

Tech Topics

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Michigan Tech's Faculty-Staff Newsletter

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Senate Approves Bioinformatics Program

The University Senate gave its approval April 25 to two new degree programs and OK'd a proposal that would increase University contributions to TIAA-CREF accounts.

The BS program in Bioinformatics, while based in the Department of Biological Sciences, would also draw its coursework from computer science and forestry. It "couples the fundamental biochemistry of organisms with computational analysis, thus providing a vast new insight into biological processes and organisms," according to the proposal.

RPI has the only undergraduate bioinformatics program in the US, with two under development at Penn State and UC Santa Cruz. Biological sciences chair **John Adler** cited the April 26 *Newsweek* article "Wanted: Hot Industry Seeks SuperGeeks," which describes the huge demand for this new class of biologists trained in computational methods. Bioinformatics professionals are coveted by the health-care industry, where they are mining the newly mapped human genome in hopes of finding cures for genetic diseases.

Some senators questioned whether the program would be adequately funded. Senator **Bruce Barna** (Chemical Engineering), chair of the Senate Finance Committee, said that the program's projected 150 students would require five to seven more faculty lines, significantly more than the anticipated two. He also questioned where the additional funding, about \$115,000 for software and \$50,000 to update labs, would come from, and if computing facilities would be adequate. Students would use computing facilities currently maintained by biological sciences and geological engineering and sciences. The provost supports the program but hasn't guaranteed funding, Barna said, and the issue should be addressed. Senator **Steve Siedel** (Computer Science) questioned whether the computing facilities would be adequate for the computer science work that would be required of bioinformatics stu-

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Vanity is so secure in the heart of man that everyone wants to be admired, even I who write this and you who read this.

—BLAISE PASCAL

Two Alumni Named to Board of Control

Submitted by the News Bureau

Governor John Engler this week appointed two Upper Peninsula businessmen, **David J. Brule, Sr.** and **Michael C. Henricksen**, to the Board of Control. Brule and Henricksen, both MTU alumni, will replace Dr. **Kenneth Rowe** of Calumet and **Rick Berquist** of Menominee, whose terms have expired.

Brule, of Iron Mountain, is president and CEO of M. J. Electric, Inc. His term will expire December 31, 2008. Henricksen, of AuTrain, is CEO of Satellite Services, Inc. and will serve on the Board until December 31, 2006.

A native of Norway, Michigan, and graduate of Kingsford High School, Brule received a BS in Electrical Engineering from Michigan Tech in 1972 and began his career as a division engineer with Wisconsin Public Service in Green Bay. In 1973 he joined M. J. Electric as a project engineer and over the next several years received several management and administrative promotions, which culminated with his appointment as president and CEO in 1985. He continued as president of the company after it was acquired by Exelon Infrastructure Services, Inc. in 1990.

M. J. Electric started as a small town contractor in 1959 and is now ranked as one of the top 25 electrical contractors in the nation with sales of about \$20 million annually. In 1997 the company was named Business of the Year by the Dickinson County Chamber of Commerce.

Brule and his wife, Elsa, have two sons and two daughters and have been active supporters of Michigan Tech. He is a lifetime member of the MTU Alumni Association, was elected to the University's Electrical Engineering Academy in 1996, and, through M. J. Electric, has provided more than \$50,000 in scholarships and summer internships to MTU students. He has also been an active member of his community, serving with Friends of Handicapped People, the Interlochen Arts Academy Presidents Council, the Dickinson Area Catholic School Board, and the Iron Mountain-Kingsford Rotary Club. He has also served on the Board of

Directors of the First National Bank of Iron Mountain and as director of the U.P. Construction Labor-Management Council.

Henricksen is a native of Marquette and received his BS in Forestry from Michigan Tech in 1964. He began his career as a woodlands manager with Champion International, Inc. in Gaylord, then became co-owner of Lake States Wood Preserving Inc. of Wetmore until 1981 when he became co-owner of Satellite Services. In 1983 he founded Superior Hiawatha Log Homes, Inc. of Munising, which he sold in 1996.

Satellite Services provides temporary office/facility support and aircraft services and supplies base support services and contracted training for the U.S. government. The company's headquarters is in Marquette, with branches in Alabama, Georgia, Maryland, Missouri, New York, and Idaho.

Henricksen has served on the North Country Financial Corporation Board of Directors since 1988 and has been chairman of the board since 1997. He is also a member of the First Northern Bank & Trust Board of Directors and is the founder and past president of the Michigan Association of Timbermen. He has also served on the Michigan State Board of Foresters, the Governor's Wood Resources Development Task Force, the Forestry Committee of the Michigan Manufacturers Association, the State Chamber of Commerce Board of Directors, and the Governor's Small Business Advisory Council. In addition, he is a Grand Island Lodge Mason and has served as an AuTrain volunteer fireman (1984) and as AuTrain Onota school board treasurer.

He is a life member of the MTU Alumni Association and a member of the University's Second Century Society. He has also served the University as a member of the Forestry Building Expansion Steering Committee, as a member of the Advisory Committee to the Institute of Wood Research, and as a Century II Campaign volunteer.

Henricksen and his wife, Judith, have three daughters and a son.

Summer Hours Start May 13

Starting Sunday, May 13, the University shifts to its summer schedule. The general hours of operation will be 8:00 a.m. to 4:00 p.m., and all offices must be staffed during those hours.

Employees are expected to fulfill their usual full-time or part-time obligations. Regular office hours resume on August 18.

Bowen Announces Move to Bucknell

By Dean Woodbeck

Stephen H. Bowen, vice provost for instruction and dean of distance learning, has announced his resignation. He is leaving to become the academic vice president and provost at Bucknell University in Lewisburg, Pennsylvania.

Bowen's career at Michigan Tech spans twenty-one years. He joined the faculty in 1978 as an assistant professor of biology, then served as head of the Department of Biological Sciences from 1986 through 1995. He was named associate dean of the College of Sciences and Arts in 1995, then was appointed to the newly created position of vice provost for instruction in 1997.

As vice provost, Bowen was responsible for planning and managing the massive effort of moving the University to a semester calendar. He led the University task force that developed Michigan Tech's new general education curriculum, and the task force on assessment of student academic success.

Bowen also served as interim provost for seven months, until Provost Kent Wray joined the University at the beginning of the 2000-01 academic year. The rapidly expanding area of distance learning was recently added to his responsibilities, when he was named dean of distance learning. He has been a strong advocate for international education for Michigan Tech students.

"Michigan Tech has been very good to me over the years," Bowen said. "I've enjoyed the camaraderie and support of many wonderful colleagues in teaching, research and university leadership. Michigan Tech students are a very rewarding group to work with, and I'll miss the friendships and the community."

"Steve has been such a valuable asset to Michigan Tech over the years," said Wray. "He led the conversion to semesters, was instrumental in developing our new general education program, and has been a catalyst in organizing our approach to distance learning. We will certainly miss his leadership."

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.

Iceberg Dead Ahead?

Center for Teaching, Learning,
and Faculty Development



By William Kennedy, director

What can we do to encourage some of our incoming students to act more responsibly from the beginning of their programs so that they might be more successful in their studies? It's a question I have heard more and more frequently of late. Although the jury is still out in terms of hard evidence, concerns about the lack of student engagement, undeveloped study skills, lapses in civility, sporadic class attendance, and poor work habits from across the academy seem to be increasing on our campus, as well.

What evidence I have to substantiate these claims at MTU is clearly anecdotal. It is not unusual, for example, when I observe a class at MTU, for less than half of the students registered to be present in a typical class section. Several instructors from across campus have confided in me that such a decline in attendance is an increasing problem in their sections, as well.

I am told that a substantial proportion of the increasing numbers of students on academic probation tend to blame their academic failures solely on external circumstances and are unwilling to take any responsibility for their academic plight. We've already dismissed 5 percent of the freshman class; 60 students who made virtually no forward progress during their first term at Tech. Upon being dismissed, these students either failed to write a letter of appeal for readmission or failed to take a significant measure of personal responsibility for their lack of progress in making their appeal. Dean Martha Janners describes this increasing tendency to blame everything or everybody else for one's own behavioral failures as "external attribution."

I am hearing reports that the Counseling Center is busier than ever and is dealing with more and more serious counseling issues for more and more students all the time. Last fall, several students arrived on campus already in need of personal counseling for issues light years beyond homesickness or missing friends.

In the fall 2000 semester, 38 percent of the students filling out end-of-term course evalu-

ations indicated that they had been either ambivalent about or negatively predisposed toward taking the courses they were evaluating. By the end of the term, 44 percent of our students indicated that their interest in the subject had not changed or had actually diminished as a result of taking the course that they were evaluating.

What's going on? After teaching for nearly a quarter of a century, it seems pretty clear to me that some part of what we are encountering is a generation of students who are, very generally speaking, somewhat less aggressive, sometimes less focused, and somewhat less driven than the cohorts of first-year students of ten or fifteen years ago. Although a higher percentage of MTU students may come from stable home environments than college students on average, many of our students surely come to us as emotionally and developmentally needy post-adolescents, truly needing some personal adult supervision and consistent encouragement.

A senior Tech professor, an accomplished researcher and a recipient of MTU's Distinguished Teaching Award, recently confided in me that he is devoting more and more of his class time to motivating, encouraging, and attempting to connect with his students before he launches forward into the course material. I asked how much time he could afford to spend on motivation and engagement without sacrificing the coverage of the course material. He answered, "as much as necessary, because without that, there's not much point in moving ahead by yourself."

For years, MTU was the kind of place where you could say to the students, "Look to your left and look to your right, only one of you is likely to graduate from Tech; which one will it be?" But being tough and acting tough are two quite different things. Building character and determination takes time and some good role models inside and outside of the classroom. Remember that every little effort that you and I make to go the extra mile, to encourage a student to work hard, or simply to lend them a hand or a word of encouragement when they are faltering, may pay substantial dividends well into our common future.

Employee Excellence Nominees Sought, Committee Named

Staff Council is seeking nominees for the Employee Excellence Award, which recognizes exemplary staff in three job categories. Nomination forms are available at the Staff Council Web site, www.admin.mtu.edu/staff_council/nomination. Nominations can be submitted at the site or printed and returned through campus mail. The nomination deadline is Monday, May 7. If you have any questions, contact Bev Auel at 487-3539 or blauel@mtu.edu.

The Staff Council constituency has elected three new members of the Employee Excellence Award Selection Committee. Building Mechanic **Jim Gentry** (Memorial Union) was chosen from the Crafts/Maintenance/Food Service/Technical category. Secretary II **Ruth Koivu** (Information Technology) was elected in the Clerical/Secretarial category, and Auditor **Sharon Haapala** (Internal Audit) was selected in the Administrative/Professional category.

Jazz Bands Present Spring Showcase

Submitted by the Department of Fine Arts

Michigan Tech's jazz bands celebrate thirty-four years of jazz studies at MTU with two concerts, the Spring Jazz Showcase and Alumni Reunion, on Friday and Saturday, April 27 and 28, at 8:00 p.m. in the Rozsa Center. Friday's program features Momentum Jazz and the Research and Development Big Band, with the Jazz Lab Band, Jaztec, and the Alumni Jazz Band taking the stage on Saturday. All are conducted by **Mike Irish**, director of jazz studies.

The founder of MTU's jazz program, **Don Keranen**, returns to play sax in the Alumni Jazz Band along with twenty other musical alums. Composer/arranger/jazz pianist **Ron Caviani** and vocalist **Matt Wright** will be featured guest artists in Saturday's concert.

Graduating seniors giving their final performances at Michigan Tech include **Jamie Roell** (sax), **Andy Grevestad** (trombone), and **Ben Hankins** (sax). Irish promises two lively, entertaining evenings with MTU's bands at the peak of their form. Both concerts will feature a variety of jazz: blues, classic swing, funk, ballads, jazz standards, and hot Latin arrangements.

Tickets for the Jazz Showcase concerts are available from MTU box offices (487-3200) for \$8 general, \$4 students (\$1 more at the door), or at <http://www.tickets.mtu.edu>.

Retirement Tribute for Johnson, Suryanarayana

The ME-EM department invites the Michigan Tech community to join them in paying tribute to retiring faculty members Presidential Professor **John Johnson** and Professor **Narasipur Suryanarayana**.

The cost per person for the luncheon for anyone outside of the department is \$9. It will be Wednesday, May 9, from noon to 1:30 p.m. at Steamer's Grill. A complimentary reception for the community will follow in ME-EM 1021 from 2:30 to 4:00 p.m.

If you would like to attend the luncheon, please RSVP to Jo Anne Stimac by May 2 at 487-2551, or by e-mail at jstimac@mtu.edu.

Forestry Symposium April 27

The Michigan Tech chapter of Xi Sigma Pi, the National Forestry Honor Society, is hosting a symposium, "Forestry in the Public Eye," on Friday, April 27, at 12:30 p.m. in Hesterberg Hall G002 (the new part of the Noblet Building). Everyone is invited.

The speakers, their topics, and their times will be Bernard Hubbard (Michigan DNR), "Public Influence on Forest Management," 12:30 p.m.; Jim Ferris (International Paper), "Industrial Forest Management," 1:20 p.m.; and Catherine Mater (Mater Engineering), "Forest Certification's Role in Management," 2:15 p.m.

Senate *Continued from page 1*

dents.

Biological sciences chair **John Adler** said that the department was seeking outside funding for the program's start-up costs, including a \$50,000 NSF grant, as well as asking for support from the College of Sciences and Arts. Regarding computer facilities, "We have the system administration support," he said, as well as some of the required software. "We hope to generate some partnerships with some of the major players in the field," he said.

Bioinformatics would require three new courses, which are set to begin next fall, he said. "We don't envision starting with 150 students," he noted.

"To get undergraduates, we need attractive programs," Dean of Sciences and Arts **Max Seel** said. At this early stage, funding even two faculty lines is unrealistic. But the program can begin in the fall with a graduate student and an adjunct faculty member. "It's the overall program area that's important," he said. "It draws on our strengths in biology, forestry, and computer science."

Senator **Christ Ftaclas** (Physics) said the proposal should include a schedule of support. "Somebody has to take responsibility for this," he said. Otherwise, existing faculty could bear the burden of teaching courses for newly added programs.

"I've been involved in this for years," said Senator **Tom Snyder** (Biological Sciences), who chairs the Curricular Policy Committee, which recommended approval of the bioinformatics program. "The Senate controls programs. It doesn't control positions. . . . This is just reality."

Seel agreed. "Nobody can promise faculty lines," he said. Those depend on state appropriations, he said.

Senate Secretary **Jim Pickens** (SFWP) noted that the applied ecology program had called for additional faculty that were not forthcoming, despite the fact that the program has attracted many majors. "It was in the proposal, and we should plan," he said. "But the senate doesn't have the teeth to make it happen."

"If Michigan Tech had stuck with only mining, we wouldn't have Michigan Tech now," Seel said. "Students follow important programs," and bioinformatics is an important program, he said.

"Maybe the senate shouldn't pass new programs until the existing programs are funded," Senator **Carl Vilmann** (Civil and Environmental Engineering) said.

If the measure is sent back to committee for reworking, the program couldn't begin next fall. "We lose a year by that action," Snyder said.

"There's no question the University should have this program," Senator **Wayne Pennington** (Geological Engineering and

Sciences) said. "I don't think we should hold it hostage for a year because of arguments that some of us, maybe all of us, have with the administration."

The proposal passed overwhelmingly on a voice vote. The BS in Bioinformatics is subject to Board of Control approval.

A proposed PhD in Engineering Physics passed with minimal debate. The program is a spinoff from the PhD in Physics and is the only one of its kind in the state.

The senate voted to support Proposal 10-01, Supplemental Contribution to Eligible TIAA-CREF Employees. The proposal asks the administration to make supplemental contributions to the TIAA-CREF accounts of employees who make more than \$50,000 a year and who are unlikely to accumulate enough in their retirement accounts through the University's share of the 2-plus-2 program to fund their retirement health care costs. It also asks MTU to increase its contributions to TIAA-CREF accounts by 0.45 percent (from 12.55 percent to 13 percent). And it would limit the increases in the Medigap premiums paid by retirees to the rate used to determine the supplemental contributions to the TIAA-CREF accounts. The measure passed 28-2 on a secret ballot.

In other business, the senate

- voted to change the search committees for University administrators by adding one professional staff person, who would be appointed by the University Senate. The measure is subject to Board of Control approval.
- approved a proposal submitted at the request of the Undergraduate Student Government recommending that teachers survey their classes in the third or fourth week of the semester, asking what was good about the course and what could make it better. The students were concerned that, with the move to semesters, too much time could pass before instructors receive feedback on how to improve the class. "I think it's a sound practice," said **Bill Kennedy**, director of the Center for Teaching, Learning, and Faculty Development. The measure passed on a voice vote.
- clarified that the Master of Engineering degree was a free-standing degree that did not permit the creation of separately titled degrees, e.g., ME in Biophysical Engineering.

For more information on senate proposals, visit www.sas.it.mtu.edu/usenate/prop.html.

Correction

The location of the U.P. Section of SME's April 26 meeting and auction was incorrectly listed in the April 20 *Tech Topics*. The event will be held in the Portage Room of the Franklin Square Inn.

Four Geo Seminars on Tap

The Department of Geological Engineering and Sciences is presenting four seminars on Friday and Monday, April 27 and 30.

Ian Parsons, a professor of mineralogy at the University of Edinburgh, will discuss "Self-Organization in Crystals, Feldspar Weathering and the Origin of Life" on Friday, April 27, at 1:00 p.m. in Dow 610. Parsons suggests that life may have originally evolved in feldspar micro-reactors. Parsons will also give the seminar "Twelve Orders of Magnitude: How Nanoscale Features of Minerals Solve Problems on the Kilometer Scale: the Kolkken Intrusion, South Greenland" on Friday at 4:00 p.m. in Dow 642. He will describe laser and electron microscopy techniques applied to study micrometer-size samples of feldspar and how this helps to interpret a strange, four-by-three kilometer igneous intrusion in Greenland.

Bruce Bevan, of Geosight, will present "Quantitative Interpretation of Magnetic Anomalies" on Friday at 3:00 p.m. in Dow 610. He will discuss ways to estimate the depth of magnetized material at archaeological sites. Among his publications, he is the author of the report *Geophysical Exploration for Archaeology: An Introduction to Geophysical Exploration*, and papers such as "The Search for Graves, Geophysical Search Techniques for Distinguishing Shipwrecks from Trash," and "Environmental Effects on Ground-Penetrating Radar."

At noon on Monday, Bevan will give a brown bag seminar, "Seasonal Effects on General Geophysical Surveys at Archaeological Sites," in the Archaeology Lab, located on the west end of the first floor of the Academic Office Building annex (the red brick building just north of the Academic Office Building). For a geophysical survey to detect something, there must be a contrast in physical properties. Radar and resistivity methods are heavily dependent on the difference in the water content of the soil and the archaeological artifact, which is in turn dependent on the season of the year when the survey is conducted. Bevan will illustrate the varying contrast of anomalies according to the season, to help avoid doing surveys at the worst possible time.

Workshop for Gen Ed Faculty May 10

The General Education Executive Council has scheduled a workshop for faculty connected to the four core courses (Perspectives on Inquiry, World Cultures, Revisions, Institutions) for Thursday, May 10, from 1:00 to 4:30 p.m., in Memorial Union Ballroom A.

The purpose of the workshop is to discuss how the first year of the new General Education program has gone and to identify issues of concern, especially the integration and coherence of the courses for students, assessment, grading, and portfolios. Beverages and snacks will be provided.

Expert on Gender Issues in Academia Here May 9

"Leaders of nine top research universities signed a pledge last week to promote the more equitable treatment of female faculty members in science and engineering, and to consider 'potentially significant changes in university policies to accomplish that goal.'"

This announcement from the February 9, 2001, issue of the *Chronicle of Higher Education* marks the beginning of efforts at the first rank of American universities to address gender inequities in academia. These inequities were brought to light in 1999 by the release of a report from MIT, "A Study on the Status of Women Faculty in Science at MIT"

(web.mit.edu/fnl/women/women.html), in which MIT acknowledged unintended gender bias in the treatment of women faculty at that institution (*Chronicle*, Dec. 3, 1999).

The MTU community will have a chance to learn more about this issue during a visit to campus by Virginia Valian, professor of psychology at Hunter College, CUNY. Valian will make a presentation on Wednesday, May 9, from noon to 1:00 p.m. in Memorial Union Ballroom A, "The Advancement of Women in Science and Engineering: Why So Slow?" Valian will discuss the effects of gender schema on the advancement of women in professional fields. Gender schema are nonconscious ideas all people have about what it means to be a man or a woman. Valian will also speak about the effects of accumulation of advantage, which is the process by which mountains are made from molehills. All members of the community are invited to attend; this is a brown bag

lunch with beverage and dessert provided.

Valian's presentation, sponsored by the Presidential Commission for Women and the Visiting Women's Lecturers Series with additional funding from the Affirmative Programs Office, was organized by **Faith Morrison** (Chemical Engineering), **Pushpa Murthy** (Chemistry), and **Chris Anderson** (Educational Opportunity). "Faith and I had the opportunity to hear Dr. Valian speak last year," Murthy says. "Her presentation is full of important, fact-based information on how perceptions related to gender can have significant and detrimental effects on the advancement of women."

"After the workshop in March 2000, I came home and read her book, *Why So Slow: The Advancement of Women*, and then bought ten copies and sent them to friends," Morrison adds. "It really opened my eyes, and I think in a technological university it is important for all faculty, staff, and administrators to see Dr. Valian's data. We are all mentors, whether of students, colleagues, or of our own children, and the effects of gender schema touch all our lives."

Valian will also be conducting a workshop for MTU administrators from 7:45 to 10:45 a.m. on May 9, and will be meeting with the Women in Science and Engineering group and with University researchers interested in issues surrounding gender in contemporary society. For more information about any of these programs, contact Morrison (fmorriso@mtu.edu), Murthy (ppmurthy@mtu.edu), or Anderson (ythcande@mtu.edu).

Sumobot Repeats as National Heavyweight Champ

The Michigan Tech chapter of the Society of Manufacturing Engineers (SME) took first place in the annual Student Robotics Engineering Challenge, held April 6 at Robert Morris College in Pittsburgh, Pennsylvania.

The Tech robot triumphed in the Sumo Heavyweight competition of the post-secondary division against a field of eleven other robots. The double elimination tournament put two 150-pound robots face to face in an eight-foot ring. The first to push the other partially outside earned the victory.

After a quick scare in the first round against the Indiana Institute of Technology, in which MTU's "black box" was on the line, it found a sudden boost of energy to turn the table and remove the other robot from the ring. From there, Michigan Tech dominated its way to the final match. The champion robot used photoelectric sensors to detect the black line as well as the other robot, and was one of only a few robots at the competition with a complete set of sensors to find its way around the ring.

Assistant Professor **Gordon Parker** (ME-EM) is the team's advisor. Participation was sponsored by the Office of Student Activities and the Parents' Fund of the Michigan Tech Fund. Among the other teams were the Rochester Institute of Technology, the University of Buffalo, and Ohio Northern University (which was champion three consecutive times before MTU's victory last year). The competition is sponsored by Robotics International of the Society of Manufacturing Engineers.

Faculty Needed to Serve on Academic Integrity Committee

Faculty nominees are needed to serve on the University Academic Integrity Committee.

The committee member will be elected to a three-year term by the University Senate May 2. Nominations should be sent to Jeanne Meyers, jmeyers@mtu.edu, by noon on May 2. Questions about the Academic Integrity Committee may be directed to Vice Provost and Dean for Student Affairs Marty Janners, 487-2212.

Adams to Keynote

HAANA Banquet

Stephanie G. Adams, assistant professor of industrial and management systems engineering at the University of Nebraska-Lincoln, will be the keynote speaker for the first MTU HAANA Awards Banquet, to be held at Northern Lights Restaurant on Friday, April 27, at 6:00 p.m.

HAANA stands for Hispanic, African American and Native American. Outreach and Multiethnic Programs, of Educational Opportunity, is sponsoring the event for underrepresented students, with a contribution from Dow Chemical Company. The Dow Percy Julian Award will be presented also during the night. **Betty Chavis**, outreach and multiethnic programs coordinator, will emcee the event. The dinner is by invitation only. For more information, contact Elizabeth Sandoval, ersandov@mtu.edu

Adventures of a Mineral Collector April 28

Rock Currier, the proprietor of Jewel Tunnel Imports, will give a lecture, "Trying to Collect Minerals in All the Wrong Places," on Saturday, April 28, at 8:00 p.m. in Dow 642. A reception precedes his talk at 7:00 p.m. in the Seaman Mineral Museum.

Currier is an importer of minerals, gems, and lapidary materials from all over the world. He has collected minerals in more than 100 countries and is famous for his collecting adventures. He will share pictures and stories about collecting minerals in Zaire and Madagascar. The reception and lecture are free, and the public is encouraged to attend. Currier's visit is sponsored by the Seaman Mineral Museum Society.

Retirement Reception for Goldstein

The Department of Fine Arts will host a reception honoring **Richard M. Goldstein**, who retires this semester after thirty-seven years on the MTU faculty, on Friday, May 4, from 3:00–5:00 p.m. in the Rozsa Center lobby. All are welcome.

A specialist in theater history, Goldstein is best known for his classes and research on American theater and musical theater. He has also taught speech, acting, and film history, and directed more than eighty plays—dramas, comedies, and musicals—for MTU and local theater groups. His recent productions at Michigan Tech include this year's *Guys and Dolls*, *The Diary of Anne Frank*, *Man of La Mancha*, and the hit comedies *Noises Off* and *Sylvia*. Goldstein has also directed musicals for the Calumet Players for the last sixteen years, and has worked with students of the Copper Country Intermediate School District on area-wide productions. His plans include acting, directing, and part-time teaching during retirement in Florida.

ME-EM Academy Inducts New Members

The ME-EM department inducted the following six new members March 31 into the Mechanical Engineering-Engineering Mechanics Academy, which honors outstanding graduates.

Carl E. Avers (BSME '62) is CEO and chairman of Thermal Ventures Incorporated, a company he co-founded in 1989. Thermal Ventures owns and operates energy systems in four cities and is based in Youngstown, Ohio. With revenues in excess of \$30 million in 1998, they employ over 100 individuals. He is also the chairman, president, and CEO of Thermal Venture II, LLC.

Dean J. Diver (BSME '65) is president of the major engineering consulting firm AVCA, in Toledo, Ohio, which provides engineering services throughout the United States and eight other countries. AVCA sales were \$25 million last year, and they have 350 employees.

John Drake (BSME '64 cum laude, MSBA '69) is president and CEO of Drake Manufacturing Services Company, a manufacturer of grinders and a provider of remanufactured and CNC retrofitted thread grinders, cylindrical grinders, and surface grinders.

Gary Lawrey (BSME '79) was named vice president of Automotive Systems within Dow Automotive in March 2000. He represents Dow Automotive interests with OEM customers on a global basis, their joint-venture relationships, and is responsible for growth in the parts and modules businesses. He is also responsible for the support of initiatives that continue future applications and growth for the materials side of Dow Automotive.

Merle Potter (BSME '58, MS Engineering Mechanics '61) continued his graduate education at the University of Michigan and earned a second MS in Aerospace Engineering and a PhD in Engineering Mechanics. Potter began an thirty-plus-year career with Michigan State University in 1965, retiring as a professor in 1994 with the title of professor emeritus and assisting the university as a visiting professor until 1998.

John Hallquist (MS Engineering Mechanics '72, PhD MEEM '74) left the Lawrence Livermore National Laboratory in 1987 to found Livermore Software Technology Corporation, a firm that produces world-class computational mechanics software. Its customers include many industry leaders in the automotive, aerospace, manufacturing, metals, electronics, construction, defense, and consumer products industries.

Students Gear Up for Mini-Baja

by Anna Swartz

The Michigan Tech Mini-Baja team has been building an off-road vehicle designed to survive rough terrain and water for their West Regional competition on April 26 at Kansas State University.

The team heads off again for its second contest, the June 1–3 Midwest Regional competition in Ohio, where last year, MTU placed twelfth out of more than 100 teams. Mini-Baja is sponsored by the Society of Automotive Engineers.

Students are finding out first-hand what it is like to be in the driver's seat. "It requires someone to take a project from the beginning to the end," says **Eric Bode**, manufacturing captain of the team and a junior majoring in civil engineering and business. "You get the real world experience." Other members agree. "You learn so much more than you can learn in the classroom," says **David Hilbert**, a graduate student in mechanical engineering.

All competitors start out with the same

ten-horsepower engine, donated by Briggs & Stratton. Everything else is up to the team, from assembling all the other parts and equipment to design and construction. This year, the MTU team is receiving financial support from the Ford Motor Company, its major sponsor.

During the competition, the vehicle must meet certain safety standards and is subjected to a rigorous, non-stop, four-hour driving test. The team will be judged on design, cost and sales presentation, and manufacturability. "The competition is open-ended," says Bode. "We have to make a design that works."

The Mini-Baja is part of Michigan Tech's new Engineering Enterprise program, which allows students to work in industry-like settings and solve real-world problems. **Brett Hamlin**, a lecturer in the Department of Mechanical Engineering-Engineering Mechanics, is the team's faculty advisor.

For more information, contact Hamlin at 487-1965, bhhamlin@mtu.edu

MTU Notables

Junior **Nicholas E. Nanninga** (Materials Science and Engineering) received a travel grant valued at approximately \$2,000 from the Foundry Association of Michigan to attend the American Foundry Society 2001 Metalcasting Industry Government Affairs Conference, held April 1–3 in Washington DC. The association annually selects a student from a Michigan university with a metalcasting program to be a guest at the conference.

Lights of the Lakes at Tech Tea Time

Submitted by University Cultural Enrichment

Phillip Block is a native of the Great Lakes area who loves the woods and waters along its shores. He is an accomplished outdoor photographer, solo canoeist, fly fisherman, and dedicated wilderness enthusiast, and he is particularly interested in Great Lakes lighthouses. The guest at Tech Tea Time on Wednesday, May 2, at 4:00 p.m. in the Memorial Union Alumni Lounge, he'll present "Lights of the Lakes," a slide/talk program featuring his lighthouse photography. Tech Tea Time is free and open to the public.

Block's program celebrates the beauty of our Great Lakes lighthouses, situated on the shores and islands of Lakes Michigan and Superior.. It is accompanied by music and sound effects and consists of about 160 slides, including spectacular portraits of 50 different Great Lakes lighthouses. Other images include shipwrecks and historical subjects depicting iron and copper mining and lumbering activities in the nineteenth and early twentieth centuries. Block con-

cludes the program with a tribute to the mysterious shipwreck of the Great Lakes ore carrier *Edmund Fitzgerald*.

A member of the Great Lakes Lighthouse Keepers Association, Block examines why the lighthouses were originally built and their historical significance for shipping. He'll also outline the threats to their existence, and discuss lighthouse technology, both past and present, and shipwrecks that occurred when the technology failed. In addition to lighthouse fans, the program is also of special interest to devotees of Great Lakes maritime history, shipwrecks, and even recreational boating and sailing.

Block resides in Port Washington, Wisconsin, where he works as a consultant for a Milwaukee area data processing firm. He is a former U.S. Army officer and a graduate of Michigan Tech.

Tech Tea Time is coordinated by University Cultural Enrichment. For more information, call 487-2844.

Retirement

Purchasing Agent **Val Machowski** retires May 31 after 34 years at Michigan Tech. Her first day on the job was April 13, 1967.

All of those years (except for eight months as a typist in the controller's office) were spent in Purchasing, where she worked as a secretary and purchasing assistant before assuming her current position.

"I will miss all my friends at MTU, but I am looking forward to this next phase of my life," Machowski said. She plans "lots of travel," beginning with a Mexican cruise in June and a trip to Europe next year. She also plans to visit her children and grandchildren in California, Arizona, and in Jackson, Michigan, as well as relatives in Minneapolis.

Health and Fitness Day May 9

The Wellness Program is marking National Health and Fitness Day, Wednesday, May 9, 7:00 a.m.–3:00 p.m., with a variety of health-related events in the ROTC Gym: heart health screening, including total cholesterol, HDL, blood pressure, diabetes assessment, and health risk appraisal. During the next twenty weeks, employees will be tested again to determine if their numbers have improved. In addition, a Rockport walking test will be offered along with other free health-related benefits. All events will be free to employees and spouses, and more information will be available later. For more information, contact Erin Carter, 487-2172, ejcarter@mtu.edu.

POSITIONS AVAILABLE AT MICHIGAN TECH

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

The following positions will be posted Friday, April 27, 2001, at 1:00 p.m. through noon, Friday, May 4, 2001, in the Human Resources Office.

- Senior Clerk N2—Air Force ROTC (Regular, ten-month, part-time position; thirty hours per week; UAW internal and external posting)
- Secretary N3—Air Force ROTC (Regular, full-time, nine-month position; UAW internal and external posting)
- Equipment Operator I—Facilities Management (AFSCME internal posting only)
- Public Safety Officer—Public Safety

University employees are reminded to apply in writing prior to noon, Friday, May 4, 2001, 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.



April

Fair Housing Month

- 27 **Friday**
noon—Xi Sigma Phi forestry symposium, "Forestry in the Public Eye"—Hesterberg G002
1:00 p.m.—Ian Parsons, "Self-Organization in Crystals, Feldspar Weathering and the Origin of Life"—Dow 610
12:05–12:55 p.m.—Open mike poetry readings—Library Friends' Lounge
1:00–4:30 p.m.—Open house for Federal Depository—Library Government Documents Section
3:00 p.m.—Bruce Bevan, "Quantitative Interpretation of Magnetic Anomalies"—Dow 610
4:00 p.m.—Ian Parsons, "Twelve Orders of Magnitude: How Nanoscale Features of Minerals Solve Problems on the Kilometer Scale: the Kolkken Intrusion, South Greenland"—Dow 642
8:00 p.m.—Spring Jazz Showcase and Alumni Reunion—Rozsa Center
- 28 **Saturday**
7:00/8:00 p.m.—Reception/Lecture: Rock Carrier, "Trying to Collect Minerals in All the Wrong Places"—Seaman Mineral Museum/Dow 642
8:00 p.m.—Spring Jazz Showcase and Alumni Reunion—Rozsa Center
- 29 **Sunday**
7:00 p.m.—Parsons Dance Company—Rozsa Center
- 30 **Monday**
noon—Bruce Bevan, "Seasonal Effects on General Geophysical Surveys at Archaeological Sites"—Archaeology Lab, Academic Office Building Annex

May

- 2 **Wednesday**
4:00 p.m.—Phillip Block, "Lights of the Lakes"—Memorial Union Alumni Lounge
- 4 **Friday**
3:00–5:00 p.m.—Retirement reception for Richard Goldstein—Rozsa Center lobby

In Print

Associate Professor **Sonia Goltz** (SBE) coauthored an article with Scott Seibert (Cleveland State University), "Comparison of Allocations by Individuals and Interacting Groups in an Escalation of Commitment Situation," in the *Journal of Applied Social Psychology*, volume 31(1).

Assistant Professor **Jaroslav Drelich** and graduate students **Elvin Beach** and **Anna Gosiewska** (MSE) coauthored "Limitation of the Young-Dupre Equation in the Analysis of Adhesion Forces Involving Surfactant Solutions," in *The Journal of Adhesion*, Vol. 74, No. 1–4 (2000).