Professor Tobin J. Marks
2010 Nichols Medalist
(See page 14.)
2010 Eastern Analytical Symposium

November 15 - 18, 2010
Garden State Exhibit Center, Somerset, New Jersey

CALL FOR PAPERS
Deadline – April 15, 2010

The Eastern Analytical Symposium and Exposition is the second largest conference and exposition for laboratory science in the U.S. dedicated to the needs of analytical chemists and those in the allied sciences. We offer high quality cutting-edge technical sessions and state-of-the-art short courses, workshops and seminars. We invite you to be a part of the program by contributing a paper for oral or poster consideration. Please note that all abstracts must be submitted electronically via the EAS web site at www.EAS.org under the Symposium tab. The abstract submission deadline is April 15.

To submit a contributed paper for the 2010 EAS Technical Program, please submit abstracts through our web site at www.EAS.org/submit between March 1 and April 15, and follow the instructions for abstract submission. Invited speakers must not submit abstracts to EAS until requested.

Please carefully review the following information:

- All contributed abstracts must be submitted through our web site at www.EAS.org between March 1 and April 15, 2010. No faxed, e-mailed, or mailed abstracts will be accepted.
- Please note that no one author may submit and present more than two posters.
- All abstracts must be a maximum of 250 words or less.
- All abstracts will be acknowledged via e-mail.
- The title of the presentation and the list of authors that you submit are final, and may not be changed.
- The abstract that you submit will be considered to be your final abstract that will be printed in the abstract book for the 2010 Eastern Analytical Symposium.
- Presenting authors of contributed submissions will be notified in June 2010 of the status of the abstract and its session assignment.

TOPICS AREAS

Bicarboxylation
Capillary Electrophoresis
Chromatography
Environmental Analysis
Forensic Analysis
Gas Chromatography
HPLC
Immunochemistry
Industrial Hygiene
Ion Chromatography
IR Spectroscopy

Laboratory Automation
Laboratory Management
LC/MS
Mass Spectrometry
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Microchemistry
Near Infrared (NIR) Spectroscopy
NMR Spectroscopy
Pharmaceutical Analysis
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Quality by Design
Quality/Regulatory/Compliance
Raman Spectroscopy

Sample Preparation
Science Education
Sensors
Separation Sciences
Size Exclusion Chromatography
Solid State Analysis
Space Analytics
Supercritical Fluid Chromatography
Surface Science
Very High Pressure LC/Ultra High Pressure LC
Vibrational Spectroscopy

Contact Information:
EAS Hotline 732-449-2280 Eastern Analytical Symposium & Exposition, Inc.
EAS Faxline 732-812-1123 P.O. Box 185
EAS E-mail askEas@EAS.ORG Spring Lake, NJ 07762

www.EAS.org
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January 2011 .................. November 15, 2010
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March ................................ January 15, 2012

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Westchester Chemical Society
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Long Island Subsection
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NORTH JERSEY SECTION
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Teacher Affiliates Executive Committee
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Thursday, March 4, 2010
Careers in Transition
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Tuesday, March 23 and
Wednesday, March 24, 2010
Younger Chemists Committee
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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 2010 issue of The Indicator is March 15, 2010.

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Among the sources I often consult for subjects for my columns is the book “Essays in Historical Chemistry” by Sir Edward Thorpe; my copy is dated 1911 and was published by Macmillan in London. As I was looking it over it occurred to me that I knew nothing about the author himself. A little research led me to the obituary notices of the Royal Society, and this sketch of Edward Thorpe’s distinguished career is drawn from information in the “Obituary Notices of Fellows Deceased” of the Royal Society for 1925.

Thorpe was born in December 1845 in a small town near Manchester, England where his father was a cotton merchant. He attended Hulme Grammar School and then Owens College, which developed into Manchester University. (Personal note: I was on the faculty of the University of Manchester Institute of Science and Technology from 1958 to 1962, and we always referred to the central facility of the University, which was situated a couple of miles away, as “Owens”. At Owens Thorpe worked with the distinguished inorganic chemist Henry Roscoe on photochemistry and on the chemistry of vanadium. There followed the almost obligatory pilgrimage to Germany. At Heidelberg, under the tutelage of Bunsen, he worked on the remarkable liquid alloy of sodium and potassium, the subject of his Ph.D. thesis. He lodged in the same building as Victor Meyer, who was also working with Bunsen, and they became close friends.

From Heidelberg he moved to Bonn to work with Kekule and they published in 1869 a paper on ethylbenzoic acid. Returning to Manchester he continued to collaborate with Roscoe and they jointly published two papers on photochemistry in 1870. As an up-and-coming young chemist it was not surprising that Thorpe was chosen for the Professorship in Chemistry at the Andersonian College of Glasgow, Scotland in 1870 and in that same eventful year he married Caroline Emma Watts. At Glasgow Thorpe published several papers: on a new oxychloride of chromium; on phosphorus chlorides; on the constitution of paraffin; and on the interaction between carbon tetrachloride and phosphorus pentasulfide. His work on chemical effects of light led to his going on an expedition to observe a total eclipse of the sun in Sicily to be observed on December 22, 1870. Sadly the ship was wrecked on the voyage from Naples to Sicily on December 15, but without loss of life.

Thorpe was “called” to the Professorship of Chemistry at the Yorkshire College of Science in Leeds (later Leeds University) in 1874 and worked there for 11 years. He turned to physico-chemical research on specific volumes of related liquid compounds and was elected a Fellow of the Royal Society in 1876. He made a successful trip to Colorado in July 1878 to observe the solar eclipse, and then began a series of magnetic observations, in collaboration with a physics colleague at Leeds, Professor Arthur Rucker. These included measurements along the 40th. parallel of the U.S. from the East Coast to the Great Salt Lake; in the Azores; and then a complete survey of terrestrial magnetism in the British Isles which was eventually published as a complete volume of Philosophical Transactions in 1896.

Thorpe was picked to succeed Sir Edward Frankland in 1885 as Professor of Chemistry at what was then the Normal School of Science and Royal School of Mines in South Kensington, London – later known as Imperial College of Science and Technology of the University of London. In the next column I will complete my discussion of the career of this distinguished chemist.
MARCH HISTORICAL EVENTS IN CHEMISTRY

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

March 1, 1910
One hundred years ago, Archer J. P. Martin was born. He shared the Nobel Prize in Chemistry with Richard L. M. Synge in 1952 for their invention of partition chromatography.

March 3, 1876
Seventy-five years ago in 1935 on this date, Gregory P. Baxter and C. P. Alter determined atomic weight of lead, which led to estimations of the age of minerals.

March 5, 1893
Emmett J. Culligan who founded the world’s largest water treatment organization as well as concept of water softening, was born on this date.

March 7, 1792
John F. W. Herschel, inventor of photography on sensitized paper, was born on this date. He introduced the terms, positive & negative for photography.

March 8, 1879
Otto Hahn discovered protactinium with Lise Meitner in 1917 and did research in nuclear fission with Otto Strassman. He received the Nobel Prize in Chemistry in 1944 for his discovery of the fission of heavy nuclei. He was born on this date.

March 12, 1900
Seventy-five years ago in 1935, Frédéric J. Joliot (Joliot-Curie) shared the Nobel Prize in Chemistry with his wife Irène Joliot Curie, for production of artificial radioisotopes. In 1934, he, H. Halban, and L. W. Kowarski proved experimentally that neutron emission occurs in nuclear fission. He was born on this date.

March 13, 1733
Joseph Priestley, who was born on this date, was the discoverer of oxygen, ammonia, hydrochloric acid gas, carbon monoxide, sulfur dioxide, and oxides of nitrogen. He also made the first soda drink.

March 14, 1935
Seventy-five years ago, Julius B. Cohen died on this date. He was a researcher on the laws of aromatic substitutions and optical activity. He was born on May 6, 1859.

March 14, 1935
Seventy-five years ago, Arthur Hantszch died on this date. He was a researcher in electrical conductivity of organic compounds, organic acids and stereochemistry of nitrogen compounds. His birthdate was March 7, 1857.

March 17, 1803
In 1826, Carl Löwig was one discoverer of bromine but because of examinations did not publish a report, thereby allowing A. Balard to receive precedence of discovery. He was born on this date.

March 20, 1735
Two hundred and seventy-five years ago, Torbern Bergman was born on this date. He was a researcher on carbon dioxide, hydrogen sulfide and the preparation of artificial mineral water.

March 21, 1932
Walter Gilbert, researcher on the determination of deoxyribonucleic acid (DNA) base sequence, was born on this date. In 1980, he shared the Nobel Prize in Chemistry with Paul Berg and Frederick Sanger for their contributions concerning the determination of base sequences in nucleic acids.

March 22, 1788
Pierre J. Pelletier discovered quinine, strychnine, and other alkaloids; obtained toluene by distilling pipe resin with Philip Walter, 1836. He was born on this date.
March 23, 1962
Neil Bartlett made the first noble gas compound, XePtF6, on this date.

March 25, 1863
Simon Flexner isolated the common strain of dysentery bacillus, *Shigella dysenteriae* in 1899. He developed curative serum for cerebrospinal meningitis in 1907 and was born on this date.

March 27, 1847
One hundred years ago, Otto Wallach, a researcher on essential oils and terpenes, was awarded the Nobel Prize in Chemistry in 1910 in recognition of his services to organic chemistry and the chemical industry by his pioneer work in the field of alicyclic compounds. He was born on this date.

March 28, 1861
George C. Pond, a chemistry teacher and preserver of the Priestley home in Pennsylvania, was born on this date.

March 30, 1920
Daniel E. Koshland, Jr., catalytic activity of enzymes, Editor, Science,

March 31, 1860
One hundred and fifty years ago, Isidor Traube was born on this date. He founded capillary chemistry and did research on liquids and critical temperature, osmosis, surface tension and colloids (suspensions of nanometer-sized particles). In addition, he designed a viscometer and capillarimeter and in 1891 made the first systematic observation of the hydrophobic effect.

Additional historical events can be found at Dr. May’s website, [http://faculty.cua.edu/may/Chemistrycalendar.htm](http://faculty.cua.edu/may/Chemistrycalendar.htm).
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: Wednesday, March 31, 2010
Time: 6:00 PM
Place: Rutgers University
Wright-Rieman Labs, Room 310
Busch Campus, 610 Taylor Road
Piscataway, NJ 08854
Cost: $5.00 - pizza dinner

Directions can be found using mapquest and the address above. A map of the campus can be found at http://maps.rutgers.edu/maps/default.aspx?campus=4.

Reservations: call (732) 463-7271 or email njacsoffice@aol.com prior to Wednesday, March 24, 2010.

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.

CAREERS IN TRANSITION GROUP

Job Hunting??

Are you aware that the North Jersey Section holds monthly meetings at Fairleigh Dickinson University in Madison to help ACS members? Topics covered at these cost-free workshops are:

- The latest techniques in resume preparation
- Ways for improving a resume
- Answers to frequently asked interview question and
- Conducting an effective job search

The next meeting for the Careers In Transition Group will be held Thursday, March 4, 2010, in the Rice Lounge on the first floor of the New Academic Building. The meeting will start at 5:30 PM and end at 9:00. There will be a Dutch-treat dinner. To get the most from the meeting, be sure to bring transparencies of your resume.

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

ChemTAG

Date: Thursday, March 18, 2010
Time: 4:00-6:00 PM
Place: Union High School
2350 North Third Street
Union, NJ

Gina Glorioso
gglorioso@twpunionschools.org
908-851-6500

YOUNGER CHEMISTS COMMITTEE

The Younger Chemists Committee presents two special screenings of:

“Naturally Obsessed: the Making of a Scientist”

Come See the Drama Unfold!

Naturally Obsessed: The Making of a Scientist is a new documentary film that reveals a rare and fascinating view of the world of laboratory science. Featuring a group of eager students, mentored by Dr. Larry Shapiro, the film follows them along a
challenging and uncertain journey toward their PhD degrees. As the story unfolds, the interdependent mentor-student relationship reveals the human face of scientific research.

The film was shot over three years’ time at Columbia University Medical Center and also documents how x-ray crystallography enables the discovery of the molecular structure of the AMPK protein, considered prime for targeted drug development because of its relevance to diabetes and obesity.

The documentary film will be shown in two locations:

**Date:** Tuesday, March 23, 2010  
**Time:** 6:30-8:30 PM  
**Place:** Rutgers, the State University of NJ  
Piscataway/Busch Campus  
Wright-Rieman Auditorium  
610 Taylor Road  
Piscataway, NJ  
**Cost:** Free  
**Co-sponsored by the Rutgers Chemistry GSA**

**Date:** Wednesday, March 24, 2010  
**Time:** 6:00 PM  
**Place:** Fairleigh Dickinson University  
New Academic Building  
Rice Lounge  
285 Madison Avenue  
Madison, NJ  
**Cost:** Free  
**Co-sponsored by the FDU Chem Club**

**METRO WOMEN CHEMISTS**

Organizers are still working on the details of the next MWCC Networking Event. Stay tuned for updates both by email and on the MWCC website, [http://www.njacs.org/metrowomen.html](http://www.njacs.org/metrowomen.html)

**Date:** Thursday, April 8, 2010  
**Time:** 6:00 PM  
**Place:** Lenfell Hall  
Fairleigh Dickinson University  
Madison, NJ  
973-443-8761, [http://fdu.edu/](http://fdu.edu/)

If you have any questions about MWCC or if you would like to be added to our email list, contact Amber Charlebois [charleb@fdu.edu](mailto:charleb@fdu.edu) or Kelly George [kelly.george@roche.com](mailto:kelly.george@roche.com)

**NJACS-TEACHER AFFILIATES**

**Election Results**

Officers for NJACS-TA effective January 2010:

**CHAIR 2010:**  
Eve Krupka  
Retired from Mount St. Mary’s Watchung  
eakrupka@optimum.net

**CHAIR ELECT 2011:**  
Dr. Susanne Iobst  
Passaic Valley High School  
Little Falls, NJ  07424  
pvsiobst@yahoo.com

**PAST CHAIR 2009:**  
Paul Sekuler  
JP Stevens High School  
Edison, NJ  08820  
researchehs@hotmail.com

**SECRETARY:**  
Mita Chaki  
Franklin Twp. High School  
Somerset, NJ  08873  
mchaki@franklinboe.org

**TREASURER:**  
David Lee  
Retired from Mountain Lakes HS  
dtleemlhs@aol.com

**NJACS-TA EXECUTIVE BOARD ELECTED**

Claire Miller (Dec. 2010)  
Kelly Chladil (Dec. 2011)  
Marco Pagnotta (Dec. 2011)

**APPOINTED 2010**

Bernie Donegan  
Frank Ferrara  
Bobbi Gorman  
George Gross  
Bettyann Howson  
Allene Johnson  
Diane Krone  
Cheryl Litman  
Barbara McNally  
Safia Madin  
John Penna  
Richard Urban
**New York Meetings**

**ACS NEW YORK SECTION MEETINGS FOR 2010**

The Board of Directors Meetings for 2010 are:

- April 16
- June 4
- September 10
- November 19

The regular Board Meetings will be held at St. John's University, 8000 Utopia Parkway, Jamaica, NY, in the Library’s Writing Center. They are open meetings and all are welcome.

For more information, please visit the New York Section website at [http://www.NewYorkACS.org](http://www.NewYorkACS.org).

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**CHEMICAL MARKETING & ECONOMICS GROUP**

**Chemical M&A Outlook and Opportunities**

*Speaker:* Tim Wilding  
Managing Director and Co-Head Industrial Growth and Services Oppenheimer & Co.  
(New York-based investment bank)

**Date:** Thursday, March 4, 2010  
**Times:** Cocktails 11:30 AM  
Luncheon 12 noon  
Presentataion 1:15 PM  
**Place:** Club Quarters  
40 West 45th Street  
New York, NY  
**Cost:** EARLY-BIRD RATES: $45 for Members (and $55 for Guests) who reserve by Monday, March 1, 4:00 PM. After 3/1, $55 for Members; $65 for Guests

To Reserve: Please reserve early to be eligible for the discount price. We now accept all major credit cards via PayPal (“Reserve Now” link on [www.nyacs-cme.org](http://www.nyacs-cme.org)), or call Vista Marketing at (917) 684-1659, or via E-mail to cmegroup@mac.com

Next Meeting: Thursday, April 1, 2010

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**WESTCHESTER CHEMICAL SOCIETY**

**Procaltin in the Diagnosis and Management of Septic Patients**

*Speaker:* Bertrand Plouffe  
Senior Manager – Clinical Affairs Siemens Healthcare Diagnostics  
Tarrytown, NY  
[bertrand.plouffe@siemens.com](mailto:bertrand.plouffe@siemens.com)

Sepsis is not a specific disease but rather a continuum of events triggered by the body’s inflammatory immune response to bacterial, viral, fungal, or parasitic infections. Sepsis is one of the biggest concerns in hospital intensive care units, and the diagnosis of sepsis continues to be a significant challenge due to the nonspecific clinical signs and symptoms. Studies have shown that early identification of sepsis is crucial to improving patient outcomes. Once a patient enters the septic spiral, survival rates can drop by 7.6% every hour, so there is a critical need for tools to aid clinicians in faster diagnosis of this potentially fatal condition. Procaltin (PCT) is a protein used as a diagnostic and prognostic marker for severe bacterial infection and sepsis. PCT has a unique kinetic response to bacterial infection, its blood concentration rising rapidly and significantly in response to a systemic bacterial challenge. Integrating PCT into the diagnosis and management of septic patients may shorten time to detection; increase the accuracy of diagnosis of sepsis, allowing earlier, more effective treatment; and, overall, can lead to improved patient outcomes. Siemens Healthcare Diagnostics has developed a PCT assay on its ADVIA Centaur® XP and ADVIA Centaur CP immunoassay systems. The assay is CE marked. It is not available for sale in the US.

Bertrand Plouffe earned his M.Sc. at Universite de Sherbrooke, (Quebec, Canada) in Biology. Mr. Plouffe has been working in the clinical research arena since 1998, working on variety of pharmaceutical trials at Novartis, therapeutic medical devices at BioSyntech, and is currently involved in the management of in-vitro diagnostic clinical trials with Siemens Healthcare Diagnostics.

**Date:** Tuesday, March 9, 2010  
**Times:** Registration and refreshments 5:30 PM  
Speaker’s talk, Q&A 6:00 PM  
**Place:** Horace Greeley High School  
70 Roaring Brook Road  
Chappaqua, NY
c-Kit, a type III receptor tyrosine kinase (RTK), is widely over-expressed in seminoma, acute myeloid leukemia and in gastrointestinal stromal tumor. KDR, a type V RTK is a key regulator of tumor angiogenesis. A dual inhibitor of these two kinases has been proposed to be an effective approach to treatment of cancer. The quinoline domain of OSI-930 was modified with heteroatom substituted pyridyl and phenyl ring systems to evaluate the effect of these changes on their activity in an effort to further understand the SAR of OSI-930, and the binding site characteristics of c-Kit and KDR. Results of the kinase inhibition assay along with the role of OSI-930 analogues in the reversal of ABCG2-mediated multidrug resistance will be presented.

Date: Thursday, March 11, 2010
Time: Seminar 6:00 PM
Place: Hofstra University
Breslin Hall Room 211
(Please note that this is a different room than past seminars at Hofstra)
Cost: Seminar is free and open to all.
Time: Dinner 7:30 PM
Place: A nearby restaurant
Cost: $25/person

HIGH SCHOOL TEACHERS
TOPICAL GROUP

Make And Take A Simulated Nuclear Power Plant

Speaker: Joe Sencen, Ph.D.
jsencen@optonline.net

All participants will go home with a working model of a simulated nuclear power plant. This device will light up a series of LEDs. All parts and pieces are supplied. It should take about 30-45 minutes to complete. The model includes all the details necessary to explain the essential working parts of a nuclear power plant. WE WILL NOT BE USING ANY RADIOACTIVE MATERIALS. (It's simulated!)

Date: Friday, March 19, 2010
Time: Social and Dinner — 5:45 PM
Place: M&G Pub (Murphy and Gonzales)
21 Waverly Place (at Green Street, North-east corner)
New York, NY
No reservations required

Time: Meeting 7:15 PM
Place: New York University
Silver Center Room 207
32 Waverly Place (South-east corner Washington Sq. East)
New York, NY

Security at NYU requires that you show a picture ID to enter the building. In case of unexpected severe weather, call John Roeder, 212-497-6500, between 9 AM and 2 PM to verify that meeting is still on; 914-961-8882 for other info.

Note: Street parking is free after 6:00 PM. For those who prefer indoor attended parking, it is available at the Melro/Romar Garages. The entrance is on the west side of Broadway just south of 8th Street, directly across from Astor Place. It is a short, easy walk from the garage to the restaurant or meeting room.

Learn more about the New York Section at www.NewYorkACS.org

WANT MORE ARTICLES

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How Do Pluripotent Cells Enable Drug Discovery?

Organizers: Huiping Jiang, PhD
Boehringer Ingelheim Pharmaceuticals
Katalin Kauser, MD, PhD, DSc
Boehringer Ingelheim Pharmaceuticals
Jennifer Henry, PhD
The New York Academy of Sciences

Recent major breakthroughs are propelling the field of stem cell research. Induced pluripotent stem cells (iPS cells) are being created to maintain all the potential of embryonic stem cells without using embryos, eliminating ethical concerns. The technical difficulties of creating stable cells with proper phenotypes to avoid the hazard of teratocarcinomas or other unwanted cell proliferation when cells are to be used therapeutically still remain, but research is progressing rapidly. The first embryonic stem cell trial in the US has recently been approved by the FDA for severe spinal cord injury. Beyond therapeutics, the promise of using differentiated human stem cells in drug discovery as disease relevant and toxicology models is maturing to mimic relevant human organ responses while reducing the need to use experimental animals.

Stem cells and cell lines derived from iPS cells of patients can accelerate the development of existing targets for different diseases and provide opportunity to explore innovative treatment opportunities in regenerative medicine. This symposium will review the current use and potential future of using pluripotent stem cells as enabling technology in drug discovery and therapeutic entity.

Date: Tuesday, March 23, 2010
Time: 1:00 PM – 5:00 PM
Place: New York Academy of Sciences
7 World Trade Center – 40th floor
250 Greenwich St. (at Barclay St.)
New York, NY

Reserve a seat on-line at: www.nyas.org/events

NYAS Members, BPDG Affiliates, and NY-ACS Members may attend BPDG meetings free of charge. Non-members may attend for a fee of $20 per event; Student Non-members for $10.

To become a Member of the Academy, visit www.nyas.org/benefits
58TH ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM

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

The symposium provides an excellent opportunity for undergraduate chemistry students in the NY metropolitan area to present the results of their research. The program includes a keynote address, oral and poster presentations of student papers, followed by a luncheon and an award ceremony.

The keynote speaker will be Dr. Jack Kaye, Earth Science Division Associate Director at NASA, an alumnus of Adelphi University speaking on “Chemistry, Climate, and Satellites: How Chemistry Helps us Observe and Understand Earth’s Changing Climate.”

For more information go to: http://newyorkacs.org/grp_students.html

Date: Saturday, May 8, 2010
Place: Adelphi University

If you have any questions please contact:
Alison Hyslop, Co-chair, Student Activities Committee
hyslopa@stjohns.edu
Sharon Lall-Ramnarine, Co-chair, Student Activities Committee
slallramnarine@qcc.cuny.edu
JaimeLee Rizzo, Co-chair, Student Activities Committee
jrizzo@pace.edu

LONG ISLAND SUBSECTION

13th Annual Sterrett Environmental Chemistry Symposium to be Held at Hofstra University

“Sustaining the Green Revolution”

Keynote Speaker: Kate Murray
Supervisor of the Town of Hempstead

Ms. Murray will present information on the status and progress of the recycling programs in the Town of Hempstead. This symposium is sponsored by the American Chemical Society, the American Institute of Chemical Engineers, the Ideas Institute of Hofstra University and Hofstra University. Efforts are underway to determine eligibility of the symposium for professional development credits for engineers and educators.

Date: Thursday, May 20, 2010
Times: 8:30 AM – 2:00 PM
Place: Hofstra University

Cost: Registration fee, which includes lunch, is $25 for members of the ACS or AICE, $35 for nonmembers and $17 for students.

For further information, please contact Dr. Margaret Hunter, 516-463-5556 or margaret.a.hunter@hofstra.edu.
PROFESSOR TOBIN J. MARKS — 2010 NICHOLS MEDALIST

The ACS New York Section congratulates and extends its best wishes to Professor Tobin J. Marks of Northwestern University who will receive the William H. Nichols Medal Award on March 5, 2010 at the Crowne Plaza Hotel in White Plains, New York. The Nichols Medal is presented at an award dinner following the Nichols Distinguished Symposium. Professor Marks’ medal citation reads - “For pioneering research in catalysis and soft matter electronics.”

Professor Tobin J. Marks is the Vladimir N. Ipatieff Professor of Chemistry and Professor of Materials Science and Engineering at Northwestern University. He received his B.S. degree from the University of Maryland (1966) and Ph.D. from Massachusetts Institute of Technology (1971), and accepted a position at Northwestern University immediately thereafter. Of his 90 named lectureships and awards, he has received American Chemical Society Awards in Polymeric Materials, 1983; Organometallic Chemistry, 1989; Inorganic Chemistry, 1994; the Chemistry of Materials, 2001; and for Distinguished Service in the Advancement of Inorganic Chemistry, 2008.

Professor Marks was awarded the 2000 F. Albert Cotton Medal, Texas A&M American Chemical Society Section; 2001 Willard Gibbs Medal, Chicago American Chemical Society Section; 2001 North American Catalysis Society Burwell Award; 2001 Linus Pauling Medal, Pacific Northwest American Chemical Society Sections; 2002 American Institute of Chemists Gold Medal; 2003 German Chemical Society Karl Ziegler Prize; 2003 Ohio State University Evans Medal; 2004 Royal Society of Chemistry Frankland Medal, 2005 Bailar Medal, Champaign-Urbana Section of the American Chemical Society, Fellow, American Academy of Arts and Sciences, 1993.

Professor Marks is a Member, U. S. National Academy of Sciences (1993); Member, German National Academy of Sciences (2005); Fellow, Royal Society of Chemistry (2005); Fellow Chemical Research Society of India (2008); Fellow, Materials Research Society (2009). He received the 2008 Spanish Principe de Asturias Prize for Technical and Scientific Research, the 2009 Herman Pines Award, Chicago Catalysis Society; the 2009 Nelson W. Taylor Award in Materials Research, Pennsylvania State University; the 2009 von Hippel Medal, Materials Research Society; the 2010 William H. Nichols Medal, ACS New York Section. In 2007, he was awarded the National Medal of Science, the highest scientific honor bestowed by the United States Government. He is on the editorial boards of 9 major journals; technical consultant or advisor for 6 major corporations and start-ups, has published 945 research articles and holds 94 U.S. patents.

The William H. Nichols Medal was established in 1902 to honor a chemical scientist for outstanding original research. The Nichols Medal was awarded in 1903 for the first time and is a gold medal depicting the allegorical figure of Dr. Faust in his laboratory as described by Goethe, on one side, and, on the obverse side, bearing an inscription of the name of the medalist and the award citation. It is the first award of the American Chemical Society.
WILLIAM H. NICHOLS MEDAL
DISTINGUISHED SYMPOSIUM AND AWARD BANQUET

Symposium: New Materials for Function: The Stuff That Dreams Are Made Of

Award Recipient: Professor Tobin J. Marks
Vladimir N. Ipatieff Professor of Chemistry
Professor of Materials Science and Engineering
Northwestern University

Date: Friday, March 5, 2010
Times: Registration 12:30 PM Registration
Symposium 1:00 PM – 5:30 PM
Reception 5:45 PM
Award Dinner 6:45 PM
Place: Crowne Plaza Hotel, White Plains, NY

PROGRAM

1:00 PM Welcome
Mr. Frank R. Romano
2010 Chair
ACS, New York Section
Agilent Technologies

1:05 PM Opening of the Distinguished Symposium
Dr. Hiroko I. Karan
2010 Chair-elect
ACS, New York Section
City University of New York
Medgar Evers College

1:15 PM Nanowires as a Platform for Nanoscience and Nanotechnology
Professor Charles M. Lieber
Dept. of Chemistry and Chemical Biology
Harvard University

2:00 PM Organic Electronics and Optoelectronics: Learning from Tobin
Professor. Mark A. Ratner
Dept. of Chemistry and Materials Science and Engineering
Northwestern University

2:45 PM Molecular Design, Function, and Commercial Application of Shape Selective Catalysts for the Petrochemical Industry
Dr. David L. Stern
ExxonMobil Refining & Supply Company

3:30 PM Coffee Break

4:00 PM Synthesis and Use of 3-d Heterostructured Materials
Professor Galen D. Stucky
Dept. of Chemistry and Biochemistry and Materials Department
University of California Santa Barbara

4:45 PM Self-Assembly Processes for Fabricating Unconventional Organic, Organometallic, and Inorganic Electronic Circuitry
Professor Tobin J. Marks
NICHOLS MEDALIST

5:45 PM Social Hour

6:45 PM William H. Nichols Medal Award Dinner

More information regarding the Symposium is available on the New York Section’s website at http://www.NewYorkACS.org

Tickets may be reserved using the form on page 16:
RESERVATION FORM

2010 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & MEDAL AWARD BANQUET in honor of Professor Tobin J. Marks, Northwestern University

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

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(For table reservations of 8 or more, use the ACS member $100/person rate for combination tickets)

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WESTCHESTER CHEMICAL SOCIETY

The Westchester Chemical Society held a meeting on December 10, 2009. Our speaker was Dr. Charles Martucci. His lecture was entitled "The Detection and Prevention of Colon Cancer". In the photo, from left to right, are Mary Cowman, Richard Goodman, Charles Martucci, Peter Corfield, Rolande Hodel, and Joseph Sencen.
Call for Nominations

DISTINGUISHED SCIENTIST AWARD

The Westchester Chemical Society, New York subsection, is seeking nominations for the its Distinguished Scientist Award. The nominee must either work or reside in Westchester County, New York. The award is presented in May, 2010. Send nominee resume to: Dr. Joseph Sencen, 5 Summit Circle, Somers, New York, 10589 or jsencen@optonline.net

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

Now is the time to begin thinking about nominations for the Edward J. Merrill Award, North Jersey Section, for Outstanding High School Chemistry Teacher for the year 2011. Go to the web site, njacs.org under education and obtain your preliminary nomination form and guidelines. The full packet takes time to do a good job!

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

Any questions or help needed contact George Gross, njmoxie1@verizon.net.

Call for Papers

MARM 2010 — Registration Now Open

Abstracts are requested for the 41th Middle Atlantic Regional meeting (MARM 2010), which will be hosted by the ACS Delaware Section and held on April 10-13 at the historic Hotel du Pont, in Wilmington, DE.

The theme of the meeting is “Chemistry in the First State.” Topical symposia planned for the meeting include sessions on medici- nal chemistry and the pharmaceutical industry; environmental chemistry; physical/analytical chemistry; materials science/polymer chemistry and engineering; fluorne chemistry; materials science/nanochemistry; sustainability, green chemistry and policy; computers in chemistry; chemical education; food chemistry; issues and resources in chemical health and safety; and more.

The Carothers Award and Arthur C. Cope Scholar symposium are planned, as well as general sessions in organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry, and biochemistry. A poster session will also be held in conjunction with the exposition. Other special events and programming are planned for high school teachers and women chemists.

Workshops will be offered for small chemical businesses, molecular simulation, how to be a more effective chemical hygiene officer, and ethics. The meeting program will also feature career workshops and individualized résumé reviews.

Recipients of the ACS Regional Industrial Innovation Award, the E. Ann Nalley Regional Award for Volunteer Service to the American Chemical Society, the Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences, and the ACS Division of Chemical Education Great Lakes Region Award for Excellence in High School Teaching will be honored at MARM 2010. Nominations for these awards are due on February 15, 2010. Information on submitting nominees for these awards will be made available at this website.

Abstracts are now being accepted through the meeting website. Go to www.marmacs.org, and click the “CALL FOR PAPERS” link.
ACS News

CHEMISTS CELEBRATE EARTH DAY 2010

Plants – The Green Machines!

Remember that CHEMISTS CELEBRATE EARTH DAY (CCED) will be celebrated on Thursday, April 22! The CCED theme for 2010 is “Plants - The Green Machines!” Hopefully you are planning to celebrate anytime during the week of April 22nd. Stay tuned to www.acs.org/earthday and The Indicator for updates and the latest information as CCED is soon approaching!

GREEN CHEMISTRY

Save the Dates: June 21-24!

The 14th Annual Green Chemistry & Engineering Conference returns to downtown Washington, DC on June 21-24, 2010. With the theme "Innovation and Application" and with one of the renowned founders of green chemistry, Dr. John Warner (President and CTO, Warner Babcock Institute for Green Chemistry) as the chair, this conference is shaping up to be one you won't want to miss! The tentative schedule for the week begins with a Student Workshop, Roundtable Meetings, and the Presidential Green Chemistry Challenge Awards Ceremony on Monday, June 21, followed by technical programming on June 22-24. Please visit the conference website, www.gcande.org, where more details will be posted as they become available.

SPEAK FOR SCIENCE

Less than 10 percent of the 535 members of Congress have backgrounds in science and engineering. Yet everyday legislators are asked to make important decisions that affect our nation’s scientific enterprise. You and your committee members can help them make informed decisions by joining the ACS’ Legislative Action Network (LAN).

The LAN is a Web-based political involvement program that gives you an easy, effective way to voice opinions on legislation effecting federal research to K–12 science education.

As you may know, for decades ACS has been a respected source of information and advocacy on Capitol Hill. Often this input is provided in formal testimony before committees and panels making decisions on spending and legislation relating to science and engineering.

But just as important, members of Congress listen to their constituents and value their timely input. That’s where you and your committee members can play a valuable role as members of the LAN.

Prior to key congressional decisions, ACS staff sends e-mail alerts to LAN members with background information, the analysis of the potential effect an issue would have on the scientific enterprise, and ACS’s position. By clicking on a Web link, participants can go directly to the ACS Legislative Action Center where they are given background information on the topic and a proposed message that can be easily personalized and sent directly to legislators—the entire process takes only a few minutes.

It’s free, simple, and done entirely via the Web. But more to the point, by participating in the LAN, chemists can impact federal policies critical to chemistry and our nation. Please register online at http://www.act4chemistry.org/register [this url may change].

If you would like more information on the Legislative Action Network please contact the ACS Office of Public Affairs at 1-800-227-5558, ext. 4386 or b_smith@acs.org. Participate and become your legislator’s “face of science.”

Learn more about the American Chemical Society at www.chemistry.org
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Monday, March 1, 2010
“Nanomaterials for Biosensors and Non-viral Delivery”
Professor Huixin He
Department of Chemistry
Rutgers University
Newark, NJ

Monday, April 12, 2010
TBD

Monday, April 26, 2010
“Multifunctional Nanomaterials: From Novel Synthetic Methods to their Applications in Catalysis, Medicine and Energy”
Professor Teddy Asefa
Department of Chemical and Biochemical Engineering
Rutgers University
New Brunswick, NJ

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Speaker: Béla Lipták, PE
Lipták Associates

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2) Lipták's invention, the reversible fuel cell (RFC), which makes solar energy continuously available, by making hydrogen when the sun is out and using it to make electricity when it is not.

Mr. Lipták arrived from Hungary in the United States in 1956. In 1960, he became the Chief Instrument Engineer at C&R (later John Brown). In 1987, he was an adjunct professor at Yale University and he is currently working as a consultant with some help (Lipták Associates PC) on industrial optimization. He has published two dozen technical books including: "Post-Oil Energy Technology", "Optimization of Unit Operations" and "Environmental Engineers’ Handbook".

Date: Thursday, April 1, 2010
Times: Networking/Cash Bar 6:00 PM
       Dinner 6:30 PM
       Presentation 7:30 PM
Place: Snuffy's Restaurant
       Park & Mountain Ave.
       (Route 22 East), Scotch Plains, NJ
Cost: Registration: $35 ACC&CE Members, $45 Non-members

To Reserve: Call Linda B. Townsend at 1-973-729-6671 or e-mail: accce@chemconsult.org
Councilor’s Corner

What Is It All About?

For many years I have represented the North Jersey Section as an ACS Councilor. This has allowed me to contribute to the chemical profession even in retirement, to make many friends and to broaden my interests. The Council meets twice and year to consider issues affecting chemists and the chemical profession. Much preliminary activity occurs in committees and special groups. I am serving on three national ACS Committees: Budget and Finance (B&F), the Council Committee on Public Affairs (CCPA) and the Landmarks Committee, and also work on the new Leadership Development Group. Most committees meet face to face twice a year, and conduct business between times by email, conference calls and web meetings. B&F reviews the ACS financial performance, makes recommendations to the ACS Board on the new budget, reviews dues and programs and looks for ways to communicate financial information to the members. CCPA actively follows and recommends ACS comments on government legislation related to science, visits Congress once a year and urges members to support important legislative initiatives through the Legislative Action Network. The Landmarks Committee identifies discoveries, places and events important to chemistry and honors them with a plaque and an appropriate celebration. Finally, the Leadership Development team develops courses to enhance the professionalism of our members to help them both in their ACS roles and in their professional activities. I will be teaching two of these new courses and look forward to seeing you at some of them.

Through all of these activities I have to give a strong thanks to the very professional staff in Washington. I continually learn from them and now am enjoying gaining financial insight, knowledge of how our government works, a lot about chemical history and wonderful professional training.

Maureen Chan
(mgchan@verizon.net)

ChemTAG Corner

Percent by Mass

Submitted by: Eileen Girten,
Edited by: George R. Gross
Retired, Union High School

A tasty lab to determine percent of sugar by mass.

Applications: calculations, percent composition

Theory: Many chewing gums contain sugar, some do not. Upon chewing, the sweetener dissolves leaving the non-soluble components behind. By massing a sample of gum before chewing and after, the percent of sugar or soluble sweetener can be determined with some degree of accuracy.

Materials: chewing gums including some sugarless varieties; digital balance, preferably 0.001 g; wax paper or plastic wrap for massing “paper”

Safety: Once foods enter the classroom/lab they are considered reagents. This lab is best performed in the foods lab, cafeteria or a regular classroom.

Preparation: Obtain the above materials. Have students develop a plan to determine the mass of sugar in chewing gum. Let them hassle with the problems such as length of time, excess saliva or water and massing methods. Perhaps they will come up with some pretty creative and scientifically sound plans.

Lab Activity: After review of individual plans, provide the equipment listed. Some plans may have to be revised. Perhaps presenting the equipment before hand will eliminate this confusion and speed up the planning.

Data: Students will need to plan to gather the following data in order to be successful:

• Mass of gum before chewing
• Mass of gum after chewing

Several plans may require successive chews.

Calculations:

Mass of unchewed – mass of chewed / mass of unchewed × 100% = % sugar

Postlab: Pool class data by gum type and brand. Find average values for percent of sugar. Discuss observed trends such as sugarless vs. sugared and variations among
brands.

Encourage students to show all work including units. If computers are available there are a number of web sites that students can refer to and do follow-up reports and research.

A Google of : ‘chewing gum sugar’ will yield great results.

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**Press Release**

**Hach Company and Water For People Give the Gift of Safe Water to Bolivia**

Loveland, Colo.—According to UNICEF, nearly one-third of the people in the rural areas of Bolivia do not have access to safe and reliable water sources. A strong proponent of global water quality, Hach Company made a $15,000 donation of water testing supplies to Water For People, a non-profit international humanitarian organization, to assist their Bolivia Water Quality project in November. This was a pilot project to determine how to best support countries needing basic water quality monitoring. Based on the success in Bolivia, in December, Hach donated an additional $26,000 in water testing supplies to Water For People for similar projects in Rwanda and Malawi that will occur in 2010.

As part of Water For People’s World Water Corps® program, a team of ten water quality expert volunteers joined local Bolivia partners to collect and analyze water quality samples in November. Prior to the trip, Hach provided products and Hach Technical Training Center training. Onsite in Bolivia, the team trained local partners, tested the physical chemistry of the water, and also monitored for E. coli and fecal coliforms, both indicators of pathogenic contamination. The Hach products will remain in Bolivia to continually monitor water quality on a sustained basis.

“Hach is proud to bring our expertise and heritage in water quality testing to countries in need of safe drinking water,” Derek Walker, Hach Global Product Manager explained. “We worked closely with Water For People and the Bolivia team to develop the best set of solutions for this monitoring project and have learned from this pilot to further refine the requirements for products and training. We plan to utilize this experience to provide solutions for other areas of the world in 2010.”

“The purpose is to examine and confirm the new water projects are supplying safe, potable water to beneficiaries in these regions,” Andrew Britton, World Water Corps Manager, said. “The World Water Corps Bolivia Water Quality project is the first thorough water quality assessment in the majority of the municipalities where Water For People has facilitated the development of water projects in Bolivia.”

“The donation from Hach allowed us as World Water Corps volunteers to conduct our mission with confidence,” Virginia Godoy, the team lead on the Bolivia project, continued. “This equipment gave Water For People staff and partners valuable insight into the quality of water resources in local communities.”

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