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June 4-7
Hershey, PA

See pages 5-7.

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

May Calendar

NEW YORK SECTION

Wednesday, May 3, 2006
Westchester Chemical Society
See page 15.

Wednesday, May 3, 2006
Analytical Topical Group
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Thursday, May 4, 2006
Chemical Marketing & Economics Group
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Tuesday, May 23, 2006
Biochemical Topical Group
See page 16.

Thursday, May 25, 2006
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See page 16.

NORTH JERSEY SECTION

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Mass Spectrometry Discussion Group
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Thursday, May 4, 2006
Careers in Transition
See page 12.

Monday, May 8, 2006
Teacher Affiliates Executive Committee
See page 12.

Tuesday, May 9, 2006
Chem Central
See page 12.

Saturday, May 13, 2006
Teachers Advanced Placement Workshop
See page 12.

Tuesday, May 16, 2006
Chem Tag
See page 12.

Wednesday, May 17, 2006
No. Jersey Section Executive Committee
See page 9.

Wednesday, May 17, 2006
50 Year Members Awards Dinner
See page 9.

Thursday, May 18, 2006
No. Jersey Group of Small Chemical Businesses
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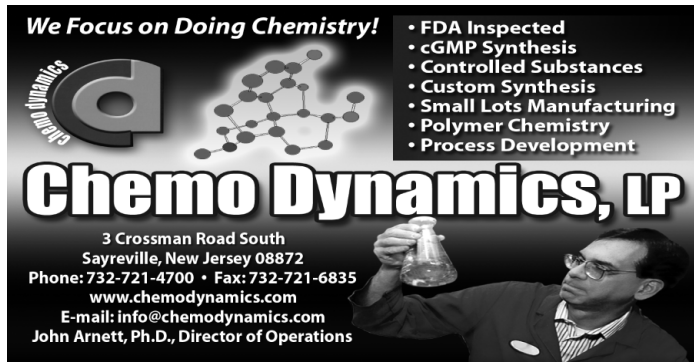
Deadline for items to be included in the September 2006 issue of *The Indicator* is July 14, 2006.

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MIDDLE ATLANTIC REGIONAL MEETING 2006

38th ACS Middle Atlantic Regional Meeting – MARM 06

Co-hosted by SE Pennsylvania and Susquehanna Valley Sections

Chemistry at Chocolate Town

Access Registration and Abstract Submission at: <http://www.marm2006.org>

Register early to reserve your spot among the over 1500 attendance expected.

Major Symposia Planned:

- Analytical Chemistry
- Medicinal/Organic Chemistry
- Chemical History (especially Joseph Priestley)
- Chemical Education (K-12 and college)
- Solid State and Materials Science

Plenary Sessions

Paul Anderson: A Retrospective View of Drug Discovery.

Howard and Sally Peters: Chocolate – Food of the Gods.

Edward Yeung: Single Molecule Spectroscopy for Early Diagnosis of Disease.

Tom Mallouk: Molecular Motors and Pumps.

Special Symposia and Programs:

The Alfred Burger Award in Medicinal Chemistry

The Cope Scholar Award in Organic Chemistry

Delaware Valley Chromatography Forum Student Awards

The ACS Regional Industrial Innovation Award

Celebration of 100 years of FDA Regulation

Chemistry of Chocolate, Beer, Tea and Wine

Mass Spectroscopy in Toxicology and Metabolite ID

Proteins as Biomarkers and Protein Rational Design

Cleaning Validation in Pharmaceutical Manufacturing

Date: June 4-7, 2006

Place: Hershey Lodge
Hershey, PA

Visit our website at <http://www.marm2006.org> for regular updates.

Vendor's Exhibition Booths are available:
Vendors: Contact Pete Christie by E-Mail



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

Philip Portoghese
University of Minnesota

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

(continued on page 6)




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

*Andrew G Ewing,
Penn State University*

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





A Retrospective View of Drug Discovery

*Dr. Paul Anderson
2006 Priestly Medalist and 1997
President of the
ACS*

The 2006 ACS Middle Atlantic Regional Meeting (MARM) is honored to have Dr. Paul Anderson, the 2006 Priestly Medalist and 1997 president of the ACS, presenting a plenary lecture. Dr. Anderson is a distinguished chemist, with nearly 40 years in the pharmaceutical industry, contributing to the discovery of numerous pharmaceutically important compounds, including the HIV drugs Crixivan and Sustiva, the cholesterol lowering drug Zocor, and glaucoma treatment Trusopt. Along with being a leader at Merck, Dupont Pharmaceuticals, and Bristol-Myers Squibb, he has also played a role on scientific advisory boards at smaller pharmaceutical companies, such as Acadia and Achillion. His achievements and service to chemistry have been additionally recognized with many honors and awards; the 2003 National Academy of Sciences Award for Chemistry in Service to Society, the 2002 Perkin Medal, and the 1995 E.B. Hershberg Award to name a few.




Single Molecule Spectroscopy for Early Diagnosis of Disease

*Prof. S. Yeung
Iowa State University*

MARM 2006 is honored to have Professor Edward S. Yeung from Iowa State University

presenting a lecture as one of the invited plenary speakers. His research, which focuses on the identification, development, evaluation, and application of new measurement concepts, has led to the discovery of new analytical techniques in nonlinear spectroscopy, laser-based detectors, capillary electrophoresis, trace gas monitoring, single-cell and single-molecule analysis, DNA sequencing, and data treatment procedures in chemical measurements. His contributions to chemistry have been recognized by numerous awards, including the ACS Division of Analytical Chemistry Award in Chemical Instrumentation and the Pittsburgh Analytical Chemistry Award. Reaching the ultimate level in microscale spectroscopy, Dr. Yeung's presentation will detail how single molecules can be detected using a novel laser-imaging system. The method provides the ability to look at the chemical constituents within a single human cell, which has important applications to the early diagnosis of diseases.




Chocolate - Food of the Gods

*Dr. Howard and
Sally Peters*

MARM 2006 promises to be an enjoyable and informative meeting with Dr. Howard and Sally Peters presenting an invited plenary lecture during the Sunday science education day. Dr. Peters has devoted himself to the advancement of chemistry in our world through numerous years of service in ACS governance and as a chemical attorney. An appropriate presentation for a chemistry meeting in "Chocolate Town" - the Peters will provide insight into the history of chocolate from the Mayan and Aztec cul-

tures to the present, the chemistry and biochemistry of theobroma cocoa, and the currently circulating urban legends about chocolate. Over the years, Dr. Peters has presented this talk and others about the history of chemistry as part of his efforts to get more people excited about chemistry and to inform current chemists of how chemistry relates to everyone's life.




Catalytic Motors and Pumps

*Dr. Thomas Mallouk
Director, Penn State
University, Center for
Nanoscale Science
and the DuPont
Professor of
Materials Chemistry
and Physics*

MARM 2006 features an in-depth technical program in materials science and nanotechnology, headlined by Dr. Thomas Mallouk, director of Penn State University's Center for Nanoscale Science and the DuPont Professor of Materials Chemistry and Physics. Dr. Mallouk will be presenting an exciting plenary lecture on nanoscale motors and pumps. He is well known for his design and application of nanomaterials to several areas of science and society. Dr. Mallouk has applied his creativity to thinking small, using DNA to aid in the combinatorial techniques to discover new fuel cell catalysts, using nanocrystalline semiconductors for artificial photosynthesis, and using chemical "delivery vehicles" for transport of nanoparticles in the remediation of polluted soils. MARM 2006 is honored to have Dr. Mallouk present the Tuesday evening plenary lecture on his collaborative work with Dr. Ayusman Sen and their students on catalytic nanomotors. This lecture will feature amazing videos of nanometer size rods and gears that use hydrogen peroxide to fuel their motion. Anyone interested in how nanoscale chemistry might ultimately change our lives will be happy they attended this thought-stimulating presentation.

THIS MONTH IN CHEMICAL HISTORY #1

Harold Goldwhite, California State University, Los Angeles
hgoldwh@calstatela.edu

Prepared for SCALACS, the Journal of the Southern California, Orange County, and San Gorgonio Sections of the American Chemical Society

A few years ago I obtained a number of volumes of a series "The Mallinckrodt Collection of Food Classics" published by that manufacturer in the mid-1960s. Most of the books are facsimile reprints of early classic cookbooks, but Volume II is different. It is a facsimile of an 1820 Philadelphia publication reprinting rapidly an English publication of the same year. This influential book, by the chemist Fredrick Accum, deserves to have its complete title, in the early 19th. century style given here: "A Treatise on Adulterations of Food and Culinary Poisons. Exhibiting The Fraudulent Sophistications of BREAD, BEER, WINE, SPIRITUOUS LIQUORS, TEA, COFFEE, CREAM, CONFECTIONERY, VINEGAR, MUSTARD, PEPPER, CHEESE, OLIVE OIL, PICKLES. And other articles employed in domestic economy. And METHODS OF DETECTING THEM."

So who was Frerick Accum, and why this book? For the following biographical sketch I am greatly indebted to a substantial article on Accum by Lawson Cockroft which appears on the website of the Royal Society of Chemistry's Library and Information Service. Accum was born in Germany on March 29, 1769. His father was a merchant and soap-maker. After beginning his education at the local gymnasium Fredrick was apprenticed to a local pharmacist and became acquainted with the family of William Brande, who provided medicines to the court of George III in London. Accum moved to London in 1793, worked in Brande's laboratory, and extended his education by attending lectures. He got to know William Nicholson who edited a well-respected chemical journal (Nicholson's Journal) and helped to translate foreign articles for inclusion. In 1798 Accum began to contribute a series of articles to the journal on adulteration of medical preparations.

Accum set up his own establishment in 1800 as a supplier of chemicals and equipment and developed considerable expertise in analytical chemistry to ensure the quality of his products. For a year he assisted Humphry Davy as a demonstrator at the Royal Institution. Accum's first book, "System of Theoretical and Practical Chemistry" was published in 1803 and was well subscribed, and he began to offer the only laboratory course in experimental chemistry available in London at that time. Accum's American pupils included James Dana, the famous mineralogist, and Benjamin Silliman, first Professor of Chemistry at Yale. Not surprisingly Accum's equipment and chemicals found their way to the initial Chemistry Departments established in the United States.

Accum became interested in the novel prospect of providing coal gas commercially for heating and lighting and testified to government committees on the subject. By 1815 some fifteen miles of London streets were gas-lit, and Accum, always alert to new opportunities, published a book on coal gas manufacture. In 1817 he published a book "Chemical Amusement" describing experiments suitable for the drawing room, and created "Chests of Chemical Amusement" containing the necessary chemicals and equipment and selling for ten to eighteen guineas, a lot of money at the time.

By 1820 Accum was ready to publish his magnum opus mentioned above and concerned with adulterations of food products. It was reviewed in all the leading journals – not the chemical journals but the popular literary magazines such as Blackwood's and the Edinburgh Review. The first thousand copies sold out in under a month and a second edition appeared immediately. The book, and Accum, were vigorously attacked by food and drink manufacturers who alleged that they were unfairly smeared by the work. Meanwhile Accum was accused of mutilating books in the collection of the Royal Institution, and a warrant for a search of his rooms led to the discovery of some 30 pages removed from books in the Royal Institution's library. Accum was released on bail but never came to trial. Badly depressed he left England, forfeited his bail, and returned to Germany.

He soon obtained two posts related to applied chemistry in Berlin. He published in 1826 his only book in German on the properties of building materials. While he continued to publish in the journal of the Berlin Royal Academy of Sciences his articles were submitted either anonymously or under the rather transparent pseudonym of Mucca. New editions of his treatise on adulteration appeared in England without his name on the title page. And it was not until 1860 that food regulation was written into law in England in the Adulteration Act. But Accum had died in Berlin in June 1838.

In my next column I will look at the contents of Accum's Treatise.

North Jersey Meetings

<http://www.njacs.org>

EXECUTIVE COMMITTEE AND SECTION MEETING

Section officers, councilors, committee chairs, topical group chairs, and section event organizers meet regularly at the Executive Committee Meeting to discuss topics of importance to running the section and representing the membership. All ACS members are welcome to attend this meeting as visitors and to become more involved in section activities.

Date: **Wednesday, May 17, 2006**

Time: 4:30 PM

Place: Fairleigh Dickinson University
College at Florham
Hartman Lounge, the Mansion
Madison, NJ

Directions: can be found at view.fdu.edu

Reservations: call 732-463-7271 or email njacsoffice@aol.com prior to **Wednesday, May 10, 2006**.

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NORTH JERSEY SECTION - 50 YEAR MEMBERS

Date: **Wednesday, May 17, 2006**

Time: Social 4:30 PM

Dinner & Presentation of
Certificates to follow

Place: Lenfell Hall, Mansion Building
Fairleigh Dickinson University
Madison, NJ

50 YEAR MEMBERS

Dr. D. Peter A. Andrews
Mr. Seymour Baron
Mr. James P. Barry
Dr. Roger F. Belt
Dr. Morton Beltzer
Mr. A. Evan Boss
Mr. John James Cargille
Mr. James Joseph Cassidy
Dr. Cipriano Cipriani
Dr. Earlene B. Cunningham
Mr. James Joseph Devine
Ms. Dorothy I. Eska
Dr. Robert J. Fredericks
Dr. Charles Gerhard Fritz
Dr. Irwin J. Gardner
Mr. G. Eugene Gottlieb
Mr. Ali A. Hamdan
Dr. Ilmar L. Kainin
Dr. Harold Kaufman
Mr. Edward Otto Klotz
Mr. James U. Mann
Dr. Emil John Maxion
Dr. Dorit L. Noether
Dr. Yutaka Okinaka
Dr. Ildiko Radichevich
Mr. W. Richard Rehl
Dr. Murray Robbins
Mr. Arthur J. Rodriguez
Dr. Frank Scotti
Mr. Harry Silla
Mr. Herbert Samuel Skovronek
Mr. George E. Spaulding
Mr. Martin H. Stein
Dr. Richard F. Stockel
Dr. Chester Dominic Szymanski
Dr. Paul Turi
Dr. Vincent Steven Venturella
Mr. Frank Martin Vodoklys
Dr. Bernard Leo Williams
Mr. Max J. Wisotsky
Mr. Francis John Zientara

CHAIR'S HIGHLIGHTS FROM THE FEBRUARY EXECUTIVE COMMITTEE MEETING

Officers of the section reported to the committee and visitors on their activities. The executive committee approved the creation of a new award to be organized by the section's Organic Topical Group. Expenditures from the section budget were approved to partially cover ACS National Meeting travel expenses for two student affiliates from the College of St. Elizabeth. The students will be doing a presentation at the meeting, representing their student affiliate group, which won national recognition for excellence. Additional funds were approved for the continuation of section support for chemistry awards at the ISEF North Jersey Regional Science Fair. Plans for the 50-year member and section awards banquet were also discussed.

Val Kuck gave an update on the section's Careers in Transitions meetings, which have helped numerous section members find employment. These meetings are normally held the first Thursday of every month at Fairleigh Dickinson University in Madison and provide expert career counseling and resume reviews. With the continued downsizing and restructuring in our local chemical companies, anyone with knowledge of someone seeking employment in chemistry should let them know of this extremely valuable member service.



NORTH JERSEY - 2005 ANNUAL REPORT SUMMARY

The North Jersey section had an outstanding year in 2005, thanks to our many dedicated volunteers and participating members. This article summarizes some of our 2005 activities, and more details can be found on our website at <http://www.njacs.org>. Look for the 2005 annual report in the Section and Membership page. If you have any questions or comments, please contact the 2005 chair, Jacqueline Erickson at jacqueline.a.erickson@njacs.org.

The highlight of the year was the 37th Middle Atlantic Regional Meeting (MARM), entitled "Chemistry at the Crossroads of Science" in May at Rutgers University, Busch Campus. This was a record breaking

MARM, with over 829 abstracts including 333 posters, and 2075 attendees. We had three days of excellent technical programming in all areas of the chemical sciences. Two other top section activities were the Cope Scholar Symposium at MARM, honoring a regional Cope Scholar, and the National Historic Chemical Landmark Ceremony at MARM, recognizing the work of the work of Selman Waksman and the Discovery of the Actinomycete Antibiotics.

Community Outreach, along with Outreach to Pre-College and College Students were other top activities for the section. Our innovative MARM Sunday program provided outreach to the community, along with Pre-college and College students. This program was done in conjunction with the New Jersey Science Teachers Association, as a celebration of their 100th anniversary. During the event, high school student posters and projects were presented by Project SEED students, as well as others. Throughout the day the IMAX video Volcanoes of the Deep was shown. A Chemistry Wizard show and a Spectacular Physics show were popular events.

The technical programming by our Topical Groups was another top activity with over 30 meetings, which attracted over 1000 people to talks in Drug Metabolism, Chromatography, Mass Spectrometry, NMR, Thermal Analysis, Organic Chemistry, and Business Management. These programs attract world-class speakers, and many of the talks focus on drug discovery and development.

Our Baekeland Award was awarded to Younan Xia of the University of Washington in November 2005. His research has resulted in significant discoveries and innovation related to nanostructured materials, in addition to conducting polymers, microfluidic and microanalytical systems, and novel devices for photonics, optoelectronics and displays. A new feature for this year's symposium and awards ceremony was the subsidized cost for student attendees, as well as a student poster session. Approximately 15 student posters were displayed, and approximately half of the 75 attendees were students.

Our Teacher Affiliates group developed an innovative new program for professional development, the New Generations Workshop. This was a week long workshop with 40 participants, over 40 Demonstration

ideas, 29 Labs, and a dozen "Make and Takes" Other Teacher Affiliate activities included ChemTAG, ChemCentral and ChemTAG Northwest meetings, as well as the ChemEssentials workshops.

Our Careers group had another successful year, with eleven monthly meetings at which they provided presentations on writing resumes, conducting a job search and interviewing. This group continues to expand its reach, with extensive career programming at MARM, and outreach to students at several universities.

For high school students, we continued our successful Project SEED program and National Chemistry Olympiad exams, where a record number of students qualified for the national exam. We also support the NJ Chemistry Olympics, and other local science programs.

This year, for National Chemistry week, we held a special day-long expo, which was a collaborative effort embracing the collegiate, industrial, and high school sectors. Over 100 volunteers helped, and we drew an audience of approximately 400 parents, students, and Boy and Girl Scout troops. Twenty-seven tables were set up for hands-on science experiments, and a room was set aside to play with "scientific" toys.

The Metrowomen Chemists Committee continues to serve as a coordinating group for women's activities in the Metropolitan Area. This year, they joined with the Association for Women in Science and the New York Academy of Science to honor outstanding women in the Metropolitan Area. They also organized the Women's Chemists Luncheon at the 2005 Middle Atlantic Regional Meeting and continued to seek nominations of women for ACS awards. One nomination resulted in Sue Fahrenholtz winning the Stanley C Isreal Regional Award for Advancing Diversity in the Chemical Sciences.

As part of our Minority Affairs Committee, the "Freddie and Ada Brown Encouragement Award For Future Careers in Chemistry" was created this year to identify and encourage high achieving middle- and high-school students, of African American and Native American heritage, to further develop their budding academic skills, with views on careers in chemistry.

In addition to the activities described above, we held two sessions for leadership devel-

opment and program planning. Finally, on the administrative side, we approved new section bylaws and updated our website.

Submitted by
Jackie Erickson, Immediate Past Chair,
North Jersey Section

MASS SPECTROMETRY DISCUSSION GROUP

Troubleshooting High Throughput MS Applications

Sponsored by Tandem Laboratories

Moderated by: Walter Korfmacher, PhD
Director
Exploratory Drug Metabolism

Topic 1:

"Strategies for Coping with Matrix Effects and Ion Suppression in LC/MS/MS Applications"

Vladimir Capka, PhD

Scientist/Project Manager, Tandem Labs

Topic 2:

"Is SFC-MS Ready for Prime Time for DMPK Studies?"

Jiwen Chen, PhD

Senior Research Investigator II
Bristol-Myers Squibb:

Topic 3:

"Effect of Sample Preparation on Metabolite Profiling and Biomarker Discovery"

Lily Li, PhD

President, PharmaKD

Date: Tuesday, May 2, 2006

Times: Social 5:30 PM

S U R R I S E

our editor by calling and saying you appreciate the quality and content of our newsletter. Our editor works hard to maintain a publication of interest to our membership. Oh, and by the way, you could also give credit to our advertisers who financially support us.

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, May 4, 2006**, 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.

Please contact vjkuck@yahoo.com, if you plan on attending this meeting.



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ANALYSIS FOR THE CHEMICAL ELEMENTS

TEACHER AFFILIATES

Executive Committee Meeting

Date: Monday, May 8, 2006
Time: 4:30 PM
Place: Chatham High School
255 Lafayette Avenue
Chatham, NJ

Contact: Diane Krone at 201-385-4810 or kroned@optonline.net



CHEM CENTRAL

Date: Tuesday, May 9, 2006
Time: 4:00 PM
Place: Biotechnology High School
1000 Kozloski Road
Freehold, NJ

Contact: Roseann McCarthy at roseannmcc@comcast.net



TEACHER AFFILIATES

Professional Development for Teachers - Advanced Placement Chemistry

NJACS-Teacher Affiliates will present a full day workshop on **Saturday, May 13th** to give chemistry teachers the tools they need to teach A.P. Chemistry and to help their students succeed on the A.P. exam. Visit www.njacs.org for more information and to print a registration form or contact Patti Duncan at PDuncan@hpregonal.org.



ChemTAG

Date: Tuesday, May 16, 2006
Time: 4:00 PM
Place: Passiac Valley Regional H.S.
100 East Main Street
Little Falls, NJ

Hostess: Susanne lobst
pvslobst@yahoo.com



Date: Thursday, June 8, 2006
Time: 4:30 PM
Place: NJIT, Newark
Cost: \$10.00

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Electronic Communication and Marketing

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This 'how to' course shows the executive, manager, or technician methods for building a web site, setting up hosting and then using the site to implement a written marketing plan which will generate internet traffic and produce sales on-line. Included is a segment on various internet strategies, the risks involved in each, and the management of those risks. Most importantly, E-customer relationship management, similar in concept to traditional customer relationship management (CRM), is defined with new tools now available for much more rapid processing and response analysis.

Creation of a website requires formatting the content of the website for easy comprehension and access by the user. Working through this module educates the attendee so he can manage the development and use of the website. Subsequent modules focus on optimizing search engines and how to attract visitors to the site, as well as how to analyze that traffic.

Included in the seminar is the NJGSCB Starter Kit which contains all the tools discussed and used during the course. Accessed on the web, it is frequently updated and contains links to other resources. There are over 100 software applications and scripts that can be used create a marketing plan, build an online customer base, process online financial transactions, and maintain a CRM program.

The course is intended for large and small chemical companies as well as distributors and manufacturing consultants. The fee is \$350 (early registration is \$325) and includes continental breakfast, coffee breaks, and lunch. To register, visit <http://NJChemBus.org> and complete payment by credit card. Early bird registration ends April 15. Company discounts available. Attendance limited to 25 attendees.

Date: Thursday, May 18, 2006
Time: 8:30 AM - 5:00 PM
Place: Holiday Inn North, Newark Airport
Registration: \$350; \$325 before April 15.
How to register: <http://NJChemBus.org>
Contact: Dave Mason at masondj@aol.com



YOUNGER CHEMISTS COMMITTEE

What is it?

The NJACS- YCC role is to promote the interests of members under the age of 35 (or close to that age). It provides graduate students, post-doctoral chemists, and young professionals with the opportunity to interact with other chemists in the section, to help them better direct their careers, and to increase their involvement in the ACS. We do it through organizing social events, talks, seminars, and generally having a bit of fun.

We were in hibernation last year, but we are now up, revamped and reinvigorated with new activities planned for 2006.

So what can you do?

If you are under 35 (or just think you are!) we need your feedback. What events do you want to see? How can we help you? We are here to serve you, so please send us your comments and suggestions. Better still, get involved!

Contact us: shyamvyas@optonline.net, monica_njacs_ycc@yahoo.com

Sign up for our newsletter e-mailing list: http://groups.yahoo.com/group/NJACS_YCC/

Visit our website: <http://www.njacs.org/ycc.html>.

Check the National ACS YCC site: <http://membership.acs.org/Y/YCC/>

What have we done?

Past event include: the annual picnic, beer tasting, careers seminars, poster sessions and talks on different areas of science.

News of future events will be coming soon.

YOUNGER CHEMISTS LUNCHEON AT MARM 2006

The North Jersey ACS Section Younger Chemists Committee (NJACS-YCC) invites ACS members younger than 35 years of age to attend a special luncheon during the 2006 Middle Atlantic Regional Meeting (MARM 2006). The luncheon will be held 12:15 PM, **June 6th**, at the Isaac's Restaurant and Deli, 1201 W. Chocolate Ave., Hershey, PA. This is a short walk from MARM 2006 at the Hershey Lodge and Convention Center. Although the luncheon is free, space and budget limitations require advance registration and meal selection, which must be done no later than May 20, 2006 by clicking on the "Younger Chemists" link at www.njacs.org. Registrations will only be accepted for the first 30 younger chemists to complete the on-line registration form.

ChemEssentials WORKSHOPS

Reserve these dates for 2006-07 ChemEssential Workshops

These popular Friday evening workshops provide content, activities, labs, alternate assessments, and dinner. Both new teachers and teachers looking for new ideas will benefit.

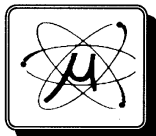
August 26, 2006 - Matter

November 17, 2006 - Gases

February 9, 2007 (Snow date,
February 16) Solutions

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Dr. John Weisburger

Student Achievement Awards for
Excellence in Chemistry

A Primer on the Fascinating Process of Offset Lithographic Printing

The offset lithographic process for printing is a fascinating process. In particular, offset lithography is based on one of the oldest chemical discoveries: that oil and water don't mix (or do they?). Throw in a little surface science, polymer science, and most of all today, computer science and voila! Desktop publishing and direct computer to plate (alias CTP) technology. The chemistry behind the offset lithographic process will be briefly discussed and practical examples of all sorts of printing outputs will be described. From this talk you will learn: basic chemistry of the lithographic process, press design features and, most particularly, the design of the lithographic printing plate and CTP technologies. We will also

take a brief visit into the future of printing.

Date: **Wednesday, May 3, 2006**
Time: Refreshments and Social
5:00 PM
Awards and Presentations
5:45 PM
Dinner - 7:15 PM

Place: Butcher Suite
The Campus Center
Pace University
Bedford Road (Entrance #3)
Pleasantville, NY
Pace Campus is opposite the
north bound Taconic Pkwy -
exit Bedford Road-NY117

Cost: \$25.00 - ACS members
\$30.00 - non-members

Reservations due by **April 26, 2006**

For information and reservations, please
call Joan Laredo-Liddell at 914-476-6860 or
e-mail JLaredoLiddell@aol.com.



ANALYTICAL TOPICAL GROUP

Time Resolved Surface Enhanced Raman Scattering Studies of 3-hydroxy- flavone on A Ag electrode

Speaker: John R. Lombardi
Department of Chemistry
The City College of New York
Convent Avenue at 138th Street
New York, NY

Reverse proton transfer of 3-hydroxyflavone
(3-HF) from tautomer ground state to normal
ground state has been studied by time
resolved surface enhanced Raman scatter-

(continued on page 16)



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ANALYTICAL TOPICAL GROUP

(continued from page 15)

ing (TRSEERS). The tautomer ground state of 3-HF is formed by an exciting 337 nm nitrogen laser pulse and monitored by a 488 nm Ar+ laser with gated photodiode array detection. By studying the changes of some transient band intensities with time, the lifetime of tautomer 3-HF on an Ag electrode is determined to be 1.4 μ s. Besides the photo-induced photo-oxygenation product, evidence for additional peroxide intermediate is obtained.

Date: Wednesday, May 3, 2006
Time: 6:00 PM
Place: The Graduate Center of the City University of New York
365 Fifth Avenue
New York, NY

The room number will be posted in the Lobby. For further information contact Dr. RP Nolan (212) 817-8248.



CHEMICAL MARKETING & ECONOMICS (CM&E) GROUP

The Third Wave in Biotechnology: Solutions for Everyday Life

Speaker: Brent Erickson
Vice President, Industrial and Environmental Section
Biotechnology Industry Organization (BIO) and Consulting Editor
Industrial Biotechnology
Washington, DC

Date: Thursday, May 4, 2006
Times: Cocktails 11:30 AM
Luncheon 12 noon
Presentation 1:15 PM
Place: The Chemists' Club
40 West 45th Street
New York, NY
Cost: \$40 discount price for Members who reserve by **Tuesday, May 2** (12 noon). \$55 for Guests and Members (at the door without reservations)

To reserve: Please reserve early to be eligible for discount price.

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NY-ACS BIOCHEMICAL TOPICAL GROUP WITH THE NYAS BIOCHEMICAL PHARMACOLOGY DISCUSSION GROUP

The Role of Cholesterol in the Etiology and Pathogenesis of Alzheimer's Disease

Organizers: Lit-Fui Lau
Pfizer
and
June Sonnenberg-Reines
Wyeth

Speakers: Benjamin Wolozin
Boston University
Gopal Thinakaran
University of Chicago
Karl Weisgraber
University of California
at San Francisco
and
Cheryl Wellington
University of British Columbia

Date: Tuesday, May 23, 2006
Time: 1:00 – 5:15 PM
Place: New York Academy of Sciences
Main Hall
2 East 63rd Street (between Fifth and Madison Avenues)
New York, New York

Space is limited. Reserve a seat on-line at <http://www.nyas.org/events> or telephone 212.838.0230 x 322.

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Non-members may attend for a fee of \$20 per event; Student Non-members for \$10.

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LONG ISLAND SUBSECTION — TENTH ANNUAL FRANCES S. STERRETT ENVIRONMENTAL CHEMISTRY SYMPOSIUM

NPS Pollution — What's in Your Sump?

Speakers include: Kimberly Rancourt
Long Island South Shore
Estuary Reserve Office

John T. Tanacredi, Ph.D.
Dowling College

Robert Turner, Ph.D.
Long Island University

Bruce Brownawell, Ph.D.
Stony Brook University

Dr. David Ackman
Nassau County
Commissioner of Health

The annual Frances S. Sterrett Symposium is dedicated to presenting the public with up-to-date, factual scientific information on environmental topics. Email questions to Dr. Barbara Hillery at hilleryb@oldwestbury.edu.

Date: Thursday, May 25, 2006
Place: Hofstra University
Hempstead, NY

Fill out and return the form below. Or register online at <http://www.newyorkacs.org>.

REGISTRATION FORM: PLEASE COPY AND SEND TO

Dr. Neil Jespersen, Dept. of Chemistry
St. John's University, 8000 Utopia Parkway
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REGISTRATIONS RECEIVED BY MAY 19
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Please register _____ people for the **Frances Sterrett Environmental Chemistry Symposium** on "NPS Pollution — What's in Your Sump?" Please list other names, addresses, and phone numbers on a separate page.

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_____ Non-ACS Members @ \$35.00
_____ Students/Retired @ \$17.00

NEW YORK SECTION - 50 YEAR MEMBERS

The New York Section congratulates and extends sincere best wishes to its 50 year ACS members. As guests of the New York Section they will be honored at a special luncheon at which the official ACS 50 Year Member Certificates will be presented.

Dr. Jay Donald Albright
Ms. Ethel Berkowitz
Dr. Olga O. Blumenfeld
Dr. Richard Bolstad
Dr. Grace B. Borowitz
Mr. Robert Dennis Cloney
Dr. Nina M. Czeczowiczka
Dr. Raymond Di Martini
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Dr. Paul Friedman
Mr. Robert Brian Huntoon
Dr. Stewart Karp
Dr. Milton Klein
Dr. Stella Esther Kohn
Dr. Thomas Medwick
Ms. Sarah Mook
Dr. Sung Moon
Mr. Peter Nicholakakos
Dr. George G. Odian
Dr. Roland P. F. Scharrer
Dr. David Israel Schuster
Dr. Niels Sigismund Schwarz
Mr. Robert Shapiro
Dr. Joan Esther Shields
Dr. Reuel Shinnar
Mr. Michael Allen Weiner

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The Indicator is interested in adding new features to the publication. Your input would be appreciated. Please let us know which type of feature you would like to see in future issues; i.e., book reviews, member news, short articles about your research or other ideas. Would you be willing to assist in gathering or writing such material?

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THE 2006 WILLIAM H. NICHOLS MEDAL AWARD AND DISTINGUISHED SYMPOSIUM

"Click Chemistry In Action"

By Irving J. Borowitz

The 2006 William H. Nichols Medal was presented to Professor K. Barry Sharpless, Nobel Laureate and W. M. Keck Professor of Chemistry, the Scripps Research Institute, by the ACS New York Section, at the Crowne Plaza Hotel, White Plains, NY on Friday March 10, 2006. This was the 100th Nichols Medal to be presented for distinguished research in chemistry. It was presented at a dinner meeting, accompanied by a check for \$5000 to the recipient. The medalist gave an informal talk.

Professor Sharpless was honored for inventing click chemistry, a powerful new approach in chemical synthesis using reliable and selective reactions for the rapid synthesis of new compounds. Professor Sharpless won the 2001 Nobel Prize in Chemistry for his discovery of general methods for catalytic asymmetric epoxidation, dihydroxylation and aminohydroxylation of alkenes.

Among the notables at the dinner were Mr. C. Walter Nichols III (great grandson of William H. Nichols) and his wife, Helga Nichols, Professor E. Ann Nalley, 2006 President of the American Chemical Society, Professor Jill K. Rehmman, 2006 Chair of the ACS New York Section, Chair-Elect Joan A. Laredo-Liddell, ACS District 1 Director Anne O'Brien, and previous Nichols Medal winners Professors Gilbert Stork, Koji Nakanishi and Harold A. Sheraga.

The dinner was preceded by an afternoon symposium that featured as speakers: Professors Valery V. Fokin, Scripps Research Institute, Jan H. van Maarseveen, University of Amsterdam, Craig J. Hawker, University of California, Santa Barbara, and the medalist K. Barry Sharpless.

(All photos courtesy of Dr. Grace B. Borowitz)



(l-r) Row 2: Prof. Valery V. Fokin (Scripps Research Institute), Prof. Jill K. Rehmman (ACS NY Chair), Mr. C. Walter Nichols III (great grandson of William H. Nichols), Dr. E. Ann Nalley (ACS President), Prof. K. Barry Sharpless (Nichols Medalist), Joan A. Laredo-Liddell (ACS NY Chair-elect). Row 1: Prof. Craig J. Hawker (University of California, Santa Barbara), Prof. Jan H. van Maarseveen (University of Amsterdam).



(l-r) Prof. and Mrs. K. Barry Sharpless with the Nichols Medal.



(l-r) Medal Presentation - Prof. Jill K. Rehmman (ACS NY Chair), Prof. K. Barry Sharpless.



Nichols attendees: (l-r) Sr. Mary Virginia Orna (College of New Rochelle), Dr. Joan E. Shields (Long Island University, Former Chair of the ACS Board of Directors), Dr. Hiroko I. Karan (Dean, Medgar Evers College), Dr. Anne T. O'Brien (ACS District 1 Director), Joan A. Laredo-Liddell (ACS NY Chair-elect, Marymount College of Fordham University).



(l-r) Dr. Ayako Yamashita (Columbia University) and three Nichols Medalists- Prof. K. Barry Sharpless (Scripps Research Institute), Prof. Gilbert Stork (Columbia University) and Prof. Koji Nakanishi (Columbia University).



Students and faculty from Pace University attending the Nichols Award Dinner compliments of the Nichols Foundation.

Call for Nominations

THE WILLIAM H. NICHOLS MEDAL AWARD for 2007

The New York Section is accepting nominations for the William H. Nichols Medal Award for the year 2007. 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 medalist'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 (The New York Section Office). The forms can be obtained from the New York Section website also: 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, 2006**. The Nichols Medal Award Jury will meet in June to select the Nichols Medalist for 2007.

For more information about the William H. Nichols Medal and a list of past recipients please visit the New York Section website listed above.



ACS NEW YORK SECTION'S OUTSTANDING SERVICE AWARD FOR 2006

Each year the New York Section presents an Outstanding Service Award to a very deserving member. Many members of the New York Section provide their time, leadership talent, educational skills and other valuable assets to the New York Section.

The tradition of excellence of the New York Section is directly attributable to the cumulative effect of these individuals. Please help us to recognize the efforts of our colleagues by nominating them for this award. The award will be presented at the New York Section's General Meeting and Section-wide Conference in January 2007.

Nominations with supporting data should be mailed to Dr. Richard Goodman, 38 Aspinwall Road, Briarcliff Manor, NY 10510 or e-mailed to him at rmgconsulting@msn.com.

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.

Nominations should be forwarded to Dr. Goodman by **May 30, 2006**.

Chem Doku Puzzle — submitted by Steve Waller

H	He	Li	Be	B	C	N	O	F
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			Li					N
He	F		N			H		Be
	C				Be	Li		
F	Be			C	N			
		He		F		N		
			H	Be			He	O
		Be	F				B	
C		F			H		Li	He
O					B			

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He	F	Li	N	B	C	H	O	Be
H	C	N	O	He	Be	Li	F	B
F	Be	O	He	C	N	B	H	Li
Li	H	He	B	F	O	N	Be	C
B	N	C	H	Be	Li	F	He	O
N	Li	Be	F	O	He	C	B	H
C	B	F	Be	N	H	O	Li	He
O	He	H	C	Li	B	Be	N	F