

Tech Topics

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Michigan Tech's Faculty-Staff Newsletter

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ChemECar Wins Regionals

A Michigan Tech team took the gold in the regionals of the national ChemECar competition, held Feb. 7–10 at the University of Michigan in Ann Arbor.

In the ChemECar Competition, sponsored by the American Institute of Chemical Engineers, students use a chemical reaction to power a model car. The car must carry a specific amount of water a designated distance (280 milliliters and 52 feet, in this case). The car that comes the closest to the finish line wins.

Students also must present a poster prior to running the cars. The poster must receive a score of at least 70 percent in order for the car to be run. Out of the 10 cars that were entered, only five qualified for the running.

MTU's ChemECar 4 took first place by coming within 6 inches of the finish line, beating out the second-place University of Dayton car, which exceeded the finish line by 9 inches. MTU's ChemECar 3 took fifth place. Both MTU cars qualify to compete in the national AIChE ChemECar Competition next fall in Indianapolis.

Both cars used a lead-sulfuric acid battery reaction to power an electric motor. In addition, ChemECar used a sophisticated iodine clock reaction to control the distance travelled. The success of this approach is demonstrated by how close this car came to the finish line.

Nine undergraduate chemical engineering students attended the AIChE North Central Regional Student Conference: **Adetoun Ayerinde, Casey Behles, Justin Ceterski, Brian Hassler, Christopher Kimojino, Shwu Yi Lee, Rajan Singh, Kit Mun Wee, and Shu Yat.** Other MTU students who worked on the cars but did not attend the conference are **Nicholas Ballor, Kevin Lamkin, Lyle Lash, Rachel Smith, and Jeremiah White.** Associate Professor **Tony Pintar** is their advisor.

The ChemECar trip and research were funded by the Tech Parents Annual Fund, Department of Chemical Engineering and the local chapter of AIChE.

The art of living lies less in eliminating our troubles than in growing with them.

—BERNARD M. BARUCH

Crittenden Elected to National Academy of Engineering

Presidential Professor **John C. Crittenden** (Civil and Environmental Engineering) has been elected to the National Academy of Engineering.

Academy membership honors Americans who have made "important contributions to engineering theory and practice" and those who have demonstrated "unusual accomplishment in the pioneering of new and developing fields of technology."

Crittenden was recognized for his groundbreaking work in air- and water-treatment technologies, particularly the development of processes for removing toxic organic compounds. Election to the academy is one of the highest professional distinctions that can be accorded to an engineer.

"I'm happy that people have found our work to be useful, especially in developing technologies and expertise that provide safe drinking water," Crittenden said. He and his fellow researchers in Michigan Tech's Environmental Engineering Center have developed and patented a variety of technologies that remove dangerous compounds such as benzene from drinking water supplies. Crittenden and his colleagues have worked with a number of municipalities on issues of drinking water quality across the U.S., in areas representing more than half of the U.S. population.

"It is gratifying and humbling to realize that our work has improved the health and well being of our nation in such a significant manner," Crittenden said. In addition, he and

his colleagues have been involved in the design of the water-treatment system for the space station.

"We're really happy to learn that John has been elected to the academy," Dean of Engineering **Robert Warrington** said. "It's an honor that he richly deserves. Dr. Crittenden is among the finest environmental engineers in the nation, and his work and the work of his colleagues has made a difference in the lives of millions of Americans. He has dedicated his life to bettering human health through science and engineering, and we're thrilled that he's received this recognition."

Crittenden is director of the EPA-sponsored National Center for Clean Industrial and Treatment Technologies (CenCITT) and associate editor of the journal "Environmental Science and Technology." Over the last 20 years, he has directed more than 36 research projects with a total budget of over \$26 million and has authored or coauthored approximately 100 articles and other publications.

A total of 74 U.S. engineers and seven foreign associates were elected this year into the National Academy of Engineering. This brings the total U.S. membership to 1,857 active members and 250 members emeriti, and the number of foreign associates to 158.

Crittenden joined the Department of Civil and Environmental Engineering in 1979. He earned a BSE in Chemical Engineering and MSE and PhD degrees in Civil Engineering: Environmental Engineering from the University of Michigan, Ann Arbor.

"Chuck the Pasty" Competition Feb. 23

By Dean Woodbeck

Gravy or ketchup? That's the typical debate when it comes to pasties.

But that's when you eat them. Not when you chuck them. As in propel them. On Saturday, Feb. 23, the question will be, "How far can you chuck a pasty?"

In celebration of Professional Engineering Week, the Michigan Tech Alumni Association invites teams of students to design a device to chuck a pasty. The competition will take place Saturday, Feb. 23, in the Memorial Union Ballroom.

The Alumni Association will provide a kit of materials. Teams will provide five students each. Construction will begin at 10 a.m., with judging at 3:15 p.m. The device that throws a pasty the farthest will be declared the winner.

The competition is limited to 10 teams of five members, and each member must be a full-time undergraduate or master's student. First prize is a free MUB pasty each week for two semesters. Second prize consists of five parking vouchers for Lot 27.

Co-sponsors of the competition include the College of Engineering, the College of Science and Arts, the School of Technology, the Vice President for Research, the Memorial Union and Public Safety.

Registration materials are available from Patti Myllyoja in the Alumni Relations office, 487-2400 or pamylyjo@mtu.edu.

How's Your IQ?

A subcommittee of the Cross Functional Planning Group is looking into replacing IQ for (Intelligent Query), a tool that generates reports from BANNER. The goal is to make better use of our database tools.

To do this, the subcommittee members need to get feedback from IQ users. Are you getting the information you need, in the format you need, when you need it? Please fill out and return the survey at www.admin.mtu.edu/em/faculty/reportneeds/survey.php

Why replace IQ if it is providing the reports that we need? First, vendor support for IQ is unpredictable because of ownership changes. The IQ product that we use is no longer being sold; MTU pays a maintenance fee to the company so that, as BANNER/Oracle is upgraded, IQ will continue to function properly. Also, support for IQ could be discontinued on a few months' notice in the future; It would be nearly impossible to get a new reporting tool in that time frame.

Secondly, IQ is basically 1980s technology. File management, data selection and reporting options are all extremely limited compared to other major reporting tools on the market. Many users spend hours manipulating and reformatting data to obtain the reports they need in the format they require. A modern reporting tool will have a GUI (drag and drop) interface and integrate more easily with office suite software. In addition, it will have Web capability for report generation and options for electronic distribution.

Thanks for taking the time to fill out the survey! If you have any questions, contact a subcommittee member: Bobbie Dalquist, Patty Kyllonen, Bob Marr, Gary Neumann, Chuck Schaefer, Denise Spagnotti, Dave Strong, and Rita Williams.

Weight Watchers Meet Feb. 25

Weight Watchers will meet at noon on Monday, Feb. 25, in Memorial Union Ballroom B1.

New members are welcome. For more information, call 487-2517.

MichiganTech

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

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 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.

Course-Based Assessment, Part 2

By William Kennedy, director

Center for Teaching, Learning,
and Faculty Development



Accrediting organizations have universally adopted assessment of student learning to

determine the merit of educational programs. Bringing measures of student learning into the classroom provides several advantages over relying on measures that bring students together outside of class to demonstrate mastery of a body of knowledge or certain skills, or their propensity to adopt the values associated with their degree program.

It may be appealing to employ some standardized achievement test to see how a sampling of our majors fares against a comparison group. In general, however, standardized test results often simply mirror the admissions profile of the institution and provide little concrete feedback that can fuel curricular improvement.

Classroom assessment procedures, on the other hand, may look very much like testing and grading procedures routinely employed in most courses, but their purpose is quite different. While course grading procedures are most useful in measuring students' relative degree of mastery of course objectives, assessment measures provide information that enables continuous instructional improvement.

Classroom-based assessment measures are commonly grouped into three categories: paper-and-pencil tests, performance-type assignments and oral questioning. Scoring in each of these categories can be objective or subjective, and each category can focus on measures of knowledge, thinking, processes, products and dispositions.

Faculty members are probably most familiar with the perils and promises of paper-and-pencil testing. To be useful for assessment, tests must measure learning tied to defined course goals, and those goals must fit into

the unit's stated learning outcomes. Test items must be carefully written and exams must be carefully constructed to ensure some measure of content validity. There is a tension between spending hours and hours designing carefully constructed objective tests that can be evaluated more quickly, and generating subjective test items and scoring rubrics which can then eat up hours and hours of evaluation time. Well-designed paper-and-pencil tests can be most profitably used to assess knowledge and thinking processes and to assess dispositions and interests.

Performance assessments observe and then judge a sustained period of student performance. The instructor designs a task and a scoring scheme. Tasks should be authentic and educative. "Authentic" implies that the task is grounded in the kinds of work people in the discipline actually perform.

"Educative" means that performing the task will actually further student learning. Analytic scoring, which involves breaking the task into several parts, is most useful for student feedback, while more holistic, after-the-fact measures may suffice for assessment purposes. Performance assessments are most useful in evaluating design projects, creative efforts or team projects.

Oral questioning works best in assessing student learning in small classes. The procedure involves the instructor calling on individual students using a carefully designed set of questions to assess the group's knowledge, skill level or attitudinal disposition and then characterizing the group's mastery according to the course's learning outcomes.

By replicating these course-based assessment efforts across sections over time, an academic unit can gain insights that might enable curricular improvements. Well-conceived and carefully executed course-embedded assessment techniques have distinct advantages over reliance on standardized measures.

* Susan M. Brookhart, *The Art and Science of Classroom Assessment: The Missing Part of Pedagogy*, ERIC, Washington D.C., 1999

Crowl Receives AIChE Award

Professor **Dan Crowl** (Chemical Engineering), the Herbert H. Dow Professor of Chemical Process Safety, has been named to receive the Norton H. Walton/Russell L. Miller Award from the American Institute of Chemical Engineers.

The award is given "in recognition of outstanding chemical engineering contributions and achievements in the loss prevention, safety and health fields." Candidates are nominated by the officers of the AIChE Safety and Health Division. "Dan had unanimous and enthusiastic support from all the officers of the S & H Division," said its chair, Joseph Louvar.

Crowl chaired the AIChE Safety and Health Division during 1996. He is a member of the AIChE Center for Chemical Process Safety Undergraduate Education Committee, the CCPS Technical Steering Committee and the AIChE 11a Committee on Loss Prevention; and editor of the Safety and Chemical Engineering Education Newsletter.

Crowl will receive the award of \$500 and a plaque at the AIChE Safety and Health Division Annual Banquet in New Orleans on March 11.

MTU Gets Two Marketing Awards

Michigan Tech has been honored by the Admissions Marketing Report with two Merit Awards in the 2001 Admissions Advertising Awards: one for a Web site, another for a radio advertisement.

The Web site is called "Build," uses Flash technology, and is part of an admissions marketing promotion that also used postcards. You can reach the Build site <http://www.mtu.edu/build/> or from the MTU Home page, <http://www.mtu.edu/>. **Dennis Walikainen, Chad Arney, and Diane Keranen** of University Relations and **Nancy Rehling**, director of admissions, were involved in creating the Build page/postcard.

The radio advertisement was part of a series that was created by the Russell and Herder advertising agency, who worked with University Relations Executive Director **Bill Curnow**.

Employee Excellence Awards: How Many Should We Have?

The Employee Excellence Award Committee is asking for staff input on possible changes to the Employee Excellence Award.

Currently, one award is given in each of three categories, and recipients each receive \$1,500. Since there are sometimes more than one deserving nominee in each category, Staff Council is considering changing the award description so that there are two winners in each category, for a total of six. In this case, each recipient would receive \$1,000.

"Please let us know what you would prefer and why," Staff Council member **Becky Christianson** said. Send your comments to Christianson at rwchrist@mtu.edu or call 487-2416 by 5 p.m. Tuesday, March 5.

UWC Scholarship Available

A \$1,600 University Women's Club Endowed Scholarship for the 2002-03 academic year will be awarded at the club's spring meeting.

Applicants must be full-time female students at Michigan Tech with a minimum GPA of 2.75 who are currently in their freshman, sophomore or junior year carrying a minimum of 12 credits. The successful applicant will have demonstrated leadership, or contributed to extracurricular student activities, or performed community service within the past three years. Financial need will be considered.

Applications may be picked up at the Financial Aid Office. The application deadline is March 15. For more information, contact Marie Ryding, 487-2622.

Bob Nuottila Dies

Robert Nuottila, who retired from Michigan Tech in December 2000, passed away Feb. 18 at St. Joseph's Hospital in Marshfield, Wis., at the age of 61.

Nuottila had been manager of accounting information systems and was well-known for his graciousness. Nuottila retired after 35 years of service to the University.

"I've been here 13 years, plus I worked with him two years when graduated from high school, and all that time Bob was always a wonderful, wonderful person," said Administrative Aide **Diane Nakkula** (Accounting Services). "He was such a gentleman; so easy going, and he never got upset about anything.

"It's so sad that he only had a year to enjoy his retirement," she said. "I can't say enough good things about him; he was a sweetheart."

Previously, he worked for the C&H Mining Company and served in the U.S. Army Reserves.

"It's a terrible shame," said his former supervisor, **Dan Greenlee**, controller and interim chief financial officer. "I hadn't worked with him that long, only a little over a year, but he was such a wonderful person.

SBE Investment Team Off to National Competition

The Applied Portfolio Management Program in the School of Business and Economics has been invited to compete at the annual RISE symposium, which brings a handful of select student investment teams from across the U.S. to the University of Dayton, in Ohio.

The symposium selects the top 15 teams to compete based on their portfolio returns over the last year. The winner is chosen based both on their investment return and their skill in delivering presentations. The top team will open the Nasdaq stock market and be interviewed on CNBC's Squawk Box news program.

Despite a rocky year for investments, the Michigan Tech students managed a return of 7.27 percent by combining an indexing strategy with active management of a portion of their assets, said their advisor, Assistant Professor **Dean Johnson**.

Last year, the SBE team had the third-best return overall at RISE and placed second. "Other universities have graduate students on their teams, who tend to be older and more mature, with workforce experience, so they'll provide steep competition for us," Johnson said. "We hope to win, but in any case, the students learn a lot from the experience."

The competition is being held Friday, Feb. 22, after the participants meet with investment professionals on Thursday.

The Applied Portfolio Management Program is made possible by donations to the investment fund, which now stands at \$300,000. For more information, contact Johnson at dean@mtu.edu or 487-1878.

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 the Office of 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.

New Staff

Darryl G. Koski has joined the Central Heating Plant staff as a mechanic. He was previously owner and operator of a trucking business, has worked for UPPCO and served in the US Navy. He is married to Lynn M. Koski, has two children, Ryan M. Niemela and Samantha Koski, and lives in L'Anse.

"Bob was a true gentleman," Greenlee said. "He was very, very kind, soft-spoken and nice. Plus, he was a hard worker who cared about his job and getting things right."

A lifelong Copper Country resident, Nuottila was born in Laurium, graduated from Calumet High School and earned a BS in Mathematics from MTU. He lived in Bootjack since 1993 with his wife, Judi. He was a member of Faith Lutheran Church, Calumet Elks Lodge, a past board member of the Calumet Golf Club and an avid bowler.

Nuottila is survived by his wife, **Judi**, a secretary in Residential Services Dining; son Craig Nuottila of Laurium; sisters Shirley (Pete) Keeler of Hastings, Neb., and Nancy (Geoff) Donnan of Florida; in-laws Wilburt "Bill" and Margaret Kananen of Calumet; sister-in-law Mary Turner of Laurium; and many nieces, nephews and cousins.

The funeral will be held Friday, Feb. 22, at 1 p.m. in the Erickson Crowley Funeral Home, the Rev. Allen Goodrich officiating. Visitation is Thursday from 4 to 8 p.m. at the funeral home. The Elks Lodge will have services Thursday at 7 p.m. Burial will be at Lake View Cemetery.

Cafe Rozsa Open Till 11:30 am

Cafe Rozsa has extended its hours. You'll be able to get a full espresso menu, gourmet coffees, chai, tea, Italian sodas and snacks from 7:30 to 11:30 a.m., Monday through Friday when school is in session.

Cafe Rozsa is located in the Horner Lobby of the Rozsa Center.

Sports Shorts

By Dave Fischer

Econo Giving Away Hockey Tickets to Kids

Econo Foods presents Kids Day Saturday, Feb. 23, at the MacInnes Student Ice Arena when the Michigan Tech hockey Huskies host Minnesota State-Mankato in the final home game of the 2001-02 season.

Econo Foods has purchased 500 tickets to give away free to kids 14 and under. The tickets are available at the Econo Foods service desk and will be distributed on a first-come, first-serve basis. While parents may pick up the tickets for their children, the tickets may only be used by those 14 and under.

Final Coaches Corner/Blueline Club Luncheon Friday

The final Coaches Corner/Blueline Club Luncheon of the 2001-02 season will be Friday, Feb. 22, at noon on the seventh floor of the Best Western-Franklin Square Inn in Houghton.

Featured speakers include hockey coach **Mike Sertich** and Minnesota State-Mankato ice boss **Troy Jutting**.

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

Olson, Sertich to Give Away Their Hockey Cards Saturday at Econo

Two legendary characters of the WCHA, Michigan Tech radio broadcaster Bob Olson and Huskies hockey coach Mike Sertich, will be at Econo Foods in Houghton Saturday, Feb. 23, from noon to 1 p.m., to sign autographs and visit with fans. In addition, the first 500 fans will receive free hockey cards of Olson and Sertich from the 2001-02 Michigan Tech Hockey Trading Card Set, sponsored by Econo Foods.

"It's not too often you have an opportunity to get the autograph and hockey card of two legends of college hockey at one time," said Michigan Tech athletic director **Rick Yeo**. "The hockey trading card set is one of the most popular things we've ever produced and I'm sure our fans will want to get the Bob Olson and Mike Sertich cards."

Olson and Sertich will be located just inside the main doors of Econo Foods.

AFSCME Members: Bacia Scholarship Available

The \$250 Leeann Bacia Family/AFSCME Scholarship will be awarded for the 2002-03 academic year. Applicants must be full-time undergraduates in their first four years of study and the son, daughter or spouse of a current AFSCME Local 1166 member.

Applications are available in the Financial Aid Office, Administration 160. The application deadline is March 9.

Tire Trouble: It Can Start Behind the Wheel

Tires go through more tests than a wannabe astronaut, and accidents still happen.

Mark Osborne isn't surprised.

"People don't know how to drive," said Osborne, a senior research engineer at the Keweenaw Research Center and director of KRC's Winter Driving School. And in a couple of key areas, manufacturers rely on expert opinion rather than quantitative testing to evaluate tires.

Companies design and test tires according to a variety of standards. Then there are field tests, based on the reports of professional drivers slamming the vehicle through a course. If they ever get to the point of being manufactured, tires undergo another battery of tests, including X-ray and infrared inspections.

It sounds great, but Osborne thinks it's a degree off perfect.

"I have a problem with tire testing that relies totally on subjective input," he said. "Being an engineer, I like hard and fast numbers for comparison." Combining subjective testing with objective measurements would make for far better results, he said.

The reports of drivers, particularly on handling, depend on the skills and preferences of

the person behind the wheel.

"While the industry has objective tire testing with instrumentation in most areas, it doesn't have it for handling and lateral stability," Osborne said. "Nobody's come up with the specs for that, so tests could be repeated in controlled conditions."

And then there is the driving public.

"Based on my experience in teaching the Winter Driving School, most people don't know how to drive in emergency situations," Osborne said. "Everybody steers too much and brakes too much. And they get themselves in trouble, especially with SUVs, because they think they should handle like a sports car, but they don't."

"What good is any tire evaluation if the average person doesn't know what to do with the tires?" Osborne asks.

In the December 2001 issue of Tire Technology International, Osborne suggests that the driving public receive better education on responding to emergency situations, and that more objective performance testing standards be implemented for tires' handling and lateral stability. The result could be fewer accidents.

Wind Symphony in Concert Tuesday

Submitted by the Department of Fine Arts

The Wind Symphony presents a preview of its 2002 Spring Tour Concert on Tuesday, Feb. 26, at 8 p.m. in McArdle Theatre. The 38-member ensemble then takes its program on the road, touring the U.P. and northern Wisconsin with concerts scheduled in seven cities.

Tickets for the Feb. 26 concert are available from Rozsa Center Ticketing Services (487-3200), on the Web at <http://www.tickets.mtu.edu>, and at the door.

The group's repertoire includes band classics such as Suite of Old American Dances by Robert Russell Bennett, and John Philip Sousa's stirring Washington Post March. The ensemble will also perform music by Leonard Bernstein and Alfred Reed, and music from films such as Henry Mancini's "Breakfast at Tiffany's" and Alan Menken's "The Little Mermaid."

The Wind Symphony, directed by associate professor **Jeffrey Bell-Hanson**, is one of four MTU music ensembles which will serve as the university's ambassadors on concert tours this year. The group is selected by audition each fall, and has established a reputation for playing a wide variety of music with fine musicianship, humor and gusto. Bell-Hanson's commentary adds a lively note to concerts.

More information is available from the Department of Fine Arts, 487-2067.

Want to Cruise to Isle Royale?

Volunteers Sought to Give Presentations on Ranger III

The Isle Royale Institute is inviting volunteers to give presentations relating to Isle Royale or the Lake Superior region.

Presentations are given on the Ranger III as it cruises across the waters of Lake Superior to Isle Royale. Presenters return to Houghton the next day.

Rolf Peterson has discussed his wolf-moose research; Sarah Green has discussed the KITES project. Graduate students have presented their research, also. Presenters are not limited to members of the MTU community; government officials and community activists are also encouraged to participate if they have a legitimate topic they'd like to share.

For more information, contact Mark Gleason at gleason@mtu.edu.

Student Workers Wanted

The Isle Royale Institute has two student positions open this summer.

An undergraduate student is needed to teach "leave no trace" techniques to the public at Isle Royale National Park. Housing (which involves some camping) and a food stipend will be provided for this position.

An MTU graduate student is needed to work on the Ranger III to assist with the research programs and help develop research capabilities on the Ranger III. A part-time salary will be provided. For more information, contact Mark Gleason at gleason@mtu.edu.

Need Data? The Fund Can Help

By Jason Bauer

As you may have read in an article a few weeks ago, the Michigan Tech Fund does a lot more for the University than solicit and collect charitable contributions. One of these important tasks is to manage the data that we collect on our 100,000 alumni, friends and supporters. The data entry and information services staff here at the Fund are in charge of this data, and it is no simple task to keep it organized and useful.

There is a laundry list of services available to University staff through the Michigan Tech Fund's Information Services Department. We can produce a list of constituents based on virtually any criteria. Want to contact all of the ME alumni who graduated before 1990 living within a 50-mile radius of Grand Rapids? No problem! How about a list of former Tech athletes living in the Midwest that you can use for invitations to a reunion? We can do that too!

All of these things sound great, but they are not possible without your help. While we have some information on all of our constituents, some of our data is outdated, and for some constituents we don't even know which state they currently live in. In order to provide you with the best data services, we need to have accurate information coming in. We strongly encourage everyone on campus to notify the Michigan Tech Fund whenever you contact alumni or friends.

If you produce a mailing, let us know who you contact so we can keep track of who has

been contacted by whom. This will prevent sending multiple pieces of similar mail to the same person, making both the constituent and the University happy. It also lets you easily see who you have contacted. This will allow you to see how effective your mailings are, and make follow-up contacts to the same group very easy. After you contact constituents, let us know of returned mail or updated addresses and phone numbers so we can update the database. This will save you money on returned mail for future contacts and allow you to reach more constituents.

One of the most important benefits of the Michigan Tech Fund's Information Services department is that they take the burden of data management away from the individual departments. We can keep track of contact information and mailing preferences so you don't have to. With one group of people keeping track of the data, it allows us to make sure that everyone gets what they need accurately and quickly. If everyone continues to work together, we can utilize our data to its fullest potential.

To report updates, get mailing lists, or for more information on how the Michigan Tech Fund can work for your department, contact Mary Jane Lowney, director of information services, at mjlowney@mtu.edu or 487-2312.

March Computer Classes

Michigan Tech offers computer classes in collaboration with dL Education. To register, send an e-mail to the Center for Professional Development and Quality Improvement at rwchrist@mtu.edu. Include the class(es) in which you want to enroll, your phone number and account number to which the class(es) should be charged. The charge is \$60 for three-hour (half-day) classes; \$120 for six-hour (full-day) sessions. Charges will be billed to your account the month following attendance. dL Education is located in the E. L. Wright Plaza, Suite 201A at 801 N. Lincoln Drive in Hancock. The Plaza is located on Quincy Hill, just below Pat's IGA.

- Access level 1, Fri., March 8, 9 a.m.–noon
- Access level 2, Fri., March 15, 9 a.m.–noon
- Access level 3, Fri., March 22, 9 a.m.–noon
- Excel level 1, Thurs., March 21, 8:30–11:30 a.m.
- Excel level 2, Thurs., March 21, 12:30–3:30 p.m.
- Excel level 1, Mon., March 25, 12:30–3:30 p.m.
- Excel level 2, Tues., March 26, 12:30–3:30 p.m.
- FrontPage, Wed., March 6, 12:30–3:30 p.m.
- FrontPage, Wed., March 13, 12:30–3:30 p.m.
- FrontPage, Wed., March 20, 12:30–3:30 p.m.
- FrontPage, Wed., March 27, 12:30–3:30 p.m.
- HTML, Fri., March 29, 9 a.m.–4 p.m. (minimum of 3 students required to hold HTML class)
- PowerPoint, Thurs., March 28, 8:30 a.m.–3:30 p.m.
- Publisher, Wed., March 6, 12:30–3:30 p.m.
- Publisher, Wed., March 13, 12:30–3:30 p.m.
- Publisher, Wed., March 20, 12:30–3:30 p.m.

February Black History Month

- 21 Thursday**
10 a.m.–5 p.m.—Black History Month Reading Room open—Memorial Union Ballroom B
- 22 Friday**
10 a.m.–5 p.m.—Black History Month Reading Room open—Memorial Union Ballroom B
noon—Lt. Col. Richard Matthews, "Sept. 11: My Pentagon Office Will Never Be the Same"—Memorial Union Ballroom B
2–5 p.m.—Vision Fund presentations—Memorial Union Ballroom A
7:05 p.m.—Hockey: Mankato at MTU—Student Ice Arena
8 p.m.—Jazz for the New Millennium concert—Rozsa Center
- 23 Saturday**
9:30 a.m.–12:30 p.m.—BPA Pancake Breakfast—American Legion Hall, Hancock
3:15 p.m.—"Chuck the Pasty" judging—Memorial Union Ballroom
7:05 p.m.—Hockey: Mankato at MTU—Student Ice Arena
8 p.m.—Pianist Dickran Atamian and the KSO in concert—Rozsa Center
- 24 Sunday**
3 p.m.—Pianist Dickran Atamian and the KSO in concert—Rozsa Center
- 25 Monday**
noon—Weight Watchers meeting—Memorial Union Ballroom B1
- 26 Tuesday**
8 p.m.—Wind Symphony concert—Rozsa Center

- Publisher, Wed., March 27, 12:30–3:30 p.m.
- Windows level 1, Mon., March 4, 12:30–3:30 p.m.
- Windows level 2, Tues., March 5, 12:30–3:30 p.m.
- Windows level 1, Thurs., March 7, 8:30–11:30 a.m.
- Windows level 2, Thurs., March 7, 12:30–3:30 p.m.
- Windows level 1, Mon., March 11, 12:30–3:30 p.m.
- Windows level 2, Tues., March 12, 12:30–3:30 p.m.
- Word level 1, Thurs., March 14, 8:30–11:30 a.m.
- Word level 2, Thurs., March 14, 12:30–3:30 p.m.
- Word level 1, Mon., March 18, 12:30–3:30 p.m.
- Word level 2, Tues., March 19, 12:30–3:30 p.m.

Alger on National Radio

Russ Alger, director of the Institute for Snow Research, will be on "The Environment Show" this week.

The show airs weekly on many public and ABC radio stations throughout most of the US . . . except for here.

However, you can hear Alger talk about his Anti-Icing Smart Overlays in connection with a story on the environmental impacts of road salt at <http://www.wamc.org/green>.

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, Feb. 22, 2002, at 1 p.m. through noon, Friday, March 1, 2002, in the Human Resources Office.

Computer and System Support Specialist—
Electrical and Computer Engineering

University employees are reminded to apply in writing prior to noon, Friday, March 1, 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.