



**Dr. Fred McLafferty**

NoJ Mass Spectrometry 2007 Discussion Group's  
Distinguished Lecturer

*See page 7.*

RECYCLE THIS PAPER

PERIODICALS POSTAGE

[www.theindicator.org](http://www.theindicator.org)

[www.njacs.org](http://www.njacs.org)

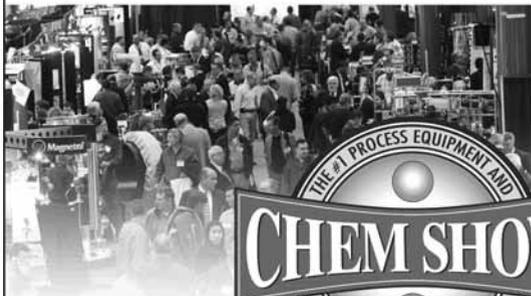
[www.newyorkacs.org](http://www.newyorkacs.org)



Over 500 Exhibitors!

See the Best of the **CPI...**

THE SUPPLIERS. THE PRODUCTS. THE SOLUTIONS.



THE 52ND CHEMICAL PROCESS INDUSTRIES EXPOSITION  
OCTOBER 30 - NOVEMBER 1, 2007  
JAVITS CONVENTION CENTER • NEW YORK CITY

Free Registration and Show Information  
[www.chemshow.com](http://www.chemshow.com)

**Don't Miss America's Largest Process Industries Event**

Produced and Managed by:  
INTERNATIONAL EXPOSITION CO.  
tel: (203) 221-9232 e-mail: info@chemshow.com

Endorsed by:



**THE INDICATOR**  
Manager / Editor  
MALCOLM STURCHIO  
1 Cable Court, Montville, NJ 07045  
973-331-5142; Fax 973-331-5143  
e-mail: sturchio@optonline.net

**Advertising Manager**  
VINCENT GALE  
MBO Services  
PO Box 1150, Marshfield, MA 02050-1150  
781-837-0424; Fax 781-837-1453  
e-mail: vincegale@mboervices.net

**INDICATOR COMMITTEE**  
**New York Section Rep.**  
EVELYN SARNOFF  
97-37 63rd Road, Rego Park, NY 11374-1624  
718-459-3097

**North Jersey Section Rep.**  
JACQUELINE ERICKSON  
GSK, 1500 Littleton Road, Parsippany, NJ 07054  
973-889-2368  
e-mail: jacqueline.a.erickson@gsk.com

**Web Master**  
PAUL TUKEY — e-mail: tukey@verizon.net  
**NEW YORK SECTION**  
<http://newyorkacs.org>

**Chair**  
JOAN A. LAREDO-LIDDELL  
391 Palmer Road, Yonkers, NY 10701-5239  
914-476-6860  
e-mail: jlaredoliddell@aol.com

**Chair-Elect**  
DR. MARC WALTERS  
Dept. of Chemistry, New York University  
100 Washington Square East, New York, NY 10002  
212-998-8400; Fax 212-260-7905  
e-mail: marc.walters@nyu.edu

**Secretary**  
DR. IWAŌ TERAOKA  
Dept. of Chemical and Biological Sciences  
Polytechnic Univ., 333 Jay St., Brooklyn, NY 11201  
718-260-3466; Fax 718-260-3676  
e-mail: teraoka@duke.poly.edu

**Section Office**  
St. John's University, Chemistry Dept.  
8000 Utopia Parkway, Jamaica, NY 11439  
516-883-7510; Fax 516-883-4003  
e-mail: njesper1@optonline.net

**NORTH JERSEY SECTION**  
<http://www.njacs.org>

**Chair**  
DIANE KRONE  
Northern Highlands Regional High School  
298 Hillside Avenue, Allendale, NJ 07401  
e-mail: kroned@optonline.net

**Chair-Elect**  
DR. MICHAEL M. MILLER  
Drug Discovery Chemistry, Bristol-Myers Squibb Co.  
Pharmaceutical Research Inst., P.O. Box 5400,  
Princeton, NJ 08543-5400  
e-mail: michael.miller@bms.com

**Secretary**  
BETTYANN HOWSON  
49 Hillside Avenue, Madison, NJ 07940-2612  
973-822-2575  
e-mail: chemphun@optonline.net

**Section Office**  
4 Cameron Road, Piscataway, NJ 08854  
732-463-7271

THE **Indicator**

CIRCULATION: 8,500

The monthly newsletter of the New York & North Jersey Sections of the American Chemical Society. Published jointly by the two sections.

**CONTENTS**

|                                      |                |
|--------------------------------------|----------------|
| Advertisers Index .....              | 26             |
| Call for Nominations .....           | 20             |
| Education .....                      | 12, 15, 16, 27 |
| New York Meetings .....              | 16-18          |
| North Jersey Meetings .....          | 6-15           |
| Obituaries .....                     | 19             |
| Others .....                         | 21-22          |
| Professional/Product Directory ..... | 24-26          |
| Puzzle .....                         | 23             |
| Puzzle Solution .....                | 24             |

**EDITORIAL DEADLINES**

|              |                  |
|--------------|------------------|
| November     | September 14     |
| December     | October 15       |
| January 2008 | November 16      |
| February     | December 14      |
| March        | January 15, 2008 |
| April        | February 16      |
| May          | March 14         |
| June         | April 14         |
| September    | July 14          |
| October      | October 15       |



Visit Us  
[www.TheIndicator.org](http://www.TheIndicator.org)

**POSTMASTER:** Send address changes to American Chemical Society, Department of Member and Subscriber Services, *THE INDICATOR*, P.O. Box 3337, Columbus, OH 43210, or e-mail: [service@acs.org](mailto:service@acs.org). Periodicals postage paid at Montville, NJ and additional mailing offices.

Published monthly except July and August. All views expressed are those of the editor and contributors and do not necessarily represent the official position of the New York and North Jersey Sections of the American Chemical Society unless so stated. Subscription price included in dues paid by New York and North Jersey Section members. Subscription price to non-members of either Section \$20.00 per year. To subscribe, make checks payable to The Indicator and mail to the Manager/Editor (see top of left column on this page).

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

## September Calendar

### NEW YORK SECTION

**Thursday, September 6, 2007**

Chemical Marketing & Economics Group  
See page 16.

**Tuesday, September 25, 2007**

Biochemical Topical Group  
See page 16.

**Thursday, September 27, 2007**

Long Island Subsection  
See page 17.

**Friday, September 28, 2007**

High School Teachers Topical Group  
See page 17.

**Deadline for items to be included in the October 2007 issue of *The Indicator* is August 15, 2007.**

### NORTH JERSEY SECTION

**Thursday, September 6, 2007**

Careers in Transition  
See page 7.

**Thursday, September 13, 2007**

NoJ Mass Spectrometry Discussion Group  
See page 7.

**Monday, September 17, 2007**

Teacher Affiliates Executive Committee  
See page 7.

**Wednesday, September 19, 2007**

NoJ NMR Topical Group  
See page 8.

**Monday, September 24, 2007**

NoJ Executive Committee  
See page 6.

**Monday, September 24, 2007**

ChemTAG  
See page 8.

## SEPTEMBER HISTORICAL EVENTS IN CHEMISTRY

by Leopold May

The Catholic University of America  
Washington, DC

**September 1, 1877**

Francis W. Aston, who introduced the mass spectrograph in 1919, was born on this day. He measured the mass of several isotopes to accuracy of 1/1000 and received the Nobel Prize in Chemistry in 1922 for his discovery, by means of his mass spectrograph, of isotopes, in a large number of non-radioactive elements, and for his enunciation of the whole-number rule.

**September 3, 1938**

Ryoh Noyori, who was born on this date, shared the Nobel Prize in Chemistry in 2001 with William S. Knowles for their work on chirally catalysed hydrogenation reactions and K. Barry Sharpless for his work on chirally catalysed oxidation reactions.

**September 6, 1766**

John Dalton was born on this day. He proposed an atomic theory, discovered law of multiple proportions, "Dalton's law of partial pressures," and discovered that pressures of saturated vapors of all liquids have the same value at their boiling point.

**September 9, 1858**

One hundred years ago, Carl Auer von Welsbach discovered lutetium with Georges Urbain. He was a researcher on rare earths, invented the incandescent mantle (Welsbach Mantle or Auerlicht), and discovered neodymium and praseodymium. He was born on this date.

**September 10, 1942**

The weighing of a pure compound of a synthetic element, plutonium, was done by B. B. Cunningham and L. B. Werner at wartime Metallurgical Laboratory, University of Chicago on this date.

**September 14, 1936**

Ferid Murad, a researcher in role of NO and cyclic GMP, was born on this date. He shared Nobel Prize in Physiology or Medicine with Robert F. Furchgott and Louis J. Ignarro in 1998 for their discoveries concerning nitric oxide as a signalling molecule in the cardiovascular system.

**September 17, 1677**

Stephen Hales studied the role of air and water in the maintenance of both plant and animal life, developed the pneumatic trough, and discovered that 'air' is released in the decomposition of plant and animal substances. He was born on this date.

**September 18, 1907**

One hundred years ago, Edwin M. McMillan, who made discoveries in the chemistry of the transuranium elements was born. In 1940, he codiscovered neptunium with P. H. Abelson and plutonium with G. T. Seaborg, J. W. Kennedy, and A.C. Wahl. In 1951, he shared the Nobel Prize in Chemistry with Glenn T. Seaborg for their discoveries in the chemistry of the transuranium elements.

**September 19, 1861**

Alexandre M. Butlerov presented the first definition and use of the term, chemical structure, before Speyer Congress on this date.

**September 21, 1832**

One hundred and seventy-five years ago, Louis P. Cailletet, a researcher on the liquefaction of gases, hydrogen, nitrogen, oxygen, and air, was born.

**September 23, 1915**

Fifty years ago, John Sheehan synthesized penicillin-V. He was born on this date.

**September 25, 1813**

On this date, Charles Hatchett published a method for separating iron from manganese.

**September 28, 1881**

Solvay Process Co. was incorporated on this date.



**Accelerating Innovation at Member Companies  
Through Proven Experience of  
Retired Technical Experts**

**YourEncore matches the skills and expertise of retired  
scientists, engineers and product developers with  
Member Company needs**

**'the experience of a seasoned veteran  
with the passion of a new hire'**

**Retired scientists, engineers and product developers  
contact Herb Young at (513) 403-6388; herb.young@YourEncore.com**

## North Jersey Meetings

<http://www.njacs.org>

### NORTH JERSEY EXECUTIVE COMMITTEE MEETING

The North Jersey Section Executive Committee meeting will be in conjunction with the Project SEED Poster Session and Dinner at Seton Hall University. Section officers, councilors, committee chairs, topical group chairs, and section event organizers will meet to discuss topics of importance to running the section and representing the membership. All ACS members are welcome to attend this meeting as visitors and to become more involved in section activities.

**Date: Monday, September 24, 2007**

**Time:** Meeting 4:30 PM  
Dinner 6:00 PM

**Place:** Science and Technology Center  
Seton Hall University  
400 South Orange Avenue  
South Orange, NJ

**Cost:** Dinner \$20.00

**Directions:** <http://www.shu.edu/visiting/>

Reservations: call (732) 463-7271 or email [njacsoffice@aol.com](mailto:njacsoffice@aol.com) prior to **Wednesday, September 19, 2007**.

**Dinner at the North Jersey Meeting is payable at the door; however, if you are not able to attend and did not cancel your reservation, you are responsible for the price of your dinner.**



### IN MEMORIAM

|                      |                  |
|----------------------|------------------|
| Dr. Patrick Grimes   | 52 Years Service |
| Ms. Dorothy Lehmkuhl | 60 Years Service |
| Dr. Herman Noether   | 67 Years Service |
| Dr. Louis Papazian   | 53 Years Service |
| Mr. Andrew Rubino    | 52 Years Service |

## SURPRISE

our editor by calling and saying you appreciate the quality and content of our newsletter. Our editor works hard to maintain a publication of interest to our membership. Oh, and by the way, you could also give credit to our advertisers who financially support us.

### PROJECT SEED

All ACS Members and Friends, Come and Hear about the Latest Research Going on in Area Laboratories

Take an hour or two to see the posters that you choose, as displayed by eager SEED students. You will receive highlights of the research they did in organic, pharmaceutical, biological, analytical, environmental, computational, inorganic, physical, and polymer chemistry, as well as in chemical and bioengineering, food, cosmetic, plant, and materials science, and drug development.

Your interest is critical. Thanks to your help, the SEED students will be further inspired. SEED students worked at NJIT, Rutgers and Cook College (3 campuses), Seton Hall, Stevens, Montclair, Beth Israel Hospital, UMDNJ-Robert Wood Johnson, William Paterson University, Ramapo College, New Jersey City University, Fairleigh Dickinson, Fordham, Long Island University, Brooklyn College, NJ Meadowlands Environmental Org., Hackensack Hospital, and the Public Health Research Institute in Newark.

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

The poster session will take place as part of the social hour of the North Jersey ACS meeting. It is at Seton Hall University, South Orange Avenue (corner Centre Street), South Orange, NJ, in the Student Center. Everyone is invited. There is no charge and no reservations are needed if you go to the poster session and cannot stay for dinner. You are welcome to be a judge, and if you are a judge, you receive a free buffet dinner. To stay for dinner, call Bill Suits at (908) 234-9240 preferably by **September 20th**. Call Susan Fahrenholtz at (973) 338-6588 or Allene Johnson at (973) 763-6883 for more information. While you are there, stay for one of the after-dinner talks.

**Date: Monday, September 24, 2007**

**Times:** Poster Session 4:30 - 6:30 PM  
Dinner 6:00 PM

**Place:** Student Center  
Seton Hall University  
400 South Orange Avenue  
South Orange, NJ

### CAREERS IN TRANSITION GROUP

Job Hunting??

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

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

The next meeting for the Careers In Transition Group will be held **Thursday, September 6, 2007**, in the Ride Lounge on the first floor of the New Academic Building. The meeting will start at 5:30 PM and end at 9:00. There will be a Dutch-treat dinner. To get the most from the meeting, be sure to bring transparencies of your resume.

Please contact [vkuck@yahoo.com](mailto:vkuck@yahoo.com), if you plan on attending this meeting.

### NORTH JERSEY MASS SPECTROMETRY DISCUSSION GROUP

2007 Distinguished Lecture

*Speaker:* Prof. Fred McLafferty

Peter J. W. Debye Professor of Chemistry, Cornell University Member, National Academy of Sciences  
2007 NJ MSDG Distinguished Lecturer

Dr. McLafferty has been a member of the National Academy of Sciences since 1982. His contributions have been recognized by numerous prestigious awards, including the Sir J. J. Thomson Gold Medal, the Robert Boyle Gold Medal from the Royal Society of Chemistry, the Heyrovsky Medal from the Czech Academy of Sciences, the Giulio Natta Gold Medal from the Italian Chemical Society, the Torbern Bergman Medal from the Swedish Chemical Society, the Lavoisier Medal from the French Chemical Society, and the Distinguished Contribution in Mass Spectrometry Award from the American Society for Mass Spectrometry.

**Date: Thursday, September 13, 2007**

**Times:** Vendor Show 4:00 - 8:00 PM  
Hors d'oeuvres 4:30 - 5:30 PM  
Dinner 6:00 - 7:30 PM  
Lecture 7:30 - 8:30 PM

**Place:** DoubleTree Hotel  
Somerset, NJ

Door prizes (iPods every hour!) available. Register at <http://www.njacs.org/ms.html>



### TEACHER AFFILIATES

Executive Committee Meeting

**Date: Monday, September 17, 2007**

**Time:** 4:30 PM  
**Place:** Chatham High School  
255 Lafayette Avenue  
Chatham, NJ

Contact: Diane Krone at (201) 385-4810 or [kroned@optonline.net](mailto:kroned@optonline.net)

**Desert Analytics**  
3860 S. Palo Verde, Suite 303  
Tucson, AZ 85714 - 520.623.3381  
[thelab@desertanalytics.com](http://thelab@desertanalytics.com)  
We accept VISA, MC & AMEX  
[WWW.DESERTANALYTICS.COM](http://WWW.DESERTANALYTICS.COM)

- CHN \* O \* S
- Halogens \* Bomb Oxidation
- Metals \* ICP \* ICP/MS \* AAS
- Anions \* Ion Chromatography
- Dry Box \* Air Sensitive Samples
- Fuel Testing \* BTU \* Prox \* Ultimate \* Sulfur \* Ash Analysis
- Inquire about other capabilities

## NMR TOPICAL GROUP

### Unsymmetrical Indirect Covariance NMR

Speaker: Dr. Gary Martin  
Distinguished Fellow  
Rapid Structure Characterization  
Laboratory  
Pharmaceutical Sciences -  
Chemical & Physical Sciences  
Schering-Plough Corporation  
Summit, NJ

Gary received a B.S. Pharmacy from the University of Pittsburgh in 1972 and a Ph.D. in 1975 from the University of Kentucky in the combined areas of solid-phase synthesis and NMR studies of reaction mechanisms. He was a Professor at the University of Houston from 1975-1989, leaving there to assume responsibility for NMR spectroscopy with Burroughs Wellcome, Co. in the US from 1989-1995. From 1996 through early 2006, he headed a group at Upjohn/Pharmacia/Pfizer responsible for the isolation and structural characterization of impurities and degradation products of pharmaceuticals. In March 2006, he joined Chemical & Physical Sciences at Schering-Ploughs, Summit, NJ facility where he continues to work on the characterization of impurities and degradation products of pharmaceuticals and the development of new NMR methods and applications.

Door Prizes!

**Date:** Wednesday, September 19, 2007

Times: Dinner 6:30 PM  
Seminar 7:00 PM

Place: Woodbridge Hilton  
Iselin, NJ

Cost: Dinner cost: \$30  
(\$5 for student/postdoc)  
No charge for seminar only.

Directions: [http://njacs.org/d\\_woodhilt.html](http://njacs.org/d_woodhilt.html)  
Register online: <http://njacs.org/nmr.html>,  
or via e-mail to [WENQING.FENG@SPCORP.COM](mailto:WENQING.FENG@SPCORP.COM)



## ChemTAG MEETING

**Date:** Monday, September 24, 2007

Judging of SEED Posters will precede our meeting

Time: 4:00 to 7:00 PM

Place: Science and Technology Center  
Seton Hall University  
400 South Orange Avenue  
South Orange, NJ

Contact: Diane Krone at (201) 385-4810 or  
[kroned@optonline.net](mailto:kroned@optonline.net)

## THE 29th ANNUAL PRINCETON ACS FALL ORGANIC CHEMISTRY SYMPOSIUM

“Cooperativity and Dual Activation in  
Asymmetric Catalysis”

Professor Eric Jacobsen  
Department of Chemistry  
Harvard University

“Discovery of JANUVIA™ (Sitagliptin),  
A Selective Dipeptidyl Peptidase-4  
Inhibitor for the Treatment of Type 2  
Diabetes”

Dr. Ann Weber  
Department of Medicinal Chemistry  
Merck Research Laboratories, Rahway

“Asymmetric Catalysis for Organic  
Synthesis”

Professor Hisashi Yamamoto  
Department of Chemistry  
The University of Chicago

“Molecules that Changed the World”

Professor K.C. Nicolaou  
Department of Chemistry  
The Scripps Research Institute

**Date:** Friday, September 28, 2007

Times: Registration 12:00-1:00 PM  
Symposium 1:00-8:30 PM

Place: Forsgate Country Club  
Monroe Township, NJ

Cost: Registration/Reception/Dinner:  
\$90.00 (\$25.00 students/postdoc)

Name: \_\_\_\_\_

Telephone/Fax: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

If Student/Postdoc,

list Advisor: \_\_\_\_\_

Vegetarian dinner required (check box)

Return to: Denise D'Auria  
Please make checks payable to:  
"Princeton ACS Fall Organic Symposium"  
and mail to:

Princeton University  
Chemistry Dept., Frick Labs  
Princeton, NJ 08544-1009

## NATIONAL CHEMISTRY WEEK POSTER CONTEST

As part of the National Chemistry Week (NCW) 2007 celebration and in recognition of the 20th anniversary of the program, the American Chemical Society (ACS) is sponsoring a poster contest for students in Kindergarten – Grade 12.

Students are invited to create a poster that celebrates the theme “The Many Faces of Chemistry”. The poster should be fun, motivational and inspire students to pursue a science/chemistry-related career.

Consider how science/chemistry is used by people in different careers.

- Photographer: chemistry's role in developing film and making prints
- Artist: the chemistry of the materials used to paint, draw or sculpt
- Veterinarian: understanding what medicines can be given to pets
- Crime Scene Investigator: investigating crimes with chemical tests

### Prizes...Prizes...Prizes....Prizes...

First and second place in each of the following grade categories:

- K – 2nd
- 3rd – 4th
- 5th – 8th
- 9th – 12th

**1st Place: \$250 — 2nd Place: \$150**

There are also prizes for teachers of winning students, which will include a *Periodic Table of the Elements* poster!

**Local prizes for North Jersey American Chemical Society students and teachers**

**1st Place: \$50.00, 2nd Place \$25.00, 3rd Place \$10.00 in every age group.**  
**Teachers of 1st, 2nd, and 3rd place students receive the same prize.**

**EDUCATORS:** Find additional ideas about careers in chemistry, resources for students and easy ways to celebrate at [chemistry.org/ncw](http://chemistry.org/ncw) and [www.njacs.org](http://www.njacs.org)

### Contest Rules:

- All entries must be original works without aid from others.
- Posters must be no larger than 14 x 22 inches.
- Entries on foam board will not be accepted.
- Entries must be hand-drawn using crayons, paint, colored pencils or markers.
- Posters must be sent to:  
National Chemistry Week Poster Contest  
c/o Mrs. Mary Ann Penna, 4 Cameron Rd., Piscataway, NJ 08854
- **Posters must be submitted to Jeannette Brown, NCW Coordinator, at the address above in time for the local contest Deadline October 13.**
- All entries **must** have the following information included on the back of the poster: student's name, grade, name of school, school address, teacher's name, school telephone number, student/teacher email address. Home schooled students are eligible for the contest and should include the name of any homeschool group with which they are associated. **Suggestion make a label with this information and paste it on the back of the poster.**
- Entries lacking complete and legible information will be disqualified.
- Schools please encourage all students in each class to participate. Please judge the posters in the school and **submit only the three best posters per grade level per school.**
- Posters not submitted should be displayed in the school during National chemistry week. Make a photo copy of the school winning posters for display. Winning posters will not be returned.
- All student participants will receive a token gift, a mini mole or a patch or washable tattoo.
- Please publicize the poster contest in your school to the media and parents and school board members.
- Invite local parents who may be scientists to help with the contest or be models for the students.

(continued on page 10)

## NATIONAL CHEMISTRY WEEK POSTER CONTEST

(continued from page 9)

- Think outside the box in other words think of all the things a chemist might do.
- Look for ideas on [www.njacs.org](http://www.njacs.org)
- Local Winners will be posted on the NJACS website during Chemistry Week.
- National Winners will be notified during November
- All local prizes will be mailed during November.
- ACS is not responsible for lost, damaged, or delayed postal shipments.
- All posters become the property of the American Chemical Society.
- Acceptance of prizes constitutes consent to use winners' names and entries for editorial, advertising and publicity purposes.
- Address questions to Coordinator: Jeannette Brown [Jebrown@infonline.net](mailto:Jebrown@infonline.net)

### Judging:

Entries will be evaluated based on the following:

1. **Artistic Merit** (use of color, quality of drawing, poster design & layout)
2. **Poster Message** (should be fun, motivational and inspire students to pursue a career with emphasis on the chemistry in the career)
3. **Originality and Creativity** (unique, clever and/or creative design)
4. **Neatness** (free of spelling and grammatical errors and/or stray marks)



## STUDENT AFFILIATE RESEARCH CONFERENCE

The 59th Annual Research Conference of Student Affiliate Chapters, North Jersey Section, was held on April 27, 2007, on the Drew University campus.

Twelve papers were presented representing 20 speakers and co-authors from St. Elizabeth, Drew, NJIT and FDU (Florham). Winners are:

1st place: Justin Mykiety (Jean Durana Award), mentor: Mary-Ann Pearsall, Drew

2nd place: Maria Carroll, mentor: Adam Cassano, Drew

3rd place: Megan Redd, mentor: Gloria T. Anderle, FDU (Florham)



### Winners and their Mentors

(l-r): Dr. Gloria Anderle, Megan Redd, Dr. Adam Cassano, Maria Carroll, Justin Mykiety, Dr. Mary-Ann Pearsall.

Some of the Student Presenters.



## CHEMISTRY OLYMPIAD

By Ray Baylouny

In the last issue of The Indicator (June 2007, p. 18), I described 11 high school students who reached the second level of the National Chemistry Olympiad. As a result of their subsequent test performances, two of them, shown below, were qualified as being the top 20 Olympiads in the US! Almost 1000 high school students overall took the battery of tests. All 20 were invited to attend a two-week study camp in Colorado Springs, Colorado.

**Yuxin Xie** (teacher: Paul Kimmel, East Brunswick High School).

**Brian Lee** (teacher: David Ostfeld, Bergen Academy of Science & Technology)

We also report that **Brian Lee** qualified for the team of four students who competed in the International Chemistry Olympiad held July 15 through 24, 2007, in Moscow, Russia. This makes three consecutive years that the NoJ Section placed a student on the International team. CONGRATULATIONS TO BRIAN LEE WHO RECEIVED A SILVER MEDAL AT THE INTERNATIONAL CHEMISTRY OLYMPIAD!!



### Olympiad Students

After Taking Tests (l-r):

Ben Yang, Eric Liu, Hashim Choudhry, Alex Morrison, Kenneth Chu, Ziran Xiao, Yuxin Xie, Sakul Ratanalert, Wenzong Zhao, Rachel Chasin, Brian Lee.



Olympiads Hard at Work in Lab at FDU (Florham).



### Olympiads and Teachers at the NoJ Awards Banquet (l-r):

Mr. Michael Amendola, Ben Yang, Brian Lee, Eric Liu, Yuxin Xie, Wenzong Zhao, Dr. Paul Kimmel, Mr. Ed Potosniak, Kenneth Chu.

## NJCG MAY 2007 SYMPOSIUM

The North Jersey Chromatography Group's May Symposium themed "Chromatographic Industrial Needs - Quality by Design: PAT and Compliance" presented several lectures from Jonathan Crowthers, PhD, Rick Cooley, Jim Bergum, PhD, Su-Chin Lo, PhD, and Joel Young. The lectures were complimentary to a successful vendor show and raffle; which all received great feedback from over 70 attendees (from industry and academia). Based on the success of this year's Symposium, the NJCG will be holding another symposium May 2008. Stay tuned to the NJCG website for information about upcoming meetings and the 2008 Symposium: [www.northjerseychromgroup.org](http://www.northjerseychromgroup.org).



Dr. Mukund Karwe, joins in the model building.



## NJ HIGH SCHOOL CHEMISTRY TEACHERS AT COOK COLLEGE

On June 12, 2007, forty chemistry teachers gathered at Cook College of Rutgers

University for the last NJACS-TA sponsored ChemTAG meeting of the school year. After a buffet dinner, teachers participated in selecting student winners of the Mole Day Poster Contest. Then Dr. Mukund Karwe, Undergraduate Program Director for the Food Science Department gave an overview of the major offerings. His power point presentation was filled with humor and generated questions. Among the new information about food that we learned, was how wheat from different geographic locations has a great influence on the shapes into which pasta can be formed. Dr. Karwe also described the large variety of career possibilities in the area of food science.

Following this, Dr. Richard Ludescher, a recipient of the Endel Karmas Award for Excellence in Teaching, and chemistry professor in the Department of Food Science, led an engaging interactive discussion of gelatin, the polymer. Each teacher in the audience constructed a "monomer" from pipe cleaners and had fun linking them all together to form a huge model of a gel. The model served as an excellent summation for the exercise and exhibited many of the properties of gelatin.

Following these presentations, Dr. Karwe concluded the program by taking us on a tour of Rutgers University high hydrostatic pressure processing facility. Here bacteria in food are destroyed using pressure up to six thousand atmospheres.

Thanks to everyone, the experience was a wonderful way to conclude our year of ChemTAG.

*Submitted by Bobbi Gorman*

## ORGANIC TOPICAL GROUP

Drugs from Academia: Marketed Drugs from Academic Labs

### Program

"Discovery of Aimita, a Broadly Effective New Antitumor Agent"

*Edward C. Taylor*  
Princeton University

"SAHA (Vorinostat): The First Anticancer HDAC Inhibitor Approved for Human Use"

*Ronald Breslow*  
Columbia University

"Didanosine (ddl): A Member of the Versatile 2',3'-Dideoxy Family of Biomedical Nucleoside Analogues"

*Morris J. Robins*  
Brigham Young University

"Basic Science to the Market. The Discovery of Lyrica®"

*Richard B. Silverman*  
Northwestern University

"The Discovery and Development of 3'-Heteranucleosides"

*Dennis C. Liotta*  
Emory University

**Date: Friday, October 26, 2007**

**Times:** Registration will begin at 8.30 AM  
Symposium 9:00 AM - 4.30 PM  
Lunch 12.30 PM

**Place:** Palace at Somerset Park  
333 Davidson Avenue  
Somerset, NJ 08873

**Cost:** \$95.00 (Symposium and Lunch)

For directions, on-line registration and further details please visit our website [www.njacs.org/organic.html](http://www.njacs.org/organic.html)

\*Due to limited seating, please complete the on-line registration form at [www.njacs.org/organic.html](http://www.njacs.org/organic.html) and send a check payable to "North Jersey Section ACS" c/o:

Dr. Binh Vu  
Discovery Chemistry, 123/3  
Hoffmann-La Roche, Inc.  
340 Kingsland Street  
Nutley, NJ 07110  
E-mail: [binh\\_t.vu@roche.com](mailto:binh_t.vu@roche.com)

## POLYMER TOPICAL GROUP — COSPONSORED BY THE ACS DIVISION OF POLYMER CHEMISTRY

Green Polymers: Materials, Processes and Products

This symposium is intended to bring the local polymer science community up to date on the penetration of green principles into the practice of polymer science and engineering and to some recent advances in the area. Through a combination of overviews 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 green polymer materials and processes.

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

Organizer: Thomas J. Pacansky

### Preliminary Program

**Session I: Green Polymers: Materials and Processes**

*Michael Jaffe*, presiding

**The Future of Polymers and the Environment: Opportunities at the Molecular Level**

*John C. Warner*  
U. Mass Lowell

**Synthetic Absorbable Polymers - Molecular and Design Considerations for Implantable Medical Devices**

*Dennis Jamiolkowski*  
JNJ

**The Preparation and Application of Highly Modified Starches**

*John S. Thomaidis*, ICI  
*L. Cimecioglu*, ICI  
*M. Rodrigues*, Alco, and  
*M. Crossman*, Alco

**Polyolefins - They're Greener than You Think**

*D. J. Lohse*  
*D. N. Schulz*, ExxonMobil  
**Session II: Green Polymers: Product Application Approaches**  
*Ron DeMartino*, presiding

*(continued on page 14)*

## Education

Center for Advanced Technology at the City University of New York  
(CUNYCAT)

Dedicated to Helping New York State Business



Need Help with R&D, or Problem Solving?

|                          |                                       |
|--------------------------|---------------------------------------|
| New Product Development  | Developing Intellectual Property      |
| Improved Quality         | Spin-off New Companies                |
| University Connection    | Increased Capital Investment          |
| Job Growth and Retention | Applying for Government Grants (SBIR) |

Contact us: [info@cunlyphotonics.com](mailto:info@cunlyphotonics.com) <http://www.cunlyphotonics.com> 212 650 8226

## POLYMER TOPICAL GROUP

(continued from page 13)

### The Role of Polymers in High Performance Construction Materials

Charlene Wall  
BASf

### Polymers for Printing Inks; A Green History

Richard Durand  
Sun

### Green Chemistry in the World of Cosmetics

Karl Krummel  
L'Oreal

### Poster Session

Jin Zhang, organizer and presiding

### Mixer

**Date:** Thursday, November 8, 2007

**Times:** Registration 1:00 PM  
Program 1:30 PM

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

**Cost:** Registration: Member, \$30  
Non-member; \$40  
Student, \$20.

**Directions:** Can be found at the Rutgers University website. (<http://maps.rutgers.edu/directions/nb.aspx>)

**Registration deadline is October 24, 2007.**

Please 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 Jin Zhang (Bristol Myers Squibb)  
[jin.Zhang@bms.com](mailto:jin.Zhang@bms.com)

**Sponsors:** ExxonMobil, Apollo Ventures, LLC

**Co-sponsors:** ACS Division of Polymer Chemistry

**Endorsing Organizations:** ACS Green Chemistry Institute, AIChE North Jersey Local Section, CUNY Center for Engineered Polymeric Materials, Lehigh Center for Polymer Science and Engineering, NJIT Medical Device Concept Laboratory, Princeton Center for Complex Materials.

## WE ARE GOING BACK TO THE LSC

### National Chemistry Week

The Liberty Science Center has re-opened and you probably have heard about all the new demos. Why don't you join us on **Saturday, October 27**, as the North Jersey Section celebrates National Chemistry Week? After sharing some of your knowledge of chemistry/science by overseeing a hands-on activity, you can tour the Center and take-in the new demos. It will be a fun day for you and your family!

The theme for this year is "**The Many Faces of Chemistry**". This gives you great latitude as you plan your hands-on activities. It would be appreciated if you could get a diverse group of people to join you at your table. Your activities should be geared for 8 to 12 year olds. As usual our first priority is safety. Preferably presenters should use household materials to demonstrate a scientific principle. We would like the students to be able to redo these experiments at home and at school so it would be very helpful if you had handout instructions to distribute.

If you are out of ideas for safe activities for a table, you can look at the NCW page at the ACS website. To minimize duplication of the presentations, we will need to know by October 2 the activity you would like to conduct at your table. Individuals contacting us first with their idea(s) will be given priority, so please let us hear from you as soon as possible. By October 12, we need to have the names and addresses of the individuals who will be joining you at your table.

As usual we are looking for financial support to cover the many expenses associated with our activities and would be most grateful, if you would contact the appropriate individuals at your company.

Please fill out the following forms and return them to me:

**Form 1.** Count me in.

My name is: \_\_\_\_\_

I am volunteering to work on: **Saturday, Oct. 27**,  
10:00am-1:00pm  
1:00pm-4:00pm, or  
all-day (Underline times).

I can be reached at: (work phone number) \_\_\_\_\_

My complete address is: \_\_\_\_\_

I am an employee at: \_\_\_\_\_ How many additional tables will you need? \_\_\_\_\_

The activities at my table will be: \_\_\_\_\_

In addition to a table, I also need: \_\_\_\_\_

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

I will need more than one table.  Yes  No

**Form 3.** I will be joined at my table by the following volunteers.

| Complete Name: | Institution: | Address (snail mail): | Acknowledge letters should be sent to: | Activity: | Time Volunteering: |
|----------------|--------------|-----------------------|--|-----------|--------------------|
|----------------|--------------|-----------------------|--|-----------|--------------------|

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

Thanks very much for all of your help. The Section is most appreciative of your efforts.  
Valerie J. Kuck, 45 Warfield St., Upper Montclair, NJ 07043, [vjkuck@yahoo.com](mailto:vjkuck@yahoo.com)

## Education



1 8 5 6

### Department of Chemistry and Biochemistry

**Fall 2007- Graduate Courses, leading to the MS and PhD degrees  
September 5 – December 19, 2007**

**Registration: August 30, 10:00 am – 12:00 n. & 3:00 pm – 5:45 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.*

| Course Number | Title                               | Day     | Time       |
|---------------|-------------------------------------|---------|------------|
| CHEM 6203 NA  | Electrochemical Methods of Analysis | Thurs   | 7:00-10:00 |
| CHEM 6301 NA  | Theoretical Organic Chemistry       | Tues.   | 7:00-10:00 |
| CHEM 6501 AA  | General Biochemistry I              | Sat.    | 9:00-12:00 |
| CHEM 6601 NA  | Advanced Inorganic Chemistry I      | Mon/Wed | 7:10-8:25  |

For more information, please visit the Department of Chemistry and Biochemistry website at <http://artsci.shu.edu/chemistry/>, call us at 973-761-9414, or email [chemistry@shu.edu](mailto:chemistry@shu.edu)

## New York Meetings

[www.newyorkaccs.org](http://www.newyorkaccs.org)

### CHEMICAL MARKETING & ECONOMICS GROUP

Topic and Speaker: To be announced

For details on the September meeting, go to <http://www.nyacs-cme.org/> or contact: David Deutsch at (917) 684-1659.

Date: **Thursday, September 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 for Members who reserve by **Tuesday, September 4** (12 noon), \$55 for Guests and Members (at 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](mailto:cmegroup@yahoo.com). You can also pay online via PayPal: go to our website, <http://www.nyacs-cme.org/>

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

Clinical Studies on the Therapeutic Value of Human Stem Cells

Organizers: Keith Haskell  
Pfizer Global R&D  
John Hambor  
Cognate Bioservices

Adult stem cells possess properties of self-renewal and pluripotency, where they play a role in homeostatic tissue regeneration, as well as the repair of injured or diseased tissue. An accepted modality, adult stem cells have been used either exclusively or in combination with other treatments to achieve significant healthcare benefits for sufferers of multiple conditions. Furthermore, the future application of adult stem cells for treatment therapies, where clinical trials have already indicated significant potential benefit, include Parkinson's, Alzheimer's, spinal cord injuries, organ transplantation, blood production, muscle regeneration, diabetes, and heart disease.

Date: **Tuesday, September 25, 2007**

Time: 8:30 AM – 5:00 PM  
Place: New York Academy of Sciences  
7 World Trade Center  
250 Greenwich Street, 40th Floor  
New York, NY

Cost: NYAS Members and BPDG

Affiliates may attend BPDG meetings free of charge.  
Non-members \$20 per event  
Student Non-members \$10

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

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



### LONG ISLAND SUBSECTION

Energetic and Kinetic Folding Mechanism of the Parallel Beta-Helix Protein Pectate Lyase C

Speaker: Douglas Kamen, Ph.D.  
Asst. Professor of Chemistry  
Adelphi University  
Chemistry Department  
Garden City, NY

Pectate lyase C (pelC) was the first protein in which the parallel  $\beta$ -helix structure was recognized. The unique features of these proteins – a simple topology and unusual interactions among side-chains – make this an interesting class of proteins to study with respect to protein folding. Denaturant titrations monitored by far- and near-UV circular dichroism (CD), and fluorescence spectroscopies were used to observe the isothermal denaturation of pelC. Unfolding was monitored as a function of temperature by differential scanning calorimetry and temperature dependent CD. These experiments indicated that pelC is remarkably stable, and its denaturation is not a simple two-state process. Experiments to understand the kinetic folding mechanism were also carried out.

Date: **Thursday, September 27, 2007**

Times: Coffee 5:30 PM  
Seminar 6:00 PM  
Place: Hofstra University  
Chemistry Building  
Lister Auditorium  
Times: Dinner: 7:00 PM  
Place: Neighboring restaurant  
Cost: \$20.00

Contact: Professor Eugene Brown  
Chair, Long Island Section 2007  
Chemistry Department  
Nassau Community College  
Garden City NY 11530  
(516) 572-7579

### HIGH SCHOOL TEACHERS TOPICAL GROUP

Neural Prosthesis

Speaker: Victor D. Chase  
science writer

During some 30 years in the field Victor Chase has garnered newspaper, wire service, and magazine experience. His latest book, "Shattered Nerves: How Science Is Solving Modern Medicine's Most Perplexing Problem, 2006," Johns Hopkins University Press, is about an exciting new area of medical implant technology created to return sight to the blind, movement to the paralyzed, and hearing to the deaf. It was cited by the Library Journal as one of the best science books of 2006.

Date: **Friday, September 28, 2007**

Time: Social and Dinner 5:45 PM  
Place: No reservations required  
Caffe Pane e Cioccolato  
10 Waverly Place at Mercer Street  
(south-west corner)  
New York, NY  
(You eat, you pay cash only, no credit cards.)  
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.

## Education

|   |  |
|---|--|
|                         | <b>Graduate Chemistry Courses<br/>Fall 2007</b>  |
| 549 <b>Electroanalytical Chemistry</b><br>Dr. Huixin He<br>Mon 6:00–8:50 pm<br>103 Life Science Center  | <p>To learn about non-degree, or full-time and part-time graduate programs, go to <a href="http://chemistry.rutgers.edu">http://chemistry.rutgers.edu</a>, or call the graduate secretary at 973-353-5173, or send email to <a href="mailto:gradchem@newark.rutgers.edu">gradchem@newark.rutgers.edu</a></p> |
| 581 <b>Biochemistry</b><br>Dr. Charalampos Kalodimos<br>Tue 6:00–8:50 pm, 240 Smith                     |  |
| 515 <b>Chemical Structure Determination</b><br>Dr. Hugh Thompson<br>Wed 6:00–8:50 pm, 240 Smith Hall    |  |
| Classes will be held on Newark Campus of Rutgers.<br>The Fall 2007 term begins on Tuesday, September 4. |  |

## NEW YORK SECTION ELECTION RESULTS

The results of the ACS New York Section's 2007 elections, held in May, were announced at the Board of Directors meeting in June. The New York Section extends a sincere thank you to all of the candidates in this election and expresses its deep appreciation for their time and efforts. The Section looks forward to another successful year in 2008.

### Chair-elect for 2008

Barbara R. Hillery  
Old Westbury College - SUNY

### Treasurer for 2008 and 2009

Stephen Z. Goldberg  
Adelphi University

### Director-at-Large for 2008

Mary K. Cowman  
Polytechnic University

Sharon Lall-Ramnarine  
Queensborough Community College -  
CUNY

Hessy L. Taft  
St. John's University

### Councilors for 2008-2010

Jean A. Delfiner  
NYC Department of Education (Retired)

Vijara L. Korlipara  
St. John's University

Frank R. Romano  
Agilent Technologies, Inc.

### Alternate Councilors for 2008-2010

Ronald P. D'Amelia  
Hofstra University

Richard M. Goodman  
Richard M. Goodman Consulting LLC

Ralph Stephani  
St. John's University

Congratulations to All!



## 2007 JERRY MARCH MEMORIAL LECTURE

The Chemistry Department of Adelphi University is pleased to present the 2007 Jerry March Memorial Lecture in memory of our distinguished colleague Jerry March, author of, among other texts, the classic, *March's Advanced Organic Chemistry: Reactions, Mechanisms, and Structure*.

## Watson's the Double Helix: Fact Versus the Fictional Rosalind Franklin

*Speaker:* Lynne Osman Elkin  
Professor Emeritus of Biology  
California State University  
at Hayward

Professor Elkin received her Ph.D. from U.C. Berkeley in 1973, working in Melvin Calvin's lab. She taught biology at California State University at Hayward from 1971 through 2003 when she retired. After nine years of original research, Dr. Elkin is currently writing a condensed biography of Dr. Franklin entitled *Rosalind Franklin and The Double Helix: Justice Pending*. This book is specifically designed to correct any possible misimpressions created by James Watson since the publication of his 1968 personal account. Dr. Elkin is a recognized authority on the life and work of Dr. Franklin, and has delivered more than 35 lectures in the United States and England. These include presentations at a number of local and national meetings of the AAAS and the ACS. She also presented at the awarding ceremony of the prestigious Van Slyke award, presented posthumously to Dr. Franklin at the 2003 meeting of the American Association for Clinical Chemistry

**Date:** Wednesday, October 15, 2007

**Time:** 7:00 PM

**Place:** University Center Ballroom  
Adelphi University  
Garden City, NY

**Cost:** Free and open to the public

Maps and travel directions can be found at <http://www.adelphi.edu/visitors/maps.php> If you need additional information call (516) 877-4136.



Lynne Osman Elkin

## Obituaries

### HERMAN GERSHON

Herman Gershon, a former chair of the NY section of the ACS [1970-72] and winner of its distinguished service award [1978] passed away on February 5th, at age 86. Herman spent the major part of his career at the Boyce Thompson Institute (BTI) for plant research [over 22 years] as a senior scientist, retiring in 1984. After retiring he collaborated with Dr. Donald Clarke at Fordham University and the NY Botanical gardens and continued publishing on the antifungal properties of substituted 8-hydroxyquinolines until his death.

Herman's studies were interrupted by World War II in which he served as a medical aidman. He received Bronze and Silver Stars as well as a Purple Heart for his service. After returning from the army he worked for his Ph. D. at Colorado State U under Prof. Karl Dittmer and then returned to the east coast to join Pfister Chemical works and later BTI.

### DOROTHY LEHMKUHL

Dorothy Schroeder Lehmkuhl, 1990 Chair of the North Jersey Section, died on June 1 in Annapolis, MD. She also served on many local and national committees for the ACS and was an ACS councilor for several terms.

Born in Kearny, NJ, Dorothy graduated from what is now known as Montclair State College, in New Jersey, with an A.B. degree in 1942. During World War II, she worked at Aberdeen Proving Ground, an Army munitions testing facility in Maryland, as an analytical chemist. After the war, she returned to Montclair State, earning a master's degree in 1946.

From 1956 until 1984, she taught chemistry at Lyndhurst High School and at Montclair State College. After retirement, she became active in many organizations, including the New Jersey Science Teachers Association, New Jersey Educational Association, and ACS. Dorothy was an animal lover and wild bird enthusiast. She also traveled extensively around the world.

She is survived by her children, Christine, David, and Bob.



## DuPont Analytical Solutions

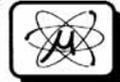
*From rapid, routine testing to complex problem-solving. One of the world's largest, and most diverse analytical laboratories, with the experience to solve your analytical challenges in :*

**Electronic Materials • Personal Care • Catalysis • Coatings, Pigments, and Adhesives  
Specialty Chemicals • Films and Packaging • Pharmaceuticals • Plastics • Fibers • Textiles**

DuPont Analytical Solutions  
P.O. Box 80302  
Wilmington, DE 19880-0302  
Phone: (302) 695-1018

e-mail: [DASolutions@usa.dupont.com](mailto:DASolutions@usa.dupont.com)  
web: <http://analyticalsolutions.dupont.com>  
FAX: (302) 695-1717

*Contact us for all your analytical needs.*



## Micron Analytical Services

**COMPLETE MATERIALS CHARACTERIZATION**  
**MORPHOLOGY CHEMISTRY STRUCTURE**

**SEM/EDXA, TEM/SAED, EPA/WDXA, XRD, XRF, ESCA, AUGER, FTIR, DSC/TGA**

**3815 Lancaster Pike Wilmington DE, 19805 Voice 302-998-1184, Fax 302-998-1836**  
**E-Mail [micronanalytical@compuserve.com](mailto:micronanalytical@compuserve.com) Web Page: [www.micronanalytical.com](http://www.micronanalytical.com)**

## Call for Nominations

### 2008 AWARD FOR CREATIVITY IN MOLECULAR DESIGN AND SYNTHESIS

The North Jersey Section of the American Chemical Society is soliciting nominations for the 2008 "Award for Creativity in Molecular Design and Synthesis." Unlike the various other Awards, which are bestowed upon members each year by singular organizations, "The Award for Creativity in Molecular Design and Synthesis" is unique in that it has been established by the North Jersey Section of the ACS and a combined consortium of organizations from the pharmaceutical sector and academic arena. The founding sponsors of this Award include: Bristol-Myers Squibb, Hoffmann-La Roche, Merck, Novartis, Schering-Plough, and Rutgers University. The Award consists of a crystal plaque and a \$5,000 honorarium. The Section presents the Award biannually, on even years, to commemorate the scientific, technical, and industrial impact of senior members of the American Chemical Society and their mentorship of younger members. The Award is given in recognition of accomplishment in pure and/or applied chemistry, as characterized by the initiative, creativity, leadership, and perseverance of the individual as indicated by published or unpublished evidence. "Accomplishment" for the purpose of this Award is understood to be that of a world renowned leader of unusual merit, with a specific emphasis on an individual who has demonstrated broad scoping impact in the areas of chemical synthesis, method development, bio-organic/ medicinal chemistry, pharmaceutical sciences, and/or molecular recognition.

Nominations for the Award should include a letter describing the nominee's achievements, a brief biography along with the individual's Curriculum Vitae, and a list of the nominee's more important publications. Recommendation letters supporting the nomination are strongly encouraged and should be assembled by the nominating individual on behalf of the candidate.

Please submit materials by **November 30, 2007**, to:

Professor Lawrence Williams  
Rutgers University  
Department of Chemistry & Chemical  
Biology

610 Taylor Road  
Piscataway, NJ 08854

### 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.

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](mailto:jchen@njacs.org). (We welcome electronic submission of the nomination package.) Nominations must be received by Feb 8, 2008. Visit <http://www.njacs.org/awards.html> for more information and a list of past recipients.

**FLASH CHROMATOGRAPHY**

Next Generation  
**IntelliFlash 310**

**Purification Has Become Even Easier**

- Simple Method Optimization
- Continuous Auto-diagnostics
- Column Verification
- Instantaneous Multi-wave UV Detection
- Intuitive User Interface
- Uninterrupted Solvent Supply

**AnaLogix**  
(800) 761-5338 • (262) 767-9111  
[www.ana-logix.com](http://www.ana-logix.com) • [info@ana-logix.com](mailto:info@ana-logix.com)

## Others

### STEVENS INSTITUTE OF TECHNOLOGY

**Ajay Bose Honored with Indian Chemical Society's Lifetime Achievement Award — Stevens professor recognized for contributions to chemical research and education**

Dr. Ajay Bose, recently retired Professor of Chemistry at Stevens Institute of Technology, was honored by the Indian Chemical Society at its national meeting in December 2006. The society presented Bose with its Lifetime Achievement Award for his valuable contributions to the field of chemical research and education. This award is significant because Bose's educational work was conducted in the U.S. The Lifetime Achievement Award, considered to be the most prestigious Indian award in chemistry, is given by the Indian Chemical Society to only one chemist every year.

Bose has received many other awards including the U.S. Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring in 1999, and the Dreyfus Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences that same year.

Bose was elected a Fellow of the American Association for the Advancement of Science (AAAS) in 2004 for "significant contributions to the chemistry of beta-lactam antibiotics, microwave-induced chemistry, outstanding mentoring of under-represented minority students.

In 1992 Bose was honored by the State of New Jersey by a Senate Resolution for his research and teaching achievements. He was named the New Jersey Professor of the Year in 1990. In 1987 he received the first Henry Morton Distinguished Teacher Award of Stevens.

Bose joined the Department of Chemistry of Stevens Institute of Technology in 1959. In his laboratory he mentored 35 Ph.D. candidates and trained more than 100 post-doctorals and visiting scientists from many countries. He has co-authored more than 350 research publications, 2 books, and chapters in several books; he also holds nine patents. He has been a consultant to pharmaceutical companies in the U.S. and abroad.

Bose was the founder and Director of the Chemical Biology Education Enhancement Program at Stevens that received a \$1 million grant (1991 to 1994) from the Howard Hughes Medical Institute for attracting American students to the study of science. He was the American Principal Investigator of a \$2 million INDO-US collaborative program (1986 to 1992) on "Bioactive Substances from the Indian Ocean."

One of Bose's most notable contributions has been the founding in 1971 of UPTAM (Undergraduate Projects in Technology and Medicine), a summer research program that he directed until recently. UPTAM and its high school version, Pre-UPTAM, have provided enhanced career opportunities for several hundred students from diverse ethnic groups and economically disadvantaged families.

In recent years Bose has helped neighboring inner city/urban schools with limited chemistry laboratory facilities by devising microwave assisted rapid and safe chemistry experiments that could be performed at their facilities in short periods of time.

As a legacy of Bose, the UPTAM program has been made a permanent feature of the Department of Chemistry and Chemical Biology at Stevens Institute of Technology.

**iQsynthesis**  
Custom Molecules for Life  
Formerly Gateway Technologies

**Custom Synthesis Services**  
iQsynthesis, formerly Gateway Chemical Technology, provides customized chemical synthesis at milligram to kilogram quantities.

- Active Pharmaceutical Ingredients
- Analytical Reference Standards
- Precursors and Intermediates
- Degradants and Metabolites
- Agrochemicals
- Bio-organic Molecules
- Chiral Synthesis
- Combinational Platforms
- Process Development

**iQsynthesis**  
11810 Borman Drive  
St. Louis, MO 63146  
314-991-1857  
1-800-506-9892  
[www.iqsynthesis.com](http://www.iqsynthesis.com)  
[info@iqsynthesis.com](mailto:info@iqsynthesis.com)  
**INNOVATION | QUALITY**

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

Graduate Seminar Series - Fall 2007

**Monday, September 10**

Micro vs. Macro Rheology  
John F. Brady  
Chevron Professor of Chemical Engineering  
California Institute of Technology

**Monday, September 17**

Understanding Adaptive Immunity: A cross-road of the Physical, Life, and Engineering Sciences  
Arup K. Chakraborty  
Robert T. Haslam Professor of Chemical Engineering  
MIT

**Monday, September 24**

Failure and Wall Slip in Entangled Polymer Melts  
Morton M. Denn  
Albert Einstein Professor of Science and Engineering and Director of the LeVich Institute  
City College of New York

Times: Refreshments 2:30 PM  
Seminars 2:45 PM

Place: Room 117, NJIT Kupfrian Hall

Seminar Coordinator: Professor Boris Khusid, (973) 596-3316,  
khusid@adm.njit.edu

**CONTINUING EDUCATION - SHORT COURSES, ONLINE COURSES, AND ACS PROSPECTIVES CONFERENCES**

**Sept. 9 - 11, 2007**

"Advances in Structure-Based Drug Discovery"  
Chair: Charles Reynolds of Johnson & Johnson, Kenneth Merz of the University of Florida, and Dagmar Ringe of Brandeis at the Hyatt Regency Airport in San Francisco, CA

**Sept. 30 - Oct. 3, 2007**

"Process Chemistry in the Pharmaceutical Industry"  
Chairs: Joe Armstrong of Merck and Chris Senanayake of Boehringer-Ingelheim at the Royal Sonesta Boston in Cambridge, MA

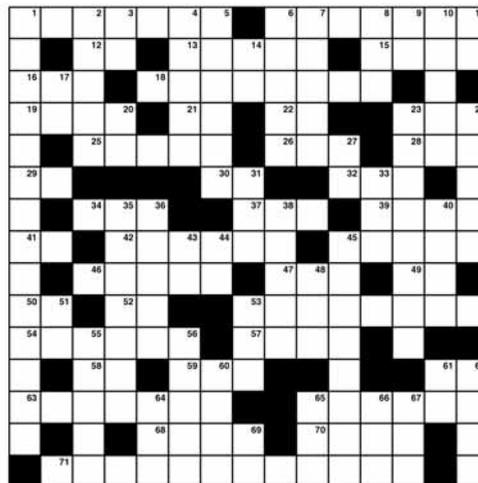
**Oct. 28 - 30, 2007**

"PK/PD for Medicinal Chemists"  
Chair: David Rodrigues of BMS and David Christ of SNC Partners at the Westin Philadelphia in Philadelphia, PA

**Nov. 4 - 6, 2007**

"Successful Biologics: Formulation to Manufacturing"  
Chairs: Wenchang Ji of Amgen and LaToya Jones Braun of University of Colorado at the Westin Philadelphia in Philadelphia, PA

**PUZZLE - Periodic Table Tapping - by Mark S. Lesney**



**ACROSS**

1. Ghosts arising in distill of the night?
2. Swamp gas
3. "By the pricking \_\_\_ my thumbs, something wicked..."
4. Scamum
5. Goes with Id(ot)s
6. Of iniquity or thieves
7. Waxed satellite (2 wds)
8. Sacred bird in family *Threskiornithidae*
9. Z=57
10. Unit of wt. for blowing up monsters, or Big Sky st.
11. Digital assistance Frankenstein could use today to make a better monster, briefly
12. Like the text of a DNA message
13. Seance ghosts knock once for
14. Alcoholic beverage or a "fellow, well-met" of the Royal Society who's been over-celebrating 53 down?
15. Z=42
16. Moon goddess element, briefly
17. Anglophilic heat meas.
18. Creepy condensate?
19. Initiation one of 45 across, or Octavian month, for short
20. A turf fungicide or the prefix for midlevel clouds
21. Sun's No. 2 element
22. A distiller's quip?
23. DNA triplet
24. Servants of 71 across (Possibly clones?)
25. High, craggy hill or rocky outcrop
26. Refractometer meas., or the Ocean st.
27. Unit of meas. for wavelength absorbance (abbr.)
28. Anno domini, briefly
29. Comes alive at 18 across
30. Results of your experiment if you forget to press 69 down and your lab tech did the run without checking
31. Killer whale
32. Pythonian "Knights who say \_\_\_" are probably not referring to element 28, briefly
33. Bristle-like appendage (planty)
34. Unit of magnetic flux named in honor of 24 down's "summoner"
35. "Count" him among the more severely UV-challenged.
36. "Helios" element
37. What you need to do after your experiment is 54 across
38. \_\_\_ 51
39. Quintessential mad scientist
40. Exorcist salt (2 words)
41. Salty bondage?
42. Radiofrequency, briefly
43. Ultima \_\_\_ or Inuit ancestors
44. Photosynthetic foodstuffs du jour?
45. Tut AND his mother
46. Not-yet-invented device a scientist might need upon being told by the chair of the department that his or her bitter rival from the lab next door 53 D: \_\_\_ control?
47. Egg source
48. Z=47
49. Point in a lens where light paths cross
50. Einsteinium, for short
51. Goosebumps' author: \_\_\_ Stine
52. DNA dye, for short, or first two initials of Charlotte's Web creator.
53. Sulfur monoxide formula
54. Witch's beaker?
55. Maxwell's fiend
56. Show me the antimony, briefly
57. Van Gogh's "love letter"
58. Chinese "Way"
59. Chemistry premeds dread?
60. Small quartz formation covered with CaCO<sub>3</sub>
61. \_\_\_ catastrophe
62. "Double, double, \_\_\_ and trouble; fire burn and 23 down bubble."
63. Very small amt. or wooded path, briefly
64. Fountain tip element, briefly, or Z=76
65. \_\_\_ from the Black Lagoon
66. Hobbit enemy
67. Beckman's famous spectrophotometer
68. Got the Nobel prize
69. Levitated or where 34 across dissolves (2 words)
70. Dr. Who's nemesis
71. Swamp travel
72. Micro letter
73. Skeleton seer
74. A grave container
75. Ringed planet, briefly
76. Flower necklace
77. Swedish devil (or an air-moving device)
78. First button to check when your spectrometer doesn't run

**Solution on page 24.**

**We Focus on Doing Chemistry!**

- FDA Inspected
- cGMP Synthesis
- Controlled Substances
- Custom Synthesis
- Small Lots Manufacturing
- Polymer Chemistry
- Process Development

**Chemo Dynamics, LP**

Contact: S. N. Bharathi, Ph.D.  
3 Crossman Road South  
Sayreville, NJ 08872  
Phone: (732)721-4700  
Fax: (731)721-6835  
www.chemodynamics.com  
E-Mail: info@chemodynamics.com

## Professional/Product Directory

### NMR SERVICE & ANALYSIS

1H, 19F, 15N-31P FDA, DEA REGISTERED



**INEXPENSIVE** **GLP COMPLIANCE**  
**RELIABLE** **24-48 hr turnaround**

### NUMARE SPECTRALAB INC

3551 Winding Road, Kintnersville PA, 18930-9543

Phone: 610-346-8660

[www.eclipse.net/~numare/](http://www.eclipse.net/~numare/)

email: [numare@eclipse.net](mailto:numare@eclipse.net)



### Eastern Scientific

[easternsci@aol.com](mailto:easternsci@aol.com)

781-826-3456

### Vacuum Pump Problems?

Eastern Scientific specializes in the repair and precision rebuilding of all makes of mechanical vacuum pumps.

Free pick-up & delivery  
Restrictions apply



## SCHWARZKOPF

### Microanalytical Laboratory

- Elemental & Trace Analysis
- Organics, Inorganics
- Organometallics
- Metals by AA & Graphic Furnace
- Functional Grps. - Mol. Wt.
- Calorimetry
- Total S. F. Halogens TOX
- Coneg Testing Custom Analysis
- 56-19 37th Ave. Woodside, N.Y. 11377
- (718) 429-6248
- [Schwarzkopfmicro@aol.com](mailto:Schwarzkopfmicro@aol.com)

## MATERIAL CHARACTERIZATION LABORATORY

A Unique Combination of State-of-the-Art Analytical Instrumentation & Expertise

GC/MS • HPLC • LC/MS • FTIR • TOC • AA  
ICP-MS • XRD • XRF • AFM • SEM • TEM

York Center for Environmental Engineering & Science  
[www.ycees.njit.edu/labs](http://www.ycees.njit.edu/labs)

138 Warren Street  
Newark, NJ 07102  
Tel: (973) 596-5858  
Fax: (973) 642-7170

# NJIT

New Jersey Institute of Technology  
A Public Research University

## Puzzle Solution



### Chemical Analysis Services



- Materials Identification
- Deformulation
- Polymer Analysis & Testing
- Failure Analysis
- Consulting Services



800.659.7659

[www.chemir.com](http://www.chemir.com)



## Professional/Product Directory

### Case Consulting Laboratories, Inc.

#### Chemistry - Materials

- GLP Compliant Analysis
  - R & D
  - Testing & Evaluation
  - Claims Validation
- 622 Route Ten  
Whippany, NJ 07981  
973-428-9666  
[www.case-labs.com](http://www.case-labs.com) [info@case-labs.com](mailto:info@case-labs.com)

### CHIRAL SEPARATIONS

LC and GC Columns

Methods Development

Processing



Advanced Separation Technologies Inc.  
37 Leslie Ct, PO Box 297, Whippany, NJ 07981  
973.428.9080 Fax 973.428.0152

### Challenge Us With Your Synthesis Needs

Good quality, fast delivery service, amazing price, satisfaction guarantee. Any synthetic needs contact or visit us. Syntask Laboratories Inc.  
7 Deer Park Dr. Ste M5, Monmouth Junction, NJ 08852  
Ph-732-355-9988, cell-848-525-9396  
Fax-732-355-9980 [www.syntasklabs.com](http://www.syntasklabs.com)  
Email: [syntasklab@verizon.net](mailto:syntasklab@verizon.net)

### Elemental Analysis

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

### HUFFMAN

LABORATORIES, INC.

Quality Analytical Services Since 1936

Phone: (303) 278-4455

FAX: (303) 278-7012

[chemistry@huffmanlabs.com](http://chemistry@huffmanlabs.com)

[www.huffmanlabs.com](http://www.huffmanlabs.com)



### ISSI Laboratories, Inc.

Voice: (732) 246-3930; Fax: (732) 247-4977

Email: [issi@pipeline.com](mailto:issi@pipeline.com)

Chromatography (HPLC, TLC, GC);  
GC-MS and LC-MS; Isolation, Purification  
And Identification of Unknown Substances;  
Stability-Indicating Tests. GLP-Compliant.

### Fast and Accurate Chemical Analysis

LC/MS/MS, GC, GC/MS, HPLC, CE, dissolution, Chiral separations, post column derivatizations, semi-prep purification, polymer analysis, impurity profiling, flavor/fragrance analysis, formulation development.  
PRIMERA ANALYTICAL Princeton, NJ 08540  
For: 609-921-7715 Fax: 609-921-7716  
E: [info@primera-corp.com](mailto:info@primera-corp.com) W: [www.primera-corp.com](http://www.primera-corp.com)

## NMR Service 500MHz

\*Mass

\*Elemental Analysis

NuMega Resonance Labs

Tel: (858) 793-6057

## TELL OUR ADVERTISERS

Membership surveys show that you want more articles in our newsletter. If you tell our advertisers that you saw their ad here, they will provide more financial support and this will allow us to add more articles.

Arendt & Assoc. IP Group  
Registered Patent Attorneys  
• Global Patent Protection • Licensing  
• Controlling Patent Costs

(978)897-8400 or (978)807-5278  
Rte 111 at Interstate 495, Boxborough, MA

[jarendt@arendtpatentlaw.com](mailto:jarendt@arendtpatentlaw.com)



## Prof./Product Directory



**BRUKER**

Bruker Daltonics

**Hit the Target**

... with sub-ppm confidence on the Bruker micrOTOF-Q™ for empirical formula determination

www.bdal.com • (978) 663-3660

think forward ESI-Qq-TOF MS

## Career Opportunity

### 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/recr\\_disp.php](http://www.mboservices.net/recr_disp.php)
- <http://newyorkacs.org/jobs.html>
- <http://njacs.org/jobs.html>

## Ad Index

| <u>ANALYTICAL</u>                  |    |
|------------------------------------|----|
| Arendt & Associates                | 25 |
| Analogix                           | 20 |
| Astec                              | 25 |
| Bruker Daltonics Inc.              | 26 |
| Case Consulting Labs., Inc.        | 25 |
| Chemir Analytical Services         | 24 |
| Chemo Dynamics, L.P.               | 22 |
| Desert Analytics Laboratory        | 7  |
| DuPont Analytical Solutions        | 19 |
| Huffman Laboratories, Inc.         | 25 |
| International Exposition Co.       | 2  |
| IQSynthesis                        | 21 |
| ISSI Laboratories, Inc.            | 25 |
| Micron Inc.                        | 19 |
| New Jersey Institute of Technology | 24 |
| Numare Spectralab Inc.             | 24 |
| NuMega Resonance Labs.             | 25 |
| Primera Analytical Solutions Corp. | 25 |
| Robertson Microlit Labs            | 28 |
| Schwarzkopf Microanalytical        | 24 |
| Syntask Laboratories, Inc.         | 25 |
| YourEncore                         | 4  |
| <u>CAREER OPPORTUNITY</u>          |    |
| ACS-NY/NoJ Sections                | 26 |
| <u>EDUCATION</u>                   |    |
| City University of New York        | 12 |
| New York University                | 27 |
| Rutgers University                 | 16 |
| Seton Hall University              | 15 |
| <u>EQUIPMENT</u>                   |    |
| Eastern Scientific Co.             | 24 |
| Mass Vac, Inc.                     | 28 |
| <u>GENERAL</u>                     |    |
| ACS-NY/NoJ Sections                | 6  |
| ACS-NY/NoJ Sections                | 25 |

## NEW YORK UNIVERSITY CHEMISTRY

FALL 2007 COLLOQUIUM SERIES

|                                   |  |
|-----------------------------------|--|
| September 7<br>Host: Arora        | Nicola Pohl, Iowa State University                           |
| September 14<br>Host: Kirshenbaum | Tom Muir, Rockefeller University                             |
| September 21<br>Host: Kirshenbaum | Ken Dill, University of California/San Francisco             |
| September 28<br>Host: Jerschow    | Arthur G. Palmer, Columbia University                        |
| October 5<br>Host: Arora          | Ken Houk, University of California/Los Angeles               |
| October 12<br>Host: Arora         | Adam Matzger, University of Michigan                         |
| October 19<br>Host: Kirshenbaum   | George Christou, University of Florida                       |
| October 26<br>Host: Canary        | Ken Raymond, University of California/Berkeley               |
| *October 29<br>Host: Y. Zhang     | Weitao Yang, Duke University                                 |
| November 2<br>Host: Ward          | Steven Zimmerman, University of Illinois at Urbana/Champaign |
| November 9<br>Host: Kirshenbaum   | Vincent Rotello, University of Massachusetts                 |
| November 16<br>Host: Ward         | Wenbin Lin, University of North Carolina                     |
| November 30<br>Host: Canary       | Nick Geacintov, New York University                          |
| December 7<br>Host: Jerschow      | Clare Grey, SUNY Stony Brook                                 |

Unless otherwise noted, seminars will be held on Fridays at 4:00 p.m. in room 1003 Silver Center, 31 Washington Place, between Greene Street and Washington Square East. Reception to follow.  
\*Monday, October 29 at 4:00 p.m. in room 1003 Silver Center.

## Your Partner For Analytical Support Services

Rapid Results • Quality • Accuracy • Competitive Pricing



### Robertson Microlit Laboratories

- Elemental CHN S, X Analysis - *same day service*
- Atomic Emission Spectroscopy
- Atomic Absorption Spectroscopy
- FTIR Spectroscopy
- UV / VIS Spectrophotometry
- Mass Spectrometry
- Chromatography
- Bioavailability
- Polarimetry
- Calorimetry
- Titrimetry
- Wet Chemistry
- KF Aquametry

P. O. Box 927 • 29 Samson Avenue • Madison, NJ 07940  
Tel: (973) 966-6668 Fax: (973) 966-0136  
www.robertson-microlit.com  
email: results@robertson-microlit.com

## A good vacuum system needs a great vacuum trap:

**Posi-Trap** positive flow  
vacuum inlet traps!

- No "blow-by" . . . **ever!**
- Filter elements matched to **your** application.
- **Easy** cleaning and changing.

**When you want the best, you want MV Products.**



**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