

Tech Topics

February 19, 1999
Vol. 31, No. 21

Michigan Tech's Faculty/Staff Newsletter

Published weekly by University Relations

Senate sends calendar issue to its constituents

The University Senate voted February 17 to put the academic calendar issue to a referendum of all faculty and professional staff.

Senator **Bruce Barna** (chemical engineering) proposed the referendum. In his remarks, he attacked administration statements in the media that were critical of the senate's use of a secret ballot to vote on the academic calendar, which conceivably allows senators to hide their votes from their constituents. Barna said that secret ballots were necessary to protect senators and their constituents from retaliation by the administration. Provost **Fred Dobney** said he had not made such statements. However, he said, "The assumption that someone would be dismissed because of their vote impugns the integrity of the administration," and he said no one would be or ever had been penalized for their vote while he was provost.

Barna said a referendum on the two academic calendar proposals could provide "new information" on the issue, saying he wouldn't want to revisit the calendar without such new information.

The senate voted February 3 in favor of a 14-week semester calendar that eliminates half-day class dismissals for K-Day and

(Continued on page 6)

Tompkins comments on academic calendar

President **Curt Tompkins** outlines his thoughts on the academic calendar in the letter below, which was submitted this week to the *Michigan Tech Lode*.

"I commend the University Senate for its thoughtful and thorough deliberation of the academic calendar. I believe that both the 14-week and 15-week calendars are meritorious. The 15-week calendar is more consistent with the guidelines approved by the Task Force on the Academic Calendar, chaired by Dr. Ken Rowe [vice chair of the Board of Control]. For that reason, I plan to recommend that the 15-week calendar be adopted by the Board of Control at its regular meeting on March 19."

If it's always odd, then it isn't odd.

—DENNIS WALIKAINEN, RE THE UNIVERSITY RELATIONS
PRINTER TWAIN.ADMIN

Tompkins expects changes in higher ed budget

Submitted by the News Bureau

While President **Curt Tompkins** is generally pleased with Governor John Engler's proposed higher education budget for fiscal year 2000, he expects some aspects of that document to change.

"In general, the governor's proposed budget for higher education looks better than any I've seen in my eight years as president of Michigan Tech," said Tompkins. But he noted that formulating an annual budget is an ongoing discussion and that process is not complete.

"We feel that now is the time to take the state's public universities to the next level of educational excellence," he said. "While we applaud the governor's suggestion that the tuition tax credit be repealed and that the resultant savings be allocated to those universities that keep in-state tuition to 3 percent or below, we feel there are other changes that need to be made."

Chief among those, said Tompkins, is the need for the state to restore incremental funding to help universities maintain and operate new buildings. "The governor's proposed budget calls for a 4 percent increase for state universities, but an 8.6 percent increase for prisons," he said. "And a good part of the money earmarked for prisons will go toward the operation and maintenance of new facilities. It just seems to make good sense that when we open a new building to educate our children, we should receive the same sort of strong funding support that prisons receive to house and care for those who

have broken society's laws."

Tompkins noted that Michigan Tech has raised 44 percent of the capital needed to fund its Dow Environmental Sciences and Engineering Building, the Rozsa Center for the Performing Arts, and the addition to the forestry building.

"We have done more than provide the 25 percent in matching funds required by the state for these projects," he said, "and we will continue to do all in our power to make our educational product as good as it can be—but we will need an increased level of support from the state to be successful."

Tompkins said he is pleased with the governor's tier plan for funding public universities, which places Michigan Tech with the state's other three major research universities—the University of Michigan at Ann Arbor, Michigan State University, and Wayne State University. However, he feels Michigan Tech will need a 6 percent appropriation increase to assure the continued improvement of its quality undergraduate education programs. Engler has recommended a 3 percent increase for MTU.

"Six percent is what I'm going to push for at the state house and senate budget hearings scheduled for March and April," said Tompkins. He said he expected strong support in his efforts from State Senator Don Koivisto and State Representatives Paul Tesanovich and Mike Prusi, all of whom have consistently been strong advocates for Michigan Tech.

Need tax help? Know someone who does? Visit VITA

The Volunteer Income Tax Assistance Program (VITA) is providing free help to taxpayers filing their 1998 U.S. and Michigan state income tax returns.

The Kappa Sigma Iota accounting organization sponsors VITA. Volunteers are students in the School of Business and Economics working under the supervision of SBE faculty. Assistance will be provided through April 14, except during spring break, at the times and in the locations listed on the program's Web page, <http://www.sbea.mtu.edu/rrtidd/VITA/>

Currently, assistance is available only for U.S. citizens. Help will be available for nonresident aliens (international students) in special sessions to be held after spring break. The times and locations for those sessions will be announced and published on the Web page around March 1.

If you have questions, call Ronald Tidd, 487-1877.

KRC'S high-tech snow groomer on TV

A story featuring **Russ Alger**'s snow groomer will air on the program *Michigan Out of Doors* on Thursday, February 18, at 9:30 p.m. on WNMU-TV cable channel 13. The story will focus on the prototype snow groomer that Alger, a research engineer/scientist I at KRC, and his fellow researchers have developed. This episode of *Michigan Out of Doors*, produced by the Michigan United Conservation Clubs, will be replayed on Saturday, February 20, at 6:00 p.m.

Staff luncheons at University Residence starting soon

Staff from several MTU departments will be invited to a series of luncheons with President **Curt** and **Kathy Tompkins** beginning this spring.

This year, staff from the following areas will be invited: Air Force ROTC, Army ROTC, MTU Employees' Credit Union, School of Business and Economics, Center for Teaching, Learning, and Faculty Development, General Engineering, Facilities Management, Central Stores, Public Safety, Vice Provost for Instruction, Center for Biomedical Engineering, College of Engineering, Cultural Enrichment, Seaman Mineral Museum, Information Technology, and the departments of Chemical Engineering, Mechanical Engineering-Engineering Mechanics, Chemistry, Computer Science, Electrical Engineering, Biological Sciences, Geological Engineering and Sciences, Mathematical Sciences, Physics, Civil and Environmental Engineering, Education, and Social Sciences.

The luncheons give nonfaculty employees an opportunity to meet informally with the Tompkins. Attendance is strictly voluntary. Faculty have a similar opportunity at breakfasts held in the fall.

Staff luncheon invitations will be sent out over the next few weeks.

New rules for van drivers

The University is implementing new rules for drivers of MTU's 8-, 12-, and 15-passenger vans, starting Monday, February 22.

Drivers can't have more than five points on their driving record or a single infraction of more than three points. Van drivers will be required to sign a statement to that effect before they can get a vehicle from the Motor Pool.

They will also be required to take the "Coaching the Van Driver" CD-ROM training program, which they can complete at Public Safety. Call 487-2216 to schedule a training session. If you have any questions, contact Janet Hayden, risk manager, at 487-3154 or jkhayden@mtu.edu.

MichiganTech

Bill Curnow, executive director, University Relations
Marcia Goodrich, *Tech Topics* editor
Gail Sweeting, electronic marketing assistant

To get *Tech Topics* via e-mail, send a message to MAJORDOMO@MTU.EDU saying `SUBSCRIBE TECH-TOPICS-L`

Information to be included in *Tech Topics* should be submitted to the *Tech Topics* editor in one of the following ways:

- By e-mail to ttopics@mtu.edu
- By regular mail, send typed copies to *Tech Topics*, University Relations.

Each week, the deadline for submitting information is **Friday at 5:00 p.m.** for publication the following Friday.

In print

Professors **Richard Brown** and **David Mendenhall** (chemistry) have published an article, "Characterization of Smith's Nitrene and 1-Phenyl-3-(α -cyano)benzylidenetriazen with Theoretical, NMR, and Flash Photolytic Methods," in the *Journal of Physical Chemistry A*, 1998, Vol. 102.

Assistant Professor **Jaroslav Drellich** (MME) published a paper, "Purification of Polyethylene Terephthalate from Polyvinyl Chloride by Froth Flotation for the Plastics (Soft-Drink Bottle) Recycling Industry," coauthored by J. H. Kimm, T. Payne, J. D. Miller (University of Utah), and R. W. Kobler (Recovery Processes International, Inc.), in the January 1999 issue of *Separation and Purification Technology*.

Professor **David Karnosky** (SFWP), R. E. Dickson, M. D. Coleman, D. E. Riemenschneider, J. G. Isebrands (U.S. Forest Service), and G. D. Hogan (Canadian Forest Service) published an article, "Growth of Five Hybrid Poplar Genotypes Exposed to Interacting Elevated CO₂ and O₃," in the *Canadian Journal of Forestry Research*, Vol. 18 (1998).

Associate Professor **Craig Friedrich** (ME-EM) has published two papers, "Direct Fabrication of Deep X-Ray Lithography Masks by Micromechanical Milling," coauthored by P. Coane (Louisiana Tech University), J. Goetter (Karlsruhe, Germany), and N. Gopinathin (Read-Rite Corp.) in the journal *Precision Engineering*, Vol. 22, No. 3. The second paper, "Development of a Core Curriculum in Miniaturization Technologies," coauthored with Dean of Engineering **Robert Warrington**, R. Keynton (University of Louisville), and M. Vasile (Louisiana Tech) was published in the *Journal of Engineering Education 1998 Supplement*.

Doing more of what works

Center for Teaching, Learning, and Faculty Development



Teaching Tips

Term after term, I walk into a classroom and face a collection of students. In many ways, I am very fortunate. My classes are small, and I teach in areas of intense personal and professional interest. I don't have to get pumped up for class or review my notes. The ideas we wrestle with in my courses are always fresh on my mind. Over the last few years, I have begun my classes keeping one fundamental question in mind: What are my expectations for this class? I realize that my preconceptions are largely based on my past experiences in teaching and learning.

I can recall classes over my last twenty years of teaching that took on lives of their own, classes in which all of the students became engaged (admittedly, in many different ways) with the genuine consideration of the ideas, skills, and attitudes associated with the course. Much more vaguely, I can recall classes that deteriorated into a sort of drudgery, an exercise of me frenetically broadcasting disconnected ideas before an unsympathetic and anonymous crowd. By the end of the term, both the students and I heaved a sigh of relief. The frightening truth is that I still don't know exactly what I or they did that helped to lead to these radically different outcomes.

As a long-time student of human communication, I know that analytically unwinding the complexities of human interactions is a very

difficult, if not impossible, pursuit. Post facto analyses usually fail to discover the subtle combination of elements that either fostered the elevation or led to the deterioration of the academic climate in a given section and unearth, instead, a potpourri of possible causes mixed in with observed effects. Why did Princess Diana die that night? French EMS practices, alcohol, disregard for public safety, excessive speed, paparazzi, bad highway design, mechanical failure, or some or all of the above?

Perhaps the best we can do is to eliminate as many potential negative influences from our interactions with students and emphasize and build on what we presently do that works for them. That's one of the arguments put forth by in the recent essay, "Doing What Works: On the Mundanity of Excellence in Teaching,"* by professor of sociology Daniel Chambliss. Chambliss writes . . .

When college administrators talk about improving the quality of education, they typically look first to the quality of teaching. Faculties debate systems of evaluating teaching, student evaluation forms are revised, periodic post-tenure reviews are established. . . This approach . . . suggests that it is the teacher who matters, and that the teacher's ability is crucial to the learning process. But perhaps we should focus more on discovering which techniques or practices get results in student learning, and worry less about "the quality of teaching" per se.

Next week, we'll explore this idea of identifying educational techniques and practices that result in increased student learning.

* Pescosolido, B. A. and Aminzade, R., Eds., *The Social Worlds of Higher Education: Handbook for Teaching in a New Century*, Pine Forge Press, Thousand Oaks, CA, 1999.

Get *Tech Topics* Sooner! Read us on the web! You can reach us from MTUs home page by clicking on "Tech Topics."

Gen Ed Council on track for fall 2000

Submitted by Vice Provost for Instruction
Stephen Bowen

The General Education Council, which has been charged with implementing the new gen ed curriculum, has set out an agenda and time line for the next several months.

With the conviction that the success of any curriculum depends on the creativity and enthusiasm of those who teach it, the council sees its role as one of facilitator, bringing together groups of faculty who will teach the three interdisciplinary core courses and supporting them as they work out the details of each course. Council subcommittees made up of council members and other faculty who may be interested in teaching general education courses have been formed as extended planning bodies to consider (1) how to identify potential instructors, (2) what professional development and other support will be most valuable in helping them plan their courses, and (3) specific implementation issues that may not have been adequately considered in the original curricular plan. Each subcommittee will be setting up teacher planning activities for the coming summer so that we take full advantage of the 18 months that remain before the curriculum is implemented in fall 2000.

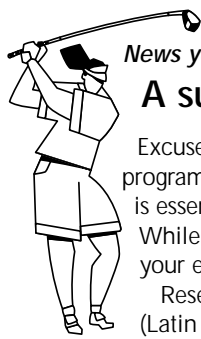
The Distribution Subcommittee is working within an even shorter time frame. Since curriculum planning in some departments depends on which of their courses will be included in distribution lists, the council needs to review and approve these as quickly as possible. The Distribution Subcommittee wants to publish precise definitions of the learning goals for each list and the criteria that will be used to evaluate individual courses in the next couple of weeks.

In addition, there are a variety of implementation issues that the council must address. How will transfer students get credit for the general education core? What about international students who need ESL support before they can succeed in core courses? Will we teach second-year core courses in the first year of implementation? It promises to be a busy 18 months for the General Education Council.

The General Education Council was established in the General Education Curriculum proposal endorsed by the faculty last November. Members include 11 faculty, 2 students, and a student affairs professional. Professor **Diana George** (humanities) is chair.

No Tech Teas Till March 17

No Tech Tea Times will be held for the next few weeks. The series will resume on March 17.



News you can use

A successful exercise program is all in your head

Excuses, excuses, excuses. How often have they come between you and an exercise program that began so enthusiastically and ended so abruptly? We all know exercise is essential to keeping our bodies healthy, our minds clear, and our lives in balance.

While maintaining a fitness program may be a challenge, there are ways to keep your exercise on track. And it all begins with training the mind.

Research in recent years has elaborated on the key functions the cerebellum (Latin for "little brain") plays in our habits, according to Michael Gilewski, PhD, a clinical psychologist with Cedars-Sinai Medical Center's Post-Acute Care Services and an active runner who has completed several marathons.

"One-third of the brain's billions of neurons—cells that conduct the brain's primary functions—are tightly packed into this small section located at the base of the brain," Gilewski explains. "Although multiple aspects of the brain are involved in any activity, the little brain becomes our 'little friend' when we try to establish a habit."

Imagine the neuron as a tree with each branch touching as many as a thousand other branches in this densely packed forest of communication, he suggested. Establishing a habit involves sprouting a new branch that will ultimately connect with numerous other branches—the more connections, the firmer the habit.

"It's important to be patient and persistent because every skill and habit—use of a fork, driving, or a morning routine—has been made relatively effortless by this little friend in our brains," said Gilewski. He recommends seven steps to establishing and maintaining a successful exercise program. While he describes these in terms of running—his exercise of choice—these steps can apply to any new exercise program.



1. Start today. There is no "best time" to start a habit. Use any motivation to get going: a new year, warm weather, a friend starting to run, a stern health warning from your doctor, a goal to run a race.
2. Start simply. Start by doing something you can already do, no matter how small it may seem. Most new runners start by walking. Even once or twice around the block is enough to set a habit. Do it regularly (daily if possible) and at a regular time of day—early morning, after work, after dinner.
3. Be successful. New habits are fragile and are nurtured by continued success in achievement. If you have health problems or have been very sedentary, get a doctor's OK and find out if you have any limitations to exercise. Get a good pair of running shoes. Gradually add time to your workouts. Gradually add running to your walks until you can maintain a run of 20 to 60 minutes, depending on your running goals (general health, 5K run/walk, or marathon). Reward yourself for little goals along the way. Initially focus on time rather than distance or intensity of effort.
4. Learn your sport. Join a training program, get a coach, read books, learn from friends or subscribe to a runner's magazine. Learn different routines and workouts to build conditioning, endurance, strength, speed, and efficiency. Learn how to prevent injuries so running remains enjoyable.
5. Be balanced. Learn how to balance hard runs and intense effort with easier workouts for good recovery. Give yourself days off as needed for rest. The goal is to maintain the exercise habit, and a serious injury from over-training is one of the quickest ways to kill a new habit. Cross-train with other exercise as desired.
6. Be persistent. Although you should not run if you're sick or injured, run despite cold or inclement weather (dress accordingly), run easier in the heat (or at cooler times of the day), run when you don't feel like it, run despite being busy—keep running! If you miss a day, forget it, and run the next day. Persistence is the best way to make a habit resistant to failure and adverse circumstances.
7. Weave running into life. Become public about your new habit. Meet other runners at the local track or sign up for races. Add variety to runs and run when you travel. Keep learning ways to improve your technique. Add to your running wardrobe. Help new runners get started. Reflect on what running means to you.

Establishing a habit will take months, but improvements in ability, ease, enjoyment, and persistence can be noticed for years, Gilewski said. The ultimate test of an established habit is craving for the activity when you cannot do it.

"Despite TV or magazine ads promising a speedy health goal, there is no quicker way to establish habits, given their neurological and psychological complexity," he explained. "By establishing one healthy habit at a time, each will become a foundation for the next."

Math researcher, educator here February 22-28

Emily Puckette, an assistant professor of mathematics at Occidental College, in Los Angeles, will be visiting MTU during the week of February 22–28 as part of the MTU Visiting Women and Minority Scholar Series.

Puckette has been honored for her teaching, both at Occidental and at Duke University, where she earned her PhD. As a Peace Corps volunteer, she spent over three years in Gabon working as a math teacher and teacher trainer, and traveled extensively in southern and eastern Africa. Her research specialty is random walk theory.

Puckette will give two lectures, "Critical Exponents and Random Walks" in Fisher 101 at 1:00 p.m. on Wednesday, February 24, and a general talk, "Two Approaches to Curricular Change," at 3:00 p.m. on Thursday, February 25, also in Fisher 101. The latter talk will be of interest to all MTU faculty, particularly those involved in semester-change-dictated (or other) curricular reform. Refreshments will be served at both talks.

During her week at Michigan Tech, Puckette will meet with undergraduate students and members of the MTU Women in Science and Engineering (WISE) group. Her visit is funded by a grant from the Presidential Commission for Women and the King-Chavez-Parks Initiative.

Black History Month Reading Room open this week

All members of the MTU community are invited to celebrate Black History Month at the "Voices in the Dark" Reading Room, honoring the Delany sisters, Sarah and Elizabeth, who authored the best-selling *Having Our Say: The Delany Sisters' First 100 Years* and *The Delany Sisters' Book of Wisdom*.

The reading room will be open 10:00 a.m.–4:30 p.m. through Friday, February 19, in Memorial Union Ballroom B. It features movies, lots of interesting literature, music, art, collectibles, and pictures.

Everyone is invited to stop by and browse. For more information, contact Sandy Henkel (shenkel@mtu.edu, 487-2920).

No March 5 Tech Topics

No *Tech Topics* will be published during spring break, the week of March 5. If you need to publicize an event occurring the following week, be sure to send the information to topics@mtu.edu in time for the February 26 edition. (Marcia says: Please try to observe the February 19 deadline.)



The Concert Choir has openings for new members who would like to join the choir's concert tour of eastern Europe in August 1999, plus a few places for non-singers who would like to be part of the trip.

"This is a phenomenal deal," says Choir Director **Milton Olsson**, chair of the fine arts department. The cost of the fifteen-day tour is \$2,100, including all transportation from Chicago, lodging, two meals per day, and guides. Persons interested—both singers and non-singers—should contact Olsson before February 26.

The choir will perform concerts and enjoy the sights in five fabled cities: Kiev, Vilnius, Riga, Tallinn, and St. Petersburg. Many unusual people-to-people opportunities are included. The tour has been arranged by Perform America, Inc., of New York City, which specializes in performance tours to eastern Europe. The tour group will depart Chicago for Kiev on August 5, returning via Prague on August 20.

Singers should call 487-2207 (or e-mail miolsson@mtu.edu) to arrange a brief audition; male voices are particularly needed. The Concert Choir rehearses on Tuesdays and Thursdays from 4:00 to 5:30 p.m. in Walker 210, and will take new members only through the first week of spring quarter.

Bulletin board contest marks Women's History Month

The Presidential Commission for Women is sponsoring a bulletin board display contest in honor of Women's History Month, with cash awards for the top six displays.

Prizes include one \$100, one \$75, two \$50, and one \$25 award. The contest is open to individuals, groups, and organizations. Entry deadline is March 12. Displays can be either short-term (at the Memorial Union in the Women's History Month Room from March 22 through March 25) or long-term (at your choice of location, from March 15 through March 31). Judging will be done the week of March 22 with prizes being awarded on March 25.

Displays will be judged on information or educational value; originality and creativity; clarity, consistency, and significance of theme; and design quality. Entry forms are available at residence hall desks, the Office of Student Affairs, Educational Opportunity, and via e-mail at vbergval@mtu.edu

Open house February 25 at MTU Child Care Center

The Michigan Tech Child Care Center will hold an open house on Thursday, February 25, from 10:00 to 11:30 a.m.

You'll be able to tour the classrooms, meet teachers, and have snack time with the children. The "Home of the Little Huskies" is located at Good Shepherd Lutheran Church, 1100 College Avenue. Everyone is invited.

Air out your bookshelves and help the library

The Friends of the Van Pelt Library are asking for donations for their annual book sale, set for April 1. You can drop off your old books in the big orange book-drop at the entry of the library. If you have pounds and pounds of books to donate and need help moving them, contact Dee Vincent (dee@mtu.edu) to arrange for a pick-up.

All proceeds of the FVPL book sale benefit the library. If you want to pick up some treasures at the sale, consider joining the Friends. Members will be able to shop at the pre-sale, held on March 31. To find out about joining the Friends, visit <http://www.lib.mtu.edu/friends/friends.htm>

Be a savvy info shopper:

Visit Engineering Information Village, Ei Compendex

The J. R. Van Pelt Library is offering two new, free, information-gathering tools from its Web site: Engineering Information Village and Ei Compendex Web.

Engineering Information Village links you with engineers and other technical professionals and provides reliable, up-to-date technical information from a wide variety of sources, including databases and carefully selected and annotated Web sites. Users can also reach other engineers directly via "Ask Your Peers, the Network of Engineers" and get prompt technical assistance via "Ask a Librarian."

Ei Compendex Web provides access to indexes for journal articles and reports in all engineering disciplines, applied physics, electronics, materials science, and related fields in science and management. It has over three million records dating from 1970. Boolean searching is available in all fields, title words, keywords, subject terms, authors, affiliations, serial titles, abstracts, and publishers. There is a choice of relevancy ranked or publications date display.

Go to the library Web site, <http://www.lib.mtu.edu>; click on "Indexes and Databases," and then click on "Ei Compendex" or "Engineering Information Village."

Educators launch pollution-prevention workshop on the Internet

Submitted by the News Bureau

Researchers at Michigan Tech and Arizona State University have launched an open Internet-based workshop on pollution prevention research and teaching in higher education.

Principal investigators for the project are Assistant Professor **David Shonnard** (chemical engineering) and Stephen Beaudoin of the Chemical, Bio, and Materials Engineering Department at Arizona State. Funding is being provided by the National Science Foundation through the Engineering Directorate, Division of Bioengineering and Environmental Systems.

"The goal of the open workshop is to focus a diversity of technical backgrounds and practical experience on pollution prevention issues in higher education," Shonnard said. Core participants will be chosen based on a submitted position paper from a list of national experts compiled as part of the project's goals. An e-mail listserver will provide opportunities for open discussion on topics of interest to national and international participants.

"Our objective is to formulate a set of recommendations and guidelines for the conduct of pollution prevention research in aca-

demia that will help to establish the foundation for research scholarship and encourage technology transfer to industry," said Shonnard. "An additional goal is to establish pedagogical approaches designed to ground students in various technical disciplines on basic environmental literacy and the fundamentals of pollution prevention and its implementation in industry."

Anyone who is interested in pollution prevention education and research is invited to participate in the Internet workshop, which can be found on the World Wide Web at <http://www.p2workshop.org>

"The goal of pollution prevention is to reduce the amount and the toxicity of anthropogenic (human caused) pollutants emitted to the environment by reducing waste generation at the source, rather than by applying pollution controls at the end of the pipe," Shonnard said. He said research conducted over the last decade in academia, industry, and government agencies has advanced the state of knowledge with respect to pollution prevention techniques, but until now, few, if any, open forums for discussion have evolved.

New staff

Charles Schaefer has joined the IT staff as an analyst/programmer. He was previously a project leader at UPPCO and has a bachelor's degree in business administration from the University of Minnesota-Duluth. He is married to Judy Schaefer, has two children, Lindsay and Ryan, and lives in Hancock.

Carl Keranen has joined the Keweenaw Research Center staff as a research associate. He was previously plant electrician at Celotex Corporation in L'Anse and also worked on plant maintenance at Lake Shore Inc. in Ontonagon. He has two AAS degrees from MTU, in electrical engineering technology and mechanical engineering technology. Keranen and his wife, Amy, live in Calumet, and he has three children, Thomas, Erin, and Jeff.

Proposals in progress

Researchers, their proposals, and their potential sponsors are

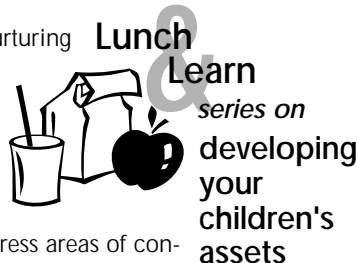
- **Alex Mayer** (geological engineering and sciences), Geoff Thyne (Colorado School of Mines), and Janice Gillespie (CSU Bakersfield), "Collaborative Research: A Multidisciplinary Approach to Determine the Controls on a Right-Lateral Reverse Fault in an Alluvial Aquifer," NSF
- **Komar Kawatra** and **Timothy Eisele** (MME), "An Economical Process for Removal of Carbon Dioxide from Flue Gas," U.S. DOE
- **David Flaspohler** (SFWP) and John Probst (USFS), "Establishing a Conservation Strategy for the Openlands Avifauna in the Upper Peninsula: The Rationale for a Multiscale," Michigan DNR
- **Donald Mikkola** (MME), "New Composite Coatings for Protection Against Oxidation, Wear, and Abrasion," NSF

A three-part lunch-and-learn series, "Developing and Nurturing Assets in Your Children," begins Thursday, February 25. All sessions will be held noon-1:00 p.m. in Memorial Union 105B.

During the first session, you will learn to identify your children's assets and build on them through an at-home workbook.

The second session, on Wednesday, March 10, will address areas of concern for today's youth. And, during the last session, on Thursday, March 25, internal and external assets, community development, and parent networking will be discussed. Participants will receive the book *What Kids Need to Succeed*.

This series is sponsored by the Employee Assistance Program. BYO lunch; soda and dessert will be provided.



Sports shorts

Submitted by Dave Fischer, athletic communications director/assistant athletic director

Youth Day at Saturday's Basketball Game

All kids 18 and under will be admitted free to the Huskies v. Lake Superior State basketball game, set for Saturday, February 20.

The GLIAC double-header is the final regular-season contest of the year. Opening tip is set for 1:00 p.m. for the women's game, with the men's game to follow at 3:00 p.m. Both games will be played in the SDC Gym.

Between games, MTU will honor the parents of its players, as well as the seniors of both the men's and women's program.

For ticket information, call the SDC Ticket Office at 487-2073.

Women's hockey follows MTU-UW Game Saturday

An exhibition game to promote the development of girls' and women's hockey will take place immediately following the MTU-Wisconsin men's hockey game Saturday, February 20, at the MacInnes Student Ice Arena.

The contest will be staged between the K-Wings and the MTU women's club team.

Susan McDowell, who directs girls' and women's hockey for the Michigan Amateur Hockey Association, will be present for the game and will answer questions from fans, players, and parents.

The MTU-Wisconsin game is scheduled for a 7:05 p.m. faceoff, with the women's exhibition game to begin at approximately 9:40 p.m.

For ticket information, call the SDC Ticket Office at 487-2073.

Coaches Corner/Blueline Club Luncheon Friday

The next Coaches Corner/Blueline Club Luncheon is set for Friday, February 19, at noon at the Best Western-Franklin Square Inn in downtown Houghton.

Cost for the buffet luncheon, which includes tax, tip, and beverage, is \$6.75 per person. Blueline Club members receive a 50-cent discount.

Featured speakers for the event, which is open to all, are MTU hockey coach **Tim Watters**, Wisconsin hockey coach Jeff Sauer, Tech women's basketball coach **Darla Innes**, and MTU men's basketball coach **Kevin Luke**.

Brown-bag lunch on women in science

Technology has changed, but have things changed for women in science? Come and join in an informal discussion with Sethanne Howard, program director, extragalactic astronomy and cosmology, in the NSF's Division of Astronomical Science.

The brown-bag lunch will be held Friday, February 19, at noon in the Memorial Union Alumni Lounge. BYO lunch; cookies and beverages will be provided.

The event is sponsored by Educational Opportunity, the Presidential Commission for Women, and Women in Science and Engineering.

February Black History Month

- 19 Friday**
3:00 p.m.—Lori Pollock, "Program-Based Testing of Parallel Programs"—Chem Sci 201
4:00 p.m.—Sethanne Howard, "Four Thousand Years of Women in Science"—Fisher 139
7:35 p.m.—Hockey, Wisconsin at MTU—MacInnes Student Ice Arena
- 20 Saturday**
1:00 p.m.—Women's basketball, Lake Superior State at MTU—SDC
3:00 p.m.—Men's basketball, Lake Superior State at MTU—SDC
6:00 p.m.—Russ Alger on *Michigan Out of Doors*—Channel 13
7:05 p.m.—Hockey, Wisconsin at MTU—MacInnes Student Ice Arena
8:00 p.m.—KSO concert with cellist David Low—Walker Theatre
- 21 Sunday**
3:00 p.m.—KSO concert with cellist David Low—Walker Theatre
- 22 Monday**
2:00 p.m.—Donald Visco, "The Thermodynamic and Molecular Modeling of Hydrogen Fluoride"—Chem Sci 201
- 23 Tuesday**
4:00 p.m.—Steve Seidel, "The Computational Science and Engineering PhD Program at MTU"—Memorial Union Alumni Lounge
7:00 p.m.—Auditions for string master class with Misha Rachlevsky—Walker Theatre
- 24 Wednesday**
1:00 p.m.—Emily Puckette, "Critical Exponents and Random Walks"—Fisher 101
- 25 Thursday**
noon—Lunch and learn, "Developing and Nurturing Assets in Your Children"—MUB 105B
10:00–11:30 a.m.—Open House—Michigan Tech Child Care Center
3:00 p.m.—Emily Puckette, "Two Approaches to Curricular Change"—Fisher 101
- 26 Friday**
7:35 p.m.—Hockey, Nebraska-Omaha at MTU—MacInnes Student Ice Arena

POSITIONS AVAILABLE AT MTU

Job descriptions are available from Human Resources starting at 1:00 p.m. on Friday. You can e-mail us at JOBS@MTU.EDU and we will e-mail you the job description you request.

The following positions will be posted Friday, February 19, 1999, at 1:00 p.m. through noon, Friday, February 26, 1999, in the Human Resources Office.

- Office Assistant—Recreation Programs (UAW internal posting only)
- Coordinator, Hispanic/Latino Outreach—Educational Opportunity
- Web Designer—Department of Electrical Engineering (Regular, part-time position; ten-twenty hours per week)
- Food Service Helper—Memorial Union (forty hours per week, nine-month position; AFSCME internal posting only)

University employees are reminded to apply in writing prior to noon, Friday, February 26, 1999, to be considered as internal candidates for bargaining unit positions only. Applicants from the recall pool will be given first consideration for non-bargaining-unit positions only. Vacancy announcements are normally posted every Friday at 1:00 p.m. in the Human Resources Office. Complete job descriptions are available in the Human Resources Office or by calling 487-2280. More information regarding employment opportunities is available by calling the Job Line at 487-2895. Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

Seminar February 23 on computational science and engg Phd program

Associate Professor **Steven Seidel** (computer science) will lead a seminar, "The Computational Science and Engineering PhD Program at MTU," on Tuesday, February 23, 4:00–5:00 p.m., in the Memorial Union Alumni Lounge.

The event is hosted by Sigma Xi, and all interested persons are invited. Wine, soft drinks, cheese, and crackers will be provided.

MTU notables

Presidential Professor **John Johnson** (ME-EM) has been named a member of the National Research Council Committee Board to review the Environmental Protection Agency's Mobile Source Emissions Factor (MOBILE) Model.

The committee will consider the adequacy of the model's input data, assumptions, structure, and results used to characterize mobile source emissions (as from vehicles). The committee will also consider ways to improve the reliability of the MOBILE model as a tool for assisting in the development of the emission control strategies to meet air quality goals. The project is sponsored by the EPA and the Department of Transportation. Johnson's appointment began February 1 and ends June 30.

Visco to give chem engg talk February 22

Guest lecturer Donald Visco will give a talk, "The Thermodynamic and Molecular Modeling of Hydrogen Fluoride," on Monday, February 22, at 2:00 p.m., in Chemical Sciences and Engineering 201. All members of the University community are invited.

Visco is a faculty candidate in the chemical engineering department. He is from the University of New York at Buffalo.

Senate (Continued from page 1)

Homecoming and Good Friday. It defeated a 15-week semester calendar that retained the traditional holidays. President **Curt Tompkins** has said he will recommend that the Board of Control adopt the 15-week semester calendar (see story on page 1).

Even if the referendum heavily favors the 14-week semester calendar, the Board of Control will probably approve 15-week semesters, Dobney said. This should not be interpreted as disregarding the senate's wishes or a failure of shared governance, he added. The Board's support of 15-week semesters stems from its initial involvement in the development of a new calendar, which includes boundary conditions (such as retaining traditional holidays) promised to students. If a referendum of the student body as a whole were to show they supported 14-week semesters, then the Board might reconsider its position.

"Everybody says we should honor the boundary conditions, until we go beyond that and look at the calendar," Senator **William Shapton** (ME-EM) said. When the two calendars are placed side by side, faculty and students both like the 14-week semester version, he said.

While the Undergraduate Student Government supports the 15-week semester calendar, the opinion of the entire student body is unclear. The USG may consider a student referendum following spring break.

The ballots are expected to be distributed to faculty and professional staff early the week of February 22, with a tentative due date of March 8. They will include detailed descriptions of both calendars.

In other business, the senate

- voted to end classes on December 22, 1999, and resume classes on January 6, 2000, as a precautionary measure. The delay in starting classes allows time for possible disruptions in travel and services that could be caused by the Y2K problem.
- began debate on the proposed MS in Environmental Engineering Science, with discussion focussing on whether the name incorrectly suggests that the program would specifically prepare students to be professional engineers. The matter will be revisited by the senate.