NORTH JERSEY CHAIR'S MESSAGE

My Fellow Members of the ACS,

I am honored to represent you as the 2008 American Chemical Society – North Jersey Section Chair. With the outstanding leadership of those that came before me, our Section has become the most productive and engaged local group in the country with a reported membership of nearly 7000. In fact, the NJ-ACS was recently presented a ChemLuminary Award for its performance by the National Society. On behalf of all of our members, I would like to thank Diane Krone, our past Chair, for her excellent management throughout 2007. I would also like to acknowledge the numerous other volunteers – from Executive Committee Members to Topical Group Leaders – throughout the Section for their dedication and continued involvement.

Over the past several years, I have been fortunate to observe, interact with, and get to personally know many of these individuals and numerous others who have dedicated their time and efforts to the betterment of the field and to the mission of extending and enhancing the human condition through science. My appreciation of the various disciplines and diversity of interests that our Section embodies stems from the opportunities which I have been given through my employment in the pharmaceutical industry, as well as my involvement in the American Chemical Society. These experiences have allowed me to see the very best that our Section has to offer. The commitment that the NJ-ACS has to the advancement of chemistry and the promotion of chemical research through the organization’s devotion to its members is a deserving goal and one that is paramount for the overall development of the chemical industry and general chemical education in the area. I continue to be humbled by the efforts of the dozens of core volunteers in our Section that tirelessly and passionately provide opportunities to the overall Section membership in the form of career events, technical meetings, symposia, networking avenues, and awards.

As Chair of the NJ-ACS, my goal is to provide leadership and support for future growth, the advancement of new ideas, and to continue to bring the national spotlight on the activities of the Section. I believe that the success of the field is dependent on capturing the imagination of today’s youth and thus attracting bright individuals to the sciences. It is therefore important to continue to promote and expand programs such as Project SEED and National Chemistry Week (NCW), as well create new innovative ways to build alignment throughout the various Topical Groups and seek new avenues of communication with and support from the local pharmaceutical companies and academic universities within the New Jersey area. I hope to continue to leverage the media to highlight the outstanding efforts of our members, thereby drawing attention to the lifesaving work and intellectually stimulating research that our combined disciplines are involved in at all levels of our Section. We are truly at a crossroads within our field and through the hard work of our volunteers and partnership with our state and national legislatures we can impact the future development of the chemical community.

The year ahead promises to be an exciting one for our Section. In the Spring of 2008, we will be part of the “Middle Atlantic Regional Meeting” (MARM), while in the Fall, our Section will once again organize and execute the “Chemistry as a Life Symposium,” as well as bestow the second “Award for Creativity in Molecular Design and Synthesis.” Many on the Executive Committee, together with various Topical Groups, are planning a multidisciplinary “Section Meeting” that will be a collaborative effort that hopes to combine our disciplines in a singular conference centered on innovation in the pharmaceutical sciences. I would encourage each of you to get involved at some level in the local section, and participate in the excellent programs that the numerous Topical Groups organize each year. These subsections vary in scope as they strive to fit each of our specific interests – from Organic Chemistry to Chromatography, from Drug Metabolism to Polymer Sciences, from Minority Affairs to Small Chemical Business. There is something for everyone.

I look forward to working for and with all of you throughout 2008.

Michael M. Miller, Ph.D.
2008 Chair, ACS-North Jersey Section

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Education

SETON HALL UNIVERSITY.

Department of Chemistry and Biochemistry
Spring 2008 - Graduate Courses
January 9 – May 6, 2008
Registration: January 8, 2008 3 pm – 5:45 pm
Courses and programs leading to the M.S. and Ph.D. degrees are offered on a full or part-time basis. Classes meet during the evening or on weekends to accommodate busy working professionals. Non-matriculated students welcome.

Course Number Title Day Time
CHEM 6204 NA Spectrochemical Methods of Analysis Tues. 7:00 PM-8:15 PM
CHEM 6425NA Computational Chemistry Thurs. 8:35 PM-9:50 PM
CHEM 7399 NA Medicinal Chemistry Mon. 7:00 PM-8:15 PM
CHEM 7512 NA General Biochemistry II Wed. 6:15 PM-8:25 PM

For more information, please visit the Department of Chemistry and Biochemistry website at http://setnau.edu/chemistry or call us at 973-761-9414.
DECEMBER HISTORICAL EVENTS IN CHEMISTRY
by Lespold May
The Catholic University of America, Washington, DC

December 3, 1900
Richard Kuhn, who was a researcher on the structures and syntheses of vitamins and carotenoids, was born on this day. He was awarded the Nobel Prize in 1938 for his work on carotenoids and vitamins. He refused the Prize in 1938 due to Nazi rules but received the diploma and the medal in 1949.

December 5, 1901
Seventy-five years ago, Werner Heisenberg received the Nobel Prize in Physics for the creation of quantum mechanics. He was a researcher in quantum mechanics and developed the Heisenberg Principle in 1927. He was born on this date.

December 6, 1778
Joseph L. Gay-Lussac, who was born on this date, discovered law of expansion of gases with heat in 1802 and in 1809, the law of combining volumes of gases. He isolated boron and was a researcher on fermentation, prussic acid, and composition of water.

December 8, 1845
Thomas E. Thorpe, a researcher on atomic weights, was born on this date. He also studied the viscosity of liquids and did chemical analyses.

December 9, 1748
Claude L. Berthollet, who was born on this date, analysed ammonia and discovered the bleaching action of chlorine and the composition of prussic acid. He also showed that acids do not need to contain oxygen.

December 11, 1925
Sir Isaac Newton, an alchemist as well as a mathematician and physicist, was born on this date.

December 12, 1852
Antoine H. Becquerel, who discovered radiation (Becquerel Rays) from uranium salts in 1896, was born on this date. In 1903, he shared the Nobel Prize in Chemistry with the Curies in recognition of the extraordinary services he has rendered by his discovery of spontaneous radioactivity.

December 17, 1778
Two hundred years ago on this date, Humphry Davy was born. In 1807, he discovered potassium, sodium in 1807, barium in 1808, and strontium in 1808. He invented Davy mine safety lamps.

December 20, 1890
Jaroslav Heyrovsky, who invented polarographic method of analysis, was born on this date. In 1959, he received the Nobel Prize in Chemistry for his discovery and development of the polarographic methods of analysis.

December 23, 1912
Anna J. Harrison was the first woman president of the ACS in 1978. She also served as president of the American Association for the Advancement of Science, 1983-4 and was born on this date.

December 25, 1642
Sir Isaac Newton, an alchemist as well as a mathematician and physicist, was born on this day. He discovered the laws of gravity and nature of light.

December 28, 1932
Seventy-five years ago, Kary B. Mullis was born. He invented the polymerase chain reaction (PCR) method for duplicating DNA. In 1993, he shared the Nobel Prize in Chemistry with Michael Smith for his invention of the polymerase chain reaction (PCR) method.

Additional historical events can be found at the CSW website or Dr. May’s website, faculty.cua.edu/may/history.htm.

THIS MONTH IN CHEMICAL HISTORY—I

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

I am always pleased when I receive a message regarding one of my columns; it assures me to know that someone out there is reading this stuff! Recently I received not only such a message, but also a gift from reader Willard E. McFarland who lives in North Hills, California. He sent me a copy of a small book “A Laboratory Guide of Industrial Chemistry” by Allen Rogers Ph.D., Instructor in Industrial Chemistry at Pratt Institute in Brooklyn, N.Y. and a member of the ACS, the Society of Chemical Industry, and the American Leather Chemists Association. The book was published by the D. Van Nostrand Company in 1908. I will devote this column to Dr. Allen Rogers, and a forthcoming column to his instructive textbook. Luckily for me Dr. Rogers’ career is summarized in the valuable book “American Chemists and Chemical Engineers” which was edited by Wyndham D. Miles Ph.D. and published by the A.C.S. in 1976.

Rogers had both academic and practical industrial chemical training. Born in Maine on May 22, 1876 he attended the University of Maine for his B.S. degree in chemistry which he received in 1897. He was appointed instructor in chemistry at the University of Maine upon graduation and served for 3 years. He then moved to the University of Pennsylvania where he received his Ph.D. in 1902. For two years he was an instructor of organic chemistry there and then was hired as an industrial chemist by the Oakes Manufacturing Co. on Long Island, New York. Rogers clearly learnt a great deal in his two years in industrial chemical practice. When he was hired to teach industrial chemistry (one precursor of chemical engineering) at Pratt Institute he developed and equipped laboratories in which students would get hands-on experience of actual industrial chemical processes. In this he followed the lead of European technical institutes.

Rogers’ students, many of whom already had work experience, were mature and were given an experimental program which included miniature versions of such industrial staples as saponification plants, tanneries,iline dye manufactories, and paint blending plants. In addition to his lectures to these students Rogers also lectured on food chemistry to nutrition students, and dyes and pigments to art students. Rogers’ courses also included in-depth instructive visits to chemical plants. Despite a demanding and rigorous curriculum which included only minimal vacation breaks, Rogers’ students admired and respected him, and after graduation often called on him as a consultant.

Rogers was an effective writer and published several books. An early text on “Elements of Qualitative Analysis” was followed by the Laboratory Guide referred to above; a second edition of the Guide appeared in 1917. His collaborative text “Industrial Chemistry” became a standard textbook with its first edition in 1912 and its sixth in 1942. An abridgment “Elements of Industrial Chemistry” went through two editions in 1916 and 1926. Rogers’ own area of emphasis was leather processing and he published “Practical Tanning” in 1922 and “Manufacture of Leather” in 1929. In World War I he served in the Chemical Warfare Service as a major. He was awarded the Grasselli Medal in 1920 for his work on using fish skins as material for leather.

Rogers died on November 4, 1938 only 62 years old from injuries received in a fall down the steps of the chemical engineering building at Pratt Institute: a sad irony, since chemical engineering was to supplant industrial chemistry as an academic subject.
CHEMICAL MARKETING & ECONOMICS GROUP

Topic/Speaker: To be announced

(Date website for latest info: http://www.nyas-cme.org)

Date: Thursday, December 6, 2007

Times: Cocktails 11:30 AM
       Luncheon 12 noon
       Presentation 1:15 PM

Place: The Chemists’ Club
       40 West 45th Street
       New York, NY

Cost: $40 discount price for Members

Who reserve by Tuesday, December 4th (12 noon).

$55 for Guests and Members
(at the door without reservations).

To reserve: Please reserve early to be eligible for discount price. Call Vista Marketing at (917) 684-1659 or via e-mail to: cmegroup@yahoo.com. You can also pay online (via PayPal): go to our Website: http://www.nyas-cme.org/.

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

Ghrelin Antagonists: A Potential Therapy for Obesity, Diabetes, Behavioral and Eating Disorders

Organizers: John R. Zylk
AstraZeneca Pharmaceuticals and
Brian J. Murphy
Bristol-Myers Squibb Company

Speakers: Jeff Zylk
University of Texas
Southwestern Medical Center
Michael Thorne
University of Virginia
Matthias Tschopp
University of Cincinnati
Sabrina Diano
Yale University School of Medicine
Roy G. Smith
Baylor College of Medicine

The role of the gut peptide hormone ghrelin as an appetite enhancer and an anabolic regulator, places it as a potential target for the treatment of obesity and other metabolic disorders. Moreover, abnormal levels of ghrelin have been associated with both anorexia and bulimia nervosa. Because emotional changes can affect feeding behavior, ghrelin has also been of recent interest in the area of psychiatric disorders. These potential effects by ghrelin on metabolism and behavior suggest that antagonists of this hormone may provide therapy for several important conditions challenging health care in this and other countries.

Date: Tuesday, December 11, 2007

Time: 1:00 PM — 5:30 PM

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

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

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

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

HOLIDAY PARTY AND 2008 BOARD ELECTIONS

Speaker: Peter Diaczuk

Director of Forensic Science
Training Center for Modern Forensic Practice
John Jay College of Criminal Justice, CUNY

Forensic Science is defined as the application of the natural sciences to matters of law. As one of the natural sciences, chemistry plays an important role in the routine of a forensic scientist. Many of the case studies presented will include applications of chemistry in the analysis of physical evidence. By its very nature, physical evidence is often available only in minute amounts; therefore, microchemical analyses will be highlighted. These analyses incorporate traditional chemical tests and principles, but are conducted on a microscope slide and are observed through the magnifying power of the microscope.

Peter Diaczuk is active in several professional organizations, including the New York Microscopical Society (Life member, Fellow and current president), Northeastern Association of Forensic Scientists (Board of Directors), Diplomat of the American Board of Criminalistics, and Full Member of the Criminalistics Section of the American Academy of Forensic Sciences. He has given over 30 presentations on forensic science topics, and conducted 5 workshops on scientific firearm and toolmark examination.

Date: Thursday, December 6, 2007

Time: Board elections at 6:00PM

Date: Thursday, December 6, 2007

Place: Nassau Community College
       2007, Chair, Long Island sub-section
       Contact: Dr. Eugene Brown, (516) 572-
       Place: Nassau Community College
       Time: Board elections at 6:00PM
       Date: Thursday, December 6, 2007

HIGH SCHOOL TEACHERS TOPICAL GROUP

The Chemist as Detective in Examining Art and Artifacts

Speaker: Mary Virginia Orna

College of New Rochelle, NY

Dr. Orna is internationally known for her work in chemical education — principle investigator for Chem Source; organizer of a BCCE and many summer outreach workshops for HS teachers. In addition, she is very active in the ACS and is a recognized expert in art conservation and authentification — the Shroud of Turin.

Date: Friday, December 14, 2007

Time: Social and Dinner — 5:45 PM

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

Note: Street parking is free after 6:00 PM. For those who prefer indoor attended parking, it is available at the Metro/Roman 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.
HUDSON-BERGEN CHEMICAL SOCIETY — JOINT MEETING WITH THE CHEMISTRY CLUB OF RAMAPO COLLEGE AND SIGMA XI, THE SCIENTIFIC RESEARCH SOCIETY

Nanotechnology: The Next Big Thing
Speaker: Dr. Ariel Fenster
McGill University

For many, nanotechnology, the engineering of functional systems at the molecular scale (nanometer), is the impetus for the next Industrial Revolution. The technology is already available in a variety of products ranging from stain-resistant textiles to antibacterial bandages. In the future there are visions of molecular motors powering nano-tools, of nano-robots cleaning up clogged arteries and of nano-materials strong and light enough to build an elevator to the moon. On the other side some see nano-technology as a new Frankenstein, bringing havoc on earth. What is fact and what is hype? This lecture describes and assesses the pros and cons of a technology too “small” to ignore.

Ariel Fenster teaches at McGill University, where he is a founding member of the Office for Science and Society, an organization dedicated to disseminating up-to-date information in the areas of food, food issues, medications, and the environment and health topics in general. Dr. Fenster is well known as an outstanding communicator and an exceptional promoter of science with an extensive program, developed over nearly three decades. Over that period he has given close to 600 lectures and public presentations in English and in French across North America and Overseas. He appears regularly on TV and radio to discuss health, environmental and technology issues and has presented numerous science segments for children’s television. Recently he was seen in French on Radio-Canada’s popular daily health show “37.5” and in English on the “Discovery” science show “What’s that all about?” His contributions to teaching, and to the popularization of science, have been recognized by numerous awards. Among them: the “Award for Excellence in Chemistry Teaching” by the U.S. Chemical Manufacturers Association and the “McNeil Medal for the Public Awareness of Science” from the Royal Society of Canada (inaugural award). Ariel Fenster, who is a native of the wine-growing region of Bergerac, France, holds a Master’s degree from the University of Paris and a Ph.D. from McGill University.

Date: Friday, December 14, 2007
Times: Dinner 6:00 PM
Lecture 7:00 PM
Place: Ramapo College of New Jersey
Trustees Pavilion, Room 3
Mahwah, NJ
Cost: Lecture is free and open to all.
Dinner $20.00 ($10.00 students)
Reservations required for dinner only. To reserve a seat, please contact Ms. Sherrill Cox at (201) 684-7748 or by e-mail at scox@ramapo.edu by December 7, 2007.
Please make checks payable to Sigma Xi/Ramapo College.

40th Middle Atlantic Regional Meeting
Chemistry and Health
May 17-21, 2008
Queensborough Community College
Bayside, NY

Look for the Call for Papers in C&EN in late November

Visit www.marmacs.org for registration, abstract submission & more
CHEMISTRY AS A LIFE SCIENCE — SYMPOSIUM XIV

The fourteenth in a series of CAALS biennial symposia.

Distinguished invited speakers:

- Carl Djerassi
  Stanford University
- Paul Knöchel
  Ludwig-Maximilians Universität
- Alana Shepartz
  Yale University
- Dirk Trauner
  University of California, Berkeley
- Justin DuBois
  Stanford University
- Philip Baran
  The Scripps Research Institute

Date: Friday, March 21, 2008
Place: The Paul Robeson Campus Center
Rutgers, The State University
Newark, NJ

Cost: Free and open to the public.

Further information regarding the Symposium will be added to the website for the North Jersey Section of the American Chemical Society as it becomes available. Due to limited seating, advance registration is required: http://www.njacs.org/caals.

Organizing committee: V. Lombardo (Lexicon), D. Askin (Merck), R. Kong (PTC Therapeutics), R. Ewing (Chair BMS), J. Kozlowski (Schering-Plough), W. Metz (Sanofi-Aventis), S. Hall (Rutgers), M. Prashad (Novartis), S. Erickson (Roche), P. Zhang (Wyeth).

North Jersey Meetings
http://www.njacs.org

NORTH JERSEY EXECUTIVE COMMITTEE MEETING

There will be no December 2007 North Jersey Executive Committee Meeting.

MASS SPECTROMETRY DISCUSSION GROUP

The MSDG season finale will feature lectures from this year’s award winners:

1. New Jersey Regional Award for Achievements in Mass Spectrometry winner, Dr. Mohammed Jemal of Bristol-Myers Squibb: Dr. Jemal is honored for his long, distinguished, and successful career in pharmaceutical analysis, in particular, bioanalysis utilizing LC-MS/MS, which earned him the AAPS (American Association of Pharmaceutical Scientists) Fellowship in 2006. He is a prolific author and contributed significantly to the bioanalysis literature in various fronts of the application of mass spectrometry, including his work on high-throughput LC-MS/MS analysis, ion suppressions, matrix effect, and interferences of metabolites to drug analysis, and very often careful and systematic evaluation of new mass spectrometric technologies to the bioanalysis.

2. New Jersey Early Career Award in Mass Spectrometry winner, Dr. Haiying Zhang, also from Bristol-Myers Squibb: Dr. Zhang is recognized for his pioneer work in inventing and developing an mass defect filter technique that fundamentally changes the data mining processes for drug metabolism studies using mass spectrometry. This new application is rapidly gaining popularity in its applications to effectively removing endogenous interferences particularly for complex matrices.

Date: Tuesday, December 4, 2007
Place: Crown Plaza Somerset (formerly Marriott Somerset)
Somerset, NJ.

Visit http://njacs.org/msdg/index.html for further details of the meeting and to register to attend.

Education

The Spring 2008 New York City Graduate Chemistry Courses will be held on the campus of the City University of New York (CUNYCAT). Contact us: info@sunycitycats.com http://www.sunycitycats.com 212 581 5226
The North Jersey Section together with the Fairleigh Dickinson University Student Affiliates share the joy of chemistry and "Ooblick" with the community at the Westfield Fall Fest Street Fair held on September 29, 2007. There was a huge crowd and a great time was had by all.

John Penna (right), former NJSTA president and chair of the 2007 NJSC Awards and Recognition Dinner, presenting a NoJ Section "Salute to Excellence" to The NJ Science League. Accepting the salute is Bill Spears.
Call for Nominations

WCS DISTINGUISHED SCIENTIST AWARD 2008

The Westchester Chemical Society is accepting nominations for the “WCS Distinguished Scientist Award 2008”. Scientists who live or work in Westchester qualify. Send resume by January 31, 2008 to Joan Laredo-Liddell, 391 Palmer Road, Yonkers, NY 10701

2008 SISTER MARIAN JOSE SMITH AWARD OF THE NORTH JERSEY SECTION

The biennial award, funded by Roche, consists of $1,000 prize and a recognition plaque. It recognizes a professor from a degree-granting institution in the North Jersey Section for inspiring students and launching them on successful careers in chemistry as manifested by their accomplishments.

GOLD MEDAL AWARD: SOCIETY FOR APPLIED SPECTROSCOPY, NEW YORK SECTION

Nominations are being sought for the 2008 Gold Medal Award of the New York Section of the Society for Applied Spectroscopy. This coveted award was established in 1952 to recognize outstanding contributions to the field of Applied Spectroscopy. The Gold Medal will be presented at a special award symposium, arranged in honor of the awardee, at the 2008 Eastern Analytical Symposium. A nominating letter describing the nominee’s specific accomplishments should be submitted along with a biographical sketch by December 31, 2007. Please send all materials to Dr. C.J. Pommier, 53 Mustang Trail, Somerset, NJ 08873.

NEW JERSEY INSTITUTE OF TECHNOLOGY — DEPARTMENT OF CHEMISTRY & ENVIRONMENTAL SCIENCE

Seminar Series – Fall 2007

Monday, December 3
“Kinetic Modeling of Hydrocarbon Processing”
Teh C. Ho
Senior Research Associate
Corporate Strategic Research Laboratories
ExxonMobil Research and Engineering Co.
Annandale, NJ

December 10
“Rimming Flows within a Rotating Horizontal Cylinder and the Drag-Out Problem in Film Coating: Some Recent Results on Two Classical Thin Film Problems”
Andreas Acrivos
Albert Einstein Professor of Science and Engineering, Emeritus
The Levich Institute
City College of CUNY, New York

Times: 2:30 - 4:00 PM
Place: Kupfrian Hall 117

NEW JERSEY INSTITUTE OF TECHNOLOGY — OTTO H. YORK DEPARTMENT OF CHEMICAL ENGINEERING

Seminar Series – Fall 2007

December 3
“Kinetic Modeling of Hydrocarbon Processing”
Teh C. Ho
Senior Research Associate
Corporate Strategic Research Laboratories
ExxonMobil Research and Engineering Co.
Annandale, NJ

December 10
“Rimming Flows within a Rotating Horizontal Cylinder and the Drag-Out Problem in Film Coating: Some Recent Results on Two Classical Thin Film Problems”
Andreas Acrivos
Albert Einstein Professor of Science and Engineering, Emeritus
The Levich Institute
City College of CUNY, New York

Times: 2:30 - 4:00 PM
Place: Kupfrian Hall 117

NEW JERSEY INSTITUTE OF TECHNOLOGY — DEPARTMENT OF CHEMISTRY & ENVIRONMENTAL SCIENCE

Seminar Series – Fall 2007

Monday, December 3
“Chemical and Biological Investigations on the MDMA Antagonist, Nantenine”
Dr. Wayne Harding
Medical Chemistry, Department of Chemistry, Hunter College
City University of New York

Time: 11:30 AM
Place: Tierman Hall, Room 373

THE INDICATOR-DECEMBER 2007

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