

Ogemaw Heights 'Water Warriors' Team Takes First Place at 2005 Michigan Envirothon!

See also information on Professional Day (pg. 2) and Fall Scientific Meeting (pg. 7),



Volume 40, Number 4 August 2005

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Chair Column

Science in the Summertime

As summer is revving up into full gear, there are several terrific things happening within our Section. The Saginaw River Watershed Testing Program, sponsored by a large multi-year grant from Dow Corning Corporation, has had a major impact on several surrounding county science education programs.

The goal of the program is to get high school students out into nature's laboratory to test water quality in the watershed where they live (air and water temp, flow, pH, hardness, dissolved oxygen, nitrates, and phosphates). One inspiring



Pat Smith, Chair ACS Midland Section

example involves the Ogemaw Heights Watershed Team, the Water Warriors, which was organized just last year. They were so proud of their efforts and skills that they entered the "Canon Envirothon" which is an international competition comprising five testing/training stations and an oral presentation component. The team first won the regionals and then the state competition and by now has competed in the international competition at Southwest Missouri State University, Springfield, MO. Our congratulations to the Water Warriors and our thanks to the Section volunteers who helped make this possible—John Blizzard, Dave Stickles, Chuck and Barbara Roth, and Gretchen Kohl.

Our Section has also been nominated for several ChemLuminary awards, which honor local ACS sections for outstanding achievement. The Midland Section is continuing its illustrious track record. Thanks to Joe Ceraso, our past Chair, for all the work that went into these nominations. The winners will be announced at the August National ACS meeting in Washington, DC.

Finally, I would like to alert you to several deadlines fast approaching. First is the deadline for 2005 Midland Section Awards, which is September 2, 2005. There are three section awards, "Outstanding Service to the American Chemical Society," "Outstanding Chemical Technician," and "Outstanding Achievement and Promotion to the Chemical Sciences." Details for nominations can be found in this issue of *The Midland Chemist* or by contacting Minghui Chai, chair of the Awards Committee (chai1m@cmich.edu). The Midland Section is also seeking candidates for officers for 2006. If you have an interest in serving in this capacity, please contact me (pbsmith@dow.com) or Anne Shim, chair of the Nominations and Elections Committee (anne.shim@dowcorning.com).

We will also be polling our local membership in September relative to their interest in Section activities, from outreach to the community, to scientific education, to scientific meetings. Please return them so we can better target Section programs. Also indicate how you would like to get involved.

Finally, the Fall Scientific Meeting is coming up on October 14. The theme is "Nanotechnology" and the program is beginning to take shape. Gregg Potter, the FSM Chair, would love to hear from you if you want to help out.

Cool Off at Professionals Day

By Rebecca Swanson and Buford Lemon

at Saux

Date: Monday, August 15, 2005 Time: 4–7 p.m.

Please join us at the Midland County Fair for the 5th Annual Professionals Day, sponsored by the Midland Section of the American Chemical Society! You can pre-register or purchase ride bands from Rebecca Swanson at mmtg_chair@yahoo.com or on the day of the event. This year we'll be featuring free



popcorn, sno-cones, pop, and water to help you cool off. There will also be science demenstrations to share the wonder of science as

onstrations to share the wonder of science, a booth with information on ACS and its affiliate organizations, and half-price ride tickets. Please join us for an evening of fun and learning at the fair!



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Students Celebrate Earth Day with a Splash!

By Gretchen Kohl

As with most ACS programs that start out as a one-day event, Earth Day in the Midland Section ACS has evolved into a major year-long event. In 2004 the theme of "What Do You Know About H₂O" initiated a watershed testing program. In this program, high school chemistry and physics students sample, test, and evaluate major rivers and tributaries in the Michigan Saginaw River watershed, an area of fresh water rivers comprising over 8700 square miles. Students sampled water from a number of sites within the watershed and tested for inorganics and physical characteristics of the test site. Sampling was performed each week for over one year to date. The first year of testing was to obtain a baseline of each test site for continued testing over the next three years. Each site database will be combined to provide a complete, systematic picture of the quality of water in this important watershed.

A grant from the Dow Corning Foundation provided the initial start for the watershed school program. Water test training was provided by Culligan and Rain Soft technicians along with Midland Section ACS chemists. Each school involved in the program was provided with all of the necessary equipment and supplies to perform a variety of water quality tests. These tests include air and water temperature, flow, pH, hardness, dissolved oxygen, nitrates, and phosphates. When the students found a spike in water hardness and pH between one test location and another downstream site, the students surveyed the situation, developed their own theory (an agricultural lime pile too near the river bank), and assisted in relocation of the pile to a new, non-polluting site.

According to Doug Grezeszak, Ogemaw Heights High School (OHHS) chemistry teacher, "This program really reinforces their classroom education with hands-on experience. It is hard to believe the things they have done and what they have learned. This program gives the students a chance to see what they learn in the classroom as it really applies." The water testing is performed and compared with NIST standards to ensure accurate, reliable test results. The students also performed analysis at Raven Analytical Laboratory in Roscommon, Michigan, an EPA-certified water quality testing laboratory, as a further confirmation of their test results. This is also part of a job shadowing program within the watershed program to expose the students to potential employment opportunities available to qualified individuals.

The second phase of the program has been initiated with a bioanalysis of the aquatic life in the watershed. OHHS students have begun sampling and evaluating the number and type of invertebrates and aquatic life in

the watershed test sites. This will be compared with the chemical analysis of the test sites to obtain any correlations.

The environmental-minded coalition does not stop here. Other private industries, organizations, and civic groups have an interest in the program. Ms. Andrea Hales, Community Bank President for National City Bank in West Branch and program supporter, said, "The effort of the school, students, and teachers is a real asset to the community and the State of Michigan. Our environment and the protection of the environment should be of concern and interest to everyone. National City Bank is proud to be a sponsor of the Ogemaw Heights High School Water Warriors."

While OHHS is the lead school in the watershed testing, other schools, communities, and organizations are involved with the program. Schools involved within the entire 8700 square mile watershed include St. John's Lutheran School and Meridian School in Midland, Michigan; Arthur Hill High School and Saginaw High School in Saginaw, Michigan; and the Saginaw Chippewa School in Mt. Pleasant, Michigan. Some of the businesses involved include QuadSil Inc. in Midland, Michigan; Raven Analytical Laboratories in Roscommon, Michigan; Dow Corning Corporation; and National City Bank.

Sci-Fest Coming Again in October

Don't forget...this year's Sci-Fest will be on October 15 at Delta College from 10:30 a.m. to 2:30 p.m. This event will kick off National Chemistry Week 2005, October 16–22, 2005. The 2005 theme is "The Joy of Toys."



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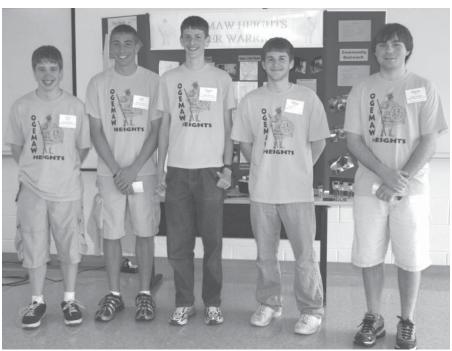
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Water Warriors Win Big at Michigan Envirothon 2005

Adapted from press release

Midland Section's Water Warriors took two firsts at the Michigan Envirothon 2005. Eleven high school teams, representing Berrien, Branch, Leelanau, Macomb, Oakland, Ogemaw, Tuscola, and Van Buren counties met at the Fort Custer Training Center, in Augusta, Michigan, on May 11 and 12, for the competition. The Fort Custer Training Center is a large Army National Guard Training Center that was established in 1917. The Fort Custer Training Center, together with the neighboring Fort Custer Recreation Area, makes up the third largest contiguous undeveloped area in southwest lower Michigan.

All of the teams participating in the 2005 Michigan Envirothon State Competition did a great job and deserve recognition for their efforts. The students made a great impression on the many adult volunteers who attended the event, not only with their intelligence and dedication, but in their ability to work hard and diligently on their projects and tests during the two-day event.



The Water Warriors (l-r): Eric Marshall, Jim McGrail, Sean Eagan, Greg Hisscock, David Sellers.

Each member of the three top winning teams received ribbons, plaques, Michigan tree and bird identification books, and four-year scholarships to Olivet College. Prizes were also given to the teams that scored highest on their Community Outreach Projects and on tests in each subject area.

The first-place prize went to the Water Warriors team from Ogemaw Heights High School in West Branch. Team members include Sean Eagan, Greg Hisscock, Eric Marshall, Jim McGrail, and David Sellers. The Team Advisors are Chris Powley, Doug Grezeszak, and Debra Green. This win is exceptional as it is the first year that they have participated in the competition. Each team member receives an Olivet College "Community Responsibility Scholarship" of \$2,000 per year for 4 years.

The Water Warriors also won First Place for the Community Outreach Project. The Water Warriors project for 2005 is two-fold. One component of their project is to establish baseline data for the Rifle River. This had previously not been done on a consistent basis. For the past year, students from the high school have performed weekly tests at five different sites along the Rifle River. The students tested for and collected data on nitrates, phosphates, dissolved oxygen, hardness, pH, flow, and temperatures of the water and air. To help fund their project for the four years that it will be conducted, John Blizzard, a retired chemist and member of the American Chemical Society, applied for and received a \$15,000 grant from the Dow Corning Foundation.

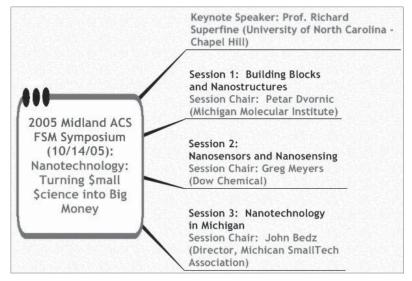
The second component of the Water Warriors project is to increase awareness of the importance of protecting drinking water supplies. To involve the community, with the help of the National City Bank in West Branch, elementary students, middle school students, and members of the general public were encouraged to bring water samples from their own homes to the bank office to be tested. The Water Warriors students tested the drinking water samples for hardness, total dissolved solids, and iron. Over 1000 tests were conducted, and the results were sent home with the participant along with an explanation of what had been done and phone numbers for local water quality companies. Throughout the duration of the project, the students have made presentations to many community groups and organizations, and plan on continuing to do so throughout the rest of their project.

Envirothon is an exciting and challenging way for high school students and their adult advisors to learn about natural resources. The program is designed to foster critical thinking, wise stewardship, and community involvement. The purpose of Envirothon is to provide environmental education to high school students, their team advisors, and their communities throughout the state of Michigan.

Announcing the 61st Annual FSM

By Gregg Potter

This year's Fall Scientific Meeting will be held on Friday afternoon, October 14, at the Dow Employee Development Center in Midland. The graphic below gives a taste of what's in store for attendees, followed by a list of selected session speakers. And there's more to come! Watch upcoming issues of *The Midland Chemist* and the FSM web page at http://membership.acs.org/m/midl/fsm05/about.htm. Don't miss this chance to learn about nanotechnology in Michigan!



- Prof. Brad Fahlman (CMU) "Synthetic Strategies for Novel Dendritic Nanocomposites and Nanoparticles"
- Dr. Steven Kaganove (MMI) "Uses of Dendritic Polymers in Sensing Applications"
- Prof. Richard Lane (U of M) "Perfect and Nearly Perfect Nanoconstruction Sites for Polyfunctional Nanoparticles and Nanocomposites from Silsesquioxanes"
- Dr. David Martin (U of M) "Nanostructured Polymers for Interfacing Electronic Devices with Living Tissue"
- Dr. Dale Meier (MMI) "Hyperbranched Polymers and their Applications in Nanostructured Coatings"
- Dr. Subra Muralidharan (WMU) "Nanosensors for Chemical Warfare Agents"
- Mr. Emery Scheibert (Dendritech) "Growing a Nanotech Company in Midland, MI"

Call for Posters

2005 Fall Scientific Meeting

By Gregg Potter

Please consider presenting a poster at the Fall Scientific Meeting, which will be held on Friday afternoon, October 14, 2005. Abstracts are being accepted now through Friday, September 16, 2005. All areas of chemistry and chemistry-related topics are invited.

Each abstract should contain title, author(s) and author(s) affiliations, and abstract body text. An example is shown below. The format specifics include:

- Single spacing with blank line between title and author and between author and abstract body text.
- Times New Roman typeface in 12-point size (or comparable).
- Submitted as an e-mail attachment in Microsoft Word (preferred) or other conventional word processor format.
- 225 words or fewer.
- Presenting author's name underlined. (Note: The e-mail address of the submitter will be the default contact person for all additional information.)

E-mail all abstracts to gpotter@dow.com. Address questions to Gregg Potter, Dow Chemical, 989-636-6310.

The Title of Your Abstract Is Displayed Here

John Doe and <u>Joe Smith</u>
Department of Chemistry, Saginaw Valley State University
University Center, MI 48410

This is an example of the abstract format. This is an example of the abstract format.

Directory of Graduate Research Available

From National ACS

The American Chemical Society ACS Directory of Graduate Research 2005 is the premier source of information on faculty and their research at programs in chemistry, chemical engineering, biochemistry, polymers and materials science, marine science, toxicology, medicinal/pharmaceutical chemistry, and environmental science in the U.S. and Canada. It lists faculty member biographical information, area of specialization, titles of all papers published within the last two years, individual telephone numbers, and FAX numbers. It also contains listings for over 600 academic programs, 10,000 faculty members, and 100,000 publication citations. Published in odd-numbered years by the ACS Committee on Professional Training, the 2005 edition of the Directory contains current faculty information for the 2005-2006 academic year.

DGRweb 2005, the online version of the DGR, is a fast, efficient search engine that contains all of the information in the print version of the Directory. With DGRweb 2005 you can search for faculty by virtually any field in the DGR, including specific research area, academic rank, gender, and state. Search results include complete contact information for faculty including direct links to faculty email addresses and web pages. Institutional searches provide all departmental contact information along with statistical data for the department and a complete list of faculty active in graduate research. Take DGRweb 2005 for a spin when it is released in late October 2005 at http://chemistry.org/education/DGRweb.

Call for Nominations

Citation for Chemical Breakthroughs Award

From National ACS

The Division of History of Chemistry (HIST) of the American Chemical Society solicits nominations for its new award program, Citation for Chemical Breakthroughs. This award recognizes breakthrough publications and patents worldwide in the field of chemistry. The term "breakthrough" refers to advances in chemistry that have been revolutionary in concept, broad in scope, and long-term in impact. Plaques, to be placed near the office or laboratory where the breakthroughs were achieved, will be presented annually to the departments and institutions at which these breakthroughs occurred. All nominations must be received by October 1, 2005. Information can be found on the HIST website, under the heading "Divisional Awards": http://www.scs.uiuc.edu/~mainzv/HIST/ or write to: hist_ccb@yahoo.com.

Turner Alfrey Program Well-Received

By Steve Keinath

This year's Turner Alfrey Visiting Professor program featured Professor Markus Antonietti from the Max Planck Institute and University of Potsdam. Professor Antonietti's topic was "Polymers and the Mesoscale: Rational Approaches toward Materials with Nanoscale Order and Improved Properties." It was an outstanding course with excellent breadth and depth. Antonietti presented an interesting philosophy of science, offering fresh insights into different ways of thinking about problems and potential solutions.

Course registrants numbered 110, including participants from Central Michigan University, Dow Chemical, Dow Corning, Michigan Molecular Institute, Michigan State University, and the Society of Plastics Engineers. The opening reception was attended by 35 people and the joint technical society dinner meeting was attended by 41 people. Other discussions and seminars were held at Dow, Dow Corning, MSU, CMU, and Dendritic Nanotechnologies.

Thanks to current TAVP program financial co-sponsors:

- Central Michigan University
- Dow Chemical Company
- Dow Corning Corporation
- Michigan Molecular Institute
- Michigan State University
- Mid-Michigan Section of the Society of Plastics Engineers
- · Saginaw Valley State University



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Call for 2006 Officer Candidates

By Anne Shim

Here is your chance to become more involved in your local ACS section. We need candidates to run for the following positions for 2006:

One-Year Terms

Chair-elect Treasurer

Secretary Chair, Nominations & Elections

Three-Year Terms

Councilors (1 slot open)

Alternate councilors (1 slot open)

Directors (3 slots open)

If you are interested in running for any of these positions or know someone who might be interested, please contact Anne Shim at 989-496-3067 or anne.shim@dowcorning.com. If you have any questions regarding what the positions entail, contact your current officers listed on the Leaders page of the Midland Section web site http://membership.acs.org/M/Midl/ and check out other information available on that page.

In Memoriam—Vernon Stenger

Adapted from the Midland Daily News

Vernon A. Stenger, a member of ACS since 1929, died June 21, 2005, at the age of 97. Stenger was born in Minneapolis, Minnesota, and was educated as a chemist, graduating from the University of Denver with B.S. and M.S. degrees in chemical engineering. He went on to earn a Ph.D. in analytical chemistry from the University of Minnesota.

Stenger came to Midland in 1935 and had a long, productive career as an analytical chemist at The Dow Chemical Company. He had numerous scientific articles and patents to his credit. In 1970 he received the prestigious Anachem award in analytical chemistry from the Association of Analytical Chemists. He retired from Dow in 1973, but continued working into his 90's. Upon his retirement, Dow's Michigan Division established the Vernon A. Stenger award, given for meritorious service in analytical science.

Stenger was also an accomplished musician and was featured on the cover and in an article in the February 2005 issue of *The Midland Chemist*. He was predeceased by his first wife Ruth Day and is survived by his present wife Eleanor and five children and their families.

4th International Dendrimer Symposium Deemed a Success

By Sonke Svenson

Central Michigan University (CMU), its Research Corporation (CMU-RC), and Dendritic NanoTechnologies, Inc. (DNT) were the hosts of the 4th International Dendrimer Symposium (IDS-4), which was held in Mount Pleasant, May 18–21. According to one seasoned dendrimer researcher who had attended the previous symposia, this symposium was "...the best IDS so far both scientifically, technically, and socially. It will be hard to match it." Approximately 280 people attended the symposium from all over the world.

Seventy-nine international speakers from the U.S., Canada, Germany, U.K., France, The Netherlands, Switzerland, Spain, Italy, Sweden, Japan, Australia, and Israel presented their research in nine sessions. The first two sessions were dedicated to the synthesis of dendrimers and dendritic polymers, still the unifying element of dendrimer research activities. The largest group of presentations was in the field of medical applications of dendrimers. Research in drug delivery, transfection, cell recognition, imaging, biomimetics, and adhesives was presented in three sessions. The next largest group, nanomaterials, catalysis, photonics, and electronics, filled two sessions. For the first time within this series, there was a session



IDS-4 local organizers Donald A. Tomalia and Sonke Svenson, Dendritic NanoTechnologies, Inc. (Photo courtesy Robert Barclay, CMU)

on commercial applications of dendrimers, featuring seven companies, and highlighting the fact that this field has matured from a lab curiosity to a respectable part of nanotechnology. Consequently, the last session of the symposium was dedicated to dendrimers in nanotechnology and nanomedicine.

The oral presentations were complemented with 94 "official" posters, although this author found almost 100 posters presented. A few attendees must have taken a chance and added last-minute contributions—a clear sign of the immediacy of this symposium. Those interested in details of the talks and posters will find more information on the IDS-4 website at www.ids4.org. In addition, the book of abstracts is still available for a small contribution. If you are interested, please contact Audra Buchanan at bucha1al@cmich.edu. The commercial activities and a few selected medical applications were highlighted as the cover story of the June 13 issue of *Chemical & Engineering News* (pp 30–36).

Preceding the symposium were two workshops on atomic force microscopy and nuclear magnetic resonance techniques for dendrimer research, presented by experts from CMU, the Michigan Core Technology Alliance, and Molecular Imaging, Inc. The evenings provided plenty of opportunity to network, with dinners at the Comfort Inn of Mt. Pleasant and the Mountain Town Station & Brewing Company. The conference dinner at the Soaring Eagle Casino & Resort featured the plenary speaker Dr. Ajaz Hussain, Deputy Director at the FDA, who provided the FDA view on "Engineering a Proactive Decision System for Pharmaceutical Quality." A sample of local culture was offered to the international attendees via a visit to the Ziibiwing Cultural Center, where the Chippewa tribe presents its history and culture.

This symposium is held every other year and is clearly the premier conference series in the fast-moving field of dendrimers. After symposia in Frankfurt (1999), Tokyo (2001), and Berlin (2003), this year's symposium was the first one offered in the United States. Michigan was certainly an appropriate location, being the center of U.S. dendrimer research, with research activities at CMU, University of Michigan, Michigan State University, Wayne State University, and Michigan Molecular Institute (MMI); the National Dendrimer & Nanotechnology Center located at the CMU campus; and commercial activities by DNT and Dendritech, Inc. The organizing committee included Donald A. Tomalia, DNT, (chair); Jean M.J. Fréchet, University of California, San Francisco; J. Fraser Stoddart, University of California, Los Angeles; and Sonke Svenson, DNT (Scientific Program Coordinator). The next symposium will be held in 2007 in Toulouse, France, organized by Prof. Jean Pierre Majoral and Dr. Anne-Marie Caminade.

National ACS Releases 2004 Annual Report

From National ACS

The ACS Office of Communications is pleased to announce the release of the 2004 ACS Annual Report. Members are invited to view the enhanced web edition of the report online at http://chemistry.org/acsannualreport.

The enhanced web version of the report includes embedded links to the web sites of various Society programs, along with additional highlights of the Society's operational divisions.

Please take this opportunity to browse through the report and perhaps even share it with others. It's a great way to provide them with some insight into what it means to belong to the world's largest scientific society.

The Office of Communications welcomes your questions, comments and feedback at annualreport@acs.org. Members may also request a printed copy of the 2004 ACS Annual Report by sending an e-mail to annualreport@acs.org.

Update on MMTG Events

By Becky Swanson

MTG has held one event since our last update. MMTG and YCC members were invited to a lunchtime presentation about fireworks on June 22nd at Plymouth Park. The presenter, Jim Malek, is a retiree from Dow Corning after 33 years as a chemist and has been a member of the Pyrotechnics Guild International, the Michigan Pyrotechnic Arts Guild, and the National Fireworks Association. Jim's presentation, entitled "What you should know about fireworks," was tailored to enlighten a technical audience. He discussed how pyrotechnics are constructed, and the chemistry involved in color production. He included a brief history, a description of the different types of fireworks, and of course, safety. He also demonstrated a few of the Michigan legal consumer fireworks. A total of 35 people were in attendance. Thank you to all who participated!

MMTG is working to identify candidates for upcoming elections. Elections for 2006 will be held slightly earlier this year due to two vacancies on the 2005 board of directors. Please contact me by e-mail, raswanson@dow.com, if you would like to benefit more from your membership and help plan upcoming MMTG events. You can also nominate someone for a position.

MMTG would also like to welcome our new members:

Amy Cooper Melissa Kloha Mary Williams

Joy Grundy Michelle Rivard

Scholarship Fund Honors Nick Angelotti

By Dave Angelotti

The Nicholas C. Angelotti Undergraduate Research Fund in Analytical Chemistry has been established at the University of Notre Dame to support undergraduate student(s) who wish to pursue independent research with the potential goal of graduate study in chemistry or biochemistry.

Established by family and friends of the late Nicholas C. Angelotti, undergraduate research funds allow selected students a tremendous opportunity to work with Notre Dame faculty in specific areas of research. Support from the fund will enable travel, equipment, and other related expenses to be acquired, giving the student a truly "capstone" undergraduate experience. This endowment offers students a unique experience that cannot be duplicated in the classroom. Learning is deepened when students develop an intellectual relationship with their professors.

A 1950 graduate of the University, Nicholas C. Angelotti achieved a B.S. degree in chemistry and then furthered his education with an M.S. degree in analytical chemistry at the Case Institute of Technology in 1952. Following a short career at Diamond Alkali and a two-year stint in the U.S. Army, Nick then began his 42-year career with Dow Corning, rising through the ranks, retiring as an Associate Analytical Scientist.

Esteemed by his colleagues for his analytical prowess, Nick was never happier than when he was at the bench dissecting chemicals into their basic parts. It is for this reason that the Nicholas C. Angelotti Undergraduate Research Fund has been established—to reward upcoming chemistry students who wish to do research and to give them the opportunity to spend time at the bench as did Nick.

Additional contributions are welcome—please send to the attention of: Carol J. Hennion University of Notre Dame Development Donor Services 1100 Grace Hall Notre Dame, IN 46556

In Memoriam—Eric Larsen

Contributed by Elisabeth Larsen

Eric R. Larsen, research scientist, retired from The Dow Chemical Company of Midland, Michigan, died April 6, 2005, at the age of 76. Born in Port Angeles, Washington, Larsen earned a B.S. in chemistry from the University of Washington in 1950, and a Ph.D. in organic chemistry in 1954 from the University of Colorado. He also served in the U.S. Army during the Korean Conflict.

He joined The Dow Chemical Company in the Chemical Engineering Laboratory as a fluorine chemist, and later became associate scientist and research scientist in the Halogens Research Laboratory. There he authored or coauthored more than 15 scientific papers, more than 100 patents, and several book chapters on such important topics as flame inhibitors, inhalation anesthetics, chain transfer agents, and inorganic bromides as he applied creative new ideas to research, production, technical service, development and business. Some specific compounds that benefited from his touch include methoxyflurane, chloroacetylchloride, neopentylbromide, vinyl bromide, ethylene dibromide, titanium tetraiodide, etc.

Larsen retired from Dow in 1986 and continued to generate creative new ideas and reduce to practice as a private consultant serving many chemical companies. He was a member of the Editorial Advisory Board of the *Journal of Fire Sciences* since its inception in 1983. Over the years, he contributed numerous papers to the *Journal*, the most recent being published in the March 2005 issue.

He is survived by a son, three daughters, six grandchildren, a brother, a sister, and several nieces and nephews. He was predeceased by his wife of 35 years, the former Donna Jean Hesselius, in 1991. The family will be accepting his 50-year ACS award this fall.

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ACS Initiates Program for Chemistry Clubs

From National ACS

This fall, the ACS Education Division will initiate a pilot program for affiliated high school chemistry clubs across the U.S. Plans for contacting interested teachers, producing a handbook, identifying interesting and appropriate club activities, and establishing contacts with membership programs are underway. Staff also plans to set up a web page for posting resources and encouraging communication among clubs. As funds permit, logo-bearing banners and pins will add to the starter package.

Supporting and establishing ACS high school chemistry clubs is an attractive idea that has been under discussion for several years. A survey sent out to high school teacher members—several of whom already sponsor clubs—confirmed support for such a program. A self-selected group of these teachers is already on board for the 2005-06 pilot program and will receive assistance from the Office of High School Education in launching their chemistry clubs. Additionally, these teachers will be encouraged to contact their local ACS sections and nearby ACS Student Affiliate Chapters to initiate joint activities and acquire member support.

This program is designed as a member benefit for high school teacher members. In order to be an ACS high school chemistry club advisor, the teacher must be a member of the Society, and/or a national, divisional, or local section affiliate.

Local ACS sections are encouraged to be pro-active in this pilot phase of the project. Any section wishing to initiate a partnership with an area high school to establish an affiliated club is welcome to move forward with the plan. Education Division staff will include the school in the pilot plan, supplying available resources and support. Please e-mail staff at education@acs.org with questions, plans and/or suggestions. Initial support for the clubs may include the following:

- A tabbed binder and CD with detailed start-up materials for establishing a club
- · A sample constitution and bylaws
- A charter application
- Safety-reviewed activities (Some of these will support various established ACS programs like National Chemistry Week, etc.)
- Career information
- Information on ACS Accredited Colleges and Universities
- A website
- Logo imprinted items (pins, banners, perhaps t-shirts and other items)
- Contact information for Local Sections and Student Affiliate groups
- Community Service Project ideas

Younger Chemists Celebrate Summer

By Joel Kern and Buford Lemon

Greetings, and welcome to the beautiful summer of 2005! This year, as always, brings sweet, sweet respite from the long Michigan winter along with something new—YCC events! We hope you were able to join us on at least one of our recent outings.

A social/grub gathering at Oscar's in Midland on May 12 brought YCC members together, many for the first time, with chatting and much discussion of younger chemists' roles in industry and academia. An added bonus was the presence of a large number of more experienced chemists and leaders from Dow who happened to be in attendance at two other strategically timed events (your chair-elect's (Buford's) birthday celebration and a large group meeting).

Next up was our evening (now becoming a recurring theme) at Mountain Town Station in Mt. Pleasant on June 30, where YCC members from Dow, Dow Corning, and CMU gathered to trade stories and network. Holding meetings here serves to draw Midland folks out of their warm, cozy confines and network across the various parts of our Section—an activity sorely needed and often difficult to achieve. Please make it a point to try to attend one of our gatherings held outside of Midland—you'll surely meet some great people, learn a lot, and be glad you did!

We'd love to see you at our August outings. First, we'll be floating down the river on Friday, August 5, at the Chippewa River Outfitters at noon on Lincoln Rd. in Mt. Pleasant. You can reserve a canoe, kayak, or inner tube by e-mailing Joel Kern at jmkern@dow.com.

Next, we're going out to the ballpark! Join us on Thursday, August 25, at 7 p.m. to watch the Lansing Lugnuts do their thing! While the July 15 deadline will have passed by the time you read this, I'm sure you'll be able to sweet-talk Wendy Flory (past YCC chair) or Joel into getting you in (e-mail Wendy at wcflory@dow.com and plan to have \$\$ to her by August 11). There's nothing quite like discussing molecular orbitals while counting strikes and balls, let me tell you.

Finally, if you have any suggestions about new events in the future, or how to improve the ones we're currently holding, please e-mail and let us hear what's on your mind.

Buford (midland_acs_chair_elect@yahoo.com)
Joel (jmkern@dow.com)
Pat (pbsmith@dow.com)

Call for Nominations

2005 Midland Section Awards

By Minghui Chai

Outstanding Achievement and Promotion of the Chemical Sciences

Each year the Midland Section honors an individual residing within the Section's geographical area who has demonstrated outstanding achievement and promotion of the chemical sciences. This award recognizes dedication and service to the chemical profession. The recipient need not be an ACS member. Nominations should include a biographical sketch, list of pertinent publications, evidence of professional growth and involvement, and letters of support from colleagues. Previous recipients are:

1976	Turner Alfrey, Jr.	1991	Thomas H. Lane
1977	Etcyl H. Blair	1992	Donald A. Tomalia
1978	David C. Young	1993	Dale J. Meier
1979	Vernon A. Stenger	1994	Philip T. Delassus
1980	Daniel R. Stull	1995	Duane B. Priddy
1981	Bob A. Howell	1996	Hans G. Elias
1982	Wendell L. Dilling	1997	Ludo K. Frevel
1983	Donald R. Weyenberg	1998	Patrick B. Smith
1984	Edwin P. Plueddemann	1999	David E. Henton
1985	Raymond P. Boyer	2000	Steven J. Martin
1986	Stanley P. Klesney	2001	Edwin C. Steiner
1987	Warren B. Crummett	2002	Thomas J. Delia
1988	A. Lee Smith	2003	Robert M. Nowak
1989	Do Ik Lee	2004	Herbert D. (Ted) Doan
1990	Joseph E. Dunbar		



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Outstanding Service to the American Chemical Society

The Section sponsors an annual award to recognize outstanding service to the Midland Section of the ACS. This award recognizes achievement in the promotion of the goals of ACS. Nominees shall be members of the Midland Section. Nominations should include a biographical sketch, a history of service to the Midland Section, and supporting letters from fellow ACS members. Previous recipients are:

1989	David C. Young	1997	Thomas H. Lane
1990	Linneaus C. Dorman	1998	Vicky S. Cobb
1991	Donald R. Petersen	1999	Theodore E. Tabor
1992	Wendell L. Dilling	2000	Peter and Patricia Dreyfuss
1993	Bob A. Howell	2001	George W. Eastland, Jr.
1994	Eldon L. Graham	2002	Joan Sabourin
1995	Gretchen S. Kohl	2003	John Blizzard
1996	Fran K. Voci	2004	Steven Keinath

Outstanding Chemical Technician

The Section presents an annual Outstanding Chemical Technician Award to an individual who has demonstrated an extremely high degree of professionalism as a chemical technician. 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 Associates 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. Criteria used to judge the award include job skills, safety, teamwork, leadership, publications and presentations, reliability, communication skills, and additional professional and community activities. Nominees must have worked for five years as a chemical technician. Chemical technicians do not need to be a TECH Division Affiliate or ACS member to be eligible for this award. Nominations should include a biographical sketch and supporting letters that address each of the criteria above. Previous recipients are:

1997	Connie J. Murphy	2001	Gordon R. Roof
1998	David Stickles	2002	Cynthia J. Gould
1999	Ronald L. Good	2003	Robert D. Krystosek
2000	Kurt A. Bell	2004	Sharon Allen

Nominations for *all three* awards are invited. The deadline for receipt of nominations and all supporting materials is *September 2, 2005*. Nominations should be sent to:

Minghui Chai Central Michigan University Department of Chemistry Mt. Pleasant, MI 48859

Fax 989-774-3883 or electronic nominations are also welcome. If you have questions or need additional information, please contact Minghui at 989-774-3955 or chai1m@cmich.edu. Nominators should provide their address and phone number in case the committee needs to contact them. The Awards Committee encourages all section members to nominate deserving colleagues and appreciates your efforts in helping these individuals receive recognition for their efforts. We look forward to hearing from you!

In Past Issues of The Midland Chemist

By Wendell L. Dilling, Midland Section Historian

- 40 Years Ago This Month—The Annual Ladies' Night Banquet will be held September 29, 1965, at The Embers in Mt. Pleasant. Tickets are \$3.75 per plate. Charles H. Rutledge of duPont's Textile Fibers Department will speak on "Fibers, Fabrics, Females, and other Factors, If Any."
- 30 Years Ago This Month—Dr. Helmut Ringsdorf, professor of Organic Chemistry at the University of Mainz, Federal Republic of Germany, will teach a short course, "Synthetic Polymers in Biomedicine," on Monday through Thursday, September 8–11, 1975, 3:00 p.m. to 6:00 p.m., at Midland Macromolecular Institute.
- 20 Years Ago This Month—The Second Annual Authors' Night will be held Monday, September 30, 1985, at 7:30 p.m. at the Chemistry Department, Brooks Science Hall, Central Michigan University in Mt. Pleasant. Dr. Benjamin J. Luberoff, President, ConcepTeam, Inc. and editor of *CHEMTECH*, will speak on "Creative Listening." Also 20 poster papers on 1984 publications and patents will be shown by Midland Section authors and inventors.
- 10 Years Ago This Month—The Midland Section was recently announced as the winner of an unprecedented fifth consecutive award for outstanding performance. No local section in any size category has won five consecutive awards previously.

Important Dates on the ACS Midland Section Calendar

Aug 8	Midland Section board meeting, Saginaw Valley State University, 7:00 p.m., Science East, Room 222
Aug 15	Professionals Day, Midland County Fair, 4:00 p.m.–7:00 p.m. (Rebecca Swanson, mmtg_chair@yahoo.com)
Aug 25	YCC at Lansing Lugnuts game, 7:00 p.m. (Wendy Flory, wcflory@dow.com)
Sep 2	Deadline for award nominations (Minghui Chai, 989-774-3955 or chai1m@cmich.edu)
Sep 12	Midland Section board meeting, Delta College Midland Center, 7:00 p.m., room number will be posted at the Center
Sep 12	Deadline for October issue of <i>The Midland Chemist</i>
Sep 16	Deadline for poster abstracts for the Fall Scientific Meeting
Oct 10	Midland Section board meeting, Delta College Midland Center, 7:00 p.m., room number will be posted at the Center
Oct 14	Fall Scientific Meeting, Dow Employee Development Center, more information available later
Oct 15	Sci-Fest, Delta College, 10:30a.m2:30 p.m.

AMERICAN CHEMICAL SOCIETY P.O. Box 2695 Midland, MI 48641-2695

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