

Pelc Appointed Director of Centile

Karol Pelc, professor of management of technology in the School of Business and Economics, has been named director of the newly created Center for Technological Innovation, Leadership and Entrepreneurship (CentILE), members of the CentILE Executive Committee have announced.

CentILE is a joint initiative by the SBE, the College of Engineering, and the College of Sciences and Arts. Its role is to coordinate education and research across campus, with the ultimate goals of supporting business start-ups and bringing technology to the marketplace.

"Similar centers have been developed in several universities during last twenty years," Pelc said. "Most of them focus on entrepreneurship education, with strong links to the business community."

Typical programs center on business plan development. In many schools, annual business plan competitions involve student teams with a jury of business partners and alumni.

CentILE may also play a supporting role in a possible entrepreneurship minor, concentration, or certificate; internships with local businesses and business start-ups; seminars on issues such as starting a business and intellectual property; executive education programs; and more.

"It is likely CentILE will focus on technological entrepreneurship and key corresponding programs in education and research," Pelc said.

CentILE is supported through the Dr. Robert Carnahan '53 Endowed Chair in the Business of Technology and The Gates Family Foundation Endowed Distinguished Professorship in Entrepreneurship Studies. The center has a Coleman Foundation grant, which supports a joint project between the SBE and the College of Engineering, the entrepreneurship module of the Engineering Enterprise program. The Executive Committee of CentILE includes SBE Dean **Eugene Klippel**, Dean of Sciences and Arts **Max Seel**, and Dean of Engineering **Robert Warrington**. Associate Dean of Engineering **Mark Plichta** and **Robert Johnson**, chair of humanities department, are liaisons from the Colleges of Engineering and Sciences and Arts.

*Kill the snake of doubt in your soul, crush
the worms of fear in your heart and
mountains will move out of your way.*

—KATE SEREDY

SBE Attains AACSB Accreditation

After years of hard work, the School of Business and Economics has joined the elite group of institutions worthy of accreditation by AACSB-The International Association for Management Education.

"We are now the only accredited business program in northern Michigan and northern Wisconsin," Dean **Eugene Klippel** said. "In a sense, this gives a seal of approval to a business degree from Michigan Tech. It assures students, parents, and employers that our students are getting an excellent education. It will add value to every diploma we issue."

Of the 1,200 schools of business throughout the United States, approximately 400 are accredited by the AACSB, the premier accrediting agency for college degree programs in business administration and accounting. Its founding members include Harvard, Yale, and the University of California at Berkeley. Only about thirty of the accredited institutions, including the SBE, offer undergraduate programs only.

The School began its move toward accreditation in 1994, when President **Curt Tompkins** brought Klippel on board.

"We can thank Dean Klippel," Tompkins said. "When he came here, he was asked to achieve accreditation, and we wouldn't have had it without his leadership."

After the School applied to AACSB for pre-candidacy, an AACSB advisor paid a site visit, reviewed the program, and offered his recommendations. Then the real work began.

The master's program was suspended because the advisor felt the School was spreading its resources too thin. "Then we did a major, major overhaul of the undergraduate curriculum," Associate Dean **Terry Monson** said. "As a result, we now have four well-defined concentrations: accounting, finance, industrial marketing/management, and management information systems (MIS). We changed the economics requirements—we found the economic theory courses weren't a good fit, so we substituted an applied economics component."

Other changes included new courses on teamwork and business problem-solving, the addition of a required technology management course, different math requirements, and seminars for students on choosing a BSBA concentration. With the support of University administration, the School added

three new faculty positions and, through attrition, replaced retiring teachers with experts in mainline fields. Overall, twelve, new faces joined the SBE faculty during the accreditation process.

"The School has made tremendous progress in a short period of time, and that trajectory will continue," Tompkins said. In addition to endowed chairs and scholarships, a new building could be in the School's future, he said.

The School also looked outside its walls for evidence that its programs were succeeding, and found plenty. On average, graduates who took the Major Field Test in Business Administration scored in the 86th percentile last year. "We had some students in the 99th percentile, and the finance students as a group averaged above 90," Monson said. MIS students have done extremely well at competitions drawing students from across the country, and MIS graduates are in such high demand (with starting salaries of \$50,000 and higher not uncommon) that MIS program enrollment has skyrocketed from fewer than 20 to more than 100 students in recent years.

"It's phenomenal growth, and it's because the graduates do so well," Monson said.

And the students themselves value their SBE experience. For the past several years, Student Satisfaction Surveys conducted by Educational Benchmarking for the AACSB give the School high marks in advising, teaching, computer facilities, and employer recruitment of graduates. Third-year MIS undergraduate **Jacklyn Armbruster** said she chose the SBE for its personalized attention and small classes. Fourth-year marketing undergraduate **Dan Gerard** cites the international experience he'd gained with the encouragement of his professors, and noted that faculty had involved students in the accreditation process.

For faculty and administrators, accreditation offers additional benefits. It's easier to attract top-quality faculty, and current faculty should have additional sabbatical opportunities. And if students opt to go to graduate school or transfer to another accredited program, they'll find that more of their credits are far more transferable.

"The faculty really deserve a huge amount of credit for this," Monson said. "They worked very, very hard on this process."

What Do You Think?

Your Opinion Wanted on VP for Research Position

The Search Committee for the Vice President for Research has developed a draft position description and is now inviting comments from faculty, staff, and students. You can view the description at <http://www.mtu.edu/mtuonly/temp/researchvp/index.html>

Submit your comments in writing or via e-mail to the Chair of the Search Committee, Professor Walter Milligan, Department of Materials Science and Engineering, milligan@mtu.edu.

Additionally, a public meeting on the position description will be held on Monday, February 12, at 1:00 p.m. in M&M 610. Everyone is welcome.

The committee is also requesting nominations and help with publicity. Anyone who subscribes to an e-mail list or discussion group that might contain candidates is encouraged to contact Milligan, so that the committee can advertise the position through those forums.

GSC Announces Travel Grants Recipients

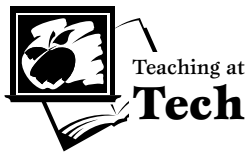
The Graduate Student Council has announced the recipients of its spring 2001 travel grants. Recipients are chosen in a random drawing from among qualified applicants.

Receiving \$300 awards for travel to present a paper are **Kexue Li, Ginger Chateuauneu, Ravepaty Shobha** (Chemistry), **Darcy Lichlyter** (Biomedical Engineering), **Qingxiu Li, Fatih Mengeloglu** (SFWP), **Haidong Zhang** (MSE), **Danielle DeVoss, Julianne Jasken, Michelle Trim, Cheryl Ball** (Humanities), **Jason Ripke** (MMPE), **Deyi Xie, Shawn Len** (Geological Engineering and Sciences), and **Prasad Ranguluri Raghava** (Physics).

Two students received \$150 awards for attending conferences, **Li Xiafen** and **Paul**

Five Things I Wish I Would Have Known, Part 2

Center for Teaching, Learning, and Faculty Development
By William Kennedy, director



Last week, I explored the five things I wish I would have known before I started teaching. This week,

we'll review the observations of some of MTU's teaching-award winners on the same topic. Professors **Donna Michalek, Kirk Schulz**, and **Mark Plichta** participated in a recent College of Engineering faculty development program for professors in their first year at MTU.

Michalek stated that beginning faculty members should be careful to set aside enough time to accomplish all of their professional duties. She encouraged new faculty members not only to schedule and maintain adequate office hours for students, but to also set aside blocks of "do not disturb" time for writing and research. While it is important to serve the needs of the students, she observed, getting a research program up and going is an equally important priority.

Michalek told the group that the first day of class sets the tone for the entire term. The first class session should include the distribution of a complete syllabus, including learning outcomes and goals, assignments and requirements, a tentative outline of course sessions, and explicit grading policies and procedures, including whether or not grades will be curved. Instructors should work very hard to grab the students' attention during this first session, telegraphing concern for the quality of the students' learning experiences and detailing the amount and kind of effort that students will need to put forth.

Schulz says he uses the first day to stress course organization, coming prepared to class, and letting students know his expectations of them. He said instructors should develop their own individual teaching style rather than trying to emulate the style of others. He stressed the value of observing and

talking with other teachers and adapting their successful techniques. Schulz said that through experimentation and adaptation, a beginning professor will develop a style of instruction that works for them and their students.

He suggested that professors share their professional interests and activities with students, particularly those interests and activities that relate to the course that they are teaching. "When I go to a professional meeting," Schulz said, "I tell my students about what I learned there." Schulz also suggested that teachers should focus on student learning and retention of new material and not be so consumed with covering a preset amount of subject matter per class or per term.

Finally, Schulz offered a word of caution regarding the use of instructional technology. Beginning faculty, he said, must carefully weigh the preparation time required to use advanced technologies against the actual instructional benefit that accrues to students. "I use the blackboard a lot," he reported. "There must be some reason they are still in every classroom."

Plichta emphasized setting a proper tone for the class on the first day and agreed that a detailed syllabus was helpful. He emphasized being confident, caring, and fair. He encourages instructors to learn the names of their students and to emphasize the message that you care about them as people but that your primary job is to encourage their learning. He encourages faculty members to break up classes with a variety of learning activities and not just rely exclusively on the lecture mode. He also cautioned beginning professors to consciously wait 15–30 seconds for students to respond to a question in class to facilitate student participation. Plichta also encouraged faculty to focus on conceptual mastery rather than emphasizing the memorization of formulas.

Those were the highlights from some of the MTU students' favorite profs.

MTU Notables

Department Chair **Kirk Schulz** (Chemical Engineering) was named the 2000–01 Outstanding Young Alumnus by the Virginia Tech College of Engineering. Schulz was nominated by the Virginia Tech Chemical Engineering Department. Over 10,000 alumni are eligible for this award.

In his supporting letter, President **Curt Tompkins** described Schulz as "positive, constructive, and innovative. He exhibits an extraordinary work ethic."

He also praised Schulz's service as department chair. "Besides continuing his own research and teaching, he has enhanced alumni and corporate relations and donor contributions and overseen a comprehensive overhaul of the undergraduate curriculum. . . . He is one of the finest faculty members I have known . . ."

Schulz will receive the award at a ceremony on the Virginia Tech campus this spring.

Associate Professor **Noel Schulz** (Electrical and Computer Engineering) has been appointed to the position of IEEE Power Engineering Society (PES) Awards and Recognition chair by the PES vice president for education and industry relations.

Saturday Sale at the Seaman

Customers get 20 percent off all merchandise priced at \$5 or higher this Saturday, February 10, at the Seaman Mineral Museum. The museum will be open from 10:00 a.m. to 4:00 p.m. in honor of Winter Carnival. Everyone's invited.

MichiganTech

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

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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 ttpics@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.

Auditions Scheduled for *Guys and Dolls*

Submitted by the Department of Fine Arts

Auditions for Michigan Tech's spring musical, "Guys and Dolls," will be held on February 13, 14, and 15 at 7:00 p.m. in Walker 210. Auditions are open to Michigan Tech students and members of the community and will include acting, singing, and dancing.

Associate Professor **Richard Goldstein** will direct the stage production, with fine arts chair **Milton Olsson** as music director. Three performances are scheduled for April 19–21 in the James and Margaret Black Theatre, Rozsa Center for the Performing Arts, with rehearsals beginning the week of February 19.

"Guys and Dolls," with songs by Frank Loesser and script by Jo Swerling and Abe Burrows, is one of the most popular musicals of all time. Based on colorful characters from the stories of New York journalist Damon Runyon, it's an all-American romantic comedy celebrating life on the streets of the city. The show and its characters, including small-time gamblers, showgirls, and Salvation Army "dolls," have won the hearts of theater lovers since "Guys and Dolls" was the smash hit of its first Broadway season.

Auditioners should come at 7:00 p.m. on one of the three nights. For vocal auditions for major roles, music from "Guys and Dolls" is available from the Fine Arts Office, Walker 209, from 8:00 a.m. to 5:00 p.m., Monday through Friday (487-2067). Contact the Fine Arts office for additional information.

Faculty Scholarship Grants Awarded

Faculty members have been awarded a total of \$51,000 in Faculty Scholarship Grants. The grants typically support scholarly work that is not likely to receive outside funding.

The recipients, their grants, and their proposals are **Sandra Boschetto-Sandoval** (Humanities), \$2,500, "Readings and Writings of Amanda Labarca"; **Heidi Bostic** (Humanities), \$3,800, "Translation into English of J. Fontanille's Book"; **William Cooke** (Biomedical Engineering), \$3,000, "Hemorrhagic Shock and Microneurography"; **Elizabeth Flynn** (Humanities), \$2,000, "Feminism(s) Beyond Modernism(s)"; **Randall Freisinger** (Humanities), \$3,500, "From Painting to Poem: The Art of Norman Rockwell"; **Mary Friedrich** (Fine Arts), \$3,500, "Industrial Short Courses on Colorimetry/Color Imaging"; **Dana Johnson** (SBE), \$3,000, "Integrating Business, Quality, Manufacturing, Environmental, and E-Commerce Initiatives"; **Donald Kreher**

Continued on page 4

Midsummer Night's Dream Giving Audiences a Set to Remember

By Anna Swartz

With all the reasons to check out Fine Arts' first theatrical production, "A Midsummer Nights Dream," in the new state-of-the-art Rozsa Center, you can add one more to your list: the set.

"It's an incredible set. There has never been a set like this in the Upper Peninsula because there has never been a stage to accommodate one," says **Milton Olsson**, chair of the Department of Fine Arts.

Designed by Technical Director **Paul Aneshansel** and Associate Professor **Debra Bruch**, two sets are featured in the production. Duke's Castle, drawn and painted by Dr. Bruch, is an interior of a castle that fills the stage and looms two stories high. The second set portrays a forest scene with many surprises. An elevator transports actors into scenes, a trap door is built right into the rock, and mountains double as chairs.

This part of the set is actually modeled after a painting from the Ming Garden restaurant in Houghton, says Aneshansel. The leaves, made from a surplus of cardboard shipping boxes, are curled to impart an Asian quality to the forest.

Also new to Michigan Tech is the first environmental friendly fog machine. "Older fog machines use oil which can sometimes cause the audience to cough. This one uses water," says Aneshansel.

Fine sets are not unfamiliar to Michigan Tech, but the added opportunity that the new Rozsa Center provides is not to be underestimated, says Olsson.

Winter Carnival performances are set for Friday, February 9, and Saturday, February 10, at 8:00 p.m. and Sunday, February 10, at 3:00 p.m. Tickets are \$10 general and \$5 students. Tickets are available from Rozsa Center Ticketing Services (487-3200), The Calumet Theatre (337-2610), and on the Web at

Webcast of Carnival Hockey Ready to Roll

For the first time ever, Michigan Tech will stream video and audio of this weekend's Winter Carnival hockey series against Minnesota-Duluth live on the Internet.

To see the live video/audio stream, go to <http://www.athletics.mtu> and follow the "Winter Carnival Hockey Live Show" link.

The live streaming of the games will use RealPlayer technology, and instructions on how to download a free version of RealPlayer will be available at the site.

The live video/audio streaming is a cooperative effort of MTU Athletics, University Relations, Auxiliary Services, and Information Technology. A total of 100 simultaneous live connections will be available at any one time, and there will be no charge to view the games.

"We're excited to get the live video streaming of Tech hockey off the ground," said **Dave Fischer**, director of athletic communications and marketing. "We'll be especially interested in feedback from those tuning in. We know certainly, that depending upon the type of connection each user has, there will be different results in terms of quality. While the technology isn't perfect, we figured Winter Carnival was a good time to give this new venture a try."

Opening faceoff is set for 7:05 p.m. (EST) Friday and 5:05 p.m. Saturday. The live webcasts will begin approximately 10 minutes prior to faceoff each game.

Workshops Needed for Daughters Day, April 26

The Presidential Commission for Women is sponsoring Take Our Daughters to Work Day on Thursday, April 26, for the Michigan Tech community. The commission is looking for interested parties to sponsor a session for the girls ages 11 and 12. Each session should be about an hour in length. Four sessions will be scheduled for the morning and four for the afternoon, 10:45–11:45 a.m. and 1:15–2:15 p.m. Past sessions have included "Building a Better Body" with the Center for Biomedical Engineering and "Building Bridges" with the

Department of Civil and Environmental Engineering. If you're interested, contact Paula Nutini at 487-3324 or pjnutini@mtu.edu as soon as possible.

New Staff

Tonya M. Wakeham has joined the McNair staff as a food service helper. She has been working in food service for the past eight years. Wakeham has three children, Travis, 9; Kayla, 5; and Lily, 7 months, and lives in Houghton. She loves to cook and volunteer at her children's schools.

Sports Shorts *By Dave Fisher*

Going to the Game? Just Wear White

Those attending this weekend's Michigan Tech-Minnesota-Duluth Winter Carnival hockey series are asked to wear white to create a blizzard effect in the MaclInnes Student Ice Arena.

Besides white clothing, other options for fans include white face paint, white body paint, white hair, or wrapping oneself in toilet paper. Please, no snowballs.

Huskies Club Winter Carnival Party Friday—Everyone's Invited

The annual Huskies Club Winter Carnival Party is set for approximately 9:30 p.m. Friday, February 9, in the SDC Gym. The event will immediately follow Friday's Michigan Tech-Minnesota-Duluth hockey game at the MaclInnes Student Ice Arena.

Cost is \$3 per person and includes sandwiches and snacks.

Those attending will have a chance to meet members of MTU's hockey and men's and women's basketball teams. All are welcome.

"We're looking forward to a fun event," said **Shelby Hamar**, president of The Huskies Club. "We'd like people to know that the event is not just for Huskies Club members, but for everyone."

Go-Kart Races This Weekend

Go-kart races will be part of the festivities surrounding intermission activity during

Winter Carnival hockey games this weekend against Minnesota-Duluth, thanks to Ron's Auto Body and Raceway.

President **Curt Tompkins** and Winter Carnival Queen **Monique Simmons** will go head-to-head in the ceremonial first-ever go-kart race at the MaclInnes Student Ice Arena in the first intermission of Friday's game.

Other races will take place on the ice, with contestants being selected in various ways.

"We'll be announcing a way for fans to enter to participate in the go-kart race via e-mail tomorrow," said Dave Fischer, director of athletic communications and marketing. "We'll also choose fans randomly in the Arena and Blizzard T. Husky will also help us in selecting some of the participants."

At least six races will take place during the weekend, with various prizes, including cash, going to the winners.

Blueline Luncheon Friday

A special Winter Carnival edition of the Coaches Corner/Blueline Club Luncheon is set for noon on Friday, February 9, at the Best Western-Franklin Square Inn in downtown Houghton.

Hockey coach **Mike Sertich**, Minnesota-Duluth hockey coach **Scott Sandelin**, women's basketball coach **Darla Olson**, and men's basketball boss **Kevin Luke** are the featured speakers.

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

Sons and Daughters Scholarships Available

MTU Employee Sons and Daughters Scholarships valued at \$100 each will be available for the 2001-02 academic year. Applicants must be full-time MTU undergraduates in their first four years of study or high school students planning to enroll in fall 2001, and the sons or daughters of Michigan Tech employees. Applications are available in the Financial Aid Office, Administration 160. Deadline for application submission is March 1.

POSITIONS AVAILABLE AT MICHIGAN TECH

Job descriptions will be available at

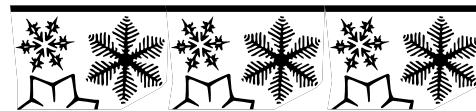
1:00 p.m. on Friday, or by e-mail at <JOBS@MTU.EDU>.

For a complete list of job openings, visit www.admin.mtu.edu/hro/postings/index.shtml

The following positions will be posted Friday, February 9, 2001, at 1:00 p.m. through noon, Friday, February 16, 2001, in the Human Resources Office.

Department Chair—Chemical Engineering
Dean—School of Business and Economics
Assistant Hockey Coach (two positions)—Athletic Department
Athletic Equipment Supervisor—Athletic Department
Assistant Director, Technical and Automated Services—J. R. Van Pelt Library

University employees are reminded to apply in writing prior to noon, Friday, February 16, 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.



February

Black History Month

- 9 Friday**
noon—Blueline Club luncheon—Northern Lights
7:05 p.m.—Hockey, Minnesota-Duluth at MTU—MaclInnes Student Ice Arena
8:00 p.m.—*Midsummer Night's Dream*—Rozsa Center
- 10 Saturday**
5:05 p.m.—Hockey, Minnesota-Duluth at MTU—MaclInnes Student Ice Arena
8:00 p.m.—*Midsummer Night's Dream*—Rozsa Center
- 11 Sunday**
3:00 p.m.—*Midsummer Night's Dream*—Rozsa Center
- 12 Monday**
1:00 p.m.—Research VP Search Committee open meeting—M&M 610
- 13 Tuesday**
7:00 p.m.—Auditions for *Guys and Dolls*—Walker 210
- 14 Wednesday**
7:00 p.m.—Auditions for *Guys and Dolls*—Walker 210
- 15 Thursday**
7:00 p.m.—Auditions for *Guys and Dolls*—Walker 210
- 22 Thursday**
5:30 p.m.—Women's basketball, Grand Valley State at MTU—SDC
7:30 p.m.—Men's basketball, Grand Valley State at MTU—SDC
- 23 Friday**
7:35 p.m.—Hockey, North Dakota at MTU—MaclInnes Student Ice Arena

Faculty Grants From Page 3

(Mathematical Sciences), \$4,000, "Combinatorial Configurations"; **Jim Mihelcic** and **Tom Van Dam** (Civil and Environmental Engineering), \$4,000, "Development of Scholarly Materials: Engineering in the Developing World"; **David Nelson** (Biomedical Engineering), \$2,000, "Preliminary Study of Role of HSP Expression"; **Milton Olsson** (Fine Arts), \$2,200, "Musical Composition"; **Barry Solomon** (Social Sciences), \$3,500, "Safe Minimum Standards Analysis of the Florida Manatee"; **John van de Lindt** (CEE), \$3,500, "Preliminary Study of a Seismic Hazard Estimation Method"; **Craig Waddell** (Humanities), \$1,000, "With a Wholesome Discretion"; **Christa Walck** (SBE), \$3,000, "A Study of Early Adult and Midlife Transitions"; **Anne Wysocki** (Humanities), \$2,500, "New Arguments of Word and Image in New Media"; and **Charles Young** (Geological Engineering and Sciences), \$4,000, "Geophysical Measurements of a Groundwater Barrier at Desert Hot Springs,