



Northeast Middle School Students Blast Off with Chemistry! *See page 3.*

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THE MIDLAND CHEMIST

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Please submit all articles and photographs to the editor, Ann Birch. Instructions for article submission are on the Midland Section web site, as is contact information for other staff members. Authors can also contact Ann directly with any questions.

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*Chair Column***Summertime...and the Livin' is Easy**

While many of us are enjoying summer vacations and holidays with a bit of rest from our busy schedules, the ACS Midland Section continues its efforts in many areas. I'd like to start by congratulating the Section on the six Chemluminary award nominations that we recently received from National ACS. The final awards decisions will be announced at the National ACS meeting in Boston in August. Thanks to all the Section members and leadership in 2006 who worked so hard to earn these nominations!



Dee Strand, Chair
ACS Midland Section

Many of us are also making preparations for fall activities. First, our elections are held in October. Many thanks to those of you who have agreed to run for elected positions for 2008. These roles are fun and rewarding and give each of us an opportunity to stretch our leadership skills and meet new colleagues. If you want to meet these folks who are willing to serve, plan on attending our ACS open house scheduled for Thursday, September 13, at Plymouth Park in Midland.

We are also accepting nominations for our Fall Awards. If you know someone who qualifies, please nominate them! This is a great way to get external recognition for co-workers. Categories include "Outstanding Achievement and Promotion of the Chemical Sciences," "Outstanding Service to the ACS," and "Outstanding Chemical Technician."

Mark your calendars for our Fall Scientific Meeting, scheduled for Friday, October 19, at the Midland Center for the Arts. The theme is "Chemistry and the Greatest Challenges of the 21st Century: Energy, Food, and Water," and our keynote speaker is National ACS President Katie Hunt, who will be discussing sustainability in energy, water, and food. This is an excellent opportunity for all of you to present posters on your work. Posters do not have to be related to the theme. Poster abstract submissions are due by September 14.

Finally, the end of October marks National Chemistry Week, where our Section truly shines with many activities and outreach programs that get kids and adults excited about science and learning.

Looking over the wide range of programs and activities that I have outlined here, one can't help but notice the scope of efforts. These range from social events to scientific meetings with opportunities to present research

to recognition and outreach. As you can see, ACS has something for everyone! If you are interested in getting involved in this award-winning section—please contact me at strandda@dow.com. You'll be glad you did!

Deidee A. Strand

Call for Posters

2007 Fall Scientific Meeting

By Dale Meier

Please consider presenting a poster at the Fall Scientific Meeting, which will be held on Friday afternoon, October 19, 2007, at the Midland Center for the Arts. Abstracts are being accepted now through September 14, 2007. The theme for the meeting will be "Chemistry and the Greatest Challenges of the 21st Century: Energy, Food, and Water." However, posters covering 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. 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 Joel Kern (jmkern@dow.com). Address questions to Dale Meier (meier@mmi.org), 989-832-5555 x577. More information is available from the FSM web pages at <http://membership.acs.org/m/midl/>.



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Northeast MS: Yes, This *Is* Rocket Science!

By Dee Strand

The Midland Section ACS sponsored “Rocket Days” at Northeast Middle School in Midland earlier this summer. A group of middle-school students with mentors spent one day after school building and learning about rockets. They then shot off the rockets and designed experiments to learn about the physics



Serious preparations are underway for rocket blast off.

of flying. The students that were involved enjoyed this so much that they, along with their teacher, Christine Brillhart, are planning on starting a Rocket Club at Northeast next fall. This would be an excellent opportunity for ACS members who are secretly rocket scientists to get involved!



(l-r) Nick Israel, Nick Torres, Jonah Israel, Cody Bauer, Mrs. Christine Brillhart (teacher), Dr. Mike Rangitsch (Dow Chemical), Megan Ginther, Ms. Melanie Tseng (Dow Corning)

Thanks to Midland Section

*Debbie Anderson, Science Education Coordinator,
Alden B. Dow Museum of Science & Art*

To the Midland Section:

On behalf of the Alden B. Dow Museum of Science and Art, I would like to thank you for your participation in our Summer Art Fair. Your presence at the Children's Corner with the Chemical Chromatography Dyeing exhibit was a HUGE hit, and over 40 children got to experience the wonders of chemistry. It was nice to hear them asking their parents if they could "Do Science."

I hope that you will be able to participate in the same capacity next year. We appreciate your help in expanding our experience offerings to the children that come to the Art Fair. The proceeds from these projects help to fund the educational offerings and exhibitions of the Alden B. Dow Museum of Science and Art.

Midland Section Up for Six National Awards!

By Dee Strand

Katie Hunt, ACS president, has announced that the Midland Section has been selected as a finalist for the following ChemLuminary Award(s):

- Committee on Community Activities—Outstanding On-Going NCW Event
- Committee on Local Section Activities—Outstanding Performance by a Local Section Medium Size Category Award
- Committee on Minority Affairs—Best Overall Local Section Minority Affairs Committee
- Committee on Public Relations & Communications—Outstanding Continuing Public Relations Program of a Local Section
- Joint Committee on Local Section/Division Interaction—Local Section/Division Interaction Award
- Younger Chemists Committee—Outstanding or Creative Local Section Younger Chemists Committee Event

Recipients will be announced and the presentation of awards will be at the 234th ACS National Meeting in Boston, MA on Tuesday, August 21, at the Westin Copley Place Hotel—America Ballroom. The presentations will include awards given by 11 committees of the Society.

ChemShorts for Kids

Homemade “Floam”

Please note: All chemicals and experiments can entail an element of risk. Experiments should not be performed without proper adult supervision.

What is like slime with polystyrene beads in it that can be molded into shapes? It's a really fun toy called Floam™. You can sculpt with this colorful goop or use it to coat other objects. You can store it to reuse it or allow it to dry if you want permanent creations. It's a lot of fun, but not always easy to locate. So, you can make a type of “Floam” yourself. Like slime, it is generally safe, though anything containing food coloring can stain surfaces (don't eat it, because polystyrene beads simply aren't food!).

Here is what to do:

- Dissolve 2 tsp. borax completely in ½ cup water. (If you want slimier, more flexible “Floam,” then try 1 tsp. borax instead)
- In a separate container, mix ¼ cup white glue and ¼ cup water. Stir in food coloring.
- Pour the glue solution and about 1⅓ cup of polystyrene beads into a Ziploc® plastic bag. Add borax solution and knead it until it's well mixed. Use 1 tbsp. of the borax solution for a very fluid Floam, 3 tbsp for average Floam, and the entire amount for stiff Floam.

To keep your Floam, store it in a sealed bag in the refrigerator (this discourages mold). Otherwise, you can allow it to dry into whatever shape you choose.

How it works:

Borax reacts to crosslink the polyvinylacetate molecules in the glue. This forms a flexible polymer.

Tips:

- If you use a 4% solution of polyvinylalcohol instead of glue, you will get a more transparent product that will hold shapes better.
- Polystyrene beads can be found at craft stores (e.g., JoAnn Fabrics), usually as fillers for bean bags or dolls. Or, for more hands-on fun, you can grind foam cups using a cheese grater.

Reference:

Anne Marie Helmenstine's “About Chemistry” at <http://chemistry.about.com/od/chemistryhowtoguide/ht/floam.htm>

Reprinted with permission from Dr. Kathleen A. Carrado, Chicago Local Section.

History of Midland Section Alive and Well

By Ann Birch and Wendell Dilling

Did you know that materials in the Section archives go back to 1919, the year the Midland Section was founded? A wealth of information is contained in the archives and is accessible to members and researchers. As Section historian, Wendell Dilling (dilli1wl@cmich.edu) is the primary contact for historical information. Along with the other committee members, Robert E. Kohrman and Jennifer A. Walton, Wendell oversees the collection and updates the materials on an annual basis.

Examples of documents added to the Midland Section American Chemical Society archives in June 2007 include:

- 2006 Annual Report.
- Minutes of the Board of Directors' meetings, 2006.
- Web site information, 2006, parts 1 and 2.
- *The Midland Chemist*, 2006, Vol. 43, No. 1–6.
- Central Regional Meeting and 39th Silicon Symposium report (2006) and photo album (CD).
- Central Regional Meeting program booklet (2006).
- Science Education and Awards Banquet program booklet (2006).
- Six Salute to Excellence awards for 60-year members (2006).
- 2006 Midland Section electronic photo album (CD).
- 1999 Best Overall Technician Affiliate Group Award trophy.
- 2001 Local Section Outstanding Performance Award, Medium-Large Size Category trophy.
- 2001 Most Innovative Technician Affiliate Group Award trophy.
- 2003 ChemLuminary Award—Outstanding New Local Section Younger Chemists Committee trophy.

An annual contribution of \$100 is made to Clarke Historical Library (CMU) as token of thanks for their processing and maintenance of Midland Section archives during 2006.

Open House: Meet the Candidates!

By Dee Strand

**Thursday, Sept. 13, 4:30–6:00 p.m.
Plymouth Park Shelter A, Midland (by the Fun Zone)**

Come meet fellow ACS members and candidates for local section offices! We'll serve snacks, beverages, and fellowship. Contact Dee Strand (strandda@dow.com) for more information.

President Hunt To Be FSM Keynote Speaker

By Ann Birch

Catherine (Katie) T. Hunt, president of the American Chemical Society, will be giving the keynote address at the 2007 Midland Section Fall Scientific Meeting, October 19, at the Midland Center for the Arts. Dr. Hunt is leader of technology partnerships at Rohm and Haas, Spring House, Pa. She received her A.B. from Smith College and her Ph.D. from University of California, Davis. She has been an ACS member since 1977.



The theme for this year's FSM is "Chemistry and the Greatest Challenges of the 21st Century: Energy, Water, and Food." The general chair for the meeting is Dale Meier, a scientist at Michigan Molecular Institute. Program chair responsibilities are being shared by Pat Smith, a scientist at The Dow Chemical Company, and Petar Dvornic, a scientist at Michigan Molecular Institute. Location for the meeting is the Midland Center for the Arts.

A poster session in the afternoon will provide participants with an overview of research being conducted not only by Midland Section industry and academia, but other institutions as well. There will also be a vendor exposition throughout the afternoon. The poster session will be followed by three symposia.

Address questions to chair Dale Meier (meier@mmi.org), 989-832-5555 x577. More information is available from the FSM web pages at <http://membership.acs.org/m/midl/>.



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Invites all ACS, MMTG, YCC, and TECH Members to

Professionals' Day

The Annual Members Only Event

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4:00 - 7:30 PM

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Candidates for 2008 Leadership Announced

By Brett Zimmerman

On behalf of the Nominations and Elections Committee, I would like to thank those who have agreed to run for 2008 local section leadership thus far. The current slate of candidates is as follows:

Chair-Elect	Angelo Cassar Tina Leaym	
Secretary	Michelle Cummings Beth Nichols	
Treasurer	Gregory Becker Brian Marinik	
Chair, NEC	Kevin Lewis Kevin Weir	
Councilor	Kurt Brandstadt Connie Murphy	
Alt. Councilor	Gretchen Kohl Mike Owen	
Directors	Doug Beyer Wendell Dilling Bob Dion	Petar Dvornic Steve Keinath Dave Stickles

Nominations from the floor will be accepted at the August 13 and September 10 board meetings (see the calendar on the web site for details). Please be aware that any nominees will have had to accept the nomination prior to their announcement from the floor. Also, please consider your involvement within the Midland Section—if you're not running for a board position, look into other great areas for you to serve.

Committee members include Brett Zimmerman (chair), Jennifer Dingman, Bob Howell, Dee Strand, and Dorie Yontz.

2007 Sci-Fest Scheduled

Sci-Fest 2007 will be held at Delta College on October 27, 2007, from 10:00 a.m. to 2:00 p.m. More information will be available in future issues of *The Midland Chemist*.

Funds Available for Collaborative Career Development Activities

From National ACS

Proposals are being sought for “Equipping the 2015 Chemical Technology Workforce” mini-grants. Up to \$500 will be awarded to collaborative activities that support technician education and career development.

Recognizing a need to support chemical technicians in the rapidly evolving chemical enterprise, several ACS units joined together in 2006 to start Equipping the 2015 Chemical Technology Workforce with the following goals:

- Raise awareness of the changing needs of chemical technicians
- Highlight opportunities for industry, academia, professional societies, and the community to collaborate on meeting those needs
- Increase involvement of technicians in the American Chemical Society

The winners of the first round of mini-grants, awarded in spring 2007, are collaborating with industry, academia, and ACS local sections on such activities as chemical technology career fairs for high school students, discussion panels on employability skills for technicians, etc.

To qualify for a mini-grant in the second round of awards in October 2007, activities must involve one or more sectors of the chemical enterprise (industry, academia, etc.) and be completed by the summer of 2008. Activities must also support one or more of the goals of Equipping the 2015 Chemical Technology Workforce. Proposals must be received by 26 September 2007.

To learn more about Equipping the 2015 Chemical Technology Workforce and the mini-grants, to get ideas for activities, or to gather information about the chemical technology profession in today’s marketplace, please visit www.ChemTechLinks.org and click on “Equipping the 2015 Chemical Technology Workforce,” or e-mail ChemTechLinks@acs.org.

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*Call for Nominations***2007 Midland Section Awards***By Scott Gaynor***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.	1992	Donald A. Tomalia
1977	Etcyl H. Blair	1993	Dale J. Meier
1978	David C. Young	1994	Philip T. Delassus
1979	Vernon A. Stenger	1995	Duane B. Priddy
1980	Daniel R. Stull	1996	Hans G. Elias
1981	Bob A. Howell	1997	Ludo K. Frevel
1982	Wendell L. Dilling	1998	Patrick B. Smith
1983	Donald R. Weyenberg	1999	David E. Henton
1984	Edwin P. Plueddemann	2000	Steven J. Martin
1985	Raymond P. Boyer	2001	Edwin C. Steiner
1986	Stanley P. Klesney	2002	Thomas J. Delia
1987	Warren B. Crummett	2003	Robert M. Nowak
1988	A. Lee Smith	2004	Herbert D. (Ted) Doan
1989	Do Ik Lee	2005	Mike Owen
1990	Joseph E. Dunbar	2006	Robert E. Kohrman
1991	Thomas H. Lane		

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	1998	Vicky S. Cobb
1990	Linneaus C. Dorman	1999	Theodore E. Tabor
1991	Donald R. Petersen	2000	Peter and Patricia Dreyfuss

1992	Wendell L. Dilling	2001	George W. Eastland, Jr.
1993	Bob A. Howell	2002	Joan Sabourin
1994	Eldon L. Graham	2003	John Blizzard
1995	Gretchen S. Kohl	2004	Steven Keinath
1996	Fran K. Voci	2005	Ann Birch
1997	Thomas H. Lane	2006	Philip Squattrito

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	2002	Cynthia J. Gould
1998	David Stickles	2003	Robert D. Krystosek
1999	Ronald L. Good	2004	Sharon Allen
2000	Kurt A. Bell	2005	Bill Rievert
2001	Gordon R. Roof	2006	Margo McIvor

Nominations for **all three** awards are invited. The deadline for receipt of nominations and all supporting materials is **September 15, 2007**. Nominations should be sent to:

Scott Gaynor, Awards Committee Chair
The Dow Chemical Company
1603 Bldg.
Midland, MI 48674
Phone: 989-638-1806; Fax: 989-636-6454
e-mail: sggaynor@dow.com

If you have questions or need additional information, please contact Scott directly. 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**—*In* The Chairman's Column by D.R. Weyenberg: "The professional chemist is a perpetual student and one of the major responsibilities of his society is in assisting his continual quest for new understanding." Also, Annual Ladies' Night Banquet, Featuring Dr. S.F. Darling, The Institute of Paper Chemistry, "The Story Behind Cosmetics," Monday, September 18, 1967, 6:30 p.m., Social Hour; 7:00 p.m. Dinner Served Promptly, The Country Squire, Midland, Michigan.
- **30 Years Ago This Month**—Call for Papers, Invitation to Participate, 33rd Fall Scientific Meeting, American Chemical Society, October 29, 1977, Midland, Michigan, Meeting Theme: "Academic-Industrial Interface: Meeting Future Challenges", Keynote Speaker: Dr. Anna J. Harrison, President-elect, American Chemical Society.
- **20 Years Ago This Month**—43rd FSM—Final Call for Papers, The 43rd Fall Scientific Meeting sponsored by the Midland Section ACS in cooperation with the Dow Chemical Company and Dow Corning Corporation, will be held at H.H. Dow High School on Saturday, October 31, 1987. The meeting is being held in conjunction with the ACS National Chemistry Day and the theme of the meeting will focus on the role that chemistry has played in raising the quality of our lives.
- **10 Years Ago This Month**—Members and Friends Celebrate National Historic Landmark Recognition, The H.H. Dow Museum was dedicated as a National Historic Chemical Landmark on May 29, commemorating Even's mill as the site of Herbert Dow's first production of bromine by electrolysis. Officials and dignitaries that attended the function included Ned D. Heindel, chair, ACS National Historic Chemical Landmark Program Advisory Committee; Paul S. Anderson, president, ACS; Richard M. Gross, vice-president and director, Michigan Operations, The Dow Chemical Company; E. Ned Brandt, director, Midland County Historical Society; Paul J. Popa, Dow Corning Corporation, and State Senator Joel Gougeon, 34th District.

Important Dates on the ACS Midland Section Calendar

Aug. 13	Midland Section board meeting, 7:00 p.m., Saginaw Valley State University, Dean's Conference Room, Room 238, of the Pioneer Hall of Engineering and Technology	Sept. 10	Midland Section board meeting, MidMichigan Innovation Center, 7:00 p.m., Core Conference Room, Directions (Chair will e-mail teleconferencing information)
Aug. 16	Professionals Day, Midland County Fairgrounds, Brown Picnic Building, 4:00–7:30 p.m. (Jennifer Dingman, j.dingman@dowcorning.com)	Sept. 13	Midland Section Open House "Meet the Candidates," Plymouth Park Shelter A, Midland (near the Fun Zone), 4:30–6:00 p.m. (Dee Strand, strandda@dow.com)
Aug. 19-23	234th ACS National Meeting, Boston, MA, http://acswebcontent.acs.org/nationalmeeting/boston2007/home.html	Sept. 14	Deadline for Fall Scientific Meeting posters (Joel Kern, jmkern@dow.com)
Sept. 3	Deadline for October issue of <i>The Midland Chemist</i>	Sept. 15	Deadline for nominations for Section awards (Scott Gaynor, ssgaynor@dow.com)

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