

THE Indicator

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Prof. Jill K. Rehmann **NY Outstanding Service Awardee**



See article on page 5.

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THIS MONTH IN CHEMICAL HISTORY

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

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

In my last column I gave a short biographical sketch of the life and career of Fredrick Accum, a nineteenth century chemist whose most famous book, published first in 1820 was "A Treatise on Adulterations of Food" to give its shortened title. In this column I will examine the scope and intent of this work. Let me quote from the Preface: "Every person is aware that bread, beer, wine, and other substances employed in domestic economy are frequently met with in adulterated state.....To such perfection of ingenuity has the system of counterfeiting and adulterating various commodities arrived in this country, that spurious articles are everywhere to be found in the marketBut of all possible nefarious traffic and deception, practiced by mercenary dealers, that of adulterating the articles intended for human food with ingredients deleterious to health, is the most criminal, and, in the mind of every honest man, must excite feelings of regret and disgust."

After an introduction Accum devotes several sections to an examination of water from different sources, and describes the harmful effects of keeping water in lead tanks. Adulteration of wine occupies 23 pages; of bread 15, and of beer no less than 49 pages. We tend to forget, unless we are familiar with domestic practices in the early nineteenth century, or have read a lot of fiction from that period, that beer played much the same part in the everyday diet then that water does in our times. Reliable supplies of drinking water were not available everywhere in England and milk was not at all a popular beverage. Small beer, also called table beer, of low alcoholic content was a safe drink that was to be found on many tables at all meals, including breakfast. Of course stronger beers were also popular.

There were laws governing the ingredients to be used in making beer, which included only malt, hops, and water, but those laws were often violated. Accum shows that the bitter and intoxicating herb *cocculus indicus*, which contains poisonous picrotoxin, was often used in place of part of the expensive ingredient hops. A certain Mr. Jackson, during the recent wars with Napoleonic France, "fell upon the idea of brewing beer from various drugs without any malt or hops." Mr. Jackson earned his money not by brewing beer himself, but by teaching his recipes to brewers for a substantial fee and supplying them with the necessary materials. Accum's book is noteworthy for giving chapter and verse for such offenses. His "List of Druggists and Grocers, prosecuted and convicted from 1812 to 1819, for supplying illegal Ingredients to Brewers for adulterating Beer" includes 28 names, and indicates penalties of fines ranging from 20 pounds (for selling liquorice to a brewer for darkening beer) up to 500 pounds for selling unspecified adulterating ingredients. Accum makes some interesting observations on the alcohol content of beers. Samples of brown stout obtained directly from reputable brewers (Barclay, Perkins; Truman, Hanbury; Meux – some of those breweries are still in the business) averaged 7.25% of alcohol. Porter, from the same brewers averaged 5.25%. When beers of the same name, allegedly from the same brewers, were obtained from retailers in public houses the brown stout averaged 6.50% alcohol and the porter 4.50%. Accum concludes that the publicans were illegally mixing the cheaper table beer with their stronger brews to increase their profits.

Apart from *cocculus indicus* the list of substances used to adulterate beer makes troubling reading. It includes quassia wood shavings, another bitter substitute for hops; iron sulphate plus molasses to improve the beer's head; peppers; wormwood; and many other spices and coloring matters. Accum lists the simple tests which can detect the presence of many of these deleterious substances in beer.

Tea was already an important beverage in Accum's time. His chapter on "Counterfeit Tea-Leaves" also makes troubling reading. A number of cases came to trial in early 1818. Edmund Rhodes was convicted of counterfeiting tea with a mixture of sloe leaves, ash leaves, elder leaves, and the leaves of other trees. He was fined 500 pounds. Mr. Palmer's falsification was more dastardly. This grocer concocted black tea by using logwood extracts to dye privet leaves; but his green tea made from sloe and thorn leaves was colored by the action of verdigris, a green copper pigment and noticeably toxic. He was fined 840 pounds.

Accum was a pioneer in the detection of adulteration in foods and drugs. Thanks to efforts by him and his fellow chemists, legislation to help prosecute those involved in such adulteration became part of our legal codes in the second half of the nineteenth century.

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| March | January 20, 2016 |
| April | February 20 |

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

April Calendar

NEW YORK SECTION

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Long Island Subsection
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Thursday, April 2, 2015

MetroWomen Chemists Committee
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Tuesday, April 7, 2015

NY Nanoscience Discussion Group
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Wednesday, April 8, 2015

Adelphi University - Dakin Lecture
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Friday, April 17, 2015

William H. Nichols Symposium
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Friday, April 17, 2015

High School Teachers Topical Group
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Friday, April 24, 2015

New York Section Board Meeting
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Friday, April 24, 2015

Long Island Subsection
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Saturday, April 25, 2015

Earth Day Celebration
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Monday, April 27, 2015

Biochemical Topical Group
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Thursday, April 30, 2015

Westchester Chemical Society
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also

Friday, May 1, 2015

Hudson-Bergen Chemical Society
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Saturday, May 9, 2015

63rd Annual URS
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Long Island Subsection
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Early October, Early November and Early December 2015

Westchester Chemical Society
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NORTH JERSEY SECTION

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Careers in Transition
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Monday, April 20, 2015

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Friday, April 24, 2015

67th Annual Undergraduate Research Conference
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NJACS Celebrates Earth Day
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Monday, April 27, 2015

Drug Metabolism Discussion Group
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also

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Detecting & Combating HIV In 3 - Video Challenge
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Sunday-Friday, June 7-12, 2015

Drew University Res-Med Seminar
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The Indicator is posted to the web on the 15th of the previous month at www.TheIndicator.org

Deadline for items to be included in the May 2015 issue of *The Indicator* is **March 20, 2015**

JILL REHMANN IS RECIPIENT OF THE NEW YORK SECTION'S 2014 OUTSTANDING SERVICE AWARD

Professor Jill K. Rehmman of St. Joseph's College received the ACS New York Section's 2014 Outstanding Service Award on January 17, 2015 at the Section's annual section-wide conference. This award, created in 1976 and presented annually, recognizes members for their generous and outstanding service to the New York Section, involving inspiration, time and hard work. Jill has been a dedicated volunteer for the New York Section since 1995 and the Section is proud to have honored her with this award.

Jill has been very active in section governance, the Brooklyn Subsection, the Chemical Education Committee, and the Student Affiliate Committee. She has coordinated the "High School Poster Session" for 20 years and has held major offices both at the New York Section level and within the Brooklyn Subsection.

Jill led the New York Section to a very successful year in 2006, serving as its chairperson and head of its Finance Committee. The Section's many excellent activities were recognized with the "Outstanding Performance by a Local Section Award" in the Very Large Size category for 2006. This award was presented at the Chemluminary Award Ceremony at the National ACS meeting in 2007. Jill, then, for five years, was a member of the Nichols Medal Jury that named outstanding chemists as recipients of the William H. Nichols Medal Award.

Jill served on the New York Section's Chemical Education Committee from 2004-2010 and chaired the committee in 2009 and 2010, during which time she assumed the job of umbrella chair for all of the New York Section's committees listed under Educational Affairs. At the New York Section Board Meetings, she continually and conscientiously reported on the activities of all of these committees. One of the outstanding Educational Activities Committees is the Student Affiliate Committee that hosts the annual Undergraduate Research Symposium (URS). Jill chaired the committee for five years and co-chaired the URS during that time, 2001-2005. This is a very time intensive project. The symposia were highly successful, with many colleges participating and numerous chemical companies offering support. In 2003, she received the ACS Salute to Excellence Award for her outstanding work with the URS.

Jill is dedicated to her subsection as well. She chaired the Brooklyn Subsection in 2004, and then 2008 to 2010, and has been its Treasurer since 2007. The Brooklyn Subsection has many excellent programs, and there is one event that she has coordinated for 20 years – the Annual High School Research Poster Session that is held at St. Joseph's College in Brooklyn. The Poster session has grown to 112 presentations and 125 participants in 2014, making it the most attended of all sessions. She assures that all students receive certificates of participation along with extras prizes for top posters.

Last, but not least, Jill has been the Student Member Advisor at St. Joseph's College for many years, and is always faithfully seen at the Section's National Chemistry Week Event at the Hall of Science manning a table with her student scientists performing chemistry demonstrations and hand-on activities for the families attending.

Jill has contributed a great deal of time and effort to numerous activities of the New York Section, the Brooklyn Subsection and the Chemical Education Committees. Her service to the Section is truly outstanding and we thank her again for all of her years of dedication and for the pleasure of working with her. Congratulations Jill!



**2015 WILLIAM H. NICHOLS MEDAL DISTINGUISHED
SYMPOSIUM AND AWARD DINNER**



**Symposium: MOLECULAR SURFACE SCIENCE AND ITS APPLICATIONS. NANOMATERIALS,
THE SURFACE CHEMICAL BOND, BIOINTERFACES, AND CATALYSIS**

Award Recipient: **PROFESSOR GABOR A. SOMORJAI**
University of California - Berkeley

Date: Friday, April 17, 2015

Time: 1:00 PM Registration 1:30 PM – 5:30 PM Symposium
5:45 PM Reception 6:45 PM Award Dinner

Place: Crowne Plaza Hotel, White Plains, NY

PROGRAM

1:30 PM Welcome Professor Paris Svoronos
2015 Chair, ACS, New York Section
CUNY - Queensborough Community College

1:35 PM Opening of the Distinguished Symposium Professor Alison G. Hyslop
2015 Chair-elect, ACS, New York Section
St. John's University

1:45 PM Metal-organic Frameworks Professor Omar M. Yaghi
University of California-Berkeley

Metal-organic frameworks (MOFs) represent an extensive class of porous crystals in which organic 'struts' are linked by metal oxide units to make open networks. The flexibility with which their building units can be varied and their ultra-high porosity (up to 10,000 m²/g) have led to many applications in gas storage and separations for clean energy. This presentation will focus on (1) how one can design porosity within MOFs to affect highly selective separations (carbon dioxide), storage (hydrogen and methane) and catalysis, and (2) a new concept involving the design of heterogeneity within crystalline MOFs to yield sequences that code for specific separations and chemical transformations.

2:30 PM Exploring the Interactions of Ions, Peptides, and Proteins with Lipid Membranes Professor Paul Cremer
Pennsylvania State University

Biological membranes often contain negatively charged lipids such as phosphatidylserine, phosphatidylglycerol, phosphatidic acid, and gangliosides. The groups of these lipids can strongly interact with positively charged aminoacids from peptides and (i.e. Arg and Lys residues), metal cation from the extracellular solution as well as positively charged drug molecules. These negatively charged lipids are highly regulated within cells and are highly abundant in certain organelles while almost completely absent in others. Moreover, their concentration within a particular leaflet of a given membrane is often tightly regulated. Despite the high degree of control of lipid composition within cells, little is often known about the reason for it or even the specific nature of ligand-receptor binding interaction with such moieties. To remedy this, we have employed a combination of spectroscopic techniques, microfluidic platforms, monolayer and planar supported bilayer architectures to explore the specific biophysical chemistries of these interactions. This includes the development of a novel analytical tool that employs a pH sensitive fluorophore to probe subtle changes in the surface potential of lipid bilayers upon ligand or ion binding. Both thermodynamic and molecular level details of these systems have been obtained. The results reveal that binding can be highly dependent on the concentration of specific lipids within the membrane. Moreover, the presence or absence of various uncharged lipids can also greatly influence the binding properties. Interestingly, specific interactions involving hydrogen bonding, charge transfer, and hydrophobic interactions often dominate over simple electrostatic effects.

3:15 PM Coffee Break

3:45 PM The Surface Chemical Bond: Explorations of Structure and Dynamics Professor Steven L. Bernasek
Princeton University

The tools of molecular surface science developed over the past fifty years have enabled the examination of the nature of the surface chemical bond and its dynamic behavior in unprecedented molecular detail. In my lecture I will discuss two examples of this sort of work. I will comment on the insights that have been gained in the basic understanding of surface chemical processes using this approach, which has been pioneered by this year's recipient of the Nichols Award. This understanding provides important foundations for the range of applications described in this symposium.

The first example focuses on the process of molecular self-assembly at characterized surfaces. The use of molecular beam scattering as well as scanning probe microscopy, coupled with electron spectroscopic and microscopic methods, provides information about the formation and energetics of chiral and achiral organic monolayers and designed nanostructured surfaces. Implications for the understanding of homochirality in biological systems, and applications in organic electronic device design will be mentioned.

The second example uses the tools of surface science, coupled with optical pulse shaping methods, to address the quantum control of surface chemical dynamics. Carefully designed self-assembled monolayer samples along with surface sum frequency generation as a feedback signal, have been used to optimize selective bond manipulation at the surface. Possible applications to heterogeneous catalysis and electronic device preparation will be presented.

4:30 PM The Genesis and Integration of Heterogeneous, Homogeneous, and Enzyme Catalysis on the Nanoscale Professor Gabor A. Somorjai
NICHOLS MEDALIST

The synthesis of metal and bimetallic nanoparticles in the 1-10 nm range, and mesoporous high surface area oxides, were utilized as heterogeneous catalysts. The rates and chemical selectivity of multi-path reactions were dependent on the nanoparticle size and the oxide-metal nanoparticle interface composition. Instruments including laser spectroscopy (sum frequency generation vibrational spectroscopy) and synchrotron based x-ray spectroscopies and scanning tunneling microscopy reveal the mobility and dynamic restructuring of adsorbed and reacting molecules and catalyst surfaces under reaction conditions. The formation of covalent bonds between the adsorbed molecules and the diverse structures of the catalyst surfaces are one important ingredient of catalytic selectivity. The charge transfer of oxide-metal interfaces to the reacting molecules (acid-base catalysis) is the other important property of catalytic reactivity. Metal nanoparticles at 1 nm size (40 atoms) and below behave as single metal-ion transition metal homogeneous catalysts. Studies of adsorbing enzyme catalysts on oxide surfaces explore how their rates and chemical selectivities are altered in progress.

5:45 PM Social Hour

6:45 PM William H. Nichols Medal Award Dinner Professor Kenneth B. Eisenthal (Columbia University) will introduce the Medalist

More information on the William H. Nichols Medal Events is available on the New York Section's website at <http://www.NewYorkACS.org>.

Tickets may be reserved using the following form, or preferably through the New York Section website that accepts credit cards or Paypal. <http://www.NewYorkACS.org>.

***** RESERVATION FORM *****
2015 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & MEDAL AWARD BANQUET in honor of Gabor A. Somorjai

Return to: ACS, New York Section, c/o Dr. Neil D. Jespersen, Department of Chemistry, St. John's University, 8000 Utopia Parkway, Queens, NY 11439 (516) 883-7510

- Please reserve _____ places for the symposium & banquet at \$120/person, ACS member
- _____ places for the symposium only at \$40/person, ACS member
- _____ places for the banquet only at \$110/person, ACS member
- _____ places for the symposium & banquet at \$150/person, Non-member
- _____ places for the symposium only at \$60/person, Non-member
- _____ places for the banquet only at \$120/person, Non-member
- _____ places for the symposium only at \$25/person, Students, Unemployed
- _____ places for the symposium only complimentary for 50 year + ACS members

(For table reservations of 8 or more, use the ACS member \$120/person rate for combination tickets)

Reserve a table in the name of: _____

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| Indicate numbers in your group who choose: | Mail Tickets to: |
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| Prime Rib _____ | Address: _____ |
| Salmon _____ | _____ |
| Vegetarian _____ | _____ |

BANQUET RESERVATION DEADLINE: APRIL 7, 2015

Please make checks payable to: ACS, NEW YORK SECTION Check for \$_____ enclosed

New York Meetings

www.newyorkacs.org

NEW YORK SECTION BOARD MEETING DATES FOR 2015

The dates for the Board Meetings of the ACS New York Section for 2015 have been selected and approved. The meetings are open to all – everybody is welcome. All non-board members who would like to attend any (or all) meetings ought to inform the New York Section office by emailing Mrs. Marilyn Jespersen at njesper1@optonline.net or by calling the Section office at (516) 883-7510.

All 2015 Board Meetings will be held on the following dates at St. John's University, 8000 Utopia Parkway, Jamaica, NY. Dr. Paris Svoronos will chair all meetings. Refreshments will be available starting at 6:00 PM while the actual meeting will start at exactly 6:30 PM. Please check Marilyn Jespersen for the exact building and room number. You may also be added in the mailing list if you so desire.

Friday, April 24, 2015

Friday, June 5, 2015

Friday September 18, 2015

Friday November 20, 2015

In addition please mark your calendar with the dates of the following major events:

Friday, April 17, 2015, William H. Nichols Medal Award Symposium and Dinner, Crowne Plaza Hotel, White Plains, NY

More information will be posted in future monthly issues of *The Indicator* and on the New York website at

<http://www.NewYorkACS.org>.

LONG ISLAND SUBSECTION

Electrophilic Cyclizations of Alkynes—Facile Approaches to Heterocyclic and Carbocyclic Molecules

Speaker: Yu Chen, PhD

Department of Chemistry

Queens College

Palladium and gold-catalyzed as well as iodine monochloride-induced intramolecular electrophilic cyclizations of functionally substituted alkynes will be discussed. These regioselective annulations represent new and efficient synthetic approaches to carbocyclic and heterocyclic molecules, including isoxazoles, isoquinolines, indenones, and dibenzoannulene-5-ones. These approaches utilize palladium or gold catalyzed reactions as the key steps towards the production of the final target molecules or intermediate compounds. The new methods start from readily available starting materials and only consist of facile and user-friendly synthetic conditions, while they will serve as valuable tools for the preparation of compounds covering a broad spectrum of fields including synthetic and medicinal chemistry, and the material sciences.

Date: Thursday, April 2, 2015

Times: Social – 5:30 PM

Seminar – 6:00 PM

Place: CUNY Queensborough

Community College

Science Building, S-112

Directions: <http://www.qcc.cuny.edu/about/driving.html>



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METRO WOMEN CHEMISTS

Drug of Abuse Bioanalysis During Pregnancy: Recent Advances and Novel Sampling Strategies

Speaker: Dr. Marta Concheiro
Assistant Professor of
Forensic Toxicology
John Jay College of
Criminal Justice
City University of New York

Abstract:

Consumption of drugs of abuse, tobacco and alcohol throughout pregnancy is a serious public health problem and results in an important economic cost to the health system. Drug and/or metabolites determination in biological matrices from mother and newborn is an objective measure of in utero drug exposure. Biological samples from the mother (urine, hair), from the newborn (urine, hair, meconium), and those collected at delivery (placenta, umbilical cord) are studied, showing their main advantages and disadvantages (window of detection, amount of sample normally available, collection procedure). Accurate bioanalytical procedures are essential to obtain high quality data to perform interventions and to establish correlations between analytical measures and clinical outcomes. We include a brief overview of clinical implications of in utero drug exposure to better understand the importance of this serious health issue.

About the Speaker:

Dr. Marta Concheiro is Assistant Professor of Forensic Toxicology at John Jay College of Criminal Justices, City University of New York. She received her Ph.D. in Toxicology in 2006 from the University of Santiago de Compostela, Spain. During her Ph.D., she trained at the Institute de Médecine Légale et de Médecine Social in Strasbourg (France) and the Instituto Nacional de Medicina Legal in Lisbon (Portugal). From 2008-2009, she was a Postdoctoral Research Fellow at the National Institute on Drug Abuse (NIDA), NIH, in Baltimore, MD. She subsequently returned to the University of Santiago de Compostela as a Researcher and Teaching Assistant of Forensic Toxicology. From 2012 to 2014, Dr. Concheiro was a Research Scientist at NIDA. Dr. Concheiro has actively participated in Drugs and Driving Research Projects, including the ROSITA (Road Side Testing Assessment) and DRUID (Driving Under the Influence of

Drugs) European Projects, and in Clinical Protocols at NIDA. Dr. Concheiro has more than 40 publications in peer-reviewed journals, and she has participated presenting her work at more than 30 professional toxicology meetings.

Date: Thursday, April 2, 2015

Times: 3:30 PM – 4:30 PM

Place: Pace University
Lecture Hall North (2nd Floor)
One Pace Plaza
New York, NY

Please contact Dr. Rita K. Upmacis (Chair of the Metro Women Chemists' Committee (rupmacis@pace.edu) if you plan to attend.



NEW YORK NANOSCIENCE DISCUSSION GROUP

2014-2015 Sessions

Hosted by: New York University
Department of Chemistry

Speakers: Marilyn Gunner
City College Physics

Richard Bonneau
NYU Biology

Kent Kirshenbaum
NYU Chemistry

The NYNDG is an ACS Topical Group that meets in the New York University Department of Chemistry. Sessions feature three 30-minute presentations on nanoscience, one each with strong orientation in biology, chemistry, and physics/applied mathematics. Presentations will be focused on discussion of recent work, although speakers will place the work in a context understandable to a broad audience.

Mark your Calendars!

Date: Tuesday, April 7, 2015

Time: Refreshments at 7:00 PM
Science at 7:30 PM

Place: NYU Silver Center
Room 1003 (10th floor)
31 Washington Place
(between Washington Square
East and Greene Street)
New York, NY

For more information, contact: James Canary (james.canary@nyu.edu)

Topical Group History:
<http://www.nyu.edu/projects/nanoscience>

ADELPHI UNIVERSITY

2015 Henry Drysdale Dakin Memorial Lecture — “GFP: Lighting Up Life”



Speaker:
Prof. Martin Chalfie
The William R. Kenan
Jr. Professor of
Biological Sciences,
Columbia University
2008 Nobel
Laureate in
Chemistry

Yankee great Yogi Berra once said, “You can observe a lot by watching.” Unfortunately, before the early 1990s observations in the biological sciences were usually done on dead specimens that were specially prepared and permeabilized to allow entry of reagents to stain cell components. These methods allowed a glimpse of what cells were doing, but they gave a necessarily static view of life, just snapshots in time. GFP and other fluorescent proteins revolutionized the biological sciences because these proteins allowed scientists to look at the inner workings of living cells. GFP can be used to tell where genes are turned on, where proteins are located within tissues, and how cell activities change over time. Once a cell can be seen, it can be studied and manipulated. The story of the discovery and development of GFP also provides a very nice example of how scientific progress is often made: through accidental discoveries, the willingness to ignore previous assumptions and take chances, and the combined efforts of many people. The story of GFP also shows the importance of basic research on non-traditional organisms.

Date: Wednesday, April 8, 2015

Time: 7:00 PM

Place: Thomas Dixon Lovely Ballroom
University Center

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

HIGH SCHOOL TEACHERS TOPICAL GROUP

Demo Derby

An evening of non-stop demonstrations by the attendees (5-8 minutes max.).

Demonstrators should bring handouts of instructions and be prepared to clean up and remove all materials. Safety procedures will be observed. Note that there is no water or gas service in the renovated room.

Date: Friday, April 17, 2015

Time: Social and Dinner — 5:45 PM

Place: White Oak Tavern
21 Waverly Place
NE corner at Greene Street
(site of the former M&G Pub)
New York, NY

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 3

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 9:00 AM and 2:00 PM to verify that meeting is still on; (516) 385-4698 for other info.

Note: On street parking is free after 6:00 PM.



LONG ISLAND SUBSECTION

The 15th Annual LI-ACS Chemistry Challenge

The Long Island Subsection of the NY-ACS invites you to participate in the 15th Annual Chemistry Challenge, to be held at CUNY Queensborough Community College. The Chemistry Challenge is a fun, fast-paced “Jeopardy-style” competition between Chemistry students of local colleges. Timed, multiple choice questions (~75% General and 25% Organic Chemistry) will be asked during the competition. Students will discuss the questions with their team members and select a final answer using electronic “Clickers.” Medals and prizes will be awarded to the top student teams. The atmosphere is exciting and brings both students and mentors together!

To register a student team or obtain more information, please contact Paul Sideris at psideris@qcc.cuny.edu. To view photo-

graphs from prior Chemistry Challenge events, please visit: <http://www.qcc.cuny.edu/chemistry/chemchallwinner.html>

Date: Friday, April 24, 2015
Times: Dinner – 5:00 PM
 Chemistry Challenge – 6:00 PM
Place: CUNY Queensborough
 Community College
 Science Building, S-111

Directions: <http://www.qcc.cuny.edu/about/driving.html>



COME AND JOIN US CELEBRATE EARTH DAY

With Our 4th Annual “Walk the Brooklyn Bridge”!



Keynote address: “99 is not 100: A Call to Action”

Speaker: Prof. Spiro Alexandratos
 Hunter College, CUNY

We will meet at Pace University at 10:00 AM and begin our celebratory “Earth Day Parade” across the iconic Brooklyn Bridge at 12:00 Noon.



Participants will be provided with breakfast, healthy snacks, and Earth Day gifts.

Date: Saturday, April 25, 2015
Times: 10:00 AM - 12:00 Noon
Place: Pace University
 To register and for more information go to: <http://www.newyorkacs.org/meetings/EarthDay/CCED.php>

Contact: Prof. JaimeLee Rizzo, CCED Chair, jrizzo@pace.edu

BIOCHEMICAL TOPICAL GROUP – JOINT MEETING WITH THE NY ACADEMY OF SCIENCES BIOCHEMICAL PHARMACOLOGY DISCUSSION GROUP

Non-Motor Symptoms: Unraveling the “Invisible” Face of Parkinson’s Disease

Organizers: Nathalie Breyse, PhD
 Lundbeck Research, USA
 Elena Dale, PhD
 Lundbeck Research, USA
 Sonya Dougal, PhD
 The New York Academy of Sciences

Speakers: Erwan Bezard, PhD
 University of Bordeaux
 Patrick Brundin, MD, PhD
 Van Andel Institute
 K. Ray Chaudhuri, DSc, FRCP, MD
 Kings College London
 Marie-Francoise Chesselet, MD, PhD
 David Geffen School of Medicine at UCLA
 Maurizio Facheris, MD, MSc
 Michael J. Fox Foundation for Parkinson's Research
 Horacio Kaufmann, MD
 NYU Langone Medical Center
 Olivier Rascol, MD, PhD
 Toulouse University Hospital
 Daniel Weintraub, MD
 University of Pennsylvania

This symposium will review clinical tools for the diagnosis and treatment of non-motor symptoms of Parkinson's disease, discuss the disease mechanisms, and address pre-clinical models for the development of new therapeutics.

Abstract submissions are invited for a poster session; several abstracts will be selected for short presentations. For instructions, please send an e-mail to ParkinsonsNMS@nyas.org with the words “Abstract Information” in the subject line.

Date: Monday, April 27, 2015
Time: 8:30 AM – 4:15 PM
 (reception to follow)
Place: The New York Academy of Sciences
 7 World Trade Center

(continued on page 12)

BIOCHEMICAL TOPICAL GROUP

(continued from page 11)

250 Greenwich Street – 40th Floor
New York, NY 10007

Cost: This event is has reduced-rate registration for ACS and NYAS members, at \$30 or \$15 (for students and post-docs). Please select the appropriate non-member Registration Category and use the Priority Code ACS. Non-members may attend for a fee of \$85 (corporate), \$65 (non-profit or academic) or \$45 (students and post-docs).

For more information and to register for the event, go to:

www.nyas.org/ParkinsonsNMS.

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



WESTCHESTER CHEMICAL SOCIETY

Distinguished Scientist Award and College Student Achievement Awards Dinner Meeting: Silicon, Silanes, Silicones and You: Ordinary and Extraordinary Applications of Silicon and Silicon-Containing Compounds

Speaker: Kenrick M. Lewis, PhD
Corporate Research Fellow
Momentive Performance
Materials, Inc.
Tarrytown, NY

Abstract

Worldwide sales of silanes, silicones and other organosilicon compounds exceed US\$ 5 billion annually and the industry continues to grow. Where are these products used? How are they used and by whom? This presentation will show that silicon-containing compounds are present in, or are used to process, a wide variety of industrial, medical and consumer products that satisfy basic human needs in a modern society. Yet, there is little awareness of the ubiquity and utility of these compounds even among members of the chemistry community. The presentation seeks not only to increase awareness, but also to impart appreciation of the enhancement of value in the final products that arise from the use of silicon-containing additives. Emphasis will be

placed on the applications and the fundamental principles or properties, which enable the use of silicon compounds in the ordinary and extraordinary applications that will be illustrated.

Biography

Dr. Kenrick Martin Lewis is a Corporate Research Fellow with Momentive Performance Materials in Tarrytown, NY. He joined the Linde Research Dept. of Union Carbide in January, 1977 and has been at the Tarrytown Technical Center since then. Dr. Lewis's research interests encompass both process and materials chemistry. In process chemistry, he has contributed to the fundamental understanding and technological exploitation of the catalytic transformations of silicon and silicon compounds. These include direct syntheses of silanes from silicon, hydrosilylation, hydrogenolysis of disilanes, redistribution/disproportionation reactions of organosilicon compounds, the use of transition metal complexes of silylenes, and silylene insertion reactions. He has investigated new methods of producing electronic and solar grade silicon, surface-chemical studies (XPS, AUGER, TPD) of intermediates in heterogeneous catalysis, and the use of nanosized materials (particularly copper and copper compounds) in catalysis. His materials chemistry interests are focused on structure-property relationships among siloxane-polyether copolymers, especially silicone surfactants for stabilizing polyurethane foams, surface modification of polysiloxanes, and addition-cure polysiloxanes and their use in medical, dental, electronic and urethane foam applications.

Dr. Lewis was born in Grenada, West Indies, and completed his secondary education there. His degrees are from the University of Alberta (Edmonton), BS (first class honors in chemistry), and from the University of Massachusetts (Amherst), Ph.D. (Inorganic Chemistry). Dr. Lewis has been the recipient of many scholarships, prizes and awards from his studentship to the present time. These include the Latimer and Langmuir Awards at General Electric Co., Caribbean Icon of Science and Technology from the Caribbean Council for Science and Technology, and a Key Contributor to the 1999 Kirkpatrick Award for Innovation in the Direct Synthesis of Trimethoxysilane.

Dr. Lewis has worked on a broad range of silicone products and has contributed to the understanding of how silicones perform in

numerous applications such as consumer and industrial detergents, personal care products, rubber and plastic fabrication, polyurethane foams, inks and coatings, textiles and food preparation, among others. He has been a major contributor to our understanding of the chemistry of silicon, silanes and silicones, studying both synthesis and application, particularly of functionalized silanes, silane coupling agents, silicone surfactants and silicone polymers. He has worked for about forty years in Tarrytown, NY and has been given numerous awards and honors. He is a member of several professional organizations, including ACS, and has done much professional volunteer work, including co-editing *Catalyzed Direct Reactions of Silicon* (Elsevier, 1993). He has nearly one hundred publications, presentations and patents.

Date: Thursday, April 30, 2015

Times: Social Hour - 5:00 PM
Lecture and Awards - 6:00 PM
Dinner - 7:00 PM

Place: Pace University
861 Bedford Road – Entrance #2
Pleasantville, NY 10570
The Campus Center, Butcher Suite

Cost: Students \$20; All Others \$30

RSVP Required – pwrc@earthlink.com

For more information, contact:

Paul Dillon:

E-Mail PaulWDillon2@hotmail.com

Or:

Anthony Durante

E-Mail: anthony.durante@bcc.cuny.edu

For Pace University information:

E-Mail: eweiser@pace.edu



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 hessyaft@hotmail.com.

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

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HUDSON-BERGEN CHEMICAL SOCIETY – JOINT MEETING WITH SIGMA XI CHAPTER AND THE SCHOOL OF NATURAL SCIENCES OF FAIRLEIGH DICKINSON UNIVERSITY

The 17th Annual Undergraduate Research Symposium

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. Students who wish to present posters must send an abstract via e-mail to mleonida@fdu.edu, by **April 15, 2015**. 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. The posters have to be self-supported. There is no registration fee.

This year's symposium also features the lecture:

Mapping Protein Folding Landscapes with High Pressure NMR



Speaker:
Catherine Royer, PhD
Rensselaer
Polytechnic Institute

How and why does pressure unfold proteins? How can we use pressure perturbation

to map protein folding landscapes and probe the molecular origins of protein folding cooperativity? We have discovered recently that the major cause for pressure induced unfolding is the elimination of packing defects present in protein folded states. This mechanism, which depends on specific and structurally heterogeneous properties of the folded states of proteins, is distinct from heat and chemical denaturation, the effects of which depend rather homogeneously upon the amount of surface area exposed to solvent in the unfolded states of proteins. This local effect of pressure, in combination with site specific NMR experiments, SAXS, fluorescence, pressure perturbation calorimetry

and other biophysical techniques has allowed detailed structural and energetic mapping of protein folding landscapes, and the effects of mutations thereon. We have found for example that single mutations can change a very simple folding pathway into a very complex one with multiple parallel routes. We are currently using pressure coupled with the above mentioned techniques applied to repeat proteins in a systematic study of the sequence and structural determinants of folding cooperativity.

Catherine Royer is a Professor of Biology and Chemistry and Chaired Constellation Professor in Bio-computation and Bio-informatics at Rensselaer Polytechnic Institute in Troy NY. She is a Permanent Visiting Professor at the Johns Hopkins University Department of Biophysics and an Elected Fellow of the American Association for the Advancement of Science. Her research interests involve the use of fluorescence spectroscopic methods to characterize structure-function-dynamics relationships in and among biomolecules.

Dr. Royer obtained her PhD in 1985 in the Department of Biochemistry in the School of Chemical Sciences at the University of Illinois at Urbana-Champaign under the direction of Professor Gregorio Weber. She carried out postdoctoral studies at the University of Paris 7, the CNRS at Gif-sur-Yvette and at LURE. She then took a position as User Coordinator and Research Physicist at the Laboratory for Fluorescence Dynamics in the Department of Physics at the University of Illinois - Urbana Champaign. In 1990 she moved to an Assistant Professorship in the School of Pharmacy at the University of Wisconsin-Madison, where she was promoted to Associate Professor with tenure in 1995. In 1997 she took the position of INSERM Director of Research in the Center for Structural Biochemistry in Montpellier where, in 2002, she became the Associate Director of the Institute and in 2007, Institute Director, a position she held until joining RPI in August of 2013.

Dr. Royer has published extensively in the field of pressure effects on biomolecular structure and interactions, and on use of state of the art fluorescence approaches applied to understanding the physical basis for the control of transcription. She is an Executive Editor of Analytical Biochemistry, Associate Editor of Biochemistry, and Editorial Board member for Biophysical Journal and Proteins. She has served on numerous review panels (National Science

Foundation Biophysics Panel, CNRS Section 21, 20, INSERM Scientific Council, French Agence National pour la Recherche – Physique et Chimie pour le Vivant) and the councils of national and international biophysical societies.

Date: Friday, May 1, 2015
Times: Poster Session 5:00 PM
 Dinner 6:00 PM

Awards and Lecture 7:00 PM
Place: Jeepers Café
 Fairleigh Dickinson University
 Teaneck, NJ
Cost: \$10.00 for dinner (dinner cost for presenters will be waived).

Reservations: Dr. Mihaela Leonida
 (201) 692-2338, e-mail:
mleonida@fdu.edu by April 25, 2015.

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|  ACS Chemistry for Life® | 63rd | ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM |
|---|------------------------|--|

The Student Activities Committee of the New York Section of the American Chemical Society

Saturday, May 9th, 2015 at Queensborough Community College

8:00 am – 3:00 pm (breakfast, luncheon and award reception included)

Sign up as an attendee at <http://www.newyorkacs.org/meetings/urs/urs.php>

Keynote Speaker: Dr. JaimeLee Rizzo

Department of Chemistry and Physical Sciences, Pace University

JaimeLee Iolani Rizzo is a Professor of Chemistry in the Department of Chemistry and Physical Sciences at Pace University, NYC campus. A native of Honolulu, Hawai'i, Dr. Rizzo received her associate's degree from Queensborough Community College followed by a bachelor's and a master's degree in Chemistry from Queens College, CUNY. She completed her graduate studies under the tutelage of Robert Ralph Engel at Queens College, CUNY, where she developed an interest in organic synthesis particularly polyammonium compounds. A series of these compounds were covalently bound to macromolecules where host/guest binding interactions were investigated.

In 2001, Dr. Rizzo joined the faculty at Pace University, where her laboratory co-developed a method to bind polycationic organic compounds to carbohydrate-based surfaces which exhibits antimicrobial activity. This work has led to the acquisition of 14 patents and 5 publications. Johnson & Johnson Wound Management Division and Prismatic Dyeing and Finishing Company have supported this endeavor and are collaborators on some patents.



Keynote Address

Constructing Killer Surfaces

Our laboratory has been developing an array of new surfaces that kill bacteria and fungi on contact. We have successfully synthesized antimicrobial surfaces that destroy bacteria and fungi where the mode of action is through an electrostatic disruption of the cell wall. The antimicrobial activity of the surface is continual with regard to the agent that is covalently bound to the surface because it is not consumed in the process of invasion and disruption of the cell wall. This makes it unlikely that microorganisms could become resistant to this type of attack as it would involve a major modification of their cell-wall structure. Surfaces which have been prepared include carbohydrate-based materials as in wood, cotton cloth, paper; proteinaceous-based as in wool and silk; chitosan; agarose; gelatin β . The agents that are covalently bound to a given surface are a series of quaternary ammonium salts. The salts are then attached via a simple two-step procedure that involves activation of the surface followed by an SN_2 reaction of the salt with the activated surface. The synthesis, characterization, and bacteriological results will be presented.

SIGNIFICANT DATES FOR 63rd URS

Deadline for Abstract Submission - **March 20, 2015** Abstract acceptance notification – April 6, 2015
 Deadline for Symposium Advanced Registration – April 10, 2015

| | | | |
|--|--|---|--|
| 2015 Co-chair Dr. Justyna Widera Adelphi University widera@adelphi.edu | 2015 Co-chair Dr. Yolanda Small York College - CUNY ysmall@york.cuny.edu | 2015 Co-chair Dr. Paul Sideris Queensborough CC - CUNY psideris@gcc.cuny.edu | 2015 Co-chair Dr. Sharon Lall-Ramnarine Queensborough CC - CUNY slallramnarine@gcc.cuny.edu |
|--|--|---|--|

FREE Registration for student members of the National ACS, faculty mentors who register in advance and sponsors. For non-ACS members and guests, the registration is \$35 in advance. All on-site registration is \$45 for faculty, staff and guests. Checks for the registration fee should be made out to: "NY ACS URS" and sent to: Prof. Justyna Widera, Adelphi University, Department of Chemistry, Science 201, 1 South Avenue, Garden City, NY 11530.

See Call for Papers, page 26.

LONG ISLAND SUBSECTION

The 25th NYACS High School Awards

(See article under "Call for Nominations," on page 28.)

"The Importance of Chemistry in Today's Crime Scene Investigations"

Speaker: Scott J. Kovar
Director of Forensic Sciences
Hofstra University

Date: Thursday, May 14, 2015

Times: Check-in – 6:00 PM

Dinner – 6:30 PM

Ceremony – 7:00 PM

Place: Nassau Community College

CCB Building

Multi-Purpose Room 1st Floor

Directions: <http://www.ncc.edu/campuservices/parkingandsafety/mapanddirections.shtml>



WESTCHESTER CHEMICAL SOCIETY

FUTURE MEETINGS

Special Seminar – "How Your Grandmother's Diet May Have Changed Your Life"

Speaker: Hailey Clancy, PhD
Lieutenant Colonel, US Army
Assistant Professor
Department of Chemistry
and Life Science
United States Military Academy
West Point, NY

Abstract will be supplied in a later issue.

Lieutenant Colonel Hailey Clancy graduated from Westminster College in Fulton, Missouri with a double major in Biology and Spanish and was commissioned into the US Army in 1992. While on active duty with the US Army, she earned a MS Degree in Environmental Toxicology from Cornell University where she developed a biosensor to detect the bacterium that causes Anthrax. In 2012 she earned a PhD in Molecular Toxicology and Carcinogenesis from New York University, where she conducted research on the effects of human exposure to nickel and its role in lung cancer. LTC Clancy's military assignments include service as a Transportation and Logistics officer

in Germany (Nürnberg, Kaiserslautern, Wiesbaden, and Baumholder), Bosnia-Herzegovina, Iraq (Balad, Diyala, Baghdad), and Fort Drum, NY. She is currently assigned as an Assistant Professor in the Department of Chemistry and Life Science at West Point, NY, where she teaches General Chemistry and Biology. Her military awards include the Bronze Star (with oak leaf cluster), Meritorious Service Medal (with two oak leaf clusters), Joint Service Commendation Medal, Army Commendation Medal (with oak leaf cluster), Army Achievement Medal (with oak leaf cluster) and the Meritorious Unit Citation.

Tentative Date: Early October, 2015

Times, Place, Cost and Further Information:
See information on page 13.

Special Seminar – "Hydrogen Bonding in Redox and Nanoparticle Construction"

Speaker: Marc A. Walters, PhD
Department of Chemistry
New York University
New York, NY

Abstract and CV will be supplied in a later issue.

Tentative Date: Early November 2015

Times, Place, Cost and Further Information:
See information on page 13.

Special Seminar – "Making Green by Being Green – Life Cycle Assessment"

Speaker: Joseph C. Bush, PhD
Associate Director
The Center for Sustainable
Energy
The City University of New York
Bronx Community College

The concept of Sustainability has its roots in many ancient cultures but over the last century was largely swept under the rug by consumer-led free market forces. However, intelligent investors never let go of the idea – they are always on the lookout for sustainable growth. As the energy and resource demands from developing nations continue to grow, and commodity prices fluctuate, the concept of sustainability is increasingly being integrated in all levels of corporate function. In this talk I will present examples of a process called *Life Cycle Assessment*, which seeks to quantify sustainability and is

being incorporated in the decision making process of businesses of all sizes.

In 2005 Dr. Bush obtained his B.S in Chemistry from the Worcester Polytechnic Institute where he studied the- synthesis, purification and structural analysis of organic polydentate, metal chelating ligand molecules to bind divalent metal ions, creating low-density crystal structures. He went on to obtain his Ph.D. in Physical Chemistry in 2010 from Brown University where he studied Rydberg Fingerprint Spectroscopy using femtosecond pump-probe photoelectron spectroscopy on Rydberg states of biomolecular model systems. He continued at Brown as a postdoctoral research associate in the Physics Department where he designed and built a prototype system interfacing custom chip-based nano-pore materials with third party radio frequency mass filters for label-free, bio-polymer sequencing. For this work, he was the project lead for CAD design, nano-structure fabrication and optimization, computer-based simulation, and experimental implementation. During this time, he also was a consultant to Brown's Technology Venture Office, which markets intellectual property for external licensing. Since 2013, Dr. Bush has been the associate director for Bronx Community College's Center for Sustainable Energy. The Center builds bridges between academic departments, industry partners, and government agencies.

Tentative Date: Early December, 2015

Times, Place, Cost and Further Information:
See information on page 13.



WESTCHESTER CHEMICAL SOCIETY

On February 11, 2015 Ms. Mahsa Mehrdad, a Ph.D. candidate in the Environmental Engineering program at The City College of New York spoke on the Anammox waste water treatment process. Compared to current denitrification processes, the Anammox process allows reductions in energy cost, alkalinity required and production of sludge solids, and eliminates the need for a carbon source. Overall it diminishes the carbon footprint of waste water treatment. As part of her dissertation research and in conjunction with New York City Environmental Protection (NYCEP) Ms. Mehrdad successfully applied the Anammox process in centrate treatment using a moving bed biofilm reactor (MBBR) located at the 26th Ward wastewater treatment plant, in Brooklyn, NY. During and after her talk, given at the Westchester Community College in Valhalla, N.Y., there were lively question and answer, and discussion, periods. This continued for several attendees and the speaker as they enjoyed a dinner together at a nearby restaurant. The photo below is of Ms. Mehrdad and the WCS board of directors who attended the meeting.



Anthony Durante, Peter Corfield, Mahsa Mehrdad, Rolande Hodel and Jody Reifenberg.

(Photo courtesy of Mahsa Mehrdad)

ACS, NEW YORK SECTION'S 2015 SECTIONWIDE CONFERENCE, ST. JOSEPH'S COLLEGE, BROOKLYN, NY

The annual Sectionwide Conference of the New York Section was held on January 17, 2015 at St. Joseph's College in Brooklyn, NY. The Sectionwide Conference featured the presentation of awards for volunteerism and achievement, a keynote address by Prof. Wayne Jones of Binghamton University, a planning session for Section activities for 2015, and a luncheon social. Professor Paris Svoronos, New York Section Chair for 2015, presided over the event. The conference began with a delicious continental breakfast and a hearty welcome by Prof. Svoronos.

At the award ceremony, Dr. Pamela Kerrigan received her past chair pin, gifts of appreciation and an ACS plaque for her outstanding work as Chair of the New York Section in 2014. The 2014 Outstanding Service Award went to Prof. Jill Rehmann of St. Joseph's College, who chaired the New York Section in 2006, has been organizing the annual High School Research Poster Session for 20 years and is treasurer of the Brooklyn Subsection. The Section presented the Nichols Foundation High School Chemistry Outstanding Teacher Award for 2014 to Mr. Matthew Christiansen of Islip High School, in Islip, NY. Mr. Stephen Radice, Chair of the Nichols Teacher Jury, introduced Matthew and listed his many accomplishments and inspiring teaching methods. Mrs. Jean Delfiner and Mrs. Joan Laredo-Liddell surprised Mr. Lew Malchick with a gift for many years of service to the High School Teachers Topical Discussion Group. Prof. Ping Furlan and Prof. Zhaohua Dai accepted a certificate of appreciation for their outstanding work, along with Ms. Erin Rent, as co-chairs of the successful National Chemistry Week event in October 2014. Mr. George Rodriguez accepted the award for Outstanding Volunteer Service at a Local Section, an award sponsored by the National ACS.

Following the awards, Dr. Alison Hyslop, 2015 Chair-elect of the New York Section, presented the names of the candidates for the upcoming 2015 elections and introduced the ones who were present.

Prof. Wayne E. Jones, Professor of Inorganic and Materials Chemistry at Binghamton University – SUNY, gave an excellent keynote address titled "Capturing the Power of the Sun Using Molecular Wires and Devices: From Photovoltaics to Photocatalysis for Environmental Remediation." The audience thoroughly enjoyed his presentation and offered many interesting questions. It was also a pleasure to have Ms. Jodi Wesemann from National ACS make a special visit to the conference to explain the recent grant that ACS received from the NSF to explore methods to better assist graduate students and postdoctoral scholars with their career planning.

The annual planning session for subsections, topical groups, and committees was held during the last hour of the conference, to discuss goals and activities for the upcoming year.

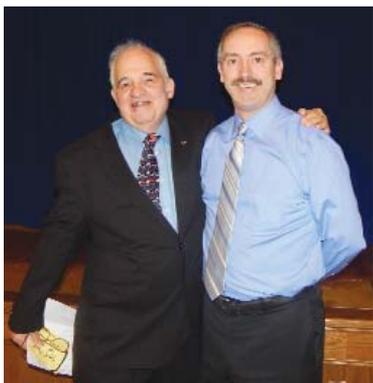
The MARM (Middle Atlantic Regional Meeting) Committee held a special meeting to continue planning the MARM meeting scheduled to be hosted by the New York Section in 2016. Following the conference, many members enjoyed lunch at the nearby Brooklyn Public House. It was an excellent conference enjoyed by over 70 New York Section members.



(Left) New York Section Chair, Dr. Paris Svoronos, greeting the guests at the 2015 annual Sectionwide Conference.

(All photos courtesy of Rhomesia Ramkellowan and Marilyn Jespersen)

(MORE PHOTOS ON PAGES 19 & 20)



Dr. Paris Svoronos thanks the conference's excellent keynote speaker, Dr. Wayne Jones.



Awardees: Mr. Matthew Christiansen (Nichols Foundation H. S. Teacher Award), Dr. Jill Rehmann (Outstanding Service Award), Dr. Pamela Kerrigan (Past Chair Service Award).



Mr. George Rodriguez was presented with an award for Outstanding Volunteer Service at a Local Section, an award sponsored by National ACS and nominated by the local section. Here with Dr. Pamela Kerrigan, 2014 New York Section Chair, and Dr. Paris Svoronos, 2015 New York Section Chair.



National ACS Representative Jodi Wesemann attended the conference to offer information about a new grant from NSF and to visit with colleagues. Here with Dr. Paris Svoronos and Dr. Pamela Kerrigan.



Dr. Ping Furlan and Dr. Zhaohua Dai received certificates of appreciation for their outstanding work on the 2014 National Chemistry Week event at the New York Hall of Science that was attended by over 1000 people.



Mrs. Jean Delfiner and Mrs. Joan Laredo-Liddell surprised Mr. Lew Malchick with a gift for his dedicated service to the High School Teachers Topical Group.

NEW YORK SECTION'S 2015 SECTIONWIDE CONFERENCE

(continued from page 19)



Officers and Awardees: Mr. Stephen Radice, Dr. George Rodriguez, Dr. Paris Svoronos, Mr. Matthew Christiansen, Dr. Jill Rehman, Dr. Pamela Kerrigan, Dr. Alison Hyslop, Mr. Lew Malchick.

The MARM committee and volunteers met to plan the upcoming Regional Meeting in 2016.



MATTHEW CHRISTIANSEN RECEIVES THE NICHOLS FOUNDATION HIGH SCHOOL CHEMISTRY TEACHER AWARD FOR 2014



Stephen Radice with Matthew Christiansen.

Mr. Matthew Christiansen is the very deserving recipient of the Nichols Foundation High School Chemistry Teacher Award for 2014. It was presented to Matthew on January 17, 2015 at an award ceremony at the New York Section's section-wide conference held at St. Joseph's College, Brooklyn, NY. The award was established in 1958 by Charles W. Nichols, Sr. for the purpose of recognizing highly effective teaching and inspirational leadership to students in chemistry within the New York Section of the ACS.

Matthew received both his Bachelors of Science in Chemistry in 2006 and Master of Science in Chemistry in 2008 from Stony Brook University. He is currently attending Hofstra University in a doctoral program in learning and teaching. Matthew has professional teaching certificates from New York State in both Chemistry and Biology.

Matthew is currently employed at Islip Union Free School District High School in Islip NY. The schools High School population is approximately 1200 with 25 % for the students eligible for free lunch. Prior to this he worked at

Stony Brook University as a Graduate teaching Assistant and Graduate Research Assistant. His work included biofilm formation.

Matthew's teaching load has included: Regents chemistry, AP Chemistry, Biochemistry & Physiology, AP Environmental Science and Forensic Science. He uses effective techniques to explain difficult chemistry concepts. To demonstrate the activity of alkali metals he takes his students outside so they can safely watch as he adds alkali metals to water. When teaching hybridization he presents his class with bags of balloons that students inflate to represent orbitals. In a lesson on surface tension and intermolecular forces he has students test water, ethanol and acetone by counting the number of drops that can fit on a penny and timing how long each liquid takes to evaporate.

To demonstrate the importance of proper procedure, Matthew asks his students to write a procedure to build a "chemistry house" out of blocks. The students switch papers and have to follow the others instructions. The students then realize that most of the instructions are vague.

Matthew challenges and inspires his students by taking them to Stony Brook University to do a college lab on the cycling of copper. The visit is well planned, for in addition to the experiment, students experience the Chemistry Department's poster board presentation. Matthew's students have an opportunity to ask questions to the graduate students or college professors about their research. Many of these students who experienced these events now major in STEM fields in college. In addition,

he is in charge of the Science Olympiad where he accompanies his team at the competitions on weekends. This year the Olympiad competitions will take place in locations including Philadelphia and M.I.T.

Matthew also has students do a final project that involves identifying a research question that they would like to investigate. Students take ownership of their investigation and they feel as if the project is in their control. Matthew says most of these projects are tame, for example, "which fruit juice had the most vitamin C? He realizes that the students like to feel like scientists and this feeling can lead to a bright future for the students in science related careers.

Dr. Eileen Rossman, Matthew's principal, writes on Matthew's hiring at her school, "we were looking for an individual with a deep understanding of content area and the ability to take a complex subject and present it to students in a manner that was understandable and interesting. We finally found our match in Mr. Christiansen... his ability for inspiring and challenging students is admirable. His dedication to our students and our community are evident in his work and in the classroom environment he created."

Scott Godfrey, a former student, writes, "Mr. Christiansen's love for his subject was only surpassed by his dedication and care for his class... To me, this class felt like a family... We always found ourselves pushing to continue our learning of the subject, and our desire to make our teacher proud.

Congratulations Matthew!

Written by Stephen Radice,
Chair of the Nichols Award Committee



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DSC, TGA, melting point
KF Aquametry, Titrimetry

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CANDIDATES FOR THE NEW YORK SECTION 2015 ELECTIONS

At the January Section-wide Conference, the Nominating Committee presented the candidates for office for the 2015 elections. The biographies of the candidates are posted on the New York Section website at <http://www.NewYorkACS.org>.

The Board of Directors extends a sincere thank you to the following candidates for accepting the nomination to run for office, and encourages ACS New York Section members to vote for these worthy candidates.

Electronic ballots will be sent to the membership in mid-April and voting will be conducted according to ACS guidelines for confidentiality and security. If your e-mail address has changed, please update it on the ACS website. If no e-mail address is associated with your membership number, a paper ballot will be sent to you automatically. Members that do have an e-mail address associated with their membership number will be asked in a survey if they want a paper ballot.

To receive all electronic messages from your New York Section, please be sure that your e-mail account will accept messages from NYACS-L@stjohns.edu or njesper1@optonline.net or jespern@stjohns.edu

Members requesting paper ballots will receive them by May 1, 2015. If any member does not receive voting materials by May 1, please contact the New York Section Office at (516) 883-7510 or njesper1@optonline.net

The Candidates are:

Chair Elect for 2016

Dr. Brian Gibney
(Brooklyn College - CUNY)

Dr. Terry Brack
(Hofstra University)

Treasurer 2016-2017

Mr. Frank Romano
(Agilent Technologies)

Directors-at-Large 2016

Dr. Daniel Amarante
(College of Mount Saint Vincent)

Dr. Paul Dillon
(Siemens Healthcare Diagnostics Consultant)

Dr. Ping Furlan
(U. S. Merchant Marine Academy)

Dr. Marlon Moreno
(Queensborough Community College - CUNY)

Dr. Yoel Ohayon
(New York University)

Dr. Paul Sideris
(Queensborough Community College - CUNY)

Councilor 2016-2018

Dr. Gina Florio
(St. John's University)

Dr. Rolande Hodel
(AIDSfreeAFRICA)

Dr. Pamela Kerrigan
(College of Mount Saint Vincent)

Mrs. Joan Laredo-Liddell
(Concordia College)

Dr. JaimeLee Rizzo
(Pace University - NYC)

Dr. George Rodriguez
(Argeni, LLC)

Dr. Joseph Serafin
(St. John's University)

Dr. Justyna Widera
(Adelphi University)



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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 20, 2015

Times: Social 6:15 PM

Meeting 7:00 PM

Place: Brookdale Community College
765 Newnam Springs Road
Lincroft, NJ

For reservations please call (732) 463-7271 or email chemphun@gmail.com prior to **Wednesday, April 15, 2015**.

Dinner cost 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.



CAREERS IN TRANSITION MEETINGS

Job Hunting??

Resume & LinkedIn writing and key word search rules are changing. To be found, come and utilize our latest insights. Our ACS trained Career Consultants offer assistance at Students2Science to help members with their job search on the second Monday of each month. Topics at this free workshop are:

- Techniques to enhance resume effectiveness
- Interview practice along with responding to difficult questions
- Networking to find hidden jobs
- Planning a more effective job search

Date: Monday, April 13, 2015

New from now on is a second CIT meeting in East Windsor on the third Monday. Contact Bill for details.

Times: Meeting 5:30 - 9:00 PM

Pizza snack and soda 6:30 PM

Place: Students 2 Science, Inc.
66 Deforest Avenue
East Hanover, NJ

Cost: \$5.00 for pizza and soda

Reservations: at www.njacs.org/careers.html

A job board and networking assistance is offered at most topical group meetings. Appointments with Bill can be arranged for personal assistance at (908) 875-9069 or billsuits@earthlink.net.

See www.njacs.org under the Career tab for Jobs hidden from sight and relevant blogs.



NJACS PARTNERS WITH STUDENTS2SCIENCE

Members are encouraged to volunteer at their East Hanover facility and explore their website at www.students2science.org to learn more about this innovative program.

S2S continues to expand their exciting laboratory experience the disadvantaged children. Many of our members continue to volunteer as mentors. At their 2 million dollar analytical lab, every 40 kids are assisted by 16 professional volunteer mentors. The experiments performed really make chemistry and science come alive using state of the art analytical equipment working with students starting in 6th grade up to HS seniors. Each day is optimized for grade level and curriculum.

Now the program has further expanded with internet video and experiments performed in the classroom for 4 & 5th grades. Internet allows views of the lab in operation and relates to simpler experiments setups done in the classroom with their teacher and a partnering chemist.

North Jersey members who volunteered benefited in many ways. Those in transition expanded their network and received job finding assistance. Retired chemists met up with old friends and made many new friends. Those with jobs used the volunteer hours as part of the company outreach programs and team training. All feel great about making a difference in the lives of the youth who may have never met a scientist or considered a career in the sciences.

Please consider volunteering and discovering more about this innovative program. If you want to learn more, you can speak with Don Truss at (908) 334-8435.

NORTH JERSEY SECTION'S 67TH ANNUAL UNDERGRADUATE RESEARCH CONFERENCE

The Sixty-Seventh Annual Undergraduate Research Conference provides an opportunity for talented undergraduate students in the North Jersey Section to give an oral presentation on their research results. All undergraduate students in the North Jersey Section are invited to participate in this very rewarding event. The research presentations will be judged by local chemists working in industry or academia and the student giving the best presentation will be given the 2015 Jean Asell Duranna Award. In addition the top three presenters will be awarded cash prizes. The student award winners and their advisors will then be invited to attend the North Jersey Section's Annual Awards Dinner held on Wednesday May 20th, 2015 in Lenfell Hall on the Fairleigh Dickinson University campus in Madison, NJ.

Abstract Information: Clearly indicate the title of the presentation and all authors. Abstracts must be no more than 200 words and need to be submitted as a word document attached to an email to Matthew Mongelli at mmongelli@kean.edu

Abstracts deadline is Tuesday April 14, 2015

Date: Friday, April 24, 2015
Times: Noon until 5:00 PM
Place: Farleigh Dickenson University
 Florham Campus
 Library Orangerie
 Madison, NJ

For more information about this event contact Matthew Mongelli at mmongelli@kean.edu



NOJ SECTION CELEBRATES EARTH DAY

At Turtle Back Zoo's Party for the Planet

Undergraduate Student Chapters and High School Chemistry Clubs are invited to compete for best demos around the theme **Climate Science – More Than Just A Weather Report!**

Check out the website www.njacs.org/earth-day for additional details.



- Competition Registration Deadline for both groups: **April 15, 2014**
- To register send an email describing your demonstration to afcharleb@gmail.com

Date: Sunday, April 26, 2015
Times: 11:00 AM - 4:00 PM
Place: Essex County Turtle Back Zoo
 560 Northfield Ave.
 West Orange, NJ



NOJ ACS DRUG METABOLISM DISCUSSION GROUP

2015 Spring Symposium and Vendor Exhibition – “Recent Advances in Drug Distribution and Drug Action”

Topics and speakers:

Prediction of Unbound Intracellular Drug Concentrations in the Presence of Transporters: from in Vitro to in Vivo

Speaker: Kenneth Korzekwa, PhD
 Associate Professor
 Department of Pharmaceutical Sciences, School of Pharmacy
 Temple University
 Philadelphia, PA

Single Cell Pharmacokinetics

Speaker: Greg Thurber, PhD
 Assistant Professor
 Department of Chemical Engineering
 University of Michigan
 Ann Arbor, MI

Imaging Drug Distribution and Biomarker Response in Drug Discovery

Speaker: Paul J. McCracken, PhD
 Director of Imaging, Biomarkers and Personalized Medicine CFU
 Eisai Product Creation Systems
 Andover, MA

Biomarkers Identification/Analysis in Clinical Research

Speaker: Steven P. Piccoli, PhD
 Research Fellow
 Immunochemistry and Biomarker Development
 Bristol-Myers Squibb
 Princeton, NJ

Systems Pharmacology Approach to Drug Disposition and Action

Speaker: James M. Gallo, PhD
 Professor

Department of Pharmacology
and Systems Therapeutics
Mount Sinai School of Medicine
New York, NY

Date: Monday, April 27, 2015
Times: 8:00 AM - 3:45 PM
Place: The Palace at Somerset Park
333 Davidson Avenue
Somerset, NJ
Cost: The registration fee is \$125 for those registering in advance (**prior to April 17, 2015**), and \$150 at the door (checks only). The registration fee for students and post-docs is \$10, \$50 for faculty, and free for those unemployed.

To register, contact your company representative, Richard Tschirret-Guth (richard_tschirretguth@merck.com), or Allen Jones (allen.n.jones@verizon.net).



DETECTING AND COMBATING HIV IN 3

A Video Challenge for High School Students

RCSB PDB invites high school students to create short videos that promote understanding of HIV/AIDS at the molecular level. Videos should incorporate structures from the PDB in order to tell a story related to the global efforts of defeating, combating, and controlling the HIV pandemic. The video submission is underway and will conclude on **May 31, 2015**.

Visit rcsb.org/pdb-101 and use the Video Challenge tab for more information, resources, HIV related curriculum, and more. A PDF flyer describing this challenge is available for download and distribution at education. rcsb.org/events/HIV-flyer.pdf

Learn more about the
North Jersey Section at
www.NJACS.org

RES MED: RESIDENTIAL SCHOOL ON MEDICINAL CHEMISTRY AND BIOLOGY IN DRUG DISCOVERY

The ResMed School offers an intensive week long graduate-level course organized to provide an accelerated program for medicinal chemists, biologists and other industrial and academic scientists who wish to broaden their knowledge of drug discovery and development. The aim of the school is to concentrate on the fundamentals that are useful in drug discovery spanning initial target assay evaluation through clinical development. Several case histories of recent successful drug development programs will also be presented. The five-day program consists of lectures, seminars and case histories.

Date: Sunday-Friday, June 7-12, 2015
Place: Drew University
Madison, NJ

For more information and application forms visit our website, www.drew.edu/resmed, email resmed@drew.edu, phone (973) 408-3787 or fax (973) 408-3504.

ResMed: Residential School on Medicinal Chemistry and Biology in Drug Discovery
June 7-12, 2015
Drew University, Madison, NJ

This graduate level course concentrates on the fundamentals that are useful in drug discovery spanning initial target assay evaluation through clinical development. Several case histories of recent successful drug development programs will also be presented. The five-day program covers:

| | |
|------------------------------|-------------------|
| Principles of Med Chem | DMPK |
| Cheminformatics | Toxicophores |
| Lead ID & Optimization | GPCRs |
| Epigenetics | Kinase Inhibitors |
| Fragment-based Drug Design | Ion Channels |
| Structure-based Drug Design | Enzyme Inhibitors |
| Drug-like Properties | Bioisosteres |
| Plasma Protein Binding | Preclinical Tox |
| Molecular Modeling | Clinical Dev |
| Protein-Protein Interactions | Case Histories |

W. Greenlee, V. Gullo and R. Doll –Co-organizers

For more information and application forms:
www.drew.edu/resmed
e-mail: resmed@drew.edu
phone: 973/408-3787; fax: 973/408-3504

Call for Papers

| | | | |
|---|--|---|---|
|  ACS Chemistry for Life® | 63rd | ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM | |
| <p>Call for Papers for the 63rd ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM sponsored by the Student Activities Committee of the New York Section of the American Chemical Society. 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 by Dr. JaimeLee Rizzo, Department of Chemistry and Physical Sciences, Pace University, presentation of student papers, followed by a luncheon.</p> | | | |
| <p>Date: Saturday, May 9th, 2015 Place: Queensborough Community College, Queens, NY</p> | | | |
| <p>To:</p> <ol style="list-style-type: none"> 1. Submit an abstract on-line (Please follow the abstract template form and included instructions) 2. Print a flyer for posting - Click "Download Flyer" in the blue frame 3. Obtain directions to Queensborough Community College <p>Go To: http://www.newyorkacs.org/meetings/urs/urs.php</p> | | | |
| <p>SIGNIFICANT DATES FOR 63rd URS Abstract submission and online registration opens - February 2, 2015 Deadline for abstract submission - March 20, 2015 Notification of the abstract acceptance – April 6, 2015 Deadline for early registration – April 10, 2015</p> | | | |
| <p>FREE Registration for student members of the National ACS, faculty mentors who register in advance and sponsors. For non-ACS members and guests, the registration is \$35 in advance. All on-site registration is \$45 for faculty, staff and guests. Students can obtain a discounted 1-yr membership to the ACS for \$25 by visiting http://undergrad.acs.org/</p> | | | |
| <p>Checks for the registration fee should be made out to: "NY ACS URS" and sent to: Prof. Justyna Widera, Adelphi University, Department of Chemistry, 1 South Avenue, Garden City, NY 11530</p> | | | |
| <p>If you have any questions please contact: nyacsurs2015@gmail.com</p> | | | |
| <p>2015 Co-chair Dr. Justyna Widera Adelphi University widera@adelphi.edu</p> | <p>2015 Co-chair Dr. Yolanda Small York College - CUNY ysmall@york.cuny.edu</p> | <p>2015 Co-chair Dr. Paul Sideris Queensborough CC - CUNY psideris@qcc.cuny.edu</p> | <p>2015 Co-chair Dr. Sharon Lal-Ramnarine Queensborough CC - CUNY slalramnarine@qcc.cuny.edu</p> |

**Learn how you could get involved
in ACS by e-mailing
Volunteer@TheIndicator.org**

Call for Presentations

LABORATORY ROBOTICS INTEREST GROUP

21st Annual Technology Event

Laboratory automation users and technology vendors are invited to submit poster and podium presentation abstracts for this meeting. It is scheduled for **Thursday, May 14, 2015**. At press time, the meeting venue has not been established but it will be held in the Somerset, New Jersey, area. Presentations will begin approximately 6:00 PM. Each presentation should be 15 to 20 minutes long.

The Laboratory Robotics Interest Group is dedicated to educating our membership about new and advanced laboratory technologies. We encourage the sharing of information through regular meetings and informal networking. Our membership is primarily drawn from the pharmaceutical, life science, chemical, and food industries. Each meeting begins with a free buffet dinner, followed by presentations, and capped off with desserts.

For more information or to submit abstracts please contact:

Kevin Olsen
Montclair State University
OlsenK@Mail.Montclair.Edu
(973) 655-4076

Call for Nominations

METRO WOMEN CHEMISTS COMMITTEE

The Metro Women Chemists Committee is now accepting nominations for the 6th annual Gift of Mentoring Award. Please share your stories with us if you have benefited from mentorship or you have had positive influence over other people's lives or careers. Please write your stories with no more than 300 words and send them to Sarah Carberry at sbolton@ramapo.edu. **Deadline: April 1, 2015.**

The mentoring award will be presented at the MWCC event on May 12th at Farleigh Dickinson University in Madison. The event will start at 6:00pm and include dinner. For

further details as the event approaches please check our website (<http://njacs.org/metrowomen.html>) or email Sarah Carberry (sbolton@ramapo.edu).



THE WILLIAM H. NICHOLS MEDAL AWARD FOR 2016

The New York Section is accepting nominations for the William H. Nichols Medal Award for the year 2016. 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. The New York Section presents this award annually in recognition of an outstanding contribution in the field of chemistry. The award consists of a gold medal, a bronze replica and \$5000. The medals are presented at the William H. Nichols Meeting that involves the Distinguished Symposium, related to the medalist's field of expertise, and a Medal Award Dinner. The event is attended by members of the Nichols Family and officers of the American Chemical Society.

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 three supporting letters. The nomination process goes through the New York Section website where the nomination form and instructions appear at <http://www.newyorkacs.org/meetings/Nominations/Nichols.php>

Nominations must be received by May 31, 2015. The Nichols Medal Award Jury will meet in June 2015 to select the Nichols Medalist for 2016.

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

(continued on page 28)

LONG ISLAND SUBSECTION

The 25th NYACS High School Awards

For the twenty-fifth consecutive year, the American Chemical Society will be recognizing outstanding high school chemistry students from high schools in Nassau, Suffolk, and Queens. We are looking for your school's outstanding chemistry student(s). While the committee hopes the student will major in chemistry while in college, it is not a prerequisite. Please nominate the student(s) who you feel have demonstrated a strong interest and who have excelled in the field of chemistry. Please consult with your colleagues and with such selection criteria as you see fit, and complete the nomination form below **by Monday, May 4, 2015**.

http://www.newyorkacs.org/sub_island_awards.php

For awardees able to attend: The ceremony and honorary dinner will be held on **Thursday evening, May 14, 2015** at Nassau Community College, CCB Building, Multi-Purpose Room 1st Floor.

Please plan on arriving by 6:00 PM for check-in. Dinner will begin at 6:30 PM and the program will start at 7:00 PM. Park in general student parking areas. The guest speaker and topic is:

"The Importance of Chemistry in Today's Crime Scene Investigations"

Speaker: Scott J. Kovar
Director of Forensic Sciences
Hofstra University

Each Awardee will receive a certificate mounted on a handsome wood plaque. Our LIACS Chair, Dr. Paul Sideris, will present the plaques following the talk.

The LIACS offers TWO complimentary seats to the awards ceremony, (dinner for one student and one chaperone, usually a parent or teacher, per school). Additional nominated students per school will be charged \$40.00 for their plaque and \$25.00 to attend the dinner. All other additional guests will be charged \$25.00 to attend the dinner. If your school has a permanent academic award trophy case or display, you may purchase a duplicate plaque for \$40.00. If you require additional seats for dinner or additional plaques, please complete the corresponding request forms on the LIACS High School Award website:

http://www.newyorkacs.org/sub_island_awards.php

Any required payment must be paid by no later than May 4, 2015. For your convenience, you can submit payment by Credit Card via PayPal on our website. Alternatively, please send a check made payable to the NYACS Long Island Subsection and mail to: LIACS, c/o Frank Romano, 3280 Sunrise Highway, PMB 293, Wantagh, NY 11793-4024. An early response is appreciated so we can plan for the event.

If you cannot participate this year, we would still appreciate you filling in the Principal, Guidance Counselor, and Teacher information on the nomination form so that we may update our records. In addition to the awards program, the American Chemical Society also sponsors the Chemistry Olympiad, the Nichols Teacher Award (\$1,000 prize), the High School Teacher Topical Group, and an Outstanding Teacher Award.

If there are any questions, please contact the High School Award Chair: Frank Romano frank.romano@agilent.com

Deadline for Nominations and Payment: Monday, May 4, 2015

Date of the

Event: Thursday, May 14, 2015

Times: Check-in – 6:00 PM

Dinner – 6:30 PM

Ceremony – 7:00 PM

Place: Nassau Community College
CCB Building
Multi-Purpose Room 1st Floor

Directions: <http://www.ncc.edu/campuservices/parkingandsafety/mapanddirections.shtml>

Submit photos (remember to include captions and photo credits) for use in *The Indicator* by e-mailing Photos@TheIndicator.org

Call for Applications

FREDDIE AND ADA BROWN AWARD

This Award recognizes and encourages high achieving middle- and high-school students, of African American and Native American heritage, to further develop their academic skills, with views on careers in the chemical sciences

Award Amounts

Middle School \$100.00 Check and \$50.00 gift certificate : High School \$200.00 Check and \$100.00 gift certificate

Who is Eligible

Middle School students enrolled in a science class : High School students who have completed a chemistry course

Grades

Middle School B Average or better in Science, B Average overall : High School B Average in Chemistry, B Average overall

Letter of Recommendation

Math or Science/Chemistry Teachers or Guidance Counselor

Statement

Middle School "Why I Like Science" : High School "Why I Like Chemistry"

Selection Criteria

Applicants must be African American (Black) or Native American (including Pacific Islander) or of mixed race.

Transcript

Official transcript required.

Financial Need

Not Required.

Applications available on the web: www.njacs.org/freddieadabrown or from your school guidance office.

Return Application To

Freddie and Ada Brown Award, NJACS Section Office, 49 Phippen Way, Morristown, NJ 07960

Due Date

Completed Applications must be post-marked no later than **March 31 Annually**

Questions: Contact Jeannette Brown Jebrown@infionline.net or (908) 239-1515

Call for Posters

HUDSON-BERGEN CHEMICAL SOCIETY

The 17th Annual Undergraduate Research Symposium

Students who wish to present posters must send an abstract via e-mail to mleonida@fd.edu, by **April 15, 2015**. 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. The posters have to be self-supported. There is no registration fee. (See article on pages 14-15).

Call for Volunteers

MARM 2016

The New York Section will be hosting MARM 2016, June 9-12, 2016 at the College of Mount Saint Vincent, Riverdale, NY 10471. The section will be celebrating its 125th Anniversary during its event. The theme has yet to be determined. The General Chairs for this meeting are Dr. Pamela Kerrigan and Dr. Daniel Amarante from the College of Mount Saint Vincent's Division of Natural Sciences. To volunteer in planning and/or for further information, please contact them at the following emails:

Pamela.kerrigan@mounstaintvincent.edu

or

Daniel.amarante@mounstaintvincent.edu



National

19th ANNUAL GREEN CHEMISTRY & ENGINEERING CONFERENCE (GC&E)

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As the longest running green chemistry conference in the United States, GC&E invites scientists, decision-makers, students, and advocates coming together, compare findings, and discuss the science of the future. Register today to explore green chemistry and engineering advancements over three days of programming featuring more than 30 technical sessions, poster sessions, a green exhibit hall, and keynote lectures. The program sessions include themes around catalysis, designing safer chemicals, education, green engineering, pharmaceuticals, sustainable products, feedstocks, functional and biobased materials, tools and metrics, energy, synthetic transformations, and biochemistry. A student workshop will be held on Monday, July 13, 2015 at the ACS headquarters and there will be many opportunities to volunteer throughout the conference!

**Date: Monday-Wednesday,
July 14-16, 2015**

Place: Bethesda, MD

Early registration is open until May 29, 2015!

For more information visit gcande.org.

Obituary

MAUREEN G. CHAN



The North Jersey Section mourns the passing of Maureen G. Chan, a member of the ACS since 1966 and a member of the North Jersey Section. She served the NJACS as Councilor for about 22 years, Chair Elect, Chair and Past Chair of the Section from 1985-1987. She was the

Secretary of the Section from 1990-1996. She served on numerous NJACS committees

including Education, Finance, *Indicator*, Program, Nominating, Baekeland Award, Women Chemist Committee and Distinguished Service Award Committee.

She was one of the four women who held an informal meeting over dinner at an ACS National Meeting that decided to combine the North Jersey and New York Section Women Chemists Committees to form the Metro Women Chemists Committee. This was in the 1970's. The Metro Women Chemist Committee does not have a single chair but a coordinator from each Section. Maureen served as Coordinator in 1977.

Maureen also was active in the National American Chemical Society. She served on several ACS committees, among them Education, Economics and Professional Affairs, Committee on Committees, Women Chemists, Garvan Medal Canvassing, Professional Programs Planning and Coordinating, and Capital Campaign Planning. She was chair of the Women Chemists Committee and the MARM Caucus Committee.

She served as Director of the then called District III from 1997 to 2002 and afterwards she served on the Board Committee on Public Affairs and Public Relations, the Grants and Awards and National Historical Chemical Landmarks.

**Memories from Maureen's Pastor,
Fr. Peter J. Krebs, S.T.**

What combination of atoms and matter and grace led to the presence in our world of Maureen Chan? I don't think any of us who knew Maureen would change anything about this woman, other than that she would still be with us. Her personality, her intellect, her leadership, her career in scientific research, her active volunteerism in the American Chemical Society and eventually her heading the Women Chemists Committee combined to give us the woman we celebrate today. We, who were lucky enough to know her, realize the blessing she was to us - such a source of inspiration, hope and love. No marvel of nature quite matches what God has done in creating humanity. For many of us Maureen is proof of that. St. Irenaeus tells us: "the glory of God is a man or woman fully alive." By embracing her humanity, by living in the present, by accepting life and having the intention to make the most of her giftedness, Maureen manifested the glory of God.

We thank you, Maureen, for sharing your journey with us and letting us be your community, sharing in your love of science, family and friends, and the many other ways you continued to expand God's creative activity.

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You can view both of these oppor-
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