

theCHEMICALbulletin

SEPTEMBER • 1999

CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

FRIDAY, SEPTEMBER 24, 1999

THE STUDIO RESTAURANT
8717 North Lincoln Avenue
Morton Grove, IL

DIRECTION TO THE MEETING

From the city, take I-94 (Edens Expressway) north to Dempster Street exit. Go west on Dempster to Lincoln Avenue (last street before the Metra train tracks). Turn left and proceed to restaurant. From the west, take I-294 north to Dempster Street. Go east on Dempster to Lincoln Avenue (first right past the train tracks), turn right and proceed to restaurant.

TOPICAL GROUP 5:30 P.M.

NIR/FTIR and Chemometrics How They Can Help Your Company

Speaker
David L. Curtin
Stepan Company

David Curtin got his BS degree from Northern Illinois University and his MS degree from the University of Wisconsin-Madison. He has been working for the Stepan Company in the analytical department for ten years. His primary work has been in the field of infrared spectroscopy and its applications in analyzing surfactants, polymers and a variety of esters.

Abstract

The presentation will provide an overview of both near and mid infrared spectroscopy and their application to the chemical industry. The presentation will begin with an overview of the differences between near- and mid-infrared spectroscopy and their present day technological status. The remainder of the presentation will cover the advantages of utilizing this technology in the laboratory and process environment. Of primary concern will be:

1) Right the first time manufacturing

- 2) Reduced manufacturing costs
- 3) QC to QA transition
- 4) Elimination of hazardous chemicals
- 5) Rapid multi-component analysis

Come and find out how these powerful tools can help your company!

SOCIAL HOUR 6:00-7:00 P.M.

Cash Bar Available with hors d'oeuvres

DINNER 7:00 P.M.

Dinner reservations are required and should be received in the section office (847/647-8405) by noon on Tuesday, September 21, 1999. Dinner cost is \$22 to Section members who have paid their local section dues, members' families, and visiting ACS members. Cost to non-members is \$24. Seating will be available for those who wish to attend the meeting without dinner. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinners ordered. No-shows will be billed.

The menu consists of Garden Fresh Tossed Green Salad with choice of dressings, choice of Prime Queen Filet Mignon with Bearnaise Sauce or Fresh Lake Superior Whitefish, Twice-baked Potato, Green Beans Almondine, Vanilla Ice Cream Sundae with Chocolate Sauce, Rolls and Butter, and Beverage.

GENERAL MEETING 8:00 P.M.

THE TOPIC:

Andrew T. Graham, Research Specialist, Dow Chemical, Midland MI, "Synthesis and Applications of Superabsorbent Polymers".

Disposable diapers were responsible during the '70s and early '80s for a global revolution in infant care. The use of superabsorbent polymers, beginning in the mid-'80s, significantly improved diaper performance while reducing their cost. As a result, the manufacture of

these polymers has grown from a few thousand metric tons in 1985 to nearly 1 million MT/yr in 1998. The polymer of choice has been, and continues to be, partially neutralized crosslinked poly(acrylic acid). This talk will briefly outline the commercial synthesis and structure property relationships for these interesting polymers. In addition to their use in absorbent articles for personal hygiene, superabsorbent polymers have been used in non-personal care applications. Several of these applications will also be discussed.

(continued on page 2)

JOB CLUB

The next meeting of the Chicago Section Job Club will be held on Friday, September 24 at The Studio Restaurant at 5 p.m. The Job Club provides a continuing opportunity for unemployed members of the Section to meet with one another, share their experiences and develop a network that may help in identifying employment opportunities. Bring plenty of resumes and business cards to distribute to your colleagues.

Should you wish to attend the Section meeting following the Job Club, the fee for unemployed members is only \$11, and you can continue your networking activities. Please call the Section office for reservations and indicate that you are eligible for a discount.

**COME SEE THE FACES OF THE ACS
CHICAGO SECTION IN THE NEW
PHOTO GALLERY ON THE WEB**

at <http://membership.acs.org/C/Chicago>

(continued from page 1)

THE SPEAKER:

Andrew T. Graham is a research specialist at Dow Chemical in Midland Michigan. He received his undergraduate education at Duke University (B.S. in Chemistry, 1967) and carried out graduate studies at Indiana University (M.S. Physical Chemistry, 1974). Andy has worked on water soluble and water absorbent polymers, primarily as a process chemist, for the last 20 years. With the beginning of Dow's efforts on superabsorbents in the mid-1980s, he transferred from Dow's polyacrylamide group to the superabsorbents research effort. He has focused on process improvements, especially through an understanding of process effects on polymer properties. For superabsorbent polymers, this has meant design of improved superabsorbent products by understanding the synthesis process and the relationship of the process to material properties, as the synthesis process is practiced in the laboratory as well as in large-scale manufacturing.

Andy is the author of over 50 Dow Chemical Internal R&D Reports, is Co-Editor of Modern Superabsorbent Technology, Wiley-VCH, 1998 and is listed inventor on five US patents. He is also the winner of an internal Dow Chemical award, the "Michigan Scientists' Organization Award" 1997 (for work on superabsorbents).

SCHWARZKOPF

MICROANALYTICAL LABORATORY

ELEMENTAL & TRACE ANALYSIS ORGANICS, INORGANICS, ORGANOMETALLICS

METALS BY ATOMIC ABSORPTION
FUNCTIONAL GROUPS
MOLECULAR WEIGHT
CALORIMETRY (B.T.U. VALUE/lb.)
METAL CORROSION ANALYSIS

CUSTOM ANALYSIS TO FIT YOUR PARTICULAR NEEDS

Routine Analysis - 5 Business Days

Write or Call for Our Brochure
56-19 37th Ave., Woodside, N.Y. 11377
(718) 429-6248

Chair's Column

July, 1999

Dear Fellow Members of the Chicago Section, ACS:

As the Chair of the Chicago Section ACS for July 1999 - June 2000, I'd like to present some of the opportunities available to the membership for the coming year. Although the Chicago Section office is run by paid staff, it should be obvious to all that the programs of the Section are carried out by volunteers: you the members.

What determines membership in an ACS local section? ZIP Code: of your ACS mailing address, either at work or home. What determines the value you place on your ACS local membership? The amount of effort you point into the process. This effort can consist of attending the monthly membership meetings or, better yet, additional effort on working with the various programs of the Section through the various committees. A list of the committees and their functions appear on p. (10). The Section Office can furnish the names and contact numbers for the committee chairs.

Among all of these opportunities, I'll highlight a few (note emphasis on outreach):

National Chemistry Week (NCW): assistance is always needed, not only on the day of celebration but in the planning. After several years of excellent leadership, Tom Kucera would appreciate a member willing to co-chair the committee.

Education, especially programs for children and families: Kids and Chemistry is an active program, but could always need more trained leaders. Other opportunities exist, including children's museums (note: the DuPage Children's Museum will be moving from Wheaton to Naperville next year and can use volunteers for its science-based programs - contact Debbie Garner, 630-260-9907).

Education, collegiate: Earlier in the year, I contacted all known contacts for Student Affiliate Groups at colleges and universities in the Section. So far, I've had no response. At a minimum, we'd like to see a Student Affiliate page on the Section website to exchange ideas, announce programs and even brag a bit (e.g., North Central College had their own celebration of NCW on campus and regularly makes presentations on science and chemistry at nearby elementary schools).

Professional Relations: This has been a tough year as many chemists in the Section lost jobs. The Section leadership

has felt somewhat helpless as those let go tend to fall off our radar screen. The Section - and the ACS - have numerous programs to assist those looking for a new position for whatever reason. This committee also has the mission of improving the status and job satisfaction for those currently employed, but we need your help.

Know of any other exciting outreach program for kids, including those sponsored by your company? Inform the Section and we can develop a Web page for exchange of ideas or inform ourselves and the public on what's available.

The Younger Chemists and Minority Affairs Committees are active and desire your participation. A related question: does the Section also need a Women Chemists Committee? Make your views known.

Monthly meetings (a.k.a. "you can't please all of the time"): Surveys in the past (do we need another one?) have indicated there's no good night to have a meeting, no good place, no good format, etc. Is the traditional dinner meeting on a Friday night the way to go? If you have other ideas, let us know. Although a survey on the web might introduce a bias, it sure would be efficient. Let us know your thoughts.

Please visit the Section website at <http://membership.acs.org/C/Chicago>. We appreciate that not every member has web access, but it is the wave of the future. Typically, those in education and those who are "younger" chemists do have access, and that's where we need increased outreach and involvement.

This year, the Section is experiencing two significant changes: in professional staff (Gayle O'Neill of TEI now administers the office), and the Chair, who is moving out of the area. The office numbers remain the same. Although I'm retiring to Minnesota, I can always be reached through the Section Office (847-647-8405); directly at 612-389-8370; or at buntrock2@earthlink.net. I will be at both the Board and membership meetings every month and hope to see you there.

For the business year 1999-2000, it's my privilege to chair one of the largest and best of the ACS local sections: the Chicago Section. I strongly encourage your participation in Section activities to carry the proud traditions of the Section into the new millennium. Volunteerism is falling on hard times, for a number of reasons. However, I hope that you can find time to participate in your local section.

Robert E. (Bob) Buntrock

"CHEM SHORTS" For Kids

This column is presented by the Elementary Education Committee. They hope that it will reach young children and help increase science literacy. Please cut it out and pass it on to your children, grandchildren, or elementary teachers. It is hoped that teachers will try to incorporate some of these projects in this column into their lesson plans.

The Incrediblob

Kids, now it's time to use chemistry to make your own plastic ball. Cover a work surface with two layers of paper towels. Into a small plastic cup put one tablespoon of white liquid glue (like Elmer's®). Into another small cup put 1/2 teaspoon each of Epsom salts and water. Swirl the cup until no more Epsom salts will dissolve (if any is left undissolved at the bottom of the cup that's okay). Pour all the contents from the Epsom salts cup into the glue cup and stir it up with a plastic spoon. What happens to the mixture?

Scoop the mixture out onto the double thickness of paper towels, fold the towels over it and press down to absorb the extra water. Pick up your newly formed plastic and form it into a long roll. See how long you can make the roll without it breaking, and measure its length. Form the plastic into a ball and flatten it down onto a piece of wax paper like a pancake. See how large a pancake shape you can make that can be lifted off the wax paper in one piece, and measure its diameter.

Form the plastic back into a ball and try bouncing it off a hard clean surface. Congratulations on making and incrediblob, incrediblob incrediblob!

Chemistry notes: Note how many different plastics you used to help make one of your own (the cups, the spoon). On the day you do this experiment, try to make a list of all the plastics you see that day and you'll be amazed at how long the list can be. Epsom salts are a chemical product called magnesium sulfate (MgSO_4). You should have some left over from making the Epsom salt towers described in the last column. Try to work quickly in this experiment because your plastic material will dry out as you use it.

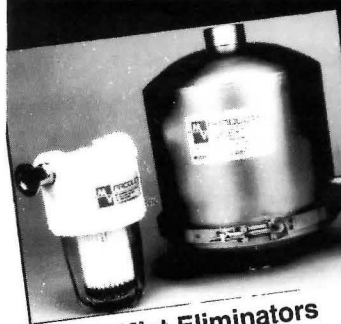
Reference: "WonderScience" from the American Chemical Society, 1991, vol. 5(8), issue on plastics.

"ChemShorts" are on the internet at:
<http://membership.acs.org/C/Chicago/ChmShort/kinindex.html>

KATHLEEN CARRADO
Elementary Education Committee.

September, 1999 Vol. 86, No.7.
Published by the Chicago Section of the American Chemical Society, Fran Karen Kravitz, Editor; Gayle E. O'Neill, Business Manager. Address: 7173 North Austin, Niles, Illinois 60714. 847/647-8405. Subscription rates: \$15 per year, \$15 outside North America. Frequency: monthly-September thru June

Meet the Protectors of Vacuum Pumps, Systems and the Environment!



Oil Mist Eliminators



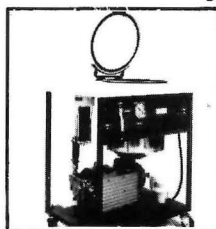
Vacuum Inlet Traps



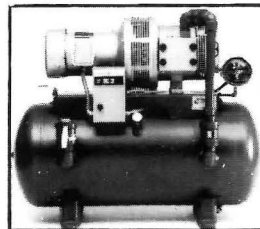
Oil Filtration Systems

- MV Products offer you a full line of Oil Mist Eliminators, Vacuum Inlet Traps, Oil Filtration Systems and other quality vacuum products designed to assure your vacuum pumps a long life and you a clean and healthy environment.
- MV Oil Mist Eliminators remove oily haze from vacuum pump exhaust, protect the surrounding areas and the room air you breath.
- MV Vacuum Inlet Traps protect your vacuum pump from corrosive and abrasive elements and can be tailored to your specific application requirements.
- Oil Filtration Systems remove acids, corrosives and contaminants from pump fluids thus reducing maintenance cost and prolong pump life.

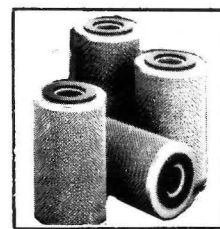
Other Quality Vacuum Products



Vacuum Degassing Chambers



Central Source Vacuum System



Filters

FOR MORE INFORMATION ON THESE AND OTHER FINE VACUUM PRODUCTS CONTACT



PRODUCTS

A DIVISION OF MASS-VAC, INC.

247 RANGEWAY ROAD, P.O. BOX 359, NO. BILLERICA, MA 01862-0359
TEL (978) 667-2393 • FAX (978) 671-0014



Analytical Laboratory Managers Association

20th Annual Conference

October 27 - 29, 1999

Argonne National Laboratory, Illinois

"Measuring Performance of the 21st Century Laboratory"

REGISTER NOW! Call 505-989-4683 or go to www.labmanagers.org

CONFERENCE PROGRAM

Wednesday, October 27

- 4:00-6:00 pm Optional Tour of the Advanced Photon Source Laboratory
7:30-9:00 pm Registration and Welcome Mixer

Thursday, October 28

- 9:15-10:00 am Measurement as a Quality Management Tool with the Malcolm Baldrige
National Quality Award Criteria, Joseph A. Muzikowski, *Solvay Polymers, Inc.*
10:30-11:15 am Measuring Laboratory Customer Satisfaction, Richard B. Beal, *Kimberly-Clark Corporation*
11:15 am-Noon Motivating the R&D Employee - a Particular Challenge, Jo Dohl, *Nycomed Amersham*
1:00-1:45 pm Evaluating Performance of Analytical Personnel, John Sadowski, *Air Products & Chemicals*
1:45-2:45 pm Panel Discussion: Why Organizations Measure Human Factor
3:15-4:45 pm Round Table Discussions
- Effectiveness of Teams in the Laboratory
 - Enhancing the Laboratory's Image with Customers
 - Communicating Lab Performance to Executive Management
 - Measuring the Quality of Laboratory Results
- 7:00-9:00 pm Banquet followed by presentation of Round Table Discussion Summaries

Friday, October 29

- 7:30-8:30 am Conference Breakfast and Business Meeting
8:45-9:30 am Measuring the Cost/Productivity Performance of the Analytical Laboratory,
Wayne Collins, *Solvay Polymers, Inc.*
9:30-10:15 am Benchmarking the Industrial Analytical Laboratory,
Keith Darlington, *Elf Atochem North America, Inc.*
10:45-11:30 am LIMS as a Management Measurement Tool, Dave Womack, *Bayer Corporation*

ALMA PRESENTS FOUR WORKSHOPS *immediately preceding the 20th Annual Conference*

Managing the Chemical Analysis Support Laboratory

Two Day Workshop, Tuesday & Wednesday, October 26 & 27, 1999. Workshop Leader: Dr. Claude Lucchesi

The Design and Implementation of High Performance Work Teams

One Day Workshop, Tuesday, October 26, 1999. Workshop Leader: Dr. Anthony J. Montana

Organizational Change and the MBTI: A Practical Approach

One-Day Workshop, Wednesday, October 27, 1999. Workshop Leader: Robert B. Johnson

Quality Systems for the Laboratory: Fundamentals, Implementation, and Applications to Analytical and Quality Control

One Day workshop, Wednesday, October 27, 1999. Workshop Leader: Dr. Anthony J. Montana

REGISTER NOW! Call 505-989-4683 or go to www.labmanagers.org

OFFICE NOTES

Things are changing at the Section office. After 42 years of service to the Section, Ron Sykstus has retired to Florida. TEI Analytical, Inc. has been contracted to provide similar, but less extensive services. Most of the duties of Section Office Manager will initially be performed by me. Gradually, other staff at TEI will be responsible for specific areas. I will use this column to keep you informed about staff changes and other office news.

The transition this year may get a little rocky at times and your patience will be greatly appreciated. I have already been fortunate to have the assistance of several Section members. Elaine

Anderson, Cherlyn Bradley, Marilyn Kouba and Adele Rozek have spent hours helping to categorize the office files. In the process, they have discovered many photos that may be of interest. Margaret and Milt Levenberg will be working with these photos to create a photo album area on the Section web page. Working in the office has some advantages. I was able to purge some photos before Margaret and Milt got their scanner on them. The camera is just too honest for my liking.

Speaking of scanners and web sites, we are computerizing more of the office operation. Hopefully, this will allow us to respond more quickly to your requests for information. If you call the office and

are transferred to the voice mail, please leave a message. Normally the call will be going to voice mail because we are on the line with someone else, not because we are out of the office. This means that we can usually get back to you in a few minutes. You can also leave information or requests by e-mail. The address is gayle@teianalytical.com.

Many have offered to help and we will not be shy in taking advantage of the offers. We are fortunate to have so many members who are dedicated to the welfare of the Section.

Gayle O'Neill,
Office Manager

Chemical Analysis Services

- ▲ Materials Identification/Deformation
- ▲ Product Defects/Failure Analysis
- ▲ Polymer Analysis & Testing

Instrumentation: FT-IR, NMR, GC, GC/MS, SEM-EDXA, HPLS, DSC, TGA



Chemir / Polytech
Laboratories, Inc.

(314) 291-6620

2672 Metro Blvd. Maryland Heights, MO 63043 - <http://www.chemir.com>

YASUI SEIKI CO., (USA) Coating Development Laboratory

- *State-of-the-art Yasui Coaters
- *UV curing and impingement drying

Contact us at:

2333 Industrial Drive, STE 24A3
Bloomington, IN 47404

Ph: 812 331-0700 Fax: 812 331-2800

e-mail: yasui@ix.netcom.com

<http://www.yasui.com>

OUTSTANDING PEOPLE

Lab Support is the leader in the scientific professional staffing industry. We specialize in placing qualified degreed scientists on short and long term assignments in laboratories in over 50 major markets throughout the United States and Canada.

All of our Account Managers make "Quality Assignments" because they have a background similar to that of our clients and of our employees.

If your company is looking for outstanding lab personnel or if you're an outstanding scientist seeking a new career offering variety, opportunity and a great benefit package, call **Lab Support**.

O'Hare area(847)699-4004

Tinley Park area . .(708)403-0231

Other Branches Nationwide. . (800)998-3332

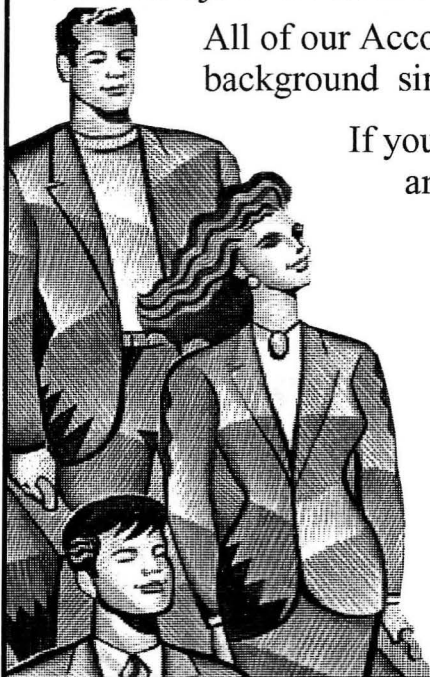
www.labsupport.com

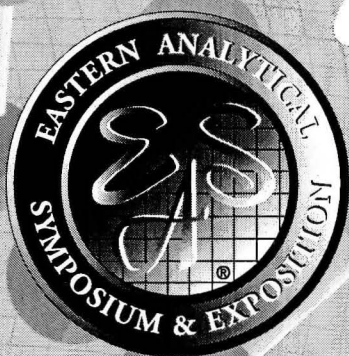
On Assignment



LAB SUPPORT®

Science Professionals On Assignment





Looking For Real Solutions To Your Analytical Problems?

Then look no further...
the place to enhance your
knowledge in the analytical
and allied sciences is EAS!

At the **Eastern Analytical Symposium & Exposition**, we take great pride in presenting an excellent **technical program**, with over **600 invited and contributed papers**. The emphasis for presentations is on cutting edge science and relates to real problems faced by scientists in all fields. EAS offers more than **80 workshops, seminars and short courses**; featuring lectures, demonstrations, and/or hands-on experience presented by speakers from exhibiting companies. We've worked hard to bring together over **235 exhibitors** to provide scientists with a convenient single location to meet and discuss a vendor's product, new equipment, services, analytical techniques, and technologies.

Come to the Garden State Convention Center
in Somerset, New Jersey on **November 14-19, 1999**.

Don't miss this incredible opportunity to be a part of the
best Analytical Symposium & Exposition ever!

For more information visit
our EAS web site:
<http://www.eas.org/>

1999 SCHOLARSHIP WINNERS NAMED

The High School Education Committee of the Chicago Section ACS held its 45th annual High School Scholarship Examination on May 15, 1999 at the University of Illinois in Chicago. This year, 123 students were nominated to take the examination. Each high school chemistry teacher could nominate up to two students.

First Place, a \$3500 Morton International Scholarship was awarded to Ken Tsui, a junior at Niles West High School, nominated by his teacher Ann Levinson.

Second Place, a \$2500 Akzo Nobel Chemicals, Inc. Scholarship was awarded to Michael Martens, a senior at West Aurora High School, nominated by his teacher Richard Ebeling.

Third Place, a \$1500 Morton International Scholarship was awarded to Kelly O'Shea, a sophomore at Maine East High School, nominated by her teacher Anna M. Klein. Kelly was also awarded the \$500 Marie Ann Lishka Memorial Scholarship for being the highest scoring female. Fourth Place, a \$1250 Nalco Foundation Scholarship was awarded to

Preeti Sukerkar, a sophomore at Glenbrook South High School, nominated by her teacher Preston Hayes. Fifth Place, a \$1000 Searle Research and Development Scholarship was awarded to David Neu, a senior at West Aurora High School, nominated by his teacher Richard Eberling.

The \$200 Marshall S. Smoler Award was awarded to Eric Zuniga, a sophomore at Lincoln Park High School, nominated by his teacher Judith Ditekowsky.

The Marshall S. Smoler Award is given to the highest scoring Chicago Public High School student. This award was established in 1972 in memory of Marshall S. Smoler, by his sister Rachel. Mr. Smoler was a chemistry teacher in the Chicago public schools for many years. Eric will also receive a \$400 Bernard E. Schaar Award from the Chicago Chemists Club.

In addition, the \$1000 Clark Refining and Marketing Inc., Scholarship was given to Brad Johnson, a sophomore at H.L. Richards High School, nominated by his teacher, John Brodemus. This award is given to the highest scoring student from the Blue Island High School area.

Finally, there were 14 honorable mentions. These names have been

submitted for two \$1000 scholarships offered by the Chemical Industries Council of the Midwest and the Chicago Drug and Chemical Association.

The section is grateful to Dr. David Kanis from Chicago State for authoring and administering the examination. Dr. Kanis provided each student with a chemical kit to perform an experiment with polyurethane foam during the break in the exam. He also performed demonstrations with chemiluminescence.

In addition, Dave personally sent each student a letter stating their percentile rank on the exam.

The section is also grateful to the following companies for their contributions which made these scholarship awards possible: Abbott Laboratories, Akzo Nobel Inc., Akzo Nobel Chemicals Inc., Alltech Assoc., Baxter Healthcare Corp., Clark Refining and Marketing, Inc., Morton International, The Nalco Foundation, Searle Pharmaceutical, Rachel Smoler, Unilever (Helene Curtis), and Wilkens-Anderson Co.

Ann Levinson,
High School Education Chairman



TESTING

Chemical testing is our business.

That's why, for more than 30 years, customers in both industry and government have depended on TEI® quality and service in chemical testing.

Call or FAX to receive more information on our capabilities.

TEI Analytical, Inc.
7177 N. Austin
Niles, IL 60714-4617

TEL: (847) 647-1345
FAX: (847) 647-0844

Visit Our Web Page At
<http://www.teianalytical.com>

LOCAL STUDENT EARNS GOLD AT THE 31st IChO

Niles West graduate, Alex Ho, helped the United States place first at the 31st International Chemistry Olympiad which took place from July 4-11, 1999 in Bangkok, Thailand. The team won three gold medals and one silver medal.

Alex attended the study camp held at the Air Force Academy for the past two summers. In order to qualify for the camp, he placed among our nation's top twenty students on the national exam administered by the ACS. Approximately 1000 students qualified to take this 41/2 hour exam out of a possible 10,000 nominated students. After attending the camp this year, Alex placed among the top 4 students in the nation allowing him to represent the United States.

As a sophomore in honors chemistry at Niles West High School in Lincolnwood, Alex was nominated by his teacher Ann Levinson to take the scholarship exam offered by the Chicago Section. He placed first winning the \$3500 Morton International Scholarship. Alex used this money to enroll in Organic Chemistry at Northwestern University during the summer of his sophomore year. As a junior, he studied Advanced Placement Chemistry in high school. He continued his studies in Chemistry independently during his senior year.

Alex graduated from Niles West this June. He will be attending the University of Illinois in Chicago medical program starting this fall.

Analytical Laboratory Managers Association to Celebrate 20th Anniversary

The Analytical Laboratory Managers Association (ALMA), founded in 1980, celebrates its 20th anniversary at this year's Annual Conference, October 27 - 29, 1999 at the Argonne National Laboratory. This year's program is entitled "Measuring Performance of the 21st Century Laboratory".

Founded as a nonprofit, professional society representing all segments of the chemical analysis laboratory profession, the organization has grown to 350 members from around the world. Created by a group of University laboratory managers, ALMA formed out of a need for consistent management practices in the Analytical Laboratory. It was recog-

nized that managing an analytical chemistry laboratory required a unique blend of technical and managerial skills. The technical skills came as a result of their educational experience. The managerial skills were self-taught and, in most cases, were learned on the job in a haphazard manner.

Consistent management practices were hard to come by and seemed to differ depending on what type of lab you managed. Dr. Claude Lucchesi of Northwestern University and Tom Lyttle of Iowa State University recognized the need to bring together a consortium of varied managers who would be able to share their thoughts on the proper management of an analytical laboratory. Dealing with problems such as staffing, facilities, equipment, maintenance, finance, human resources, training, motivation, and compensation allowed an interchange of ideas that could be used in most any analytical laboratory setting.

In the nineteen annual conferences since 1980, ALMA has looked at a varied assortment of managerial themes. Every conference includes time for managers to meet and share their experiences with fellow managers. The informal, collegial atmosphere is further

enhanced by a series of round table sessions, held near the end of the first day. These round table discussions consistently receive acclaim from conference attendees.

For conference or membership information contact ALMA, 1201 Don Diego Avenue, Santa Fe, NM 87505, Tel: 505-989-4683, Fax: 505-989-1073 or visit the ALMA website at www.labmanagers.org.

John T. Pivinski

RESOLUTION SYSTEMS

Now offering premium products for HPLC, SPE, LC-MS and Automated SPE from the technical experts at Jones Chromatography.

1187 Wilmette Ave, Ste. 277 P: (800) 572-6653
Wilmette, IL 60091 (847) 328-8002
www.resolutionssys.com F: (847) 328-7520

NMR ANALYSIS

270 - 360 - 400 MHz • 1D/2D
Liquids/Solids • GLP/GMP Compliance
SPECTRAL DATA SERVICES, INC.
818 Pioneer • Champaign, IL 61820
(217) 352-7084 • Fax (217) 352-9748
<http://www.sdsnmr.com> sdsnmr@sdsnmr.com

POLYMER PROBLEMS?

- Complete Polymer Deformation
- Good vs Bad Comparison
- DSC, TGA, IR, UV-Vis, GC, HPLC, NMR
- GPC/SEC Molecular WEIGHTS AND MWD
- Additive Package Analysis

4 Mill Street, Bellingham, MA 02019

(508) 966-1301



Associates, Inc.
HPLC Specialists

ELEMENTAL ANALYSIS

CHONS • ICP • AA • GC • GC/MS • IC
TOC • TOX • BTU
Custom Analysis • Problem Solving

HUFFMAN
LABORATORIES, INC.
Quality Analytical Services Since 1936

phone: (303) 278-4455
<http://huffmanlabs.com/lab>



PROTECT Your Expensive Lab Work with Research and Development Record Books

STOCK RECORD BOOKS

B50D — Fifty original and fifty duplicates. 1/4 inch sqs. on right pages.

B100P — 100 — 1/4 inch sqs. on right pages. 100 — 10 sqs. per inch on left pages.

B200P — 208 1/4 inch sqs. on right and left pages.

B200PH — 208 horizontally lined right and left pages.

Books have instruction and TOC'S.

Page size 11 x 8 1/2.


Now on hard extension covers with squared corners and flat back so titles showup. All on acid free paper.

\$13.50 Each, FOB Chicago

CUSTOM MADE BOOKS TO ORDER
OUR 87th YEAR

SCIENTIFIC BINDERY PRODUCTIONS

1255 So. Wabash Ave.,
Chicago, Illinois 60605
Phone: 312-939-3449
Fax: 312-939-3787



DESERT ANALYTICS

LABORATORY

- ◆ CHNOSP Halogens
- ◆ Metals by AA
- ◆ Ion Chromatography
- ◆ Trace Analysis
- ◆ Coal/Petroleum

Fast, Reliable Service

No Charge for Phone/Fax Results

P.O. Box 41838 245 S. Plumer, #24
Tucson, AZ 85717 Tucson, AZ 85719
Fax 520-623-9218 Phone 520-623-3381

Analysis For The Chemical Elements

POLYMER STANDARDS FOR GPC/SEC MOLECULAR WEIGHT ANALYSIS GPC/SEC COLUMN REPACKING

American Polymer Standards Corporation
8680 Tyler Boulevard, Mentor, OH 44060
Phone: 440-255-2211 Fax: 440-255-8397



POLYMER LAB, CONSULTING, R&D SERVICES

Polymer Analysis

Rheology

Mech. Test.

Failure Analysis

Thermal Analysis DSC, TGA, TMA, DMA
Infrared Micro, Reflectance, Pyrolysis
Molecular Weights GPC, IV, Dilute Soln.
Microscopy Optical, Stereo-SEM/EDX
Chromatography HPLC, SEC, GC/FTIR
Rheology Dynamic, Capillary
Mech. Test. Strength, Impact, Creep, Fatigue

For capabilities literature please call:
L.J. Broutman & Assoc., Ltd. 3424 S. State St., Chicago, IL 60616
312 842 4100 Fax 312 842 3583

CPCS ANALYTICAL SERVICES

We may have the Resources and Technical Expertise to help you achieve your goals

Call us regarding projects involving

GC HPLC Preparative HPLC SFC SFE HRMS

GC-MS LC-MS LC-MS-MS 600 MHz NMR ICP-AES GFAA EDX

Py-GC-IR-MS Headspace and Purge and Trap analysis by GC-MS

Spectral interpretation • Synthesis of analytical standards

Product troubleshooting

Contact Joe Hoppesch • 847-270-5805

e-mail: hoppeschj@baxter.com

CENTER FOR PHYSICAL AND CHEMICAL SCIENCES

A Member of CRTS, Baxter Healthcare Corp.

SCHEDULE OF CHICAGO SECTION, ACS MEETINGS 1999-2000

All meetings will be held on Fridays at various locations as indicated. Topical group meeting are at 5:15, dinner at 7:00p.m. Further information on speakers, locations, subject and topical group meetings along with exact times will appear in your monthly issue of "The Chemical Bulletin." Support your local section by planning to attend one or more of these outstanding meetings! Thanks

MEETING DATE	LOCATION	SPEAKER
September 24, 1999	The Studio Morton Grove	Andrew Graham, "Synthesis and Application of Superabsorbent Polymers"
October 22, 1999	Wellington Arlington Heights	Patrick Murray "Production of Water-Soluble Polymers As Water-Continuous Dispersions"
November 19, 1999	Monty's Bensenville	Derek Davenport, "The Royal Institution of Great Britain: 1799-1999"
December 10, 1999	Monastero's Chicago	Cady Coleman, "NASA and the STS-93 Mission"
January 21, 2000	Ambassador Elmhurst	John Parlow, "Polymer-Assisted Solution Phase (PASP) Chemical Library Synthesis"
February 25, 2000	The Diplomat Elmhurst	West Chris Marshall, "New Support Materials for the Desulfurizations of Heavy Oils"
March 17, 2000	Como Inn Chicago	TBA, Public Affairs
April 14, 2000	North Shore Holiday Inn Skokie	Peter Maul "Nanocomposites"
May 19, 2000	Windows Restaurant Skokie	WILLARD GIBBS AWARD BANQUET
June 23, 2000	Stevens Elmhurst	TBA, Education

Contract Research and Development

Analytical Services

- Preparative HPLC separations
- Flash chromatography to kilo scale
- NMR, IR, MS, HPLC, and GC analysis
- Reference standard analysis

Custom Synthesis

- Full service prep and kilo laboratories
- Pharmaceutical intermediates
- Analogs of lead compounds
- cGMP synthesis production

Combinatorial chemistry

- Solid and solution phase libraries
- Custom libraries of your design
- High-throughput HPLC purification

MediChem accelerates discovery!



MediChem Research, Inc.

12305 South New Avenue
Lemont, IL 60439

Phone (630) 257-1500 • Fax (630) 257-1505
www.medicchem.com

1999-2000 Chicago ACS Volunteer Form

I am interested in working on the following Committees. Indicate preference, if any, by a 1, 2, etc.
Return to Chicago Section Office, 7173 N. Austin, Niles, Illinois 60714. Or fax to (847) 647-8364.

Name: _____ **Phone:** _____

Bus ☐ Home ☐

Address: _____
 Number & Street Apt/Dept# City State Zip

-
- ☐ **Audit Committee.** Audit the books and accounts of the Section for the current fiscal year.
 - ☐ **Awards.** Determine local section nominees for various ACS and local awards; assemble information and make formal nomination.
 - ☐ **Bulletin Advertising.** Assist Business Manager in contacting possible advertisers; follow through on advertising leads; suggest ad solicitation programs.
 - ☐ **Chemical Bulletin Editorial Staff.** Formulate policy; write articles, program notes, etc.
 - ☐ **Chemistry Day.** An annual 1-day or weeklong event depending on year. Serve on committee making plans for the event, as a judge for the educational portion, guide, hospitality table, demonstrator, helper, etc.
 - ☐ **Chicago School Board Liaison.** Interface with the Chicago School Board to improve chemical education; assist with special teacher programs.
 - ☐ **Education - Elementary Science.** Assist in promoting science education at the pre-high school level.
 - ☐ **Education - High School.** Prepare and administer annual scholarship examination; arrange teachers conference and other programs connected with teaching high school chemistry.
 - ☐ **Education - College.** Run annual undergraduate student symposium; maintain liaison with ACS Student Affiliates.
 - ☐ **Education - Continuing.** Determine course and administer annual lecture series.
 - ☐ **Election Tellers.** Count election ballots on day of annual Section meeting in April.
 - ☐ **Employment.** Recommend how section can provide employment assistance; initiate new programs; advise applicants with job difficulties.
 - ☐ **Endowment.** Solicit funds for annual scholarship awards; work on drive to establish permanent scholarship fund through individual member contributions.
 - ☐ **Environment & Laboratory Safety.** Study, correlate and publicize matters relating to chemical safety.
 - ☐ **Hospitality.** Assist at Section meetings by greeting new members, distributing dinner tickets; initiate programs to improve hospitality; handle special parties.
 - ☐ **House.** Sell dinner tickets, run projection equipment at Section meetings; assist in maintaining equipment inventory, etc.
 - ☐ **Kids & Chemistry.** Participate in activities of the ACS's "Outreach" program. Give demonstrations after training.
 - ☐ **Membership.** Devise programs for getting new members; advise applicants for membership and investigate qualifications; make recommendations to ACS Admissions Committee.
 - ☐ **Middle Grades/Jr. High.** Assist Grades 6-9 by providing teaching aids and science related materials.
 - ☐ **Minority Affairs.** Give support and commitment to the development of an action agenda to stimulate and strengthen the participation of all minorities at all levels in chemistry. Devotes attention to mentoring, encouragement, and the intellectual and professional enhancement of students, teachers and practicing chemists of all ages and interest levels.
 - ☐ **Minutemen.** Post monthly meeting notices and other material sent out by committees and other technical groups; keep membership applications and information; liaison with Section Board of Directors and membership at large.
 - ☐ **Nominating Committee.** Serve on committee to solicit nominations for slate of Section election; assist in preparing slate of candidates.
 - ☐ **Professional Relations.** Investigate member complaints on unethical practices, monitor layoffs, suggest new programs to improve status of chemists.
 - ☐ **Project Seed.** Find summer positions in science for economically-disadvantaged high school students.
 - ☐ **Program.** Establish overall program policy; contact speakers; hospitality to speakers.
 - ☐ **Public Affairs.** For all who are concerned about the interrelation between chemistry and chemists, social responsibilities, government and the environment.
 - ☐ **Speakers Bureau.** Volunteer to give nontechnical talks to lay audiences (service, church groups, clubs, etc.); audience donation, if any, goes to scholarship fund.
 - ☐ **Younger Chemists.** Encourage recruiting and retention of younger chemists; assist in programming for the interests of younger chemists.
 - ☐ **Your Suggestions.** How would you like to help?
-

CHEMISTRY OLYMPIAD

The High School Education Committee held its search for candidates to compete for the National Chemistry Olympiad on March 15, 1999. The local examination was held at Roosevelt University and administered by Dr. Fred Turner. Out of twenty-eight students, twelve were selected to write the National Exam on April 23, 1999, also at Roosevelt University. The National Exam took 4 1/2 hours and consisted of a multiple choice section, a free response section and a lab practical. The Olympiad Committee selected two of these students to be among the twenty students in the country to attend the intensive study camp at the Air Force Academy this summer. The students selected were Alex Ho, Niles West High School and Brian Tang, Naperville North High School. Their teachers were Ann Levinson and Lee Marek respectively.

The Chicago Section is proud to announce that Alex Ho was chosen as one of the four finalists and Brian Tang was selected as second alternate.

Ann Levinson,
High School Education Chairman

MOLECULAR TOXICOLOGY LABS

In Vitro & Aquatic Toxicity Testing
Drug Deformulation HPLC, GC, IC, AA
Preparative Small Scale LC
Chicago, Ill. (773) 274-3658

Alpha

Consulting Laboratories, Inc.

A Consulting Group For Your Non-routine Problems

- Competitive Product Analysis • Non-routine Analyses
- Regulatory Affairs • Methods Development
- Product Development • Expert Witness Testimony

920 N. Ridge Ave. Ste 5C (630) 620-0867
Lombard, IL 60148 FAX (630) 620-0845



Providing Excellence— For The Entire Scientific Community.

Kelly Scientific Resources™ offers a full range of services for short- and long-term staffing in the scientific and laboratory environments. As a community and nationwide leader, KSR™ is an asset to employers *and* employees...

As a business leader, you can use KSR to meet today's work challenges with efficient, full-service staffing delivered with the highest quality standards.

As a scientific professional, you can use KSR to get ahead. Being represented by a leading staffing supplier means you have access to outstanding opportunities in the scientific community.

Fax your resume to 630-964-0562.

For details, call today!

630-964-0239

1101 W. 31st Street, Suite 120
Downers Grove, IL 60515

Kelly Scientific Resources™

A unit of Kelly Services, Inc.

www.kellyservices.com

An equal opportunity employer/Never an applicant fee ©1997 Kelly Services, Inc. E1026

CHEMISTRY DAY VOLUNTEERS NEEDED!

Call 847-647-8405 or e-mail gayle@teianalytical.com

BAP
SAM
SEM
ESCA
XPS

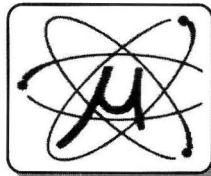
SURFACE ANALYSIS

can help you better understand
catalysis • corrosion • chemical bonding •
semiconductor processing • soldering •
fluorescence efficiency • thin film properties •
composites • metals • ceramics

3-D Elemental Maps and Depth Profiling
Local Service - Participate in your analysis
Fast Turn Around - <48 Hrs.
Scanning Auger and ESCA at SEM Prices

BP Vacuum Analysis, Inc.
Tel (847) 467-2594

Northwestern University/Evanston Research Park
906 University Place, Evanston, IL 60201
FAX (847) 491-7955 E-Mail: BPVA@aol.com



micron inc.

ANALYTICAL SERVICES

SEM - TEM - EPA - ESCA - AUGER

XRF - XRD - OES - FTIR - DSC

MORPHOLOGY - CHEMISTRY - STRUCTURE

3815 LANCASTER PIKE, WILMINGTON DE. 19805

(302) 998-1184

**DO NOT DELAY
DATED MATERIAL**

**CHICAGO SECTION, AMERICAN CHEMICAL SOCIETY
THE CHEMICAL BULLETIN
7173 NORTH AUSTIN
NILES, ILLINOIS 60714**

Nonprofit Organization
U. S. POSTAGE
PAID
Chicago, IL
Permit No. 171

Officers

Chair	Robert E. Buntrock, Buntrock Associates
Vice-Chair	Angela Kowalski, Nalco Chemical Company
Chair-Elect	Robert J. McGorin, Kraft Foods
Secretary	Darryl Prater, Searle Pharmaceuticals
Treasurer	Sanford A. Angelos, U.S. Drug Enforcement Administration
Immediate Past Chair	Margaret Stowell Levenberg, Stepan Company

Directors

To June 30, 2000	To June 30, 2001
Lawrence U. Berman	Cherlynlaughn Bradley
Marilyn J. Kouba	Herbert S. Golinkin
Thomas J. Kucera	Fran Karen Kravitz
Marty Landorf	Barbara Moriarty
Gayle E. O'Neill	Sharon J. Northup
Adele L. Rozek	Marsha Ann Phillips
Fred A. Turner	Steve Sichak

Standing Committee Chairs

Awards	Sanford Angelos
Chemical Health & Safety	Larry Berman, Steve Sichak
Chicago Chemistry Week	Tom Kucera, David Crumrine
Chicago School Board Liaison	Elizabeth Cozzi, Nat Gilham
College Education	Charles Cannon
Continuing Education	Marsha Ann Phillips, Fred Turner
Elementary Education	Katie Carrado
High School Education	Ann Levinson
Employment	Robert Shone, Anthony Toussaint
Endowment	Fran Karen Kravitz
Gibbs Arrangements	Margaret Stowell Levenberg
Hospitality	Connie Buenvenida
House	Cherlyn Bradley, Adele Rozek
Membership Affairs	Guy Rosenthal
Minority Affairs	Woody Johnson, Darryl Prater
Professional Relations	Seymour Patinkin
Program	Diane Kozelka
Public Affairs	Barbara Moriarty, James Shoffner
Public Relations	Marsha Ann Phillips

Ad Hoc & Special Committee Chairs

Audit	Charles Cannon
Budget/Office Affairs	Adele Rozek
Bylaws	Sanford Angelos
Comptroller	James Doheny
Computer	Larry Thielen
Great Lakes Region Mtg	Marilyn Kouba, David Crumrine
Kids & Chemistry	Marsha Ann Phillips
Long Range Planning	Thomas Kucera
Middle Grades/Jr. High	Marsha Ann Phillips
National Affairs	Margaret Stowell Levenberg
Policy	Sanford Angelos
Project SEED	Cherlyn Bradley, Charles Cannon
Topical Groups	David Crumrine, Margaret Stowell Levenberg
Younger Chemists	Allison Aldridge, Catherine Wojtowicz

Chemical Bulletin

Editor	Fran Karen Kravitz
Business Manager	Gayle E. O'Neill

Section Office

Office Manager	Gayle E. O'Neill
----------------	------------------