

THE Indicator

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NATIONAL CHEMISTRY WEEK



**October 21, 2012 through
October 27, 2012**

See NY Events, page 11.

See NoJ Events, page 19.

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

October Calendar

NEW YORK SECTION

Wednesday, October 3, 2012
Westchester Chemical Society
See pages 7-8 .

Tuesday, October 23, 2012
Biochemical Topical Group
See page 9.

Friday, October 26, 2012
Hudson-Bergen Chemical Society
See page 10.

Friday, October 26, 2012
High School Teachers Topical Group
See page 10.

Saturday, October 27, 2012
National Chemistry Week Celebration
See page 11.

**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
November 2012 issue
of *The Indicator* is
September 20, 2012.**

NORTH JERSEY SECTION

Monday, October 1, 2012
Mass Spectrometry Discussion Group
See page 18.

Tuesday, October 2, 2012
Chromatography Topical Group
See www.cpsa-usa.org.

Tuesday, October 2, 2012
Younger Chemists Committee
See page 22.

Monday, October 8, 2012
Careers in Transition Group
See page 18-19.

Wednesday, October 17, 2012
NoJ Executive Committee Meeting
See page 18.

Saturday, October 20, 2012
National Chemistry Week Celebration
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Saturday, October 20, 2012
Younger Chemists Committee
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Tuesday, October 23, 2012
Laboratory Robotics Interest Group
See page 19-20.

Tuesday, October 23, 2012
Association of Consulting Chemists and
Chemical Engineers
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Wednesday, October 24, 2012
NMR Topical Group
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THIS MONTH IN CHEMICAL HISTORY

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

Russian organic chemists of the nineteenth century tend to be underappreciated by cursory students of chemical history, but their contributions were impressive. A new book: "Early Russian Organic Chemists and Their Legacy" by David E. Lewis of the University of Wisconsin Eau-Claire redresses the balance. In this column I will draw on Professor Lewis's book to describe the career and influence of Aleksandr Mikhailovich Butlerov.

Butlerov was born on September 6, 1828 into a military family, of minor nobility, in Chistopol in what was then the province of Kazan in central Russia. He attended the Gymnasium in Kazan and then Kazan University from 1844 to 1849. Initially a chemistry student who studied with Zinin (see my previous column) and Klaus he turned to entomology when Zinin left for St. Petersburg. Though his first dissertation was on butterflies he was pressed into service instructing chemistry after Zinin's departure. His M. Chem. from Kazan and later his Dr. Chem. dissertation at Moscow were both on historical work and remained unpublished.

After teaching chemistry for a few years he was given leave to broaden his chemical training. He met Kekule and Erlenmeyer, spent 6 months in Wurtz's laboratory in Paris, learned of the work of Gerhardt and Laurent, and eventually abandoned Berzelius' dualistic theories and became a proponent of the new directions in organic chemistry. He returned to Kazan in 1858 and was appointed Professor. He modernized the laboratories and insisted on practical work for chemistry students. The curriculum at Kazan was soon on a par with those in Western Europe and a number of Kazan students including Markovnikov and Zaitsev went on to Professorships at other Russian universities.

Butlerov served two short terms as Rector of Kazan University; tensions between students and his administrations led to those terms being brief. In 1868 he moved to a Chair at St. Petersburg where he remained for the rest of his career.

A structural theory of organic compounds had been proposed independently by Kekule and Couper around 1858, shortly after Butlerov left Paris. Butlerov at first rejected but then became a convert to the new ideas and presented his views at a conference in Germany in 1861. He stressed that each organic compound had a unique structure — a novel idea for the time. He used his views not solely to develop structures for known compounds but also to create synthetic routes to novel compounds. His most striking achievement was to predict the existence of tertiary alcohols; until this time only primary and secondary alcohols had been identified. Butlerov synthesized tertiary butanol by two different routes: reaction between phosgene and dimethyl zinc (a Frankland reagent) ; and reaction between acetyl chloride and dimethyl zinc. The resultant tertiary alcohol resisted mild oxidation, as he had predicted. He then generalized this synthesis of tertiary alcohols from carboxylic acid chlorides and dialkyl zinc reagents.

Butlerov's synthetic work covered a wide range. In Wurtz's laboratory he prepared methylene iodide and hexamethylenetetramine. Work at Kazan included the polymerization of formaldehyde in dilute basic solution to give a mixture of carbohydrates which he called "formose" and which was later shown to contain ribose. This reaction has been invoked by students of prebiotic chemistry as a possible non-biological route to carbohydrates.

Interestingly, despite his observations on the uniqueness of organic structures, studies by Butlerov of alkene polymerization led him to the suggestion that there might be the possibility of dynamic equilibrium between structural isomers, a concept that was later established as tautomerism.

At St. Petersburg Butlerov supported the Russian group in the Academy of Sciences (of which he was a full member) in their disputes with the pro-German group. He resigned his Chair in 1880 and returned to his family estates where he carried on research on atomic weights and pursued his interests in spiritualism and bee-keeping (shades of Sherlock Holmes!). He died on August 17, 1886.

REPORT: 37,400 CLEAN ENERGY JOBS ANNOUNCED IN Q2, BUT PTC THREAT ALREADY SLOWING WIND INDUSTRY

Top 10 Clean Job States: California, Florida and New York Landed Most Clean Energy Jobs in 2nd Quarter; Michigan, Colorado, Ohio, New Jersey, Illinois, Nebraska and Mississippi Rounded Out Biggest-Gaining States.

WASHINGTON, D.C. (August 16, 2012) – As many as 37,409 jobs could be created from the more than 70 major clean energy projects announced across the United States during the second quarter of 2012, according to the latest quarterly Clean Energy Jobs Roundup from Environmental Entrepreneurs (E2), the national group of business leaders who advocate for sound economic and environmental policies.

While noting the major advances made in clean energy employment in the second quarter, the E2 report also shows that the potential end of the Production Tax Credit (PTC) already is putting a damper on the growth in the wind industry.

In the second quarter, E2 tracked 12 wind generation project announcements that are poised to create about 2,300 jobs.

In the first quarter of this year, E2 tracked 31 wind power generation project announcements that would create more than 9,100 jobs.

"The good news is that despite the challenging economic and political environment, the clean energy industry is still creating badly needed American jobs all across the country," said Judith Albert, executive director of Environmental Entrepreneurs.

"The bad news is that the threats to the wind industry because of uncertainty over the Production Tax Credit are very real, and are already taking its toll on job creation in that sector," she said.

According to the E2 report, the top 10 clean energy job states in the second quarter were:

1. California (16 projects announced with 20,879 possible jobs).
2. Florida (3 projects announced with 7,375 possible jobs).
3. New York (3 projects announced with 1,408 possible jobs).
4. Michigan (9 projects announced with 1,319 possible jobs).
5. Colorado (2 projects announced with 1,100 possible jobs).
6. Ohio (4 projects announced with 712 possible jobs).
7. New Jersey (2 projects announced with 600 possible jobs).
8. Illinois (4 projects announced with 542 possible jobs).
9. Nebraska (1 project announced with 500 possible jobs).
10. Mississippi (1 project announced with 426 possible jobs).

Other findings:

- * Clean energy projects were announced in 30 states in the second quarter. Nearly one-third of the announcements were in Midwest states, including Michigan, Ohio, and Illinois.
- * Clean energy projects cross over party lines. A total of 35 clean energy projects were announced in Democratic districts and 31 in Republican districts. Nine projects spanned districts represented by both Democratic and Republican lawmakers.
- * Public transportation, electric vehicle manufacturing and power generation announcements led the clean energy sector for job growth.

For the full text of the E2 report on top states for clean energy jobs in the second quarter of 2012, go to <http://www.e2.org/cleanjobs>.

New York Meetings

www.newyorkacs.org

NEW YORK SECTION BOARD MEETING DATES FOR 2012

The dates for the Board Meetings of the ACS New York Section for 2012 were chosen and approved at the September 2011 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.

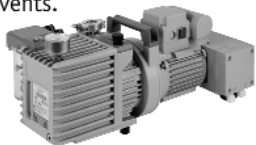
The 2012 Board Meetings will be held on the following Fridays at 6:00 PM at St. Johns University, Writing Center, Jamaica, NY. Dr. JaimeLee lolani Rizzo will chair the meetings.

Friday, November 16, 2012

More information will be posted in future issues of *The Indicator* and on the New York website at <http://www.NewYorkACS.org>.

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WESTCHESTER CHEMICAL SOCIETY

Fall 2012 Schedule — Special Seminars

Arsenic and Human Health

Speaker: Toby Rossman, Ph.D.
Professor of Environmental Medicine
NYU Longone School of Medicine

Arsenic (As) is a ubiquitous element found in the atmosphere, in water, in soils and sediments, and in organisms. Humans are exposed to As compounds coming from both natural and man-made sources. While there is still some concern about acute As toxicity, particularly as a result of occupational exposure to arsines, the major human health concern today is that of chronic low-level exposure to (mainly) inorganic As compounds, especially arsenite [As(III)]. Recently the world has become aware of the enormous disaster in the Bengal Delta Plain, where millions have been exposed to high levels of inorganic As in water from tube wells. High drinking water As levels are also seen in some U.S. communities. High As levels in drinking water are associated with skin, lung, and bladder cancers, as well as some other diseases. Exposure of mice to As(III) alone in drinking water does not cause skin cancers, but enhances the skin tumorigenicity of solar UV irradiation. As compounds do not react with DNA and are not directly mutagenic, but As is a comutagen and causes genomic instability (delayed mutagenesis). Cocarcinogenic mechanisms are probably via effects on DNA repair, DNA methylation, aneuploidy, and signaling changes. As and selenium (Se) are mutually antagonistic. Low (Se) levels may exacerbate effects of As in some parts of the world. Se enhances the biliary excretion of As through formation of a diglutathione compound [(GS)₂AsSe]⁻. A synthetic selenium compound prevented the cocarcinogenesis by As(III). Se may protect via the antioxidant action of selenoproteins, increasing biliary excretion of As, or other effects on As metabolism.

Toby G. Rossman, Ph.D. was tenured Professor of Environmental Medicine at New York University School of Medicine (NYUSOM) until 2009 and is now a part-time Professor and a Toxicology consultant. She got her bachelor's in Biology and Chemistry at Washington Square College (NYU), started graduate studies in Biochemistry at Brandeis University and completed a Ph.D. degree in Basic Medical Science (Microbiology/Biochemistry) from NYUSOM

(continued on page 8)

WESTCHESTER CHEMICAL SOCIETY

(continued from page 7)

(1968). After a Pathology postdoc at NYUSOM, and a position as Associate Research Scientist at the Nelson Institute of Environmental Medicine, she was appointed Assistant (1974), Associate (1978) and Full (1985) Professor of Environmental Medicine. Her research has been continuously funded, mainly by NIH, but also USEPA and non-federal sources. She has published 120 articles, most on metal (particularly arsenic) carcinogenesis and toxicology, was first to report on the comutagenicity of arsenic, and developed the only animal model of arsenic-induced skin cancer. She has served on the Chemical Pathology Study Section (NIH), the National Toxicology Program (NTP) Study Section, the American Cancer Society Study Section (Genetics), the Environmental Health Sciences Review Committee (NIEHS), the NIH Small Business Grants (Genetics) study section, and the Metabolic Pathology Study Section (NIH). She was on the editorial boards of *Environmental and Molecular Mutagenesis*, *Mutation Research*, *Molecular Toxicology*, and *Teratogenesis, Carcinogenesis and Mutagenesis*, and is a reviewer for many other journals and Federal documents. She is a member of the American Chemical Society, Environmental Mutagen Society, Society of Toxicology, and American Association for Cancer Research, serving on many committees and elected positions. She participated in the Workshop "Environmental restoration: Significant basic research needs", U.S. Department of Energy, 1990 and the International Agency for Research in Cancer review of the carcinogenicity of metals, Lyon, France, 1993, 2004, and 2009. She organized and chaired the session on mechanisms of carcinogenesis at the NIH/EPA meeting "Arsenic: Health Effects, Mechanisms of Action, and Research Issues", Baltimore, Sept. 22-24, 1997. She was co-organizer of the First, Second, and Third International Meetings on Molecular Mechanisms of Metal Toxicity and Carcinogenicity. In 2003, she edited a Special Issue of *Mutation Research* devoted to Metals and Carcinogenesis. She was on the Program committee for the 9th Symposium of Metals in Biology and Medicine, Lisbon, 2006 and the Scientific Advisory Board (arsenic) for the USEPA.

Date: Wednesday, October 3, 2012

Times: Refreshments 5:30 PM

Lecture 6:00 PM

Place: Westchester Community College
Gateway Building Room 110
75 Grasslands Road
Valhalla, NY

Cost: Free and open to the public.

For more information, contact Paul Dillon:

E-Mail PaulWDillon2@hotmail.com

Phone 1-914-393-6940

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

Vitamin D: Understanding the Technical Challenges in Testing

Speaker: James Freeman
Director, Assay Development
Siemens Healthcare Diagnostics
Tarrytown, NY

Date: Tuesday, November 6, 2012

The Value Chain – From Basic Chemicals To Commercial Products

Speaker: Anthony Durante, Ph.D.
Assistant Professor
Department of Chemistry
Bronx Community College, Bronx, NY

This talk will discuss the value added to basic chemicals that elevates them to commercially important products. This value-added concept, known as the "value chain", is often used by consultants to understand and discuss the materials, businesses and industries involved in manufacturing these commercial products. Although a value chain attempts to illustrate multiple processes in a simple manner, the underlying science and technology is often rather complex. The beautiful part of a value chain is that it reveals the many links among the scientific, manufacturing and marketing communities needed to successfully bring products to market and value to consumers. I believe this aspect of chemistry is often overlooked in educational and research institutions. I hope to introduce the group to the practical side of the work we are all involved in.

Dr. Durante received a BS in Chemistry from Iona College, a PhD in Organic Chemistry from Fordham University, and an MBA in Business Management from Pace University. He is now an Assistant Professor in the Department of Chemistry at the Bronx Community College of the City University of New York. He brings to the classroom over 30 years of chemical industry background in fundamental research, new product development, R&D leadership, team development, and technical training, along with additional experience in business development, international business, and marketing management. He worked for Chem Systems (a division of Nexant, Inc.), White Plains, NY as Director of Specialty Chemical Consulting; The Turnaround Team, Westfield, NJ as Director of Consulting Services; International Specialty Products, Wayne, NJ as Business Manager of the Solvents and Intermediates Unit; and Union Carbide Corporation, Danbury, CT as Researcher, Group Leader, and Marketing Manager. Dr. Durante has taught environmental science, and general and organic chemistry, among other chemistry courses at Marist College, Mercy College, and Fordham University, and has taught marketing and marketing management courses at Pace University.

Date: Wednesday, December 5, 2012

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



The New Age of Antibody Therapeutics

The New Age of Antibody Therapeutics

- Organizers:** Robert Martone
Covance Biomarker Center of Excellence
- Heather Shih, PhD
Pfizer External Research Solutions
- Mohammad Tabrizi, PhD
Merck Research Laboratory
- Jennifer Henry, PhD
The New York Academy of Sciences

- Speakers:** Anthony Coyle, PhD
Pfizer
- Peter Kiener, DPhil
Zyngenia
- Serge Muyldermans, PhD
Vrije Universiteit Brussel, Belgium
- Carl Nathan, MD
Weill Cornell Medical College
- Mohammad Tabrizi, PhD
Merck Research Laboratory
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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.

There are many monoclonal antibody therapeutics on the market, and myriad development candidates. We review the application of cutting-edge technologies to the development of next-generation antibody therapeutics and address translational challenges.

Date: Tuesday, October 23, 2012

Time: 8:30 AM – 6:00 PM

Place: New York Academy of Sciences
7 World Trade Center
250 Greenwich Street – 40th Floor
New York, NY

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/AntibodyTherapeutics

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A Lecture on the Celebration of National Chemistry Week — “Paved with Good Intentions: Drug Discovery and Nicotinic Acid Receptor”

Speaker: Robert Aslanian, Ph.D.
New Jersey City University

The discovery and development of a new drug is a long, tedious and expensive process. For every compound that makes it through development to market, there are scores that fail despite having excellent pre-clinical scientific rationales. These failures are a major drain on company resources and lead to higher drug costs. An excellent example of this is the nicotinic acid receptor (NAR). The nicotinic acid receptor is a GPCR that was putatively associated with improving serum lipid profiles, primarily increased HDL levels, via binding with nicotinic acid. After the discovery of NAR, most major companies undertook discovery projects with the goal of identifying small molecule NAR agonists. Several compounds reached the clinic, but all have apparently failed the primary endpoint of raising HDL. This presentation will discuss the early stages of the drug discovery and development process using the nicotinic acid receptor as an example of good science that has yet to lead to a product.

Robert Aslanian, Ph.D. is an assistant professor of chemistry at New Jersey City University. Formerly, Professor Aslanian was Senior Director of Medicinal Chemistry with the Schering Plough Research Institute and Merck Research Laboratories where he led discovery efforts in a number of different therapy areas. Professor Aslanian has over twenty-five years of experience in the pharmaceutical industry and is co-inventor on thirty-eight U.S. patents and coauthor on sixty-seven scientific articles and reviews. Professor Aslanian is also co-editor of the book *Case Studies in Modern Drug Discovery and Development*.

Date: Friday, October 26, 2012

Times: Social 5:30 PM
Dinner 6:00 PM
Lecture 7:00 PM

Place: Dickinson Hall Café
Fairleigh Dickinson University
Teaneck, NJ

Cost: \$20.00 for dinner (\$10.00 for the students)

Reservations: Dr. Mihaela Leonida (201)

692-2338, e-mail: mleonida@fdu.edu by
October 19, 2012.



**HIGH SCHOOL TEACHERS
TOPICAL GROUP**

Raising the Level of the Bayonne Bridge

Speaker: Dennis Stabile
Port Authority of New York and
New Jersey

The Bayonne Bridge, an historical civic engineering landmark, is the fourth longest steel arch bridge in the world and was the longest in the world at the time of its completion in 1931. It connects Bayonne, NJ, with Staten Island, NY, spanning the Kill Van Kull. The primary purpose of the bridge is to allow vehicular traffic from Staten Island to reach Manhattan via the Holland Tunnel. Today, the 151-foot air draft restriction beneath the Bayonne Bridge is an obstacle for larger ships doing business with marine terminals west of the Bridge. As a result, in December 2010, the Port Authority announced the "Raise the Roadway" alternative to provide the most effective solution to the Bayonne Bridge clearance issue — raising the bridge's roadway to approximately 215 feet to increase the existing 151-foot navigational clearance restrictions. The 64 feet of additional air draft will allow the Port of New York and New Jersey to benefit from the increased deployment of larger, operationally efficient and environmentally beneficial vessels.

Date: Friday, October 26, 2012

Time: Social and Dinner — 5:45 PM

Place: M&G Pub (Murphy and Gonzales)
21 Waverly Place
(at Green St., 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 walk from the garage to the restaurant or meeting room.

NATIONAL CHEMISTRY WEEK

Nanotechnology: The Smallest BIG Idea in Science!

Come and join us in the fun as the New York Section of the American Chemical Society celebrates National Chemistry Week!

This day-long event will showcase chemistry principles using demonstrations performed by local college students and volunteers from local industries for children of all ages. This year's theme is "Nanotechnology: The smallest BIG idea in science!" All are welcome!

Date: Saturday, October 27, 2012

Place: New York Hall of Science
Flushing, Queens, NY

For more details, direction, and to see photos from last year's fun, please visit our website. Hope to see you all there!

http://www.newyorkacs.org/meetings/NCW/2012_ncw.php



NEW YORK SECTION 2013 ELECTION RESULTS

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The New York Section extends a sincere thank you to all of the candidates. Your time, efforts and dedication are greatly appreciated.

DR. RICHARD EISENBERG IS THE WILLIAM H. NICHOLS MEDALIST FOR 2013

The New York Section is pleased to announce that the Nichols Jury chose Dr. Richard Eisenberg to be the William H. Nichols Medalist for 2013. Dr. Eisenberg is Professor (Research) and the Tracy H. Harris Professor of Chemistry Emeritus at the University of Rochester. The Nichols Distinguished Symposium and Medal Award Dinner will be held on Friday, March 15, 2013 at the Crowne Plaza Hotel, 66 Hale Avenue, White Plains, NY.

The Distinguished Symposium will feature internationally known chemists – Dr. Clifford P. Kubiak (University of California, San Diego), Dr. Marcetta Y. Darensbourg (Texas A&M University), Dr. William D. Jones (Rochester University) along with Medalist Dr. Eisenberg. Dr. Harry B. Gray of the California Institute of Technology will introduce the Medalist.

Dr. Pamela K. Kerrigan, Chair-elect of the New York Section in 2013, will conduct the Distinguished Symposium, and Dr. Philip H. Mark, Chair of the New York Section in 2013, will present the Nichols Medal Award to Dr. Eisenberg at the dinner that follows.

The entire program and reservation form will appear in the January, February and March *Indicators* and on the New York Section website at <http://www.NewYorkACS.org>



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.

CHEMICAL MARKETING AND ECONOMICS GROUP (CM&E)

Business Group of the American Chemical Society NY Section Celebrated 58 Years of Service Giving Awards to Brilliant Leaders

The Chemical Marketing and Economics Group (CM&E) recently announced that on **December 6, 2012**, it will present its inaugural Awards for Leadership at the New York Yale Club. The honorees are:

- Juan Pablo del Valle, Chairman of Mexichem, for outstanding global growth
- Peter McCausland, Chairman and CEO of Airgas, for a lifetime of achievement
- John Televantos, Partner at Arsenal Capital, for distinction in private equity

The Awards for Leadership have been established by CM&E, a topical group of the American Chemical Society's New York Section (ACS NY), to honor individuals for extraordinary contributions in the chemical industry. The CM&E awards have been endorsed by ACS, the largest scientific society in the world with over 160,000 members.

"Among ACS' firmament of stars, the Chemical Marketing & Economics group of ACS New York Section shines with unique clarity on the confluence of technology, business and investment where society harnesses the transforming power of chemistry. Congratulations to CM&E for instituting the Award for Leadership during the 12-6-12 celebration of the group's 58th Anniversary!" said Madeleine Jacobs, Executive Director and Chief Executive Officer at the ACS.

Prior to these awards, ACS NY's illustrious history has been kindled by the Nichols Medal established in 1903 for scientific discoveries. Since then, 108 scientists have received the medal, and 16 of them eventually became Nobel Prize winners in Chemistry. This year the CM&E Board identified a pool of nominees with exceptional credentials to match the high selectivity hallmark of ACS NY Section.

Juan Pablo del Valle, Chairman of Mexichem, for outstanding global growth.

Juan Pablo del Valle has been a visionary leader. In 2003, Mexichem was a Mexican domestic company with annual sales over USD258 million. The company has exhibited remarkable growth becoming a world-class enterprise with operations in 42 countries in the Americas, Europe, and Asia. Between 2003 and 2011, sales had multiplied 15 times to USD3.8 billion; EBITDA had grown 20-fold to USD840 million; and its market

value had increased 42 times. In addition, under Mr. Del Valle's leadership the company concluded 75 acquisitions, including Ineos Fluor in 2010 and Wavin in 2012.

"Mr. del Valle's record in building value through bold acquisitions while fostering a tenacious culture that goes further to serve customers is truly impressive," said Mr. George Rodriguez, Chairman of CM&E, Board member of ACS NY Section and Director at Argeni. "In addition, his championing of corporate social responsibility, large low income housing projects and key non-profit associations are emblematic of the qualities that CM&E seeks in a leader."

"It is an honor to receive this CM&E award that I will share with all employees at Mexichem and the Kaluz Group," Mr. del Valle said. "CM&E meetings provide fantastic cross-sector insights on relevant industry topics that I have found useful in shaping global strategies. Congratulations to CM&E for dedicating almost six decades of service to its members."

Peter McCausland, Chairman and CEO of Airgas, for a lifetime of achievement.

Mr. McCausland founded Airgas (NYSE: ARG) in 1982 with the purchase of Connecticut Oxygen, an industrial gas distributor with approximately \$3 million in sales. Through strategic growth initiatives and over 400 acquisitions in 30 years, McCausland has led Airgas to become one of the premier industrial gas companies in the U.S., with sales of more than \$4.7 billion in its most recent fiscal year. Since its IPO in 1986, Airgas has delivered a total return to shareholders that is among the highest in the S&P 500 Index.

"Few people can found a company, help propel it for three decades and turn it into a consistent top performer in its class," Mr. Rodriguez noted. "Mr. McCausland is a pioneer who has remained undaunted when faced with challenging market shifts. His passion for creating an environment focused on customers, strengthening operational efficiencies and helping society through his foundation constitutes an exemplary pillar for the chemical industry."

"The CM&E group of the American Chemical Society New York Section provides a strong foundation for professional networking and science education, which is fundamental for future generations," Mr. McCausland said. "I am honored to receive this lifetime achievement award and would like to express my profound gratitude to the CM&E group for this recognition and to the more than 15,000 Airgas associates who work tirelessly to

bring value to our customers every day.”

John Televantos, Partner at Arsenal Capital, for distinction in private equity.

Since 2006, Dr. Televantos has been with Arsenal Capital Partners where he serves as co-head of the Specialty Industrial practice of the firm with a focus on Specialty Chemicals and Materials. During his tenure with Arsenal he has been part of the acquisitions of Fluoro-Seal, Royal Adhesives & Sealants, Evonik's Colorants business, and the acquisition and subsequent divestiture to BASF of Novolyte Technologies. Prior to Arsenal, Dr. Televantos was President of Aqualon Company, owned by Hercules Incorporated, President and Founder of Helios Chemical Company, and Chief Executive Officer for Foamex International.

“Dr. Televantos' central role in Arsenal's top deal-making team and his distinguished record as a CEO make him an icon in Specialty Chemicals M&A,” Mr. Rodriguez noted. “His insights and eloquence were enthusiastically received by our members when he was a panelist of our M&A Luncheon in 2011. CM&E is proud to recognize a most prolific leader.”

“I am honored to receive the CM&E award for leadership in the field that is most dear to me,” Dr. Televantos said. “I have been impressed by the stimulating networking, actionable insights and the splendid quality of the meetings organized by this topical group of the American Chemical Society dedicated to business and investments and by its unwavering support for science education.”

The American Chemistry Council, the Chemists' Club, Société de Chimie Industrielle, SOCMA and the New York Biotechnology Association will help promote the 12-6-12 CM&E award presentation and M&A event. Funds raised will help bolster ACS scholarships, National Chemistry Week (K-12) and other science education programs. For more information about CM&E awards, events and sponsorships, please go to www.cmeacs.org.

* * * * *

CM&E organizes monthly luncheons in New York City where business and investment leaders share their insights on energy, materials and life science (www.cmeacs.org). The group was established in 1954 by an ACS NY steering committee that included Vick Chemical Company (now part of P&G), Allied Chemical and Dye (now Honeywell), Celanese Corporation, The Oil, Paint and Drug Reporter (now ICIS), and American Cyanamid (now part of BASF, Pfizer and Cytec). The inaugural speaker was the pres-

ident of Carbide and Carbon Chemicals Company (now part of Dow Chemical). The American Chemical Society (ACS) is the world's largest scientific society with over 160,000 members. ACS is one of the leading sources of authoritative information with 39 scientific journals and a registry of 67 million inorganic and organic substances. A nonprofit organization established in 1876 and chartered by the U. S. Congress, ACS is at the forefront of the evolving worldwide chemical enterprise and the premier professional home for chemists, chemical engineers and related professions around the globe.

Airgas, Inc. (NYSE: ARG), through its subsidiaries, is the largest U.S. distributor of industrial, medical and specialty gases, and hardgoods, such as welding equipment and supplies. Airgas is also a leading U.S. producer of atmospheric gases, carbon dioxide, dry ice, and nitrous oxide, one of the largest U.S. distributors of safety products, and a leading U.S. distributor of refrigerants, ammonia products, and process chemicals.

Arsenal Capital Partners is a progressive private equity firm that invests in middle-market companies with revenues ranging from \$30 to \$400 million. Our philosophy is to partner with talented management teams, provide them with access to world-class operating resources and patient capital, and develop positive, open and constructive relationships that foster long-term value creation.

Mexichem is a leader in plastic pipe systems and in the chemical and petrochemical industry in Latin America, with more than 50 years of experience in the region and 33 years on the Mexican Stock Exchange with a market capitalisation of approximately USD\$8.2 billion. Mexichem, which exports to more than 50 countries, and has presence in Latin America, North America, Europe and Asia. In 2012 Mexichem estimates an annual turnover of approximately USD\$5.6 billion and EBITDA of approximately USD\$1,120 million. With more than 16,000 employees throughout virtually the entire American continent, UK and Japan, the company has the largest fluorspar mine in the world and is the only fully integrated coolant gas producer in America. It is also the largest producer of PVC resin in Latin America and contributes actively to the development of the countries through products that have a wide market in the most dynamic growth sectors including construction, housing, drinking water, and urban sewage in Mexico, the United States, UK, Japan and Latin America. More details about Mexichem can be found at www.mexichem.com.

BROOKHAVEN NATIONAL LABORATORY

ACS NY Section Designates Chemistry Building at Brookhaven National Lab an Historic Chemical Landmark

Organized by: Committee on the History of the ACS New York Section

Speakers: Louis Sokoloff, M.D.
Laboratory of Cerebral Metabolism, NIMH

Abass Alavi, M.D.
Chief, Division of Nuclear Medicine, University of Pennsylvania Hospital

Mony J. DeLeon, Ed.D.,
Department of Psychiatry
NYU Medical Center

Nora D. Volkow, M.D.
Director, NIDA.

On Friday, October 19, the New York Section of the American Chemical Society will designate the Chemistry Building at Brookhaven National Laboratory an Historic Chemical Landmark commemorating the synthesis of 2-deoxy-2-[^{18}F]fluoro-D-glucose (^{18}F FDG) in 1976 by chemists in the

Chemistry Department of Brookhaven National Laboratory. ^{18}F FDG is now the standard radiotracer used for positron emission tomography (PET) neuroimaging and cancer diagnosis, with more than 1.5 million ^{18}F FDG PET scans performed annually.

Public activities will include a Laboratory celebration, presentation of a plaque and a brief scientific symposium recalling the development and use of ^{18}F FDG and the accomplishments of the people who developed the compound and the techniques.

Date: Friday, October 19, 2012

Time: 9:00 AM – 12 Noon

Place: Brookhaven National Laboratory
Chemistry Dept. (Building 555)
William Floyd Parkway
County Road 46
Upton NY.

Located 1-1/2 miles north of Exit 68 of the Long Island Expressway.

Note: Free parking is easily available. This Laboratory event is open to the public. All visitors to the Laboratory age 16 and over must bring a photo ID.

For more information, contact Linda Sallustio (lsallust@bnl.gov) (631) 344-4303. Detailed driving directions may be obtained from <http://www.bnl.gov>.



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44TH INTERNATIONAL CHEMISTRY OLYMPIAD

Regis High School Student Brings Home Gold from Olympics of the Mind



Chris Hillenbrand

Christopher Hillenbrand, a rising sophomore at Regis High School in New York City, earned a gold medal at the 44th International Chemistry Olympiad (IChO). Hillenbrand, 15, was the youngest member of one of the youngest U.S. teams ever sent to the event. His three teammates also earned high scores,

each receiving a silver medal.

The U.S. students competed with teams from more than 70 countries, July 21-30, at the University of Maryland, College Park, which marked only the second time ever that the event was held in the United States. During these 10 days of exams, laboratory work, athletics and sightseeing, the students had a chance to compete at the highest levels and establish networks that go beyond cultures and borders.

The Dow Chemical Company was sole sponsor of the IChO, and the American Chemical Society was the official organizer.

Chris' interest in chemistry started at age five when his father bought him a chemistry book (that he still has). "The interest in chemistry never went away, unlike some of my other transient interests," says Chris. What he liked best about the experience was to be able to "talk about a subject I love" with other kids who share the same passion. "Maybe one day we'll publish papers together," he added.

"We are proud of all the students who participated in the Olympiad," said ACS President Bassam Z. Shakhshiri, Ph.D. "But it's not what these students did here, or how many medals they are bringing home that's so compelling. Rather it's who they are and what they'll be doing down the road that sets them apart. It's their drive to be creative problem solvers and innovators, to push the limits of knowledge that warrants our notice and appreciation. In a few years I

fully expect they will be finding solutions to the most vexing global challenges we face today — things like adequate clean water and safe food for the world's population, renewable energy, safeguards for our environment and cures for debilitating disease of all kinds. That's the promise of chemistry, and these young people clearly are poised to put it to work."

Joan B. Coyle
Society Communications I
Office of Public Affairs
American Chemical Society

* * * * *

I have been the coordinator of the Olympiad for the New York Section since 1999 and this year for the first time since then one of our students, Christopher Hillenbrand, a high school freshman, was selected to be a member of the U.S. national team. Christopher won a gold medal, and I thought it might be of interest to readers of "The Indicator" to hear from Christopher in his own words. So I sent him a number of questions and what follows are his responses exactly as he wrote them.

— Stephen Z. Goldberg
Olympiad Coordinator, NY-ACS

How did you get interested in chemistry and how did you learn so much so early in your life?

Start of adventure: when I was five, a friend named Anthony gave me a science book containing basic information about biology, chemistry, and physics. My dad saw that I spent much time reading the chemistry section, so he bought me *Chemistry for Dummies*. The book kept me interested for a while, but not for too long. Later, I was given another chemistry book, *The Extraordinary Chemistry of Ordinary Things* by Carl Snyder, which I enjoyed even more. When I was about 8, I was allowed to use the computer. I read Wikipedia's articles on plants, horticulture, physics, and chemistry for fun. I think that I learned most of my chemistry knowledge this way. I also had "waves" of obsession in different subjects; these lasted from a few weeks to a few months and were frequently in chemistry or electronics. In sixth grade, I was allowed to take chemistry in school. One of our first assignments was to read *Uncle Tungsten: Memories of a Chemical Boyhood* by Oliver Sacks and to write an essay in response to it. Something in it transformed me irreversibly. His vivid portrayal of his boyhood chemistry adven-

(continued on page 16)

CHEMISTRY OLYMPIAD

(continued from page 15)

tures in his home lab (converted from a washroom) and the intricate laboratory apparatus, opened up an enchanting, addicting new world for me: DIY (Do It Yourself) science. (After sixth grade, about half of my "obsession-waves" concerned chemistry.) My teacher, Mr. Marionni, also allowed me to do my own experiments under his supervision. At home, I would read about random chemical topics and pick the experiment I liked the most. We made a silver mirror, destroyed pieces of candy with molten KClO_3 , isolated iodine, and observed the luminescence of luminol. At the end of eighth grade, I finally decided that I liked chemistry more than anything else. After a quagmire of youthful indecision and delay I was finally able to order supplies and chemicals, and build and put together my home laboratory in the back porch. This allowed me to do the vital experiments in the areas of chemistry I was interested in exploring. So far, it has again been a lot of fun. Before IChO, I made some salicylic acid from aspirin, in order to make a little phenol. This is the cheapest way I can get phenol (ironically, since aspirin itself is made industrially from phenol), but making it this way is also educational - I found an interesting patent on decarboxylation. For the reaction, you only need a dash of hydrated lime as a catalyst.

Without pressure from school, I find that learning at home is enormously exciting — I can research any topic I want! With the help of the internet and inexpensive books, I can access almost any information source I need. An added bonus is the lack of mandatory homework.

Tell us a little bit about your experiences at the USNCO Study Camp.

USNCO camp was the best summer activity I ever attended. It was intense; a lot of material was crammed into quite a short course. The lecturers and mentors were excellent in what they did. It was quite an experience to learn so much at such a rapid pace; at the end of every lesson, I always wanted to be taught more. There were 1.5-hour "quizzes" at least every other day. We were in the lab for 4 hours almost every day of camp. I thought I had done quite badly on the assessments when I saw the marking (perhaps fewer points were deducted than what I thought?) From the point of knowledge, I think the camp prepared me well for IChO.

The best part of camp was getting to know everybody. I think it would be fair to say that

most of us never really had the opportunity to discuss chemistry seriously with students our age. I could finally say out loud the most random things that came into my head. However, we didn't only discuss chemistry. We talked about our lives at home, our aspirations, and our opinions on random topics. I learned valuable things about life from the discussions.

Tell us a little bit about your experiences at the Olympiad event in Washington.

After a drive from my home in NJ, I found myself surrounded by a crowd of chemistry students from all around the world at a luxurious opening ceremony. Although it was not the London Olympics, I could sense that everyone had worked very hard to get there. It was easy to tell that they were all excited for the coming week, which was tightly packed with excursions and activities. Shortly after the ceremony, I met a student from Israel whom I had spoken with (on a forum for amateur chemistry). While we discussed chemistry, I realized how a common passion for any subject could draw people together and create friendship. (I also found out that people usually look completely different from preconceived mental images).

I felt proud representing the US and was motivated to do my best. I had been studying for a while and felt prepared; however, the most stressful part of the ten days was the actual competition. On Tuesday, we took the practical exam. I took part B first, and I did not enjoy it. We had to synthesize the ugliest, slimiest slurry I have ever seen, and then dry it. My product would not fit on the tiny funnel we were given since it was so voluminous. I emptied the flask's congealed contents onto a piece of filter paper and used Kimwipes to remove the water through the bottom of the paper. When I finished, there was a large pile of wet, brown tissue on my bench, and a disgusting mess in my fume hood. I would like to apologize to whoever cleaned it up (we were dismissed before I could finish cleaning). Luckily for me, the theoretical exam and part A of the practical were not so disastrous. The remainder of exams quickly passed, and we were able to enjoy the activities without worry.

In contrast, the best part of the trip was slightly harder for me to identify; there were so many incredible experiences I had. One fond memory in particular was the trip to Kings Dominion amusement park. We joined Team Japan and Team Norway in riding all the roller-coasters. Visiting Dave & Buster's arcade was another highlight. We also visited a museum which contained an extensive mineral collection. That was fun because

some of the minerals had been in previous exam questions (cassiterite and sphalerite!!!). We also toured NASA's Goddard Space Flight Center and the US Naval Academy.

The most rewarding part of the competition was interacting with the other competitors. It helped me realize that I have come a long way since my hesitant middle school experiments. It was a heady experience; I established the foundation of a network that will allow me to exchange crazy chemistry ideas and experiments with my peers, and perhaps to collaborate on future research and papers together. To a future chemist, all this is invaluable.

I very much appreciate those who made USNCO, the Colorado study camp, and IChO possible. The whole competition has given me a summer filled with experiences that I will never forget because it has been so unique. If allowed, I would certainly go again next year to Moscow.

What are your ambitions for the future?

For the time being, I will do my best in all my academics and I will not focus so much on

chemistry. I will, however, work on a science project, at least during sophomore year. I will also try to learn more in mathematics, computer science, and physics.

I also hope that I will be able to use sophisticated equipment similar to that which I saw at USAFA, like NMR spectrometers and X-ray diffractometers. Some day, I also want to be able to perform the exotic experiments that are described in textbooks but require extreme conditions that cannot be achieved in a high school lab. I'm a bit frustrated that most research in chemistry requires materials that I cannot access

At this stage, I am not yet sure of what I want to do with my life. I want to go to college, but I must decide whether to pursue chemistry or electrical engineering. For sure, I'll tinker with electronics and chemistry in my free time, regardless of my career path. I am also keen to discover or invent something productive and of human value for society. My grandfather used to say that if I were to work in an area I really enjoy, it would never seem like work. So in a way, I'll never have to get a job. I'll always get up in the morning eager to start work.

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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.

For the details, time and location, check the website <http://www.njacs.org>

Executive Committee members must pre-register for the meeting if you plan to attend the dinner and that can be done through the Topical Group's website <http://www.njacs.org/>

Date: Wednesday, October 17, 2012

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.



MASS SPECTROMETRY DISCUSSION GROUP — JOINT MEETING WITH FRONTAGE LABORATORIES

Pharmaceutical Sciences Workshop — Focus on Biomarker, CPSA2012

Moderators: Ron Kong, PhD
and
Fangbiao Li, PhD

With the advancement of new technologies, molecular biomarker becomes one of the most important aspects in the pharmaceutical development. Biomarkers can give an indication of the probable effect of treatment on patients or the extent of disease stage. Biomarker is frequently used as a surrogate endpoint for evaluating efficacy and safety in early drug development studies, safety studies, and clinical development. This workshop focuses on the application of analytical technologies and methodologies in the identification and validation of molecular biomarkers during the drug development.

“Biomarker Development and Validation — Our Practices and Experiences”

Shawn Li, PhD

Director, Biologics Services
Frontage Laboratories, Inc.

“Biomarkers Utilization in Early Stage Development”

Omar F. Laterza, PhD, DABCC

Director

Immunoassays and Mass Spectrometry
Clinical Development Laboratory
Merck Research Laboratories

“Using Physiologically-based PK/PD Modeling to Impact Drug Development Decision Making”

Emile Chen, PhD

Director

Drug Metabolism and Pharmacokinetics,
Modeling and Translational Biology
GlaxoSmithKline

“Innovative Biomarker Assay for the Quantitation of D3 Creatinine and Creatinine Using LC-MS/MS”

Michael Leonard, PhD

Investigator

PTS-DMPK-BST
GlaxoSmithKline

Date: Monday, October 1, 2012

Times: 12:00 noon - 4:00 PM

Place: Sheraton Bucks County Hotel
400 Oxford Valley Road
Langhorne, PA

Cost: Free of charge, compliments of our sponsor!

Please REGISTER at www.njacs.org



CAREERS IN TRANSITION MEETINGS

Job Hunting??

We 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

Dates: Monday, October 8, 2012

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 bill-suits@earthlink.net.

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



NORTH JERSEY CHROMATOGRAPHY GROUP

Please mark your calendars for our upcoming NJCG events for 2012:

Tuesday, October 2, 2012

Evening Seminar in conjunction with CPSA, in Langhorne, PA. See www.cpsa-usa.org.

Monday, November 12, 2012

Evening Seminar at the Crown Plaza, in Somerset, NJ (EAS week)

Please check our website: www.NJCG.org for more information on specific events.



NORTH JERSEY YOUNGER CHEMISTS COMMITTEE

National Chemistry Week

The YCC is excited to be take part in this opportunity to reach out to children, teens, and adults alike to show that Science can be fun! This is the fourth consecutive year that the YCC will participate in this event and we hope to help make it even bigger and better than the last. This year's theme is "Nanotechnology: the Smallest Big in Science".

If you are interested in joining the YCC planning committee or volunteering the day of the event please let us know by signing up on our website at <http://www.njacs.org/ycc> or http://groups.google.com/group/ycc_njacs

Volunteers are asked to donate 2 hours of their time (10:00 AM -12:00 Noon or 12:00 Noon - 2:00 PM) and in exchange are invited to spend the rest of the day enjoying the Liberty Science Center free of charge.

In 2011, National Chemistry Week atten-

dees (and volunteers!) were delighted with activities such as Glitter Slime, Sweet Measurements, Paper Cover-up, and Sniffing out good taste. Help us make 2012 even more memorable!

- Glitter Slime: Demonstrates the Importance of Mucus to the human immune system
- Sweet Measurements: Demonstrates the Importance Nutrition: Visual Representation of how much sugar is in common food products
- Paper Cover-up: Demonstrates how wax protects your food and other surfaces from water, etc.
- Sniffing out good taste: Demonstrates the importance of sense of smell when eating and how it affects taste of food
- Vacuum Packing People: Demonstrates the removal of oxygen from food extending the storage quality of preserved foods.

Date: Saturday, October 20, 2012

Times: 10:00 AM - 2:00 PM

Place: Liberty Science Center
Jersey City, NJ



LABORATORY ROBOTICS INTEREST GROUP – MID ATLANTIC CHAPTER

Annual Informatics Meeting, Mobile Devices in the Laboratory

An exciting technical program is planned

“Writing iOSX applications – Mono Touch – a cross platform .Net environment targeting Apple and Droid mobile devices”

Speaker: Chris Boraski

Title to be announced

Speaker: Richard Patterson
National Instruments,

For meeting information contact William Neil at william.neil@bms.com

Date: Tuesday October 23, 2012

Times: The meeting will take place in the evening but at press time, the start time for the meeting has not been set. Please check the chapter web site for meeting times and menu details.

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LABORATORY ROBOTICS INTEREST GROUP

(continued from page 19)

Place: Somerset Crowne Plaza
110 Davidson Avenue
Somerset, NJ
Cost: There is no charge to attend LRIG
meetings.

http://www.lab-robotics.org/mid_atlantic

The Mid Atlantic Chapter is once again holding a winter meeting the theme of which will be **Lab Automation - The View From the Bench**. Working scientists and automation end-users are encouraged to discuss their work and ongoing projects. The meeting is tentatively scheduled for late January 2013. Persons interested in presenting at this meeting should contact Kevin Olsen at OlsenK@Mail.Montclair.Edu



ASSOCIATION OF CONSULTING CHEMISTS AND CHEMICAL ENGINEERS, INC.

Update and Annual Meeting Notice

ACC&CE was founded in 1928 by a group of distinguished chemists who felt an acute need for an association that would advance the practice of consulting chemists and chemical engineers and which would include consultants who would conform to the highest principles of professional conduct. It continues in the same vein to this very day and consistently attracts to its membership qualified technical consultants of all kinds who assist their clients in creating and using chemical knowledge and technology.

The organization is run by a Council composed of Directors and an Executive Committee according to a Constitution & By-laws written by the founding fathers and modified during the intervening years. A central office, originally based in The Chemists' Club in NYC, and currently situated in Murray Hill, NJ, is the center of operations.

New member applications are evaluated by the Membership Committee and if considered appropriate, are recommended to Council for approval. There are periodic Council Meetings held throughout the year, networking is encouraged, and many are fol-

lowed by a speaker presentation on novel technology or consulting developments.

ACC&CE's primary mission is to secure consulting work for the membership, provide mentoring to the younger, newer members, and maintain a close-knit membership to share its knowledge, as needed, to solve the knotty problems common to consultants.

One of the unique features that has always set it apart from many other such organizations, is the transparency of its membership. Until the advent of the Internet, a periodic paperback (Consulting Services) comprising the Scope Sheets of the individual members along with a Classifier enabled potential clients to sort through the available specialties and locate specific consultants. The central office was always available to provide specific direction as needed.

Similar characteristics, including an online search feature, are now embodied in the ACC&CE website, <http://www.chemconsult.org/>; email: accce@chemconsult.org; address: ACC&CE, PO Box 902, Murray Hill, NJ 07974-0902, voice/fax: (908) 464-3182. These can be used to learn more about the association, apply for membership, and/or request gratis copies of its e-newsletter, "The Chemical Consultant".

The September 27, 2012 meeting was held at Snuffy's Restaurant, Park & Mountain Aves, Route 22 East, Scotch Plains, NJ. Following dinner, the speaker was Rick Smith, Director of Licensing & Commercialization, Physical Sciences and Engineering, Office of Technology Commercialization, Rutgers, The State University of New Jersey.

The Annual Meeting will be held at the same location on October 23, 2012, where anyone is invited to meet the members and learn about the association's activities from current president, Joseph Porcelli. Reservations as above.

Date: Tuesday, October 23, 2012

Times: Annual Meeting 4:00 PM
Cocktails 6:00 PM
Dinner 6:30 PM
Speaker 7:45 PM

Place: Snuffy's Restaurant
Park & Mountain Avenues
Route 22 East
Scotch Plains, NJ

Cost: Members \$30; nonmembers \$35

NMR TOPICAL GROUP**NMR Spectroscopy 2012 Symposium:
"NMR in Biomedical Research"****"Improved Technologies for Protein
Structure Determination by Solution
NMR"**

Speaker: Professor Gaetano Montelione
Jerome and Loraine Aresty Chair
Center for Advanced Biotech-
nology and Medicine and
Department of Molecular Biology
and Biochemistry
Rutgers, The State University of
New Jersey

**"NMR Approaches to the Structure and
Dynamics of Glycoproteins"**

Speaker: Professor James Prestegard
Professor of Chemistry and
Biochemistry
University of Georgia

**"To Isolate or Not? The Sometimes
Circuitous Route to the Characterization
of Impurities and Degradation Products"**

Speaker: Dr. Gary Martin
Distinguished Fellow
Merck Research Labs

**"pH-Triggered, Activated State
Conformations of the Influenza
Hemagglutinin Fusion Peptide Probed
by NMR"**

Speaker: Dr. Ad Bax
Chief, Biophysical NMR
Spectroscopy, NIH

Date: Wednesday, October 24, 2012

Times: 1.00 – 5.30 PM

Place: Fiber Optics Auditorium
Rutgers University, Busch Campus
Piscataway, NJ

Register online at
<http://www.njacs.org/nmr.html>

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Registration is **FREE**. Space is limited.
Register in advance to secure your seat.

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<http://rucss.rutgers.edu/~aleslie/map.html>

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2012 Co-Chairs

Charles Pathirana
Luciano Mueller

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**AGENDA**

1.00 PM

Opening remarks

1.05 – 2.05 PM

Professor Gaetano Montelione

Jerome and Loraine Aresty Chair
Center for Advanced Biotechnology and Medicine
and Department of Molecular Biology and
Biochemistry

Rutgers, The State University of New Jersey

**"Improved Technologies for Protein
Structure Determination by Solution
NMR"**

2.05 – 3.05 PM

Professor James Prestegard

Professor of Chemistry and Biochemistry
University of Georgia

**"NMR Approaches to the Structure and
Dynamics of Glycoproteins"**

3.05 – 3.30 PM

Break

Refreshments will be served

3.30 – 4.30 PM

Dr. Gary Martin

Distinguished Fellow, Merck Research Labs

**"To Isolate or Not? The Sometimes
Circuitous Route to the
Characterization of Impurities and
Degradation Products"**

4.30 – 5.30 PM

Dr. Ad Bax

Chief, Biophysical NMR Spectroscopy, NIH

**"pH-Triggered, Activated State
Conformations of the Influenza
Hemagglutinin Fusion Peptide Probed
by NMR"**

NORTH JERSEY YOUNGER CHEMISTS COMMITTEE

Get Involved — Mark Your Calendars for Our Fall YCC Events:

Career Webinar at Rutgers, New Brunswick

ACS webinars will broadcast a webinar entitled "Secrets from the Other Side—What Recruiters Know that You Don't" by Dr. Dennis Guthrie of The Dow Chemical Company. This webinar details how to prepare and interview for your first job out of school. There will also be the opportunity to ask Dr. Guthrie questions after the webinar. Registration and more details available on our website: <http://www.njacs.org/ycc/index.html>.

Date: Tuesday, October 2, 2012

Time: 8:00 PM

Place: Rutgers University
New Brunswick, NJ

Trivia Night

We had a very successful Trivia night earlier this year, and hoped to recruit more members by holding one over the summer when we usually have fewer events.

The evening began with a social hour encouraging attendees to mingle and interact with each other over a game of pool or a piece of pizza. Members from our executive committee made themselves available to give attendees information on resume assistance, job placements, mentoring and upcoming events.

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

The evening ended with an opportunity to continue discussion while competing in the Fox and Hound's Wednesday night trivia competition. Our team the "Isotopes" won 3rd place!

We would like to thank everyone, especially the new members, who attended the second NJYCC trivia night at the Fox and Hound in Edison, NJ.

More happy hours coming soon...

About us:

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

We have been revamping and reinvigorating the club in the last few years and have a host of new and exciting activities planned for this year.

So what can you do?

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

For more information about our group or upcoming events please visit us on the YCC Google group, and post your questions: http://groups.google.com/group/ycc_njacs

One of us will get back to you shortly.

Or check us out on the National ACS YCC site: <http://membership.acs.org/Y/YCC/>

Membership is free.

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NORTH JERSEY ORGANIC TOPICAL GROUP

The Award for Creativity in Molecular Design and Synthesis

**2012 Award Recipient:
Professor K.C. Nicolaou
The Scripps Research
Institute and the
University of California,
San Diego**



The award symposium honoring Professor Nicolaou will feature lectures from Professor Phil S. Baran (The Scripps Research Institute), Professor Scott A. Snyder (Columbia University), Professor Erik J. Sorensen (Princeton University), Dr. Janet L. Gunzner-Toste (Genentech, Inc), and Professor Nicolaou.

Seating is limited, so please register early! For information and on-line registration, visit our website: <http://www.njacs.org/organic.html>

Date: Wednesday, November 14, 2012

Times: 9:00 AM - 5:00 PM

**Place: The Palace at Somerset Park
333 Davidson Avenue
Somerset, NJ**

Cost: \$80 (including lunch) (a discounted rate of \$35 will be available for a limited number of students)



ILLUSTRATION BY JENNIFER HARRIS

ACS News

ChemLuminary Awards

The winners of the 14th Annual ChemLuminary Awards have been posted to the ACS website, and a video of the event will be available by mid-September.

If you need additional information, contact chemlum@acs.org.

PressRelease

Ansell Launches HyFlex® 11-435 Work Gloves

Red Bank, NJ — Ansell combines safety with a leap forward in environmentally friendly production with the launch of HyFlex® 11-435, cut-resistant work gloves made with water-based polyurethane. Using water instead of dimethylformamide (DMF) solvent in the manufacturing process, HyFlex 11-435 gloves enhance safety and dexterity for workers in a variety of industries.

The gloves are available in sizes 6-11 to accommodate the hands of almost any worker. The gray color masks dirt for longer usability, and their excellent washability ensures a prolonged lifetime.

For more information about Ansell HyFlex 11-435 gloves or other protective gloves, apparel and safety solutions, visit www.ansellhyflexus.com or call 800.800.0444 in the US.



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Call for Volunteers

Come Join Us at the Liberty Science Center

Last year The North Jersey Section of American Chemical Society celebrated National Chemistry Week at the Liberty Science Center. We had a great time and the attendees really appreciated all of our efforts. Why don't you join us this year? On **Saturday, October 20, 2012** the North Jersey Section will be holding its annual **ChemExpo** in celebration of National Chemistry Week. As usual we will have many tables offering all kinds of hands-on activities for budding scientists. You can set up your own table or help out at another table. We need you to help us make a difference!

The theme for this year is "Nanotechnology". Engage visitors in exploring the positive impacts of chemistry as it relates to the emerging field of "Nanotechnology". Check out the National Chemistry Week web page at <http://portal.acs.org/> Click on "Education" and then "National Chemistry Week" to get some ideas for hands-on activities that you might want to present.

Your activities should be geared for 8 to 12 year olds. As usual our first priority is safety. Preferably presenters should use household materials to demonstrate a scientific principle. We would like the students to be able to repeat these experiments at home and at school so it would be very helpful if you had handout instructions to distribute.

To minimize duplication of the presentations, we will need to know by October 1 the activity you would like to conduct at your table. Individuals contacting us first with their idea(s) will be given priority, so please let us hear from you as soon as possible. Contact Bobbi Gorman at rosellerams@yahoo.com or Mita Chaki at mitachaki@gmail.com and let us know what activities you will be doing at your table or if you want to volunteer at the Expo.

We also value and look forward to receiving financial support to help cover many of the expenses associated with the Section's NCW activities. If you would contact the appropriate individuals at your company, the Section would be most grateful. A donation of \$500.00 indicates Gold Sponsorship, a \$250.00 gift indicates Silver Sponsorship

and a \$100.00 gift indicates a Bronze Sponsorship. Checks should be made out to the North Jersey ACS Section with a memo of "ChemExpo" and sent to Jacqueline Erickson, 33 Ronald Road, Lake Hiawatha, N, 07034-1121.

Please fill out the following forms and return them to Mita Chaki at mitachaki@gmail.com.

Form 1. Count me in.

My name is: _____

I am volunteering to work on: **Saturday, October 20** (Check appropriate box)

- 10:00am-11:30 am,
 11:30 am – 2:00 pm,
 10:00am-2:00pm

I can be reached at:
 (work phone number) _____

My complete address is: _____

I am an employee at: _____

The activities at my table will be: _____

In addition to a table, I also need: _____

I will be bringing handouts on activities that the students can do at home. Yes No

I will need more than one table. Yes No
 How many additional tables will you need?

Form 2. My company would like to support these efforts.

The following company/individuals are willing to help defray the costs of these events:

An acknowledgement letter for this contribution should be sent to (name and full address):

(See next page for Form 3)

Form 3.

I will be joined at my table by the following volunteers.

Complete Name: _____ Institution: _____ Address (snail mail): _____

Activity _____ Time Volunteering _____

Complete Name: _____ Institution: _____ Address (snail mail): _____

Activity _____ Time Volunteering _____

Complete Name: _____ Institution: _____ Address (snail mail): _____

Activity _____ Time Volunteering _____

Acknowledge letters should be sent to: _____

Thanks very much for all of your help. The Section is most appreciative of your efforts.
Mita Chaki and Valerie Kuck, American Chemical Society, North Jersey Section



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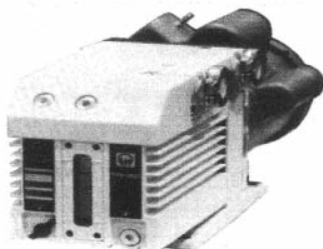
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Call for Nominations

EDWARD J. MERRILL AWARD FOR OUTSTANDING HIGH SCHOOL CHEMISTRY TEACHER FOR 2013

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 2012.

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 Bettyann Howson, chemphun@gmail.com.



2013 ESSELEN AWARD FOR CHEMISTRY IN THE PUBLIC INTEREST

The Northeastern Section of the American Chemical Society is pleased to invite nominations of worthy candidates for the Gustavus John Esselen Award for Chemistry in the Public Interest. This award recognizes a chemist for outstanding achievement in scientific and technical work that contributes to the public well-being. The award consists of a \$5000 prize and a medal of recognition. The presentation takes place at an award ceremony in April at Harvard University, followed by a formal address by the awardee. The tentative date for this ceremony is April 4, 2013.

The award was established in 1987 to honor the memory of Gustavus John Esselen, a distinguished member of the Northeastern Section. The first awardees were F. Sherwood Rowland and Mario J. Molina, who subsequently received the Nobel Prize. For further information go to www.nesacs.org/awards_esselen.html.

The deadline for nominations is **October 15, 2012**.

Others

FIFTH PASSAIC RIVER SYMPOSIUM AT MONTCLAIR STATE UNIVERSITY

Today's Status, Tomorrow's Perspective

Organized by: The Passaic River Institute of Montclair State University

If you live or work in, on, near, or about the Passaic River and its watershed, this conference is for you.

The fifth Passaic River Symposium will be a day-long event and will include invited keynote speakers and sessions on all aspects of environmental management that are relevant to the Passaic River Basin. This is a unique conference because it brings together scientists, public officials, activists, planners, writers, and historians. This conference year will also have special sessions on the sediment remediation technologies used in the Lower Passaic Interim Remediation Project. Another important development that will be discussed at the conference is the recent release of the Focused Feasibility Study by the The Lower Passaic River Restoration Project. This document will provide guidance for ecosystem restoration, environmental advocacy, and public outreach efforts.

The symposium registration fees (regular \$115, student \$40) includes continental breakfast, lunch and book of abstracts. Registration information is available on the symposium web site.

Readers of THE INDICATOR are invited to submit abstracts for presentations. Abstracts are sought for platform (oral) presentations and posters on any environmental, recreational, and governance issues relevant to the Passaic River Basin and nearby watershed environments. Platform presentation length will be 15 minutes, including questions. A book of abstracts will be distributed at the conference and placed on the conference website following the conference. All symposium presenters are required to register for the conference. Please contact Dr. Meiyin Wu at the address below to submit an abstract.

Direct any inquires or questions to Dr. Meiyin Wu, Director of the Passaic River Institute and chair of the Symposium at pri@mail.montclair.edu or 973-655-5423.

Date: Friday, October 19, 2012
Times: 8:00 AM - 5:00 PM
Place: Montclair State University Conference Center
 1 Normal Avenue, Montclair, NJ
Cost: Regular \$115, Student \$40

Symposium web site:
www.montclair.edu/csam/passaic-river-institute/conferences-symposiums/

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Linda R. Atkins, Editor

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