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*Chair Column*

## Through the Looking Glass

Welcome once more to *The Midland Chemist*. This month I thought I'd spend a little time looking forward, as well as some time looking back.

Well, to start off, as I scan out through the looking glass of the Midland Section, discerning the bits and pieces of information that coalesce together, occasionally forming up to something we're interested in, I have in view the 2-month future view of ACS participation at the Midland County Fair in August. I have several preliminary reports of things happening there. Further on down the line, I see some events at the October Fall Scientific Meeting. One event that will probably come as a shake-up to most of you is the decision to have the meeting on a Friday afternoon! More to come on both of these in further announcements, so be sure to stay tuned.

Now, in the recent past, some excellent activities that I've had the pleasure to be a part of, that could stand just a tiny bit more exposure. The first activity was back in March, at the Coleman Middle School Science Fair. I was invited to serve as one of six judges, and I got to review seventh-grade efforts. After judging our section, we took a look around at the other grades, too. What a marvelous selection of entertaining ideas! It was a very good effort. One could easily detect excellent science skills at work. Next, we move on to the Turner Alfrey Visiting Professor, Dr. Roderic P. Quirk of the University of Akron. I met up with Dr. Quirk at the dinner meeting sponsored by SPE/AICHe/ACS where I learned many of the properties of anionic polymerization. Once upon a long time ago, I knew one of Dr. Quirk's sons, a fine actor, and I could see where it was indeed a family trait. Dr. Quirk's presentation was quite animated by his speaking style.

Next on the calendar was the 11<sup>th</sup> ACS Midland Spring Science Education Recognition Dinner at the Dow 47 Building cafeteria. The event was loaded with awards received by students and faculty from all over the area—Chemistry Olympiad winners, best high school, college winners, best teachers in elementary, middle school, high school, college, and a few awards beyond—best service (overall) and promotion of diversity. Quite a few of the best, no doubt about it! Finally, a Matrix:Midland event, "Nano-medicine," by Dr. James R. Baker, Jr., Ruth Dow Doan Pro-



Pat Cannady, Chair  
ACS Midland Section

fessor of Biologic Nanotechnology, University of Michigan. Dr. Baker explained how they are using a multidiscipline approach—an ongoing collaboration between doctors, biological scientists, chemical engineers, and microchip builders—to map out a material basis for the ongoing fight against several diseases, including cancer. It was held at the Towsley Auditorium and was really quite nice.

Well, the list goes on, I'm sure, for many of you who have seen far more things than these, in the past little while. As you are involved in whatever form of chemistry, keep in mind—what you do can make a difference!

That's all for now!



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## **Vandenberg to Receive 2003 Priestly Medal**

*by Bob Howell*

**E**dwin J. Vandenberg will receive the 2003 Priestly Medal. This award, which recognizes distinguished service to chemistry, is the highest honor bestowed by the American Chemical Society. Vandenberg, 83, is retired from Hercules. He received a degree with distinction from Stevens Institute of Technology in 1939. In 1965, he received an honorary doctorate from the same institution. He spent 43 years at Hercules where he was a driving force for the development of new technology. He is best known for his discovery of isotactic poly(propylene) and the development of methods and catalysts for its manufacture. He also discovered the hydrogen chain-transfer method for controlling the molecular weight of polyolefins produced by coordination polymerization.

Vandenberg is well known for his long and distinguished service to the Polymer Division–ACS. He served as chair of the Division in 1979 and until a year ago served as chair of the industrial sponsors group. He has long been a positive force in the Division.

Since his retirement, Vandenberg has served as research professor in the Department of Chemistry at Arizona State University. Just recently he moved to the Department of Bioengineering at the same institution as research scientist. His recent work has focused on biomedical polymers.

Vandenberg has received several awards for his work, including the ACS Award in Polymer Chemistry (1981), the ACS Award in Applied Polymer Science (1991), the Charles Goodyear Medal from the ACS Rubber Division (1991), the Herman F. Mark Award from the ACS Division of Polymer Chemistry (1992), and the Society of Plastics Engineers International Award (1994).

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## Midland Section Recognizes Excellence in Science Education, Promotion

*By Angelo Cassar*

**C**hemistry is a vital science in our society. The Midland Section of the American Chemical Society for the last eleven years has recognized outstanding students, who are the learners of chemistry; teachers, who pass their knowledge of chemistry to the students; and volunteers of chemistry, who unselfishly donate their time to the community in the desire to promote chemistry.

The 2002 Science Education Recognition Dinner was held on Wednesday, April 24, at the Dow Chemical 47 Building. This event was well attended by high school and college students, parents, K-12 teachers, and college professors. Also in attendance were members of the ACS Midland Section that sponsored the event. The reception was held in the atrium of Dow 47 Building. After the reception, a buffet dinner was held at the main dining room, which was followed by the awards presentations.

I would like to recognize the Midland Section ACS Awards Committee who has also promoted chemistry by putting on an excellent Science Education Recognition Dinner. The Awards Committee includes Phil Squattrito (chair), Mike Ferritto, Aneta Bialek, Wendy Mathews, Deb Mendrick, Wendy Mallory, and Pam Slavings. I would also like to recognize Llara Martinez for her secretarial support.



*Richard Moreau presented the U.S. National Chemistry Olympiad awards to eight area high school students (teachers' names in parentheses): Michael Zajac and Robert Hough of H.H. Dow High School (Mary Fredell), Kyle Gies and Jacob Kauffman of AuGres-Sims High School (Scott McAlindon), Nathan Lord of Saginaw Arts & Science Academy (Daniel Sealey), Matt Sneller of Laker High School (Deborah Hasselschwert), and Ryan Kenny and Eric McDonald of Nouvel Catholic Central H.S. (Mark Bradtke). (Please note that student names for this photo and for the photo at the top of pg. 4 are not in order and not all students are shown.)*



*Mike Ferritto presented the Outstanding High School Chemistry Students awards to thirteen area students: Ashley Alwood of Mt. Pleasant Sacred Heart Academy, Alison Beehr of Mt. Pleasant High School, Michael Bradford of Hemlock High School, Kaleena Chilcote of Midland H.H. Dow High School, Noel Dominick of Shepherd High School, Benjamin Hutton of Merrill High School, Alexandria Kling of Midland Bullock Creek High School, Gerald M. McCann of Bay City John Glenn High School, Patrick McGuire of Clare High School, Morgan Randall of Freeland High School, Minerva E. Sanchez of Saginaw Arthur Hill High School, Joseph Vance of Bridgeport High School, and Allison Zabetian of St. Louis High School.*



*Phil Squattrito presented the awards for Outstanding College Chemistry Students to Jacqueline D. Hicks of Alma College (upper left), Dennis Wickline, Jr. of Central Michigan University (upper right), Sarah Bottke of Delta College (next page), Carrie Briggs of Saginaw Valley State University (lower left), and Amie L. Langland of Alma College (Biochemistry) (lower right).*



*Debbie Bailey (on right) presented the Outstanding College Chemical Technology Student award to Sarah Bottke from Delta College.*



*The Outstanding Achievement in Elementary Level Science Education award was presented by Wendy Mallory (on left) to Maureen Becker from Saint Brigid Catholic School in Midland.*



*The Outstanding Achievement in Middle Level Science Education award was presented by Deb Mendrick to Joel Mikusko from Jefferson Middle School in Midland.*



*The Outstanding Achievement in High School Chemistry Teaching award was presented by Aneta Bialek to Robert Hansen from Midland Bullock Creek High School.*



*Phil Squattrino presented the Outstanding Achievement in College Chemistry Teaching award to Margaret Hill from Central Michigan University.*



*The chair of the Midland Section, Pat Cannady, presented the award for the 2001 Science Education Volunteer. Pat presented this prestigious award to Joan McMahon from Dow Corning Corporation.*



A new award was initiated this year: *Promotion of Diversity in Chemistry, Related Sciences and Engineering*. Lin Dorman, who chairs the ACS Midland Section Minority Affairs Committee, presented this new award to George Gant (photo on left) from Dow Corning Corporation and Richard Stringfield (photo on right) from The Dow Chemical Company.

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### Call for Nominations

## 2003 National Chemical Technician Award

**T**he 2003 National Chemical Technician Award will be presented to a chemical technician who has demonstrated an extremely high degree of professionalism. Criteria used to judge the award include technical skills, communication skills, safety, reliability, leadership, teamwork, publications, and presentations. Additional professional and community activities are also considered. The award will consist of a trip to the 225th American Chemical Society National Meeting, March 23-27, 2003 in New Orleans, Louisiana, for the awardee and guest(s). \$1000.00 and a plaque will be presented at the TECH National Chemical Technician Award Dinner at the National meeting. The definition of an appropriate nominee for this award can be found on pg. 16.

Letters of nomination must be received by Susan Ross, QA Labs, AstraZeneca Pharmaceuticals LP, 587 Old Baltimore Pike, Newark DE 19711, no later than September 30, 2002. Nominations, including seconding letters, *must not* exceed six pages. The nominating letters should address the above criteria. A current work address and phone number must be provided for the nominee and the nominator. E-mail addresses are also requested.

If you need further information, contact Susan Ross at the above address or via:

Phone: 302-286-4113

FAX: 302-453-3390

Susan.Ross@astrazeneca.com

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# Delta College Dedicates New Chemical Process Technology Lab and Program

*By Joan Sabourin*

**O**n April 17, 2002, Delta College's new chemical process technology laboratory and program were dedicated. This event also celebrated a significant partnership between education and industry. In the early 1990s, the chemical industry became increasingly aware that an aging workforce would give way to a need for skilled workers in many areas. One of the areas identified nationwide was the need for skilled chemical laboratory technicians and process technicians to maintain America's high standards of performance.

In response to this need, compatible but different partnerships developed between Dow Corning Corporation, The Dow Chemical Company, Michigan Technological University, Saginaw Career Complex, and Delta College. The general mission of the partnerships was to support initiatives at the national, state, and regional level to:

- Build programs consistent with national voluntary skills standards
- Support state workforce initiatives
- Include general education abilities along with workplace competencies, standards, and core abilities
- Include local industry objectives with national standards

The Delta College program was developed through a National Science Foundation grant shared between Michigan Technological University and Delta College. The approximately \$635,000 laboratory facility came about through a partnership between Dow Corning Corporation, The Dow Chemical Company, Saginaw Career Complex, and Delta College. Dow Corning donated the equipment and paid for it to be transported and assembled at the Delta site. Dow contributed \$100,000, some equipment, and rent-free use of their training facility for the Delta College Chemical Process Technology students while the pilot plant was being completed. The partnership also included



*Ron Good makes adjustments to the process.*



*The reassembling crew (left to right) Jim Mitchell, Bill Mattes, Roger Davis, Sam Price, Jim Clingan, and Gary Novak.*

building a pilot plant at the Saginaw Career Complex. Students who complete two years at the Saginaw Career Complex have the possibility of transferring Delta College credits towards completion of a Certificate or an Associate in Applied Science – Chemical Process Technology degree at Delta College.

Delta is presently the only community college in the state that has its own chemical process simulator. Ron Good is the lead instructor and coordinator. Ron knows the processes well and shares his wealth of experience with students in the program. He is dedicated to creating awareness of the career opportunities this field offers. Students completing the program have been hired soon after they finish.

Many of these students continue their education, working on bachelor's degrees at nearby universities. Presently there are 33 students in the growing program. Future initiatives include strengthening the alliance to include additional partners and sharing the facility with the tri-county area for continuing education.



*Students Tricia Woodcock and Carly Hess at work.*



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## Midland Section Councilor Supports NSF Budget Increase

*Editor's note: Midland Section Councilor Bob Howell sent the following letter to Representative Dave Camp via the legislative action network. The Midland Chemist is reprinting his letter (with permission) to ensure our members are aware of what is happening with federal funding.*

**A**s Congress starts developing appropriation bills, I respectfully urge you to sign on to Representative Vernon Ehlers' bipartisan letter in support of a 15% increase for the National Science Foundation's FY 2003 budget.

As the largest federal supporter of basic research at colleges and universities (excluding medical research), the National Science Foundation (NSF) is a critical component of our nation's scientific infrastructure. It is also the only agency responsible for supporting research and education across all fields of science and engineering.

Studies repeatedly show that our nation's investment in science and technology is one of the best ways to ensure long-term growth in the U.S. economy. As a professional chemist, I know the monumental impact NSF has on the private sector and academic institutions. NSF supports quality peer-reviewed basic research that trains the next generation of scientists and engineers, which is crucial to technological advances in the private sector.

Providing NSF with a 15% increase will enable the Foundation to more efficiently perform its mission. For instance, NSF could bolster its core research and education programs, which play a vital role in improving student learning at all levels in science, engineering, and mathematics. NSF could also increase its grant size and duration without limiting the number of new awards. This is vital, because competition for NSF grants is at an all-time high, and it will enable researchers to concentrate on discovery rather than paperwork. Also, research grants help today's scientists train the next generation of scientists and engineers. In addition, the Foundation could increase graduate student stipends from \$21,500 to \$25,000. Providing better compensation to graduate students will attract more qualified Americans to science and engineering careers.

Although I recognize the budget constraints under which Congress must work, I hope you will make robust investments in NSF a priority and co-sign Representative Vernon Ehlers' bipartisan NSF letter. I look forward to receiving your response.

## 223rd National Meeting, A Universal Event!

*By Bob Howell and Gretchen Kohl*

**T**he 223rd National ACS Meeting, held in Orlando, attracted 12,246 registrants and 2,062 exhibitors for a total of 14,308 attendees. The exposition was the second largest in history and reflected a 25% growth over the last meeting in Orlando in 1996. The Boston exhibition for the 224th meeting is already sold out, and space for the virtual exhibition (ACS web site) is now being sold. Midland Section councilors were busy as usual with a variety of activities including committee meetings, the Council meeting, symposia honoring two greats (Kris Matyjaszewski and Jim McGrath), and a technical presentation.

Bob Howell continues to serve as a member of the Patents and Related Matters Committee. A major concern of the committee is the diversion of fees from the Patent and Trademark Office (PTO) to the general fund to cover potential deficits. This hampers the work of the PTO and prevents the modernization of search capabilities. It continues to be the position of the committee that fees paid to the PTO should be retained by that entity so that better service to applicants could be provided. Tom Lane, a Midland Section alternate councilor and a member of Corporation Associates, visited the Patents Committee to speak on a variety of issues, most prominently the selection of awardees for invention/creativity. Corporation Associates will provide funding for printing "What Every Chemist Needs to Know About Patents," a Patents Committee publication. The Patents Committee makes nominations for the National Inventors Hall of Fame and the National Technology Medal. If you know of worthy candidates for either of these awards, contact Bob Howell, 989-774-3582;

[bob.a.howell@cmich.edu](mailto:bob.a.howell@cmich.edu).

Gretchen Kohl serves as an active and energetic member of the Committee for Environmental Improvement. She is also CEF's liaison to the Local Section Activities Committee and is the District II Councilors' Caucus Secretary.



*Ted Tabor and Gretchen Kohl take a minute to relax during a busy meeting schedule.*

The CEI is chartered to be the Society's advisor to Environmental Issues. One of the major activities is to promote increased, or at least continued, Congressional funding for energy and environmental research. In addition to actual Hill visits by members of the CEI, they want to begin working at the grassroots level, where local ACS sections can plan events or outreach programs to educate both the public and our legislators in environmental issues. As a first start, David Harwell, Manager of the ACS Office of Community Activities, has suggested that a separate National Chemistry Week activity be planned for Earth Day 2003. Gretchen was assigned to be the CEI point-person for this activity. Anyone from the Midland Section who would be interested in brainstorming some ideas on this should contact her (989-496-8200 or [gretchen.kohl@dowcorning.com](mailto:gretchen.kohl@dowcorning.com)). At this meeting, it was also discussed that CEI, and the ACS Board, made a list of experts available to Congress and the White House to assist in any chemical homeland defense issues that might arise following 9/11. Locally, we have several copies of the tape that was produced by Midland CAER (Community Awareness and Emergency Response) Program on "Sheltering In Place," which covers what to do in the case of a chemical release. Contact Gretchen if you need a copy of this tape for awareness sessions.

Our new District II director is Diane Schmidt (Cincinnati Section, Procter & Gamble Company), who won the election last November against both the incumbent, Helen Free, and Carol Duane, another very worthy candidate. Diane did a very good job in her inaugural meeting, ending the meeting five minutes early! There were no real controversial voting issues before Council for this meeting, but our District has many experienced, outspoken, and influential Councilors and the meeting was well attended, as usual, and the discussion lively.

The Presidential Event held on Sunday night showcased ACS President Eli Pearce's theme of "A Celebration of the Diverse World of Chemistry and Its Practitioners." Live entertainment and a sampling of ethnic foods accompanied a Rosen Center poolside award ceremony. Another of the special events was the Presidential Plenary on "Diversity in the 21<sup>st</sup> Century—Advancing Women in Science." One of the keynote speakers was Kathleen Bader, Business President and Corporate Vice-President, The Dow Chemical Company.

On Wednesday, the actual Council meeting was the site of several actions but no controversial issues. The petition to increase the size of society committees was postponed and will be considered in Boston in August. Dues for 2003 were set at \$116, the fully escalated rate (an increase of \$4.00). Charles P. Casey of the University of Wisconsin and Alvin L. Kwiran of the University of Washington were selected as candi-



*Members had several chances to discuss meeting topics and socialize.*

dates for 2003 president-elect. The name of the Cellulose, Paper and Textile Division (CELL) was changed to the Cellulose and Renewable Materials Division (CELL).

Other actions/activities included:

- The National Employment Clearing House attracted 131 employers with 988 available positions. The number of job candidates registered was 867. Despite the sluggish economy, the number of available positions continues to exceed the number of applicants, i.e., the ratio of positions available to candidates is still strongly positive (greater than 1).
- At many academic institutions the ACS student affiliates group is a vital organization that reflects enthusiasm for chemistry and serves as a source of dedicated future members of the society. The year 2002 represents the 65th anniversary of the founding of the student affiliates.
- A presidential event at the Boston meeting will focus on “Interdisciplinary Science and Education.”
- The theme for National Chemistry Week 2002, October 20-26, will be personal care chemistry and titled, “Keep Us Clean.” Our local celebration will be during Sci-Fest, at Delta College, on October 19, 2002. Anyone who would like to help with this should contact Gretchen.

- The spring 2013 national meeting will be held April 25-29 in New Orleans, while the 2013 fall meeting will be held September 8-12 in Indianapolis.
- The *Journal of the American Chemical Society* will publish its 125th volume in 2003. A special symposium will be held at the New York national meeting (Fall 2003) to celebrate this occurrence.
- The Project SEED program continues to be highly effective—348 SEED I students will participate in summer research at 101 institutions across the country; 115 SEED II students will be active at 50 institutions. In addition the SEED program has awarded 27 college scholarships worth \$135,000 for the 2002-03 academic year.
- The Committee on Professional Training (CPT) continues to be concerned about access to chemical information by undergraduates. During the past year, 127 additional institutions have added Sci-Finder Scholar, but many smaller four-year schools still find the cost prohibitive.
- The chemistry education option for the B.S. degree in chemistry has not been successful and a new ACS-approved minor in chemistry for secondary school science teachers has been developed. Chemistry programs at 623 colleges/universities (out of a total of approximately 1050 which offer chemistry degrees) now hold ACS certification.
- The ACS posted a net deficit for 2002 of \$8.3 million. This is largely due to underperformance of the financial market. Efforts are underway to reduce the deficit to about \$2.0 million for 2003 and \$1.0 for 2004 with the budget to be in balance for 2005.
- ACS membership now stands at 163,503.



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*Call For Nominations*

## **2002 Midland Section 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. The recipient need not be an ACS member. Nominations should include a biographical sketch, list of pertinent publications, evidence of professional growth and involvement, and letters of support from colleagues. Previous recipients of this award are:

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

### **Outstanding Service to the American Chemical Society**

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

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

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## Outstanding Chemical Technician

The Section presents an annual Outstanding Chemical Technician Award to an individual who has demonstrated an extremely high degree of professionalism as a chemical technician. The ACS defines a chemical technician as a person whose training includes successful completion of a two-year post-high school level chemistry curriculum leading to an Associates Degree, or the equivalent course work in a Baccalaureate program, or the equivalent knowledge gained by experience. The primary work of a chemical technician is conducting experimentation and/or correlating information to help solve chemical problems and/or discover new chemical knowledge. Criteria used to judge the award include job skills, safety, teamwork, leadership, publications and presentations, reliability, communication skills, and additional professional and community activities. Nominees must have worked for five years as a chemical technician. Chemical technicians do not need to be a TECH Division Affiliate or ACS member to be eligible for this award. Nominations should include a biographical sketch and supporting letters that address each of the criteria above.

Previous recipients are:

1997	Connie J. Murphy	2000	Kurt A. Bell
1998	David Stickle	2001	Gordon R. Roof
1999	Ronald L. Good		

Nominations for all three awards are invited. The deadline for receipt of nominations and all supporting materials is September 13, 2002. Nominations should be sent to:

Philip J. Squatrito  
Department of Chemistry  
Central Michigan University  
Mt. Pleasant MI 48859

Fax (989-774-3883) or electronic nominations are also welcome.

If you have questions or need additional information, please contact Phil at 989-774-4407 or [p.squatrito@cmich.edu](mailto:p.squatrito@cmich.edu). Nominators should provide their address and phone number in case the committee needs to contact them. The Awards Committee encourages all section members to nominate deserving colleagues and appreciates your efforts in helping these individuals receive recognition for their efforts. We look forward to hearing from you!

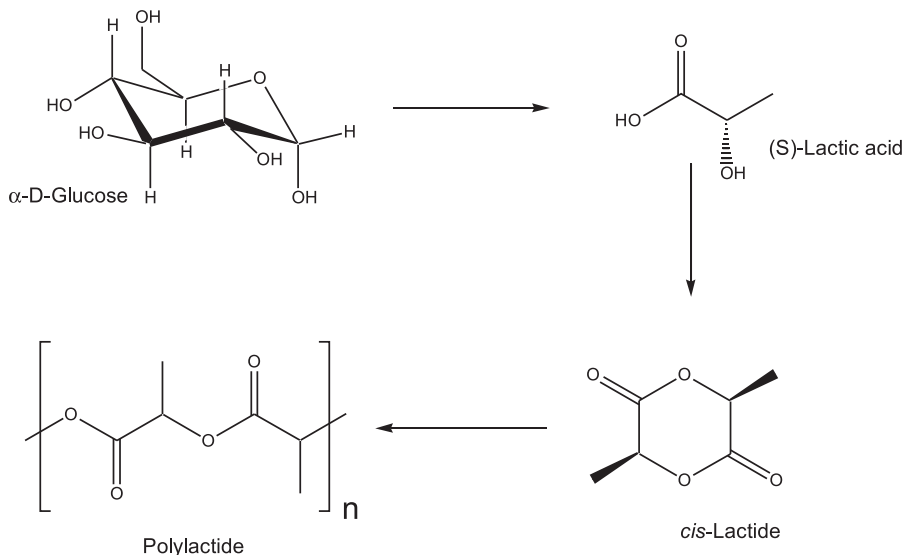
## New Chemistries

## Polylactic Acid (PLA)

By David Baker

**P**olylactic 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 website 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](http://www.cargilldow.com/natureworks). It is very well organized and very informative.

## SWE Announces Conference in Detroit

*By Kristine Danowski*

**T**he Society of Women Engineers will hold their 2002 national conference in Detroit, October 9–12, at the Cobo Conference/Exhibition Center. The focus for the conference is “The Art of Engineering.”

SWE is a nonprofit, educational service organization dedicated to supporting and encouraging women to pursue careers in engineering and related technical and scientific fields. The volunteer efforts of SWE are fueled by a nationwide network of members and student members who influence thousands of young women to choose careers in engineering or to enhance their technical careers through professional development and advanced education. Exhibitors at the 2002 SWE Conference will meet an impressive cross-section of our dynamic and enthusiastic membership who represent the heart of the Society. In addition, SWE Conferences draw non-member attendance from related technical societies and technical women’s groups and the local community, who are specifically seeking employment with companies who actively promote diversity in their organizations. (Information obtained from SWE web site.)

For more information on the conference: <http://www.swe.org/SWE/Convention/detroit>



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## **Important Dates on the ACS Midland Section Calendar**

- June 3 Midland Section board meeting, Central Michigan University, 264 Dow Science Building, 7:00 p.m.
- July 1 Deadline for August issue of *The Midland Chemist*
- August 5 Midland Section board meeting, Saginaw Valley State University, 205 Science East, 7:00 p.m.
- August 6 Deadline for September issue of *The Midland Chemist*

All meetings are open to all ACS members and the public.

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**AMERICAN CHEMICAL SOCIETY**

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