

Tech Topics

March 1, 2002
Vol. 34, No. 22

Michigan Tech's Faculty-Staff Newsletter

Published weekly by University Relations

Campaign Has Raised \$140 million

The University Senate heard an overview of the Leaders for Innovation capital campaign Feb. 27, which has achieved its goal of raising gifts and pledges of \$140 million.

The campaign has not officially ended, however, said Vice President for Advancement and Marketing **Fred Hensley**. The Michigan Tech Fund is still working to finalize some major-gift proposals to maximize the success of the campaign.

From July 12, 1997, to Dec. 31, 2001, the campaign has raised \$60.5 million in cash gifts, \$24.9 million in in-kind gifts, \$17.3 million in pledges and \$37.8 million in planned gifts, for a total of \$141.0 million.

The campaign set fundraising goals in five areas: \$30 million for faculty enrichment, including endowed chairs; \$20 million for campus enrichment; \$35 million for student enrichment; \$35 million for innovation; and \$20 million for facilities. In most of these areas, the goals were met or exceeded. The one shortfall was in the area of faculty enrichment, which has raised about half of its intended amount, or \$15 million.

Hensley said that a "mini-campaign" phase, to reach the unmet goals of the campaign, could follow the major fundraising effort.

The next major thrust is expected to be Michigan Tech's endowment, which now stands at about \$6,000 per student, or about \$40 million. Though the endowment has doubled in the last six years, it is still small compared to that of peer institutions: about \$30,000 per student.

Senator **Bill Gregg** (Geological Engineering and Sciences) suggested that continued emphasis be placed on student enrichment, since donors seem willing to support scholarship funds, which could mean that less general fund money would need to be used for scholarships. Provost **Kent Wray** said that, as a result of the campaign-funded scholarships, the University has been able to reduce general fund financial aid by about \$500,000 while maintaining student support.

Continued on page 5

There are times when you have to choose between being human and having good taste.

—BERTOLT BRECHT

SBE Students Win National Investment Competition

Six Michigan Tech undergraduates get to go to New York this spring.

A team from the School of Business and Economics beat out dozens of student investors from business schools across the U.S. and Canada to win the second annual RISE Symposium in the Blended category. As their reward, they get to open the Nasdaq stock exchange in Times Square on April 15. The following day, they'll appear on the CNBC finance program Squawk Box.

"As the judges read off the names of the top finishers, they started with fifth place and worked their way up," said Assistant Professor **Dean Johnson**, the students' teacher and advisor. "We kept waiting to hear 'Michigan Tech,' and when we finally realized that we'd won, the students were in shock."

The symposium gives awards in three categories based on the type of stock the student teams concentrate on in their portfolio management: Growth, Value, and Blended, a combination of value and growth stocks. The MTU team was named National Champion in the Blended Portfolio Management category.

The annual Redefining Investment Strategy Education Symposium brought together 61 teams of business students to compete Feb. 21-22 at the University of Dayton, in Ohio. Each team manages their own real-life invest-

ment portfolio. Fifteen finalists are placed in one of the three investment categories and are then judged both on their investment returns and on their presentations to a panel of judges.

Students in Michigan Tech's Applied Portfolio Management Program manage an investment portfolio that has grown to \$300,000, largely from alumni donations but also from the careful management of the student investors. This year, they earned a return of 7.27 percent despite a rocky year for stocks.

This is the second time that Michigan Tech has been a top competitor at RISE.

"We're very proud of our consistency," Johnson said. "We were among only four universities to make the top 15 this year and last year at RISE."

"And we learned from last year," he said. "The students had a year of experience under their belts, and their presentations and their answers to the judges' questions were fabulous."

What could be better? Maybe taking both first and second place.

"Now, we have one fund, and one group of students managing it," Johnson said. "We'd like to expand that and have a second fund so more students could have this kind of experience."

Distinguished Teaching Award Finalists Announced

Submitted by the Center for Teaching, Learning and Faculty Development

Each year, MTU recognizes two educators for their outstanding contribution to the instructional mission of the University. The first stage in this process involves the identification of ten Distinguished Teaching Award finalists (five in the Lecturer/Assistant Professor category and five in the Associate/Professor category). Over 40,000 student rating of instruction scores from the spring and fall 2001 semesters were used to determine the 10 finalists. The selection committee will solicit and review comments from students, staff, faculty and alumni of MTU in making its final decision. Comments on the nominees should be sent to nsseely@mtu.edu by April 1.

ODK will survey the classes of the finalists, and the Distinguished Teaching Award Committee will determine the award recipients. The winners will be formally announced during the fall 2002 convocation.

FINALISTS—ASSOCIATE PROFESSOR/PROFESSOR

Mary Ann Beckwith (Fine Arts)

Jeffrey Bell-Hanson (Fine Arts)

Karl Rundman (Materials Science and Engineering)

William Sproule (Civil and Environmental Engineering)

Dennis Wiitanen (Electrical and Computer Engineering)

FINALISTS—LECTURER/ASSISTANT PROFESSOR

Susan Amato-Henderson (Education)

Heidi Bostic (Humanities)

William Cooke (Biomedical Engineering)

David Flaspohler (Forestry and Wood Products)

Lawrence Sutter (Technology)

CAMMP Invites Proposals

The Center for Advanced Manufacturing and Materials Processing (CAMMP), an umbrella organization for several research centers, has \$125,000 to purchase equipment or invest in other research-related activity.

Since CAMMP started in 1999, it has provided \$126,000 for research-related equipment and activities to the Micro-Materials Devices Lab, the Institute for Materials Processing and the Carbon Technology Center.

The CAMMP Advisory Committee is asking for proposals for the use of the \$125,000, such as purchasing equipment, or other research expenditures. "It is not absolutely necessary to spend these funds right now," said CAMMP Director **Jay Meldrum**. "If you feel that it would be appropriate to let the funds accumulate (e.g. for a larger purchase at some point in the future), please indicate this."

Proposals must be interdisciplinary (involving at least two researchers from different departments), and they must relate to advanced manufacturing and materials processing. Please submit your proposals in writing (one page text and one page for the budget) to Meldrum by April 1. The CAMMP Advisory Committee will review the proposals and make funding recommendations. For more information, contact Meldrum at jmeldrum@mtu.edu or 487-3178.

CAMMP has been involved in project awards totalling over \$5.4 million, and \$101,000 in extra overhead return has been returned to researchers. So far, seven different departments, 25 research faculty, 20-plus grad students and over 40 undergraduates have participated in CAMMP.

In the News

Michigan Tech was mentioned in the story "Eco-Vandals Condemned as Domestic Terrorists," which appeared in the Jan. 8 edition of the San Francisco Chronicle.

MichiganTech

Bill Curnow, executive director, University Relations
Marcia Goodrich, *Tech Topics* editor
Tech Topics Web site: www.mtu.edu/level3/ttopics.html

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- By e-mail to ttopics@mtu.edu
- By campus 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.

Higher Ed and the Digital Divide

Center for Teaching, Learning,
and Faculty Development



By William Kennedy, director

Depending upon how you look at it, either the sky is falling or a new day is dawning on

American higher education. Hundreds of institutions of higher learning, including MTU, are already offering online certificate and degree programs in nearly every imaginable academic discipline. These technology-enabled programs appeal to many segments of the nearly unlimited market of nontraditional learners seeking to improve themselves and/or advance their careers. Distance learning programs offer these students a flexible, affordable, and eminently more manageable alternative to the traditional residential or commuter college experience. For many, the question isn't which is better, it's which will simply do the job of getting them where they want to go.

In the next few years, the demographers note that the recent waves of college-bound sons and daughters of baby-boomers will begin to ebb. Could it be that, at nearly the same time, the distance-ed providers will be siphoning off a significant percentage of traditional college-bound students as well? Skeptics decry the sweeping projections regarding the ultimate impact of distance education on traditional higher education programs by pointing out the capricious early pronouncements regarding the anticipated effects of radio, film and television on classroom-based instruction. Surely, early reports of the imminent demise of classroom-based education were somewhat premature, but even a cursory review of who is betting big on distance ed and the mind-boggling levels of financial resources that they are committing to this venture should demand our continuing attention.

Unlike being an ardent fan of radio, TV or film, being computer savvy is touted as one of the essential keys to securing substantial employment. Information literacy itself has become one of the goals of college general

education programs. The very technology which is enabling the distance-education revolution appears to be securing and defining its own future markets. Observe the emergence of the so-called "digital divide." According to 2000 U.S. Census data, among households with annual incomes of \$75,000 or more, 80 percent had computers with in-home Internet access. By comparison, only 20 percent of households with income levels at or below \$25,000 had similar access. Seen from perhaps even a more disturbing perspective, 77 percent of white non-Hispanic households had Internet access, while only 43 percent of African American and 37 percent of Hispanic households had home Internet access.

More and more Americans get their news from the Internet, do their banking, pursue their hobbies, play games, communicate with friends, pay bills, shop and even plan their vacations using their computers. As broadband connections become more widely available, capacious, and more affordable, it seems clear that the days of reading lectures on an endless series of computer screens will end, and the virtual classroom, or even more stimulating educational offerings yet to be imagined, will be available in more and more home offices and living rooms.

Where it will end is anybody's guess. But the pace of implementation and the continuing development of distance-ed programs is all quite alarming or exciting, depending on your perspective. Early predictions of wind-fall profits by distance-ed providers have been tempered by the growing reality that developing and producing high-quality learning materials is a costly undertaking. Finding talented faculty members who are willing and able to invest the time and energy to translate their instructional materials to new media is a daunting task that is posing new challenges to traditional institutional cultures and reward systems.

Next time, we'll take a snapshot of the distance-learning higher education industry circa 2002.

Nominees Sought for Award Selection Committee

Staff Council is soliciting nominations for members of the Employee Excellence Award Selection Committee.

Committee members serve for three years and are chosen from the following categories: Crafts/Food Service/Technical/Maintenance, Clerical/Secretarial/Non-exempt Clerical and Administrative/Professional. The Selection Committee has 12 members, all MTU staff. Nine are elected and three are the award recipients from the previous year.

Nomination forms have been mailed to full- and part-time staff on campus. The deadline for returning forms is 5 p.m. Tuesday, March 5. All nominees will be contacted to verify their interest in serving. Staff will elect members of the Selection Committee in late March.

The Employee Excellence Award recognizes outstanding ability, performance, and service among staff members of Michigan Tech. Recipients of the 2002 awards will be announced in late May.

If you have any questions, please contact Becky Christianson, Employee Excellence Award Committee co-chair at rwchrist@mtu.edu or 487-2416.

Robert Horner Dies

Robert Horner, a longtime friend of Michigan Tech, died Jan. 18 in Boca Raton, Fla., at the age of 84.

Horner received an Honorary Doctor of Forest Science degree from Michigan Tech last fall, in recognition of his distinguished career and his generosity to several institutions of higher learning, including Michigan Tech.

"Bob was very humble, a real gentleman," said **Glenn Mroz**, dean of forestry and wood products. "He was very impressed by his family's ability to survive a fire that burned down their [hardwood flooring business, in Dollar Bay] and the Depression, which nearly put them out of business.

"I think it was for that reason that all of the donations Bob made to Michigan Tech were in his parents' name, to remember them and all they went through. Now, when we use the Horner Lobby in the Rozsa, or Horner Hall, it's our time to remember Bob."

After graduating from Houghton High School, Horner attended Michigan Tech in 1938 and 1939, and in 1940, he received the AB degree in History from University of Michigan. He then earned his JD degree from Northwestern University in 1948.

During World War II, he served as a naval aviator, receiving the Air Medal and Gold Star. He continued his commission as Lt. Commander in the Naval Reserves while embarking on a career in commerce and international law.

He went on to a long career with the Glidden-Durkee Division of SCM Corporation, where he served 10 years on the Executive Committee and 15 years on the Board of Directors, in addition to being secretary and general counsel. He was admitted to law practice in Michigan and Illinois in 1948, Ohio in 1950 and the U.S. Supreme Court in 1961.

Horner has received the Board of Control Silver Medal and he was on the Forestry Building Expansion Steering committee. His gift to honor his parents created the Samuel and Grace Horner Lobby of the Rozsa Center. He also helped fund a new wing of the forestry building to honor his father's memory. He has established scholarships in the SFWP as well as an annual research award for students involved with northern hardwood research.

Horner is survived by his wife, Virginia; two grandchildren; and two great grandchildren.

Learn How to Get NSF \$

Professor **Bruce Seely** (Social Sciences), who is completing his second year as an NSF program director, will give a lunch talk, "Proposals that Work," on Monday, March 18, from noon to 1 p.m. To register, call the CTLFD at 487-2046. Lunch will be provided for faculty who register by March 11.

Caneba: Building an All-Purpose Polymer

Gerard Caneba hands out two plastic baggies of what look like polystyrene muffins in aluminum pans. One set is hard and flat, as if someone forgot to add the baking soda. The others are airy, fluffy balls of . . . what?

Caneba, an associate professor of chemical engineering, picks up one of the big puffy ones. "I like this," he says, turning it around in his fingers. "It's amazing to see what it does when it's blown up in a vacuum."

So, what is it, besides a cupcake-size version of packing peanuts?

Caneba starts a list: it's sticky but can become slippery; it's a surfactant and a foam. Plus, it can be made biodegradable.

At some point, there might be a shorter name for the stuff. But for now, this patent-pending copolymer is known by its two parts; vinyl acetate-acrylic acid. Its dual nature is what makes it so versatile. "We've developed a unique and efficient process to distribute the two chemicals differently along the chain or neutralize the acid with a variety of bases and have different properties," Caneba said.

"We've produced some really neat new materials."

The surfactant, or detergent, form of the copolymer dissolves into particles up to 200 times larger than regular detergents. "It can disperse big, toxic organic compounds such as PCBs much more efficiently," which could make it particularly useful in mopping up spills. And, being biodegradable, it wouldn't be as polluting.

The copolymer has been shown to have promise in oil recovery. "Usually, petroleum is trapped within the pores of the rocks inside an oil well," Caneba said. "Billions of barrels of oil is unrecovered from existing wells here in the continental US alone."

Surfactants are used to improve oil recovery, and it looks like vinyl acetate-acrylic acid may outperform current products—by up to 400 percent—at a much lower cost.

You can also rearrange the copolymer to

produce a coating that's slick on one side and sticky on the other. "That lets you make real low-friction surfaces," Caneba said.

And another form of vinyl acetate-acrylic acid could be used to create composites, binding wood and plastic together. "It seems to have an affinity for lots of natural materials," Caneba said. "It's inexpensive, it performs well and its environmentally responsible."

It even has an unusual property that could give it a role in constructing micro- or nano-electrical mechanical systems.

The copolymers naturally form tight coils and don't tangle up with each other. "They stay separate for a long time; it's amazing," Caneba said.

At Argonne National Laboratory, where Caneba was a summer research fellow, he and his colleagues were able to show through X-ray scattering methods that the primary structures formed during chemical reactions are very stable, even at nano-scales.

"When you get to that level, quantum mechanics kicks in and people don't know what's going on, especially in a chemical reaction," Caneba noted. "But this reaction is very well-controlled, so it might be useful in MEMS or even NEMS production."

Because it can form such small, stable structures, the copolymer might be used to make super-small filters, used in bioengineering and pharmaceuticals. "Or it might be used as a grid for cells to grow on," Caneba muses. "When the primary structures are that small, you can do really fine patterning."

At this point, he and his co-workers are using X-ray lithography, a technique used in microelectronics, to produce a very uniform, square grid pattern from a similar material that's biologically compatible, opening up possibilities in medicine and biological engineering.

"I'm sure other people would have other ideas," he adds. "It's quite exciting."

E-Mail Document Delivery Gets Thumbs Up

Submitted by the J. R. Van Pelt Library

"Much faster," "easier," "convenient," "simpler and more direct" are phrases used to describe interlibrary loans and document deliveries sent as e-mail attachments.

In late January, the JRVP Library upgraded its software to be able to deliver documents in digital format. "We have been receiving them digitally for over two years, printing them off and putting them in campus mail or having users come to the library to pick them up," said **Mark Bronson**, head of access services.

Since then, a survey was e-mailed to the users along with their journal article. Of the 40 responses, eight were not able to open the attachments. Seventy-five percent preferred receiving their document this way. Many liked the idea of saving trees and bookshelf space while being able to edit and save their documents electronically to use when it was convenient.

Users had some concern about degradation of image quality, detail or black-and-white copies of color graphs. Most of these issues will have to be addressed on a case-by-case basis.

"We are providing the option of digital delivery or paper copy delivery when requested," said **Phyllis Johnson**, library director.

For help opening your document delivery attachment, contact Bronson, mbronson@mtu.edu or 487-2473. For further information, contact the ILL/DD staff at ill@mtu.edu or 487-3207.

Michalek on Sabbatical in the U.S. Senate

Assistant Professor **Donna Michalek** (ME-EM) is currently on sabbatical as part of the Federal Government Fellowship Program, sponsored by the American Society of Mechanical Engineers.

Michalek is working on the staff of U.S. Senator James M. Inhofe (R-Oklahoma). Her fellowship runs through Dec. 31.

Under the program, selected ASME members work on the staff of a congressional committee, U.S. representative or U.S. senator. Fellows conduct research, draft bills and provide engineering and technical advice to policy makers in Congress and other federal agencies.

ASME was the first engineering society to establish a congressional fellowship program. As legislation becomes increasingly technical, the need for engineering expertise is essential.

Michalek conducts research in computational fluid dynamics, with emphasis on modeling multiphase fluid systems for automotive and manufacturing applications. Her work uses both analytical and computational models to evaluate the role of cutting fluids in machining processes to improve air quality in manufacturing environments.

Inhofe's main committee assignments are Armed Services and Environment and Public Works. "I'll be working on issues brought to both committees," Michalek said. "And there is always work on the budget, as that drives everything else here. The Energy Bill will hit the Senate floor soon, and that will keep all of us busy."

Currently, she is working on the Water Investment Act of 2002.

While ASME sponsors the fellowship, the fellows are not assigned to an office. Instead, they interview with congressional offices to find a good match. "It's not too unlike finding any job," Michalek said.

"Although I feel like I am still trying to get up to speed, I am sure the year will be a great one and will go by very quickly," she added. "This is an interesting place to be at a very interesting time."

Tech Outdraws Northern

For the third consecutive year, MTU has won a blood drive competition with Northern Michigan University, 123 pints to 88 pints. The MTU Blood Drive, sponsored by Residence Life, has donated 409 pints of blood to the U.P. Regional Blood Center in the three competitions. Thanks to all students, staff, faculty and community members who made our drive a success.

No Tech Topics Next Week

We resume publication March 15. Happy Spring Break!

Rock and Roll Doctor

Little Feat Keyboardist on Poetry, Music and Life

By *Dennis Walikainen*

Rock and roll stars are often painted with a nasty brush: they lead lives of excess, they are overpaid, spoiled; you know the rest.

Bill Payne was on campus last week to talk to students and teachers about poetry and music, and he helped dispel that image. There was a lot more than boogie woogie going on here.

Payne talked about the importance of weaving "the fabric of history" into artistic expression. He bristled at the thought of today's younger generation having a "free ride" because of prosperous times, especially before 9/11. He told the assembled high school and college students that, through art, they can "derive the truth out of what we are seeing," and that they should test waters of what they can get away with.

"And don't look for the horrible things," he said. "They'll find you." Instead, he said, we should focus on the good, celebrate the wonderful stories like those at the Olympics this year, and "let life deal with you."

The students and teachers smiled and nodded. The congregation was clearly getting the message.

Payne showed how three notes could be transformed from something simple into something powerful, New Orleans blues, for example. Then the music could inspire words. Payne quoted from the newly developed Poetry & Song Web site <http://www.hu.mtu.edu/poemandsong> while discussing that process:

"My approach to lyrics and poetry is informal. Regardless, it has not stopped me from putting my experiences, real or imagined, into word pictures. The destination of intent is what I love about writing. What are you trying to stimulate in the reader?"

And the connection to poetry?

"The weight of words and their importance are in abundant evidence in poetry, creating a music in the way the words fall upon our

ears (the cadence), and painting images in our mind supplemented from experiences drawn from our lives," he said. The Web site also features Associate Professor **Randall Freisinger** and Gary Bays from the University of Akron-Wayne College.

Payne also extolled the virtue of "increasing the vocabulary" beyond what other students are listening to or reading. As examples, he cited his work with modern rock star Beck, and the fact that "sampling" is common now in musical compositions.

"I learned the synthesizer and probably stole a lot of work from people working with strings," he said. "And piano players did some damage to the careers of harpsichord players."

In between playing Little Feat songs and reading some of his poems, he did have a few rock and roll road trip stories. Performing in Rio de Janeiro recently, his band was caught in traffic and complaining about diesel fumes when they noticed locals packed and standing in a stuck bus in the intense heat. "Those people were singing," he said. The complaining stopped.

He talked of working with James Taylor (rehearsing fifty songs to play less than half that in concert), Jackson Browne (asking him "Why am I here if you want to play the song your way?") and Meat Loaf (recommended to him by Roy Bitton, Bruce Springsteens keyboardist).

But his main focus was on students and teachers. Students, he said, should find "anchors of reality" in their art. Teachers can "make the light to go on in a kid's head. What a great way to make a difference."

He ended by going back to his and rock's roots: the blues, his piano spreading the word via the Little Feat classic "Oh, Atlanta." It was a different version, however, proving to the students that revision can be rewarding.

He also proved that nice guys can rock (and preach). Amen.

Archives Announce Travel Awards

The MTU Archives and Copper Country Historical Collections has given two \$600 Research Travel Awards to researchers using its collections.

The program is funded by the Friends of the Van Pelt Library.

Award recipient Dag Avango, a doctoral student in the Department of History and of Science and Technology at the Royal Institute of Technology in Stockholm, Sweden, will travel here to research the development of the Swedish coal mining industry in Svalbard, an arctic archipelago of islands above Scandinavia. He will examine records at the MTU Archives pertaining to the Arctic Coal Company, a successful American venture funded by John Munroe Longyear of Marquette and other Michigan capitalists.

Award recipient Aaron Shapiro, a doctoral candidate in the Department of History at the University of Chicago, will research the development of vacationing and tourism in the Upper Midwest from World War I to the 1950s.

For further information about the awards program or about the collections of the MTU Archives, call 487-2505.

Senate *Continued from page 1*

The University also needs to build up its alumni network, particularly in the south-eastern U.S., where there are virtually no chapters. And alumni elsewhere are expressing an interest in substantive events, in which, for example, faculty give presentations on their research.

"We need to create a vision in which people want to invest," Hensley said. "We need to take the campus to the constituency." Alumni benefit from this process, since it improves the University's reputation and increases the value of an MTU degree.

Raising awareness of Michigan Tech, particularly in downstate Michigan, is also a priority in order to increase enrollment, he said.

The senate heard a report from Senator **Kelly Strong** (SBE), the liaison to the Michigan Tech Enterprise SmartZone, on the possible effects the involuntary bankruptcy of DCT could have on the project. The state has promised the Local Development Financing Authority a \$2 million grant to purchase a building on behalf of MTEPS to serve as incubator space for high-tech businesses. The projected site would be the Republic Bank building in Hancock, which has been leased in part by former DCT-owner **Bronce Henderson's** real estate company from Republic Bank. Henderson, a member of the Board of Control, had indicated he would lease the entire building from the SmartZone, should it be purchased from Republic. He would then solicit lessees and take responsibility for its upkeep.

MTU POSITION AVAILABLE

Job descriptions will be available at 1:00 p.m. on Friday, or by e-mail at <JOBS@MTU.EDU>.

The following position will be posted Friday, March 1, 2002, at 1 p.m. through noon, Friday, March 8, 2002, in the Human Resources Office.

Corporate and Foundation Development Officer—Corporate Services

University employees are reminded to apply in writing prior to noon, Friday, March 8, 2002, 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.

Because of Henderson's business uncertainties, the future ownership of the building is unclear; the two members of the financing authority, the cities of Houghton and Hancock, do not want to take on the risk of managing the building themselves.

However, Strong said, the situation does not affect Michigan Tech monetarily, since it has made no financial commitments to MTEPS. He also noted that the SmartZone has been carefully organized, with the revenues to be handled by one body (the financing authority) and the operations and expenditures administered through another (the yet-to-be-formed Michigan Tech Enterprise Corporation).

Provost **Kent Wray** stressed that, whatever the outcome, MTU would be held harmless. "From the get-go, we've had no intention to underwrite MTEPS," he said.

In other business, the senate

- approved a new Enterprise minor, which would be awarded to students participating in Engineering Enterprise projects.
- heard a report from Senator **Jim Pickens** (SFWP) on how the University's R&I Fund is invested. The fund covers expenses such as health care, retirement and workers' compensation. For the last several years, the fund has invested its assets in stocks using an indexing strategy, and its returns have reflected those of the stock markets. The fund currently has investments worth about \$8 million, \$500,000 more than its liabilities, so its balance exceeds legal requirements. Pickens noted that about \$3.9 million had been transferred from R&I to the general fund in past years. While he did not approve of the transfer, he said, the University would probably be in a worse financial situation had that not happened.

In Print

Associate Professor **John Jaszczak** (Physics), who is also adjunct curator at the Seaman Mineral Museum, published a paper, "Multiple Length Scale Growth Spirals on Metamorphic Graphite {001} Surfaces Studied by Atomic Force Microscopy," with coauthor John Rakovan (Miami University, Oxford, Ohio) in the January 2002 issue of *American Mineralogist*.

Take Our Daughters to Work Day April 25: Can You Help?

Thursday, April 25, is Take Our Daughters to Work Day, and the Presidential Commission for Women is sponsoring this event at Michigan Tech. A day of programming is planned for fifth and sixth grade girls who are the children, grandchildren, etc. of Michigan Tech employees.

Hour-long sessions will be presented by campus faculty and staff. The PCW is looking for individuals to help organize a session in their departments. Sessions can be interactive or strictly informative. If you are interested in sponsoring a session, please contact Paula Nutini at 487-3324, or pjnutini@mtu.edu.

March

National Women's Month

- 9 Saturday**
10 a.m.—4 p.m.—Family Fun Day—SDC, Memorial Union
- 23 Saturday**
10 a.m.—Men's tennis, Mercyhurst at MTU—Gates Tennis Center
- 24 Sunday**
10 a.m.—Men's tennis, Findlay at MTU—Gates Tennis Center
- 29 Friday**
6/7:15 p.m.—Club Indigo: Dinner/"American in Paris"—Calumet Theatre

Family Fun Day Reminder

Don't forget to return your registration forms if you plan to attend Family Fun Day Saturday, March 9. This puts you in a drawing for two Sbarro pizzas and a 12-day pass to the SDC.

Family Fun Day is free for all employees and their families. You can do everything from bowling to shooting (both rifles and billiards), swimming and more, plus there's free food.

For more information, see the yellow flyer you received in campus mail or call Rita Smith (rsmith@mtu.edu, 487-2048), Dave Nordstrom (dpnordst@mtu.edu, 487-2578) or Chris Roy (croy@mtu.edu, 487-2975).

New Staff

Alfred Eckhart has joined the Central Ticket Office staff as a senior clerk. He was previously an office assistant at OK Houghton Auto Value and served 20 years on active duty in the US Army before retiring as a major in 1993. Eckhart graduated in 1984 from Chapman College, in Orange, Calif., with an MS in Human Resource Management and earned a BA in Liberal Arts from Michigan Tech in 1976. He and his wife, Mary, live in Chassell and he has one son, Gregory, who is a June 2000 graduate of MTU. Eckhart says his passions are hockey and sailing.

Thomas P. Gemignani has joined the staff of the civil and environmental engineering department as a computer support specialist. He was previously employed by Pronet Solutions Inc. of Phoenix, Ariz., and now lives in Hancock.