

Sponsored by
The New York Section of the
American Chemical Society

40th
MARM
May 17-21, 2008

CHEMISTRY
AND HEALTH

QUEENSBOROUGH COMMUNITY COLLEGE CUNY

www.marmacs.org

**Middle-Atlantic
Regional Meeting**
Chemistry and Health

May 17-21, 2008

Sponsored by the NY-ACS and hosted by
Queensborough Community College of CUNY
Bayside (Queens), NY

See page 14.

RECYCLE THIS PAPER

PERIODICALS POSTAGE

www.theindicator.org
www.njacs.org www.newyorkacs.org

Your Partner For Analytical Support Services

Rapid Results • Quality • Accuracy • Competitive Pricing



Robertson Microlit Laboratories

- Elemental CHN S, X Analysis - same day service
- Atomic Emission Spectroscopy
- Atomic Absorption Spectroscopy
- FTIR Spectroscopy
- UV / VIS Spectrophotometry
- Mass Spectrometry
- Chromatography
- Bioavailability
- Polarimetry
- Calorimetry
- Titrimetry
- Wet Chemistry
- KF Aquametry

P. O. Box 927 • 29 Samson Avenue • Madison, NJ 07940
Tel: (973) 966-6668 Fax: (973) 966-0136
www.robertson-microlit.com
email: results@robertson-microlit.com



Vacuum Inlet Traps

Because vacuum pumps don't grow on trees.



Oil Filtration Systems

Because a really old, really healthy vacuum pump is a beautiful thing.



Oil Mist Eliminators

Because no one wants to eat oily mist.



M PRODUCTS

A Division of Mass-Vac, Inc.

247 Rangeway Road • PO Box 359 • North Billerica, MA 01862
978 667 2393 Fax 978 671 0014 sales@massvac.com www.massvac.com

THE INDICATOR

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
PO Box 1150, Marshfield, MA 02050-1150
781-837-0424; Fax 781-837-1453
e-mail: vincegale@mboservices.net

INDICATOR COMMITTEE

New York Section Rep.

DR. NEIL JESPERSEN

Chemistry Dept., St. John's University
8000 Utopia Parkway, Jamaica, NY 11439
718-990-5221, e-mail: jespersen@stjohns.edu

North Jersey Section Rep.

DR. ANITA BRANDOLINI

TAS, Ramapo College, 505 Ramapo Valley Rd.,
Mahwah, NJ 07430 • 201-884-7753
e-mail: abrandol@ramapo.edu

Web Master

PAUL TUKEY — e-mail: tukey@verizon.net

NEW YORK SECTION

<http://newyorkacs.org>

Chair

DR. MARC WALTERS

Dept. of Chemistry, New York University
100 Washington Square East, New York, NY 10002
212-998-8400; Fax 212-260-7905

e-mail: marc.walters@nyu.edu

Chair-Elect

DR. BARBARA R. HILLERY

Dept. of Chemistry, Old Westbury College - SUNY
P.O. Box 210, Old Westbury, NY 11568
516-876-2738; Fax 516-876-2704

e-mail: hilleryb@oldwestbury.edu

Secretary

DR. IWAO TERAOKA

Dept. of Chemical and Biological Sciences
Polytechnic Univ., 333 Jay St., Brooklyn, NY 11201
718-260-3466; Fax 718-260-3676

e-mail: teraoka@duke.poly.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

DR. MICHAEL M. MILLER

Drug Discovery Chemistry, Bristol-Myers Squibb Co.
Pharmaceutical Research Inst., P.O. Box 5400,
Princeton, NJ 08543-5400

e-mail: michael.miller@bms.com

Chair-Elect

DR. JOSEPH POTENZA

Dept. of Chemistry and Chemical Biology
Rutgers University
610 Taylor Road, Piscataway, NJ 08854
732-445-2115, Fax 732-445-5312

e-mail: jpotenza@rutchem.rutgers.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: 10,500

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

CONTENTS

Advertisers Index	20
Call for Nominations	18
Education	17
MARM 2008	14
New York Meetings	14-16
North Jersey Meetings	8-11
Others	19
Professional/Product Directory	19-20

EDITORIAL DEADLINES

September	July 14
October	August 15
November	September 15
December	October 15
January 2009	November 15
February	December 13, 2008
March	January 16, 2009
April	February 13
May	March 16
June	April 15



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. 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.

May Calendar

NEW YORK SECTION

Wednesday, May 7, 2008
Westchester Chemical Society
See page 15.

Tuesday, May 27, 2008
NY Biochemical Topical Group
See pages 15-16.

NORTH JERSEY SECTION

Thursday, May 1, 2008
Careers in Transition
See page 9.

Monday, May 12, 2008
Teacher Affiliates Executive Committee
See page 9.

Thursday, May 15, 2008
ChemTAG
See page 9.

Thursday, May 22, 2008
No. Jersey Organic Topical Group
See page 10.

Wednesday, May 28, 2008
No. Jersey Awards Dinner
See page 8.

Thursday, May 29, 2008
No. Jersey Chromatography Group
See page 11.

**Deadline for items to
be included
in the September 2008
issue of *The Indicator*
is July 14, 2008.**

Desert Analytics has a new name, but we are still the same location, same people, and same high quality data and service.



Trusted technical expertise.



3860 S. Palo Verde Road, Suite 302, Tucson, AZ 85714 | 520.573.1061 | tucson@cslab.com

**Our Tucson Laboratory provides professional
Micro-Elemental and Fuel Testing Services**

- CHNOS - Combustion / TC / IR Detection
- Carbon & Sulfur - High Temperature Combustion / IR Detection
- Halogens & Anions - Oxygen Bomb & Flask Combustion / IC or ISE Detection
- Metals - Total Acid Dissolution, Fusions, ICP-OES, ICP/MS, AAS
- Fuel Analysis - Proximate, Ultimate and BTU Content
- Air Sensitive & Hygroscopic Samples - Nitrogen Dry Box

Contact Columbia Analytical for a full list of capabilities.
Same day to 4-6 day rush services available.

Serving the fields of:
Academic Research
Biotech
Chemicals
Cosmetics
Electronics
Energy
Manufacturing
Mining
Environmental
Pharmaceuticals

www.csllab.com An Employee-Owned Company

MAY HISTORICAL EVENTS IN CHEMISTRY

by Leopold May, The Catholic University of America, Washington, DC 20064

May 2, 1802

Heinrich Gustav Magnus, who was born on this date, discovered the Magnus effect (the lift force produced by a rotating cylinder which, for example, gives the curve to a curve ball); the first platinum-ammonium compounds; expansion of gases when heated, vapor pressures of water and various solutions, electrolysis, induced and thermoelectric currents, optics, magnetism and hydrodynamics; discovered also sulfovinic, ethionic, and isethionic acids, and (with Ammermüller) periodic acid; investigated the diminution in density produced in garnet and vesuvianite by melting; and studied the property inherent in the blood of absorbing carbonic acid and oxygen (founding thereon the theory of the absorption of the blood).

May 5, 1958

Fifty years ago, Albert Ghiorso, et al., announced the discovery of nobelium (No, 102) based on work done at University of California, Berkeley.

May 6, 1871

F. Victor Grignard developed magnesium reagent used in organic chemistry; Nobel Prize (1912) for the discovery of the so-called Grignard reagent, which in recent years has greatly advanced the progress of organic chemistry; shared the prize with Paul Sabatier who received it because for his method of hydrogenating.

May 9, 1927

Born on this date: Manfred Eigen, shared Nobel Prize (1967) with Ronald George Wreyford Norrish and George Porter for their studies of extremely fast chemical reactions, effected by disturbing the equilibrium by means of very short pulses of energy

May 12, 1895

This is the birthday of William F. Giauque who received the Nobel Prize in 1949 for his contributions in thermodynamics, particularly concerning behavior of substances at extremely low temperatures.

May 14, 1878

The name "vaseline" for petroleum jelly was given a trademark on this date.

May 17, 1897

Odd Hassel researched molecular structure of cyclohexane and derivatives, charge-transfer compounds, and the rules for geometry of charge-transfer compounds. He shared the Nobel Prize in 1969 with Derek H. R. Barton for their contributions to the development of the concept of conformation and its application in chemistry. He was born on this date.

May 19, 1916

Ralph Landau cofounded Scientific Design in 1946 and led in the development of of terephthalic acid process in polyester manufacture and the propylene oxide process. This is his birthday.

May 21, 1936

Günter Blobel received Nobel Prize in Medicine and Physiology in 1999 for discovery that proteins have intrinsic signals that govern their transport and location in the cell.

May 25, 1915

Paul J. Scheuer, the "Father of marine natural products", was born on this date.

May 26, 1895

Helen Marie Dyer who did research on chemotherapy, was born on this day. She received an award from ACS in recognition of distinguished service by a female. She was the oldest member of CSW when she died at the age of 103.

May 27, 1909

Mary Fieser who did research on quinones, natural products, and steroids, was born on this day. She coauthored texts in organic chemistry with her husband, Louis Fieser.

May 29, 1970

General Electric Corp. announced synthesis of gem-grade diamonds.

May 30, 1915

Born on this date, Henry A. Hill, founded National Polychemicals and Riverside Research Laboratories; first African American president (1977) of the American Chemical Society.

Additional historical events may be found at Dr. May's website,
<http://faculty.cua.edu/may/ChemistryCalendar.htm>.

THIS MONTH IN CHEMICAL HISTORY - I

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

Since 1903 the Chemical Society of London has been publishing annual reports on the progress of chemistry. This series was possibly based on the example of Berzelius, the great Swedish chemist, who for many years early in the 19th. Century single-handedly compiled his annual personal review of significant work in chemistry. We are near the beginning of a new year, and I have before me Volume V of the Chemical Society's reports for the year 1908 (published, naturally, in 1909) just 100 years ago. It is striking that this report is economically contained in fewer than 300 pages including both name and subject indexes. I plan to devote this column and the next to an overview of my selections from this report.

But before I get into specifics, let's examine the historical context. The electron was discovered by Thomson only ten years ago. Radioactivity is, if you'll pardon the pun, the hot new research area. Rutherford and his students Geiger and Marsden have just begun their experiments on the interactions between alpha particles and metal foils that will lead to the concept of the nuclear atom. Gilbert N. Lewis is sketching in his notebook at Berkeley his first notions of the octet rule.

In this context the comments by Alexander Finlay on the structures of atoms make fascinating reading. He begins at the beginning: the evolution of the heavier elements from lighter ones as deduced from the spectra of nebulae. "...[These] consist of lines recognizable as those of hydrogen and helium, as well as two other lines not belonging to any known substance. From these four initial substances or protons [note the different meaning of the word from our current usage; hg] all the other elements are regarded as being evolved by the condensation round these protons (themselves formed of corpuscles) of corpuscles so as to form stable systems capable of separate existence. Whatever the internal structure of these atoms may be, they may be regarded as being built up of concentric "rings", or assemblages of corpuscles."

Finlay is here drawing on theoretical speculations of A.C. and A.E. Jessup which led them to propose the existence of two new elements, as yet undiscovered terrestrially, which they called proto-glucinum (glucinum was the generally accepted name for the element we now call beryllium) and proto-boron. These elements occupied the first row of the Jessup's periodic table at the head of Groups 2 and 3.

Turning from the evolution of the elements to the electronic theory in chemistry we see again the early stirrings of what would become a new view of chemical reactivity and reactions. Sir William Ramsay, discoverer of the noble gases, and in 1908 President of the Chemical Society, outlined his views in that year's Presidential Address. "Electrons are atoms of the chemical element electricity; they possess mass; they form compounds with other elements; they are known in the free state, that is, as molecules; they serve as the 'bonds of union' between atom and atom. The electron may be assigned the symbol E". In Ramsay's view the reaction forming sodium chloride from its elements can be symbolized as $\text{ENa} + \text{Cl} = \text{NaECI}$, with the electron E as the bond of union between the sodium and chlorine. "On solution the electron remains with the chlorine giving chloridion." Arrhenius' views on dissociation into ions of electrolytes in aqueous solution, first enunciated in his thesis some 20 years earlier, are by now widely accepted; but not yet carried over to the structures of ionic solids. That had to wait another decade for the Braggs' X-ray diffraction results.

THIS MONTH IN CHEMICAL HISTORY - II

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

In this column I continue my examination of the Chemical Society's Annual Reports for 1908, a century ago. And I'll begin by turning my attention to inorganic chemistry. The thorny question of chemical constitution of even simple inorganic compounds is an initial concern: "The difficulty of giving any generally acceptable representation of the composition of compounds such as K_2O_4 , KI_7 , KBF_4 etc. In spite of their apparently simple composition, shows how far we still are from possessing a workable hypothesis as to the nature of chemical combination between elements." The author of this section, Hugh Marshall, looks forward hopefully to the "electrochemical point of view" of valency and constitution as some time in the future giving answers to such fundamental questions.

The section on "New Elements" gives a view of the confusion that reigned when there was not yet a fundamental constant, like atomic number, to characterize each element. The former "element" ytterbium has now been found to contain two distinct elements called by Urbain lutecium and neo-ytterbium; and by von Welsbach aldebaranium and cassiopeium. Further confusion – or enlightenment – is now revealed by Urbain's discovery that the spectra of William Crookes' "elements" ionium and incognitum (the latter a particularly felicitous name, I think) are reproduced by mixtures of gadolinium and terbium. Bayer's bauxium similarly turns out to be a mixture of vanadium and tungsten with traces of other elements.

There is excitement over possible new elements discovered independently and simultaneously by Miss Evans (I really have to find out more about this pioneer woman inorganic chemist) and M. Ogawa. But Ogawa gets his claim based on more evidence; the new element, isolated from three different minerals, namely thorianite, molybdenite, and reinite, has an equivalent weight of about 50 and atomic weight of about 100. This fits the position we now assign to technetium but it is unlikely that these researchers actually isolated technetium compounds. The longest lived isotope of Tc has a half-life of only 220,000 years and any natural Tc has long since disappeared. Possibly Evans and Ogawa were looking at mixtures, but Ogawa, proving that chauvinism was very much alive and kicking, proposed the name of nipponium for his new element. In this he was following recent examples such as gallium, germanium, and polonium.

By 1908 Alfred Werner's coordination theories were being applied to many "complex salts" as they are called in this Report – coordination compounds as we would call them. This particular year includes discussions of Pfeiffer's extensive work on the cobaltamines; Delepine's exploration of hexachloroiridates and related compounds; comparable work on rhodium chloro complexes; and Werner's own work on bridged cobaltamines.

In a section curiously headed "The Argon Group" the successful independent efforts first of Onnes and then of Dewar to liquefy helium are noted. A hundred years later we are used to seeing tanks of liquid helium wheeled about our departments to assuage the appetites of high field nuclear magnetic resonance instruments. But that shouldn't diminish the efforts that went into these first results. The first hurdle was to get really pure helium uncontaminated with even traces of hydrogen. Then study of the low temperature properties of helium showed that to employ the Joule-Kelvin effect to liquefy the gas it would have to be cooled by liquid hydrogen. Dewar obtained 60 mL of colorless transparent liquid helium of density 0.15 g/mL and of boiling point 4.5K within 1K of its critical point. Dewar was unable (at pressures below 1 atm) to obtain solid helium.

North Jersey Meetings

<http://www.njacs.org>

NORTH JERSEY EXECUTIVE COMMITTEE MEETING AND 50 & 60 YEAR MEMBERS AWARDS DINNER

Date: **Wednesday, May 28, 2008**

Times: Social 4:30 PM
Dinner and Presentation of Certificates 5:30 PM
Among awards presented will be the Burton C. Belden Award to Val Kuck

Place: Fairleigh Dickinson University College at Florham Lenfell Hall, the Mansion Madison, NJ

Cost: \$35.00

Reservations __ called into John Penna 732-463-3987 or Bill Suits 908-234-9240 **prior to Monday, May 21, 2008.**

Payment is made at the door.

Directions: can be found at view.fdu.edu/default.aspx?id=238.



50 YEAR MEMBERS

Mr. Amleto Alessandrini
Mr. Jordan B. Barth
Mr. Leonard Berkowitz
Dr. Ajay Kumar Bose
Mr. Ronald Fecher
Dr. Arthur M. Felix
Mr. Henry Frankel
Dr. John K. Gillham
Dr. Alvin P. Ginsberg
Mr. George E. Heinze
Mr. Edwin L. Kelley
Dr. Ti Kang Kwei
Dr. Julian Lakritz
Mr. Theodore Legatt
Dr. Donald H. Lorenz
Mr. Ira Loter
Mr. William J. Maier
Dr. Donald J. Martin
Dr. Robert H. Miller
Mr. Irving S. Neshin
Mr. John F. O'Brien
Dr. Louis A. Pilato

Mr. Joseph Carl Pisciotta
Dr. Albert Rossi
Mr. Richard F. Schwab
Mr. Jerome E. Schwartz
Mr. William Tautz
Dr. James J. Tietjen
Mr. Thomas J. Trainor
Dr. Milan R. Uskokovic
Mr. Herbert H. Waddell
Mr. C.J. Waitkus
Dr. George T. Wildman
Dr. David Zudkevitch

60 YEAR MEMBERS

Dr. James D. Barnhurst
Mr. Leslie William Bauerle
Dr. Murray S. Cohen
Mr. H. F. Corning
Dr. Malcolm C. Crew
Mr. Harry James Dabagian
Dr. Eugene P. Di Bella
Mr. Kelvin Domovs
Dr. Robert Ehrlich
Mr. William Albert Ellis
Dr. Edith H. Farb
Dr. George P. Gross
Dr. George G. Hazen
Dr. William Hodes
Mr. William Coe Hosford
Mr. Douglas E. Howes
Dr. Horst Walter Hoyer
Mr. William Hulstrunk
Mr. Warne Perrault Johnson
Dr. Ira Kukin
Dr. Irving Kuntz
Dr. Arthur I. Lowell
Dr. Charles Driscoll Mason
Mr. George Edward Mensak
Dr. George M. Naimark
Dr. E. Richard Nightingale
Dr. William Edward Rosen
Dr. Lincoln H. Werner
Dr. Charles N. Winnick
Anatole Wowk
Mr. Jack P. Wright

SURPRISE

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 1, 2008**, 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.

TEACHER AFFILIATES

Executive Committee Meeting

Date: **Monday, May 12, 2008**
Time: 4:30 PM
Place: Chatham High School
255 Lafayette Avenue
Chatham, NJ

Contact: Cheryl Litman at, 1-732-289-3700
Ext. 4034, clitman@mail.nbtschools.org




ChemTAG MEETING


Date: **Thursday, May 15, 2008**
Time: 4:00 – 6:00 PM
Place: Mount Saint Mary Academy
1645 U.S. Highway 22 at
Terrill Road
Watchung, NJ

For directions: <http://www.mountsaintmary.org>.

Hostess: Eve Krupka, eve1221@aol.com, 908-757-0108 Ext. 4511.




easternsci@aol.com
781-826-3456



Vacuum Pump Problems?

Eastern Scientific specializes in the repair and precision rebuilding of all makes of mechanical vacuum pumps.

*Free pick-up & delivery
Restrictions apply*



North Jersey ACS Organic Topical Group Presents
Pharmaceutical Success Stories
Thursday May 22, 2008

The Palace at Somerset Park
333 Davidsen Ave.
Somerset, New Jersey 08873

Invited Speakers:
William Clark, Robert W. Marquis
GlaxoSmithKline

"Process Chemistry at GlaxoSmithKline, The Development of a Manufacturing Route to a Cathepsin K Inhibitor"

Prashant Desphande, Wei Meng
Bristol Myers Squibb

"Discovery and Development of SGLT-2 Inhibitors"

James Balkovec
Merck Research Laboratories

"Natural Products in Drug Discovery: The Development of Cancidas®"

David Smith
Roche

"From R1479 to R1626: Discovery and Advancement of 4'-Substituted Nucleosides for the Treatment of Hepatitis C"

Jotham Coe
Pfizer

"The Discovery of Varenicline, a Nicotinic Receptor Partial Agonist for Smoking Cessation"

Registration will begin at 8:30 am, symposium from 9:00 am - 4:30 pm, lunch at 12:30 pm. For directions, online registration and further details please visit our website: <http://www.njacs.org/organic.html>
Registration fee is \$95.00, payable to "North Jersey Section ACS" c/o Dr. Dong Xiao, K-15-1800, Schering Plough Corp., 2015 Gallopung Hill Road, Kenilworth, New Jersey, 07033.

Organizing committee: Lawrence Williams (Chair, Rutgers), Dong Xiao, Joe Koslowki (Schering), Anjali Ali (Merck), Albert DeHoffman (BMS), Bob Yu (Roche), Eric Metz (Roche)



**NORTH JERSEY
CHROMATOGRAPHY GROUP**

Future of Chromatography

Speakers: Nelu Grinberg, PhD
Matt Przybyciel, PhD
Guodong Chen, PhD
Jian Ning, PhD
& more...!

Date: Thursday, May 29, 2008

**Place: Crowne Plaza
Somerset, NJ**

Cost: Professionals \$80, Students, \$40

Details: Continental Breakfast, Lunch,
Free Raffles, Great Speakers, & Vendor
Exhibit.

Registration: Register today at
www.njcg.org, or at www.njacs.org, click
on Chromatography

**NORTH JERSEY ACS MEMBER
SPOTLIGHT**

William J. Greenlee
Schering-Plough Research Institute

The North Jersey Section's membership includes many prominent leaders in chemical research and education. This is the first in a series of profiles of some of these leaders.



With over 150 research publications and 60 U.S. patents, **Dr. William (Bill) J. Greenlee** is a leading contributor to the development of modern pharmaceuticals. Currently, he is Vice President, CNS and Cardiovascular Chemistry and High-Throughput Synthesis at the Schering Plough Research Institute in Kenilworth. In this capacity, he directs a large group of chemists working toward the control of conditions such as Alzheimer's disease, obesity, diabetes, thrombosis, and chronic pain. His group has several candidates that are in clinical development.

In 2004, Bill received the Alfred Burger Award in Medicinal Chemistry from the ACS and was later inducted into the Division of Medicinal Chemistry's Hall of Fame. He has been active in both the Medicinal Chemistry and Organic Divisions, serving as Chair of MED1 in 2003 and of ORGN in 2004. Currently, Bill is the Program Chair for ORGN and an editor of the *Journal of Medicinal Chemistry*. "I've had the chance to meet and work with many enthusiastic and creative scientists in the two divisions and the North Jersey Local Section, and have learned a lot from them," he commented. "After seeing the many ways ACS has contributed to my career, I wanted to give something back. He has also chaired the Medicinal Chemistry Gordon Conference and was recently elected a Fellow of the American Association for the Advancement of Science (Pharmaceutical Division).

Bill is also influential in chemical education through Drew University's Residential School on Medicinal Chemistry and Rider University's Scientific Advisory Board. He emphasized the importance of this involvement, "Inspiring scientific curiosity at a young age and maintaining students' interest in science will be of vital importance, if we are to educate enough chemists to maintain the leading role of the United States in science and technology. Unfortunately, public knowledge of science, and especially chemistry, is lacking at a time when important advances in science are being made that will affect many aspects of our lives."

Prior to joining Schering Plough, Bill worked at Merck Research Laboratories in Rahway. While there, he was part of the Merck group that discovered novel angiotensin-converting enzyme (ACE) inhibitors, which are used to control high blood pressure and treat heart failure. Two of these inhibitors are

(continued on page 12)

NORTH JERSEY ACS MEMBER SPOTLIGHT

William J. Greenlee

(continued from page 11)

marketed as Vasotec™ (enalapril) and Prinivil™ (lisinopril). His group at Merck made significant contributions to the discovery of novel angiotensin receptor antagonists and agonists.

Bill's interest in organic chemistry dates back to his undergraduate years at The Ohio State University, where he studied strained ring hydrocarbons with Paul G. Gassman. During his graduate studies at Harvard under Robert B. Woodward, he carried out the first total synthesis of (+/-)-marasminic acid. As an NIH Postdoctoral Fellow at Columbia University with Gilbert Stork, he worked on a team that completed the first total synthesis of cytochalasin B.

Looking back on his career, Bill remarked that "Times have changed since I started out in the pharmaceutical industry 30 years ago. Then, it was assumed that most new employees would be with a company for their entire career. That is no longer the case. It's more important than ever for young scientists to build their own careers by setting personal goals, working hard, committing to life-long learning, publishing and presenting their work, and remaining optimistic despite setbacks." He identified an effective way to do this, "Every chemist who is a member of ACS benefits from the many opportunities it provides to publish original research in high-quality ACS journals and to meet and interact with other chemists at the National and Regional meetings and in the local sections. The divisions and local sections are always looking for support and new ideas, and I encourage all chemists to consider contributing their time and ideas."




DU PONT **DuPont Analytical Solutions**
From rapid, routine testing to complex problem-solving. One of the world's largest, and most diverse analytical laboratories, with the experience to solve your analytical challenges in :

Electronic Materials • Personal Care • Catalysis • Coatings, Pigments, and Adhesives
Specialty Chemicals • Films and Packaging • Pharmaceuticals • Plastics • Fibers • Textiles

DuPont Analytical Solutions e-mail: DASolutions@usa.dupont.com
P.O. Box 80302 web: <http://analyticalsolutions.dupont.com>
Wilmington, DE 19880-0302 FAX: (302) 695-1717
Phone: (302) 695-1018

Contact us for all your analytical needs.

DU PONT
200
YEARS

 **Micron Analytical Services**

COMPLETE MATERIALS CHARACTERIZATION
MORPHOLOGY CHEMISTRY STRUCTURE

SEM/EDXA, TEM/SAED, EPA/WDXA, XRD, XRF, ESCA, AUGER, FTIR, DSC/TGA

3815 Lancaster Pike Wilmington DE. 19805 Voice 302-998-1184, Fax 302-998-1836
E-Mail micronanalytical@compuserve.com Web Page: www.micronanalytical.com

TEACHER AFFILIATES

On Friday, March 8, 2008, twenty-two high school teachers gathered at J. P. Stevens High School in Edison to learn about the Pogil approach teaching (Process Oriented Guided Inquiry Learning). The workshop was run by the North Jersey Section of the American Chemical Society- Teacher Affiliates.



Diane Krone observes and comments on the teachers learning by the Pogil method.



Bettyann Howson observes the teachers learning by the Pogil method.



Middle-Atlantic Regional Meeting

Chemistry and Health: May 17-21, 2008

Sponsored by the NY-ACS and hosted by
Queensborough Community College of CUNY
Bayside (Queens), NY

www.marmacs.org

Over 60 symposia, poster sessions & other events with top national and international speakers, plus plenary lectures by



Ronald Breslow

The Invention of SAHA, an Approved Anticancer Medicine with a Novel Mechanism of Action



Roald Hoffmann

The Chemical Imagination at Work in Very Tight Places

There is something for everyone at MARM 2008!

Students • Academic Chemists • Industrial Chemists • Entrepreneurs

Sessions in all areas of chemistry

Analytical • Biochemistry • Chemical Education • Computational
Environmental • Forensic • Inorganic • Materials • Medicinal
Nanoscience/technology • Organic • Organometallic • Physical • Polymers
Chemistry and the Arts

Onsite registration for MARM is still available.

We look forward to meeting you!

The QCC campus is easily accessible by car and public transportation, and on-campus parking is free. Bayside is located in suburban Queens, NY and is only a short trip from Manhattan and its attractions.



New York Meetings

www.newyorkacs.org

WESTCHESTER CHEMICAL SOCIETY

The Distinguished Scientist Award and Dinner and College Achievement Awards

"HIV/Microbicides and Development of a Vaccine to be Delivered Mucosally"

Awardee: Dr. David Fairhurst
Colloidal Consultants, Ltd

Date: **Wednesday, May 7, 2008**

Times: Social at 5:00 PM
Lecture and Awards at 5:45 PM
Dinner at 7:00 PM

Place: Butcher Suite
The Campus Center
Pace University
Bedford Road - Entrance #2
Pleasantville, NY

Cost: Students - \$15
ACS members - \$20
Non-ACS members - \$25

Reservations required:
JLaredoLiddell@aol.com (914) 476-6860.

Information regarding Pace:
eweiser@pace.edu.

Check NY website.

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

DISC1 and the Developmental Hypothesis of Schizophrenia

Organizers: Julia Heinrich
Wyeth Discovery Neuroscience
Robin J. Kleiman
Pfizer, Inc.

Speakers: Akira Sawa
Johns Hopkins University
School of Medicine

Nicholas Brandon
Wyeth Research

Katherine Burdick
North Shore Long Island
Jewish Health System

Steven Clapcote
The University of Edinburgh
Scotland

Schizophrenia (SZ) is a debilitating psychiatric disorder that affects 1% of the population world-wide. Disrupted in Schizophrenia 1 (DISC1) gene is one of the most promising susceptibility loci in SZ linkage studies. The question of whether DISC1 and its "hub" like role in directing the traffic of pathways related to schizophrenia permits early prediction and medical intervention with disease modifying therapy is now being

(continued on page 16)

We Focus on Doing Chemistry!

- FDA Inspected
- cGMP Synthesis
- Controlled Substances
- Custom Synthesis
- Small Lots Manufacturing
- Polymer Chemistry
- Process Development

Chemo Dynamics, LP

Contact: S. N. Bharathi, Ph.D.
3 Crossman Road South
Sayreville, NJ 08872
Phone: (732)721-4700
Fax: (731)721-6835
www.chemodynamics.com
E-Mail: info@chemodynamics.com

BIOCHEMICAL TOPICAL GROUP

(continued from page 15)

addressed by the scientific community. This symposium invites experts in the field to present their ideas on the etiology of SZ and how it might relate to the DISC1 paradigm.

Date: Tuesday, May 27, 2008

Time: 1:00 PM – 5:00 PM

Place: The New York Academy of Sciences

7 World Trade Center
250 Greenwich Street – 40th Floor
New York, NY

Space is limited. Reserve a seat on-line at: <http://www.nyas.org>

NYAS Members and BPDG Affiliates may attend BPDG meetings free of charge.

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

To become a Member of the Academy, visit <http://www.nyas.org/landing.html>



Hit the Target

... with sub-ppm confidence on the Bruker micrOTOF-Q™ for empirical formula determination

www.bdal.com - (978) 663-3660

think forward ESI-Qq-TOF MS

CANDIDATES FOR THE NEW YORK SECTION 2008 ELECTIONS

At the January General Meeting and Section-wide Conference, the Nominating Committee presented the following candidates for the New York Section 2008 elections. ACS, New York Section members will receive a ballot in April. The ballot must be returned by **May 31, 2008**. If a ballot is not received by May 12th, please contact the Section Office at 516-883-7510 or njesper1@optonline.net. The New York Section extends a sincere thank you to the following candidates for accepting the nomination to run for office.

Chair-elect for 2009

David A. Lloyd Hofstra University
Frank R. Romano Agilent Technologies

Secretary for 2009-2010

Margaret Mandziuk Manhattan College

Directors-at-Large for 2009

David P. Cormode Mount Sinai School of Medicine
Alison G. Hyslop St. John's University
Karin E. Pavese New York Academy of Sciences
David M. Sarno Queensborough Community College - CUNY
Lori Zaikowski Dowling College

Councilors for 2009-2010

Donald D. Clarke Fordham University
Ronald P. D'Amelia Hofstra University
Richard M. Goodman RMG Consulting
Neil D. Jespersen St. John's University
Joan A. Laredo-Liddell Science Education Consultant
Ralph Stephani St. John's University



NEW YORK SECTION: SUMMARY OF 2007 ACTIVITIES

Joan Laredo-Liddell, 2007 Chair

Highlights of some of the outstanding activities of the Section.

January: At the Annual Meeting, we were privileged to have Dr. William Carroll, Jr. 2005 ACS President, as our keynote speaker. Four Salutes to Excellence Awards were presented: New York Hall of Science (National Chemistry Week); David

Sherman of Pepsi (National Chemistry Week); Vijaya Korlipara (Chemagination); and Richard Cassetta (Long Range Planning). Frank Romano received the Outstanding Service Award. Sara McCoy received the Nichols Foundation High School Chemistry Teacher Award.

March: The Nichols Symposium and Awards Dinner honored Nicholas J. Turro of Columbia University.

May: The NY Section celebrated the 50 and 60 year members of ACS with a luncheon at "Tavern on the Green" in Central Park. Thirty members and guests attended the affair. Over 30 section members attended the production of "Phallacy" by ACS member, Carl Djerassi at the Cherry Lane Theatre. The 2007 MARM was held at Ursinus College, PA. and Sara McCoy received the High School MARM Award. Anne O'Brien, Yorke Rhodes, Donald Clarke and I attended the Awards Dinner. Our 2003 HS Teacher Awardee received the James Bryant Conant Award in HS Chemistry Teaching in New Orleans. The Undergraduate Research Symposium, one of the largest, was held at Manhattan College. It was superbly organized by the three co-chairs (A. Hyslop, S. Lall-Ramnarine, J. Rizzo). The Long Island Subsection sponsored the 11th Annual Frances Sterrett Environmental Chemistry Symposium at Hofstra, chaired by Barbara Hillery.

October: The Section received a \$3000 Innovative Grant from ACS-Local Section

Activities Committee (LSAC) to purchase goggles, aprons and sponsor a Haiku and Poster Contest for National Chemistry Week. There were over 1300 attendees at the New York Hall of Science on October 27. The success of NCW was due to the universities, colleges, high schools and industries presenting demonstrations. The NY Section is honored to have David Sherman of Pepsi as a coordinator.

November: The Section was represented at the Eastern Analytical Symposium in Somerset, New Jersey and organizing the NY members was Frank Romano. New York members also attended the North Jersey Leo Hendrick Baekeland Award Symposium and Dinner held at the New Jersey Institute of Technology. The Section received a \$500 grant from ACS-LSAC and sponsored two Science Cafes, one in Westchester and one on Long Island. The topic was "Health and Whole Foods." The NY Section presented its 2nd Annual Historic Chemical Landmark Award to IBM-T.J. Watson Research Laboratory in Yorktown. Also, approved by National ACS as an historic landmark, with the presentation in 2008, was the Pfizer Laboratory in Brooklyn. John Sharkey, our Historian, was involved with both activities.

NY is proud of its Seed students and their moderator, Nadia Makar. The Section congratulates the subsections, topical groups, colleges and universities for sponsoring state of the art lectures and programs.

Education

Center for Advanced Technology at the City University of New York (CUNYCAT)

Dedicated to Helping New York State Business

Need Help with R&D, or Problem Solving?

New Product Development	Developing Intellectual Property
Improved Quality	Spin-off New Companies
University Connection	Increased Capital Investment
Job Growth and Retention	Applying for Government Grants (SBIR)

Contact us: info@cunlyphotonics.com <http://www.cunlyphotonics.com> 718 997 4280

Call for Nominations

CALL FOR NOMINATIONS FOR THE ACS NEW YORK SECTION'S OUTSTANDING SERVICE AWARD FOR 2008

Each year the New York Section presents the **Outstanding Service Award** to a most deserving member of the section. Many members of the New York Section provide their time, leadership talent, and educational skills to the New York Section. The tradition of excellence of the New York Section is attributable directly to the cumulative effect of these individuals. Please help the New York Section to recognize the efforts of our colleagues by nominating them for this award. Nominations will be reviewed by a committee consisting of the previous five winners of the award. The Outstanding Service Award for 2008 will be presented at the New York Section's Section-wide Conference in January 2009.

Nominations with supporting data should be mailed to the OSA Committee Chair, Dr. Lesley Davenport, Department of Chemistry, Brooklyn College - CUNY, 2900 Bedford Avenue, Brooklyn, NY 11210 or emailed to LDVNPOR@Brooklyn.cuny.edu.

For more information about the award along with a list of former award recipients, please visit the New York Section's website at http://www.newyorkacs.org/awards_nyacs.html

Nominations should be forwarded to Dr. Davenport by **June 30, 2008**.

CALL FOR NOMINATIONS FOR THE WILLIAM H. NICHOLS MEDAL AWARD FOR 2009

The New York Section is accepting nominations for the William H. Nichols Medal Award for the year 2009. 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.

Each nomination requires a completed Nomination Form, biographical and professional data, and seconding letters. Since the nomination procedure now will utilize the New York Section website, please access the forms and instructions at <http://www.NewYorkACS.org>. Nominations must be received by **May 31, 2008**. The Nichols Medal Award Jury will meet in June 2008 to select the Nichols Medalist for 2009.

Questions regarding the nomination procedure should be directed to Marilyn Jespersen, New York Section Office, at njesper1@optonline.net.



iQsynthesis
Custom Synthesis Services

iQsynthesis Technology provides customized Chemical synthesis at milligram to kilogram quantities.

- Custom Synthesis
- cGMP Synthesis of API and Intermediates
- Process Development
- Cytotoxic and Highly Potent Compounds
- Hot and Cold Isotopic Labeling
- Analytical Support

iQsynthesis
11810 Bomas Drive
St. Louis, MO 63146
314-991-1857
1-800-506-9892
www.iqsynthesis.com
info@iqsynthesis.com

INNOVATION | QUALITY

Others

ASSOCIATION OF CONSULTING CHEMISTS & CHEMICAL ENGINEERS

Cleantech - What is Clean and Where is the Business?

Speaker: Faruq Marikar, Ph.D.
NanoBiz LLC

Clean, green, sustainable - what does it mean? This talk will start with a quick look at the fuzzy, feel-good definitions of the various desirable futures; and then delve into the serious issue of where is the business in getting us from the "dirty" present to the clean future. Venture capital is financing spectacular photovoltaic start-up companies at impressive levels. The Midwest is awash in corn-based ethanol plants. Better light bulbs, electric vehicles, the hydrogen economy...where is it all headed, and who is making money?

Faruq Marikar is Managing Partner of Nanobiz, LLC a consulting group offering business, investment, patent and legal guidance on alternate energy, materials, clean-

tech and nanotechnology commercialization. Nanobiz helps major corporations in their growth initiatives and small companies in finding enabling partnerships and financing. In his prior corporate career with Hoechst, Celanese and Gould, Marikar was responsible for planning and developing new business opportunities. Product/industry areas of involvement include batteries, capacitors, fuel cells, films, paints, coatings, plating, corrosion, carbon fiber, graphite, specialty chemicals, plastics, electronic chemicals, ceramics, and composites.

Date: Tuesday, May 27, 2008
Place: Snuffy's Restaurant
Scotch Plains, NJ
Times: Networking/Cash Bar 6:00 PM
Dinner 6:30 PM
Presentation 7:30 PM
Cost: \$35 ACC&CE Members
\$45 Non-members

To Reserve: Call 1-973-729-6671 or e-mail: acce@chemconsult.org

Advanced registration is required.

Please visit www.chemconsult.org for more details.

Professional/Product Directory

Custom Synthesis Services

Challenge us with your custom synthesis needs. Good quality & fast delivery services with competitive prices, satisfaction guarantee.

Syntask Laboratories Inc.

7 Deer Park Dr. Ste M5, Monmouth Junction, NJ 08852
Phone: (732) 355-9988; Fax (732) 355-9980 syntasklab@verizon.net

Fast and Accurate Chemical Analysis

LC/MS/MS, GC, GC/MS, HPLC, CE, dissolution, Chiral separations, post column derivatizations, semi-prep purification, polymer analysis, impurity profiling, flavor/fragrance analysis, formulation development.

PRIMERA ANALYTICAL Princeton, NJ 08540
Fon: 609-921-7715 Fax: 609-921-7716
E: info@primera-corp.com W: www.primera-corp.com

Elemental Analysis

CHNOS ash
ICP • AA • ICP/MS
TOC • TOX • BTU
Problem Solving

HUFFMAN

LABORATORIES, INC.
Quality Analytical Services Since 1936
Phone: (303) 278-4455
FAX: (303) 278-7012
chemistry@huffmanlabs.com
www.huffmanlabs.com

Chemical Analysis Services

CHEMIR
Analytical Services

- Materials Identification
- Deformulation
- Polymer Analysis & Testing
- Failure Analysis
- Consulting Services

800.659.7659
www.chemir.com

NJIT
New Jersey's Science & Technology University

MATERIAL CHARACTERIZATION LABORATORY

A Unique Combination of State-of-the-Art Analytical Instruments and Expertise
GC/MS • HPLC • LC/MS • FTIR • TOC • AA
ICP-MS • XRD • XRF • AFM • SEM • TEM
York Center for Environmental Engineering & Science
www.yccc.njit.edu/labs
758 Warren Street Newark, NJ 07102
Tel: (973) 596-5858 Fax: (973) 642-7170

Professional/Product Directory

work smarter, not harder...
with physico-chem drug properties

from the experts at **pION INC**
Analytical Services include:

* pka, log P * PAMPA
* solubility * stability testing
* dissolution * excipient screens

+1 781-935-8939
www.pion-inc.com
10% off by mentioning this ad

SCHWARZKOPF Microanalytical Laboratory

Elemental & Trace Analysis
Organics, Inorganics
Organometallics
Metals by AA & Graphic Furnace
Functional Grps. - Mol. Wt.
Calorimetry
Total S. F. Halogens TOX
Coneg Testing Custom Analysis
56-19 37th Ave. Woodside, N.Y. 11377
(718) 429-6248
Schwarzkopfmicro@aol.com

NMR_{Service} 500MHz

*Mass
*Elemental Analysis
NuMega Resonance Labs
Tel: (858) 793-6057

TELL OUR ADVERTISERS

Membership surveys show that you want more articles in our newsletter. If you tell our advertisers that you saw their ad here, they will provide more financial support and this will allow us to add more articles.

Conference on Small Molecule Science

July 28-July 30, 2008
The Duke Hayes Mansion, San Jose, CA



The Conference on Small Molecule Science addresses the latest in small molecule science both in a unique intimate setting. This innovative research-style meeting promotes high-level discussions focusing on the exchange of practical experience and ideas, academic research and novel techniques.

Pre-conference tutorials begin Monday morning. These tutorials are pre-cursors to the conference providing a brief overview of current topics and trends appearing in the sessions and workshops throughout the week.

PARAPETNES: FUTURE DEMANDS ON ANALYTICAL PRACTICE
FUNDAMENTAL TOPICS IN STRUCTURE EDUCATION
STRUCTURE EDUCATION APPLICATIONS AND PROBLEM SOLVING
THE SCIENCE OF CHROMATOGRAPHY
ATMOSPHERIC POLLUTION TECHNOLOGIES: WHERE ARE WE NOW?

www.CoSMoScience.org

Ad Index

<u>ANALYTICAL</u>	
Bruker Daltonics Inc.	16
Chemir Analytical Services	19
Chemo Dynamics, L.P.	15
Columbia Analytical Services	4
CoSMoS	20
DuPont Analytical Solutions	12
Huffman Laboratories, Inc.	19
IQSynthesis	18
Micron Inc.	12
New Jersey Institute of Technology ..	19
NuMega Resonance Labs.	20
pION	20
Primera Analytical Solutions Corp.	19
Robertson Microlit Labs	2
Schwarzkopf Microanalytical	20
Syntask Laboratories, Inc.	19
<u>EDUCATION</u>	
City University of New York	17
<u>EQUIPMENT</u>	
Eastern Scientific Co.	9
Mass Vac, Inc.	2
<u>GENERAL</u>	
ACS-NY/NoJ Sections	8
ACS-NY/NoJ Sections	20