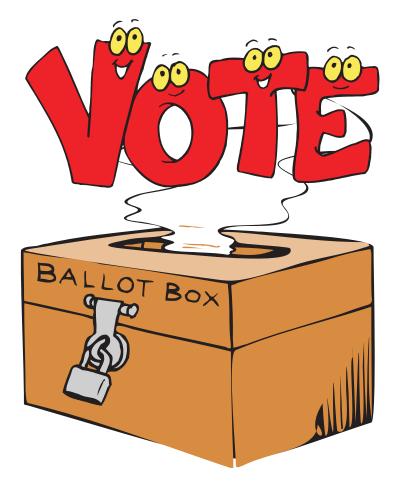


2001 Election and Ballot

The Midland Section Needs Your Vote!



Also in this issue:

- Fall Scientific Meeting
- National ACS Awards
- Chem Demo at Midland County Fair and more...



Volume 37, Number 7 October 2000

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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.

Neither *The Midland Chemist*, nor the Midland Section, nor the American Chemical Society assumes any responsibility for the statements and opinions advanced by contributors of or to *The Midland Chemist*.

Contributors to this issue: Deb Bergstrom, Dow Corning; Wendell Dilling, CMU; George Eastland, SVSU; Brian Murdoch; Janet Smith, Dow Corning; Fred Vance, Dow Chemical; Ann Birch, Editech.

Fall Scientific Meeting

The Midland Section's Premier Event

f all the events held each year by the Midland Section, the Fall Scientific Meeting (FSM) is the largest and probably the most important to our members. This year, on Saturday, October 28, the Section will hold its 56th such meeting. FSM General Chairman Fred Vance of The Dow Chemical Company and his committees have been hard at work to provide an outstanding meeting for you. The meeting will include several symposia, poster papers, keynote address, panel discussion, presentation of three Section awards, and lots of food (breakfast and lunch). The keynote speaker will be Dr. Attila Pavlath, president-elect of the ACS and a somewhat controversial figure in the area of



Wendell Dilling, Chair ACS Midland Section

professional relations in the national ACS for many years.

Although the series of meetings that became the FSM originated at The Dow Chemical Company and Dow Corning Corporation in 1945, and the first 18 meetings were held at their facilities, this year's FSM is the first in 38 years to be held at one of these sites. From 1962 to 1999, the meetings were held at academic institutions such as Delta College, Central Intermediate School, H.H. Dow High School, Central Michigan University, and Saginaw Valley State University. This year's FSM will be held at the Dow Employee Development Center in Midland.

The Fall Scientific Meeting has a long tradition, having been initiated May 5, 1945. The first five meetings, from 1945 to 1949, were open only to Dow Chemical and Dow Corning employees and were not open to other ACS members. However, since 1950 the meetings have been open to everyone, both ACS members and non-members. One exception was the spring meeting held in 1962, which again was limited to Dow Chemical and Dow Corning employees. The meeting has been held every year since 1945 except in 1974 when a labor strike against The Dow Chemical Company caused its cancellation. The first 18 meetings of the numbered series, from 1945 to 1962, were held in the spring. Since 1962, this scientific meeting has been held in the fall.

A 50th anniversary FSM was held in 1994. On that occasion a history of the FSM, "Fifty Years of Midland Section ACS Spring and Fall Scientific Meetings (1945–1994)," was written. For those interested in a more

detailed history, see *The Midland Chemist* **1994**, *31*, No. 6, 11–18 (September 23). This article can also be found on the Midland Section web site at http://membership.acs.org/M/Midl/Overview.htm.

The FSM has always served as an excellent opportunity for chemical professionals in the Midland Section area to renew acquaintances, present results of recent work, learn new chemistry, and discuss topics of mutual interest. It is an especially good opportunity to become acquainted with chemists at institutions other than one's own (and even at one's own when it is very large). Although in recent years attendance at the FSM has decreased, the Fall Scientific Meeting remains a viable Midland Section activity. Twenty to forty years ago the attendance at the meetings was often in the range of 500 to 700. In the last three or four years attendance has ranged from only 100 to 200. Let's show our appreciation for the hard work of this year's organizing committee and take advantage of the opportunities that the 2000 FSM affords.

I look forward to seeing many of you at the 2000 Fall Scientific Meeting on October 28. Detailed information on the meeting begins on page 13. Keep up with FSM news at http://membership.acs.org/m/midl/fsm2000.

Wordell L. Dilling

FOR HOW MANY MINUTES . .

...would you feel comfortable discussing with your neighbor or friends the global chemical industry initiative known as *Responsible Care*?

If you are a member of the chemical industry, we urge you to learn about this initiative, which calls on chemical companies to demonstrate their commitment to improve all aspects of performance that relate to the protection of health, safety, and the environment.



DOW CORNING

Midland Section and MMTG Honored at National ACS Meeting

By Deb Bergstrom and Janet Smith

The Midland Section and the Mid-Michigan Technician Group (MMTG) were both honored with awards at the National ACS Meet-

ing in Washington DC in August. Deb
Bergstrom, past-chair of the Midland Section, accepted the National ACS Award for Outstanding Performance by Local Sections in 1999 in the mediumlarge category. This is the seventh Award for Outstanding Performance received by the Section in the last 27 years.

In addition to this award, the Midland Section also received the National ACS Local Section Public Relations Award in the medium-large to very large section category. Kermit Kwan, our publicity chair, accepted this award on behalf of the Midland Section. This award recognizes the great efforts and advancements in the distribution of information



Tina Leaym receives the Special Award for Outstanding Service from Vena Adams.



Janet Smith, chair-elect of the Mid-Michigan Technician Group, accepts the 1999 Best Overall Technician Affiliate Group Award on behalf of MMTG from Attila Pavlath, ACS president-elect.

on Section activities and events through local and national news media and electronic tools. Kermit and many others had key roles in this success.

At the Chemluminary Awards ceremony, the MMTG received the 1999 Chemluminary Best Overall Technician Affiliate Group Award. This

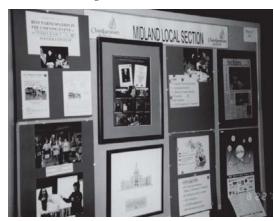


Janet Smith, Kermit Kwan, and Deb Bergstrom proudly display the awards received by the Midland Section and MMTG on August 22.

prestigious award was presented to MMTG by Attila Pavlath, ACS president-elect and accepted by MMTG chairelect Janet Smith.

At the TECH Division Speaker's Dinner, Tina Leaym was honored with a Special Award for Outstanding Service, recognizing service contributing to the success of TECH. This award was for her work as editor of

ConnectTech, the TECH division newsletter. During her tenure as editor, she completely redesigned the newsletter, taking it from a 2-page format to a 30-page publication. Part of this revamping included the formation of an advisory board, which included Ben Luberdoff, founding editor of ChemTech magazine.



The Midland Section poster gives some idea of the range of professional, community, and education activities in which the Section takes part.



The ACS National Meeting isn't all work! Gretchen Kohl, Tom Lane, and newfound friend take time to enjoy some local entertainment.

2001 Midland Section Election

Candidates for each position are listed alphabetically. Voting instructions and a ballot are on page 11.

Candidates for Chair-Elect



Pat Cannady



Peter Qian

Pat Cannady's Statement

I am pleased to have this opportunity to stand for election for the office of Chair Elect 2001, and subsequently, Chair 2002 in the Midland Section of the American Chemical Society. Please allow me a few moments of your time to tell you a little about my candidacy.

I have been associated with the Midland Section of the ACS since first coming to Midland in 1978. Although a "hiatus" was required due to relocation to Dow Corning's Carrollton, KY, facility from 1984–1992, I have enjoyed my renewed association with the Section these past 8 years as well.

The ACS exists to serve the needs of its members. These needs include promoting our science to the community at large and improving the situation of its members within our profession. The Midland Section then exists to bring these factors to bear in a personal and "at home" fashion for its members and our local communities.

The leadership of the Section, then, is obligated to get the members of the Section and the members of the community at large (which includes the commercial and educational institutions by whom many of our members are employed) working together on these needs. If elected, I will lead the section to greater fulfillment in these areas.

Pat Cannady's Profile

B.S., Chemistry, California Institute of Technology, 1974; Ph.D., Inorganic

Chemistry, University of Illinois at Urbana-Champaign, 1979. 1978– present, Dow Corning Corporation. Current Position: Associate Research Scientist and Global Leader, Intermediates Expertise Center.

ACS Activities: Joined, 1976; Fall Scientific Meeting Committee, 1982; Technical Presentations, Fall Scientific Meeting, 1983, 1994; chairman, E.C. Britton Symposium, 1983; Chemistry Teacher Substitute Day, 1984; National Chemistry Week, 1993.

Peter Qian's Statement

I would like to be your chair-elect in this election. I believe that the local Section leaders should enrich activities to attract members to become more involved in our organization. Specifically, if I am elected, I would like to work on the following four areas:

- 1. To serve the needs of local members in terms of exchanging scientific ideas, networking, and chemistry career development
- 2. To be the chief spokesperson of the local Section to promote chemistry in the local community
- 3. To get more members (especially young and new members) involved in various ACS activities
- 4. To stimulate interests in and aspirations for advanced chemical education for students in local K–12 schools and colleges Thank you for your support.

Peter Qian's Profile

B.S., Chemical Fiber, Suzhou Silk College, 1982; M.S., Textile Chemistry, Clemson University, 1986; Ph.D., Chemistry, Clemson University, 1989. Current Position: Senior Research Specialist, Dow Corning Corporation.

ACS Activities: Joined 1986; ACS Midland Fair booth volunteer 1995–1997; treasurer of 1997 ACS Central Regional Meeting; treasurer, ACS Midland Section, 1999–2000.

Candidates for Secretary

Jennifer Ehlert

B.S., Biology, Western Michigan University, 1992; Ph.D., Environmental Health Sciences, University of Alabama at Birmingham, 1997. Current Position: Safety Coordinator for the College of Science and Technology at Central Michigan University. Career includes 2-year laboratory-graduate appointment at Argonne National Laboratory, an internship with the Dow Chemical Company, and an internship with the Upjohn Company.

ACS Activities: Jennifer is a new member to the Midland Section ACS and looks forward to becoming more involved in the Section's activities.

Estelle Lebeau

B.S., Chemistry with Honors, Bates College, 1991; Ph.D., Inorganic Chemistry, University of North Carolina Chapel Hill, 1997; Postdoctoral Research Fellow, The Johns Hopkins University, 1999; Instructor, Inorganic Chemistry, The Johns Hopkins University, 1998-9. Current Position: Assistant Professor, Inorganic Chemistry, Central Michigan University. Member Sigma Xi (1991-present) and Council on Undergraduate Research (1999-present).

ACS Activities: Joined, 1992; Midland Section Program Committee, 1999–present; Midland Section Chemistry Olympiad Committee, 1999–present; ACS-SA (CMU Chapter) Faculty Advisor 1999–present.

Candidates for Treasurer

Douglas E. Beyer

B.S., Chemistry, Michigan State University, 1974; M.S., Organic Chemistry, University of Wisconsin, 1975. Various research positions within The Dow Chemical Company, 1975–present. Current Position: Research Associate, Saran Barrier Systems R&D. Volunteer business and finance advisor, Junior Achievement—Midland, Company program, 15 years.

ACS Activities: Joined, 2000. Served on various Scientific Meeting committees.

Timothy B. Lueder

B.S., Chemistry, Central Michigan University, 1997. Current Position: Chemist, Sealant Development S&T, Dow Corning Corporation.

ACS Activities: Joined, 1999; Student Affiliate 1995–97; presented at local meetings in 1996 and 1997.

Candidates for Chair, Nominations & Elections Committee

Steven E. Keinath

B.S., Chemistry and Physics, Saginaw Valley State College, 1976; M.S., Polymer Science, University of Massachusetts, 1978; M.B.A., General Business, Saginaw Valley State College, 1981; M.A., Education, Central Michigan University, 1985; Ph.D., Chemistry, Michigan Technological University, 1992. Current Position: Research Scientist and Associate Professor, Michigan Molecular Institute.

ACS activities: Joined 1977; co-editor, *Midland Chemist*, 1984–85; editor, *Midland Chemist*, 1986–87; printing chair, 22nd ACS Central Regional Meeting, 1987–90; co-chair, Awards Committee, 1992; alternate councilor, 1993–98; member, Nominations and Elections Committee, 1994–97; chair, Nominations and Elections Committee, 1999–2000; member, Auditing Committee, 1995, 1998; session moderator at Midland Section hosted meetings: Fall Scientific Meetings, 1996–97. Papers presented

at Midland Section hosted meetings: Fall Scientific Meetings, 1975, 1984, 1986, 1989, and 1990; 22nd ACS Central Regional Meeting, 1990; Author's/Awards Night, 1991.

Fred Vance

B.S., Chemistry (magna cum laude), Hope College, 1993; M.S. Chemistry, Northwestern University, 1995; Ph.D. Inorganic Chemistry, Northwestern University, 1999. Current Position: Senior Research Chemist at The Dow Chemical Company working in Corporate R&D.

ACS Activities: Joined 1994; Joined Midland Section 1999; chair, Fall Scientific Meeting 2000.

Candidates for Alternate Councilor

Thomas H. Lane

B.S. Chemistry with Honors in Chemistry, Purdue University, 1974; M.S. Chemistry, Central Michigan University, 1979; Ph.D. Physical-Organic Chemistry, Open University, Milton Keynes, England, 1990; Fellow, Royal Society of Chemistry, 1994; Current Position: Research Scientist and Manager, Global Sponsored Research—Central Research, Dow Corning Corporation.

ACS Activities: Member since 1973; active in many ACS committees and in the Fall Scientific Meeting; Member of the Award and Recognition Committee, 1979-84; Membership Growth, 1980, chair 1981; Program Committee, 1979; Seminar Committee, 1979, chair 1980; Fall Scientific Meeting, various committees; Olympics of the Mind, 1982-84; Saginaw Science Fair, 1982-86; Chemistry Lab—Community Culture Center, 1982, 1986; Author's Night Committee, 1984–86; Teacher Group, 1984, chair 1987; Nominated chair-elect for the Section, 1982; secretary of Midland Section, 1982; chair, Publicity Committee, 1983; ACS Science Advisor, 1990–92; recipient of 1991 Midland Section ACS Award for Outstanding Achievement and Promotion of the Chemical Sciences: ACS National Science Foundation Network Member, 1991-00; chair-elect for Board of Directors, 1985, 1996; chair of Board of Directors, 1986, 1996; past chair of Board, 1987, 1997; Executive Committee, 1982, 1985-94, 1996-97; Board of Directors, 1982, 1984–95; member of ACS Committee on Corporation Associates, 1995-present (chair, Awards Subcommittee); Outstanding Service to the American Chemical Society—Midland Section, 1997; and several other Section activities.

Dale I. Meier

B.S., M.S., Chemistry, California Institute of Technology; Ph.D., Physical Chemistry, University of California at Los Angeles (UCLA); Current Position: Distinguished Research Fellow/Program Manager and Research Professor, Michigan Molecular Institute

ACS Activities: Joined 1950; director, Midland Section 1979-81; Committee Member: Author's Night 1984–1991, Fall Scientific Meeting 1990, ACS Rubber Division Education 1987–1990; session chairman, ACS 14th Central Regional Meeting; symposium chairman, ACS 22nd Central Regional Meeting; recipient of the 1993 ACS Midland Section Award for Outstanding Achievement and Promotion of the Chemical Sciences.

Candidates for Board of Directors

Debora F. Bergstrom

B.S., Chemistry, University of Missouri, St. Louis, MO, 1980; M.S., Inorganic Chemistry, University of Michigan, Ann Arbor, MI, 1984; Ph.D. Inorganic Chemistry, University of Michigan, Paul Rasmussen, Ann Arbor, MI, 1988. Current position: Global Leader, Reinforcement Expertise Center, Central Research and Development, Dow Corning Corporation.

ACS Activities: Joined, 1980, Student Affiliate 1978–80; ACS Midland Section Fall Scientific Meeting, symposium chair 1994; ACS Midland Section Fall Scientific Meeting, program chair 1995; ACS Midland Section Fall Scientific Meeting, general chair 1996; Midland Section chair elect, 1998; Midland Section chair, 1999; Midland Section past chair; Long Range Planning Committee; Minorities Affairs Committee, 2000.

Karol Childs

B.S., Education, Indiana University; National Science Foundation Scholar; Director, Hall of Ideas of the Midland Center for the Arts, a museum of art, history, and science.

ACS activities: Joined, 1997; Member, Midland Section Science Literacy Project, 1995—present; contributor to SciFest since the early 1990s; co-chair, 1st Professional Society Day at the Midland County Fair, 2000.

My interest is in promoting science literacy informally through public events, teacher and parent workshops, and opportunities for kids and families. I am a proponent of community collaboration and, if elected, will support formal and informal science education community outreach.

M. Peter Dreyfuss

B.S., Chemistry, Union College, 1952; Ph.D., Organic Chemistry, Cornell University, 1957; BF Goodrich Co., Research and Development, 1956-1984; Michigan Molecular Institute, Senior Research Scientist and Research Professor of Polymer Chemistry, 1984–1990; Central Michigan University, Adjunct Professor, Dept. of Chemistry, 1991–1993; Retired 1990.

ACS Activities: Joined, 1955. Midland Section: director 1992– present; chair-elect and chair, 1990–1991; Program Committee, 1989; 1990 Central Regional Meeting Committee, program co-chair, and special events coordinator; Fall Scientific Meetings: Chemical Exposition Committee, 1985; program chair, 1986; general chair, 1987; keynote speaker chair, 1989; registration chair, 2000. Akron (Ohio) Section: treasurer, 1981. Numerous committee chairships and assignments, 1975–1984.

Gary Kozerski

B.S., Chemistry, Western Michigan University, 1992; M.S., John Carroll University, 1996. Employed by Dow Corning Corporation since 1996; Current Position: Associate Research Chemist in Health and Environmental Sciences. Member of Society for Applied Spectroscopy (SAS); Mid-Michigan Section: chair-elect and chair, 1998–present.

ACS Activities: Joined, 2000; Midland Section Chemistry Olympiad co-chair 1997–1998.

David L. Stickles

AAS, Industrial Chemistry Technology, Ferris State University, 1973; Dow Corning Corporation, 27 years of service, 1973–2000. Current Position: Senior S&T Technologist in the Paper Industry Group Level 7 Technician); Release Coatings TS&D, 1973–1980; Paint Coatings and Intermediates TS&D, 1980–1982; Materials Development TS&D, 1996; Pressure Sensitive Industries Commercial Unit (TS&D), 1996—present; 9 Patents; 16 Dow Corning Technical Reports.

ACS Activities: *MMTG*: Chaired the MMTG in 1996 and 1997; director MMTG 1994–1995, 1998; Secretary MMTG 1993. While chair, the MMTG received two national-level awards: 1) the 1996 Most Innovative Technician Affiliate Group Award; 2) the 1997 Best Local Section/Technician Affiliate Group Interaction Award from the American Chemical Society Division of Chemical Technicians. *Midland Section ACS Activities*: chair, ACS Fair Booth 1997; chair, ACS Sci-Fest in 1997–2000; secretary for Midland Section 1999; director for Midland Section 2000

Marvin Tegen

B.S. UW-Eau Claire, 1980; Ph.D. Inorganic Chemistry; UW-Madison, 1985; Current Position: Dow Chemical, 1985–present.

ACS Activities: Joined, 1977, National Chemistry Week, 1987–present, co-chair since 1993; Project Science Literacy co-chair since 1994; Central Regional Meeting 1997; recipient of Science Education Volunteer Award, 1997. Author/co-author of eight papers and posters presented at various national ACS meetings on topics ranging from science education to polymeric adsorbents for pollution control.

Ballot for Election of Year 2001 Midland Section ACS Officers INSTRUCTIONS FOR VOTING

- 1. Vote for the candidate of your choice, selecting one for each office *except as noted*.
- IMPORTANT: To maintain anonymity, do not sign the ballot or the *in-ner* ballot envelope.
- 3. Place ballot in ballot envelope. Place ballot envelope in return envelope and sign and print your name on the return (outermost) envelope. You must sign your name on the outer envelope to have your ballot counted. See #4 below.
- 4. To vote, you must be a member or associate member in good standing with the ACS. Affiliates are not eligible to vote according to national ACS bylaws.
- 5. Ballots must be received at the address below *on or before November* 3, 2000.

Steven E. Keinath, Chair

Midland Section ACS Nominations & Elections Committee

Michigan Molecular Institute

1910 West St. Andrews Road

Midland, MI 48640-2696

Wildiana, Wil 40040-2030			
2001 BALLOT			
CHAIR-ELECT (vote for one)			
Pat Cannady	☐ Peter Qian		
SECRETARY (vote for one)			
Jennifer Ehlert	☐ Estelle Lebeau		
TREASURER (vote for one)			
Douglas E. Beyer	☐ Timothy B. Lueder		
CHAIR, NOMINATIONS & ELECTIONS COMMITTEE (vote for one)			
Steven E. Keinath	☐ Fred Vance		
ALTERNATE COUNCILOR (vote for <i>one</i>) Note: Candidate with the highest number of votes will serve for a 2-year, vacancy fill-in term.			
☐ Thomas H. Lane	Dale J. Meier		
BOARD OF DIRECTORS (vote for <i>three</i>) Note: Candidates with the three highest numbers of votes will serve for 3-year terms.			
Debora F. Bergstrom	☐ Gary Kozerski		
☐ Karol Childs	David L. Stickles		
M. Peter Dreyfuss	Marvin Tegen		

ACS/MMTG Chemistry Show Wows Crowds at Midland County Fair

By Brian Murdoch



Just put your lips together and blow! Brigette Schulz helps Chris Sprague with his glassblowing demonstration while Jeff Noyes looks on.

he Mid-Michigan Technician L Group (MMTG) organized a chemistry show for the 2000 Midland County Fair in August that drew both children and adults. In the past, the ACS/MMTG ran a week-long hands-on chemistry booth at the fair. This year's show involved exciting demonstrations that were performed by qualified personnel in front of an audience both Tuesday and Thursday evenings during Midland Fair week. The theme this year was "Fire & Ice." The experiments included a burning cloth that put itself out, frozen carbon dioxide, liquid nitrogen, making

of nylon, water-wine-milk-beer demo, and more. Rainbow-colored Slinkies along with beverage cozies that advertised Sci-Fest were handed out to the spectators.

Special thanks to Chris Sprague and Jeff Noyes from Wyse Glass Specialties, Inc., who drew a large crowd while demonstrating glassblowing each night prior to the show. Also, special thanks to the



Janet Smith conducts the "burning cloth" demo where cloth is soaked in 50/50 ethanol/water and ignited. The ethanol burns away, leaving the water behind, which keeps the cloth from burning. Helpers Brian Murdoch and Dave Stickles watch (from a distance).

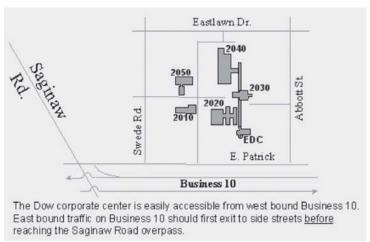
demonstrators: Janet Smith, Janet Allen, Dave Stickles, Peter Qian, Wendy Mallory, Bonnie Pelon, and Phyllis Anderson; set-up, crowd control, and clean up: Sue Perz, Amy Betz, Karen Syverud, Kerry Pacholke, and Pam Slavings. I'd also like to thank the ACS—Midland Section for their financial support.

56th ACS Fall Scientific Meeting

Changing Times 2000 ACS Fall Scientific Meeting

The Dow Chemical Company Employee Development Center Midland, Michigan October 28, 2000 8:00 a.m.–3:00 p.m.

Open Discussion with Attila Pavlath
ACS President-Elect
October 27, 2000
4:00 p.m.
Bay City Country Club



The Employee Development Center (EDC) is part of Dow's Corporate Center located just north of business 10 in Midland. Parking for the EDC is accessible from Abbott Ave., and the entrance to the EDC is in the southwest corner of the parking lot.

From the FSM General Chairperson

The Midland Section of the American Chemical Society welcomes you to the 2000 Fall Scientific Meeting! As we put the commotion over Y2K behind us, we cannot avoid the sensation that we are living in a time of tremendous transition. The theme for the 56th meeting is *Changing Times*, reflecting that sense of transition in our technologies and in our very lives.

The keynote address, *Time for a Change*, by ACS president-elect Attila Pavlath, will emphasize how the American Chemical Society might better serve its members in these changing times. He will focus on the needs for member services, rather than the more traditional role the society has played in publishing journals and holding scientific conferences.

Some things don't change. At the 2000 meeting, you will again find a broad range of scientific topics to sink your brain into. However, you will discover that the poster session and the symposia on *Education*, *Biotechnology*, *Careers in Chemical Technology*, and *Thermophysical Properties of Cross-Linked Materials* offer insights into fresh new ideas and forward thinking.

Free Food! To promote fellowship and a relaxed environment, food will be available throughout the meeting. A continental breakfast will start off the day, and attendees can enjoy lunch while they peruse the poster session. The Fall Scientific Meeting is the largest gathering our section has all year, so use this opportunity to catch up with old friends or make new acquaintances who share your interests.

The 56th meeting marks the first time in 38 years that the event has taken place in a corporate environment. Our sincere gratitude is expressed to Rick Gross, corporate vice president of research and development, for donating the use of Dow's Employee Development Center for our gathering. We appreciate the generosity and the opportunity to hold the meeting in such a world class facility.

The 2000 organizational committee did a superb job. Please join me in thanking the people that volunteered their time and effort to make this a successful endeavor.

Program Chair Dean Millar

Symposia Chairs

Education Laura Vosejpka and Gary Ronk

Chem Tech Careers Connie Murphy
Elastomers Udo Pernisz
Biotechnology Elizabeth Butch
Poster Symposium Dave Karpovich

Facilities Andrew Wood and Lee Hoffman
Publicity Chitra Subramaniam and Jim Malek

Keynote Don Miller

Panel Discussion Sarah Snow and Don Miller

Registration Pete Dreyfuss

—Fred Vance

General Chairperson

AB and DE Hallways

Schedule of Events

Friday,	Oct.	27
---------	------	-----------

5:00 p.m. Mixer and open discussion on ACS Ashman Court Hotel with Attila Pavlath, ACS presidentelect. Cash bar. Main Street Midland, MI

Saturday, Oct. 28

8:00 a.m. Registration Entrance Breakfast AB and DE Hallways 8:30 a.m. Opening Remarks Auditorium ACS Section Awards Presentation Auditorium Kevnote Address: Attila Pavlath Auditorium 9:00 a.m. 10:15 a.m. Panel Discussion: Recent Trends Auditorium in the Chemical Industry 11:15 a.m. Poster Session Rooms C and G

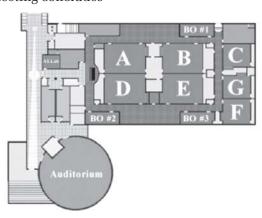
12:00 p.m. Symposia

2:00 p.m.

Education Room A
Thermophysical Properties of Elastomers Room B
Biotechnology Room D
Careers in Chemical Technology Room E
Posters Available for Viewing Rooms C and G

3:00 p.m. Meeting concludes

Lunch



Poster Presentations

We ask that all posters be made available for viewing from 9 a.m. to 3 p.m., with the presenters available at their posters for discussion at least during lunch (11:15 a.m. until noon). The facility will be open at 7:30

a.m. for early poster set up, and any posters remaining after 3 p.m. will be removed by the meeting staff.

Keynote Address

"It Is Time for a Change" Attila E. Pavlath ACS President-Elect

In 1971, an industrial bench chemist was elected as ACS president over two well-known scientists by the largest election turnout in ACS history (almost 40%). His statement had one message: "The first responsibility of the ACS is to its own members." It apparently coincided with the feelings of a large part of the membership which was not unknown to the Society. In 1947, the ACS commissioned the Hancock study to survey ACS structure and the wishes of the members. The study found that 57% wanted from the ACS more than just publishing journals and organizing meetings. They wanted the Society to address the professional and economic status of chemists, e.g., the issue of licensing and/or employment-related problems.

While the Society dragged its feet on these actions, Sputnik created a euphoria with the expectation of a never-ending sky-is-the-limit progress, shelving further consideration of these problems, even though there were people who warned that sooner or later the bubble will burst, which finally did happen in the early seventies. Nevertheless, even though another study brought out the same result as the one 25 years before, the majority of the actions were still aimed at chemistry and not at its practitioners. As we are entering to the next century, the next millennium celebrating our 125th anniversary, we must make the changes our members



Dr. Attila E. Pavlath

Dr. Attila E. Pavlath is an emeritus lead scientist at the Western Regional Research Center of the U.S. Department of Agriculture in Albany, California, in a research group on the utilization of agricultural products as chemical resources. He finished his undergraduate and graduate studies in Hungary with a diploma in chemical engineering at the Technical University of Budapest, and a doctor degree in chemistry by the Hungarian Academy of

Sciences. He was an assistant professor at the Technical University of Budapest and a group leader at the Central Chemical Research Institute of the Hungarian Academy of Sciences. He left Hungary in 1956 and was a research fellow at McGill University in Montreal, Canada, until 1958 when he joined the Western Research Center of Stauffer Chemical Company in Richmond, California, as a senior group leader. Since 1967 he has been with the U.S. Department of Agriculture in Albany leading various research projects.

Dr. Pavlath's research experience of almost 40 years includes a wide variety of scientific areas. He is an internationally known expert in fluorine, textile, agricultural, glow discharge, and energy chemistry where he has over 110 scientific publications, 25 patents, three books, and numerous chapters and reports. He has lectured throughout the world at various scientific meetings. The American Chemical Society lists him on its tour speaker list with eight topics. In 1976, he was given the Outstanding Contribution to Chemistry Award by the ACS California Section, recognizing his 25 years research in fluorine chemistry. In 1987, he was selected as the Federal Scientist of the Year in California. In 1989, he received the ACS Henry Hill Award for Distinguished Services in the area of professional relations and in 1991 the California Section's Walter Peterson Award for Outstanding Services. He has also received numerous merit awards from the U.S. Department of Agriculture. More detailed information is available on his webpage: http://www.pavlath.org.

After chairing numerous committees of the American Chemical Society and serving nine years on the ACS Board of Directors as director-at-large, he was elected in 1999 for the presidential succession (president-elect, 2000; president, 2001 and immediate past president 2002. He is planning, as promised in his election statement, to involve ACS members at the grassroots level in improving the Society to make it a better place equally for everyone from our youngest members to the most respected Nobel laureate. He is ready to address any ACS group not only on scientific topics but also on this subject.

Panel Discussion



- Competitive Analysis
- Unknown Identification
- Additive Analysis
- Taste & Odor Analysis
- Color Body Identification

Contact: Andrew Wood • 517-832-5555 ext 563 E-mail: wood@impactanalytical.com www.impactanalytical.com

Recent Trends in the Chemical Industry

The panel will discuss downsizing (right sizing), merging, spin-offs, globalization, automation, and high technology and their effects on technical careers. Discussion leader: Dr. Sarah Snow, technical program development specialist, Scientific and Technical Development, Dow Corning Corporation. Additional panel members will include:

- Dr. Randy Collard, materials science and information research director, Corporate R&D, The Dow Chemical Company
- Dr. Bob Howell, professor, organic/polymer chemistry, Central Michigan University
- Ms. Connie Murphy, senior research technologist, Corporate R&D, The Dow Chemical Company
- Dr. Attila Pavlath, emeritus lead scientist, Western Regional Research Center, Department of Agriculture, Albany, California, and presidentelect, The American Chemical Society

This program is sponsored by the Midland Section Career Services Committee to stimulate thinking about career planning and decision-making by section members (including recent graduates entering industry, midcareer professionals, and those nearing retirement) taking into account the panel's comments followed by discussion from the floor.



Celebrating the 13th Anniversary of National Chemistry Week

Polymers, Plastics, and Sports

We cordially invite you and your family to attend



Sci-Fest



2000

Saturday, November 4, 2000 10:30 a.m.–2:30 p.m. Delta College —Pioneer Gym



FREE ADMISSION



Special Science Demonstrations for Kids of All Ages and Information on Science Programs that are Available in Your Area. Sponsored by the Midland Section of the American Chemical Society and the Mid-Michigan Technician Group.

ACS Dinner Program

"The Beginnings of Free Radical Chemistry: from Moses Gomberg to Morris Kharasch"

Thomas T. Tidwell

Department of Chemistry, University of Toronto Toronto, Ontario, Canada M5S 3H6

Where: Best Western, Valley Plaza, Midland

When: Monday, October 30, 2000

6:00 p.m. cocktails (cash bar), buffet dinner to follow



The discovery of the triphenylmethyl radical by Gomberg in 1900 had an immediate impact, and there was a surge of activity to confirm and extend this breakthrough, including contributions by Heinrich Wieland (1877–1957), Wilhelm Schlenk (1879–1943), and Karl Ziegler (1898–1973) in Germany, and Carl Marvel and James B. Conant in the U.S.

A separate line of development of the chemistry of free radicals in the gas phase was carried out by physical chemists, including work by Max Bodenstein (1871–1942) in Germany

and Hugh S. Taylor (1890–1974) at Princeton, which culminated in the demonstration by Freidrich Paneth (1887–1958) in 1929 that CH_3 • radicals and a lead mirror are formed upon pyrolysis of $Pb(CH_3)_4$, and the mirror may subsequently be removed by other CH_3 • radicals with reformation of $Pb(CH_3)_4$.

Paneth's experiment demonstrated that alkyl radicals were viable chemical intermediates, and it led to a new outburst of activity that was celebrated by a 1933 Faraday Discussion on Free Radicals in Cambridge. This was attended by many of the pioneers in the field, including Gomberg, Ziegler, and Paneth, and others including Erich Hückel, Michael Polanyi, and C.K. Ingold. Taylor and F.O. Rice (1890–1989) at Johns Hopkins quickly used the Paneth mirror technique to demonstrate the presence of radicals in ethylene polymerization and hydrocarbon pyrolysis, respectively.

In 1933 Morris Kharasch (1895–1957) with Frank Mayo published his first paper on the "peroxide effect" in the anti-Markovnikov addition of HBr to propene, but did not mention free radicals at this time. The perox-

ide effect was also studied by Yoshiyuki Urushibara (1901–1972) in Japan, but the free radical mechanism now found in many introductory textbooks was not proposed until 1937, by Kharasch as well as by Donald Hey (1904-1987) and William Waters (1903-1985) in Great Britain.

Other early figures in the field were E.W.R. Steacie (1900–1962) in Canada, Hans L.J. Bäckström (1896–1977) in Sweden, and Nikolai N. Semenov (1896–1986) in Russia. Some mention of the fascinating careers of these pioneers in free radical chemistry, as well as the fickle hand of the Nobel Prize Committee, which missed the chance to recognize individuals such as Gomberg and Paneth, will be presented.

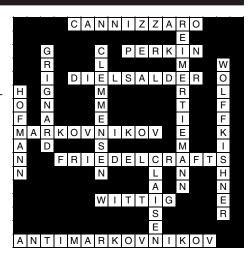
Tom Tidwell began his study of chemistry by accident while an undergraduate at the Georgia Institute of Technology in 1957, and his first exposure to organic chemistry was from a text by Louis Fieser, which contained historical vignettes about some of the individuals who made important chemical discoveries. His fascination with the inherent logic of the subject has never left him, nor has the appeal of the personalities of its practitioners.

After graduate study at Harvard with P.D. Bartlett and postdoctoral work with Teddy Traylor at the University of California, San Diego, and with Alan Katritzky at the University of East Anglia in Britain, he has been at the University of Toronto since 1972. His research involves the synthetic and mechanistic study of organic reactive intermediates, and his main interest has recently returned to free radicals, while the centennial of the Gomberg discovery of triphenylmethyl has stimulated his curiosity about the founders of the field. He has served in IUPAC as chair of the Commission on Physical Organic Chemistry and is currently vice-

Procident at the Organic Division

Solution to September ChemPuzzler

Hope you found last month's chempuzzler, "Don't Just Stand There, React!, to be both challenging and fun. Here's the solution. We invite your unique submissions to the chempuzzler.



October 2

Important Dates on the ACS Midland Section Calendar

- Midland Section board meeting, Delta College Midland Center, Room 12, 7:00 p.m. October 27 Dr. Attila Pavlath, Mixer and open discussion on ACS, Ashman Court Hotel, Midland, 5:00-7:00 p.m. (George Eastland, 517-790-
- 4321. gwe@svsu.edu)
- October 28 2000 Fall Scientific Meeting, Dow Employee Development Center, 8:00 a.m.-3:00 p.m. (Fred Vance, 517-636-0390, fwvance@dow.com)
- Professor Thomas Tidwell, "The Beginnings of Free Radical Chem-October 30 istry: from Moses Gomberg to Morris Kharasch," Best Western, Valley Plaza, Midland, at 6:00 p.m. (George Eastland, 517-790-4321, gwe@svsu.edu)
- November 3 Ballots for 2001 Midland Section election must be in! (Steve Keinath, 517-832-5555 x 588, skeinath@mmi.org)
- November 4 Sci-Fest 2000, Delta College Pioneer Gym, 10:30 a.m.-2:30 p.m. (Dave Stickles, 517-496-5626, d.stickles@dowcorning.com)
- November 6 Midland Section board meeting, Delta College Midland Center, Room 12, 7:00 p.m.
- November 7 Deadline for December issue of The Midland Chemist

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