

NSAOSMM

NEWSLINE

Winter 2007 Vol. 39 No. 4

CERTIFIED SCIENTIFIC MATERIALS MANAGERS



2007
You?

NAOSMM 2005-2007 OFFICERS AND COMMITTEE CHAIRS

EXECUTIVE BOARD

President

Joanne Brown
Haverford College
Voice: 610-896-1326
Fax: 610-896-4963
jcbrown@haverford.edu

Vice-President

Jaque Mann
Voice: 605-484-5651
jaque_mann@hotmail.com

Secretary

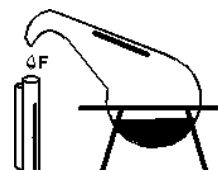
Janice Westerling
SUNY at Potsdam
Voice: 315-267-2275
Fax: 315-267-3170
westerja@potsdam.edu

Treasurer

Amy Aldridge
Florida State University
Voice: 850-644-1034
Fax: 850-644-8281
aldridge@chem.fsu.edu

Past President

Ed Glumac
University of Houston
Voice: 713-743-2639
Fax: 713-749-1260
eglumac@uh.edu



COMMITTEE CHAIRS

2007 Site

Jeff Your
John Carroll University

2008 Site

Ed Glumac
University of Houston

Auditors

Sue Viglione
Youngstown State University

Karen Grubb

Fairmont State College

Awards

Linda Perez
New Mexico State University

By-laws and Constitution

Lori Keen
Calvin College

Certification

Ed Graham
Florida State University

Lori Keen

Calvin College

C.E.U.

Shirley Buchli

Historian

Mary Ann Stoll
Idaho State University

Hospitality/Member Interaction

Karen Miller
Weber State University

Internet

Phil Waite
Denison University

Trade Show Coordinator

Cassandra Wong
University of Michigan

Marketing and Membership

Recruitment

Kevin Mautte

Newsline

Jaque Mann

Barbara Neff

Saint Joseph's University

Nomination

Claris Cupido
Barry University

Program

Gypsy Lindh
Brigham Young University

Membership Database and Dues

Jerry Patterson
College of Wooster

Site Selection

Kevin Mautte

Survey

Heather McCollor
Macalester College

TABLE OF CONTENTS

President's Message	1
New Members	2
CSMM Requirements	3
Seminar Summaries	7
Conference Awardees	14
Lab Training Schedule	15
Travel Awards Available	16
Committee Happenings	20
Trivia Contest	22



PRESIDENT'S MESSAGE

Have you ever gotten a song stuck in your head? It happens to me all the time. I suppose it is only natural since I listen to music practically all of the time – in the car, in the office, at home, going to sleep. I can listen to just about any kind of music, but one genre in particular appeals to me and that is oldies music.

Despite the fact that I wasn't even born yet, I love those "oldies but goodies" of the 50's and 60's. My father had a big collection of record albums from that era and he would play them all the time. My sisters and I would dance and sing to them, pretending WE were the doo-wop or girl group belting out the tune. My affection for oldies music makes me eager to go to Cleveland next summer for the 34th Annual Conference and Trade Show. I have always wanted to see the Rock and Roll Hall of Fame and Museum and to visit the city where DJ Alan Freed coined the term, "rock and roll".

Sure, I know I am supposed to say that I am headed to the conference for the opportunity to learn new things, to further develop my career, and for a chance to make contact with colleagues and vendors. Believe me, all of that is true. I would have never attended the past 13 conferences if I didn't feel that attending them benefited me professionally. It just so happens that as a bonus, I want to sight-see and take pleasure in visiting the host city.

There has to be some social time built into the conferences. After all, when our 8 (or 9 or 10!) hour work day is done at our employers, we are ready for some relaxation and socializing with friends or family. The same holds true for the conferences. We can spend a good portion of the day gathering knowledge, but it is both fun and necessary to decompress at some point. NAOSMM has always tried to plan the conference week with this in mind and to balance the education with a social component.

To that end, this year, the board has decided to reduce the hours of the trade show on Wednesday by one and a half hours in the afternoon and to not schedule anything at all in that time period. In recent years, attendance at the trade show in the late afternoon has been dwindling, with the low numbers being very apparent to the vendors and very embarrassing to the NAOSMM organization. The board hopes that this change will allow attendees some free time to relax, explore, shop or socialize in any way they see fit.

We also expect that in giving you that free time, it will enable you to fully attend the trade show during ALL of the other hours that the show will be open. We hope that you make an effort to thank each of them for coming, even if you can't give them your business. Our vendors are vital to the success of this organization and they deserve our appreciation and respect for exhibiting yearly.

Meanwhile, I am here with another song stuck in my head that I heard on the way into work this morning. The song?... "Anticipation", by Carly Simon. How is that for an appropriate song for the 2007 conference in Cleveland?!

Joanne Brown
President

NATIONAL
ASSOCIATION
OF
SCIENTIFIC
MATERIALS
MANAGERS



WINTER 2007 VOL. 39 NO. 4

MANAGING EDITORS

Jaque Mann
Voice: 605-484-5651
Email: jaque_mann@hotmail.com

Barbara Neff
Saint Joseph's University
Voice: 610-660-1790
Email: bneff@sju.edu

NEWSLINE STAFF

ASSOCIATE EDITORS

Alan Warren
Ginny Sari

PHOTOGRAPHERS

Dale Randall

COLUMNIST

Janice Westerling

ADVERTISING MANAGER

Richard Caro

*Funding for publication and mailing of the
NAOSMM Newsline is provided by Sigma-Aldrich.*

NAOSMM WELCOMES OUR NEWEST MEMBERS

John Prindle
Tulane University
New Orleans, LA
(504) 865-5774
jprindle@tulane.edu

Natalie Novack
Saint Joseph's University
Philadelphia, PA
(610) 660-1831
nnovack@sju.edu

Diane Williamson
Labconco Corp
Kansas City, MO
(800) 821-5525
dianew@labconco.com

Alina-Monica Alb
Tulane University
New Orleans, LA
aalb@tulane.edu

Tom Belcher
Univ. of Maryland
Rockville, MD
(240) 314-6223
belcher@umbi.umd.edu

Kimberly O'Connell
Bryn Mawr College
Bryn Mawr, PA
(610) 526-7374
loconnel@brynmawr.edu

James Jackson
Univ. of Mary Hardin – Baylor
Belton, TX
(254) 295-4211
jjackson@umhb.edu

Diane McKinney
MDC
Miami, FL
(305) 237-2770
dmckinne@mdc.edu

David Saunders
IsoSciences, LLC
King of Prussia, PA
(484) 557-7336
isosciencesllc@comcast.net

Derek Dallas
Parkland College
Champaign, IL
(217) 351-2397
ddallas@parkland.edu

Shuwei Li
Ctr for Adv. Research in Biotech
Univ. of Maryland
Rockville, MD
(240) 314-6330
liw@umbi.umd.edu

Kristi Rehrauer
Elon University
Elon, NC
(336) 278-6193
krehrauer@elon.edu

Brian High
Missouri State Univ.
Springfield, MO
(417) 836-5030
brianhigh@missouristate.edu

Dr. Robert Bittman
Queens College
Flushing, NY
(718) 997-3279
Robert.bittman@qc.cuny.edu

Stephen Burris
Lynchburg College
Lynchburg, VA
(434) 544-8377
burris.s@lynchburg.edu

Renee Curtis
Univ. of Scranton
Scranton, PA
(570) 941-7558
renee.curtis@scranton.edu

Meghann Mouyianis
University of Detroit – Mercy
Detroit, MI
(313) 993-1259
mouyiamn2@udmercy.edu

Ryan Smith
Sigma-Aldrich
St. Louis, MO
(314) 289-6099
rsmith4@sial.com

Jennifer Kearney
Shepherd Univ.
Shepherdstown, WV
(304) 876-5178
jkearney@shepherd.edu

NEWSLINE DEADLINE

The next deadline for materials to be published in the Spring issue of the *Newsline* is **March 8, 2007**. It is essential that any material to be included for that issue be in my hands by that date. *Articles received after that date will appear in the Summer 2007 issue.* Articles should be submitted in Microsoft Word via email whenever possible. JM.

CERTIFIED SCIENTIFIC MATERIALS MANAGER

The National Association of Scientific Materials Managers, in 1990, developed and adopted an instructional program for the purpose of certifying the NAOSMM members as Certified Scientific Materials Managers (CSMM.) A NAOSMM Certification Committee, consisting of one (1) chairperson, three (3) committee members, and the vice president of NAOSMM, has the authority to oversee the program, approve certifications and recommend changes.

Any member may submit to the Certification Committee proof (transcripts, certificates, etc) of completed courses, seminars, workshops, etc with a letter to the Chairperson of the Committee requesting review of such proof for approval and assignment of points. Candidates must submit an Application that includes the specific category to which the course applies. All courses must have been taken and completed within the last five (5) years without exception. At the time certification is awarded, all materials will be from the past five (5) years. Any submission that is older than five (5) years will not be considered. If all the requirements have been met, the Committee will notify the candidate and issue a Certified Scientific Materials Manager Certificate good for five (5) years. Vendors can be members of the organization, but cannot be certified.

REQUIREMENTS

The requirements for Certification are divided into four areas. The first, Core Requirements, is further divided into 2 areas, Basics and Specifics. The second area is Contributions to the Profession, the third area, Other, and the fourth and final requirement is a written paper. A specified number of points are required in each area, with a total of 120 points required for Certification.

CORE REQUIREMENTS (60 POINTS MINIMUM)

Courses must cover at least three of the categories in each section (Basics and Specifics.)

Basics (20 points minimum)

1. Personnel management
 - a. Organizing/coordinating work units
 - b. Motivating employees (theories, application)
 - c. Legal aspects (liabilities, grievances, etc.)
 - d. Appraising work performances (evaluation methods)
2. Managerial Planning
 - a. Planning for change
 - b. Stress management
 - c. Conflict management (strategies and procedures)
 - d. Goal setting
 - e. Ethics
3. Communication
 - a. The communication process
 - b. Report writing
 - c. Delegation techniques
 - d. Feedback techniques
4. Decision Making
 - a. Decision making process
 - b. Factors affecting the process
 - c. Delegating decision, dividing workloads, future assignments, etc.
5. Leadership Patterns
 - a. Styles and influences
 - b. Adopting and adapting

Specific to Scientific Materials Management (40 Points minimum)

1. Control and Management
 - a. Inventory control (receiving, shipping, etc)
 - b. Effective techniques of material management
 - c. Cost and investment
2. Purchasing
 - a. Systems and methods
 - b. Bids, contracts
 - c. Ethics
3. Security
4. Warehousing
 - a. Material handling
 - b. Operation and management of a mechanized stockroom
5. Safety/Regulatory
6. Scientific/Technical
 - a. Technologies

CONTRIBUTIONS TO THE PROFESSION (20 POINTS MINIMUM)

1. Service to NAOSMM (maximum 15 points)
 - a. NAOSMM board officers (5 pts per year of service)
 - b. NAOSMM committee chairs (3 pts per year of service)
 - c. Committee member (2 pts per year of service)
 - d. Other - speaker introductions, seminars synopsis, registration help, etc.Points are awarded on a case-by-case basis.
2. Articles published in trade journals, such as NAEB, NAPM, *Newsline* and scientific journals. The Committee will determine the points to be credited within this category on a case by case basis (Maximum 10 points)
 - a. Original article
 - b. Editing for publication
 - c. Regular contributor to *Newsline*
3. Community Service. Activities which promote science, science education outside of the workplace. Activities and involvement outside of the department at the place of employment. (maximum 15 pts.)

OTHER (20 POINTS MINIMUM)

1. NAOSMM Conference Training and Experience (5 pts per conference. Maximum 10 pts.) These points are awarded to acknowledge that not all NAOSMM conference sessions fall neatly into the BASICS or SPECIFIC topics outlined above.
2. Manager of the Year recipient (10 pts)
3. Management Experience (maximum 10 pts)
 - a. Manager of other managers in scientific materials management (3 pts per year)
 - b. Manager of other stockroom personnel, including students, other than clerical staff (2 pts per year)
 - c. Stockroom staff or does not manage anyone other than clerical staff (1 pt per year)

THE PAPER (20 POINTS)

In addition to the completion of 100 points credit above, the candidate must develop a paper on a list of specific topics and submit it to the Committee. The Committee will evaluate the paper which must cover six (6) of the following specific topics:

- a. Receiving/shipping methods and procedures
- b. Issuing/delivery methods and procedures
- c. Cataloging/coding systems
- d. Inventory control methods and procedures
- e. Obsolete material/investment recovery
- f. Purchasing
- g. Warehousing/storage systems

- h. Safety/regulatory issues as they pertain to Stores/Laboratories
- i. Administration/budgeting
- j. Management theories/strategies
- k. Leadership/Personnel Management

This paper must reflect the candidate's knowledge on these subjects and is not necessarily a reflection of their specific work operation.

Each category will be graded on a 1-5 point basis per topic. A total passing grade is 20 with a minimum of 3 in each category.

ASSIGNING OF POINTS

Applicants must submit documentation for completion of the courses pertaining to certification. Each course will be assigned a point value based on content and length of course.

1. In general, points are awarded based on 1 pt for every hour of training. Final determination of points are at the discretion of the Certification Committee. This training may be from, but is not limited to, seminars, workshops, etc, offered by an employer, from NAOSMM or other conferences, from professional associations, etc.
2. In general, 1 point is awarded for initial OSHA or employer required training, i.e., HazCom, Bloodborne Pathogens, sexual harassment, etc. However, points are not awarded for annual refresher training. These types of training are a routine requirement of nearly all employees and do not indicate any special expertise or knowledge.
3. Points may be awarded for those who become trainers or take leadership roles (such as BBP pathogen trainer, CHO, Spill Response team members, etc.) These types of activity do indicate special training, expertise and knowledge. Actual points are awarded on a case by case basis.
4. Points are generally not awarded for training required by an employer due to implementation of new software or other programs and protocols. Candidates may request consideration for such training if they believe the circumstance is warranted.
5. Educational courses offered by accredited colleges or schools in these and allied fields will be accepted by the Committee with a maximum of 20 points on the following scale:
 - 7 points for PhD level classes,
 - 5 points for Masters level and
 - 3 points for undergraduate classes.

When submitting hours for classes, please include a class description. Lesser point values may apply to particular classes.

6. Applicants should submit their documents along with the application for certification indicating the category to which each training applies. Number of hours for each training is required by the committee.
7. **ALL MATERIALS** for certification must be received no later than May 15 for the certification to be granted at that year's annual conference. Applicants will be notified of their status within 30 days of submission of materials.

RE-CERTIFICATION & LIFETIME CERTIFICATION

1. Renewal of the Certified Scientific Materials Manager Certificate shall be granted after evidence of continued education and contribution to the profession shown through participation in the Certification Continuing Education Program and completion of fifty (50) points as outlined for initial certification; however, the requirement for a paper is omitted. The points must be earned at least three (3) but not more than five (5) years after the certification was awarded. Failure to apply for re-certification prior to the expiration of original certification results in the deletion of the CSMM.
2. Upon three (3) renewals of certification, members receive **LIFETIME CERTIFICATION**.
3. Failure to renew certification results in automatic deletion of the CSMM and the candidate must redo all aspects of the original requirements.

An **Application for Certification or Re-certification**, along with a copy of the Requirements for Certification, may be obtained from the chair of the Certification Committee.

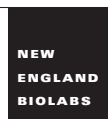
ALL MATERIALS for re-certification must be received no later than May 15 for the certification to be granted at that year's annual conference. Applicants will be notified of their status within 30 days of submission of materials.

An APPLICATION FOR CERTIFICATION or LIFETIME CERTIFICATION, along with a copy of the Requirements for Certification, may be obtained by calling, faxing, writing, or e-mailing:

Lori A. Keen
 Lab Manager
 Calvin College
 Biology Department
 1726 Knollcrest Circle SE
 Grand Rapids, MI 49546
 Phone: 616-526-6080
 Fax: 616-526-6501
 Email: keel@calvin.edu

or

Edward M. Graham, C.S.M.M.
 Florida State University
 Chemistry & Biochemistry
 Room 126 DLC
 Tallahassee, FL 32306
 Phone: 850-644-4235
 Fax: 850-644-8281
 Email: egraham@chem.fsu.edu



Antarctic Phosphatase

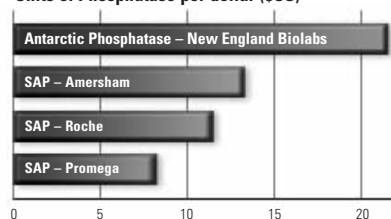
100% heat inactivation in 5 minutes. very cool.




RECOMBINANT AND 100% HEAT LABILE – A BETTER ENZYME THAN SAP AT A BETTER PRICE

For years, BAP, CIP and SAP were the only options for dephosphorylation protocols. Now, New England Biolabs introduces Antarctic Phosphatase – a superior reagent that saves time because you can ligate without purifying vector DNA, and since it's recombinant, you are guaranteed the quality and value you've grown to expect from New England Biolabs.

Units of Phosphatase per dollar (\$US)*



* Units/\$ data was calculated on 1/20/05 from published catalog or website prices for each supplier's largest available package size.

To Order Antarctic Phosphatase 		
M0289S	1,000 units	\$58
M0289L	5,000 units	\$232

 = Recombinant

1-800-NEB-LABS www.neb.com



2006 NAOSMM CONFERENCE & TRADE SHOW

SEMINAR SUMMARIES



KAIZEN & OTHER MODELS OF PROCESS IMPROVEMENT

Presented by Shannon Timmons, Manager Customer Development - Sigma Aldrich
Submitted by Melva Cain, University of St. Thomas

Kaizen is a Japanese term; kai (change) and zen (to become good)

The Japanese concept for change has three aspects:

1. Examine both the process and the results
2. Systematic thinking (the big picture)
3. Non-judgmental or non-blaming (blaming adds cost, not value)

It must be long term and everyone must participate. Rapid experiments are done using the scientific method. Observations result in the elimination of waste. The PDCA cycle is employed: Plan, Do, Check, Act.

Some well-known process improvement models include:

- TQM – Total Quality Management gets everyone involved and everyone benefits.
- Six Sigma – eliminates defects through measurement and data acquisition; very structured.
- DMAC – define, measure, analyze, control

Benefits of these include improvement in customer satisfaction and cost savings.

Improvement comes from the right kind of action – developing, testing, and implementing ideas (trial and learning approach). Questions that must be asked are “What change should occur?” and “What are we trying to accomplish?”

Effort is focused toward a particular goal and the change is measured to determine if it is positive (choose what to measure). Graphs are used to communicate the data. What changes will help? To determine the options, both what has and what has not been tried must be studied. A fresh look at the process is conducted by removing the current way of doing things, challenging boundaries, and rearranging the order of the steps.

The basic procedure can be described in four steps.

- (1) Make a plan based upon a particular hypothesis
- (2) Do testing and take measurements
- (3) Study and analyze the data
- (4) Act on the results

Real process improvement tests put change into effect on a temporary basis to learn the potential impact. Implementation should be permanent. This requires activities to minimize resistance to change, such as letting everyone know what the change is and why it is needed. Regular updates should be provided and the test cycle should be communicated across all departments to foster teamwork.

The use of process improvement at Sigma Aldrich has resulted in \$86 million in cost savings, improved customer satisfaction, and improved employee morale, empowered for change. Nothing is more important than choosing the right leader.

References:

The Process Improvement Guide by Nolan, Nolan, Norman, and Provost

(Barnes and Noble website did not list this book, but had one entitled *Quality Improvement Through Planned Experimentation* by Ronald Moen, Thomas W Nolan, Lloyd P Provost)

The Goal: A Process of Ongoing Improvement by Jeff Cox, David Whitford, Eliyahu M Goldratt



THE CARE & USE OF MICROSCOPES

Presented by Gretchen Ziegler, Sales Manager, Educational Division,
Leica Microsystems Inc.

Submitted by Rooney Coffman, St. Andrew Presbyterian College

Points stressed during the presentation include:

Storage Always store scopes covered. Wrapping electrical cord around base is not recommended.

Use Carry scope with two hands when moving.

Use the dial for setting interpupillary distance. Pushing and pulling eye pieces can easily damage scope.

Focus first at 10x followed by 40x and then return to 10x to parfocalize the scope. One quarter turn of the focus knob between objectives is considered acceptable.

Teach students to use a pin head size drop of immersion oil. Oil should be removed from objectives before storage to prevent it from getting into the objective.

The user should turn down the illumination and return the scope to the low power setting when finished with scope.

Care Use lens tissue, lens cleaner, cotton swabs and dust guns to clean scope. Be careful not to invert dust gun when using. Liquid from gun can damage optics.

Never touch the bulb with your fingers when replacing it. Oil from the fingers may produce hot spots which will shorten the life of the bulb.

The objectives may be inspected by removing them and using inverted eye pieces as a magnifier.

Consider professional service every one to two years depending upon use. Always check reference prior to engaging service. Preference should be given to firms who are authorized by manufacturer to service your model or models of microscopes.



BIOBANKING AND THE FUTURE OF MARINE BIODIVERSITY

Presented by Dr. Daniel Distel, Ocean Genome Legacy.
Submitted by Phil Edwards, University of Central Florida

This very interesting seminar was presented by Dr. Daniel Distel of the Ocean Genome Legacy located in Ipswich, MA. The mission of OGL is to promote conservation of marine genomic diversity by creating a collection of genomic DNA's, a genomic bank, to maintain and preserve various species relevant to the marine environment.

In doing so, marine species would be preserved beyond the point of extinction and could be reintroduced when environmental changes are conducive to continued existence. However, this begs an ethical as well as environmental question. How does this affect the progression of natural selection and is it acceptable to reintroduce species which could not sustain under present environmental conditions?

As Dr Distel presented his ideas regarding the preservation and storage of various DNA's, it became increasingly evident that this was a proposition whose time had come because of the enormous impact the marine environment has on all phases of life. If there is a problem with Biobanking, it seems to be lack of exposure to scientists who are actually conducting field research in the ocean environment. Perhaps, in time, the word will spread.



THINK GREEN

Presented by Robert Forte, Sr. VP Bus. Dev., Fisher Scientific
Submitted by Teresa Arnold, George Fox University

Fisher Scientific is committed to protecting the environment by progressively adopting sustainable green business practices. Their focus is on the three principles of Recycle, Reuse, and Reduce. Their goal in chemical management is sustainability by viewing the ecosystem as a consumer.

The Fisher recycle program includes using recycled biodegradable packaging both in warehouse storage and shipping. Reuse occurs in the trade-in program whereby old equipment can be brokered out to a used equipment dealer or refurbisher. Reduction occurs by locating warehouses in close proximity to customers and encouraging them to conduct ecommerce. Internally, Fisher is implementing better tracking and management systems to optimize use, reduce overall volume, and minimize disposal of chemicals. They are also dedicated to reducing health and safety issues by increasing awareness and information available to employees.

Sustainable marketing is a circular use of resources, instead of a linear progression from manufacturer towards disposal. Fisher plans to do this by replacing existing programs with longer-term programs that use less product and generate less waste. They intend to help customers satisfy their needs while achieving organizational goals and compatibility with the environment.

Green business is more than just recycling. It is also about encouraging and influencing customers and suppliers towards more environmentally friendly activities. It is not always more expensive and it is no longer optional.

Some initiatives that do not cost more include: organic farming, LEED certified buildings, green chemistry, hybrid vehicles, energy saving appliances, renewable energy, post-consumer reuses, alternative fuels and product substitutions.

Fisher's approach will begin with evaluating their manufacturing process and their product attributes for recyclability. Some focus areas are reducing packaging waste, lowering energy consumption and paper waste, reducing environmental risks for chemical hazards, reducing vehicle emissions and increasing the recycling program.

Some ways we, as consumers, can assist are to consolidate our orders and encourage shipment from the nearest warehouse. We can reuse packaging materials in which our products arrive. We can also avoid air rush orders, consolidate our chemicals for multiple users and manage our inventory data so that all chemicals and wastes are tracked. We can then analyze our usage and aim for a 20% decrease in inventory (purchase, administration, storage and disposal) costs over a 3-year period. This will also help in achieving compliance with regulatory commissions, improve reporting and reduce risks. Using electronic/CD catalogs is also encouraged. Further suggestions for all campus initiatives include paperless ecommerce and evaluating campus vehicle activity.



WHY ARE “GOOD’S” BUFFERS “SO” GOOD?

Seminar presented by Dan Flowers, Research Organics

Submitted by Lori Keen, Calvin College

This seminar provided an interesting history of biological buffers combined with the basics of buffers and their characteristics.

pH is extremely critical in biological processes and very slight changes in pH can have significant impact on biological functions. Therefore, buffers are critical to nearly all work in biology from plant and animal cell culture to physiology to molecular biology.

A buffer is a compound that resists a change in pH on addition of acid or alkali. Buffers can be thought of as “pH herders”. Traditional biological buffers include phosphates (such as phosphate buffered saline), carbonates, acetates and borates. However, these buffers were less than ideal for many applications. Dr. Norman Good, a researcher in plant physiology at Michigan State University, set about developing better biological buffers for use in his lab. His work, published in 1966, first introduced a unique class of organic molecules with superior buffering capabilities. These have come to be known as “Good’s” Buffers. These compounds are zwitterionic compounds; that is, they have an acid and a basic group on the same molecule. It is this characteristic that provides the excellent buffering capabilities.

An ideal biological buffer has many characteristics, including a buffering capacity over 1 pH unit, chemical stability, non-interference with metabolic and enzymatic processes, and an ability to maintain buffering capacity over a wide temperature range. In addition, ideal buffers should be highly soluble, should not chelate metals or other ions, should not diffuse across cellular membranes, and as all stockroom managers know, must be cheap and readily available. “Good’s” Buffers meet these criteria. The classic

“Good’s” Buffer is HEPES, which Dr. Good has stated is pronounced “heaps”. Other classic Good’s Buffers are MES, TES, CHES and BES. The “ES” stands for ethylene sulfonic acid.

The next generation of buffers – the “SO” buffers - were developed by Dr. Wilfred Ferguson, who had been a student in Dr. Good’s lab. The “SO” buffers are characterized by an aminosulfonic acid and include MOPSO, CAPSO, and TAPSO. The “SO” buffers are often used in the analysis of fluid samples.

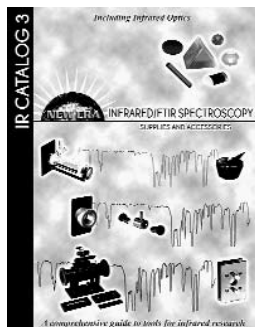
The next class of buffers is the propane sulfone buffers which most stockroom managers will recognize as MOPS, HEPPS, TAPS and CAPS. Other miscellaneous biological buffers that have been developed include HOMOPIPES (used in bacterial cultures such as E. coli at pH 5), PIPES, BICINE, TRICINE.

Each new class of buffer compounds has broadened the scope of useful pH ranges for working with biological systems. Mr. Flowers concluded his presentation by saying that buffers will continue to be developed to meet the demands of the “biopharmaceutical market to produce drugs based on antibody and active biological molecules derived from cell culture processes.” Stockroom managers – this means more inventory to come!

SPECTROSCOPIC

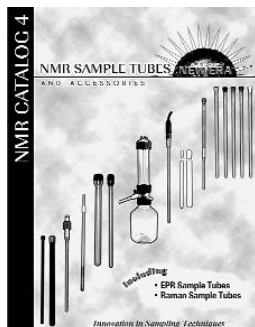
SAMPLING SUPPLIES and ACCESSORIES

IR - FTIR



- Windows and Reflectance Plates
- Liquid-Solid-Gas Accessories
- Reflectance Accessories
- Reconditioning HATR

NMR - EPR



- Sample Tubes 5 to 30mm
- Micro Tubes and Capillaries
- Innovative New Products
- EPR and Raman Sample Tubes

UV - VIS - FL



- Quartz and Glass Cells
- Fluorescence Cells
- Raman Cells
- Special Application Cells

View and Download all literature with pricing at www.newera-spectro.com



NEW ERA ENTERPRISES, INC.

THANK YOU 2006 TRADE SHOW VENDORS!



2006 CONFERENCE IN SAVANNAH, GA



CONGRATULATIONS TO THE 2006 CONFERENCE AWARDEES!



NAOSMM CONFERENCE & TRADESHOW AWARD:

(l-r, front): Teresa Robertson, Dorothy Cullen, Carol Bowman, Heather McCollor, Karen Smith, Kathryn Quashnock (l-r, back): Tom Blakeney, Mary Jackson Hayward, Jennifer Diana, Jill Rench, Victoria Sample, Rooney Coffman, Dale Randall



NALGE NUNC TRAINING AWARD:

(l-r) Peter Charleton of Nalge Nunc, Karen Grubb, Todd Wincek, Kimberley Dorion, Beth Reiter

Lifetime Membership



Lifetime Membership:
Janet Chrisman, Dave Roberts
(not pictured), Glen Thornley

Exceptional Service Award



Glen Thornley also received the
Exceptional Service Award.

Honorary Member



Honorary Member:
Jane Houston, wife of founder
Lamar Houston

2007 LAB SAFETY TRAINING SCHEDULE

One-day Seminars in Natick, MA

Jan 30	Regulatory Compliance for Laboratories
31	Lab Waste Management
Feb 13	Safety in the Laboratory
14	Chemical Hygiene Officer
15	Safety in Secondary School Science Labs
May 2	8-Hour Hazwoper
3	Radiation Safety
15	Safety in the Laboratory
16	Chemical Hygiene Officer
17	Safety in Secondary School Science Labs
Aug 8	Lab Waste Management
9	Biosafety in the Laboratory
Sept 2	Safety in the Laboratory
16	Chemical Hygiene Officer
27	Safety in Secondary School Science Labs
Oct 24	Regulatory Compliance for Laboratories
25	Lab Ventilation
Nov 7	Safety in the Laboratory
8	Chemical Hygiene Officer
9	Safety in Secondary School Science Labs

On-site training programs are also available. The programs vary in length from one hour to several days. They can be customized to meet the needs of your organization. More than 50 topics are available. For more information contact: services@labsafety.org

Two-day Short Courses

Jan 10-11	Newark, DE
Jan 16-17	Burlington, VT
Jan 17-18	Charlotte, NC
Jan 23-24	Fort Worth, TX
Jan 30-31	Tampa, FL
Feb 6-7	Natick, MA
Feb 14-15	Lawrenceville, GA
Feb 20-21	Albuquerque, NM
Feb 27-28	Oklahoma City, OK



Mar 7-8	Chattanooga, TN
Mar 13-14	Canada
Mar 20-21	Naperville, IL
Mar 27-28	Canada
Apr 3-4	Madison, WI
Apr 10-11	Concord, NH
Apr 18-19	Kansas City, MO
Apr 24-25	Stamford, CT
May 1-2	Colorado Springs, CO
May 9-10	Frederick, MD
Sep 12-13	Honolulu, HI
Sep 18-19	Anchorage, AK
Sep 25-26	Buffalo, NY
Oct 3-4	Philadelphia, PA

Oct 9-10	Bloomington, MN
Oct 16-17	Cranston, RI
Oct 24-25	Columbia, SC
Oct 30-31	Trenton, NJ
Nov 14-15	San Francisco, CA
Nov 19-20	Canada
Nov 28-29	Cincinnati, OH
Dec 11-12	Natick, MA
Dec 18-19	Orlando, FL

24-Hour Short Course

May 15-18	Minnesota
May 22-25	Illinois
Jun 20-22	Texas
Jun 26-29	Washington
Jul 3-6	Canada
Jul 10-13	Nevada
Jul 17-20	California
Jul 24-27	South Carolina
Jul 31-Aug 3	Massachusetts
Aug 7-10	Ohio

To register or for more information contact:

The Laboratory Safety Institute
192 Worcester Road
Natick, MA 01760
(508) 647-1900
Fax: (508) 647-0062
email: info@labsafety.org
www.labsafety.org



TRAVEL AWARDS AVAILABLE FOR THE 2007 CONFERENCE & TRADE SHOW IN CLEVELAND!!

NALGE NUNC TRAINING AWARD:

The Nalge Nunc International Professional Training fund was established in 1987 by Nalge Company (now Nalge Nunc International) for use by eligible members of the National Association of Scientific Materials Managers (NAOSMM) to attend the annual national conference for the purpose of improving their professional management skills. Nalge Nunc International and NAOSMM hope additional members will be able to attend the annual conference with the help of these awards.

This fund will be divided into at least six non-repayable awards for regular NAOSMM members who receive little or no financial assistance from their employer. Primary consideration will be given to those members who have never attended a NAOSMM Conference. The award may be used to supplement partial funding provided by the employer or as “seed money” to encourage employers to match the award.

NAOSMM SEMINAR & TRADE SHOW ATTENDANCE GRANT:

The NAOSMM Seminar and Trade Show Attendance Grant was established in 1992 with the purpose of helping NAOSMM regular members attend the yearly conference and trade show by providing funding to help offset their conference travel and lodging expenses.

The NAOSMM Seminar and Trade Show Attendance Grant is funded primarily from *Newsline* advertising revenues and through donations from corporations and companies who wish to assist NAOSMM members who do not have financial support to attend the yearly Conference and Trade Show. These corporate or company donations will be combined into a single fund and distributed by the Awards Committee per established guidelines. The donating corporation or company cannot specify a donation for any NAOSMM member. The amount of the donation is at the discretion of each corporation or company. Each year, NAOSMM publishes an alphabetical listing of the corporations or companies who contributed to this grant in the NAOSMM Seminar and Trade Show Program. This fund will be divided into non-repayable awards and given to regular NAOSMM members who meet the established guidelines.

ELIGIBILITY CRITERIA FOR TRAVEL AWARDS:

The following guidelines will be used by the NAOSMM Awards Committee to determine which applicants will be eligible to receive funding through either the Nalge Nunc International Professional Training Fund Award or the NAOSMM Seminar and Trade Show Attendance Grants.

Applicant must be a regular NAOSMM member with current year's dues paid. New members are able and strongly encouraged to apply. Applicants must be currently employed at a stockroom/laboratory-related job or as purchasing agent of laboratory supplies by a university, college, private or corporate institution.

Current Executive Board members and Awards Committee members are ineligible.

Members who receive full reimbursement from their employer to attend the conference are ineligible.

All applications postmarked/faxed by **April 14** will be given first consideration for funding. Those postmarked/faxed after **April 14** will be considered only if funds become available. Award amounts will vary per applicant's financial need and total funds available. Funds awarded are intended to defray lodging and/or transportation costs incurred by member's attendance. Awards do not cover meals or other incidentals. Recipients of travel funds are required to stay at the official designated conference hotel in order to be reimbursed for hotel expenses. Receipts submitted for reimbursement from non-conference hotels will not be funded.

Applicants may now request funding every year. However, those applicants that did not receive funding in the prior year will be given first priority. Recipients of any award must attend at least three FULL days of the Conference. (Example: Monday-Wednesday or Tuesday-Thursday).

Applicants who have been given an award will be notified of the award amount in early June, sooner if possible. Award checks WILL NOT BE distributed at the conference. Travel Award recipients are required to itemize and submit original receipts to the Awards Chair no later than two weeks following the conference. Checks will be mailed to recipients within two to four weeks after the conference.

Any NAOSMM member who meets these guidelines is encouraged to complete the application for travel funding and return it with the requested paragraph to the interim Awards Committee Chair by **April 14** for consideration.

APPLICATION FOR TRAVEL FUNDING:

If you are interested in applying for either of these awards and feel you are eligible, print the *application for travel funding* found on the NAOSMM website (www.naosmm.org) and mail or fax by mid-April of the year of the summer conference you wish to attend. If using the FAX number, please be sure to send the application to the attention of Linda Perez-Saldana.

Mail to: Linda Perez-Saldana
New Mexico State University
Department of Biology
Foster Hall Room 411
Box 30001 MSC 3AF
Las Cruces, NM 88003

Fax to: 505-646-5665

Questions? Call or email Linda at 505-646-3915 or liperez@nmsu.edu

Solvents

Looking for more value from your Solvent purchases?

Sigma-Aldrich can save you time and money with these tips and offers!

- Some solvent grades are more expensive than others. To make sure you have the right grade for your application – use our online Applications Portal.
- Researching suppliers and product listings can take a lot of time. Use our online Solvent Selector to generate a list of solvents that will meet your demands.
- Sign up for the NAOSMM/Sigma-Aldrich Pricing Agreement – solvents are priced to provide maximum savings for NAOSMM members.
- Get more with your solvent purchases. Join the Supply Rewards program and start earning rewards for all of your solvent purchases. For more information on Sigma-Aldrich Supply Rewards, visit sigma-aldrich.com/rewards



Please visit
sigma-aldrich.com/solvcenter
to access the Applications Portal,
Solvent Selector, and other
helpful tools.
For a price sheet detailing your
savings or for more information
on any of these features, contact
us at naosmm@sial.com



SIGMA-ALDRICH

sigma-aldrich.com

WHERE DOES MY WASTE GO?

Matthew T. Farrell, CHMM, President, Disposal Consultant Services, Inc.

In the hazardous waste industry, the Environmental Protection Agency (EPA) regulates hazardous waste from **cradle-to-grave**. Laboratories that generate hazardous waste are the **cradle**, while the disposal facilities that receive the hazardous waste are known as the **grave**. The phrase **cradle-to-grave** indicates that every step of the process of managing hazardous waste is important. This means that you, the generator, are responsible, and potentially liable, for managing your hazardous waste from the day it is generated until final disposal. Recent events such as the fires at hazardous waste facilities in Arkansas, Michigan and North Carolina and a mercury contamination and cleanup effort at a high school in Washington, D.C. should prompt laboratory personnel to ask “Where does my waste go?”

In simple terms, your hazardous waste disposal vendor should be transporting your hazardous wastes (both regulated and non-regulated) to an EPA permitted disposal facility using properly permitted vehicles. These vehicles often display identification placards that indicate the types of hazardous waste they are carrying (e.g. Flammable, UN 1203). The EPA, in conjunction with individual state agencies, administers a process for private companies in which they receive special permits to treat, store and/or dispose of hazardous wastes. These permits could cover short and long-term storage, processing, recycling, treatment and disposal of a wide variety of hazardous waste streams. Hazardous waste facilities are commonly referred to as Treatment, Storage and Disposal Facilities (TSDFs).

Every TSDF is permitted to accept a specific amount and type of waste and to perform specific processes. There are two primary types of TSDFs: transfer stations and final disposal facilities.

- Facilities that re-process the waste for further treatment or final disposal at another facility are called **transfer stations**.
- Landfills, incinerators and some wastewater treatment facilities are called **final disposal facilities** because they treat hazardous wastes and render the material non-hazardous.

Transfer stations usually accept waste from a variety of customers and consolidate or co-mingle similar materials into truckload quantities. That means a 55 gallon drum of solvents will get pumped into a storage tank with compatible solvents from other waste generators. When a sufficient quantity of material is collected, a full load of solvents will be shipped to an incinerator or cement kiln for “final disposal”. Similarly, a 5 gallon lab pack of sodium azide will be unpackaged, inventoried, and re-packaged into a larger drum with similar materials. The new, larger lab pack will then be shipped to an incinerator for **final disposal**. The most common processes at transfer stations include:

- Consolidation of solvents for fuel blending.
- Consolidation of acids and bases for wastewater treatment.
- Repackaging and consolidation of lab packs.
- Consolidation of inert solids for landfill.

End disposal facilities also accept waste from a variety of customers. They process the waste to render it non-hazardous, according to EPA treatment standards, through specific technologies such as incineration or contaminant removal. Some drums of waste are consolidated into larger containers for handling purposes, such as drums of acid pumped into tanks for treatment, while other drums may be handled individually due to incinerator limitations or chemical properties like water reactive chemicals. Other examples of end disposal for common lab waste are:

- A 55 gallon drum of ethidium bromide gels that is sent to an incinerator may be co-mingled with similar materials and the bulk waste stream will be fed into the incinerator for destruction.
- A 5 gallon lab pack of sodium azide shipped to an incinerator may be fed directly into the incinerator for destruction.
- A 55 gallon drum of photographic chemical waste shipped to a treatment facility will be pumped into a holding tank with like materials. Any contaminants in the waste, such as silver, will be removed by chemical means before the material is neutralized and discharged into an EPA permitted sewer system.

- A 30 gallon drum of sulfuric acid spill clean-up shipped to a landfill will be mixed with treatment materials (often cement) that will **stabilize** the contaminants to **at or below** regulatory limits. This process is also known as **fixation**. The stabilized waste can then be placed in the permitted landfill.

The following are typical processes at end disposal facilities:

- Incineration of almost all waste types.
- Waste Water Treatment of acids and bases.
- Incineration of solvents as fuels.
- Stabilization and landfill of acceptable materials.

The next time you speak with your hazardous waste disposal vendor, the above outline will give you a better understanding of where your material is shipped and how it is handled. You can inquire as to what type of facility your material is being shipped to, and what processes it will undergo before final disposal. There are good disposal facilities, and bad disposal facilities. You can inquire about yours through your state regulatory agency, and by checking the EPA web site (www.epa.gov) and typing ECHO in the search bar (Enforcement and Compliance History Online).

In addition to local market conditions, the cost for disposal of your hazardous waste will depend upon the type of waste you create and the process necessary to treat it properly. Landfill is generally the least expensive disposal option, while incineration tends to be the most expensive. However, incineration offers the most protection for your future liability since wastes are virtually destroyed by the process. As you review your current practices, keep in mind that “cradle-to-grave” should influence which disposal technology you utilize. Which will lead us to our next topic...**“What steps can I take to manage my waste more effectively?”**

Increase Value



Decrease Cost™

INSIST

on the High Performance
Azlon®
Carboys from Dynalon!

- Autoclavable
- Leakproof Spigot
- Easy to Handle



Space saving design!

<u>Carboy with Spigot</u>	<u>Carboy without Spigot</u>
5L 505634-0001 \$45.97	5L 505634-0004 \$29.34
10L 505634-0002 \$64.70	10L 505634-0005 \$48.39
20L 505634-0003 \$77.50	20L 505634-0006 \$61.19



Barloworld Scientific

DYNALON 800.334.7585 ph 585.334.0241 fax

2007 NAOSMM TRIVIA CONTEST

CLEVELAND, OHIO

The Board has approved another trivia quiz for 2007. The person who correctly answers the most questions will receive a free regular member's registration to the conference in San Antonio in 2008. Submit your answers to Mary Ann Stoll, NAOSMM Historian, at stolmary@isu.edu, by June 1st, 2007. Decision of the judges will be final. In the event of a tie, a winner will be chosen at random. Questions will also be posted on the NAOSMM website.

THE EARLY YEARS OF CLEVELAND

1. General Moses Cleaveland and a survey party arrived at the mouth of the Cuyahoga River on 22 July in what year? _____ to begin mapping the region known as the _____.
2. At the end of that summer, Moses Cleaveland returned to his home in _____ where he died in 1806, never to step foot again in the city that bears his name.
3. The answer to Question #1, part two, was called this because?
4. At some point, the 'a' in Cleaveland was dropped from the city name. Why? _____
5. _____, which is the oldest newspaper in the city, began publishing on 7 January _____.
6. Abraham Lincoln visited Cleveland for the first time on 15 February 1861. He only passed through the city another time. What was the occasion for his visit _____ and in what year _____?
7. Professional baseball in Cleveland is one of the city's oldest traditions, dating back to _____.
8. Archibald Willard, born in nearby Bedford Township, was an American painter of the 19th century. He painted several versions of this well-known scene in time for the nation's centenary celebration. The work portrayed a fife and drum. What is the name of this painting? _____
9. A new form of lighting was installed on Public Square 29 April 1879. What kind of lights were they _____ and who was the inventor? _____
10. In 1881, the President of the United States was assassinated. Who was he? _____ In which city was he shot? _____ and where is he buried? _____

CLEVELAND COMES OF AGE

11. Jesuit priests from Buffalo NY opened St. Ignatius College on 6 September 1886. By what name(s) is this college now known? _____ and/or _____.
12. In 1903, President Theodore Roosevelt attended a wedding in Cleveland. Who were the bride and groom? _____ and _____.
13. George Crile performed the first successful _____ (a medical procedure) in 1906. He later teamed up with some other doctors in 1921 to open a clinic. What was it called? _____.
14. In 1911, a village on the east side of Cleveland was incorporated, named after a religious group. Who were the group and what was the village called?
15. This same group was well respected for their woodworking and furniture. What practical laundry device did they invent? _____
16. The following year, 1912, F.A. Sieberling began building a beautiful new home (65 rooms!) for his growing family. How did Frank make his money to afford such opulence? _____. He named his estate _____, which means "Stone Quarry" in Old English.
17. Cleveland grew quickly during the Civil War and after, becoming an industrial center making steel, the original home of Standard Oil Co. and eventually a producer of electric equipment, paint, cars and airplane parts. By 1920, Cleveland population peaked to become the nation's _____ largest city.
18. In the same year that the population of Cleveland peaked, the home town baseball team did what? _____. And the name of that team? _____
19. The first radio station in Cleveland _____ (it's call letters) began broadcasting in 1922.
20. From 1929 until 1939, and again from 1946 to 1949, this race was usually held in Cleveland. What was being raced and where did the race take place (in general)?

21. Cleveland's landmark skyscraper, the Terminal Tower, now called Tower City, was completed in _____ (year?) and was the second tallest building in the world at that time. In fact, it remained the tallest building in the world outside of New York until _____ (year?).
22. _____ became Safety Director of Cleveland in 1935. What was his claim to fame in his previous job? _____
23. Another son of Cleveland _____ won four gold medals at the Berlin Olympic Games in 1936. Who was he?
24. This man left Cleveland after being hounded for more taxes. He began his career as a humble clerk but died in 1937 as the richest man in the world. Who was he? _____ Where is he buried? _____

CLEVELAND'S MORE RECENT PAST

25. The same year that streetcars last ran in Cleveland, this young Bay Village matron was murdered in her home. The ensuing manhunt to find her killer became the basis for the TV series and later, the movie, The Fugitive. Who was she and when did she die? _____
26. In 1967, _____ was elected mayor of Cleveland, the first African-American mayor of a major American city.
27. At 11:56 am on June 22, _____ (in what year?) an oil slick caught fire on the Cuyahoga River just southeast of downtown Cleveland, Ohio.
28. On 15 December 1978, Cleveland became the first major American city to _____ since the Great Depression.
29. This "topped off" at 948.7 feet high when it was completed in 1991 to become Cleveland's tallest. What is it? _____
30. This museum almost wasn't built in Cleveland. What other city _____ was almost selected in 1986 to become the home of this museum _____? On what does the collection focus?

31. What 1990's movie, based on a story by Jean Shepherd, was filmed in Cleveland, Ohio? _____

32. Cleveland was named "The _____ City in the Nation" by the U.S. Census Bureau in September 2004, displacing Newark NJ, Detroit MI and Fresno CA.

33. Despite this designation, the Economist Intelligence Unit in October 2005 named Cleveland the "Most _____" in the United States.

34. Who are the Guardians of Transportation and where would you find them on short notice?



NEW

The 2006-2008 Spectrum Catalog is now available

- Nearly 30,000 fine chemicals and laboratory equipment & supply items
- Over 2,000 new items

Request your FREE Copy

800.901.4062

www.spectrumchemical.com



ROCKIN' INTO CLEVELAND IN 2007!

Jeff Your, 2007 Host

Plans are shaping up for our best conference and trade show ever. Be sure to check back on the NAOSMM page for Cleveland frequently for updates. That page will be very DYNAMIC! (<http://naosmm.org/confer/cleveland/index.html>). Click your reload button on your browser a few times for some great views of the city and its many attractions. Those will also be updated seasonally.

City tours will be offered on Sunday afternoon preceding the conference. I've taken this tour and it is very fun and informative. It includes a lot of Cleveland history and a mid-tour stop at the city greenhouse built on land donated by John D. Rockefeller. Indeed, the 270 acres surrounding the greenhouse is a series of cultural gardens strung together along a parkway which represent the more than 25 ethnic heritages who built Cleveland into the 5th largest city in the U.S. Each garden is a unique tribute to that country's culture and people, many with fountains.

We have a very special guest scheduled to open the Conference on Monday morning. I guarantee you will love him (or her?). We're keeping the wraps on this one for a little while. Suffice to say, s/he is a character we all know — they were born in Ohio not too far from Cleveland.

Friday will be an all-polymer day! We have a nice balance planned – an industrial tour of Saint-Gobain Performance Plastics in Akron. After our tour, we'll enjoy a box lunch and tour Stan Hywet Hall and Gardens – a 65-room English Tudor-style mansion and country estate sited on 70 acres of landscaped grounds and formal gardens. Included in the admission is a glass conservatory with a live exotic butterfly aviary (technically, an insectiary). What does this have to do with polymers, you ask? Stan Hywet was built in 1912 by F.A. Sieberling, the founder of Goodyear Tire and Rubber Company.

Pay attention, because there'll be a quiz later. Yes, the Board has again approved a trivia quiz for the regular members resulting in the award of one free registration for the following year's conference. The questions will be based on what you read right here in the *Newsline*, so hold on to your copy. Instead of being on the listserv, you can find the quiz in this issue of the *Newsline*. It will also be accessible from the Cleveland page off the NAOSMM website.





By always listening, Sigma-Aldrich understands

Always on hand - with technical service and support

At Sigma-Aldrich, we understand your work can't wait. That's why our scientists are on hand to listen to your questions, provide the answers you need – and discuss research topics as wide ranging as ferrocene complexes, RNA silencing and gene knockdown technologies.

The majority of our technical representatives have worked on the research, development and production of the products they support – so the researchers in

Sigma-Aldrich is proud to support the NAOSMM travel scholarship fund through placement of ads such as this in the Newline magazine.

your organization will benefit from hands-on knowledge of all our product lines plus fast, accurate responses to keep your workflow moving.

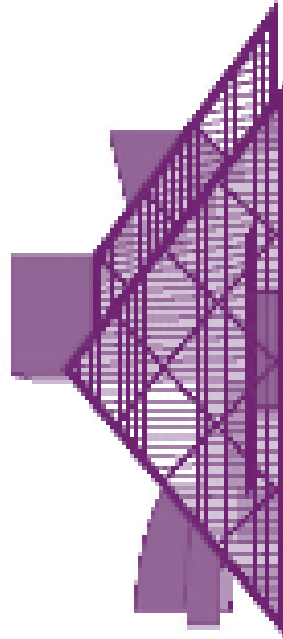
Recognized across the scientific community for the highest levels of service and technical expertise, Sigma-Aldrich has a reputation for listening.

With a product line ranging from the most frequently used solvents and reagents to the rarest chemical and biologic specialties, Sigma-Aldrich understands.



SIGMA-ALDRICH

Chemistry Department
Saint Joseph's University
5600 City Avenue
Philadelphia, PA 19131



naosmm
*Rockin' into Cleveland
in 2007*