North Jersey and New York Sections extend their welcome to the new Student Members
See pages 7 to 10.

In this Issue, Several New Columns and Features
See pages 32 and 33.

Dr. Barbara Petrack
2008 NY ACS Outstanding Service Awardee
See page 4.
Education

STEVENS
Institute of Technology

Department of
Chemistry, Chemical Biology, and Biomedical Engineering
Hoboken, NJ 07030

www.stevens.edu/ses/chem-bio

FALL SEMESTER EVENING GRADUATE COURSES
Classes 6:15-8:45pm Semester begins August 31, 2009

Special Courses

GENE THERAPY - Ch 781 (Thur eve)
Chemical, physical, and viral methods of gene delivery to target cells; cellular,
 systemic, and immunologic barriers to gene transfer; design variables in gene
 transfer vectors; the combination of gene and cell therapies; and application
 of gene transfer to specific human diseases. Prof. Leopold

MODERN MASS SPECTROMETRY – Ch 666 (Thur eve)
Hands-on course from fundamentals through biological and biochemical applic-
ations; EI, CI, FAB, MALDI, ESI, TOF, FTMS, etc. included.
Prereq. – U.G. Organic and Physical Chemistry Prof. Attygalle

PHYSICAL CHEMISTRY OF POLYMERS – Ch 671 (Mon eve)
Physio-chemical aspects of polymers: MW distributions, solution characteriza-
tion and thermodynamics, chain configuration, amorphous state, crystalline state.
Prof. Sukhishvili

And Also

Instrumental Analysis Laboratory – Ch 561 (Wed eve)
Spectra & Structure Determination – Ch 650 (Tue eve)
Computer Methods in Chemistry – Ch 664 (Fri eve)
Advanced Organic Chemistry – Ch 640 (Mon eve)
Chemistry of Natural Products - Ch 646 (Thur eve)
Polymer Functionality – Ch 674 (Wed eve)
Biochemistry II – Ch 681 (Mon eve)
Physiology – Ch 583 (Wed eve)
Molecular Genetics – Ch 687 (Tue eve)

For Applications: Graduate School (201) 216-5234
For Information: Department (201) 216-5528
The 2008 Outstanding Service Award of the New York Section of the ACS was presented to Dr. Barbara Petrack.

Dr. Petrack received her Ph.D. from New York University Medical Center and completed a Post-Doctoral Fellowship at Rockefeller University. She had an extensive career in biochemical research at CIBA-GEIGY before joining the faculty at Drew University in 1997.

She has been active in the New York Section of the ACS since 1970, serving as a councilor until 1982. From 1976 to 1981 she served at the national level on the Professional Relations Committee. She has co-chaired symposia in the past and has more planned for the future.

In 1980 she took on the duties of Chair of the NY Section's Biochemical Topical Group. The Biochemical Topical Group collaborates with the Biochemical Pharmacology Discussion Group of The New York Academy of Sciences. Dr. Petrack serves on the Steering Committee of that group, having previously served as the Chair (1978-1982) of the Biochemistry Section of the NYAS. Together, the NYACS and the NYAS biochemistry groups sponsor 7-8 symposia per year.

Dr. Barbara Petrack's efforts have not gone unnoticed. She has been the recipient of numerous awards. The New York Section of the ACS previously recognized her with a Salute to Excellence Award in 2002. Her continued activities on behalf of the NY Section gave us the opportunity to honor her again with the 2008 Outstanding Service Award.
Obituary — Malcolm Sturchio

Malcolm Louis Sturchio, a former editor of The Indicator, a mentor, colleague and friend of the members of the North Jersey and New York ACS Sections, passed away on April 30, 2009, after a courageous battle with primary liver cancer.

Mal was a dedicated chemist and educator who, in his 57 years as a professor of chemistry and science education at Fairleigh Dickinson University, taught tens of thousands of chemistry students and trained thousands more science teachers.

Malcolm Sturchio was born in Newark, NJ and attended Rutgers University (B.A., 1952) and Seton Hall University (M.A., 1954). He taught chemistry at Rutgers (Newark, NJ) and Panzer College (East Orange, NJ) from 1952-54, at the same time that he began a career-long association with Fairleigh Dickinson University (FDU). Starting in 1952 with his appointment as a Lecturer in Chemistry Malcolm’s work at FDU was consistently recognized as he assumed increasing responsibilities and numerous administrative positions including Executive Director of their Science Education Center and of their Math/Science Institute. In 1998, the University awarded him a Doctor of Humane Letters degree in recognition of his outstanding service to the University and to science education. His work with and commitment to FDU continued long after his official retirement in 1997.

Dr. Sturchio also played an important role in international relations in chemistry, particularly in his close relationship to the Korean chemical community and involvement in introducing modern science curricula to Korea following a stint as Fulbright Professor at Seoul National University in the mid-1960s.

Mal first joined the ACS in 1950 and was a fixture among the leadership of the North Jersey ACS Section. He held nearly every office in the Section, edited its monthly bulletin, The Indicator, Chaired the Section and served it well for multiple terms as a Councilor and Alternate Councilor. He was a valued and reliable member of a number of national and divisional ACS committees, including the Committee on Teaching Chemistry of the Division of Chemical Education and the ACS International Activities Committee.

Mal influenced science education in New Jersey and nationally – he led the New Jersey State Science Day and New Jersey Science League for decades and held leadership positions in both the New Jersey Science Teachers Association and the New Jersey Science Supervisors Association, as well as the National Science Teachers Association. Through his work on Kids in Chemistry and in teacher training courses Mal encouraged strong science curricula at the primary school level. He also provided exciting opportunities for high school students with his work on the Science League and Science Day.

Malcolm Sturchio was also actively engaged in the community and his willingness to give unstintingly of his time and counsel was matched by his generosity and steadfast support for his family and wide network of friends and colleagues around the world. Malcolm Sturchio will be missed.

In his memory, the family is establishing the Malcolm Sturchio Scholarship in Chemistry at Fairleigh Dickinson University. Please send donations to: Fairleigh Dickinson University, Institutional Advancement, 1000 River Road, Teaneck, NJ 07666, Attn: Ms. Sue McConville.
Register Today for these ACS ProSpectives conferences, designed for industry scientists, with an emphasis on ideas and information you can immediately apply to your work.

Tactical Approaches to the Challenge of Drug Failure  
October 4-6, 2009  
Philadelphia, PA • Crown Plaza Philadelphia Downtown

Process Chemistry in the Pharmaceutical Industry with Special Emphasis on Continuous Manufacturing  
November 2-4, 2009  
Durham, NC • Sheraton Imperial Hotel & Convention Center

Register now at www.proed.acs.org  
Advanced Registration and Group Discounts are available.
Welcome to the September issue of *The Indicator*. Over the summer there have been some changes in ACS and this publication, the newsletter of the North Jersey and New York sections. Students are now eligible to be full members of ACS and the comment below contains a special welcome for students. We have established an Editorial Board who will work to help make *The Indicator* a more valuable source of information for chemists in our area. Each monthly issue will now have more of a theme or focus and guest editors will help collect items to support the theme. A number of new columns will also appear for the first time, each has a contact that will again help solicit contributions. We encourage you to send comments, questions and submissions to them as well as the editor. All these materials will be in addition to the usual information about upcoming events and reports and photos from recent meetings that have been covered in *The Indicator*.

---

**Welcome to New Student Members**

*ACS WELCOMES NEW STUDENT MEMBERS*

*By Yorke E. Rhodes, NYU, Councilor, New York Section*

Growth is Change - We begin a new year in ACS several times a year. After a summer of vacation in September we begin a new academic year - in January, we will begin a new fiscal year with new national officers of ACS and new Local Section and Division officers. We change all the time. But this year with this September's issue of *The Indicator*, we welcome an even bigger change - as of July 1, 2009 Student Affiliates became Student Members!

We are happy to welcome students as members of the American Chemical Society Nationally and we welcome students as members of our Local Sections, especially in the New York Local Section and the North Jersey Local Section of the ACS. You are automatically assigned to a Local Section depending on where you live or where you attend school. You may also want to choose to join a Division, groups of individuals with a focus on a chemical interest, such as Analytical, Organic, Biochemical or Physical Chemistry, areas that you know from your educational programs, or even more specialized disciplines such as Rubber Chemistry, Chemistry and the Law, Polymer Chemistry, Water Chemistry, Paints and Finishes, and special areas of Biochemistry and Biological Chemistry. New Divisions are created as interests in new areas of chemistry expand and grow. There are 33 Divisions in total; Local Sections number 189. Local Sections vary in size from 50 Members (the minimum requirement to form a Section) to the largest Section, the Northeastern Section in the Boston area with about 7,000 Members. The North Jersey Section is the Second largest Section and the New York Section is also one of the eight Very Large Sections with about 4,000 members. There are six categories of sizes ranging from Very Small to Very Large, who compete within their categories - the larger the Local Section, the greater number and size of their activities, meaning more and different types and sizes of their Local Meetings.

Our two Sections, New York and North Jersey, have different organizational structures, and
different member types: New York members represent more typically academic members and North Jersey members have a greater number of industrial members, reflecting the chemical and pharmaceutical industries in the North Jersey area. New York Section is structured into six different Subsections, for example, Brooklyn, Long Island, Westchester, each having their own agendas and meetings, whereas North Jersey is one Section and tends to have more variety of their meeting groups and types. The two Sections complement each other in the interest differences of their members and together publish The Indicator, our joint monthly (except in Summer) publication; and yet, we are all Chemists, Chemical Engineers, Medical, Dental, Hospital personnel, etc. Our professional interests are all in some aspect of Chemistry.

ACS publishes the weekly national magazine, Chemistry and Engineering News, known by most of us as C&EN. All members receive C&EN as part of their membership. Local Meetings in New York and in North Jersey are monthly, typically, and are announced in The Indicator. Nationally, ACS holds two meetings per year, a Fall meeting in August or September, and a Spring meeting in March or April. This year Nat'l Meetings are held in Washington DC this August 15th to 20th, 2009 and then in San Francisco, CA from March 21st to 25th, 2010.

Nationally, ACS numbers about 155,000 Members. We claim to be the largest single science organization in the world. ACS was founded in 1876 in New York City by a group of chemists who wanted to get together to talk about their discoveries and research in areas of chemical interest and further to promote interest in chemical work.

How we have grown from this first group of interested scientists in joining an organization to promote chemistry. And now, we grow more by including you young chemistry students as members of our Society. (Student members if you wish.) We want to encourage you and stimulate you to be good, critical chemists and to do interesting chemistry and we want to be stimulated by you and your chemical work. We, in ACS, are volunteers and as you begin to volunteer with us you will get much more out of ACS as you volunteer in more and different ways as we work together to create a more productive science and a more contributing society through ACS activities. There are so many avenues of participation within ACS that you surely will be able to find several that are of interest to you and worthy of your time volunteered. We need you to grow and you need to grow.

Come, join our activities and programs. A Grand Welcome to our newest group of members from one of the older ones.

What’s In A Name?

Anita Brandolini, Ramapo College of New Jersey

So now you’re an ACS Member, not just a student affiliate! Congratulations, and welcome! But is this anything more than simply a name change? Well, yes and no. You will still pay dues at the undergraduate rate, will still belong to your college or university’s chemistry club, and will still have access to special student programs and resources. But your status as a member, rather than as an affiliate, gives you a greater voice in the Society, provides you with additional benefits, and recognizes your important role as soon-to-be professional scientists. By voting and volunteering, you can now become involved in the activities of the ACS as a whole, and begin to build the professional network that will support you throughout your career. By taking advantage of other member benefits such as publications, meetings, and the career consultants, you can expand on your undergraduate education to become an even more informed and effective scientist. As you go forward in your career, you will find the ACS to be a tremendous resource for networking and professional development. Whether your interests are in scientific areas, community outreach, or public advocacy, the ACS offers opportunities to make a difference to the science of chemistry. You are the future of these chemical sciences, and the ACS welcomes you, your ideas, and your enthusiasm.
The Significance of Community College Students in Becoming Members Rather than Affiliates of the ACS

Paris Svoronos, Ph.D., Queensborough Community College

Effective this summer 2009, undergraduates will be declared members rather than plain affiliates of the ACS. This is an overdue acknowledgment of the students’ importance in expanding the role of chemistry at the grassroots level. Chemistry is a difficult subject and most undergraduates take courses reluctantly and only because most health-related fields require it. It is common knowledge that less than 20% of the students taking Organic continue with Physical or Analytical Chemistry. Research and internship opportunities, unless they involve summer pay, do not particularly enhance the interest of undergraduates to continue as chemistry majors.

At Queensborough Community College almost three dozen students are annually involved with research projects that they present at the ACS-NY section-sponsored annual Undergraduate Research Symposium (URS) in early May. Three years ago the New York section decided to require that all student presenters become ACS-affiliates or pay a registration fee. This is a financial burden for our department where the budget is tight. However this is also turned out to be an advantage for our students. Now, students feel and become more attached to our profession. The significance is that upon graduation from Queensborough many choose to transfer and earn a B.S. or B.A. in Chemistry or Biochemistry, especially if they continue conducting research during their junior and senior years. Making them ACS members is a unique experience for them as well as an extra “bullet” in their resume.

The real benefit of our research program becomes significant when these same students start with a URS presentation and go on to regional and national meetings to present posters of their research findings.

Chemistry Undergraduates, ACS is the Place for You

Jill Rehmann, St. Joseph’s College

College chemistry students can now become full ACS members for the same cost as student affiliates last year. They can take advantage of the many opportunities offered by the world's largest professional organization for chemists. Being part of this national organization offers many benefits including mentoring, job and research opportunities, and invitations to participate in national meetings. It also includes membership in your local ACS chapter.

The New York Section of the ACS has many great programs for undergraduate students. Many of our undergraduate members have started ACS Student Member Chapters at their schools. If your college has one, you can join, and if not we can help you start one at your college. Every spring students from colleges throughout the New York are invited to present their research at the Undergraduate Research Symposium. This event has a 56 year history and has launched the professional careers of many successful chemists. Another event for student members is the Chemistry Challenge which is an annual event that invites teams of students from area colleges to test their chemical knowledge in a collegial competition.

All college students are invited to participate in the events the section sponsors throughout the year. We also invite ideas and participation on our committees by students. Let us know what you are interested in doing. One of our biggest events is the celebration of National Chemistry Week. In the New York Section we have a day of demonstrations at the New York Hall of Science where chemists from both academia (that means you, the students) and industry make science fun for children of all ages. The section also has many speakers and symposia where students have a chance to network with chemists in a variety of specialties.

To learn more about these and the many other great things the New York Section has to offer visit http://newyorkacs.org/. Join us, get involved and see what happens!
UNDERGRADUATE STUDENT MEMBERS — NORTH JERSEY ACS IS LOOKING FOR YOU!

By Amber Charlebois, College at Florham, Fairleigh Dickinson University

Chemistry undergrads all across the U.S. are now full members of the ACS. As full members, students can advantage of so many things that the national organization has to offer. In addition, students in the North Jersey Local Section can get involved in many activities, events and programs, and become active members in the local chemistry community.

In late October, in celebration of National Chemistry Week, the Section, together with volunteers from many pharmaceutical and chemical companies, local high school teachers, college chemistry clubs, and girl scout/boy scout troops gather at the Liberty Science Center for the Chemistry Expo. This is a day filled with dozens of chemistry demonstrations and experiments performed for the visitors to Liberty Science Center. It is an opportunity to reach out to the community and share the excitement of chemistry.

In April every year the Section holds the Research Conference of the Intercollegiate Council of the American Chemical Society Student Member Chapters. This Conference is usually hosted by the Chemistry Clubs at Fairleigh Dickinson University, Drew University or the College of Saint Elizabeth. It is an opportunity for all undergraduates who are performing research to present their research project in the form of an oral presentation. There are cash prizes awarded for the best presentations, including the Jean Asell Durana Award (a $250 award) for the overall best presentation and two smaller awards of $150 and $100 for the second and third prize winners, respectively.

Several of the undergraduate chemistry clubs have participated in outreach to the community through their presence at local street fairs and festivals. It is a great experience to spread the joy of chemistry to the surrounding community, and the interactions with children are especially enjoyable. In addition, some of the student member groups take their demonstrations to local high schools, middle schools, elementary school and even day care centers in order to plant the seed for our future chemists.

It should also be noted that the North Jersey Section, with its large number of pharmaceutical and chemical companies, and very large membership, has several very active and successful topical groups which hold regular meetings and events throughout the year. Topical groups in the section include, Organic, Mass Spectroscopy, Chromatography, Medicinal Chemistry, NMR, Polymers, MetroWomen Chemists Committee and Younger Chemists Committee. Undergraduate students are encouraged to take advantage of these groups and are invited to attend any of their activities (often at reduced cost). For more information about these groups or just to learn more about the NJACS check out the webpage http://njacs.org/.

Welcome aboard, student members!!!!
ANNUAL SEED POSTER SESSION

Support our top 100+ Project SEED students at our annual SEED Poster Session

ACS members are invited to attend the student poster session and dinner. Those willing to help with poster judging are admitted free. The Fee for dinner is $25 for others.

Over 100 posters will be presented by HS SEED students and Summer Scholars. Their research in the labs of professional mentors will include organic, pharmaceutical, biological, analytical, environmental, computational, inorganic, physical, and polymer chemistry, as well as chemical and bioengineering, food, cosmetic, plant, and materials science, and drug development.

Your interest is crucial to further inspire the students as they explore science careers and go on to college. The students worked at NJIT, Rutgers and Cook College (3 campuses), Seton Hall, Stevens, Columbia University, Beth Israel Hospital, UMDNJ, Ramapo College, New Jersey City University, NJ Meadowlands Environmental Org., Kean University, Fairleigh Dickinson University, Hackensack Hospital, and the Public Health Research Institute in Newark.

Thanks are due to their mentors' kindness and dedication, and funds donated by school boards, corporations, the ACS SEED Endowment and many individual chemists.

Date: Monday, September 21, 2009
Times: Poster setup 3:30 PM
Judging 4:00-6:00 PM
Dinner 6:00 PM
Awards and Presentation 6:30 PM
Place: Seton Hall University
University Center
Main Lounge
400 South Orange Avenue
South Orange, NJ
Fee: $25.00
Attendees are encourage to register at www.njacs.org
POLYMER TOPICAL GROUP

Polymers in Tissue Engineering

The symposium “Polymers in Tissue Engineering” is presented by the Polymer Topical Group of the North Jersey Section of the American Chemical Society and co-sponsored by the Society for Biomaterials. This symposium is intended to bring the local polymer science and biomaterials community up to date on recent developments in the application of polymers to solve challenges in tissue reconstruction and regeneration. Through a combination of reviews and case histories, the attendees will gain a fundamental foundation, a broad perspective on the directions and growth, and an update on recent advances in the use of polymers in tissue engineering.

This event features presentations, posters and networking opportunities at a mixer during the poster session. In addition to posters on Polymers in Tissue Engineering, general polymer posters are being requested.

Preliminary Program

Organizers: Professors Treena Livingston Arinzeh and Michael Jaffe NJIT-BME

“Challenges for the Biomaterials Scientist in Tissue Engineering”
Speaker: Joachim Kohn Rutgers

“Biomimetic Scaffold Design for Integrative Soft Tissue Repair”
Speaker: Helen Lu Columbia University

“Polymeric Scaffolds for Stem Cell Tissue Engineering”
Speakers: Treena Livingston Arinzeh NJ Institute of Technology
Kam Leong Duke
Patrick Snowhill Integra Life Sciences
Representative from Johnson and Johnson, Inc.

Poster Session

Bin Wei (ICI National Starch and Chemical) (bwei01@gmail.com)

Date: Thursday, October 29, 2009
Times: Registration 12:00 noon
Program 1:00 PM
Mixer/Posters 5:30 PM
Place: Rutgers University
Cook College Campus Center
59 Biel Road
New Brunswick, NJ
Cost: ACS or SfB Member, $40; non-member; $50; student, $25.
After October 15, 2009, member $45, non-member $55, student, $30

Directions: Can be found at the Rutgers University website:
http://maps.rutgers.edu/building.aspx?id=92

Registration: Please register on-line
http://www.njacs.org/ptg.html or send your full contact information along with a check made payable to NJACS-Polymer Group to Dr. Willis B. Hammond, Treasurer, NJACS-PTG, 128 Center Ave., Chatham, NJ 07928.

Poster Submission: Contact Bin Wei (bwei01@gmail.com)

Learn more about the North Jersey Section at www.NJACS.org
NoJ GROUP OF SMALL CHEMICAL BUSINESSES

Green Chemistry and Sustainable Business Models — Valuable Free Information on Shifting to Sustainable Chemistry as a Business Strategy

At the May 28, 2009 dinner meeting of the NJ Group of Small Chemical Businesses (NJGSCB), attendees were provided with free information on the trend towards leveraging sustainable chemistry as a business strategy, and the assistance that can be provided by the Sustainable Business Incubator at Fairleigh Dickinson University.

In the presentations, “Clean Chemistry for New Jersey”, by Tana Kantor of The Green Economy magazine; and “Partnering with the EDA”, by William Russell of FDU’s Sustainable Business Indicator, the attendees were acquainted with the concept of “green chemistry” as well as its “12 Principles”. Also emphasized was how, particularly in New Jersey, with its existing chemical and pharmaceutical infrastructure; the application of green / sustainable chemistry principles present significant opportunities for companies to improve their bottom line.

In the panel discussion following the presentations, moderator Jonathan Cloud of FDU’s Sustainable Business Indicator, along with panelists Tana Kantor and William Russell, continued the discussion of how the application of sustainability and green chemistry principles should be considered positively in formulating business strategies. Attendees shared their own experiences in this area with the group, and were encouraged to use Sustainable Business Incubator at Fairleigh Dickinson University for assistance.

Be sure to look for information on the next meeting of the NJ Group of Small Chemical Businesses: the Fall Marketing Forum, scheduled for October 2009, will again be designed to help you develop new business strategies and implement them successfully — making your business more profitable.

METRO WOMEN CHEMISTS COMMITTEE

On Thursday, May 28th, twenty women of the Metro Women Chemists Committee gathered at for a networking dinner at Taro Eclectic Asian Cuisine restaurant in Montclair. Dr. Anita Brandolini, an Assistant Professor at Ramapo College gave an informative and insightful presentation titled, “Petrochemicals to Pedagogy: From Industry to Academia.” It was a wonderful opportunity to meet, interact and network with women in the North Jersey/New York area. Between the presentation, the conversation and of course the scrumptious chocolate cake, a great time was had by all.

Dr. Anita Brandolini
POLYMER TOPICAL GROUP

The symposium on “Polymers for Sensory and Energy-related Applications” was held on May 14, 2009 at the Paul Robeson Campus Center’s Bergen Room, Rutgers University, Newark Campus. The symposium was organized by Prof. Frieder Jäkle. Dr. Bin Wei was the posters Chair and Dr. Nicole Harris (Sun Chemical) was the Exhibits Chair. Of the 90 registrants, there were 50 ACS members, 12 non-ACS and 28 students. There were 6 presentations focusing on new developments in sensory and energy-related applications. The poster/mixer session consisted of 14 industrial and academic posters, a commercial poster from Q-Sense and commercial exhibits from Q-Sense and Horiba Scientific. ExxonMobil and Sun Chemical were symposium sponsors.

The next symposium Polymers in Tissue Engineering will be organized by Mike Jaffe and Treena Arinzeh of NJIT and held on the Rutgers Cook Campus Student Center in New Brunswick, NJ. We are planning to hold the symposium jointly with the Society for BioMaterials and the tentative date is October 29, 2009.

The speakers: back, l to r: Andy Tsou (Exxon-Mobil), Ralf Peetz (College of Staten Island CUNY), Keynote Speaker Use Bunz (Georgia Tech), Kelly Chichak (GE Global Research) and Frieder Jaekle (program chair, Rutgers); front: Huixin He (Rutgers).

Small Discussion Group: Ron DeMartino (PTG Sec.), Xianhong Feng (NJIT) and Tony East (NJIT).

Registration: Bill Suits (Chempharma), Ron DeMartino (PTG Sec.) and Rao Bezwada.

Sergey Kazakov (Pace University) setting up poster with Xianhong Feng (NJIT) watching.

Poster Session and Commercial Exhibits.

Poster Session and Commercial Exhibits.

The Audience.
NORTH JERSEY SECTION’S OUTREACH TO JOB SEEKERS

Individuals, whose careers, are in transition are urged to go to http://njacs.org/jobs.html where links can be found to many resources. A primary source of assistance at the local level is the Careers in Transition (CIT) group that meets the first Thursday of the month at Fairleigh Dickson University in Madison. The CIT meetings are free to members and topics such as ways for optimizing a resume, answering common interview and effectively conducting a job search are discussed. The ACS notices tab provides information on benefits for unemployed ACS members and has direct links to key benefits including dues waivers, and discounts for regional and national ACS meetings.

You will also find job listings posted on Chemjobs at www.yahoogroups.com. Chemjobs allows subscribers to automatically receive updates and share information on new job openings and also obtain career advice above and beyond the information given at www.acs.org/careers and www.indeed.com. Employers can place free job postings on the Chemjobs site by following the instructions provided.

Most North Jersey Section Topical Groups have job boards at their meetings where one can post open positions and have resumes. To enhance networking, it is crucial for job seekers to bring plenty of business cards to these meetings. At most meetings local Career Consultants are present and are willing to introduce you to key decision makers. It is suggested that job seekers contact billsuits@earthlink.net prior to attending a Topical Group meeting to ensure that a Career Consultant will be available to assist you.

The national ACS website for career information is www.acs.org/careers. Many helpful resources including tips on resume writing, job searching and networking primers are posted there. The ACS Salary Comparator is especially helpful in establishing meaningful income expectations by taking into account: the type of industry, company location, and an individual's experience. Also on that website are the names of available Career Consultants who will review your resume and assist you in optimizing it.

Submitted by Bill Suits, Valerie Kuck and Rick Yglesias

VOLUNTEER OPPORTUNITIES NORTHERN JERSEY

Monday, September 21, 4:30 PM – 6 PM, Seton Hall University

Judges are needed to evaluate Project SEED posters and encourage these budding scientists. Your arriving as early would be appreciated. A free buffet dinner will be available to all judges. Contact Bill Suits at billsuits@earthlink.net or register at http://njacs.org

Saturday, October 24,10 AM – 2 PM, Liberty Science Center

How about joining the North Jersey Section in celebrating National Chemistry Week? You can present your own hands-on activities with your friends, join another table and share your chemistry, or help greet attendees. Just complete the forms in the NCW article in this issue of the Indicator. If you would prefer to go into your local school, library, or scout meeting at a time and date of your choice, please email vjkuck@yahoo.com with the particulars.

Volunteerism is not the same without “U”

Did you know that by volunteering for just a few hours you can make a difference in the lives of others? The American Chemical Society provides many services that are in need of your talents, caring spirit, and time. In the following months, we will inform you of events that the North Jersey and New York Sections are in need of a little help from you. Not only will you have the satisfaction of helping others, you will meet other generous members of the chemistry community. When many contribute a small amount of time, the impact of a program can be significant. Just in case you feel your contribution would be insignificant remember "If you think you're too small to make a difference, you haven't been in bed with a mosquito!" (Anita Roddick)

VOLUNTEER OPPORTUNITIES NORTHERN JERSEY SECTION

Monday, September 21, 4:30 PM – 6 PM, Seton Hall University

Judges are needed to evaluate Project SEED posters and encourage these budding scientists. Your arriving as early would be appreciated. A free buffet dinner will be available to all judges. Contact Bill Suits at billsuits@earthlink.net or register at http://njacs.org

Saturday, October 24,10 AM – 2 PM, Liberty Science Center

How about joining the North Jersey Section in celebrating National Chemistry Week? You can present your own hands-on activities with your friends, join another table and share your of chemistry, or help greet attendees. Just complete the forms in the NCW article in this issue of the Indicator. If you would prefer to go into your local school, library, or scout meeting at a time and date of your choice, please email vjkuck@yahoo.com with the particulars.

Send comments and questions about this column, offers of help and requests for volunteers to Volunteer@TheIndicator.org

Bobbi Gorman
rosellerams@yahoo.com

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

THE INDICATOR-SEPTEMBER 2009
NORTH JERSEY SECTION
TOPICAL GROUPS HAVE THE SOLUTION!

If you are interested in building your career, enhancing your leadership skills, staying current in your field of interest and networking with your fellow chemists, North Jersey Section Topical Groups are for you.

Topical Groups are the life blood of the North Jersey Section. Whether you are an old hand, or are just starting to work in a new area, you will benefit from the programs offered by the North Jersey Section’s 8 Topical groups (Chromatography, Drug Metabolism, Lab Robotics, Mass Spectrometry, NMR, Organic, Polymer and Small Chemical Business) and the many special interest groups and committees within the North Jersey Section. Over 50 meetings/symposia are held by these groups during the year catering to the many and varied needs of the North Jersey Section members.

A very important aspect of career building is keeping up-to-date in your field of interest and staying current is a necessity if you are going to grow in an extremely competitive environment. Attending monthly Topical Group meetings and symposia is an excellent way to stay competitive by listening to eminent speakers in their field. These meetings will also give you the chance to network and meet other chemist’s with similar interests. Many of the Topical Groups also hold vendor exhibits during their meetings that will give you an opportunity to see the latest instrumentation to stay competitive.

Enhance your leadership skills by getting involved with a Topical or Special Interest Group. Volunteers are needed at all levels and you can donate as little or as much of your time as you want. You can find more information on topical groups, special interest groups and committees at www.njacs.org and stayed tuned for more information here from these groups.

If you have comments or suggestions of groups to highlight, e-mail TopicalGroups@TheIndicator.org

Going Places

NORTH JERSEY AND NEW YORK MEMBERS

This column will highlight members of our Sections who have moved out of our area or are otherwise less visible locally but still involved in ACS.

Roland Hirsch joined the ACS and started his professional career in 1965, when he joined the faculty of Seton Hall University. His career and his ACS membership have developed in tandem ever since.

Roland quickly became involved in the North Jersey Section, thanks to colleagues who encouraged him to do so — Galen W. Ewing deserves special mention in this regard — and due to the fact that the monthly meetings were then mostly held at the university’s brand new Bishop Dougherty Student Center. Roland’s involvement in the Analytical Topical Group led to participation in the Eastern Analytical Symposium, cosponsored by the Section, which led to invaluable professional contacts across the country. He was elected a Councilor and then in 1978 Chair of the Section.

Election as Secretary of the ACS Division of Analytical Chemistry grew out of these experiences, and led directly to the second phase of his career, with the Federal government. Dub Shults of Oak Ridge National Laboratory was Chair of the Division in 1982, and he and Roland worked together closely. When an opening developed for a program manager at the Department of Energy Dub encouraged Roland to take it. After four years the move became permanent with a civil service position at the National Institutes of Health and then a return to DOE, where Roland has been since 1991.

Retaining membership in the Section has kept Roland in touch with many good friends, and he feels fortunate to be working with several of them in ACS governance.

If you have comments or suggestions of people to highlight e-mail NoJOnTheMove@TheIndicator.org
New York Meetings

www.newyorkacs.org

ACS NEW YORK SECTION
MEETINGS FOR 2009

The Board of Directors Meetings for the New York Section in 2009 are as follows:

Friday, September 11
November 13

The regular Board Meetings will be held at St. John's University, 8000 Utopia Parkway, Jamaica, NY. These meetings are open meetings and all are welcome. If you are not a member of the Board of Directors and wish to attend please inform the New York Section Office at 516-883-7510 or njesper1@optonline.net.

LONG ISLAND SUBSECTION

Understanding Molecular Self-Assembly using STM and Theory: Structural, Energetic, and Electronic Properties of Monolayer Films

Speaker: Dr. Gina M. Florio
St. John's University

Interfacial two-dimensional molecular self-assembly is driven by a variety of non-covalent intermolecular and adsorbate-substrate interactions. While the magnitude of potential energy of the chemisorbed system is dominated by the interaction between the adsorbate and substrate, the details of the packing structure are typically dictated by the nature and strength of the intermolecular forces. Understanding the complex balance of forces that initiate and control molecular self-assembly is of particular interest in nanotechnology. The spontaneous ordering of molecules into supramolecular structures on surfaces provides a synthetic route for the formation of functional nanometer-scale materials. This talk will detail our recent efforts using a combined scanning tunneling microscopy (STM) and theoretical approach to (i) determine the preferential packing structures of simple molecules (e.g. n-alkanes, haloalkanes, polycyclic aromatic hydrocarbons, benzene carboxylic acids) on graphite surfaces, (ii) to explore the potential energy landscape and determine the energetic origins of the observed packing motifs, (iii) to understand how the presence of a solvent modifies the assembly, and (iv) to understand the electronic structure of the interfacial system and its influence on the tunneling signatures observed via STM.

Date: Thursday, September 3, 2009
Times: Coffee 5:30 PM
Seminar 6:00 PM
Place: Hofstra University
Chemistry/Physics Building
Lister Auditorium
Times: Dinner 7:00 PM
Place: Neighboring restaurant
Cost: $20.00

CHEMICAL MARKETING & ECONOMICS GROUP

Creating Tomorrow's Business at BASF

Speaker: Mark Mielke

In addition to innovation activities carried out by BASF business units as well as the corporate R&D functions, BASF Future Business (BFB) pursues entirely new directions for growth through corporate venturing activity. As a global team, BFB identifies future business fields and scouts for relevant technology which fit these new areas. The talk will describe BFB's approach to scouting and strategy in the mega-trend fields of energy, electronics, health and environment.

Mark Mielke is responsible for Innovation Scouting & Strategy in North America at BASF Future Business GmbH. He formulates emerging market strategies and builds relationships with start up companies, innovators and universities with the goal of adding new technologies to the BFB portfolio leveraging BASF's core competencies in chemistry and materials. Mark analyzes megatrends and problems related the environment, energy management, and human health. Mark holds a PhD degree in Colloid Science from the University of Kiel Germany and an MBA from the Stevens Institute of Technology.

Date: Thursday, September 10, 2009
Times: Cocktails 11:30 AM
Luncheon 12 noon
Presentation 1:15 PM

(continued on page 18)
CHEMICAL MARKETING & ECONOMICS GROUP

(continued from page 17)

Place: Club Quarters
40 West 45th Street
New York, NYC
Cost: $45 for Members who reserve by Tuesday, September 8; $55 for Guests and Members (at door without reservations)

To Reserve: Please reserve early to be eligible for the discount price. We now accept all major credit cards via PayPal, or call Vista Marketing at (917) 684-1659, or via E-mail to cme-group@mac.com

METRO WOMEN CHEMISTS COMMITTEE

Fall Networking Dinner
Date: Thursday, September 17, 2009
See under NoJ Meetings, page 11.

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

Emerging Importance of Companion Diagnostics in Drug Development

Organizers: Carol Reed
Clinical Data, Inc.
George Zavoico
Westport Capital Markets, LLC

Speakers: Ken Carter
Avalon Pharmaceuticals, Inc.
Gary Kelloff
National Cancer Institute
(Additional speakers to be announced)

Molecular diagnostics is a rapidly growing field in the management of many diseases. Technological advancements, understanding of disease pathophysiology, and emergence of personalized medicine are putting new demands on drug development. This symposium will bring together some of the elements highlighting the demands, challenges, and successes in this exciting new era of disease management.

Date: Tuesday, September 22, 2009
Time: 1:00 – 5:00 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/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 http://www.nyas.org/benefits

HIGH SCHOOL TEACHERS TOPICAL GROUP

Sustainability Initiatives of the NYC DOE

Speaker: John Shea, CEO
Division of School Facilities
NYC DOE Division of School Facilities
44-36 Vernon Boulevard
Long Island City, NY 11101
<jShea3@schools.nyc.gov>

The NYC DOE is committed to integrating sustainability into both its operational and educational efforts. From our new construction projects, to our maintenance and custodial procedures, and eventually across the spectrum of our curriculum, environmental conservatism is an important part of the DOE’s message. This discussion will review some of the many initiatives that the DOE is undertaking, our challenges, and our goals for the future.

Date: Friday, September 25, 2009
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.

Sponsored by the New York Section
LEADERSHIP DEVELOPMENT COURSE
Developing Communication Strategies
Facilitator: Anne O’Brien
As a leader within ACS governance, you will encounter an increasing number of opportunities to represent the Society to outside parties, stakeholders, and media, often under pressure and in high visible situations. This level of communication requires a higher understanding of communications to ensure the best representation possible. This interactive course introduces you to executive level communications where you will learn how to skillfully communicate new insights, keep others informed, report on new endeavors, and communicate in an interesting and compelling manner. The event is open to all ACS members and the first 20 people to register will be reimbursed for their registration fee after successfully completing the course. For more information contact: Barbara Hillery, 516-876-2738, hilleryb@oldwestbury.edu and visit www.newyorkacs.org

Date: Saturday, September 26, 2009
Time: 9:00 AM - 1:00 PM
Place: St. John’s University
8000 Utopia Parkway
Jamaica, NY
Cost: $150

---

**Seton Hall University**

**Department of Chemistry and Biochemistry**

**Fall 2009 - Graduate Courses leading to the MS and PhD degrees**

**August 31 – December 19, 2009**

**Registration: August 27, 8:45 am – 4:45 pm**

All courses and programs are offered on a full or part-time basis. Classes meet during the evening or on weekends to accommodate busy working professionals.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 6205 NA</td>
<td>Modern Separation Tech.</td>
<td>Tues.</td>
<td>8:35-9:40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thurs.</td>
<td>7:00-8:25</td>
</tr>
<tr>
<td>CHEM 6301 NA</td>
<td>Theoretical Organic Chemistry I</td>
<td>Tues.</td>
<td>8:25-9:40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thurs.</td>
<td>7:00-8:25</td>
</tr>
<tr>
<td>CHEM 6401 NA</td>
<td>Chemical Thermodynamics</td>
<td>Tues.</td>
<td>7:00-8:25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thurs.</td>
<td>8:35-9:40</td>
</tr>
<tr>
<td>CHEM 6411 NA</td>
<td>Intro to Polymer Chemistry</td>
<td>Wed.</td>
<td>6:40-8:50</td>
</tr>
<tr>
<td>CHEM 6501 SA</td>
<td>General Biochemistry I</td>
<td>Sat.</td>
<td>9:00-12:00</td>
</tr>
<tr>
<td>CHEM 6601 NA</td>
<td>Advanced Inorganic Chemistry I</td>
<td>Mon.</td>
<td>7:10-8:25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wed.</td>
<td>7:10-8:25</td>
</tr>
</tbody>
</table>

For more information, please visit the Department of Chemistry and Biochemistry website at http://arts.chu.edu/chemistry/ or call us at 973-761-9414, or email chemistry@shu.edu

---

THE INDICATOR-SEPTEMBER 2009 19
EMPLOYMENT AND PROFESSIONAL RELATIONS COMMITTEE, NY 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.

Members can request job information or employers can advertise for free. They can contact me, Chair of the Professional and Employment Committee at hessytaft@hotmail.com if there is a job opening by employers or if a job seeker is looking for availability. The purpose of this mechanism is to put relevant people in contact who may not wish to give all their info on the web.

For job seekers, I would need their ACS member number, their latest degree, 3-5 words about their specialty/area of interest and about 1-2 lines on experience. For job posting, I would need a short description of the position available and the background required. 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.

NATIONAL CHEMISTRY WEEK — NEW YORK SECTION

The 2009 theme for National Chemistry Week is “Chemistry - It's Elemental”. Again, the New York Section will present NCW at the New York Hall of Science, Flushing, on Saturday, October 24 from 10 AM to 4 PM. The community activity will include collecting nonperishable food (in recyclable tin and aluminum cans) which will be delivered to a local food bank.

ACS is sponsoring a poster contest. The competition is looking for the best illustrated poster using the theme with a fun, motivational, and inspiring representation of an element or elements in the periodic table. There are four categories: kindergarten through second grade; third through fifth grade; sixth through eighth grade and ninth through twelfth grade.

Two posters may be submitted per grade level and received by October 17. Size of the poster from 8-1/2 x 11 to 14 x 22.

Send to: Joan Laredo-Liddell, 391 Palmer Road, Yonkers, NY 10701-5239. - (914-476-6860)

NEW YORK SECTION — COUNCILOR CORNER

Report by Ronald D'Amelia, New York

As a councilor for the New York section, I am a member of the ACS national Committee on Community Activities (CCA). The CCA provides guidance and support to the ACS office of Community Activities (OCA) and is classified as a Joint-Board Council committee. The mission of CCA is to deliver high-quality community-based outreach programs, products and services; to connect chemists with their local communities in an effort to improve the public’s perception of chemistry. To accomplish this mission, the committee has three subcommittees. I am a member of the Program Development and Promotion (PDP) subcommittee which provides guidance and develop resources for the Office of Community Activities outreach programs such as National Chemistry Week (NCW) and Chemists Celebrate Earth Day (CCED). The PDP team suggests theme names, facilitates collaborations and connections to other related organizations and advises OCA on activities, games, and resources associated with each year's respective celebrations. Important information regarding CCA activities and programs for CY 2009-2011 that all ACS members should be aware of are:

National Chemistry week in ’09 will be held from October 18-24. The Theme is “Chemistry- Its Elemental”

Chemists Celebrate Earth Day will be in April 2010. The Theme is “Plants: The Green Machines”

National Chemistry Week in 2010 will be in October and the theme will be “Behind the Scenes with Chemistry”

Year 2011 will be the International Year of Chemistry and many events will take place in support of this year’s chemistry celebration.

The Committee on Community Activities like the national ACS is trying to “Improve people’s lives through the transforming power of chemistry”
INTRODUCTION TO NoJ ACS AWARDS

NJ ACS administers seven annual or biennial awards to recognize the contributions from its members and to promote the advancement of chemistry. The Leo Hendrik Baekeland Award is given to an American chemist under forty years of age, for outstanding accomplishments in pure or applied chemistry. It has a long and distinguished history and is one of the few influential national awards administered by a local ACS section.

The Award for Creativity in Molecular Design and Synthesis is presented to an individual who has demonstrated broad scavenging impact in the areas of chemical synthesis, method development, bio-organic/medicinal chemistry, pharmaceutical sciences, and/or molecular recognition.

The Lifetime Achievement Award recognizes a North Jersey chemist or chemical engineer over fifty years of age for conspicuous achievements in chemistry, not heretofore recognized by any major scientific award.

The Sr. Marian José Smith Award for Excellence in Education is given to a professor in North Jersey for inspiring students and launching them on successful careers in chemistry.

The Burton C. Belden Distinguished Service Award recognizes a member of the North Jersey Section for conspicuous service to the Section.

The Pro Bono Award is presented to a member of the Section who does not hold an elective office of the Section, and who participated for at least five years in the management of affairs of the Section with dedication and noticeable success.

The latest addition to the Section’s awards is the Freddie and Ada Brown Award, which recognizes and encourages high achieving middle- and high-school students, of African American and Native American heritage, to further develop their academic skills, with views on careers in the chemical sciences.

For more information on these awards and to submit a nomination, please contact Jiwen Chen, Awards Committee Chair, at jchen@njacs.org, or visit http://njacs.org/awards.html.

PICTURES FROM THE NORTH JERSEY RECOGNITION DINNER

The awards ceremony was the Recognition Dinner for the North Jersey Section of the ACS. It was held at Fairleigh Dickinson University on May 27, 2009. It involved recognizing the 50 and 60 year members of the ACS as well as the ACS Student Affiliate Conference Awardees, the 11 Science Olympiad finalist, the Pro Bono Awardees of the NoJACS, the Edward J. Merrill Award winner, the Harvey Russell Award winner, the Freddie and Ada Brown Awardees, and the 2009 Lifetime Achievement Awardee who was the guest speaker.

ROCHE CHEMIST HONORED WITH NORTH JERSEY ACS LIFETIME ACHIEVEMENT AWARD

Waleed Danho, Ph.D., has a world-wide reputation as a leader and innovator in the field of peptide chemistry and the application of peptide chemistry to drug discovery. "Waleed is exceedingly deserving of this award. His scientific career has been marked by an unquenchable thirst for success and he has been a pioneer in peptide research, making significant contributions to Roche, the industry and scientific understanding," said Nader Fotouhi, Ph.D., vice president, global head, Discovery Technologies, one of several impressive chemists initially recruited to Roche by Danho.
NORTH JERSEY 50 & 60 YEAR MEMBERS

Dr. Jules Blake (right), Sixty Year ACS Member, with Joseph Potenza, ACS Chair at the NoJ ACS Awards Dinner 2009.

Dr. Joseph Weber (right), Sixty Year ACS Member, with Joseph Potenza, ACS Chair at the NoJ ACS Awards Dinner 2009.

Mr. Robert Steltenkamp (right), Fifty Year ACS Member, with Joseph Potenza, ACS Chair at the NoJ ACS Awards Dinner 2009.

Dr. Charles Shalotsky (right), Fifty Year ACS Member, with Joseph Potenza, ACS Chair at the NoJ ACS Awards Dinner 2009.

Dr. Gerhard Frohoich (right), Fifty Year ACS Member, with Joseph Potenza, ACS Chair at the NoJ ACS Awards Dinner 2009.

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

Dr. Edward Kresge (right), Fifty Year ACS Member, with Joseph Potenza, ACS Chair at the NoJ ACS Awards Dinner 2009.

Dr. Howard Kimmel (right), Fifty Year ACS Member, with Joseph Potenza, ACS Chair at the NoJ ACS Awards Dinner 2009.
ACS STUDENT AFFILIATES RESEARCH CONFERENCE AWARDS

Marc Lindner from FDU, ACS Student Research Conference Awardee, and his advisor Gloria Anderle

Itsaso Murua from NJIT, ACS Student Research Conference Awardee and her advisor, Joseph Bozelli.

NORTH JERSEY SECTION ACS PRO BONO AWARDS

Dr. Gary Munk (center) from the Hackensack Medical Center, receives the Pro Bono Award from Sue Fahrenholtz and John Penna.

Dr. Burkehard Wagner receives the NoJ ACS Pro Bono Award from Chairperson Joseph Potenza (right) and John Penna (left).

ACS TEACHER AFFILIATES HARVEY J. RUSSELL AWARD

Elizabeth Matuszak receives the NoJ ACS Pro Bono Award from Diane Krone and John Penna.

Dr. Richard Moog (center) from Franklin and Marshall received the Harvey Russell Award for Service to Chemical Education from John Penna and Bettyann Howson.
EDWARD J. MERRILL AWARD FOR EXCELLENCE IN HS CHEMISTRY TEACHING

Dr. Ara Kahyaoglu from Bergenfield HS receives the Edward J. Merrill Award for Excellence in HS Chemistry Teaching from NoJ ACS secretary Berryann Howson.

CHEMISTRY OLYMPIAD AWARDEES

2009 Chemistry Olympiad North Jersey American Chemical Society students who competed in the Advanced Test. The picture was taken at Fairleigh Dickinson University during the five hour exam. Twenty students from the ACS sections across the country will attend a two week study camp at the Air Force Academy in Colorado. From there, four will attend the International Chemical Olympiad.

School
Bergen Academy
East Brunswick HS
Madison HS
South Brunswick HS
Watchung Hill HS
Westfield HS

Teacher
Dr. David Ostfeld
Dr. Paul Kimmel
Claire Miller
Theresa Farinella
Michael Amendola
Martha Bailey

Left to right back row Mathew Akhil, Christopher Varnerin, Yixiao Wang; front row, Siddarth Viswanathan, David Kolchmeyer, Ian Osborn, Ajay Roopakalu, Utsarga Sikder, and Timothy Barnum.

Theresa Farinella with her Awardees, Ajay Roopakalu (left) and Utsarga Sikder.

Claire Miller with her Chem Olympiad Awardee Akhil Mathew.

Michael Amendola with his Chem Olympiad Awardee, Christopher Varnerin.
Solutions

ANSWERS FOR ALL YOUR PROCESSING NEEDS

IN THE EXHIBIT HALL:
• Over 300 Exhibitors - Leading manufacturers of process equipment, systems and technology for fluids, solids, and plant services.
• NEW Technology Workshops - An interactive opportunity to discuss specific solutions with participating exhibitors.

IN THE CLASSROOM:
• Dozens of Educational Sessions - covering efficient process operations and the latest technology in these programs: AIChE Day, The Chemical Engineering Magazine Educational Conference, Nano & Green Technology Symposium, and more.

ONLINE:
• NEW Matching Service connects you with the exhibitors that have the right products and solutions you need.

More to see, do and learn at the process industries #1 event.

Free Show Registration and Information:
www.chemshow.com

November 17-19, 2009 | Javits Convention Center • New York City

Produced and managed by:
INTERNATIONAL EXPOSITION CO. Telephone: 203-221-9232 E-mail: info@chemshow.com

Endorsing Associations:
NEW YORK ACS AWARDS — IN REVIEW

WESTCHESTER CHEMICAL SOCIETY

Joseph Sencen, Westchester Chemical Society’s chair presented Joan Laredo-Liddell and Jean Delfiner the Salutes to Excellence Award for their five years as serving as co-chairs for WCS.

The Westchester Chemical Society presented Chemistry Achievement Awards to the top college chemistry students (seated), while their faculty members are standing behind them.

The April Westchester Chemical Society Meeting was presented by Dr. Rolande Hodel at NYU-Polytechnic University. Left to Right: Mary Cowman, Joseph Sencen, Rolande Hodel, Peter Corfield, Ann O’Brien, John Weisburger, Joan Laredo-Liddell.

Joseph Sencen, Westchester chair, presented the Westchester Chemical Society’s Distinguished Scientist Award to Dr. Thomas H. Hintze, in recognition of his research and insight into the mechanisms of causation of heart disease that can be the basis for prevention and effective therapies.

Dr. Joseph Sencen presents a certificate of congratulations to Kathy Wang of Pearl River High School (Rockland County). Kathy Wang was one of the top students in the Chemistry Olympiad. With Kathy is her mother.

Westchester Chemical Society’s Board members with Dr. Hintze. (Seated) Rolande Hodel and Ellen Weiser (standing) Richard Cassetta, Jean Delfiner, Peter Corfield, Joseph Sencen, Dr. Hintze, Mary Cowman and Joan Laredo-Liddell.
LONG ISLAND SUBSECTION

LI-ACS High School Award sponsored by the Long Island subsection of the NY-ACS and organized by the Awards Committee Chair, Dr. Ralph Stephani, was held on June 9, 2009 at St. John’s University. Awards were presented to students receiving the highest mark in chemistry from Suffolk, Nassau and Queens high schools. Each nominee was presented with a plaque by the Chair of the Long Island Subsection. The ceremony was opened by the ACS New York Section Chair, Dr. Barbara Hillery, and featured a seminar by Dr. Denton Ebel of the American Museum of Natural History who spoke about meteorites and their formation and properties.

The 9th Chemistry Challenge sponsored by the Long Island subsection of the NY-ACS was held on April 24, 2009 at Queensborough Community College. This was a chemistry knowledge competition between twelve student teams of three members from area two- and four-year institutions. Frank Romano of Agilent Technologies was the master of ceremonies and special thanks go to Pedro Irigoyen of QCC for his invaluable technical assistance. Hofstra University team 1 won the event and received gold medals. The 2nd place went to Adelphi team 1 and the 3rd place was shared by Adelphi University team 4 and St. John’s University team 2. The 2nd and 3rd place teams were awarded silver and bronze medals. All participants received Barnes and Noble gift certificates. We look forward to next year’s competition!
Call for Nominations

ACS NEW YORK SECTION’S OUTSTANDING SERVICE AWARD FOR 2009

Each year since 1958 the New York Section presents an Outstanding Service Award to a most deserving member of the section. Many members of the New York Section provide their time, leadership talent, and educational skills to the New York Section. The tradition of excellence of the New York Section is attributable directly to the cumulative effect of these individuals. Please help the New York Section to recognize the efforts of our colleagues by nominating them for this award. Nominations will be reviewed by a committee consisting of the previous five winners of the award. The Outstanding Service Award for 2009 will be presented at the New York Section’s Section-wide Conference in January 2010.

Nominations with supporting data should be mailed to the OSA Committee Chair, Dr. Robert H. Beer, Department of Chemistry, Fordham University, 441 East Fordham Road, Bronx, NY 10458, or emailed to beer@fordham.edu.

For more information about the award along with a list of former award recipients, please visit the New York Section’s website at http://www.newyorkacs.org/awards_nyacs.html.

EDWARD J. MERRILL AWARD FOR OUTSTANDING HIGH SCHOOL CHEMISTRY TEACHER FOR 2010

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 2010.

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.

www.emdechemicals.com/analytics

Does EMD know anything about ACS Reagents?

You might say we’re in tune with your needs.

EMD offers a diverse range of ACS products that perform.

The quality of our solvents plays second fiddle to no one.

That’s what’s in it for you. EMD Chemicals
NOMINATIONS ARE OPEN FOR 2011 ACS NATIONAL AWARDS

Nominations for the national awards administered by ACS that will be presented in 2011 are now being taken. The deadline date for submitting nomination packages for 2011 is November 1, 2009. Earlier transmittal of nomination documents is strongly encouraged.

The ACS Board Committee on Grants and Awards, which oversees the awards program, urges the nomination of individuals from groups not commonly named as recipients of ACS awards such as women, minorities, chemists from industry and the National Laboratories and faculty members at universities not well-represented in the awards program. If you are aware of individual who has done outstanding work, please consider preparing a nomination package for the person. Nomination forms as well as detailed descriptions of all of the ACS national awards are available online at www.acs.org/awards. The awards cover all branches of chemistry.

It should be noted that any individual may nominate a person for an award, unless that individual is a member of the Selection Committee for that award. However, Selection Committee members may submit nominations for other awards.

If you have any questions concerning the awards, it is recommended that you email the Office of the Awards Programs at awards@acs.org. For help in nominating ACS members from the NY/NJ area, you can contact Les McQuire (Les@LesMcQuire.org) or Val Kuck (VKuck@Comcast.net).

Don’t let someone’s outstanding efforts go unnoticed by the chemistry community. Help the Society recognize those individuals who have made a difference!

2010 SISTER MARIAN JOSE SMITH EXCELLENCE IN EDUCATION AWARD

This American Chemical Society award consists of $1,000 prize and a recognition plaque. It recognizes a Chemistry professor from a degree-granting Institution in the...
CALL FOR NOMINATIONS
(continued from page 29)

North Jersey area for inspiring students and launching them on successful careers in chemistry as manifested by their accomplishments.

Please submit nominations and supporting letters to Jiwen Chen, Awards Committee Chair, c/o NJ ACS, 4 Cameron Road, Piscataway, NJ 08854. Tel: 609-818-6319, email: jchen@njacs.org. Nominations must be received by February 19, 2010. Visit http://www.njacs.org/awards.html for more information and a list of past recipients.

ASSOCIATION OF CONSULTING CHEMISTS & CHEMICAL ENGINEERS — JOINT MEETING WITH AIChE NY METRO SECTION

A Chemical Consulting Business —Then and Now

Speaker: Dr. John C. Bonacci
Fibonacci Inc.

Reflections from the owner-operator of a small consulting practice over the past 20 years will be shared with members of AIChE and the ACC&CE.

These experiences and comments evolve from work by Dr. Bonacci for clients of his company Fibonacci Inc. They cover a 20 year period from 1988 until early 2009. Any specific case histories emanate from catalyst applications, air pollution control, safety & accidents and some design work. The clients were large Fortune 200 companies as well as smaller and start-up companies.

Dr. John C. Bonacci is a Ph.D. Chemical Engineer with degrees from Clarkson University and U. of Pennsylvania. He is a licensed professional engineer and US Patent Agent license. John is a co-author on 101 global patents issued to Dupont, Mobil Oil and Engelhard Corporation. He has published numerous refereed articles in World-wide journals, spoken and chaired dozens of seminars. He was elected a Fellow of the AIChE in 1984 and received the Golden Knight award from Clarkson University in 2002.

He served on the AIChE National Education Committee, was a member of the New Jersey Energy Institute and Chairman in 1984-85

and a Trustee of the World Environment Center. He is currently a twice-elected Councilman in Berkeley Heights, New Jersey.

Date: Monday, September 21, 2009
Times: Networking/Buffet Dinner 5:30 PM
Presentation  6:30 PM
Place: Pfizer Building
685 Third Avenue
New York, NY

MERCK DONATES THE MERCK INDEX TO HIGH SCHOOL CHEMISTRY TEACHERS

Merck & Co., Inc., a national partner for the 2009 National Chemistry Week (NCW) celebration, has donated 10,000 copies of the 14th edition of the Merck Index to ACS for teachers across the US. North Jersey ACS members can request a copy for their students High School Teacher by visiting www.njacs.org and completing the online request form.

To complete the online request, please have the following information available: ACS member’s name, member’s email, name of teacher, school, school address, ACS meeting/event at which you will pick up your copy. The copy will come with a letter signed by our chair, Joe Potenza, which you can also sign before giving the book to the teacher. It will also have directions to an njacs.org site where the teacher can acknowledge receipt and obtain access to many ACS resources to help in their teaching role.

Copies will also be provided for teachers who volunteer to judge for the SEED poster session at Seton Hall University on September 21, 2009, or help with NCW at the Liberty Science Center on October 24th. A limited number of copies will be distributed at the New Jersey Science Convention October 13-14, 2009.

Thank-you Merck for this and all the support you have given to chemists, the profession and chemical education.

Submitted by Bill Suits

THE INDICATOR-SEPTEMBER 2009
National

NERM 2009 OPENS FALL REGIONAL MEETING SCHEDULE

The 36th ACS Northeast Regional Meeting (NERM) leads off the fall season of ACS Regional Meetings. Hosted by the Connecticut Valley Section, NERM will be held at the Hilton Hartford Hotel and Conference Center, October 7-10, 2009, just as the leaves are turning. Abstracts and advance registration are now open – you can find links to both on the NERM web site (www.NERM2009.org).

In addition to a strong technical program, NERM offers an exciting program for high school chemistry teachers and middle school science teachers, including sessions on forensics, polymers, biofuels, alternative energy, lab safety, demonstrations, and more. Attendees will be able to earn CEUs. Programming for students includes workshops on careers and job search and a graduate school fair. Also, NERM is soliciting nominations for regional awards in the areas of high school chemistry, volunteerism, achievements in chemistry, and industrial innovation. Visit www.NERM2009.org for more details about the awards, and to nominate a worthy member of your local section!

Check the ACS Regional Meetings web site for links to online registration and the web sites for all the fall meetings, and don’t miss the upcoming editions of ACS Matters, in which we’ll be previewing each of the fall ACS Regional Meetings in detail!

CHEMISTRY OLYMPIAD

The U.S. National Chemistry Olympiad is a multi-tiered program designed to locate the best students under the age of 19, and to find a team of four top students to represent the U.S. in the International Chemistry Olympiad. During this process students, teachers and schools honored and chemistry is fostered at the high school level.

The Olympiad program is subsidized by the American Chemical Society, which has been involved in the program since 1984.

(continued on page 32)
The multi-tiered process begins with an invitation to promising chemistry high school students in our section (approx. 10,000 nationally) to take a 2-hour-long local screening test at the College at Florham, FDU. Successful students are then asked to take a grueling 6-hour battery of tests (approx. 900 nationally) involving multiple choices questions, thought problems, and laboratory exercises.

From the last tests, graded and ranked by the national office, the top 20 best students in the country emerges. These students are invited to a two-week study camp at the Air Force Academy in Colorado Springs. During this time, a battery of lectures, tests, and labs on all phases of chemistry are given, leading to a team of four top-notch chemistry students representing the U.S. in the International Chemistry Olympiad.

The North Jersey Section is proud to have two students ranked in the top 20, and one member of the international team, for the last 6 consecutive years. Our entry this year is Yixiao Wang from Westfield High School. His teacher/coach in AP chemistry was Louis Casogrando. He traveled to Cambridge, England for the international competition July 18-27, 2009.

The Indicator features short reports on local ACS committees and activities. To comment on this item or to suggest other activities to profile e-mail Committee@TheIndicator.org.

REPORT FROM ACS

REPORT FROM THE JUNE ACS BOARD OF DIRECTORS MEETING

In an effort to keep you better informed of the activities of the ACS Board of Directors, throughout the year I will post in The Indicator a brief synopsis of the most recent Board meeting. Our meetings are focused on addressing major strategic issues that can represent opportunities, potential barriers to success of the Strategic Plan, or both. We monitor the progress that we are making in achieving our goals through reports from standing committees, task forces, working groups, and the Executive Director/CEO. At the June meeting, the Board considered a number of critical issues and responded with several actions.

The Board voted to support the funding of four ACS national awards, announced that the Board had selected Richard Zare of Stanford University as the recipient of the 2010 Priestly Medal and that Margaret Cavanaugh of the National Science Foundation as the recipient of the 2010 Volunteer Service Award, discharged the Board Oversight Group on Leadership Development with thanks, and instituted a Leadership Advisory Board, which has oversight for the ongoing efforts of promoting participation and establishment of a full pipeline of leaders.

In light of the current economic downturn and the resulting impact on the Society’s finances, the Board received a thorough briefing of ACS Finances that included the Society’s current financial status. Like many organizations, ACS experienced a significant decline in its unrestricted net assets, or reserves, due to investment losses and non-operating changes related to its defined benefit pension plan. Overall, the Society’s reserves fell from $212 million as of December 31, 2007 to $60 million by year end 2008. This decline was directly related to the historic drop in the capital markets. The Board learned that, as a result of several mitigating actions and some improvements in the capital markets, unrestricted net assets stood at $132.7 million as of May 15, 2009. The Board agreed to continue its review of Society finances at its August meeting — noting that this topic will remain under stringent review for the duration of the global crisis.

Finally, the Board spent considerable time discussing issues related to enhancing the ACS member proposition and the Society’s effectiveness and influence on public policy in the interest of science and our members. By Valerie Kuck, ACS Board Director-at-Large and member North Jersey Section. Questions and comments to Val are welcome: VJKuck@yahoo.com
Partners In Science

PARTNERS IN SCIENCE

This new monthly column will highlight other societies and groups providing programming which may interest ACS members. If you have comments or suggestions of groups to highlight e-mail Partners@TheIndicator.org.

The Royal Society of Chemistry has 2,000 members, out of the Society’s world wide total of 46,000, in the United States. These chemists make up the RSC US Section which holds meeting and events independently and in partnership with other scientific organizations (e.g. ACS, IUPAC etc.).

New Jersey and New York are convenient to many RSC meetings as large number of RSC members live between Washington D.C. and Boston. The RSC US Section maintains a website (www.RSC-USA.org) and there are RSC US groups on Facebook, LinkedIn and Yahoo. RSC members are kept informed of upcoming events via the web and by regular mailings. New Jersey and New York are in the middle of many RSC US activities.

The RSC US now routinely holds events in conjunction with the ACS Middle Atlantic and northeastern Regional Meetings (MARM and NERM) and there are RSC receptions at every National ACS Meeting. The RSC Section helped initiate and now co-sponsors, with ACS and IUPAC, the “Advances in Chemical Sciences” meeting held in Cambridge, MA each spring.

The Section usually holds meetings in the spring and fall. Every other year the Section holds a Garden Party in Mystic, Conn., and the Annual General Meeting is always held in New York City in November.

The RSC US welcomes you to participate by either attending with your partner, friends or colleagues — they try to find interesting speakers who appeal to a mixed audience as well as our purists. For more information see the www.RSC-USA.org site or e-mail Les@LesMcQuire.org.

On-Line Tools

ON-LINE TOOLS THAT WORK FOR CHEMISTS

This new monthly column will highlight online tools and resources that ACS members may find useful in their professional, personal and volunteer lives. If you have comments or suggestions of tools to highlight e-mail Tools@TheIndicator.org.

The ACS has established the ACS Network which has the potential to be the largest online global chemistry community. Today over 17,000 chemists and chemical practitioners worldwide have already joined the ACS Network and are using the power of this online community to establish connections, collaborate with colleagues and to share their knowledge and expertise. The ACS Network is a professional networking and collaboration platform that connects scientists, ideas and opportunities.

The ACS Network’s growing suite of tools will allow members to build on-line profiles, form and join groups, participate in discussions, get email alerts, share documents and collaborate with other network members who share similar interests.

There is also a small but growing North Jersey group on the ACS Network that could be used to communicate rapidly within the section. Join the ACS Network (www.acs.org/acsnetwork) today and the North Jersey group.

An unrelated but useful page for you to explore: www.acs.org/getinvolved.

Submit a letter for publication to Letters@TheIndicator.org

Give us feedback on The Indicator by completing the survey at www.TheIndicator.org/survey.html
SEPTEMBER HISTORICAL EVENTS IN CHEMISTRY

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

September 1, 1909
One hundred years ago on this date, Rohm & Hass Co., was founded 1909.

September 2, 1853
One hundred years ago, Wilhelm Ostwald was awarded the Nobel Prize in Chemistry in recognition of his work on catalysis and for his investigations into the fundamental principles governing chemical equilibria and rates of reaction. He was a researcher on affinity, mass action, theories of solutions, and conductivity (Ostwald's Law of dilution & conductivity) and was born on this date.

September 7, 1854
Paul Vielle, invented smokeless powder, Poudre B, from gelatinized nitrocellulose mixed with alcohol and ether. He was born on this date.

September 9, 1929
Westinghouse Laboratories announced the discovery of Konel, a cobalt-nickel alloy, on this day.

September 10, 1892
Arthur H. Compton, who received the Nobel Prize in 1927 for his research in cosmic & x-rays, was born on this day.

September 11, 1894
Carl S. Marvel, who did research in organic chemistry and polymer synthesis, was born on this day.

September 13, 1937
Polaroid Corporation was incorporated on this day.

September 14, 1698
Charles F. de Cisternay Du Fay, who discovered + and - electricity and repulsion between like charges was born on this day. He also did research in phosphorescence and double refraction.

September 17, 1901
Peter Cooper Hewitt obtained patent for mercury vapor lamp on this day.

September 22, 1791
Michael Faraday was born on this day. He discovered electromagnetic induction, specific inductive capacity, rotation of plane-polarized light in a magnetic field and liquefied chlorine and other gases.

September 22, 1909
One hundred years ago on this date, the first liquid chlorine shipped in the US by Electro-Bleaching Gas Co., Niagara Falls, NY.

September 24, 1905
Fifty years ago, Severo Ochoa and Arthur Kornberg shared the Nobel Prize in Physiology or Medicine for their discovery of the mechanisms in the biological synthesis of ribonucleic acid and deoxyribonucleic acid. Severo Ochoa was born on this date and did research with enzymatic processes in biological oxidation and synthesis and the transfer of energy;

September 29, 1915
Gencorp incorporated as General Rubber Mfg. on this day.

September 30, 1802
Antoine J. Balard, who was born on this date, discovered bromine in seawater in 1826, hypochlorous acid, and chlorine monoxide.

Additional historical events can be found at Dr. May's website, at http://faculty.cua.edu/may/ChemistryCalendar.htm or the “This Week in Chemical History” at the ACS website: http://www.acs.org/whatischemistry.
Ad Index

**ANALYTICAL**
- Columbia Analytical Services ........ 27
- EMD Chemicals Inc. ................. 28
- Huffman Laboratories, Inc. ....... 35
- International Exposition Co. ...... 25
- Micron Inc. .......................... 10
- Nacalai USA Inc. .................... 12
- New Jersey Institute of Technology ... 35
- NuMega Resonance Labs .............. 35
- Robertson Microlit Labs ............. 36
- Vacuubrand, Inc. .................... 29

**EDUCATION**
- ACS ProSpectives .................... 6
- Seton Hall University ............... 19
- Stevens Institute of Technology ...... 2

**EQUIPMENT**
- Eastern Scientific Co. .............. 31
- Mass Vac, Inc. ...................... 36

**GENERAL**
- ACS-NY/NoJ Sections ................ 16
- ACS-NY/NoJ Sections ................. 35
- ACS-NY/NoJ Sections ................. 35

*Send any suggestions for articles to*
Suggestions@TheIndicator.org

---

**Elemental Analysis**
CHNOS ash
ICP • AA • ICP/MS
TOC • TOX • BTU
Problem Solving

**HUFFMAN LABORATORIES, INC.**
Quality Analytical Services Since 1956
Phone: (303) 278-4455
Fax: (303) 278-7012

chemistry@huffmanlabs.com
www.huffmanlabs.com

---

**NMR Service 500 MHz**

*Mass*

*Elemental Analysis*

NuMega Resonance Labs

numegalabs.com  P- 858-793-6057

---

**SEARCHING FOR THAT SPECIAL JOB?**

There are many companies and organizations searching for chemical and biochemical personnel to fill important jobs in their organizations.

- Companies for laboratory and management positions
- Universities & Colleges for teaching positions and laboratory personnel
- Hospitals for technical and research personnel

There are several web sites that may help you search for these open positions.

- [www.mboservices.net](http://www.mboservices.net)
- [http://newyorkacs.org/jobs.html](http://newyorkacs.org/jobs.html)
- [http://njacs.org/jobs.html](http://njacs.org/jobs.html)

---

**Send any suggestions for articles to**
Suggestions@TheIndicator.org
Robertson Microlit Laboratories
Where speed and accuracy are elemental

- Elemental CHN, S, X, Analysis (same day service)
- Metals by ICP-OES, ICP-MS, A/A
- FTIR, UV/VIS Spectroscopy
- Ion Chromatography
- Bioavailability
- Polarimetry
- DSC, melting point
- KF Aquametry, Titrimetry

P.O. Box 927 • 29 Samson Ave. • Madison, NJ 07940 • 973.966.6668 • F 973.966.0136
www.robertson-microlit.com • email results@robertson-microlit.com

Rapid Results • Quality • Accuracy • Competitive Pricing

Vacuum Inlet Traps
Because vacuum pumps don’t grow on trees.

Oil Filtration Systems
Because a really old, really healthy vacuum pump is a beautiful thing.

Oil Mist Eliminators
Because no one wants to eat oily mist.

PRODUCTS
A Division of Mass-Vac, Inc.
247 Rangeway Road • PO Box 359 • North Billerica, MA 01862
978 667 2393 • Fax 978 671 0014 sales@massvac.com • www.massvac.com