

APRIL 2011 Vol. 92 • No. 4 ISSN0019-6924



New York Section
Outstanding Service Awardee
Dr. James W. Canary

See page 7.

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I must say that your Symposium line up will make Chemspec USA the BEST meeting in the States to attend! I am really impressed

Steve Munk, CEO of Ash Stevens

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#### **RX-360 SEMINAR**

#### THURSDAY MAY 4 2011

Rx-360 is an international consortium of pharmaceutical and biotech companies and suppliers to the industry, that aims to develop and implement a global quality system to help members ensure product quality and authenticity throughout their supply chain to enhance patient safety.

#### AGENDA AT A GLANCE

#### SUNDAY MAY 1 - THURSDAY MAY 5

Starting Sunday, May 1: American Chemical Society Short Courses Monday, May 2: Scholarship Golf Day

Tuesday, May 3: Symposium Day

Exhibition & Exhibitor Showcases

#### MORE INFORMATION

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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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| May                 | March 15         |  |
| June                | April 15         |  |
| September           | July 15          |  |
| October             | August 15        |  |
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| December            | October 15       |  |
| January 2012        | November 15      |  |
| February            | December 15      |  |
| March               | January 15, 2012 |  |
| April               | February 15      |  |
|                     |                  |  |

## Visit Us www.TheIndicator.org

The Indicator (ISSN0019-6924) is published monthly except July and August by the New York and North Jersey Sections of the American Chemical Society, Office of Publication, 1 Milbark Court West, Homosassa, FL 34446. Periodicals Postage Paid at Homosassa, Florida and at additional mailing offices.

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.

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 os stated. Subscription price included in dues paid by New York and North Jersey Section members. Distributed electronically to members through the website www.TheIndicator.org and monthly emailings. Non-members are invited to read it online. Members should register their email addresses at www.acs.org/update.

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

# **April Calendar**

#### NEW YORK SECTION

Wednesday, April 6, 2011 Westchester Chemical Society See pages 8-9.

Thursday, April 7, 2011 Chemical Marketing & Economics Group See page 9.

**Friday, April 8, 2011**High School Teachers Topical Group *See pages 10.* 

**Thursday, April 14, 2011** Brooklyn Subsection *See page 29.* 

Thursday, April 14, 2011 Long Island Subsection See page 10.

Friday, April 18, 2011 New York Board Meeting See page 8.

**Tuesday, April 26, 2011**Biochemical Topical Group *See page 10.* 

Friday, April 29, 2011 Hudson-Bergen Chemical Society See page 11.

The Indicator is posted to the web on the 15th of the previous month at www.TheIndicator.org

#### NORTH JERSEY SECTION

Sunday, April 3, 2011 or Thursday, April 14 NoJ Teacher Affiliates Executive Meeting See page 16.

**Thursday, April 7, 2011** Careers in Transition *See page 16.* 

**Tuesday, April 12, 2011**MetroWomen Chemists Committee See page 16.

**Tuesday, April 12, 2011**Mass Spectrometry Topical Group *See www.njacs.org*.

**Wednesday, April 13, 2011**Drug Metabolism Discussion Group *See pages 17-18.* 

Friday, April 22, 2011 Chromatography Topical Group See www.njacs.org.

Monday, April 25, 2011 NoJ Executive Committee Meeting See page 16.

Saturday, April 30, 2011 Younger Chemists Committee See page 19.

Deadline for items to be included in the May 2011 issue of The Indicator is March 15, 2011.



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#### THIS MONTH IN CHEMICAL HISTORY

By 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

In this column I am continuing my report on the chemistry of a century ago as presented in the "Annual Reports on the Progress of Chemistry for 1911" published for The Chemical Society [of London] in 1912. This is volume VIII of this interesting series which gives us an insight into the discoveries that were regarded as significant by leading chemists of the time. I begin with some comments made by the reporters for organic chemistry, D. Chattaway and S. Smiles. Their heroic task was to summarize the major developments for a year in some 100 pages. They did an admirable job, but as they say: "Owing to the enormous number of researches now annually carried out, and to the difficulty in regarding them in true perspective, it is both laborious and perplexing to report on the progress made during a single year in organic chemistry." Consider, then, my perplexity on trying to write a short column on this material. Clearly I can only touch on major themes.

One of these is the Walden inversion, and questions of stereochemistry, which have been the subject of concepts put forward separately by no less a pair of luminaries than Emil Fischer and Alfred Werner (both early Nobel Laureates in chemistry). Both draw on ideas of "residual affinity" and "unsaturated atoms" which were superseded later by electronic theories of organic structure and dynamics. It is interesting that reports of optically active compounds centered on phosphorus, cobalt, and chromium atoms are covered in this organic chemistry section.

The state of chemotherapy in 1911 is illustrated by a long section on the preparation and properties of organic compounds of arsenic. Many arsenical preparations, of dubious efficacy, are listed in mid-nineteenth century pharmacopeias, but it was the discovery by Ehrlich and Bertheim in 1907 that a compound prepared in 1863 by Bechamp was para-aminophenylarsinic acid, or atoxyl, and was efficacious against a number of parasitic diseases including syphilis, that led to a burgeoning interest in organo-arsenic compounds including salvarsan (the treatment of choice against syphilis until penicillin came along in the 1940s) and, to a lesser extent, in organo-antimony compounds.

Natural products chemistry was also vigorously pursued in 1911. A number of isoquinoline alkaloids were synthesized for the first time including cotarnine, narcotine, and gnoscopine (d,l-narcotine). The articles describing the latter two bear the names of W.H. Perkin Jr. and Robert Robinson – familiar (I hope) to most organic chemists. The constitution of chlorophyll has been to some extent clarified by the work of Willstaeter and his colleagues who have confirmed the presence of pyrrole derivatives in chlorophyll. Chlorophyll obtained from plants invariably contains phytol; a note of interest to chemists and music lovers alike: "...the crystalline chlorophyll obtained by Borodin and others does not contain phytol, and it therefore cannot be the unaltered natural pigment."

I'll conclude with some comments on radioactivity, reported by Soddy, one of Rutherford's collaborators and a Nobel Laureate himself. The theory of the atom's structure is still that of J.J. Thomson (but see below!) that: "...the positive electricity has a uniform distribution is, however, retained, and is essential." The fundamental particles coronium, of mass 0.5131, hydrogen of mass 1.008, nebulium of mass 1.6277, and protofluorine of mass 2.3604 are invoked to explain atomic masses from helium to magnesium. Helium, for example, is NuPf. In a prophetic passage Soddy notes that "The scattering of alpha-particles in their passage through the atoms of matter possibly will give an experimental means of learning something of the nature of the atomic structure." This refers to early experiments of Rutherford and collaborators in which "a small fraction of the incident alpha-particles, about 1 in 20,000, is turned through an angle of 90° by impact on a gold leaf 0.00004 cm thick ... the atom is the seat of a much more intense electric field than in ...Thomson's theory of the atom." This is on the threshold of the nuclear theory of the structure of the atom.

#### APRIL HISTORICAL EVENTS IN CHEMISTRY

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

#### April 2, 1953

Francis H. C. Crick and James D. Watson mailed a 900-word article on the structure of deoxyribonucleic acid (DNA) to *Nature* on this date.

#### April 5, 1956

Marshall Gates & G. Tschudi announced synthesis of morphine on this date.

#### April 6, 1863

James Walker, a researcher on hydrolysis, ionization constants, and amphoteric electrolytes with organic compounds, was born on this day.

#### April 8, 1911

One hundred years ago on this date, Melvin Calvin was born. He received the Nobel Prize in Chemistry in1961 for his research in photosynthesis.

#### April 10, 1863

One hundred years ago in 1886, Paul Louis Toussaint Héroult discovered the electrolytic aluminium process in the same year that Charles Martin Hall discovered the same process for isolating aluminum, which is called the Hall-Heroult process. Also, he invented the electric arc furnace for steel in 1900, which replaced some giant smelters for the production of a variety of steels and was born on this date.

#### April 14, 1927

Alan MacDiarmid, who was born on this date, is a researcher on the synthesis of conductive polymers. In 2000, he shared Nobel Prize in Chemistry with Alan J. Heeger and Hideki Shirakawa for the discovery and development of conductive polymers.

#### April 15, 1861

One hundred and fifty years ago on this date, Ernest Solvay received his first patent entitled "Industrial Production of Sodium Carbonate by Means of Marine Salt, Ammonia, & Carbon Dioxide."

#### April 15, 1961

Fifty years ago on this date, Carol W. Greider was born. She shared the Nobel Prize in Physiology or Medicine in 2009 with Elizabeth H. Blackburn and Jack W. Szostak for the discovery of how chromosomes are protected by telomeres and the enzyme telomerase.

#### April 16, 1728

Joseph Black developed the concept of latent heat and laid the foundation for modern quantitative analysis. He was born on this date.

#### April 18, 1838

One hundred years and twenty-five years ago in 1886, Lecoq de Boisbaudran found dysprosium in didymium that, Per Teodor Cleve had concluded in 1874, had two elements later named neodymium and praseodymium. Also, he discovered gallium (Ga, 31) in 1875, samarium (Sm, 62) in 1880 using spectroscopic methods devised by Robert Bunsen and Gustav R Kirchhoff. He was born on this date.

#### April 20, 1912

Gertrude E. Perlmann was born on this date and did research in protein chemistry. She received the Garvan Medal in 1965

#### April 21, 1774

Jean-Baptiste Biot, who discovered optical activity, was born on this date.

#### April 22, 2007

Celebrated by ACS on this day but the first Earth Day was founded by Sen. Gaylord Nelson, Father of Earth Day and organized by Denis Hayes on April 21, 1970.

#### April 22, 1919

Donald J. Cram, a researcher in application of stereochemical techniques to organic reaction mechanism, was born on this date. He invented carceplexes or guest molecules completely encapsulated by host, synthesized a variety of host-guest complexes including crown ether complexes and shared the Nobel Prize in 1987 with C. J. Pedersen and J-M. P. Lehn for their development and use of molecules with structure-specific interactions of high selectivity.

#### April 23, 1917

Rohm & Haas Co. was incorporated on this date.

#### April 27, 1880

Charles James, who devised crystallization methods for separating the rare earth elements, was born on this day.

Additional historical events can be found at Dr. May's website,

http://faculty.cua.edu/may/Chemistrycalendar.htm

# THE OUTSTANDING SERVICE AWARD FOR 2010 GIVEN TO PROFESSOR JAMES W. CANARY OF NEW YORK UNIVERSITY

Professor James W. Canary of New York University is the winner of the 2010 Outstanding Service Award of the ACS New York Section, which he received on January 15, 2011 at the Sectionwide Conference at St. John's University. This award, created in 1976 and presented annually, recognizes members for their inspiration, time, and real work; for their generous and outstanding service to the New York Section. Prof. Canary is honored for his significant contribution to programming. He initiated a crucial, contemporary topical discussion group on Nanoscience that has offered excellent seminars to the present day.

Professor Canary is recognized, also, for his particular effect on leadership in the Section. In 2004, 2005, and 2006, he served as the Chair-elect, Chair and Past Chair of the Section. He did not waste a minute! An unassuming person himself, Prof. Canary initiated changes in the conduct of the New York Section Board Meetings, thus positively influencing the leadership style in the Section. He conducted meetings with superb precision, working always from an "Action Item" list. He always advanced the goals of the New York Section by promoting a positive awareness of chemistry. Prof. Canary's efforts and those of the many member volunteers that assisted him contributed to the New York Section receiving the ACS Outstanding Very Large Section Award for year 2005.

Professor James Canary has contributed to many other New York Section programs, and has held numerous offices. He chaired the Organic Topical Discussion Group from 1994 to 1995, co-organized the Graduate Student Poster Session program, was a Bioorganic Symposium Organizer for MARM 1997, Director-at-Large in 2003, and, of course, Section Chair in 2005. During this time, he was a member of the Board of Directors of the New York Section. From 2003 to the present, he has been a mentor for Project SEED. In 2003, when the ACS held its National Meeting in New York City, Prof. Canary was a member of Local Section Liaison Committee.

Professor Canary received his Ph.D. under the direction of Prof. Donald Cram at the University of California at Los Angeles. He joined the New York University faculty in 1991 after completing an NIH postdoctoral fellowship with Prof. Ronald Breslow at Columbia University. His work and interests span a wide range: from synthetic chemistry to chiroptical spectroscopy to biomedical imaging. He is especially known for ligand design and synthesis with an emphasis on stereodynamic coordination chemistry. He teaches undergraduate advanced inorganic/organic laboratory and graduate organic chemistry courses.

The ACS New York Section truly appreciates Professor Canary's continued dedication to the New York Section and again extends a sincere thank you. His gentle manner and superb work ethic has endeared him to the members of the Section. Congratulations Professor Canary!



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# **New York Meetings**

#### www.newyorkacs.org

#### NEW YORK SECTION BOARD MEETING DATES FOR 2011

The dates for the Board Meetings of the ACS New York Section for 2011 were chosen and approved at the June 2010 Board Meeting. The meetings are open meetings; all are welcome. If non board members would like to attend the meeting, please let the New York Section office know by emailing Mrs. Marilyn Jespersen at njesper1@optonline.net or calling the office at (516) 883-7510. Refreshments are served at 6:00 PM and the meeting is held at 6:45 PM.

The 2011 Board Meetings will be held on the following Fridays in the library of St. John's University, 8000 Utopia Parkway, Jamaica, NY. Dr. Hiroko I. Karan will chair the meetings.

#### Friday, April 8, 2011

Friday, June 3, 2011 Friday, September 23, 2011 Friday, November 18, 2011



# WESTCHESTER CHEMICAL SOCIETY

Special Seminar — "Women Chemists in the National Inventors' Hall of Fame"

Speaker: Sister Mary Virginia Orna College of New Rochelle New Rochelle, NY



Sr. Mary Virginia Orna

The National Inventors' Hall of Fame celebrates the creative and entrepreneurial spirit of great inventors by showcasing exhibits and presentations that allow

visitors to experience the excitement of discovery, creativity and imagination. Founded in 1972 and located in Akron, Ohio, USA, the Hall of Fame is dedicated to the individuals who conceived the great technological advances which the USA fosters through its

patent system. Each year a Selection Committee composed of representatives from national scientific and technical organizations votes to select the most qualified inventors from those nominated for the current year. To date, only 13 women of the more than 375 inventors thus honored are members of the Hall of Fame, and of these 13, seven are chemists. This talk will highlight the extraordinary contributions these women have made to our health and wellthrough such inventions chemotherapeutic agents, Kevlar. Scotchgard, and easy self-diagnosis for dia-

Sister Mary Virginia Orna, O.S.U. (Order of Saint Ursula) is professor of chemistry at the College of New Rochelle and Editor-at-Large, Chemical Heritage magazine. Among her many professional activities, she has presented plenary lectures and named lectureships on more than a dozen different occasions. She is a tour speaker on the roster of the American Chemical Society and has been an invited lecturer to every part of the United States and many countries in Europe, the South Pacific, and the Middle East. Her many publications have appeared in the Journal of Chemical Education, Color Research and Application, Studies in Conservation. Analytical Chemistry, Microchemical Journal, Journal of Biological Chemistry, American Chemical Society monographs, and various other journals. She has also authored numerous book chapters and encyclopedia articles, three books and co-edited eight others. Her ACS activities include serving on all elected Council committees and on other committees, i.e. the Society Committee on Education, Divisional Activities Committee and the Committee on Meetings and Expositions. She is active in several divisions of the American Chemical Society, having served as Chair, Program Chair and Treasurer of the Division of the History of Chemistry. She is currently serving as ACS Councilor and as a member of the ACS Council Policy Committee. She is a recipient of the following major awards: the 1984 CMA Catalyst Award for excellence in college chemistry teaching, the 1989 New York State Professor of the Year and National Gold Medalist, the 1989 Merck Innovation Award, the 1996 ACS Visiting Scientist Award, the 1996 James Flack Norris Award, the 1999 ACS George C. Pimentel Award in Chemical Education, the 2001 New England Association of Chemistry Teachers J. A.

Timm Award for excellence in chemistry teaching, the 2008 Henry Hill Award, and the 2009 ACS Volunteer Service Award. She is presently president of ChemSource,Inc., a major effort in chemistry teacher preparation and enhancement funded by the National Science Foundation. She was a Fulbright Fellow in Israel (1994-95), where she lectured at The Hebrew University, The Weizmann Institute of Science, and the Shenkar College of Engineering and Design.

Date: Wednesday, April 6, 2011

Times: Refreshments 5:30 PM

Lecture 6:00 PM

Place: Westchester Community College

75 Grasslands Road Gateway Building Room 110

Valhalla, NY 10595
Cost: Free and Open to the Public

For more information, contact Paul Dillon: E-Mail paul.dillon@siemens.com
Phone 1-914-524-3313



# CHEMICAL MARKETING & ECONOMICS GROUP

# Growth Opportunities in Specialty Pharma

Speaker: Michael Higgins

Managing Director and Senior Specialty Pharmaceuticals Analyst

Rodman & Renshaw

- What are some key opportunities in specialty pharma?
- What characteristics are required of the most attractive niches?
- What types of companies are poised to benefit from the trends?

As human population increases from 6 to 10 billion, the alarming rates of obesity and diabetes combined with aging population in many countries and improved access to healthcare will generate unprecedented growth opportunities in specialty pharma. In this talk we will cover the salient markets but will place particular emphasis on one of the most attractive segments: the wound care market. This is a \$15 billion per year market where the US represents 40% of the market and key markets grow at a steady 10% rate and the advanced treatments grow 15% annually. Chronic wound patients have a mortality rate that is similar to several types of cancers — 50% at five years. Similarly, the cost to treat chronic, non-healing wounds is as expensive as treating some cancers. Unlike first line treatments, innovators of effective therapies have significant pricing power which makes it quite appealing in the health care universe. Join us to find out how to monetize this opportunity.

Prior to joining Rodman & Renshaw, Michael Higgins gained ten years of drug marketing experience with Procter & Gamble Pharmaceuticals, followed by seven years as a research analyst. His analyst experience includes Dafna Capital Management, Wedbush Morgan Securities and an independent research firm he founded, 4sight Research Partners, LLP. Mr. Higgins has earned a four-star rating from Starmine for stock performance. He earned a BS from University of Wisconsin-Stevens Point and an MBA from Marquette University. Mr. Higgins is recognized for his coverage of "drug launch" companies and his coverage of drug delivery technologies and patents.

**Date:** Thursday, April 7, 2011
Times: Registration and Networking

11:15 AM

Luncheon 12:00 noon

Presentation and Webcast 1:00 PM

Place: Midtown Executive Club

at Club Quarters 40 West 45th Street

between Fifth & Sixth Avenues

New York, NY

Cost: Luncheon Fees: \$70\* for Members of CM&E who paid 2011 dues or NYSCC or NYSSA. \$90\* for nonmembers/prior CM&E members who did not attend Jan. 6 event. (Members include Paid Members of CM&E or NYSCC or NYSSA.)

\* Includes automatic CM&E membership at the special rate of \$20 for 2011.

**Save Now - Early-Bird Discount:** \$20 for all who pay via credit card by on the Friday before the event.

"Specialty Pharma" Bonus: If you register for the Luncheon by March 25, you will receive complimentary copy of the Michael Higgins/Rodman & Renshaw paper "Industry Overview: Advanced Wound Care Market" to capitalize on this growing market opportunity.

**Webcast or its recording:** \$30 for all. \$15 discount if you reserve by the Friday before the event.

#### HIGH SCHOOL TEACHERS TOPICAL GROUP

"Demo Derby"

An evening of non-stop demonstrations by the attendees (5-8 minutes max.) If you want to participate, just bring your demo along with clean-up equipment and your safety apparel, and write your name on the board. Remember, it's quick, quick, quick. You're not teaching, just showing what can be demonstrated in the classroom.

If you demonstrate, a write up of the procedure, required materials, scientific principles and expected conclusions for distribution to the audience of 50 would be appreciated but not required.

Date: Friday, April 8, 2011

Time: Social and Dinner — 5:45 PM Place: M&G Pub (Murphy and Gonzales)

21 Waverly Place (at Green Street,

North-east corner) New York, NY

No reservations required

Time: Meeting 7:15 PM Place: New York University

Silver Center Room 207 32 Waverly Place (South-east corner Washington Sq. 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: Street parking is free after 6:00 PM. 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.



#### **BROOKLYN SUBSECTION**

Date: Thursday, April 14, 2011

See article on page 29.



#### LONG ISLAND SUBSECTION

Heavy Metals and Chronic Degenerative Diseases

Speaker: Christopher Calapai C.C. Medical Services

Dr. Calapai will be speaking about heavy metals and how they affect common degenerative diseases, such as Parkinson's, multiple sclerosis, Alzheimer's, and cancer.

Dr. Calapai is Board certified in family medicine, anti-aging medicine and chelation therapy. He has been in practice for 23 years with offices in East Meadow and Plainview and he hosts two live radio shows weekly.

Date: Thursday, April 14, 2011

Times: Social 6:00 PM

Seminar 6:30 PM Place: Hofstra University

Breslin Hall, Room 103

Cost: Seminar - free and open to all.
Dinner: following the seminar at a

nearby restaurant (\$25.00)

Please visit the LI-ACS webpage at http://www.newyorkacs.org/sub\_island.php for details, updates, and directions.



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

Autism Spectrum Disorders: From Genes to Targets to Treatments

Organizers: Robert R. Ring, PhD

Pfizer

Daniel G. Smith, PhD

Pfizer

Mercedes E. Beyna, MS

Pfizer

Jennifer Henry, PhD The New York Academy

of Sciences

Speakers: Joseph D. Buxbaum, PhD

Mount Sinai School of Medicine

Jacqueline N. Crawley, PhD National Institute of Mental

Health, NIH

Peter B. Crino, MD, PhD University of Pennsylvania

Timothy T. Roberts, PhD Children's Hospital of

Philadelphia

Robert T. Schultz, PhD Children's Hospital of Philadelphia

Autism spectrum disorders have wide-ranging symptoms, including impaired social interactions, communication deficits, repetitive behaviors and restricted interests. This symposium explores emerging research in the development of novel therapeutics.

**Date:** Tuesday, April 26, 2011 Time: 9:00 AM - 5:00 PM

Place: The New York Academy of Sciences

7 World Trade Center

250 Greenwich Street - 40th Floor

New York, NY 10007

Cost: This event is has reduced-rate registration for ACS and NYAS mem-

Istration for ACS and NYAS members, at \$25 or \$10 (for students and post-docs). Please use the Priority Code SPN1-ACS1. Nonmembers may attend for a fee of \$80 (corporate), \$60 (non-profit or academic) or \$40 (students and

post-docs).

For more information and to register for the event, go to: www.nyas.org/autism

To become a Member of the Academy, visit www.nyas.org/benefits



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

The 13th Annual Undergraduate Research Symposium

"Self-assembled Soft Nanomaterials from Biobased Surfactants"

Speaker: Dr. George John Dept. of Chemistry

The City College of New York-

CUNY

In future research, developing materials from renewable resources would be fascinating yet demanding practice, which will have a direct impact on industrial applications, and economically viable alternatives. This talk presents a novel and emerging concept of generating new chemicals, intermediates and materials in a 'Biorefinery'. Our continuous efforts in this area have led us to develop new amphiphiles and surfactants from industrial by-products such as cashew-nut-shellliquid, which upon self-assembly produced nanoarchitectures including lipid nanotubes, twisted/helical nanofibers, low-molecularweight gels and liquid crystals. More recently, harnessing the availability of 'chiral pool' of carbohydrates and selectivity of enzymes catalysis, we have produced an array of amphiphilic molecules from simple sugars such as amygdalin, trehalose, vitamin-C and sugar alcohols. The amygdalin amphiphiles showed unique gelation behaviour in a broad range of solvents: nonpolar hexanes to polar aqueous solutions. Importantly, an enzymetriggered drug-delivery model for hydrophobic drugs was demonstrated by using these hierarchically assembled hydroaels. Intriguingly, by combining biocatalysis, with principles of green and supramolecular chemistry, we have developed building blocks-to-assembled materials. addresses the advances that have led to the understanding of chiral behaviour and the subsequent ability to control the structure of glycolipid nanostructures and gels, and the resulting impact of this on future material applications. The second part of the talk addresses the templated synthesis of nanoparticles using self-assembled soft materials. These results will lead to efficient molecular design of supramolecular architectures and soft nanomaterials from underutilized plant/crop¬based renewable feedstock.

Dr. George John is an Associate Professor of Chemistry, the City College of the City University of New York (CUNY). After obtaining his Ph.D. in Chemistry from Kerala University, he held several research positions-in the Netherlands, Japan and at the Rensselaer Polytechnic Institute, Troy, New York before joining CUNY. His research interests are in the broad area of organic and macromolecular materials chemistry, green chemistry and nanoscience. George is recognized for his active research in the field of biobased products, functional molecular materials and green nanotechnology. His recent research on self-assembled soft materials has been widely acclaimed in many publications including Discovery News, Nature. Newsweek. Scientific American and in the New York Times. He is on the editorial team of two international journals. He holds more than a dozen patents on inventions related to value-added chemicals from renewable resources and biomaterials.

Date: Friday, April 29, 2011

Times: Social/Poster Session 5:00 PM

Dinner 6:00 PM

Awards/Lecture 7:00 PM

Place: Dickinson Hall Café
Fairleigh Dickinson University

Teaneck, NJ

Cost: \$10.00 for dinner (dinner cost for

student presenters and awardees

is waived).

Reservations: Dr. Mihaela Leonida 201-692-2338, email: mleonida@fdu.edu by April 22, 2011.

See also CALL FOR POSTERS, page 22.

# WESTCHESTER CHEMICAL SOCIETY

The Distinguished Scientist Award and Dinner and College Student Achievement Awards

"Studies in Molecular Epidemiology"

Awardee: Dr. Assieh Alexy Melikian

New York University School of Medicine Department of Environmental

Medicine



Dr. A. A. Melikian

By using an interdisciplinary approach our research is focused on the elucidation of the mechanisms of action of environmental carcinogens, especially tobacco products, with the ultimate goal of utilizing this information in the design and development of targeted prevention strategies.

We have studied assays in laboratory animals to gain an understanding of metabolic pathways leading to ultimate carcinogenic metabolites of agents that have shown carcinogenic activity in animals. Then sensitive methods were developed and validated to quantify metabolism of these carcinogens in humans, usually by employing GC-MS, LC-MS, or other methods to analyze carcinogen metabolites in urine, or carcinogen protein or DNA adducts in tissue or blood. The design and some results of such a molecular epidemiologic study will be presented.

Date: Wednesday, May 4, 2011

Times: Social 5:00 PM

Lecture and Awards 5:45 PM Dinner 7:00 PM

Place: Butcher Suite
The Campus Center
Pace University,

Bedford Rd – Entrance #2

Pleasantville, NY Cost: Students \$20

> ACS members \$25 Non-ACS members \$30

RSVP required to pwrc@earthlink.net

Information regarding Pace University eweiser@pace.edu

Check for updates http://www.newyorkacs.org/

Directions to Pace: http://www.pace.edu/pace/about-us/all-about-pace/directions-to-all-campuses/pleasantville-campus//

# 59TH ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM

Sponsored by: The New York Chemistry Students' Association of the American Chemical Society's New York Section

The symposium provides an excellent opportunity for undergraduate chemistry students in the NY metropolitan area to present the results of their research. The program includes a keynote address, presentation of student papers (15 minute talks to small groups), and a poster session to be followed by a luncheon.

Date: Saturday, May 7, 2011

Place: College of Mount Saint Vincent

For more information on the program, go to: http://newyorkacs.org/grp\_students.html

If you have any questions please contact: Barbara Hillery, Co-chair

hillery b@oldwest bury.edu

Joseph Serafin, Co-chair SerafinJ@stjohns.edu

Justyna Widera, Co-chair widera@adelphi.edu

NY Section, Student Affiliate Committee Co-chairs Barbara Hillery, Joseph Serafin, and Justyna Widera.



# EMPLOYMENT AND PROFESSIONAL RELATIONS COMMITTEE OF THE NEW YORK SECTION

# To Human Resources Departments in Industry and Academia

The Employment and Professional Relations Committee maintains a roster of candidates who are ACS members seeking a position in the New York metropolitan area. If you have job openings and would like qualified candidates to contact you, please send a brief job description and educational/experience background required to hessytaft@hotmail.com.

Candidates from our roster who meet the requirements you describe will be asked to contact you.

#### CANDIDATES FOR THE ACS NEW YORK SECTION 2011 ELECTIONS

At the January Section-wide Conference, the Nominating Committee presented the following candidates for the New York Section 2011 elections. ACS, New York Section members will receive a ballot in April. The ballot must be returned by May 31, 2011. If a ballot is not received by May 15th, please contact the New York Section Office at 516-883-7510 or njesper1@optonline.net. The biographies of the candidates will appear on the New York Section website http://www.NewYorkACS.org. The New York Section extends a sincere thank you to the following candidates for accepting the nomination to run for office.

#### Chair-elect for 2012

Dr. Sharon I. Lall-Ramnarine CUNY - Queensborough Community College

Dr. Philip H. Mark

SUNY - Nassau Community College

#### **Treasurer for 2012-2013**

Dr. Robert P. Nolan International Environmental Research Foundation

#### Directors-at-Large for 2012

Mr. David J. Deutsch
Vista Marketing and Financial
Dr. Charles Hicks
SUNY - Nassau Community College
Dr. Marie Thomas
Brookhaven National Laboratory
Dr. Kwesi Amoa
CUNY - Medgar Evers College
Mr. Herbert Weiss
South Side High School

#### Councilors for 2012-2014

Dr. Ronald P. D'Amelia
Hofstra University
Dr. Richard M. Goodman
RMG Consulting
Dr. Barbara R. Hillary
SUNY - Old Westbury College
Dr. Rolande R. Hodel
AIDSfreeAFRICA and SUNY Westchester Community College
Dr. Hiroko I. Karan
CUNY - Medgar Evers College
Mrs. Joan A. Laredo-Liddell

Fordham University

#### Alternate Councilors for 2012

(To fill vacancies)

Dr. Mihaela D. Leonida Fairleigh Dickinson University

Dr. Marc A. Walters New York University



#### LONG ISLAND SUBSECTION

#### **Future Events Schedule for 2011**

#### Thursday, May 5

"Characterizing Nanoparticle-Based MRI Contrast Agents"

Marc Walters

New York University

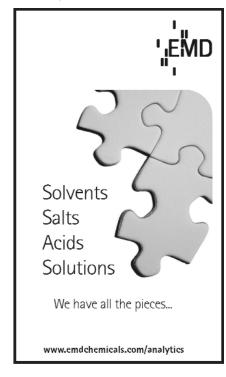
Location: Hofstra University

#### Thursday, June 2

"LI-ACS High School Awards"

Location TBA

Please visit the LI-ACS webpage at http:// www.newyorkacs.org/sub\_island.php for details, updates, and directions.



### 2010 NICHOLS FOUNDATION HIGH SCHOOL CHEMISTRY TEACHER AWARD

The ACS New York Section, 2010 Nichols Foundation High School Chemistry Teacher Award was presented to Ms. Kay Sirianni at the 2011 Section-wide Conference.



Ms. Kay Sirianni accepts the 2010 Nichols Foundation High School Chemistry Teacher Award from Mr. Stephen Radice.

(Photo courtesy of Marilyn Jespersen)

Kay received her Bachelor of Science degree in Clinical Laboratory Science from the University of Minnesota, and a Master of Science degree in Forensic Science from John Jay College of Criminal Justice. Kay has both Chemistry and General Science Teaching certification as well as a Chemical Laboratory certificate of fitness from the Fire Department of New York City.

Kay is presently teaching at Brooklyn Technical high School in Brooklyn, New York. It is a school of approximately 4800 students. Prior to her teaching career, Kay worked as a Medical Technologist, Microbiologist, surgical assistant, chromatography lab technician, serologist and a blood banker, that included performing Rh typings, antibody identification and preparation of frozen plasma.

She teaches courses in Honors Chemistry, Forensics Science and Regents Chemistry. Kay uses effective techniques to capture the interest of her students. She believes that all chemistry lessons should be engaging, giving pupils a reason to want to learn. She captures the students' interest by using CHEM-Mysteries. This includes a crime scene at a neighborhood deli, which she revisits throughout the year. She uses an elemental dating game where students are assigned elements such as Fluorine that is the most attractive and takes an electron from just about any element. In bonding, students use " America's next top Molecule." When she teaches acids and bases the students must solve the problem of identifying Grandma's mixed up medications. grandma's aspirin, antacids and prednisone tablet for her cat are all mixed together and the students devise experiments to make sure the cat does not take the wrong pill. To teach gas laws Kay has students make toys including one in which an army figure is shot to the sky out of a PVC pipe and then parachutes down.

One way Kay challenges and inspires students is having working chemists guest lecture in her class. These role models include the inventor of the lithium-ion battery, a Brooklyn medical examiner and a DEA chemist. Kay also runs the forensic club, is advisor to the science Olympiad and mentors students in the science fair. In March 2010 Kay presented, at the National Consortium for Specialized Secondary Schools of Mathematics Science and Technology, a workshop on integrating forensic science into chemistry and advanced chemistry courses.

Thomas A. Evangelist, Assistant Principal for supervision at Brooklyn Tech, writes "Ms. Sirianni can easily uphold our department policy of making the students touch, do and feel science. Her creative methods call for her to bring in a range of items that can be manipulated by the students to enhance their learning. This keeps the students motivated and working to their full potential."

One of Kay's students writes: "Ms Sirianni makes her class fun and exciting...because of Ms. Sirianni I grew to love chemistry and became a chemistry major... Ms Sirianni is a kind, caring dedicated and engaging teacher...who never stops trying to do her best. She is a great and valuable teacher"

Congratulations Kay!

(Submitted by Mr. Stephen Radice)

# WESTCHESTER CHEMICAL SOCIETY

The Wednesday, February 9th Westchester Chemical Society meeting turned into a reunification of Chemists. Speaker Tom Parliment wrote after the meeting: "It was so good to see you [Paul Dillon] and also Dick Casseta, Richard Goodman, Peter Cornfield and Anne O'Brien, too. So many friends from the past!" Tom is correct not to list me

amongst these distingushed scientists because I belong to Tom's more recent past. Tom's talk provoked a lengthy in-depth discussion. Imagine you actually eat 800 chemicals when eating strawberries, more if you drink a cup of coffee. What a great argument to use next time someone tells me our drugs are no good because they are made from "chemicals"! Enjoy your strawberries!

Kindly, Rolande Hodel



Pictured from left to right: Paul Dillon, Rolande Hodel, Jody Reifenberg, Thomas Parliment, Peter Corfield, Richard Goodman.

> (Photo courtesy of Paul Dillon)

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# North Jersey Meetings

#### http://www.njacs.org

#### NORTH JERSEY EXECUTIVE COMMITTEE 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 and to become more involved in section activities.

Date: Monday, April 25, 2011 Time: 6:00 PM

Place: Rutgers University

Wright-Rieman Labs, Room 260 Busch Campus, 610 Taylor Road

Piscataway, NJ 08854 Cost: \$5.00 - pizza dinner

Directions can be found using mapquest and the address above. A map of the campus can be found at

http://maps.rutgers.edu/maps/default. aspx?campus=4.

Reservations: call (732) 463-7271 or email njacsoffice@aol.com prior to Wednesday, April 20, 2011.

Dinner at the Section Meeting is payable at the door. However, if you are not able to attend and did not cancel your reservation, you are responsible for the price of your dinner.



#### NJACS TEACHER AFFILIATES

#### **Executive Committee Meeting**

Meeting dates are subject to change due to school closings or inclement weather.

Sunday, April 3 or Thursday, Date:

April 14, 2011 Time: 4:30 PM - 6:30 PM Place: College of St. Elizabeth Faculty Lounge/Study

2nd Floor of Mahoney Library Madison, NJ

Contact: Mita Chaki mchaki@franklinboe.org

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 prepara-
- Ways for improving a resume
- Answers to frequently asked interview question and
- Conducting an effective job search

The next meeting for the Careers In Transition Group will be held Thursday, **April 7, 2011**, in the Rice Lounge on the first floor of the New Academic Building. 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 billsuits@earthlink.net. if you plan on attending this meeting.



#### MASS SPECTROMETRY TOPICAL GROUP

Date: Tuesday, April 12, 2011

See www.njacs.org for more information.



### METRO WOMEN CHEMISTS COMMITTEE — JOINT MEETING WITH THE ASSOCIATION FOR WOMEN IN SCIENCE - CENTRAL JERSEY CHAPTER (AWIS-CJC)

#### 2nd Annual Mentoring Event

The Mentoring Award nominator will briefly share why she chose her mentor for the 2011 Mentoring Award, followed by the presentation of the 2nd annual Mentoring Award and a Keynote Address by the 2011 Mentoring Award Winner.

The evening will include appetizers, a buffet style dinner and dessert. Feel free to bring a bottle of wine.

Date:

Tuesday, April 12, 2011 Dinner 6:00 PM, Meeting 6:30 PM Times:

Place: Lenfell Hall

Fairleigh Dickinson University

285 Madison Avenue

Madison, NJ

Cost: ~ \$30.00. Students \$15.00

RSVP to Chunlin Zhao at chunlin.zhao@roche.com

#### DRUG METABOLISM DISCUSSION GROUP

2011 Spring Symposium and Vendor Exhibition — "Current Scientific Concepts and Practices in DMPK: Drug Transporters, DDI, Formulation Strategies, and Clinical Pharmacology"

#### **PROGRAM**

8:00 AM Registration / Continental Breakfast / Vendor Exhibit

9:00 AM Introductory Remarks

Dr. Imad Hanna, Chair, NJDMDG

9:10 AM Structure and Function of Human "Multidrug and Toxin Extruders" (MATEs)

Dr. Stephen Wright, Professor of Physiology, Biochemistry and Molecular

Biophysics, Department of Physiology, University of Arizona, Tucson, AZ

10:00 AM Factors Influencing Drug Delivery to the Brain: Multiple Mechanisms at Multiple Barriers

William F. Elmquist, Professor and Department Head, Department of Pharmaceutic, University of Minnesota, Minneapolis, MN

10:45 AM Vendor Exhibit & Coffee Break

11:30 AM Irreversible Inhibition of CYP2C19 by Some but Not All Proton Pump Inhibitors and Its Relevance to the Anti-platelet Effect of Clopidogrel (Plavix)

Dr. Andrew Parkinson, Chief Scientific Officer, XenoTech LLC, Lenexa, KS

12:15 PM Lunch & Vendor Exhibit

1:45 PM Formulation-dependent PK/PD and Human Dose Projections Using in silico, in vitro and in vivo Data

*Dr. Tycho Heimbach*, Senior Investigator, Drug Metabolism and Pharmacokinetics, Novartis Institute for BioMedical Research, East Hanover, NJ

2:30 PM Vendor Exhibit & Coffee Break

3:00 PM Developing the Clinical Pharmacology Section of a U.S. Package Insert Dr. Philip Mayer, Assistant Vice President of Clinical Pharmacology, Pfizer Global Research and Development, Collegeville, PA.

3:45 PM Program Closure

Date: Wednesday, April 13, 2011

Times: 8:00 AM - 3:45 PM

Place: Somerset Crowne Plaza Hotel

110 Davidson Avenue

Somerset, NJ

Cost: Pre-registration fee is \$125 (by April 7, 2011).

Registration is FREE for students (with proper identification).

Registration fee at the door is \$150 (Checks only).

- Please plan to pre-register as a group, as coordinated by a member of the NJACS DMDG steering committee from your organization (see list on next page).
- If you have no DMDG member at your company, please contact Imad Hanna (imad.hanna@novartis.com) for registration.
- · Payments by personal or company checks. Sorry, credit cards are not accepted.
- · Checks should be made payable to: NJ Drug Metabolism Discussion Group.
- Please also visit our website: http://www.njacs.org/drugmet.html

#### Exhibitors:

 Please contact Karen Dingley (karen\_dingley@merck.com) for information concerning exhibits.

#### DRUG METABOLISM DISCUSSION GROUP

(continued from page 17)

#### NJDMG Steering Committee 2010-2011:

| Name              | Company            | E-mail address                  | Responsibility        |
|-------------------|--------------------|---------------------------------|-----------------------|
| Imad Hanna        | Novartis           | imad.hanna@novartis.com         | Chair 2010-2011       |
| Lian Zhou         | BMS                | Lian.zhou@bms.com               | Chair-Elect 2011-2012 |
| Philip Krieter    |                    | pakrieter@verizon.net           | Past Chair, 2009-2010 |
| Narendra Kishnani | Merck Research     | Narendra.kishnani@merck.com     | Past Chair, 2006-2007 |
| Karl Frank        | Roche              | karl.frank@roche.com            | Past Chair, 2004-2005 |
| Jo Carlin         |                    | carlinjo@att.net                | Treasurer             |
| Shiying Chen      | Merck Research     | shiying.chen@merck.com          | Member                |
| Lauren Aleksunes  | Rutgers University | aleksunes@eohsi.rutgers.edu     | Member                |
| Mark Kao          | Johnson & Johnson  | MKao@PRDUS.NJN.COM              | Member                |
| Wing Lam          | Johnson & Johnson  | wlam@its.JnJ.com                | Member                |
| Zhao pie Zeng     | Sanofi-aventis     | Zhaopie.Zeng@sanofi-aventis.com | Member                |
| Lei Tang          | Sanofi-aventis     | Lei.Tang@sanofi-aventis.com     | Member                |
| Ryan Pelis        | Novartis           | Ryan.pelis@novartis.com         | Member                |
| Karen H. Dingley  | Merck Research     | karen_dingley@merck.com         | Member                |
| Sherrie Xu        | Merck Research     | skiyao_xu@merck.com             | Member                |
| Wen Bo            | Roche              | bo.wen@roche.com                | Member                |
| Donglu Zhang      | BMS                | Donglu.zhang@bms.com            | Member                |
| Manthena Varma    | Pfizer             | Manthena.V.Varma@pfizer.com     | Member                |
| Allen Jones       |                    | allen.n.jones@verizon.net       | Member                |
| Sekar Surapaneni  | Celgene            | ssurapaneni@celgene.com         | Member                |



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# CHROMATOGRAPHY TOPICAL GROUP

Date: Friday, April 22, 2011

See www.njacs.org for more information.

## YOUNGER CHEMISTS COMMITTEE



Celebrate the International Year of Chemistry 2011 with the NJACS Younger Chemists Committee! The International Year of Chemistry 2011 is a worldwide celebration of the achievements of chemistry and its contributions to the well-being of humankind. Under the unifying theme "Chemistry—our life, our future," we will be celebrating the year with a range of interactive, entertaining, and educational activities for all ages.

Bring out your inner UV Detective and stop by the NJACS Younger Chemists Committee UV learning booth at Rutgers Day on **April 30, 2011** from 10:00 AM to 4:00 PM. Here you or your children can make your own UV detecting bracelet using UV-sensitive beads. When exposed to sunlight these beads take on a dazzling array of colors. With some simple experiments, your family will also learn how to test the power of UV rays, and how sunscreen protects you from UV over-exposure. This is a great opportunity for your family to experience and enjoy science, while building awareness of the dangers of excessive sun exposure and learning how to protect your skin.

We invite you to join us at our booth located outside the Wright-Rieman building on Busch Campus, to discover the power of the sun!

Date: Saturday, April 30, 2011
Time: 10:00 AM - 4:00 PM
Place: Wright-Rieman Labs

Department of Chemistry and

Chemical Biology
Rutgers New Brunswick

Busch Campus 610 Taylor Road Piscataway, NJ

Cost: Free

Free Admission. Parking on campus lots is free on Rutgers Day. Rain or Shine.

For information about other Rutgers Day events go to:

#### http://rutgersday.rutgers.edu/index.php

Becoming a NJACS YCC member is easy. Just visit and sign up to join our google group: http://groups.google.com/ group/ycc\_njacs



### LABORTORY ROBOTICS INTEREST GROUP

#### Mid-Atlantic Chapter - Annual Technology Exposition and Vendor Show

This meeting features 90 automation and technology vendors, short courses and workshops, posters, and food. Admission is free but advance registration is required. Registration details, menus, and schedules will be posted on the chapter web site as they become available.

The URL for the Chapter Website is: http://www.lab-robotics.org/Mid\_Atlantic

**Date:** Tuesday, May 17, 2011 Time: Exhibit Room 4:00 PM

Place: Hyatt Regency New Brunswick, NJ

Cost: Free



#### NEW TOPICAL GROUP — FORMULATION SCIENCE

The ACS North Jersey Section is forming a Formulation Science Topical Group which will be dedicated to fostering a continued dialogue on issues related to formulation chemistry and formulation manufacture/scale-up. The Formulation Science Topical Group welcomes discussion on issues from a variety of different types of formulations and will cover topics such as: pre-formulation, preservation, stability, excipient functionality, factors influencing formula performance, manufacturing and scale-up effects and, theoretical aspects of formulation development.

If you would like to be notified of our upcoming events or to get involved, please contact Phil Oths via e-mail at oths14@msn.com. In addition, please be sure to check www.njacs.org for the latest news and happenings for the Formulation Science Topical Group.

# 42<sup>nd</sup> National Organic Chemistry Symposium Princeton University, June 5-9, 2011

Joseph Armstrong Merck Process Chemistry

Carolyn Bertozzi University of California, Berkeley

Benjamin Cravatt Scripps Research Institute

Vy Dong University of Toronto

Dennis Dougherty California Institute of Technology

Dieter Enders Rheinisch-Westfälische Technische Hochschule

Jean Frechet University of California, Berkeley

Amir Hoveyda Boston College

Michael Krische University of Texas at Austin

Colin Nuckolls Columbia University
M. Christina White University of Illinois

Anthony Wood Pfizer Medicinal Chemistry

Hisashi Yamamoto University of Chicago

Robert Grubbs\* California Institute of Technology

\*(2011 Roger Adams Awardee)

Poster sessions and social events round out the schedule Recreational activities abound in scenic Princeton, nearby in Philadelphia, New York City and at the Jersey Shore

Don't miss this premier event sponsored by the ACS Division of Organic Chemistry!

For more information, and to register please visit www.nationalorganicsymposium.org

> Poster submission deadline: May 1, 2011 Early registration pricing ends May 13, 2011

> > Division Organizers:

William Greenlee (Merck), Duane Burnett (Merck) and Scott Sieburth (Temple\_University)

Local Co-Chairs (Princeton University):

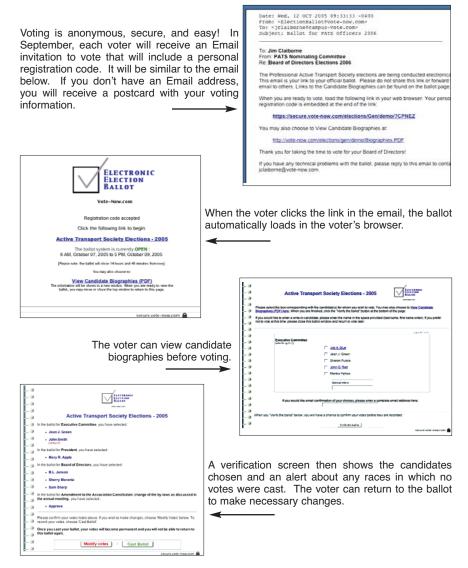
Paul Reider, Abigail Doyle and Dorothea Fiedler

American Chemical Society



# Learn more about the American Chemical Society at WWW.acs.org

#### NORTH JERSEY SECTION IS GOING TO WEB-BASED VOTING



Upon submission, the voter can send comments about the election.

To guarantee a smooth election, please make sure that the ACS office has your correct Email address. You can update your membership information by logging in at <a href="http://www.acs.org">http://www.acs.org</a>. (If you don't have an ACS ID click on the "Registering is easy" button and fill in the requested information.) After logging in, click "Show Account Details," then "Edit My Profile." Then scroll the page to verify or edit your Email address. Save your changes.

If you have any questions about the online voting process, contact Diane Krone at kroned@verizon.net.

## **Call for Nominations**

#### EDWARD J. MERRILL AWARD FOR OUTSTANDING HIGH SCHOOL CHEMISTRY TEACHER FOR 2011

Now is the time to begin thinking about nominations for the Edward J. Merrill Award, North Jersey Section, for Outstanding High School Chemistry Teacher for the year 2011.

Go to the web site, **njacs.org** under education and obtain your preliminary nomination form and guidelines. The full packet takes time to do a good job!

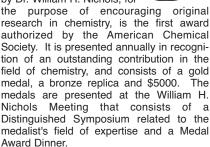
We all know an outstanding high school chemistry teacher. Perhaps one from your town, your son's or daughter's teacher or just one that you have heard about or worked with at some point. The award carries \$500 for the teacher, \$500 in supplies for the teacher's classroom and a plaque to display at home or in the classroom.

Any questions or help needed contact George Gross, nimoxie1@verizon.net.



# THE WILLIAM H. NICHOLS MEDAL AWARD FOR 2012

The New York Section is accepting nominations for the William H. Nichols Medal Award for the year 2012. This distinguished award, established in 1902 by Dr. William H. Nichols, for



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. The New York Section encourages nominations from academia, government and industry.

Each nomination requires a completed Nomination Form, biographical and professional data, and seconding letters. Since the nomination process utilizes the New York Section website, please access the forms and instructions at http://www.NewYorkACS.org.

Nominations must be received by **May 31**, **2011**. The Nichols Medal Award Jury will meet in June 2011 to select the Nichols Medalist for 2012.

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

# **Call for Posters**

#### HUDSON-BERGEN CHEMICAL SYMPOSIUM

13th Annual Undergraduate Research Symposium on April 29, 2011

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). All the presenters will receive certificates and a book, courtesy of Bedford-Freeman-Worth Publishers.

Students who wish to present posters must send an abstract via e-mail to mleonida@fdu.edu by April 10, 2011. 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.

## In the News

#### SUNY PURCHASE PROF. SKRIVANEK GOES TO D.C. FOR PRESIDENTIAL HONOR

By Andrew Klappholz

AKLAPPHOLZ@LOHUD.COM

HARRISON — Before the recent Tuesday night's State of the Union address, Purchase College professor Joseph Skrivanek took part in a VIP tour of the White House — just one part of a week full of honors he received in Washington, D.C.

Skrivanek founded one of the four programs to receive this year's Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring.

His initiative, the Baccalaureate and Beyond Community College Mentoring Program, helps community college students from underrepresented minority groups transfer to four-year colleges and complete their bachelor's degrees in the sciences.

"I'm very pleased that they've recognized this program that I've been working on for 11 years," Skrivanek said before boarding a plane for Washington at Westchester County Airport.

The professor of chemistry's program has grown from six community college students in the first class to 48 this year — including 10 from Westchester Community College and five from Rockland Community College.

The program provides peer mentoring, academic advising, tutoring, employment, internships, cultural and leadership development activities, career planning, and assistance with graduate school admissions.

There's also a five-week, paid, advanced research program during the summer. Skrivanek says that kind of hands-on laboratory work gives students a huge leg up in preparation for higher levels of education.

"The opportunity to work in a lab typically only happens when they get to graduate school," said Lisbeth Wesley-Furke, assistant vice president for external affairs and sponsored research at Purchase. "It's what doing science is about — rather than studying it in the classroom, which is a completely different thing."

Skrivanek accepted the award on behalf of Purchase College at a White House ceremony. It was presented by the president's chief science adviser, John Holdren, although Skrivanek said he hoped Obama himself would make an appearance.

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## **Others**

#### THE 2011 MIDDLE ATLANTIC REGIONAL MEETING



The 2011 Middle Atlantic Regional Meeting (MARM) of the American Chemical Society will be held May 21-24, 2011 on the campus of the University of Maryland, College Park, hosted by the Chemical Society of Washington. This meeting will feature national and international leaders in the chemical sciences and will include a broad selection of symposia in BIOCHEMISTRY. ORGANIC CHEMISTRY, INORGANIC / MATERIALS CHEMISTRY, ANALYTICAL / PHYSICAL / THEORETICAL CHEMISTRY. and CAREER. EDUCATION and PROFES-SIONAL areas. Several Workshops are planned, and there will be events that feature career development, funding opportunities, and education.

Research presentations are open to all, and symposia will include contributed papers selected from those submitted that best represent the symposium topic. Invited speakers for each symposium will include national and international leaders. Graduate students, postdoctoral associates, and young professionals are encouraged to come to increase their visibility, and undergraduate students will find ample opportunity to learn about employment and graduate school opportunities. There will be activities for senior chemists, who will also be available to advise and inform younger chemists.



#### ADELPHI UNIVERSITY

2011 Henry Drysdale Dakin Memorial Lecture

"Transport of Potassium and Chloride across Biological Membranes"

Speaker: Professor Roderick MacKinnon Rockefeller University, HHMI

2003 Nobel Laureate in

Chemistry

lon channels are responsible for generating electrical impulses and mediating numerous cellular processes. To accomplish their tasks

in biology, ion channels must exhibit two basic properties, selectivity and gating. Selectivity refers to the property of high fidelity discrimination among similar ions, while gating refers to protein conformational changes that open a channel in response to specific stimuli such as ligand binding or membrane voltage. Recent developments on the molecular principles of selectivity and gating in potassium channels will be presented as well as a new mechanism for the counter transport of chloride ions and protons.

Date: Monday, April 4, 2011

Time: 7:00 PM

Place: University Center Ballroom Cost: Free and open to the public

Travel Directions:

http://www.adelphi.edu/visitors/directions.php

Additional Information: Contact Professor Stephen Z. Goldberg, (516) 877-4147 or goldberg@adelphi.edu



#### SCIENCE CAFÉ

Sponsored by Iona College, The New Rochelle Public Library, and the New Rochelle BID

(Reservations suggested but not required: <a href="mailto:jrmlevkov@gmail.com">jrmlevkov@gmail.com</a>)

#### "Ocean Depths - Changing Tides"

Speaker: Dr. Carl Safina
Blue Ocean Institute

Dr. Carl Safina will share his explorations of how the ocean is changing, and what those changes mean for wildlife and for people. Looking at the scientific dimensions as well as moral and social implications of our relationship with nature, he will describe his campaigns to ban high-seas driftnets, rewrite U. S. federal fisheries law, work toward international conservation of tunas, sharks, and other fishes, and achieve passage of a United Nations global fisheries treaty.

Participants will also learn about the Blue Ocean Institute, which uniquely works through science, art, and literature to inspire solutions and a deeper connection with nature. The Institute shares reliable information that enlightens personal choices instills hope, and helps restore living abundance in the ocean.

To learn more about Dr. Carl Safina, click here: http://carlsafina.org/about-carl/ biography/ and the Blue Ocean Institute, click here: http://www.blueocean.org/home

Date: Tuesday, April 14, 2011

Time: 7:00 PM

Place: Linda Kelly Theater

New Rochelle High School

## **Grants Available**

#### IYC GRANTS FOR STUDENT CHAPTERS



Grants up to \$750 are available to active undergraduate

ACS student chapters for projects and activities that celebrate at least one of the four quarter themes — environment, energy, materials and health. The deadline to apply is **April 8, 2011**.

Check: 365 Chemistry for Life - ACS celebrates IYC 2011. ChemunityNews-education@acs.org

If you are participating in any IYC activities, please forward the information to Joan Laredo-Liddell at JLaredoLiddell@aol.com.

# Job Openings

# CINPHARM IN DOUALA, CAMEROON

# Chemists needed for Cameroon's first drug manufacturing company

Currently 300 people are employed; need close to one hundred more. The company has five drugs on the market, with 15 more in the pipeline and a final goal of 60. Drugs are generics and IV fluids. Salary is negotiable. It will pay cost of living in Cameroon, thus we like to call it a "volunteer job".

If you are from the continent and trained in pharmaceutical production, please consider moving back for good. We need production, formulation, QC/QA, and analytical people. We are a non-profit called AIDSfreeAFRICA, see www.AIDSfreeAFRICA.org for info. Cinpharm is Cameroonian owned and operated. Since 2005 we are supporting the country's attempts for pharmaceutical production and are delighted that this milestone has finally been realized. The company is backed up by Indian generic giant Cipla and the German Development Bank. Please e-mail me at RRHodel@aol.com



## **Press Releases**

## Avro Energy

#### **Brings Wells Back Into Production**

Avro Energy, Inc. is pleased to announce that three of the Company oil wells are currently being reworked to increase production. Work crews are to begin work this week on the Caddo Levee Board No. 8, 9, and 10 Wells. Included in this program is the recompletion of the Muslow No. 6 Well in North Louisiana.

The Company has been following the recent rise in oil prices quite closely, and to that end plans to speed up its program to acquire more wells in the area. The Company expects to have a formal agreement for the purchase of three new wells in South Arkansas as soon as proper legal and title work is complete. The Company will keep its shareholders updated on an ongoing basis.

More information about the Company is avavailable at its corporate website at <a href="http://www.avroenergy.com">http://www.avroenergy.com</a>.

(continued on page 26)

#### PRESS RELEASES

(continued from page 25)

### China Chemical Receives High-Tech Enterprise Certification

# Certification Qualifies China Chemical for Reduced Income Tax Rate

ZIBO CITY, China, Jan. 31, 2011 (GLOBE NEWSWIRE) — China Chemical Corp. (OTCBB:CHCC) ("China Chemical" or the "Company"), a manufacturer of organic chemicals for broad consumer goods applications, today announced that it has received High-Tech Enterprise certification from the government of the People's Republic of China ("PRC").

High-Tech Enterprise status is issued to companies that meet the requirements of Chapter IV, Article 28 of the Enterprise Income Tax Law of the PRC. Among the requirements, companies must generate at least 60% of their annual revenue from products or services that support a list of key national high-tech fields. China Chemical will recognize the benefits of the certification through fiscal 2013.

For more information about China Chemical Corp., please visit the Company's website at <a href="http://www.chinachemicalcorp.com">http://www.chinachemicalcorp.com</a>.



### GGA Software Services and Royal Society of Chemistry's ChemSpider ...

...announce a strategic technology partnership that will provide significant benefits to users of the ChemSpider chemical database.

The agreement makes available GGA,s open source Bingo chemistry search engine for use on the ChemSpider website, enhancing the ability of users of the ChemSpider service to efficiently conduct searches of the nearly 25 million chemical structures within the ChemSpider chemical database.

Bingo is a RDBMS data cartridge that provides the next-generation, fast, scalable, and efficient storage and searching solution for chemical information. Bingo sets the industry standard in structure and reaction registration and retrieval, implementing state-of-the-art indexing algorithms within

an underlying database server and making chemical searching fast and reliable. Its extensible indexing enables scientists to store, index, and search chemical moieties alongside numbers and text within one underlying relational database server.

For more information, please visit our website at www.ggasoftware.com. Also see www.rsc.org and www.chemspider.com

# InnoCentive Introduces Novel Molecule Challenge

New Offering Provides a Simple and Secure Method of Connecting Compound Library Owners to Corporate R&D Labs

WALTHAM, MA — January 25, 2011 — InnoCentive, the global leader in Challenge Driven Innovation, today announced the launch of a new Challenge offering, the Novel Molecule Challenge (NMC). Housed in InnoCentive's new Novel Molecule Pavilion, this groundbreaking offering brings open innovation to owners of molecule compound libraries — including academic institutions and custom molecule synthesis labs—by providing an easy and secure way for them to interact with corporations seeking new molecules for product research and development.

The Novel Molecule Challenge is a natural evolution of previous Challenges posted on InnoCentive's web site by Seeker organizations looking for novel compounds. In the past, Solvers viewed one molecular Challenge at a time, checked the request against their compound collection, and if a match was found, submitted their compound as a solution to the Challenge. Winning Solvers received a nominal payment, and Seekers received one new compound to add to their collection.

For more information, visit www.innocentive.com



### Intelligrated to Feature IntelliSort Tilt-Tray and Cross-Belt Sorters at ProMat 2011

IntelliSort TT, DT and CB sorters are now a part of the North Americanmanufactured IntelliSort family (Cincinnati, OH) January 24, 2011: Intelligrated® (www.intelligrated.com), a leading North American-owned automated material handling solutions provider, announces that it will feature its tilt-tray and cross-belt sorter offerings at ProMat 2011 (booth #2903). Now part of the company's IntelliSort® sortation product family, the tilt-tray (IntelliSort TT), double-tray (IntelliSort TT) and cross-belt (IntelliSort CB) sorters are engineered, assembled, controlled, installed and supported in North America by Intelligrated.

For sales and marketing information, please contact Emily Smith, senior marketing coordinator, Intelligrated, by phone at (513) 881-5239 or by e-mail at emily.smith@intelligrated.com.



#### **FINFACTS**

The third global event in its series, the Helsinki Chemicals Forum will take place on 19–20 May 2011 at the Helsinki Exhibition and Convention Centre. The event will focus on four contemporary themes:

#### **REACH Review - Make it Work Better**

HCF 2011 is unique in that it will be the first occasion that initial experiences of the REACH implementation will be presented and discussed widely by stakeholders from across the world. The European Chemicals Agency (ECHA) is an official partner in HCF 2011 and it will present the first results of its own REACH Review.

#### Regulatory Reform - Global Use

Like many other bits of chemical legislation around the world, REACH has brought, and will continue to bring, vast quantities of information about chemicals and their properties to the reach of officials from different areas. Better use should be made of this information in order to improve chemical safety and to reduce the pressure in various parts of the world to create new rules.

#### Sustainable Chemistry - Challenge for Industry and Society

Chemistry has the answers to several of the problems facing the world today. Sustainable chemistry, and the promotion of it, represents a major challenge not just for the industry, but also for society as an enabler and creator of a conducive environment.

# Bioeconomy - An Opportunity Globally and Locally

The bioeconomy is an answer to the future global energy and raw materials crises. It aims to replace dwindling resources with renewable, bio-based raw materials and fuels. The bioeconomy represents a major opportunity, especially for the pioneers in the field. But it also requires fresh economic thinking.

For further information and to register, visit: www.helsinkicf.eu



# The B'laster Corporation Introduces 2 New Products:

# Food Grade Silicone & Graphite Dry Lube

Valley View, OH (February 22, 2011) – The B'laster Corporation announces two new products being introduced to the extensive lineup of popular B'laster products: Food Grade Silicone and Graphite Dry Lube spray.

Food Grade Silicone provides an effective method of lubricating and protecting bottling, dairy and food processing machinery. A multi-purpose silicone lubricant, Food Grade Silicone prevents wear and corrosion on a variety of surfaces. It acts fast in handling a wide variety of maintenance jobs and it dries tack free. Ideal for use on slides, O rings, rubber seals and general lubrication. Food Grade Silicone contains 10% industrial strength silicone, does not contain fluorocarbons, and is economical to use.

Graphite Dry Lube spray forms a quick-drying film that provides long-wearing lubrication and protection from extreme pressures and temperatures (-100° F to 850° F). The high performance formula bonds to rubber, metal, wood and plastic. It lubricates and protects surfaces from extreme pressures and friction, and it reduces metal wear to extend equipment life.

For more information on the company, call (800) 858-6605 or visit www.BlasterCorp.com

You can also follow B'laster: www.Facebook.com/Blastercorp and at www.twitter.co

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#### BROOKLYN SUBSECTION — JOINT MEETING WITH THE POLYTECHNIC INSTITUTE OF NEW YORK

The Brooklyn Frontiers in Science Public Lecture: "Personalized Energy (for 1 x 6 Billion)"

Speaker: Professor Daniel G. Nocera Massachusetts Institute of

Technology Cambridge, MA

The capture and storage of solar energy at the individual level - personalized solar energy - drives inextricably towards the heart of this energy challenge by addressing the triumvirate of secure, carbon neutral and plentiful energy. The doubling of global energy need by mid-century and tripling by 2100 is driven by 3 billion low-energy users in the non-legacy world and by 3 billion people yet to inhabit the planet over the next half century. The possibility of generating terawatts of carbon-free energy, and thus providing society with its most direct path to realizing a low GHG future, may be realized by making solar PE available to the 6 billion new energy users by high throughput manufacturing. This talk will present the creation of new catalysts that capture many of the functional elements of photosynthesis; these catalysts are then integrated to make the first artificial leaf. The discovery sets a new paradiam for the direct production of solar fuels. In doing so, we provide a highly manufacturable and inexpensive method to effect a carbon-neutral and sustainable method for solar storage - solar fuels from water-splitting. By developing an inexpensive 24/7 solar energy system for the individual, a carbon-neutral energy supply for 1 x 6 billion becomes available.

Date: Thursday, April 14, 2011 Time: Reception – 5:30 PM

Lecture – 6:00 PM

Place: Pfizer Auditorium
Polytechnic Institute of NYU

5 Metrotech Center

Brooklyn, NY

Cost: Free and open to the public.

Please register at http://www.newyorkacs. org/sub\_brooklyn.php