



Sci-Fest Brings Science to Children, Families, p. 3



List of 2002 Board Members, Committee Chairs, and MMTG Leaders, p. 12

THE MIDLAND CHEMIST

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Cover photograph by Angelo Cassar.

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Chair Column

A Word from the Acting Chair

One of the responsibilities of the chair-elect as directed by our bylaws is to serve as acting chair in the absence of the chair. There will be such an absence for a while. Pat is not fully fit at this moment and although there is every expectation of a complete recovery, it is essential that he devote himself wholly to that process. We wish him a speedy return to full health. Meanwhile, I have this earlier-than-usual occasion to make this contribution.

Chairs-elect enjoy a great opportunity to attend an ACS Leadership Conference specifically designed to help us lead our local section. I'm going in March and expect, among many other things, to learn what's appropriate and what's not in a column such as this. Until then I'll be relying on my fellow board members for help and guidance. Thankfully, I'm pleased to report there is more than one past-chair on the board. One obvious thing I can do is to use this column to help fulfill the promises I made as a candidate. In particular, I want your input on ways to broaden involvement of members. I really do want your opinions; please phone (989-631-7339), write, or e-mail me at michaelowen01@chartermi.net.

There is nothing original, of course, about my call for your input. Indeed, the chair of our Long Range Planning Committee, Wendell Dilling, issued an interesting interim report last December on responses to a recent Midland Section ACS survey conducted by that committee. I was particularly struck by the breadth of interests relevant to ACS that members listed, over 100 categories from 200 respondents. No one deficiency sticks out like a sore thumb but there are several issues raised by this survey that I will use as material for future columns. One comment I cannot resist drawing attention to (with apologies to all and fair warning of future transgressions) is a call for chemists to consider becoming unionized. Was this a plea for collective representation or electrical neutrality?

I would also like to hear your views on some recurring issues that we face. One of these came up again at the last board meeting of 2001. We were discussing what to do about displaying the numerous awards we have won as a local section. You may recall the photograph in a recent *Midland Chemist* of some of our past-chairs holding the eight Outstanding



Mike Owen, Acting Chair
ACS Midland Section

Local Section Awards we have received. Now what to do with the Section jewels is a nice problem to have, but that's not the real issue I invite your views on, although you're very welcome to make an input (some of the awards have been on display at CMU and will have moved this month to Delta College). The bigger issue that re-emerged as part of this discussion is should we have a permanent office somewhere? This would solve a number of problems apart from where best to display our trophies. It is quite an expensive proposition but we are a relatively well-off section and probably could afford it, albeit at the cost of curtailing some of our other activities. I don't know how many other sections have such offices but some certainly do.

We are not the only ones wrestling with this matter either. I saw a plea in a recent Local Section Officer's Digest from the DC Local Section to "describe our section's office and its facilities, e.g. computer, phone lines, fax, Internet access, storage, archives, space for meetings, etc." You could sense the amazement at such a luxury beyond belief in some of the replies, "We're supposed to have an office?" Some sections meet in local restaurants or members' homes, so we are already better off than many, being able to meet at Delta College, CMU, and SVSU, thanks to our active academic participants. Among other aspects of this issue, the Clarke Historical Library at CMU handles our archives (thanks to our historian, Wendell Dilling), and we rent storage space on North Eastman Avenue. Anyway, the present position seems to work much of the time but it is certainly imperfect and inconvenient on occasion. Please let me know your views on the wisdom or otherwise of exploring a more permanent base for our operations.

Before closing I want to welcome all new and old board members. I look forward to working with you throughout the year, mostly, I sincerely hope, as chair-elect rather than acting chair. Get well soon, Pat.

Mike Owen



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Sci-Fest 2001 Celebrates Chemistry and Art

By Dave Stickles and Joan Sabourin

Photos by Angelo Cassar and Joan Sabourin

The theme of Sci-Fest 2001 was "Celebrating Chemistry and Art." This event was held at the Delta College Pioneer Gym on November 3, 2001, from 10:30 a.m. to 2:30 p.m. The celebration consisted of several hands-on activities that continually had about 10 people around each booth. Exhibitors and part of their activities included:

- AICHe (activity with light-sensitive paper)
- Alma College Science Club (colorful sculptured-dough experiment)
- ACS/MMTG Colors of Chemistry (color separations, colorful putter's putty)
- Delta College Astronomy Club (Sky Theater presentations)
- Delta College Biology Division/Greenhouse (hydroponics)
- Delta College Computer/Internet Lab (web sites pertaining to chemistry and art)
- Delta College Science Division
- Delta College CAD/CAM (production of a colored prototype)
- Delta College Art Department (hands-on student artwork)
- Delta College Graphic Arts (digital coloring and animation)
- Digital Photography (colorful laminated name tags for each child)
- Dow Corning (moldmaking and



Cassie Hale at the ACS/MMTG Colors of Chemistry display helps youngsters make putter's putty.



At the National Chemistry Week display, Angelo Cassar shows young attendees how guitar music is related to acoustics.

colors of molecular modeling)

- Dr. Slime (fluorescence and phosphorescence)
- Glass Blowing (production of colored glass and objects)
- Gougeon Brothers (epoxy and art)
- Hall of Ideas (art and science of fireworks)
- Society of Plastics Engineering (art display using plastics)
- National Chemistry Week (spin art, colorful ink stamps)
- Guitar Player (art of acoustics)
- Saginaw Zoo (colorful exotic animals)
- Saginaw Valley State University Science Club (liquid nitrogen experiment)
- Sunset Astronomical Society (space models, astrophotography, telescopes)
- Traditional Film Photography



At the ACS/MMTG Colors of Chemistry display, visitors work with density columns and PVA "slime."

New attractions this year included Delta College Astronomy Club, Delta College CAD/CAM, Delta College Graphic Arts, Delta College Art Department, Dow Corning moldmaking, Dow Corning molecular modeling, and traditional film photography.

Advertising included 8000 4.25-inch x 5.5-inch handbills that were distributed by individual ACS/MMTG members on Halloween. An additional 2000 8.5-inch x 11-inch flyers were produced. Both the handbills and the flyers were distributed to many science teachers in Auburn, Bay City, Freeland, Midland, Mt. Pleasant, and Saginaw by having different people send the fliers to science teachers through their children.



The Dow Corning moldmaking exhibit was a big hit with Sci-Fest attendees.

Notices of the event went out on cable access channels for Bay City,



Students create artwork using a “bony friend” as a model. No problem with the model moving at the wrong time!



This budding scientist is intent on his “spin art” experiment at the National Chemistry Week display.

Midland, and Saginaw. A 4-minute video segment regarding the event was aired on *CNN Headline Hometown News* in Bay City, Midland, and Saginaw. Notices regarding Sci-Fest were sent to the *Bay City Times*, *Midland Daily News*, *Mt. Pleasant Sun*, and *Saginaw News* for public service announcements. Unfortunately none of the papers ran one for us this year. A volunteer thank-you letter was published in the *Bay City Times* and the *Midland Daily News*.

The attendance estimate for the day was about 900 people. The smaller crowd gave more time for the exhibitors to talk with people, and those attending Sci-Fest enjoyed the exhibits much more. Participants did not have to wait to do some of the hands-on experiments, and they asked a lot more questions. Both the workers and the visitors appreciated the continuous flow. Several participants stayed around for the whole 4 hours. Free cider and donuts were also a big hit. Lunch was provided for all presenters and workers. Including the presenters and the ACS and MMTG members, there were at least 83 volunteers. The day was a success!

Call for Nominations

2002 Diversity Award

By Phil Squattrito

This year, the Midland Section of the American Chemical Society will present the "Promotion of Diversity in Chemistry, Related Sciences and Engineering Award" for the first time. This award will be presented biannually to a person or group residing in Midland, Bay, Saginaw, Isabella, or Gratiot County for outstanding achievement in enhancing the participation of underrepresented groups in the study of chemistry, related sciences, and engineering. The inaugural award will be presented at the 2002 Science Education Recognition Dinner on April 24, 2002, at the Dow 47 Building Cafeteria in Midland.

Criteria for candidates for this award include teaching, mentoring, serving as a role model, and active and sustained participation in organizations that support diversity which have had a demonstrable impact on the promotion of diversity in chemistry, related sciences, and engineering. Members of the Midland Section Minority Affairs Committee are not eligible to receive this award.

Recipients of this award will be selected by the Midland Section Awards Committee. Nominators should write a letter describing the attributes of the candidate. Supporting letters from students, colleagues, supervisors, and community leaders are strongly encouraged. The deadline for nominations is March 22, 2002. Electronic and fax submissions are acceptable. All submissions must be accompanied by the name, position, address, and phone number of the nominator.

Please submit your nomination to:

Phillip J. Squattrito

Chair, ACS Awards Committee

Department of Chemistry

Central Michigan University

Mt. Pleasant, MI 48859

Phone: 989-774-4407; fax: 989-774-3883

p.squattrito@cmich.edu

Midland Section Elects Officers for 2002

By Steve Keinath

Editor's note: There were several errors in this article as printed in Vol. 38, No. 8. The article below has been corrected.

The 2001 Nominations & Elections Committee is pleased to announce the following Midland Section ACS 2002 officers:

Chair-Elect (1-year term)

Mike Owen Retired

Secretary (1-year term)

Cynthia N. Peck Delta

Treasurer (1-year term)

Douglas E. Beyer The Dow Chemical Company

Chair, Nominations & Elections Committee (1-year term)

Kermit S. Kwan Dow Corning Corporation

Councilor (3-year term)

Gretchen Kohl Dow Corning Corporation

Alternate Councilor (3-year term)

Steven E. Keinath Michigan Molecular Institute

Board of Directors (3-year terms)

Ann F. Birch Editech

Wendell L. Dilling Retired

Joan Sabourin Delta College

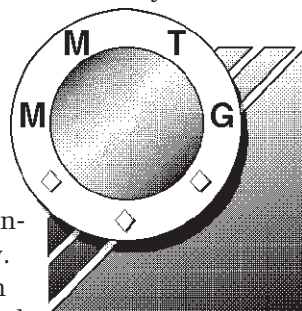
The Nominations & Elections Committee would like to express its sincere thanks to all of the candidates who agreed to run for positions and to the Midland Section ACS members who voted. The N&E Committee received 127 valid ballots.

—2001 Nominations & Elections Committee: Steve Keinath (Chair), Pat Cannady, Wendell Dilling, Bob Howell, and Gretchen Kohl

Outgoing MMTG Chair Sums Up 2001

By Phyllis Anderson

As the outgoing chair for the Mid-Michigan Technician Group (MMTG), this will be the last article I will write for *The Midland Chemist*. I would like to take this opportunity to thank the people affiliated with the Midland Section ACS for including me in their monthly business meetings. I have been really impressed by the amount of work that is done by a handful of people. The Midland Section truly deserves the Outstanding Performance by a Local Section Award. All of the effort by the Section that goes into offering our community exposure to the wonderful world of science is truly outstanding and greatly appreciated by the youth in the area.



For me, being 2001 chair of MMTG was a learning experience and one that I enjoyed thoroughly. In addition to being able to hone my presentation and meeting organization skills, I certainly learned to be more tolerant of other people's viewpoints. This was totally unexpected, and was the biggest eye opener. I developed a new respect for people who do these things day in and day out.

The MMTG held a much deserved year-end celebration. We accomplished a lot this year. We organized three lunch seminars and two evening fun events, presented the Outstanding Chemical Technology Student Award, and participated in the Midland County Fair and the annual Sci-Fest. Several of our members were able to travel and participate in national meetings. There are also several members who serve as committee members at local colleges who have or are interested in adding chemical technology to their curriculum. Our membership increased from 38 to 76, a whopping 100%. The highlight of the year was receiving the 2000 award for the Best Overall Technician Affiliate Group at the National ACS Meeting held last fall in Chicago.

The chair for 2002 is Deb Bailey from Dow Corning Corporation. I am sure she will enjoy the experience as much as I have.

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Ready for a sabbatical or career-changing opportunity? The ACS is

ing all chemists—senior professionals and graduate students—to apply for one of the two American Chemical Society Congressional Fellowships and a Science Policy Fellowship. This is a great opportunity to work in the Congress or ACS using your scientific and technical expertise, gain first-hand knowledge of the government, and contribute to decision-making.

The application deadline is January 10, 2003. For a brochure contact: ACS Office of Society Services, 1155 16th Street, NW, Washington, DC 20036; phone: 1-800-227-5558; e-mail: congfellow@acs.org; information on the Internet at <http://www.chemistry.org/government>.

Committee Reports at Board Meetings in 2002

Jan. 7	Midland	<i>The Midland Chemist</i> (and every month)
Feb. 4	Midland	Awards, Membership Growth and Retention
Mar. 4	Midland	Technical Society Interface
Apr. 1	Midland	Historian, Long Range Planning
May 6	Delta	Program, Fall Scientific Meeting
Jun. 3	CMU	Project SEED, Chemistry Olympiad
Aug. 5	SVSU	County Fair Booth, County Fair Professional Day, MMTG
Sept. 9	Midland	Careers and Professional Relations, Sci-Fest
Oct. 7	Midland	Environmental Affairs, Industry Affairs
Nov. 4	Midland	National Chemistry Week, Project Science Literacy, Government Affairs
Dec. 2	Midland	Minority Affairs, Corporate Agent, Web Site

ACS Members Get Discounts at Major Hotels

The American Chemical Society recently announced a new benefit for members. You can receive a discount on your next stay at any of the following hotels: Ameri-Host, Days Inn, Knights Inn, Ramada Inn, Travelodge, Villager, and Wingate Hotels. Call 1-877-670-7088 to make your reservation, or call the hotel directly, mention the Society's discount #62871 and receive up to 20% off your next visit at any of the previously mentioned hotels.

Attention All Technicians!

By Deb Bailey

I would like to introduce myself as the 2002 Chair of the Mid-Michigan Technician Group (MMTG). I have been actively involved in MMTG for the last 3 years. I have been in the technical world for approximately 12 years. I started out as a co-op at The Dow Chemical Company, then became a contractor, and finally moved to my full-time technician position at Dow Corning, which I have held for approximately 5 years.



The MMTG is an affiliate group of the Midland Section of ACS and is associated with TECH, a national organization for technicians. The only requirement for joining MMTG is an interest in science. At the local level, members have the opportunity to network with technicians from local chemical companies, attend seminars/workshops, and participate in public outreach programs and social events. In 2001, MMTG participated in or chaired events such as:

- Sci-Fest at Delta College
- Kitchen chemistry demonstrations at Midland County Fair
- Lunchtime seminars on fireworks, chemistry in movies, “Life is Too Important to be Taken Seriously”
- Karaoke night at Tucson Jack in Bay City (membership drive)
- A night of “stars” at the Delta Planetarium
- Outstanding Student Technician Award given to a Delta college student in the Chem Tech program

MMTG focus for 2002 is

- Giving back to the members by exploring opportunities for technicians through workshops, seminars, networking, mentoring, etc.
- Continuing to provide informative meetings that allow for idea exchange and member interaction
- Continuing our strong community outreach programs in conjunction with ACS
- Encouraging technician participation in the local ACS, as well as TECH and national ACS
- Continuing to increase our membership

The activities of MMTG for this year will be planned at monthly meetings, usually held the first Wednesday of every month. This year, meetings will be held at Dow Corning and The Dow Chemical Company. Please refer to <http://membership.acs.org/t/tag/meetings.html> for the location of the meetings. I would personally like to invite anyone interested in

becoming a member to attend one of these planning sessions and/or to attend one of our many events.

The first event this year will be a lunchtime seminar on "Weighing the Pros and Cons of a Career Switch for Chem Techs: Is the Grass Really Greener?" Two MMTG members, Tina Leaym and Janet Smith, will give this presentation on February 20 at the Dow Corning DC40 building main conference room. Seating is limited so please RSVP by February 15 to d.k.bailey@dowcorning.com.

If you would like further information, please contact me (989-496-6337 or d.k.bailey@dowcorning.com) or any of the members of the MMTG Executive Committee.

Welcome to New Midland Section Members!

By Connie Murphy

Welcome! to the following people who have recently either joined the American Chemical Society or transferred to the Midland Section:

Tim Cabelka	Dorothy B. Kurland	Woo Min Song
Mark Cubberley	Vickie Langer	Richard Strittmatter
Sandeep Dhingra	David Malotky	Lamont Terrell
Ora Flaningam	Sanjay Mandal	Traci Vansickle
Paul Foley	Margo L. McIvor	Chun Wang
Karen Guhr	Shelly McKenney	Paul M. Welch
Martin Johnson	Jodi Milhaupt	Sara G Wilkinson
Melinda Keefe	Nichole Nickel	Min Zhang
Paul Kehl	Didem Oner	Robin Ziebarth
Jonathan Kurland	Aaron Sanders	

Midland Section Board of Directors Meetings Schedule 2002

Feb. 4	Midland	Delta College Midland Center	Room 12
Mar. 4	Midland	Delta College Midland Center	Room 12
Apr. 1	Midland	Delta College Midland Center	Room 12
May 6		Delta College	Room D, 135
Jun. 3	CMU	Dow Science Building	Room 264
Aug. 5	SVSU	Science East	Room 205
Sept. 9	Midland	Delta College Midland Center	Room 12
Oct. 7	Midland	Delta College Midland Center	Room 12
Nov. 4	Midland	Delta College Midland Center	Room 12
Dec. 2	Midland	Delta College Midland Center	Room 12

ACS Midland Section Board of Directors

Voting Members for 2002

Chair

Pat Cannady*	pat.cannady@dowcorning.com	Dow Corning	496-6471
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Chair-Elect

Mike Owen*	michaelowen01@chartermi.net	Retired	631-7339
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Secretary

Cynthia Peck*	cnpeck@alpha.delta.edu	Delta College	686-9270
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Treasurer

Doug Beyer*	debeyer@dow.com	Dow Chemical	636-4083
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Past-Chair

George Eastland*	gwe@svsu.edu	SVSU	790-4321
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Councilors

Gretchen Kohl (04)	gretchen.kohl@dowcorning.com	Dow Corning	496-8200
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Bob Howell (02)	bob.a.howell@cmich.edu	CMU	774-3582
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Alternate Councilors

Steve Keinath (02)	skeinath@mmi.org	MMI	832-5555 X588
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Tom Lane (02)	tom.lane@dowcorning.com	Dow Corning	496-4181
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Chair, Committee on Nominations and Elections

Kermit Kwan	k.s.kwan@dowcorning.com	Dow Corning	496-8516
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Directors

Connie Murphy (02)	cjmurphy@dow.com	Dow Chemical	636-2961
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Art Smith (02)	agsmith@alpha.delta.edu	Retired	631-4619
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Steve Snow (02)	steven.a.snow@dowcorning.com	Dow Corning	496-6491
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Deb Bergstrom (03)	d.f.bergstrom@dowcorning.com	Dow Corning	496-6951
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Dave Stickles (03)*	d.stickles@dowcorning.com	Dow Corning	496-5626
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New director to be appointed for remainder of one term (03)

Ann Birch (04)	ann.birch@editech-mi.com	Editech	832-7485
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Joan Sabourin (04)*	jmsabour@alpha.delta.edu	Delta College	686-9249
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Wendell Dilling (04)*	dilli1wl@cmich.edu	CMU	631-1621
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*Member of Executive Committee

Committee Chairs for 2002

Committees on Internal Matters

Executive

Pat Cannady	pat.cannady@dowcorning.com	Dow Corning	496-6471
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Membership Growth & Retention

Connie Murphy	cjmurphy@dow.com	Dow Chemical	636-2961
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Long Range Planning

George Eastland	gwe@svsu.edu	SVSU	790-4321
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Corporate Agent

Patricia Dreyfuss	p2drey@aol.com	Retired	832-7651
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Historian

Wendell Dilling	wendell.l.dilling@cmich.edu	CMU	631-1621
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MMTG

Debbie Bailey	d.k.bailey@dowcorning.com	Dow Corning	496-6337
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Committees on Communications

Publicity/Public Relations

Angelo Cassar	angelo.cassar@dowcorning.com	Dow Corning	496-6196
<i>The Midland Chemist</i>			
Ann Birch	ann.birch@editech-mi.com	Editech	832-7485
Government Affairs			
Walter E. Rupprecht	wrupp@concentric.net	Retired	631-8945
Environmental Affairs			
John Oleson	johnoleson@chartermi.net	Retired	631-1442
Technical Society Interface			
Eldon Graham	graham@svsu.edu	SVSU	790-4127
Midland Section Annual Report			
Tom Delia	thomas.j.delia@cmich.edu	CMU	774-4098
Web Site			
Fred Vance	fwvance@dow.com	Dow Chemical	636-0390

Committees on Member Assistance and Recognition

Careers & Professional Relations

Don Miller	donmiller@dm.net	Retired	832-8270
Awards			
Phil Squattrito	philip.squattrito@cmich.edu	CMU	774-4407

Committees on Member Programs and Activities

Program

Mike Owen	michaelowen01@chartermi.net	Retired	631-7339
Fall Scientific Meeting position open			

Committees on Public Education and Student Programs

National Chemistry Week

Gretchen Kohl	gretchen.kohl@dowcorning.com	Dow Corning	496-8200
Angelo Cassar	angelo.cassar@dowcorning.com	Dow Corning	496-6196
Project Science Literacy position open			
Project SEED			
Margaret Hill	hill1mr@cmich.edu	CMU	774-3143
Chemistry Olympiad position open			
County Fair Booth			
Dave Swenson	swenson@svsu.edu	SVSU	790-4292
Sci-Fest			
Dave Stickles	d.stickles@dowcorning.com	Dow Corning	496-5626
Joan Sabourin	jmsabour@alpha.delta.edu	Delta College	686-9249
Minority Affairs			
Lin Dorman	lcdorman@aol.com	Retired	631-0213
Kids and Chemistry			
Pat & Peter Dreyfuss	p2drey@aol.com	Retired	832-7651
Science Promotions position open			

Mid-Michigan Technician Group Contacts for 2002

Chair

Debbie Bailey	d.k.bailey@dowcorning.com	Dow Corning	496-6337
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Chair Elect

Amy Betz	albetz@dow.com	Dow Chemical	636-9549
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Past Chair

Phyllis Anderson	pkanderson@dow.com	Dow Chemical	638-6006
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Secretary

Sarah Kushon	srkushon@dow.com	Dow Chemical	636-5314
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Treasurer

Nate Malowinski	namalowinski@dow.com	Dow Chemical	636-6275
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Directors

Karin Syverud	ksyverud@dow.com	Dow Chemical	638-9807
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Wendy Mathews	wemathews@dow.com	Dow Chemical	638-5981
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Janet Smith	janet.smith@dowcorning.com	Dow Corning	496-6860
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Pam Slavings	pjslavings@dow.com	Dow Chemical	638-9482
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Delegates

Wendy Mallory	wmallory@dow.com	Dow Chemical	636-4182
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Dave Stickles	d.stickles@dowcorning.com	Dow Corning	496-5626
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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



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Good Chemistry at Work

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MMTG “Adopts” Family for Christmas, 2001

By Amy Betz

The Adopt-A-Family program, coordinated by the Salvation Army, matches needy families in our community with willing sponsors who “adopt” them for the holidays. The Salvation Army screens families that apply to be adopted to ensure that the families meet necessary low-income guidelines, then contacts sponsors and gives them the names and address for the family they are to adopt. The sponsor then contacts their family, informs them that they’ve been adopted, and makes arrangements to supply their family with gifts and provide for a nice holiday meal. This can be done in a variety of ways, depending on the needs and wants of the family. Some families choose to make wish lists, and let the sponsor do the shopping so that the gifts can be a surprise. Other families may want to come with the sponsor to do the shopping so they can be involved and pick out exactly what they want.

Thanks to the generosity of MMTG members, \$281 was raised for this program. This was enough money to spend the Salvation Army suggested limit of \$50 per person on gifts and provide a \$50 Meijer grocery gift certificate for their holiday meal and other groceries. After the adopted family was provided for, \$32.12 was left over, which was donated to the Salvation Army to benefit other needy families.

This year, the family MMTG adopted consisted of a father, mother, and two very young boys (ages 14 months and 9 weeks). I had the privilege of spearheading the Adopt-A-Family effort on behalf of MMTG. At their request, I took the entire family shopping and the parents were able to pick out their own gifts and the gifts for their children themselves to make sure each person got what they needed. The parents selected clothing for themselves and both clothing and toys for the youngsters.

Thank you to MMTG members for their generosity in reaching out to a family in need in our community. Thanks to them, a family received not only much-needed clothing and appreciated toys, but also the more important gifts of kindness, compassion, and hope. It is my privilege to be a member of such a caring group of professionals.

Want to Write to Congress? Here's How

By Ann Birch

How many times have you had that urge to write to your elected officials then realized you weren't even sure who they were? The ACS web site not only gives you an easy way to determine who is representing you, but lets you know what pending issues are of particular interest to chemists. In addition, it provides the means of contacting elected officials and expressing your opinion.

Simply visit the ACS home page at <http://www.chemistry.org>. Click on the "Quick Find" and go to Government Affairs. Recent topics include:

- Agricultural Biotechnology
- ACS Comments on NSF Math and Science Partnerships Initiative
- ACS Comments on EPA Proposed Hazardous Waste Management System
- The Status of EPA Science
- Public Policy Priorities 2001-2002
- Key Science and Technology Issues for the President and the New Congress



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Former Dow Corning Executive Addresses Section Leadership

By Ann Birch

At a dinner meeting on December 7, 2001, retired Dow Corning executive Jim Falender addressed Midland Section leaders on the relationship between the local ACS and local corporations. He offered the presentation as a catalyst for discussion of future directions.

He first gave his observations on what the Midland Section has done very well in the past, including:

- Promoting the importance of chemistry as a career and as a skill for everyone
- Integrating industrial, academic, government, and nonprofit organizations
- Encouraging special initiatives to improve society
- Developing and using professional skills
- Providing professional outlets that complement employment
- Sharing best practices
- Fun!

He then addressed the changes that have taken place in chemical corporations that affect the way corporations view and work with organizations such as ACS. Such changes include:

- Chemical corporations do not see their home office as the center of the world. Even the name American Chemical Society may have unintended implications to those in other parts of the world.
- Chemical corporations do not see chemistry as the only center of their world. Biology, physics, electronics, marketing, and law have become of critical importance. Most projects have activities that cross discipline lines.
- The special awe for chemists within chemical corporations in the past has been attacked as being arrogant.
- The concept of corporations needing to have their employees do all important work has been superseded by partnerships, collaborations, outsourcing, and joint ventures.
- Cost pressures can appear to be in conflict with professionalism.
- Skills seem to become obsolete at an accelerating pace. It can be unclear whether it is best to persist with the application of old skills, develop new skills, or move on to another organization.

The ensuing discussion on "where do we go from here?" concluded that although the Midland Section will continue to have close ties to local corporations, the relationship itself will need to change with the changing times.

New Chemistries

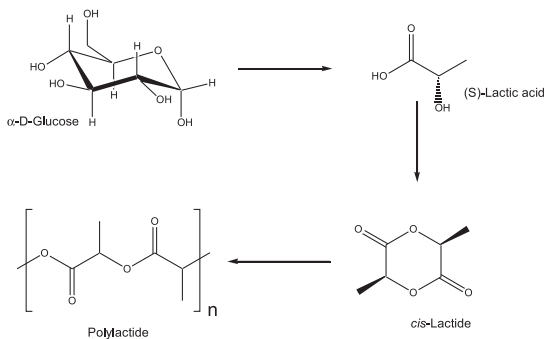
Poly(lactic Acid) (PLA)

By David Baker

Poly(lactic acid) (PLA) is a new resin derived from lactic acid, which is obtained from the fermentation of corn sugars. The production of this resin is being developed by Cargill Dow, a joint venture between The Dow Chemical Company and Cargill Incorporated. A new production plant in Blair, Nebraska, was opened in early 2002 to manufacture these resins from readily available corn supplies.

The PLA is produced under the trademark Natureworks®. The web site states: "Natureworks fibers are the first fibers to have the feel of nature with the performance of synthetics." Early last year Cargill Dow signed a collaboration agreement with Mitsui Chemicals to develop new applications for these biodegradable polymers. Currently PLA is being blended with cotton for clothing in Japan. When used for packaging, this plant-derived polymer is fully degradable.

In the manufacturing process, the corn is milled and the starch extracted. The starch is hydrolyzed to D-glucose, which is subsequently fermented to yield lactic acid. Further processing of lactic acid results in dimerization to produce lactide. This material is then converted by a solvent-free melt polymerization to produce PLA resin. The outline of this process is shown in the scheme below.



Corn starches are initially being used to produce PLA, but researchers are working on obtaining lactic acid from other sources of starch such as sugar beets and agricultural waste. In a few years we could have a production facility right here in the tri-city area from the readily available source of starch in sugar beets.

More information about Natureworks products and the production process can be found at the web site www.cargilldow.com/natureworks. It is very well organized and very informative.

Call for Nominations

2002 Science Teaching and Education Volunteer Awards

By Phil Squattrito

Each year the Midland Section of the American Chemical Society presents awards to recognize outstanding achievement in the teaching of the chemical sciences. Nominations for the 2002 awards are invited.

Awards are presented for outstanding achievement in the following areas:

- Elementary Level Science Education
- Middle Level Science Education
- High School Chemistry Teaching
- College Chemistry Teaching

Candidates for these awards must be educators at schools in the five-county geographical area of the Midland Section: Bay, Gratiot, Isabella, Midland and Saginaw Counties.

The Science Education Volunteer of the Year Award is also presented to an individual who makes a substantial contribution to science learning in the Midland Section through voluntary efforts.

Previous recipients of the awards are as follows:

	Elementary Level	Middle Level
1992	Karen Ziemelis	Derrell Steffen
1993	Lela Wade	Laurie Hepinstall
1994	Constance A. Dullock	JoAnn Kraut
1995	Joan Klopacic	not awarded
1996	Mark Hackbarth	Barbara J. Bibbee
1997	Denise Koppleberger, Cheryl Ruthig	Gary J. Johnson
1998	Barbara McGivern	not awarded
1999	John Clark	not awarded
2000	Sue Burtch, Robin Harshman-Rogers, Vicki Richard, Clare Jorgensen	not awarded
2001	Cathy Egerer, Amy Hindbaugh-Marr	not awarded
	High School Teaching	College Teaching
1989	Robert Wallace	Joan Sabourin
1990	Gary Ronk	Bob Howell
1991	not awarded	Robert Kohrman
1992	John Clark, Edna Konwinski	Scott Hill
1993	Mary Irons	Ajit Sharma
1994	Jo Ann Pelkki	Laura Vosejpka
1995	not awarded	George Eastland
1996	Sandra Schafer	Martin Spartz

1997	Mary Fredell	Philip Squattrito
1998	Dale Ressler	Thomas Delia
1999	Robert Enszer	Steven Keinath
2000	Steven Kelly	James Hutchison
2001	William Stokes	Sandra Smith

Science Education Volunteer

1992	Gregg Young
1993	Peter Bonk
1994	Peter Moehs
1995	Gretchen Kohl
1996	John Blizzard, Richard Van Effen
1997	Marvin Tegen
1998	Carlton Beyer
1999	William Albe
2000	Karol Childs
2001	Donald Petersen

Recipients of all awards will be selected by the Awards Committee. Nominators should write a letter indicating the award and describing the attributes of the candidate. Supporting letters from students, colleagues, supervisors, and community leaders are strongly encouraged. The deadline for nominations is March 22, 2002. Electronic and fax submissions are acceptable. All submissions must be accompanied by the name, position, address, and phone number of the nominator.

Award recipients, as well as high school and college student award recipients and Chemistry Olympiad winners, will be honored at the 2002 Science Education Recognition Dinner on April 24, 2002, at the Dow 47 Building Cafeteria in Midland.

The Awards Committee greatly appreciates the efforts involved in nominating someone and thanks you for helping to recognize deserving educators in our section. *Parents: Does your child have a great science teacher? If so, consider nominating him/her and pass this flier along to that teacher's principal or section head.* Please submit nominations to:

Philip J. Squattrito
Chair, ACS Awards Committee
Department of Chemistry
Central Michigan University
Mt. Pleasant MI 48859
Phone: 989-774-4407; fax: 989-774-3883
p.squattrito@cmich.edu

ACS Tour Speaker and CMU Chemistry Department Seminar
Symmetry and its Importance in Art and Science

Professor Lawrence F. Dahl

Department of Chemistry

University of Wisconsin-Madison

Monday, February 25 at 4:00 p.m.

Central Michigan University

Dow Science Building Room 175

(Reception at 3:30 p.m. in Room 264)

On February 25, Professor Lawrence F. Dahl will present an animated 10-minute “psychedelic” video on “Symmetry” together with pictures to illustrate the principles of symmetry both in art and science. The presentation will introduce and apply the basic concepts of point group symmetry to describe a wide variety of intriguing molecular architectures and crystal morphologies. It will also introduce and illustrate the use of one- and two-dimensional space-group symmetries to analyze the symmetry aspects of Hungarian folk needlework and M.C. Escher’s periodic drawings. This talk will not assume any prior knowledge or background on symmetry, and all of the basic principles of symmetry will be developed from a conceptual viewpoint.

Recent results of his research on the preparation and physical/chemical characterization of new nanosized transition metal carbonyl clusters will also be included to emphasize the importance of symmetry in modern x-ray diffraction analyses of crystalline materials to obtain and describe the ultimate structures.

Anyone wishing to have dinner with the speaker at The Embers in Mt. Pleasant should contact Dr. Anton Jensen at jenselaw@cmich.edu or 989-774-3125. RSVP by February 22. Dinner will begin at approximately 5:30 p.m. Meals may be ordered from the menu at your own expense.

About the speaker: Dr. Lawrence Dahl earned his B.S. in chemistry from the University of Louisville (1951) and his Ph.D. in physical/inorganic chemistry from Iowa State University (1956). He has been on the faculty of the University of Wisconsin—Madison since 1957, where he currently holds the R.E. Rundle Chair in Chemistry and is a Hildale Professor. He has been elected to the National Academy of Sciences (1988) and to the American Academy of Arts and Sciences (1992). Recently he received the J. Willard Gibbs Medal (1999) from the Chicago ACS Section and a Chemical Pioneer Award (2000) from the American Institute of Chemists. Since 1957, 93 students have received their Ph.D. degrees in inorganic and/or physical chemistry under his guidance.

Important Dates on the ACS Midland Section Calendar

- February 25 Professor Lawrence F. Dahl, "Symmetry," CMU Seminar Series and ACS Tour Speaker, Dow 175, 4:00 p.m., reception preceding in Dow 264 at 3:30 p.m. (Anton Jensen, 989-774-3125).
- March 4 Midland Section board meeting, Delta College Midland Center, Room 12, 7:00 p.m.
- March 4 Deadline for April issue of *The Midland Chemist*
- March 22 Deadline for nominations for 2002 Science Teaching and Education Volunteer Awards and 2002 Diversity Award (Phil Squattrito, 989-774-4407)

AMERICAN CHEMICAL SOCIETY

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