

THE MIDLAND CHEMIST

A publication of the Midland Section of the American Chemical Society

Vol. 47, No. 4

August 2010

www.midlandacs.org

From the Chair

Seeking Member Involvement

As I watch the news on TV, I am always amazed at what one person can accomplish and what a difference one person can make in this world. I bring this up because it is almost time for elections to take place in the Section and I would like to encourage all of our members to consider becoming more involved in the Section by running for one of the elected offices. If you are or have ever considered putting your hat in the ring, please contact Kevin Weir, our Chair of Nominations and Elections, to discuss this. I would also be available to discuss any of the open positions with you.

I received the following e-mail from ACS National:

Dear Mr. Blizzard,
On behalf of the ChemLuminary Planning Committee, it is my pleasure to inform you that the Midland Local Section has been selected as a finalist for the following ChemLuminary Award(s):

- ♦ Chemists with Disabilities Inclusion Award
- ♦ ACS President's Award for Local

Section Government Affairs

- ♦ NCW Best High School Event
- ♦ Outstanding Performance by a Local Section—Medium Size Category
- ♦ Outstanding Continuing Public Relations Program of a Local Section
- ♦ Outstanding Kids & Chemistry Award



John Blizzard

Recipients will be announced and the presentation of awards will occur at the 240th ACS National Meeting in Boston, MA on Tuesday, August 24.

It is because of the outstanding service from our volunteers that the Section is being recognized for our programs. Whether or not we receive the final award is not as important as National's recognition of our volunteers' efforts. Thank you all for your valuable time and effort.

Further, I received notification from ACS National that Dr. Wendell Dilling and Dr. Mike Owen are to be recognized as ACS Fellows. This is out-

In This Issue

Chair Column	1
Calling 2011 Officer Candidates	1
Symposium Organizers Needed.....	2
Call for 2010 Award Nominations ...	2
MMTG Event at Wyse Glass	2
Dilling, Owen Named ACS Fellows ..	3
Kids & Chemistry Gears Up	4
ACS Announces 2010 Fellows	5
Call for 2010 FSM Presenters.....	5
ACS Webinars for August.....	5
Upcoming September Webinars	5
In Past Issues	6
Become a Chemistry Ambassador ..	6

Calendar for Aug./Sept.

Aug. 16	Section Board Meeting
Aug. 17	K & C Training Session
Sept. 13	MC Deadline
Sept. 15	RSVP for Wyse Glass Event
Sept. 20	Section Board Meeting
Sept. 22	Award Nomination Deadline
Sept. 24	MMTG Wyse Glass Event

Click on the Calendar button at <http://www.midlandacs.org> for more details.

standing, well deserved and helps to show what one person can do. There will be more to follow on this honor.

Thank you to all our volunteers and congratulations to Wendell and Mike.

Kevin Wier, N&E Committee

Calling 2011 Officer Candidates

Why volunteer with ACS? Read what Tina Leaym had to say:

"Several years ago I was pursuing a major career change. In my interview, the questions were very difficult and required personal examples of how I had handled many different situations. Had it not been for my volunteer work with ACS, I would have struggled to come up with examples of leadership and problem-solving at this early point in my career. The ACS provided a risk-free environment for me to get my feet wet leading teams and projects."

"Volunteering to work with ACS

gives me multiple opportunities to contribute; whether it's doing a cool demo to pique a child's interest in science or working with science educators or stuffing envelopes, I always learn something. The people are great—friendly and helpful—and we all have the same goal. ACS is one of those examples with great return on investment potential. The more you put into it, the more rewarding it becomes. And if you sit back and don't get involved, you are really missing out! You could be meeting great people, contributing to the scientific enterprise, and demonstrating your leadership skills."

Here is *your* chance to become more involved in your local ACS section. We need candidates to run for the following positions for 2011:

One-Year Terms

Chair-elect
Secretary
Treasurer
Chair, Nominations & Elections Committee
Councilor
Alternate Councilor

Three-Year Terms

Directors (3 slots open)

(Continued on page 2)

(Continued from page 1)

If you are interested in running for any of these positions or know someone who might be interested, please contact Kevin Wier at 989-496-4596 or kevin.wier@dowcorning.com. If you have any questions regarding what the positions entail, contact your current officers listed on the Section web site <http://www.midlandacs.org> at About Us/Section Leadership/Board Members.

Anja Mueller, CMU Chem. Dept.

Symposium Organizers Needed

Central Michigan University is organizing the ACS Central Regional Meeting in 2013. This meeting we are trying to develop the theme "Building Blocks for a Sustainable World."

We are looking for people who are interested in organizing a symposium for this meeting. You can choose any topic. We will try to have two organizers per symposium. The program director is going to prepare a call for papers, with information about the conference, abstract submissions, registration, and also a sample invitation letter.

A year before the conference, you will send out information to as many faculty, industrial researchers, colleagues, and programs you can think of. Please keep track of the invitations and answers, as well as submissions. Please review all abstracts and accept the ones that are good and fit your topic. At this point we might also redistribute some talks into different sections and make the final decision about talks vs. posters.

The whole program committee will work out a schedule and you'll be required to send the information back to the speakers, including registration details. At the time of the conference, you and your co-organizer will announce the speakers to ensure they stay on time.

If you are interested in organizing a symposium for the meeting or have further questions, please contact the program director:

Anja Mueller
Dept. of Chemistry
Central Michigan University
Mt. Pleasant, MI 48859
Phone: (989) 774-3956
E-mail: muell1a@cmich.edu

Diana Deese, Awards Chair

Call For 2010 Award Nominations

The Midland Section of the American Chemical Society is soliciting nominations for its Fall awards to possibly be presented at the 2010 Fall Scientific Meeting. Since this is a transition year, these awards may be awarded at the Spring 2011 Awards Dinner. If it is decided to delay the awards, it will be communicated through *The Midland Chemist* and a new deadline will be set for additional nominations.

The Awards Committee is seeking nominations for the following awards:

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, but 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.

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 and objectives of the Society. 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.

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. Nominees must have worked for five years as a chemical technician or related field. Chemical technicians do not need to be an ACS member to be eligible for this award. Nominations should include a biographical sketch, contributions to industry, patents and papers, outside affiliations, and, supporting letters.

Nominations for all three awards are invited. The deadline for receipt of nominations and all supporting materials (electronic/e-mail is preferred) is September 22, 2010. Nominations, questions or requests for more information should be directed to:

Diana K. Deese
Dow Corning Corporation
2200 W. Salzburg Rd.
PO Box 994: Mail #AUB1007
Midland, MI 48686-0994
(989) 496-5277
diana.deese@dowcorning.com

Gerard Nowaczyk, Past Chair 2010

Wyse Glass and MMTG Join Forces

**Glassware Training & Lunch
Wyse Glass Specialties, Inc.
September 24, 11 a.m.—2 p.m.
RSVP by September 15**

The Mid-Michigan Technician Group (MMTG) will present, in conjunction with Wyse Glass Specialties, Inc., an informative and practical training event. Wyse will discuss several areas pertinent to working with laboratory glassware. Glassware handling and safety will be discussed as well as determining the lifespan of your glassware, repair and custom fabrication.

This event is intended to educate and inform the laboratory professional

to better respond to some of the more typical laboratory issues like un-sticking glass joints, and is it worth repairing or does it just make more sense to purchase a new one? Is it possible to design a setup that will be able to do this and that?

A complimentary barbecue lunch will be provided. All RSVPs are due to gerard.s.nowaczyk@dowcorning.com by September 15th.

Wyse Glass Specialties, Inc. currently provides custom glassware and glassblowing services to companies in the United States, Canada, Spain, Singapore and Japan. Wyse Glass is located at 1100 Rockwell Drive in Freeland right off of Salzburg. Phone 989-496-3510.

Scott D. Rettelle and Amy Tesolin-Gee, Co-Editors

Wendell Dilling, Mike Owen Named National ACS Fellows

It is a great pleasure to announce that Wendell Dilling and Michael Owen have been elected to the 2010 class of Fellows of the American Chemical Society.

The 2010 ACS Fellows will be honored at a special ceremony during the ACS National Meeting in Boston on Monday, August 23, 2010. The event will be held at the Sheraton Hotel from 1:30–4:30 p.m.

What is an "ACS Fellow" you ask? The Fellows Program is a program that recognizes members for their contributions to the chemical sciences and outstanding service to the ACS.

What are the qualifications? First, nominees, primary nominators, and secondary nominators must be ACS members. Second, nominees for ACS Fellows must have demonstrated excellence in their scientific profession and have provided outstanding service to ACS. There must be evidence of exceptional accomplishments and professional attainment in one of these areas with significant contributions in the other. Lastly, nominations on behalf of ACS National Committees, Technical Divisions, or Local Sections must be submitted or endorsed by that entity's chair.

Each individual had many nominations submitted on his behalf. Portions of these are shown below to help illustrate their outstanding achievements.

From Wendell Dilling's Nomination Letters:

"Wendell provides an extraordinary example of a person who is deserving of the recognition provided by the ACS Fellows Program. He manifests outstanding excellence in his contributions to basic and applied research. He has written over 200 journal publications, proceedings publications, and abstracts—many while employed at The Dow Chemical Company and others after his formal retirement."

"While numerous publications were accomplished with undergraduate students, he even conducted several projects with high school students through the ACS SEED Program. His research publications often probed fundamental understandings in organic photochemistry; and even to this day, he leads the organic discus-

sion group at Central Michigan University."

"Since his retirement from Dow Chemical in 1992, Wendell has served as an adjunct faculty member at Central Michigan University where he has been very active in teaching and research up to the present time."

"Over the years Wendell has been a mentor and role model for me, representing the best in service to the Society."

"Wendell has been and continues to be very active in our local section of the ACS. He has been a Midland Section member for 50 years. During this time he held several appointed positions such as Treasurer, Chair Elect and Chair of the American Chemical Society – Midland Section."

"He is a true ambassador for ACS and the Midland Section."

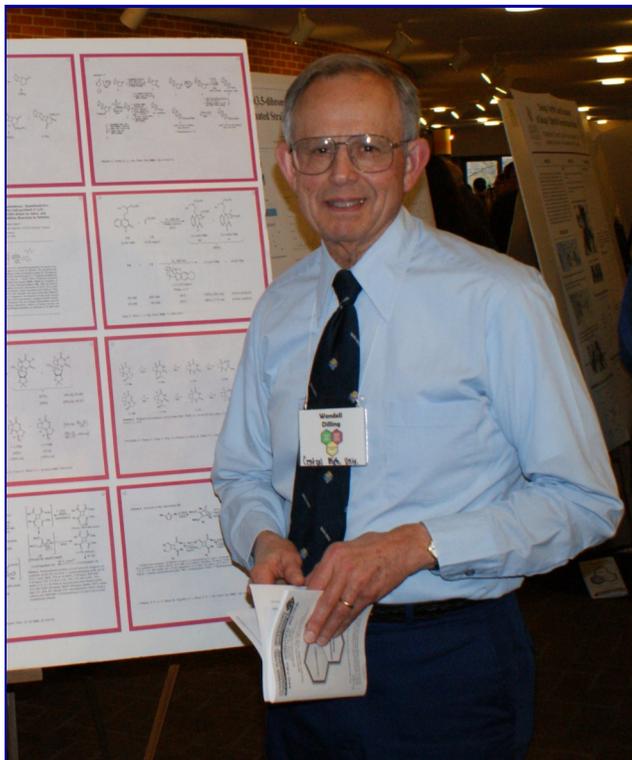
"Dr. Dilling still attends all of our governance meetings, participates in each event that he can fit on his schedule, presents posters at all of our technical meetings and is an active Director on our Section Board."

"His outstanding service to the American Chemical Society is without peer. He has served and continues to serve at the grass roots and the national levels of the ACS. A few examples from his vita reflect this exemplary commitment to the profession. He has been the editor of the section publication *The Midland Chemist* and even when he was not the editor, provided a steady stream of articles for publication in this important local journal."

"He has been intimately involved in countless leadership capacities in the Midland Section's Fall Scientific Meeting. He has provided leadership to several ACS regional

meetings and has been involved in a myriad number of ways and responsibilities with scientific journals. He has also served on a variety of committees at the national level. He has been one of the section's Councilors to the national ACS, has been a long-time local Board member and also has chaired the local section. Indeed, he has either been a national councilor or a member of the Midland Section's Board of Directors for over 35 consecutive years!"

"I can personally attest to the fact that he has played a key role in the Midland Section's history of receiving many Outstanding Section Awards from the ACS. His organizational skills have been instrumental in forging new directions for the profession, and yet he also appreciates the local section's past accomplishments in his continuing role as Section Historian. He organized and caused the section's comprehensive archives to be located at the Clarke Historical Library at Central Michigan University."



Dr. Wendell Dilling, elected to the 2010 class of Fellows of the American Chemical Society.

(Continued on page 4)

(Continued from page 3)

From Michael Owen's Nomination Letters:

"Dr. Owen read for his degrees in Chemistry at the University of Bristol and obtained his Ph.D. in the world leading "Surface and Colloid Science" program there. He has then spent his career with the Dow Corning Corporation—both in the UK and in the US—rising to the distinguished level of "Corporate Scientist."

"During his outstanding career he has coauthored over 60 journal articles, over 50 conference proceedings, 28 book chapters, encyclopedia articles and reports, 8 review articles and 27 patents."

"He has also participated in multiple teaching of four university short courses...I have personally had the pleasure of joining him...and witnessed his excellent teaching skills and attention by which he was received by the students"

"Dr. Owen has also served on the faculty at MMI in Midland, Michigan and has served terms at the National Science Foundation in Washington, DC."

"He is well known throughout the world as an expert on surfaces & interfaces, silicones and dendritic polymers...he has always published widely in the peer-reviewed scientific literature and has been an invited speaker at international symposia around the world."

"Mike's scientific achievements focus on the area of surface chemistry of silicones and other low surface energy materials, particularly on the structure-property relationships of organosilicon-containing copolymers, fluorosilicones and surface modification techniques, dendrimers, nanocomposites, copolymers, emulsions and surfactants."

"He became widely recognized in the scientific community for his contributions to the understanding of surface phenomena and properties, and I have personally often heard him being referred to by other scientists with a high degree of respect and appreciation as "Mr. Contact-Angle Man."

"Mike has significant accomplishments in the area of scientific excellence. He achieved the level of Senior Scientist



Dr. Michael Owen, elected to the 2010 class of Fellows of the American Chemical Society.

status at Dow Corning Corporation—a title held by only 12 individuals in the 64 year history of the company."

"In 2005, he was given the Midland Section ACS Award for Outstanding Achievement and Promotion of the Chemical Sciences. Mike also won the 2001 de Bruyne Medal award from the Society for Adhesion and Adhesives (UK) for excellence in the advancement of adhesion and release science; and in 1998, the Sigma Xi Midland Chapter best paper award."

"Mike is very active in our local section of the ACS. He has been a Midland Section member for 35 years. During this time he held several appointed positions...(including) Chair in 2003—during this time I believe it was no coincidence that the Midland section won four ChemLuminary Awards for 2003 including Outstanding Local Section plus four Certificates of Excellence."

"In addition to his accomplishments, Mike continues to be a very strong mentor for young scientists. I see this all the time in his work with youth and his work within Dow Corning. Mike always has time to talk about science with others and this passion of his infectiously influences those around him."

As you can see, both Wendell and Mike are well worthy of the Fellows nomination. They represent what it takes to be a leader of science, education, and the ACS. Congratulations.

Gina Malczewski,
Kids & Chemistry / Outreach

K & C Gears Up For Busy Season

Training on acids and bases was offered at Quadsil on August 4th. As in the past, these trainings are intended for those interested in taking some activities into schools or other group settings—this one was very hands-on, and has been "kid-tested" for middle school. We provide the materials, and the associated "kit" is available for trained personnel to "check out" for use. For these trainings, all are welcome—no previous experience is necessary.

Tuesday Aug 17th will be another training topic, most likely presented as an INTEGRATION of science with another non-science subject. This first one may be "art + science"—doing "tie dye" shirts using chromatographic principles. We will have a series of these in coming months to prep for some teacher training we hope to do in the future with MSTA.

We expect to have a volunteer orientation in very early September—stay tuned!

We will begin our "Chemistry Coaches" program (in association with National) this fall; we have already connected with several area schools. We also expect opportunities for demos through Big Brothers/Big Sisters starting in October.

A Girl Scout event with a polymer theme is tentatively planned for November 13th. Contact Lisa for further info or to volunteer.

Planning will also begin shortly for SciFest, to take place in October; the date and venue are still under consideration. Incorporated this year will be the National Chemistry theme "Behind the Scenes" as well as the "Making Stuff" focus of our Nova Grant with CMU.

Want to have fun with kids of all ages? VOLUNTEER! Want to change perceptions about science? VOLUNTEER! Think we are losing ground in math and science education? VOLUNTEER! Have great ideas for events or activities? VOLUNTEER!

Contact:
Gina.malczewski@dowcorning.com
Lisa.thackery@dowcorning.com

National ACS

ACS Announces 2010 Class of Fellows

A group of 192 distinguished scientists have been selected as 2010 Fellows of the American Chemical Society. These ACS members were selected based on their outstanding achievements in and contributions to the science, the profession, and their excellent service to the Society. Similar to the inaugural class of 2009, the Fellows represent a wide range of disciplines and geographic locations, representing 33

technical divisions and 79 local sections. The 2010 class also includes distinguished scientists and engineers from industry, academia, and government.

A complete list of the Fellows can be found in the August 2, 2010 issue of C&EN. For additional information on the ACS Fellows Program, go to www.acs.org/fellows or send an email to fellows@acs.org.

MC Editors

Call for 2010 FSM Presenters

The Fall Scientific Meeting is "tentatively" set for October 16th at CMU. Formal presentations and posters can be sent to Gretchen Kohl: gretchen.kohl@dowcorning.com. Watch your email for further details in upcoming ACS Communication Updates and on the Midland Section website: www.midlandacs.org.

National ACS

ACS Webinars Scheduled For August 2010

American Chemical Society Webinars (ACS Webinars™) is a weekly online event serving to connect ACS members and scientific professionals with subject matter experts and global thought leaders in chemical sciences, management, and business on relevant professional issues. Each webinar is 60 minutes in length, comprising of a short presentation followed by Q&A with the speaker.

August 5, 2010 - Delivering a Dynamic Presentation.

Do you want to present your research with the confidence, power, and clarity that leaves a strong impact on your audience? Feeling that you are not a naturally gifted speaker? With practice, anyone can improve their public speaking ability. The often repeated cliché "it's not what you say, but how you say it" is true, and our speaker, Nick Washienko understands this better than anyone. Nick has successfully helped many scientists to deliver a powerful, confident presentation that gets results. This is one presentation you do not want to miss! (*Editor's note: Recordings for past events can be viewed at www.acswebinars.org/archives.*)

August 12, 2010 - How Chemical Policy Reform Can Spur Green Chemistry.

In the wake of the largest Gulf oil disaster or public concern over the chemicals in a baby bottle, how will changing legislation affect chemical professionals? Public policy has the potential to transform the chemical industries and set a new course for

the next decade. Join our speaker, Richard Denison, and learn about the latest Green Chemistry policy developments (Safe Chemicals Act/TSCA reform) and how they may affect chemical professionals, chemical industries, and the future of green chemistry.

August 19, 2010 - Propel Your Career – Networking Tips and Strategies for Success.

Looking to increase your career opportunities? Networking has consistently been cited as one of the most important skills for building a successful career. As a scientist, your talents, abilities, and experience are important but may not amount to much if no one meets you or remembers you. The old adage, "It's who you know" can make all the difference in this competitive global economy. Join our speaker, Cheryl Martin with KPCB, as she shares tips, strategies, and best practices for propelling your career upward through the powerful practice of networking.

August 26, 2010 - Tapping into the Chemistry of Beer and Brewing. Fancy a bubbly brew?

Curious to know how chemistry affects the differences behind various beers? With over 1,500 professional breweries and many dedicated home brewers, the US is the world's largest producer of this most popular alcoholic beverage. Join us with speaker Charles Bamforth, Professor of Food Science and Tech. at UC Davis, to learn about everything from chemistry tips for making great brews to career options for chemical professionals in the beer industry. It's all about the chemistry behind beer!

The live webinars are held on Thursdays from 2-3 p.m. ET and recordings of the past webinars are available online at www.acswebinars.org/archives.

View and register for upcoming events at <http://acswebinars.org/events> or email acswebinars@acs.org.

National ACS

Upcoming Sept. Webinars

September 2, 2010 – Programs and Funding Opportunities for Manufacturers and Small Chemical Businesses with Doug Devereaux, NIST.

September 9, 2010 – How scientific skills are used in advising the movie industry with Dr. Barry Byrne, University of Florida.

September 16, 2010 – TBA

September 23, 2010 – Demystifying SBIR/STTR Grant Applications and Processes for Entrepreneurs and Small Businesses with Dr. Josephine Yuen, Program Director, National Science Foundation.

September 30, 2010 – Global Patent Protection and International Business Strategies with Dr. Michael Brodowski, K&L Gates.

For further details and to register visit <http://acswebinars.org/events>.

Wendell Dilling, Director and Historian

In Past Issues of *The Midland Chemist*

40 Years Ago This Month

In *Local Election Coming Up*: "Through the efforts of the Nominating Committee, chaired by Carole Kleeman and consisting of Elmer Wymore, Charles Roberts, Ronald Baney, and Lawrence Sonnabend, local ACS members have an opportunity to gain more information than usual about this year's election nominees. Candidates' photographs and a statement by each person appear in this issue, beginning on page 6. During past recent local elections 40–50% of the ballots have been returned. You are encouraged to vote and help raise this percentage, and to help select the best people to fill next year's positions." For comparison, 25% of the members voted in the 2009 Midland Section election.

30 Years Ago This Month

In *Asimov Advocates Popularization of Science* by S. I. F. Weitz: "American government is inhibited from making farsighted scientific decisions by its democratic structure, science fiction writer and scientist Isaac Asimov told Dow Corning research personnel at a recent Research and Support Conference at Sugar Loaf. Those running the government tell their constituents 'not

what's needed, but what's popular. The hard measures are never popular,' Asimov charged. 'Government will always hang back from doing what it absolutely has to do until it's too late or too expensive,' said the author of over 100 books and hundreds of articles."

20 Years Ago This Month

In *The 1990 Chemistry Olympiad – Local Competition* by Donald R. Petersen: "Lance Hammond, a senior at H. H. Dow High School in Midland, and a Midland Section nominee for the National chemistry Olympiad competition, was named a national finalist, and one of this country's top chemistry students. He was presented an award of \$150 by the Section at a recent recognition program in his school. The finalists will participate in a two-week training camp in June at the Air Force Academy in Colorado Springs, at the conclusion of which a four person team will be selected to represent the United States at the International Chemistry Olympiad in Paris, France in July. The International Chemistry Olympiad originated with Czechoslovakia, Poland, and Hungary in 1968 and was quickly joined by other eastern European countries, Western Europe began participating in

1974, and the first U.S. team took part in 1984. More than two dozen countries now are included in the annual event." Lance is the second national finalist from our Section in recent years, Kevin Chausee being selected in 1987. Both were students of chemistry teacher Lawrence J. Thompson."

10 Years Ago This Month

In *Project Science Literacy, Bringing Science to Life in the Classroom* by Ann Birch: "The Midland Section has been involved in science education for many years, but by far the most wide-reaching, successful program has been Project Science Literacy. In 1995, the Midland Section was awarded a \$10,000 grant from the Education Division of the ACS to develop 'Science Demonstration Workshops for Elementary and Middle School Classrooms.' Soon after, the Section received a grant from Dow Corning Corporation for \$20,000. Five years and five Phoenix awards later, this teacher education program has reached over 1283 teachers in 42 counties in Michigan."

ACS National

Become a Chemistry Ambassador

Help bring chemistry to classrooms this fall! ACS has developed many ways and educational tools to help kids from kindergarten to high school do more hands-on science this school year, and as a Chemistry Ambassador, the link begins with you!

At the Chemistry Ambassadors website, www.acs.org/chemistryambassadors, you can find links to get you started:

- ◆ Need a way to introduce yourself to a teacher? Try our emails that make a great first impression.
- ◆ You can print off and hand your local teacher flyers detailing ACS resources to bring science into classrooms
- ◆ You can provide *ChemMatters* to high school chemistry teachers and students. The magazine complements textbooks, and you can

view free articles and other resources online at www.acs.org/chemmatters.

- ◆ You can volunteer in a classroom either as part of a full outreach program or on a one-time basis. You might lead an experiment with elementary kids using ACS science kits or give a chemistry presentation to high schoolers drawing from your own research.
- ◆ You can alert teachers to a wide range of educational resources and programs, including science kits, scholarships, partnership programs with ACS, and curriculum materials.
- ◆ Help kindle a child's wonder for chemistry and science exploration this school year!

Your gifts and time will definitely be appreciated by teachers, students, and parents alike.

The graphic features the ACS logo at the top left with the tagline "Chemistry for Life®". Below it, a large brown speech bubble contains the text "SHARE CHEMISTRY." in yellow. A smaller light blue speech bubble contains "START A REACTION." in blue. At the bottom, the "Chemistry Ambassadors" logo is displayed, followed by the website address "www.acs.org/chemistryambassadors" and the slogan "Find everything you need to get started!". The American Chemical Society name is at the very bottom.



Global Language Translations and Consulting, Inc.

Technical translations since 1996



FAST-TRANS™

Machine Translation (MT)

- Fastest turnaround
- Lowest cost
- Rapid document screening
- “Gist” type translation
- Text only

KWIKTRANS™

Machine Aided Translation (MAT)

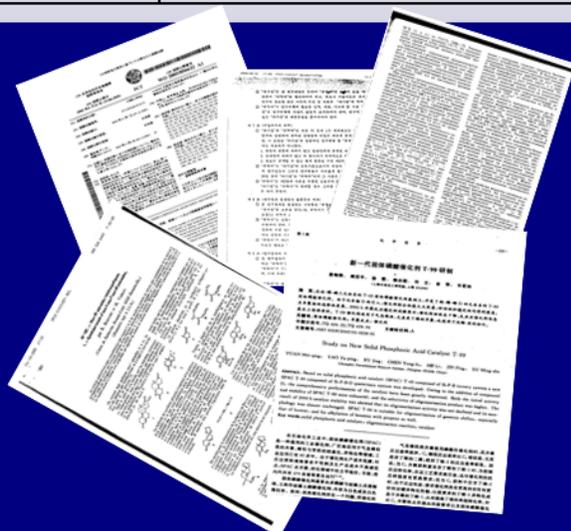
- Human post-edit of MT
- Better quality than Fast-Trans
- 80%-90% of full human quality
- Charts, Tables, Graphs

Human Translation (HT)

- Best quality
- Native language translators
- Subject Matter Experts
- Competitive rates
- Volume discounts

MT/MAT Languages:

- Arabic
- Chinese
- Dutch
- French
- German
- Greek
- Italian
- Japanese
- Korean
- Portuguese
- Russian
- Spanish
- Swedish



Convert PDF Image / Hardcopy → TEXT

Customized requests:

- Claims by Human, rest by MT
- Claims and Examples by Human
- Pages 2-4 by Human, rest by MAT
- Claims ONLY
- MT today, HT in two weeks

Optimize your research by applying precision only where you need it!

Over 70 languages available for Human Translation – Patents, MSDS, Contracts, Package Inserts, Labels...

Telephone interpreting 24/7 available in 150 languages

Request a translation TODAY!

WWW.GLTAC.COM

877.68TRANSLATE

877.688.7267

Midland Section Sponsors



Living.
Improved daily.

The Midland Chemist is published six times a year by the Midland Section of the American Chemical Society.

American Chemical Society
Midland Section
P.O. Box 2695
Midland, MI 48641-2695
<http://www.midlandacs.org>

Volunteer Staff

Scott Rettelle Co-Editor
989-496-5099
newseditor@midlandacs.org
Amy Tesolin-Gee Co-Editor
Dave Baker.....Writer
Peggy Hill.....Writer

Please submit all articles and photographs to the editor. An editorial calendar and instructions for article submission are on the Midland Section website on the Communications|Newsletter menu.

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*.

©Copyright 2010 Midland Section of the American Chemical Society

The Midland Chemist is now primarily available online with publication notification by e-mail. If you are currently receiving The Midland Chemist as a hardcopy, this means we do not have an e-mail for you. If you do have e-mail and would prefer to get the publication electronically, please notify the Editor at newseditor@midlandacs.org. However, if you do not have e-mail, we are happy to provide the publication as hardcopy. If you have questions about events and only electronic communication information is listed, feel free to contact the Section Chair, John Blizzard, at 989-496-1434.

Place postage
here

AMERICAN CHEMICAL SOCIETY
Midland Section
P.O. Box 2695
Midland, MI 48641-2695
RETURN SERVICE REQUESTED