

From the Chair...

The Year Springs Ahead—Grades and Awards

This time of year always seems to be one of the busiest for me. With the end of the semester, there are tests to be graded, papers to be read and graded, final exams to be constructed, given, and graded, and final grades to be given. Then, of course, there is the litany of moans and groans that the grades evoke. In addition, our Section activities seem to pick up around this time. Not that I'm complaining, mind you—the school processes are part of the job and the Section activities are always enjoyable.

We had a really great Spring 2001 Science Education Recognition Dinner on April 25—the 10th annual dinner. My sincerest congratulations to Phil Squattrito and his group for an outstanding job. It was different this year in that they coupled their efforts with Karol Childs and her folks at the Midland Center for the Arts. So our dinner not only recognized the people involved in education, but also included Salutes to Excellence, a National ACS program. Our venue was the Center for the Arts with a great buffet dinner.

The program began by honoring places of importance in chemistry in our community. The ACS encourages local sections to recognize a product, a practitioner of chemistry, or a place of importance in chemistry for their positive impact in our everyday life. Three places were chosen for the first award, reflecting the past, present, and future.

The location of past importance was the Evens Mill Laboratory and Production Line, at the Herbert H. Dow Historical Museum, a Chemical Historical Landmark. The location of the present was the Chemical Process Technology Partnership, a partnership between Delta College, Saginaw Career Complex, Dow Corning Corporation, and The Dow Chemical Company. The future location was the science laboratory at the Aabizikaawin School in Mt. Pleasant.

I was privileged to make the awards by reading the citations written by Gretchen Kohl. I managed to turn her excellent notations about each place into largely unintelligible mumbles, which should not surprise any of my students.

Ed Benson, from CMU, presented awards to the eight students who performed the best in our Section's Chemistry Olympiad testing. Anton Jensen presented awards to the sixteen outstanding high school chemistry students (if memory serves, fourteen of them were there, some with their



George Eastland, Chair
ACS Midland Section

teachers). There were four outstanding college chemistry students honored, one each from Alma, CMU, Delta, and SVSU. Those awards were given by Phil Squattrito of CMU. The Outstanding College Chemical Technology Student award was given by Phyllis Anderson, the chair of the Mid-Michigan Technician Group. Aneta Bialek presented awards to two elementary school teachers for their achievements in elementary level science education.

Amy Betz and Phil Squattrito presented the outstanding achievement awards in high school and college chemistry teaching, respectively. Those went to Bill Stokes, Heritage High School (Saginaw Twp.) and Sandy Smith, CMU. I know both of them—Bill has taught at SVSU on a part-time basis for years, and Sandy was not only a CMU student, but taught there for a number of years. Those awards were richly deserved (I might say, overdue). Finally, I had the very good fortune and distinct honor to give the 2001 Science Education Volunteer award to Don Petersen (that's Petersen, with a penultimate e, thank you!). Don started our Chemistry Olympiad program and did virtually all of the work to get it going and sustain it. Since that time, first Dave Baker (Delta College) and then Ed Benson have carried on the program in an excellent fashion.

The other event(s) occurring this time of year revolve around MMI's visiting professor. This year it is James Mark, from the University of Cincinnati. MMI held their reception for him on April 30. It was, as usual, a very pleasant affair, and gave us a chance to meet Jim and his wife. The next evening he was the speaker at the SPE dinner, which was held this year at Northwood University's NADA Center. He gave a really fine after-dinner talk—most digestible, even for someone like me who, on a good day, can just barely spell polimer...er...polymir...wait a minute, don't help me...polymer!



- **Failure Analysis**
- **Competitive Product Analysis**
- **Additive Analysis**
- **Color Body Identification**
- **Taste & Odor Analysis**
- **Consulting Services**

1910 W. St. Andrews Rd., Midland MI 48640

Phone: 517-832-5555 Fax: 517-832-5560

info@impactanalytical.com www.impactanalytical.com

Dinner Recognizes Students, Educators, Science Programs

Article and photos by Angelo Cassar

The 2001 Spring Science Education Recognition dinner was held on April 25th at the Midland Center for the Arts. This event was well attended by students, parents, teachers, and ACS members, as well as representatives from local corporations and organizations. The ACS Midland Section sponsored the event. The reception was hosted by the Hall of Ideas, which was open for attendees to view the Hall's impressive display of science and art. After the reception, a buffet dinner was held in the Founders Room, which was followed by the awards presentations.

Ed Benson presented The U.S. National Chemistry Olympiad awards to eight area high school students, who scored the highest in the first round of the national exam from their high schools. They are Arrak Bhattacharyya and Michael Zajac from Midland H.H. Dow, Jacob Zier and Robert Butts from Midland, Joshua Enszer from Nouvel Catholic, Mathew Rupp and Matt Bender from Saginaw Heritage, and Grant Soehnel from Essexville Garber.

Anton Jensen presented Outstanding High School Chemistry Student awards to 16 area students: Charles Crissman of Midland Dow, Shawn Kloha of Bay City Central, Brianne Klouse of Coleman, Elise Victoria MacArthur of Freeland, Meghan McGee of Midland, Matthew McLain of Carrollton, Kimberly



These area high school students obtained the highest scores in their respective schools in the first-round exam in U.S. National Chemistry Olympiad program. Also shown are Ed Benson, chair of the Olympiad Committee, William Stokes, and Mary Friedle.



Teachers from area high schools were asked to nominate students for the Outstanding High School Chemistry Student award. Sixteen students were selected to receive the award.

Petrimoulx of Bay City John Glenn, Adam Schrems of Frankenmuth, Joe Shaw of Ashley, Elizabeth J. Sherman of Merrill, Jennifer Silverthorn of Shepherd, Tamara Spadafore of Saginaw Arthur Hill, Elaine Stratton of Bullock Creek, Michael Vance of Bridgeport, Wad Wilkes Varner of Alma, and Tim Wertz of St. Louis.

This year Phil Squattrito presented the award for Outstanding College Chemistry Student to

four area students:

Kevin Metz from Alma

College, Megan

Treutle from Central

Michigan University,

Brad Rokosz from

Delta College, and

Matthew Miller from

Saginaw Valley State

University. Phyllis

Anderson presented

the Outstanding Col-

lege Chemical Tech-

nology Student award

to Dana Bitzer from Delta College.

Teachers were also recognized

at this dinner with the following

awards: The Outstanding Achievement in Elementary Level Science Education award was presented by Aneta Bialek to Cathy Egerer from Midland and to Amy Hindbaugh-Marr from Ithaca. The Outstanding Achievement in High School Chemistry Teaching award followed this award. This year Amy Betz presented the award to William Stokes from Heritage High School for his achievements in high school teaching. Phil Squattrino presented the Outstanding Achievement in College Chemistry Teaching award to Sandra Smith from Central Michigan University.

Midland Section chair, George Eastland, presented the final award to the 2001 Science Education Volunteer. George presented this prestigious



Recipients of the Outstanding College Chemistry Student award were (l to r): Matthew Miller, Kevin Metz, Megan Treutle, and Brad Rokosz.



Dana Bitzer received the Outstanding College Chemical Technology Student award from Phyllis Anderson, MMTG chair.



Cathy Egerer (l) and Amy Hindbaugh-Marr (r) received Outstanding Achievement in Elementary Level Science Education awards from Aneta Bialek.



William Stokes from Saginaw Heritage received the Outstanding Achievement in High School Chemistry Teaching award from Amy Betz.

Sandra Smith, CMU, received the Outstanding Achievement in College Chemistry Teaching award from Phil Squattrito.

award to Donald R. Petersen, who was the driving force and almost sole operator of the Section's Chemistry Olympiad program for over a decade. His personal commitment to the recognition of student excellence is well-recognized.

The efforts of many individuals went into making this event a success. The Awards Committee had a difficult task in selecting winners from all the excellent candidates. Committee chair Phil Squattrito from CMU did an excellent job in arranging this event. Other committee members in-

cluded Anton Jensen, Amy Betz, Wendy Mathews, Mike Ferritto, and Aneta Bialek.

Chair George Eastland, councilors Gretchen Kohl and Bob Howell, past-chair Wendell Dilling, and director Karol Childs and the Hall of Ideas staff provided invaluable assistance.



Don Peterson, who led the Chemistry Olympiad efforts for years, was named 2001 Science Education Volunteer. Midland Section George Eastland presented the award.

We're responsible . . .

In 1988, the American Chemistry Council (ACC) launched Responsible Care® to respond to public concerns about the manufacture and use of Chemicals.

Through this initiative, Dow Corning Corporation and other ACC members and partners are committed to continually improving our responsible management of chemicals.

We're responsible because we care.

DOW CORNING



© 2001 Dow Corning Corporation. Dow Corning is a registered trademark of Dow Corning Corporation. Responsible Care is a registered service mark of the American Chemistry Council.

Section Recognizes ‘Places of Chemistry’

By Karol Childs

At the April 25th Spring Science Education Recognition Dinner, Midland Section Project Science Literacy presented Salutes to Excellence—Past, Present and Future for Places of Chemistry.

Salutes were presented to:

- A Place of Chemistry from the Past—Evens Mill laboratory and production line at the H.H. Dow Museum. Receiving the salute on behalf of the Midland County historical site was Charles Lentz, chairman of the board, and Gary Skory, director.
- A Place of Chemistry of the Present—The Chemical Process Technology Partnership. Receiving the salute were the four members of the partnership:



Gary Skory (right) accepted the “Place of Chemistry from the Past” award from George Eastland, Midland Section chair.
Photo: Angelo Cassar



The “Place of Chemistry of the Present” award was accepted for The Chemical Process Technology Partnership by (l to r) Douglas Struble, Julie Walker, Joan Sabourin, and Mike Warren.

Photo: Angelo Cassar

Dow Corning Corporation, represented by Mike Warren; The Dow Chemical Company, represented by Douglas Struble; Delta College, represented by Joan Sabourin; and Saginaw Career Complex, represented by Julie Walker.

- A Place of Chemistry for the Future—Laboratory/chemistry classroom at the Aabizikaawin School of the Saginaw Chippewa Tribe. Receiving the salute on behalf of the school were Colleen Tighe, tribal office, and Max Wolf, Aabizikaawin School.



Colleen Tighe and Max Wolf accepted the award for “Place of Chemistry for the Future,” representing the Saginaw Chippewa Tribe and the Aabizikaawin School.

Photo: Angelo Cassar



Living.
Improved daily.

What's New at MMTG?

By Phyllis Anderson

During the first 4 months of 2001, the Mid-Michigan Technician

Group (MMTG) has planned and accomplished many goals. A brochure defining our purpose and goals and describing the benefits of belonging to a TAG (Technician Affiliate Group) was designed and printed. This brochure will be available for distribution at local and national meetings. In addition, we designed a lapel pin to wear and distribute at local and national meetings.



On March 12, 2001, members of MMTG traveled to the Delta College Planetarium Learning Center to explore the skies. It was a cold and blustery night, which affected the attendance at this event, but everyone who made the trip enjoyed the presentation immensely. The program started with a brief description of the stars and an illustration of the stars and planets visible from our backyards at this time of the year. The show we saw was Planet Quest, an interactive voyage through the solar system. We boarded our simulation spacecraft, Delta Planet Cruiser, and zoomed from planet to planet. The information presented in this portion of the presentation is a result of many, many years of exploration via powerful telescopes and interplanetary probes like NASA's Galileo, Cassini, or Viking spacecraft. The trip was enlightening and enjoyable, and it renewed our interest in viewing and exploring the stars.

Each year, MMTG presents an award to a deserving student enrolled in the Chemical Technology program at Delta College. The Outstanding Chemical Technology Student award for 2001 was presented to Dana Bitzer at a recognition dinner held at the Midland Center for the Arts. Dana currently is working for the Chemical Science group at The Dow Chemical Company and has recently been offered and has accepted a position as a chemical technician with Polystyrene R&D. Dana maintained a GPA greater than 3.5 and has been on the vice-president's or dean's lists each semester at Delta College.

Upcoming events of the MMTG include a presentation by John Fortman, an ACS touring speaker, entitled "The Serious and Delirious Use of Chemistry in Movies," helping with a booth at the Midland County Fair, the annual Sci-Fest held at Delta College, and a membership drive. We hold monthly meetings at the Dow Cafeteria the first Wednesday of each month from 11:30 to 1:00. Everyone is welcome.

Notes from National ACS Meeting, San Diego

By Bob Howell and Gretchen Kohl

The 221st National ACS meeting was held in San Diego, March 30–April 5, 2001. Both Midland Section councilors attended and participated in a variety of committee activities, the Council meeting, and attended/presented technical papers.

The San Diego meeting was extremely successful in many ways. It was the third largest meeting ever with 17,824 registrants and 252 exhibitors occupying 472 booths. The meeting set a record for participation by undergraduates with more than 700 poster papers presented by undergraduates and more than 2000 undergraduates in attendance. This is reflective of the increasing emphasis on the involvement of young professionals at an earlier stage of their career. These individuals represent the future of the Society and need to be encouraged to be active and involved at a young age. This has long been an emphasis of the Midland Section. Each year since 1977, undergraduates have presented papers at the annual Midland Section ACS Fall Scientific Meeting. This is simply one more area in which foresight/innovation by the Midland Section long predates similar activity by the ACS at the national level.

Although there is some general weakening of the U.S. economy, employment opportunity for professionals in the chemical sciences remains strong. At the San Diego meeting the Employment Clearing House hosted 208 employers who posted 819 available positions. For these positions, 897 candidates registered with the clearing house. The ACS will launch JobSpectrum.com, a new web site in June. It is intended to become the premier recruitment site in the world and is expected to generate revenue from online advertising. A service of potential interest to everyone will be an online salary comparison which will permit direct access to salary information for any particular specialization/length of service across the chemical community. A new interactive web site, Chemistry.org, intended for use by everyone including the general public, will also soon be available.

This year represents the 125th anniversary of the American Chemical Society. To note this event, representatives of 28 international chemical societies attended the San Diego meeting to bring congratulations and gifts. The Council heard videotaped addresses of congratulations from Representatives Ellen Tausher, D-CA (from the home district of President Attila Pavlath) and Mike Rodgers, R-MI (from the home district of Board Chairperson Nina McClelland) and received a congratulatory letter from President Bush. An exhibit depicting important technology milestones over the past 125 years will be held at the Chicago meeting in August.

SciFinder Scholar, the limited version (but still exceedingly expensive) of SciFinder for academics, continues to gain in popularity with 100 new subscriptions this year for a total of 325. A concern of the Committee on Professional Training (CPT) is that undergraduates are not using the scientific literature to the level desired. SciFinder Scholar is not getting into the smaller four-year institutions, which stand at a financial disadvantage with respect to major institutions. These institutions simply cannot afford SciFinder Scholar. Many of them have been forced to give up the print versions of Chemical Abstracts and prominent ACS journals for reasons of cost. This situation presents a real dilemma for the CPT and ACS. For ACS certification, use of the scientific literature is an essential component of B.S.-level training in chemistry. How can this be made affordable for four-year institutions? This is an issue that the ACS will ultimately have to address. At the San Diego meeting, CPT added four programs to the ACS approved list and deleted two. The new total of approved B.S.-degree programs stands at 619.

Project SEED, the ACS program for able but economically disadvantaged high school students, continues to receive strong support at the national level. For 2001, Summer I participants will include 348 students at 101 institutions while 81 students at 35 institutions will be involved in a second summer of research as Summer II participants. Thirty-two former SEED participants have received college scholarships for 2001-2002 totaling \$160,000. The expanded scope of the SEED program is made possible by several major donors which include ACS members (each of you should feel a glow each time you check the box for a SEED contribution on your annual dues statement), the Petroleum Research Fund, The Bayer Foundation, the estate of C.T. Kirchner, Glenn and Barbara Ulliyot, Alfred and Isabel Bader, the Burroughs Welcome Fund, and Kelly Scientific Resources.

President Pavlath continues his efforts to better serve and involve the membership. To get direct member input he has initiated the first-ever e-mail poll of members (50,000 members now have e-mail access). At his initiative, the Council approved a petition to increase the size of standing committees of the council: each standing committee (six) shall now consist of not fewer than twelve and not more than twenty members, except on special authorization of the council. This will allow more members of the Council to gain committee membership. Currently, more than 150 members of Council hold no committee membership and thus have no voice in ACS governance. Not only are they disenfranchised but so are the local sections and divisions which they represent.

Dues for 2002 were set at the fully escalated amount of \$112. Reflecting the economy of mid-Michigan and the sentiment of the Midland Sec-

tion Board of Directors, both of your councilors voted “no” on this issue (it might be noted that they were members of a distinct minority). ACS membership stands at 163,016, an all-time record, with approximately 20,000 young members and approximately 100 precollege teachers (more needs to be done to bring precollege teachers into the Society). The retention rate for 2001 was 94%. A graduated dues structure (first six years of membership) is being considered to make membership more attractive (and possible) for individuals early in their career.

William F. Carroll, Jr., and Elsa Reichmanis were chosen as candidates for 2002 ACS president-elect. Candidates for District II director are Carol A. Duane and Helen M. Free.

The ACS Committee on Patents and Related Manners selects ACS nominees for both the National Technology Medal and the National Inventors Hall of Fame. Many Midland Section members have achievements that make them eligible for these awards. Bob Howell serves as a member of the committee and would welcome suggestions/nominations/advice from any member of the Section

(bob.a.howell@cmich.edu). The ACS nominees for this year (Boyer and Cohen for the first demonstration of gene splicing/genetic engineering) will receive the National Technology Medal at ceremonies in Washington this fall.

Finally, the highlight of the San Diego meeting for the Midland Section members was the induction of Duane Priddy of The Dow Chemical Company as a PMSE Fellow (see pg. 13). Duane was honored for his long-time and significant contributions in the area of polystyrene. In particular, his recent efforts with mediated radical polymerization of styrene were noted. Duane has had a long and distinguished career at Dow. It is certainly fitting that his accomplishments be acknowledged with a major award of this kind.

Stavropoulos Honored with Palladium Medal

William S. Stavropoulos, chairman of The Dow Chemical Company, was honored in May with the 2001 Palladium Medal by the American Section of the Société de Chimie Industrielle. This award was made “in recognition of his ability to act today while articulating a vision of the future of the chemical industry,” according to *Chemical and Engineering News*.

An extensive article in the May 14 issue of the ACS publication discusses his career and accomplishments. Stavropoulos has been a member of ACS since 1964.

Duane Priddy Honored by ACS

Duane Priddy, a research scientist with Dow Plastics in Midland, was one of eight 2001 Fellows of the Division of Polymeric Materials: Science and Engineering (PMSE) named by ACS. This honor was established by the division last year to recognize members who have made significant contributions to the science and engineering of polymeric materials. The induction took place on April 2 at the ACS National Meeting in San Diego.

Duane was recognized for his pioneering research in polymer chemistry, notably living free-radical polymerization. He has 60 U.S. patents and 100 published works and is considered a global expert in polystyrene. He serves as adjunct professor of polymer chemistry at Michigan Technological University and Central Michigan University, and has lectured at other universities and colleges.

An employee of Dow since 1966, Duane has devoted most of his career to producing innovative polystyrene products. He was a key contributor to the research that led to the development of new STYRON A-TECH resins, and continues to investigate new polymerization processes to improve the properties of polystyrene.

Duane joined Dow as a research chemist with Organic Chemicals, moving in 1972 to the Styrene Molding Polymers business. In 1983, he transferred to Engineering Plastics to help start up the polycarbonate plant in Freeport, Texas. He rejoined Polystyrene in 1985, and has been conducting research to support the development of new polystyrene resins.

Duane holds a bachelor's degree in chemistry from Olivet College and a doctorate in organic chemistry from Michigan State University.

Editor's note: Portions of this article were adapted from the April 16 issue of the Midland Daily News.

New Career Services Publication Available

In April 2001, ACS Department of Career Services published "Tips on Writing a Curriculum Vitae," a Professional & Workforce newsletter that provides guidance on how to develop this vital tool when seeking an academic position. While there is general agreement that an academic application should include these elements—a C.V., a strong cover letter, a research proposal and a teaching philosophy—there is little consensus on which one is most important. This article includes the advice of seven chemistry professors on how to write an effective C.V. For more information about the publication or other ACS Career Services products, please call 1-800-227-5558 or email: careers@acs.org.

Singapore Delegates Attend TECH Meetings in San Diego

By Wendy Mallory

The ACS Division of Chemical Technicians (TECH) had the pleasure of meeting with six people from Singapore during several events at the 221st ACS National Meeting in San Diego, California. TECH members communicated with the Singapore delegates prior to the national meeting so that they could get the most value from their time spent in San Diego.

The people from Singapore represented both government (Economic Development Board of Singapore (EDB)) and industry. Pei Wei Woo of EDB gave the TECH Executive Committee an overview of the government and industry structure of Singapore, as it might relate to TECH, at our opening Executive Committee meeting. The result at week's end was a decision to investigate development of a Singapore Society for Technicians and how it could be best affiliated with ACS.



Six delegates from Singapore attended TECH events at the ACS National Meeting in San Diego. From left to right: Abdul Nasser, Seraya Chemicals; Johnny Lim, Schering Plough; Norman Cheung, EDB; Pei Wei Woo, EDB; Eng Hong Ngoh, EDB; Charlie Ho, ExxonMobil.

Photo by Wendy Mallory

A Student's View of the National Meeting

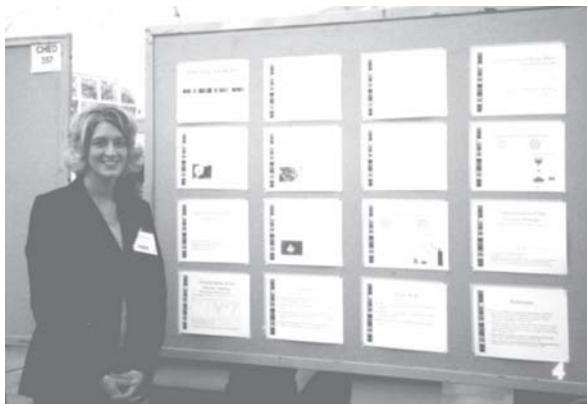
By Lisa Schafer

I originally joined ACS three years ago as a student affiliate member in conjunction with joining the chemistry club at Saginaw Valley State University. I was pursuing the ACS-certified chemistry degree, which I just recently successfully completed, and felt that this membership was a natural step in that process. Truthfully, the only real perk I ever felt I received as a result was the *Chemical and Engineering News* every few weeks.

I had no idea of the opportunities that were available to me as a student affiliate member; that is, not until a few months ago. I learned not only that I would be presenting my senior research at the National ACS Meeting in San Diego, but that I would also be able to participate in many other activities.

I presented the results of my undergraduate research project at SVSU during a poster session at the meeting. My research project involved the characterization and derivatization of fullerenes to form star polymer analogs. This was an exceptional experience in that I was able to better understand a very real aspect of one of a chemist's main responsibilities. Presenting the results of a project in an efficient and understandable manner is just as important as the experimental findings. This poster session not only gave me a chance to discuss my results with others, but also to receive ideas and thoughts about different aspects of my research. It was a helpful learning experience.

In addition to presenting my undergraduate research, I also participated in the National Employment Clearing House. The NECH is basically a large job fair, with companies from all over the U.S. as potential employers. Graduating students or individuals looking for a job, both of which must be ACS members, are able to register for NECH free of charge, submit résumés, and view the numerous job postings. From there, job



Lisa's poster presentation was entitled, "Fullerene Chemistry: The Characterization and Derivatization of Star Polymer Analogs."

seekers send memos to the companies with open positions that interest them, and then employers drop a note into the mailboxes of the applicants with whom they want to meet. I was fortunate enough to have ten interviews in two days with companies from all over the United States. It was an exciting experience because I learned so much about different jobs that I did not even realize chemists performed. Also, when or where else would I have the opportunity to interview with ten companies in two days? So far, I have flown down to Columbus, Ohio, for one on-site interview as a result of the meeting.

The National ACS Meeting also had much more to offer. I attended many different presentations throughout the week concerning my re-

search topic and other scientific topics of interest. Along with the five other students from SVSU who attended the meeting, I was present during the acceptance of our club's Commendable Chapter award. Naturally, I also found time to see a couple of San Diego's sights.

I highly recommend that any student with the opportunity to attend a National



Several students and advisors from SVSU attended the national meeting in San Diego, including (back row) Ryan Vedrode, Robert Cottrell, Dr. David Karpovich, Ken Stawowy, Dr. Deborah Huntley; (front row) Lisa Schafer, Meagan Smekar.

ACS Meeting should do so. The expense of the trip should not be an issue because many organizations are willing to help with the cost. In my case, the Midland Section of the ACS, Student Association of SVSU, and the Dean of Science, Engineering and Technology at SVSU all generously contributed to the funding of my trip. Even if I had to pay for all of the expenses myself, it still would have been worth it. Overall, this meeting has opened many doors of possibilities for my future and was a very rewarding learning experience.

Dinner Meeting with Dr. Mark Enjoyed by All

By Angelo Cassar and Steve Keinath

At a dinner meeting on May 1, Dr. James Mark, the 2001 MMI Turner Alfrey Visiting Professor, captivated the audience, discussing both the history and the recent development of elastomers. The meeting was held at the NADA center, Northwood University. It was so well attended that the staff at Northwood had to set up more tables and chairs to accommodate additional people. SPE, ACS, and AIChE co-sponsored the event.

Among those in attendance were 17 students and two professors from Flint's Kettering University. Two Kettering students sat at our table, and they discussed the importance of today's elastomers in automobiles. In total, 54 people attended the dinner meeting, including twenty SPE members, eleven ACS members, two AIChE members, the Kettering students, and four others.

The title of Dr. Mark's talk was "The Importance and Technical Status of Rubber-like Elasticity." He began by pointing out that elastomers have been used for the last 4000 years. Dr. Mark then covered the historical development of elastomeric compounds by discussing their significance through the ages and the noted accomplishments of various scientists and chemists involved in the field of elastomers.

Although there were several interesting topics that were discussed that evening, one that was exceptionally intriguing was biomimicry. Dr. Mark is well aware of the structure-property relationships that exist in biological materials, such as muscle tissue and the wall lining of arteries. He commented on the extraordinary engineering feat of an organism to create specific proteins that can repeatedly store and release energy efficiently. He cautioned that attempting to follow nature in creating human-made elastomers might be a mistake. For example, early aviation attempts by man mimicked the flapping motion of birds, which resulted in dismal failure. The final solution to flying was a propeller and an airfoil, which does not simulate flying as exhibited in nature.

The last topic discussed by Dr. Mark was centered on what we do not know about elastomers, as opposed to what has been learned in the last 4000 years. Explanations as to how the molecular chains "communicate" with each other are, to this day, still a mystery.

The meal presented at Northwood's NADA center was delicious, and the talk given by Dr. Mark was both informative and interesting.

Chemists and Careers: The Digital Job Search

By Don Miller

If you are a scientific professional seeking employment (recent graduate, midcareer employee, or retiree looking for part-time employment) the Internet can yield a wealth of information. Various web sites can be accessed from your personal computer, providing employment information both by job specialty and geographical location.

For example, Monster.com (monster.com) lists jobs in various specialties throughout the country. Locally, the ACS Midland Section web site (<http://membership.acs.org/M/Midl>) contains a career services section that lists several companies in the Section area that currently have positions available. The Midland Section web site is also linked to the National ACS site (www.acs.org), which has chemical employment information listed through the Online Professional Data Bank and the ACS Job Bank as well as a new service (jobspectrum.org). These programs are available to all ACS members. The *Detroit Free Press* classified (Market Place) sponsors a site called Michigan Job Hunter (www.michiganjobhunter.com) that lists jobs in various fields throughout the state. Also various business and financial magazines (*Business Week*, *Fortune*, etc.) have web sites containing career information.

After targeting a company (or companies), writing the online résumé is the next step. Certain formatting rules should be followed to be effective. Before submitting the résumé contact the company and find out what format they require. According to Vivian VanLier, owner of a career service in Valley Glen, California, 1-inch side margins should be used, along with a simple typeface in which the letters don't touch. It should be straightforward and simple. The urge to be creative should be suppressed: no bullets, boxes, boldface, or other graphic elements, and no indenting.

The reason for these stringent formatting rules is that incoming résumés usually go into a large database. The recruiter (or a computer program) will put in key words or search parameters to access those that fit their job requirements. If a résumé is not formatted properly or does not contain the appropriate key words, it is likely to be passed over in a search of the applicant database.

The final step in the job search is the interview. The online procedures end here. No one has yet written a program for a virtual interview. You have to be there in the flesh sitting across the desk from the interviewer. The best advice from the experts includes the following: be on time, know as much about the company and the position as possible, dress appropriately, be polite, and try to stay calm. A little luck also helps. The interview should be followed by a personal note to the interviewer thanking him/her for their time.

Position Available for Analytical Lab Manager

By Don Miller

BioReliance, a firm in Rockville, Maryland, has announced an opening for vice-president, U.S. Analytical Services. Below is a brief summary of the responsibilities and the experience required.

Responsibilities

This executive will lead and manage the Analytical Services Division to maintain the highest quality standards and work to become the recognized leader in contract testing and development services for the growing market of cGMP protein and peptide products. Reporting to the president, he/she will lead the development of an analytical services infrastructure to support growth, marketing intensity, and readiness for meeting the obligations of a premier contract services organization in a national marketplace. This executive will be responsible for expanding the U.S. business, principally along the lines of the current European model—i.e., client-based with business approaches supporting high-volume, high-efficiency outsourcing deals.

The new vice-president will provide leadership and motivate the team to create a fresh start. He/she will recruit and retain high-quality professional staff to build a cohesive team. The vice-president will be responsible for the division's operations and gross profit. He/she will be a key member of the VP staff management team.

Preferred Educational Background

A graduate degree in science.

Preferred Minimum Experience

This executive will have at least 5 years experience managing a GLP/GMP analytical chemistry laboratory. A background in protein or small molecule analytics is a plus. Ideally, some experience should have been in a turnaround or high-growth company or business unit. He/she will be a leader from the contract service organization sector with solid operations and financial management credentials and experience in supporting CBER-licensed products.

The new VP will bring complementary skills to BioReliance; his/her competencies will fit well with those of the other members of the VP staff, the technical teams, and the president. He/she will be comfortable in working with peer executives, the president, and the board of directors.

For more information contact: Jackie Bates, Heidrick & Struggles, 1750 Tyson's Blvd. Suite 220, McLean, VA 22102; (703) 748-8867.

Call for Nominations for Salutes to Excellence

By Karol Childs

The Salutes to Excellence program is sponsored by the American Chemical Society. These awards recognize the contribution of Places of Chemistry, Practitioners of Chemistry, and Products of Chemistry within the five-county area of the Midland Section (Isabella, Midland, Bay, Saginaw, and Gratiot). The first Salutes to Excellence awards (Places of Chemistry) were presented at the April 25th Spring Education Recognition Dinner (see pg. 3). Nominations are open for the remaining awards:

- Practitioners of Chemistry June 4 deadline
- Products of Chemistry September 1 deadline

Practitioners of Chemistry will be recognized during Chemistry Professional Day at the Midland County Fair, August 17. Products of Chemistry will be recognized during the Fall Scientific Meeting in October.

We invite you to nominate people and products for either of these awards. Please include in your nomination:

- Your name, phone number, e-mail, and postal addresses
- Person/product's address and phone number
- Particular achievement being recognized

Send nominations to Karol Childs at childs@mcfta.org, 989-631-5930 x1215, or Gretchen Kohl at gretchen.kohl@dowcorning.com, 989-496-8200.

Science Literacy and Chippewa Tribe Celebrate New Lab!

By Joan McMahon

The Project Science Literacy group of the Midland Section ACS has been working with Dow Corning to help the Aabizikaawin School build and supply a science laboratory for their high school and alternative education students. We will be celebrating the dedication of that lab on Wednesday, May 30th, at 11:00 a.m., at the Aabizikaawin School, Saginaw Chippewa Tribe, 7070 East Broadway, Mt. Pleasant MI. If you would like to attend, please RSVP Joan McMahon at joan.mcmahon@dowcorning.com by Wednesday, May 23rd, or if you have any questions, feel free to call Joan at 517-496-5569.

Editor's note: Because this issue will probably be received after the deadline, please e-mail or call Joan about the possibility of attending despite missing the deadline.

Project Science Literacy Celebrates Volunteers

Article and photos by Angelo Cassar

The fifth annual Science Literacy Volunteers Recognition Dinner was held on April 7 at Soaring Eagle Resort, Mount Pleasant. This recognition dinner, which was organized by Joan McMahon, acknowledges both those on the Project Science Literacy committee and their spouses. The recognition is well deserved, since Project Science Literacy is truly one of the outstanding efforts of the Midland Section. The members of this very dedicated committee volunteer vacation time to put on workshops for teachers. The statistics concerning the effect on students in Michigan as well as other states are impressive! Since the inception of this project in 1995, approximately 1,520 teachers have been trained in “hands-on” chemistry through the “Bringing Science to Life in the Classroom” workshop. Since it is reasonable to assume that every teacher has, on average, about 30 students per year, Project Science Literacy has touched approximately 45,600 students each year! In addition, the program has gone beyond Michigan to teachers in New York and New Jersey.

Last year the project expanded to include a “how to” guide to establishing a teacher-workshop program and an advanced workshop involving polymer chemistry called “Clowning Around with Polymers.” These sessions are a cooperative effort with the local AIChE and SPE chapters.

Currently, volunteers are in the process of “Bringing Science to Life in the Classroom” to the Chippewa



Joan McMahon was the organizer for the fifth annual Science Literacy Volunteers Recognition Dinner.



Mike Ferrito is a volunteer with Project Science Literacy.

Tribal school in Mount Pleasant. This includes a teacher workshop and establishing an actual lab (using benches and equipment donated to ACS by Dow Corning Corporation). The committee will continue to work with the Chippewa school system in cooperation with Section awards programs and Project SEED.

I have attended a number of recognition dinners, but I have never been so impressed with all the accomplishments of a group of volunteers like the Project Science Literacy committee. Congratulations to the committee for their many past accomplishments and future endeavors! They will have a booth (#20) at the upcoming ACS Great Lakes/Central Regional Meeting, in Grand Rapids, on June 11–13, 2001, so stop by if you are at the meeting.

Committee members include Jennifer Arnold, Dave Baker, John Blizzard, Karol Childs, Drew Colenrander, Claudia Douglass, Julie Eaton, Mike Ferrito, Todd Hogan, Gretchen Kohl, Nicole Lenz, Tara Estes, Joan McMahan, Paul Popa, Heather Quinn, Barb Roth, Chuck Roth, Joan Sabourin, Cheryl Schultz, Richard Skochdopole, Janet Smith, Marvin Tegen, Martha Rogers, Heidi Vandort, and Joe Powers.

Midland Section Members Active in Regional Meeting

Several Midland Section members have organized technical sessions for the 33rd Central/33rd Great Lakes Joint Regional Meeting. The meeting will be held Monday, June 11, through Wednesday, June 13, at the Amway Grand Plaza Hotel in Grand Rapids, MI. Meeting and registration information are available online at <http://membership.acs.org/w/wmi/2001>. For additional information, call the program chairs: Dawn Merritt, Pharmacia Corp., (616) 833-2382, e-mail: dawn.a.merritt@am.pnu.com; or Mike Silver, Hope College, (616) 395-7636, e-mail: silver@hope.edu.

Technical sessions directed by Midland Section members include:

- | | |
|--|--------------|
| • Polymer Surfaces and Nanocomposites | Mike Owen |
| • Polylactic Acid Technology | David Henton |
| • Mediated Radical Polymerization | Bobby Howell |
| • Self-Assembly at Interfaces | Steven Snow |
| • Degradation of Vinylidene Chloride Polymers | Bobby Howell |
| • Soft Nanostructured Materials | Randy Hill |
| • Advances in Polymer Characterization | Fred Vance |
| • Meeting the Rapidly Changing Challenges of Corporate Education | Sarah Snow |

Call for Posters—2001 Fall Scientific Meeting

By Fred Vance

In celebration of the 125th anniversary of the American Chemical Society, the Midland Section will focus the attention of the Fall Scientific Meeting on one of the Society's oldest traditions—publishing. This is a departure from previous symposia-based meetings in that it will provide a broad overview of publishing technical papers—why we need to do it, how to survive the corporate/academic review process, how to contact and work with editors and publishers.

The meeting will also place a heavy emphasis on poster presentations. We strongly encourage members and students to submit poster abstracts for the meeting, especially from work that has been published recently, so that we have another avenue in which to discuss the important role publishing plays in our professional lives. However, this does not preclude the poster presentation of current research that has not been published.

The meeting will be held in October 2001, the date to be announced. Abstracts are being accepted through September 1, 2001. Abstracts may be sent by e-mail or conventional mail. Please submit your abstract to:

Dr. David S. Karpovich ph. 989-790-4349
Department of Chemistry fax 989-790-2717
Saginaw Valley State University dsk@svsu.edu
248 Science Bldg.
7400 Bay Road
University Center, MI 48710

Instructions for Preparing Abstracts for the Fall Scientific Meeting of the Midland Section of the American Chemical Society

John Doe and Mary Smith, Department of Chemistry, Saginaw Valley State University, University Center, MI 48410

Begin typing your abstract here. Use Microsoft Word (IBM or Mac) or Word-Perfect (IBM or Mac) to create your files, with one abstract per file. Use 12-point Times font. Single space paragraphs; double space between paragraphs. Do not indent. **Bold** titles only. Body copy should be typed in normal type. Use superscript and subscript and correct symbols where appropriate. Use *italic* only when required. All copy should be typed flush left. Do not center or justify your type. Use a 4½-inch wide line. Each abstract is limited to a maximum of a four-line title and 1300 characters in the body of the abstract. The information should appear in the following order: title, author list with complete address; presenter underlined; one blank line between title and abstract. Electronic submissions are preferred.

Call for Nominations—2002 National Chemical Technician Award

The 2002 National Chemical Technician Award will be presented to a chemical technician who has demonstrated an extremely high degree of professionalism as a chemical technician. Criteria used to judge the award include technical skills, communication skills, safety, reliability, leadership, teamwork, publications, and presentations. Additional professional and community activities are also considered. The award will consist of a trip to the 223rd American Chemical Society National Meeting, April 7-12, 2002 in Orlando, Florida for the awardee and guest. \$1000.00 and a plaque will be presented at the TECH National Chemical Technician Award Banquet at the National meeting.

The ACS defines a chemical technician as a person whose training includes successful completion of a two-year post high school level chemistry curriculum leading to an Associate degree or the equivalent course work in a Baccalaureate program or the equivalent knowledge gained by experience. The primary work of a chemical technician is conducting experimentation and/or correlating information to help solve chemical problems and/or discover new chemical knowledge

Letters of nomination must be received by Christy Yembrick, AstraZeneca Pharmaceuticals LP, 1800 Concord Pike, NLW2, PO Box 15437, Wilmington, DE 19850-5437, no later than September 30, 2001. Nominations, including seconding letters, must *not* exceed six pages. The nominating letters should address the above criteria. A current work address and phone number must be provided for the nominee and the nominator. E-mail addresses are also requested. A nominee must have worked as a chemical technician for a minimum of five years to be eligible for this award. Nominees need not be a Technician Affiliate or an ACS member to be eligible for this award. This award is administered by the Division of Chemical Technicians of the American Chemical Society and is sponsored by Corporation Associates.

If you need further information, contact Christy Yembrick at the above address or via:

Phone: 302-886-4125

FAX: 302-886-5359

christy.yembrick@astrazeneca.com

STN Express Reports Results Effectively

Chemical Abstracts Service (CAS) now offers new ways to present results of searches in the STN online network, through the latest version of its STN Express with Discover! personal computer software.

STN Express is the most popular tool for searching the wealth of databases on the scientific and technical information network, STN International. STN Express is a friendly, graphical interface that makes searching for information easier and more enjoyable. What's significantly different about Version 6.0 are capabilities for creating customized search reports that integrate text, images, and chemical structures.

Among the options introduced in the new version of STN Express are powerful tools for preparing reports and tables to present the information retrieved from STN databases:

- Table Tool - helps users create a table of data, graphics, and chemical structures from STN answer sets for easy analysis of search results; see an example on the web at <http://www.cas.org/online/stn/tables.html>
- Report Tool - helps users create customized, easily readable reports from search results; see an example on the web at <http://www.cas.org/online/stn/customized.html>
- Predefined Reports feature - allows users to create reports with a professional-looking predefined format; see an example of this feature on the web at <http://www.cas.org/online/stn/predefined.html>
- RTF files with hyperlinks - allows users to follow links in their transcripts to the associated full-text documents on the Web.

For more information about STN Express with Discover! 6.0 call CAS customer service at 1-800-753-4227 (or 614-447-3700 outside the U.S) or visit the web at <http://www.cas.org/online/stn/discover.html>.

Get Involved!

This issue of *The Midland Chemist* is packed with articles on successful

Midland Section programs made possible by volunteers promoting the understanding of science. There are many opportunities for you to get involved, both in large projects and small pieces of projects. You don't even have to be an ACS member. Here are some contacts if you are interested in opportunities for ACS, education, and community service:

- George Eastland, chair: 989-790-4321; gwe@svsu.edu
 - Gretchen Kohl, councilor: 989-496-8200; gretchen.kohl@dowcorning.com
 - Steve Keinath, Nominations and Elections: 989-832-5555 x588; skeinath@mmi.org
-

Important Dates on the ACS Midland Section Calendar

Note: There will be no July issue of *The Midland Chemist*

- May 30 John Fortman, "Serious and Delirious Use of Chemistry in the Movies," MMTG lunch presentation (Phyllis Anderson, 517-638-6006)
- May 30 Reception and dedication of the Aabizikaawin School science lab, 11:00 a.m., Saginaw Chippewa Tribe, 7070 East Broadway, Mt. Pleasant. (Joan McMahon, 989-496-5569).
- May 31 Dr. James R. Heath, "Nanoscience, Nanotechnology, and Molecular Electronics," Matrix:Midland, Midland Center for the Arts Little Theatre, 7:30 p.m. (MCF TA Box Office, 989-631-8250)
- June 4 Deadline for nominations for "Practitioners of Chemistry" in the Salutes to Excellence Program (Karol Childs, 989-631-5930, x1215)
- June 4 Midland Section board meeting, Central Michigan University, Mt. Pleasant, Dow 264, 7:00 p.m.
- July 2 Deadline for August issue of *The Midland Chemist*
- August 6 Deadline for September issue of *The Midland Chemist*
- August 6 Midland Section board meeting, Saginaw Valley State University, place and time to be announced
- August 17 Chemistry Professional Day, Midland County Fair (Gretchen Kohl, 989-496-8200)
- August 13, 15, 17 Chemistry Demonstration, Midland County Fair (Dave Swenson, 989-790-4292), time to be announced

All meetings are open to all ACS members and the public.

AMERICAN CHEMICAL SOCIETY

P.O. Box 2695

Midland, MI 48641-2695

<p>NONPROFIT U.S. POSTAGE PAID Permit No. 91 Midland, Michigan</p>
