre-registration for students is \$25 (by March 31, 2005); \$50 at the door. (Checks only)

#### PROGRAM

**8:00 AM**  
Registration/Continental Breakfast  
Vendor Exhibit

(continued on page 20)



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## DRUG METABOLISM DISCUSSION GROUP

(continued from page 19)

### 8:50 AM

Introductory Remarks  
*Dr. Hequn Yin*  
Novartis Pharmaceuticals Corp.  
East Hanover, NJ

### 9:00 AM

Imaging for CNS Drug Discovery and  
Development  
*Dr. Richard Hargreaves*  
Vice President, Imaging  
Merck Research Laboratories  
West Point, PA

### 9:50 AM

Improving Oral Drug Therapy in Oncology:  
Focus on ABC Transporters  
*Prof. Jan H.M. Schellens, MD, PhD*  
Dept. of Medical Oncology  
The Netherlands Cancer Institute  
Amsterdam, The Netherlands

### 10:40 AM

Vendor Exhibit  
Coffee Break

### 11:10 AM

Assessment of Transcellular Transport of  
New Drug Candidates to Predict Their  
Hepatobiliary and Renal Clearances  
*Prof. Yuichi Sugiyama*  
University of Tokyo  
Tokyo, Japan

### 12:00 Noon

Lunch  
Vendor Exhibit

### 1:30 PM

Considerations for Development of Fully  
Human Monoclonal Antibodies (mAb):  
Pharmacokinetics, Affinity, and Antibody  
Cross-Reactivity  
*Dr. Mohammad Tabrizi*  
Associate Director, Pharmacokinetics &  
Toxicology  
Abgenix Inc.  
Fremont, CA

### 2:15 PM

MAb Development: Preclinical to Clinical  
and Post-Marketing — Experience, Issues  
and Strategies  
*Melinda Marian*  
Staff Scientist  
DNAX Research Institute  
Palo Alto, CA

### 3:00 PM

Vendor Exhibit  
Coffee Break

### 3:30 PM

**(Part A)** *In Vitro* to *In Vivo* Extrapolation  
(IVIVE): Bridging the Gap Between Pre-  
clinical and Clinical Development  
*Prof. Amin Rostami-Hodjegan*  
Director of Scientific Development  
Simcyp Limited & Senior Lecturer,  
University of Sheffield  
Sheffield, UK

**(Part B)** Practical Use of *In Silico* Modeling  
to Predict *In Vivo* Drug Interactions from *In  
Vitro* and Pre-clinical Data: An Industrial  
Perspective  
*Dr. Heidi Einolf*  
Novartis Pharmaceuticals Corp.  
East Hanover, NJ

### 4:45 PM

Program closure

Please plan to pre-register as a group,  
preferably, and not individually. Checks can  
be made payable to: NJ Drug Metabolism  
Discussion Group.

If you would like to attend this symposium,  
pre-registration may be done with a member  
of the steering committee at your organiza-  
tion. Alternately, pre-registration may be  
done with Lian Zhou by email  
([Lian.zhou@bms.com](mailto:Lian.zhou@bms.com)). Email is preferred,  
however, pre-registration may also be faxed  
to Lian at (609) 252-6802. Please also visit  
our website: [www.njacs.org/drugmet.html](http://www.njacs.org/drugmet.html)



## CHEM ESSENTIALS

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Teacher Who Is Looking for Something  
NEW?

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The last workshop for this year is on April  
22:

“Thermodynamics”

**Date: Friday, April 22, 2005.**

**Place: Somerville High School**

Contact Patti Duncan at  
[PDuncan@hpregonal.org](mailto:PDuncan@hpregonal.org) or go to  
<http://www.njacs.org/teacher.html>  
for more details and a registration form.

## METROWOMEN CHEMISTS

**Date: Tuesday, April 26, 2005**

See Under New York Meetings, page 15.



## TEACHER AFFILIATES

### Summer Chemistry Workshop

The North Jersey Section of the American  
Chemical Society, Teacher Affiliates Group,  
is hosting a week long workshop for chem-  
istry teachers. It is open all chemistry  
teachers who are interested.

The workshop will run from **August 15  
through 19**, and be held on the campus of  
Fairleigh Dickinson University in Madison.  
The cost is \$300 per person and includes  
breakfast, lunch, snacks, all materials and  
supplies including a notebook and CD of the  
week's activities.

The lead presenters are Brenda Rosenau of  
Somerville H.S. and Patricia Duncan of High  
Point Regional H.S. and is being coordinat-  
ed by George Gross, retired, Union H.S.

**The New Generation: A Year of Chemical  
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istry classes.

Housing is available nearby but is not  
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own housing.

The presenters are all experienced presen-  
ters having presented at local, state, nation-  
al and international meetings of chemistry  
teachers. All three have been involved with  
Flinn Scientific programs during the sum-  
mers or at national conventions as well.

**Dates: August 15-19, 2005**

**Place: Fairleigh Dickinson University  
Madison, NJ**

**Cost: \$300 per person (includes break-  
fast, lunch, snacks, all materials  
and supplies including a notebook  
and CD of the week's activities)**

For additional information contact  
[bkrosenau@aol.com](mailto:bkrosenau@aol.com) or 908-218-9404. To  
register, send a check in the amount of  
\$300.00, payable to ACS-TA, and mail it to  
George R. Gross, 445 Wyoming Avenue,  
Millburn, NJ 07041.

## NEW JERSEY CHEMISTRY OLYMPICS-2005

**A Competition for High School Students**

**Date: Wednesday, May 4, 2005**

**Place: NJIT  
Newark, NJ**

There are three categories of events:  
Research, General, Laboratory. Turn your  
students on to chemistry. Go to  
<http://web.njit.edu/chemistryolympics/>  
for more details and for information about  
registering a team.

---

## Call for Nominations

---

### ACS NEW YORK SECTION'S OUTSTANDING SERVICE AWARD FOR 2005

Each year the New York Section presents an  
Outstanding Service Award to the most  
deserving member of the section. Many  
members of the New York Section provide  
their time, leadership talent, educational skills  
and other valuable assets to the New York  
Section and the section leadership wants to  
recognize their outstanding contributions.  
Nominations will be reviewed by a committee  
consisting of the previous five winners of the  
award.

The tradition of excellence of the New York  
Section is directly attributable to the cumula-  
tive effect of these individuals. Please help us  
to recognize the efforts of our colleagues by  
nominating them for this award. Now that  
you've finished your annual reports to the sec-  
tion each subsection and topical group may  
reward one of your most active members by  
nomination for the New York Section's  
Outstanding Service Award. The award will be  
presented at the New York Section's General  
Meeting and Section-wide Conference in  
January 2006.

Nominations with supporting data should be  
mailed to Professor Yorke E. Rhodes, 1629  
Glenwood Road, Route 565, Sussex, NJ  
07461 or e-mailed to [yr2@nyu.edu](mailto:yr2@nyu.edu).  
Nominations may be sent as a letter describ-  
ing the details of the contributions of the mem-  
ber. A Seconding nomination letter is highly  
recommended.

For more information about the award along  
with a list of former award recipients, please  
visit the New York Section website at  
[www.NewYorkACS.org](http://www.NewYorkACS.org).

## OUTSTANDING SERVICE AWARD

(continued from page 21)

Nominations should be forwarded to Professor Rhodes by **May 31, 2005**.



## THE WILLIAM H. NICHOLS MEDAL AWARD FOR 2006

The New York Section is accepting nominations for the William H. Nichols Medal Award for the year 2006. This distinguished award, established in 1902 by Dr. William H. Nichols, for the purpose of encouraging original research in chemistry, is the first award authorized by the American Chemical Society. It is presented annually in recognition of an outstanding contribution in the field of chemistry, and consists of a gold medal, a bronze replica and \$5000. The medals are presented at the William H. Nichols Meeting that consists of a Distinguished Symposium related to the medallist's field of expertise and a Medal Award dinner.

Investigators who have published a significant and original contribution in any field of chemistry during the five calendar years preceding the presentation meeting are eligible for consideration by the Nichols Medal Jury.

Nomination forms may be obtained from: The American Chemical Society's, New York Section, Inc., Department of Chemistry, St. John's University, 8000 Utopia Parkway, Jamaica, NY 11439. The request may be faxed to 516-883-4003 or e-mailed to [njesper1@optonline.net](mailto:njesper1@optonline.net) (The New York Section Office). Forms and additional information about the William H. Nichols Medal, including a list of past recipients may also be obtained from the New York Section website at [www.NewYorkACS.org](http://www.NewYorkACS.org). Six copies of the nominating materials and the official nomination form should be sent to the above mail address. **Nominations must be received by May 31, 2005.** The Nichols Medal Award Jury will meet in June to select the Nichols Medalist for 2006.

## THE PAUL J. FLORY POLYMER EDUCATION AWARD

Purpose: To recognize, encourage, and stimulate outstanding achievements by an individual in promoting undergraduate and/or graduate polymer education.

Nature: The award consists of a plaque and an honorarium of \$2000. The award is usually presented biennially in even-numbered years at the Spring meeting of the Polymer Chemistry Division. The recipient is expected to present an address at a symposium organized in his/her honor. Reasonable travel expenses to the meeting are paid in addition to the honorarium.

Establishment and Support: The award was established in 1981 and is administered by the Polymer Chemistry Division. The DuPont Company sponsors the award.

Previous Recipients: Herman F. Mark, Carl S. Marvel, Paul J. Flory, Maurice Morton, Charles G. Overberger, George B. Butler, Eli M. Pearce, Leo Mandelkern, Eric Baer, Roger Porter, James E. Mark, U. W. Suter and the team of James E. McGrath, Thomas C. Ward and Garth L. Wilkes.

Rules for Eligibility: A nominee must be a member or affiliate of the ACS Division of Polymer Chemistry at the time of nomination. The award shall be granted to an individual or team for significant contributions in furthering polymer education. The award shall be granted to an individual or team without regard to race, color, national origin, sex, religion, age, disability, or sexual orientation.

Nomination Procedure: Eight (8) collated individual copies of a complete nominating document, including a synopsis of the accomplishments of the nominee, a curriculum vitae, and a maximum of five reprints or other supplementary material for each copy, shall be submitted to the Awards Chairman for distribution to the committee. The document should be letter-size. A maximum of three (3) supporting letters, which contain factual information about the candidate not provided in the nominating document may be attached to the nomination. The nomination and its accompanying material for the 2006 award must be post-marked no later than July 1, 2005. Address nominating material to: Dr. Thomas J. Pacansky, 281 Valley Drive, Watchung, NJ 07069.

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281 Valley Drive, Watchung, NJ 07069  
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## National

### MID-HUDSON SECTION OF THE ACS

#### 6th Annual ACS Undergraduate Chemistry Research Symposium

#### "What is Left for the Next Generation of Chemists to Do?"

*Guest Speaker:* Dr. Ronald Breslow  
S.L. Mitchell Professor of Chemistry and University Professor  
Department of Chemistry  
Columbia University

**Date:** Wednesday, April 20, 2005

**Times:** 3:00 – 8:00 PM  
Poster Session 3:00-4:30 PM  
Talk 4:45 PM

**Place:** Villard Room, Vassar College

For more information, please contact Dr. Miriam Rossi ([rossi@vassar.edu](mailto:rossi@vassar.edu)).

## Others

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#### A Case for Establishing Technical Schools

*Speaker:* Dr. Gull-Maj Roberts

The current system of four years of high school, followed by four years of college, is an expensive and time consuming way to prepare for the work place. A four-year college has become the requirement for positions that thirty or forty years ago required only a high school diploma. Could the establishment of specialized two-year schools, based on a European model, with a strong emphasis on competencies rather than grades ensure a better qualified workforce at a lower cost?

Dr. Roberts is familiar with Technische Hochschule system used throughout Europe as well as with the US system on both a high school and college level and brings these unique perspectives to the discussion of the topic.

**Date:** Tuesday, April 26, 2005

**Times:** Networking/Cash Bar 6:00 PM  
Dinner 6:30 PM  
Presentation 7:30 PM

**Place:** Snuffy's Pantagis Renaissance

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#### Chemistry Seminar Series - Spring 2005

##### April 1

"Mechanisms of Flavoprotein-Catalyzed Oxidations"

*Paul Fitzpatrick*  
Texas A&M University

##### April 8

"Chemical Sensors Derived from Electrodeposited Nanowire Arrays"  
*Reginald Penner*  
University of California, Irvine

##### April 15

**Dr. H. Martin Friedman University Lecture**

"Self Assembly Routes to Molecule-Based Organic Electronics"  
*Tobin Marks*  
Northwestern University

##### April 22

"Multifunctional and Polymeric Lewis Acids for Catalysis and Materials Chemistry Applications"  
*Frieder Jäkle*  
Rutgers University  
Newark, NJ

##### April 29

"Thermodynamics of Protein-DNA Interactions"  
*Thomas Record*  
University of Wisconsin

#### Dates: Fridays, as above

**Times:** Coffee Social 11:00 AM  
**Place:** Olson Reading Room, 338  
**Times:** Seminar 11:30 AM  
**Place:** Hill Hall, Room 108  
Rutgers University, Newark, NJ

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**NJIT - DEPARTMENT OF  
CHEMISTRY & ENVIRONMENTAL  
SCIENCE**

**Seminar Series - Spring 2005**

**April 5, 2005**

11:30-1:00PM - Tiernan 373

Topic - TBA

*Dr. Dan Benson*

Center for Energy, Economic and  
Environmental Policy  
Bloustein School, Rutgers University

**April 12, 2005**

11:30-1:00PM - Tiernan 373

"Silicon Nanowires"

*Dr. Saion K. Sinha*

Assist. Professor; Dept. of Physics  
University of New Haven, West Haven, CT

**April 20, 2005**

11:30-1:00PM - Tiernan 373

Topic - TBA

*Dr. G. Downing*

NCI-NIH, Bethesda, MD

Seminar Series Coordinator: Dr. Sanjay  
Malhotra (973) 596-5583, [malhotra@njit.edu](mailto:malhotra@njit.edu)



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**April 4**

"Devulcanization of Crosslinked Elastomers  
by Power Ultrasound"

*Dr. Wenlai Feng*

Polymer Processing Institute  
NJIT, Newark, NJ

**April 18**

"Assembling Materials from Nanoscale  
Building Blocks"

*Dr. Richard Siegel*

Professor, and Director of the  
Nanotechnology Center  
Rensselaer Polytechnic Institute, Troy, NY

Times: Refreshments 2:30 PM

Seminars 2:45 PM

Place: Room 3740

William S. Guttenberg Information

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Seminar Series Coordinator: Professor  
Gordon Lewandowski (973) 596-3573,  
[lewandow@adm.njit.edu](mailto:lewandow@adm.njit.edu) **National**

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**Date: Tuesday, May 17, 2005**

**Place:** Hilton East Brunswick  
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