

Saroki, Pawar to Receive Honorary Doctoral Degrees

By Bruce Annett, *Executive Director
Marketing and Public Affairs*

A prominent architect and the agriculture minister of India will receive honorary doctoral degrees when Lawrence Tech holds its commencement on May 18 at 2 p.m. at Cobo Arena in Detroit.

The commencement address will be given by Victor Saroki, BSAr'79, BA'r'80, an award-winning architect and a member of the University's Board of Trustees, who will be awarded an honorary doctorate of architecture.

Saroki's work has been recognized by over 50 design awards and in over 40 articles on design, including eight in national publications. His Birmingham-based firm, Victor

Saroki & Associates Architects PC, was named by AIA Michigan as the 2007 Firm of the Year. Its commissions have included residences, theaters, restaurants, retail, galleries and hotels.



Victor Saroki

Saroki was awarded the AIA Detroit Young Architect of the Year Award in 1994, and in 1998 received the University's Distinguished Architecture Alumni Award.

He is a former president of the Detroit

Chapter of the American Institute of Architects (AIA) where he remains active, and also serves on the board of AIA Michigan. He was named to the prestigious College of Fellows by the national AIA in 2000.

Receiving an honorary doctorate of humanities will be Sharad Pawar, India's minister of agriculture and minister of consumer affairs, food and public distribution since 2004.

Hailing from a farming family in the state of Maharashtra, Pawar became president of the State Youth Congress at 24, a member of the State Assembly at 27, and a state cabinet member five years later. In 1978, at the age of 38, he became youngest chief minister in India when he became the executive head of

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Lawrence Tech Students Take Ford Model T University Challenge

Lawrence Technological University is one of five universities selected by Ford Motor Company to compete in an international university challenge to design a vehicle for this century that will recapture the attributes that made the Ford Model T the most revolutionary vehicle of the 20th century.

In conjunction with the 100th anniversary of the introduction of the Model T, the Ford Motor Company has challenged five university teams to design a vehicle intended for the global market that shares the Model T's attributes – simple, lightweight, practical, compelling and inexpensive. The goal is a vehicle that can be priced below \$7,000.

The other competitors are Aachen University in Cologne, Germany; Art Center College of Design in Pasadena, Calif.; Deakin University in Melbourne, Australia; and the

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Lawrence Tech students will take the Ford Model T as their inspiration as they try to design a vehicle with the same attributes for this century. The Lawrence Tech team includes (L-R) faculty advisors Ken Cook and Keith Nagara, William Consiglio, Jason Falenski, Jeffrey Saunders, Scott Lindberg and faculty advisors Tom White and Vance Hanna. Behind the Model T are Christopher Nichols, David Boehmer, Kyle Post, Jamie Dobrowolski and Taylor Manuilow. Missing is Ben Graf.

Taubman Student Services Center Wins LEED Silver Certification

By Eric Pope
Tech News Editor

The A. Alfred Taubman Student Services Center at Lawrence Technological University has earned the coveted silver certification through the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

The LEED rating system established by the U.S. Green Building Council (USGBC) has become the nationally accepted benchmark for the design, construction and operation of high-performance green buildings. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

Lawrence Tech alumnus Arthur Smith of Harley Ellis Devereaux in Southfield was the lead architect. Walbridge Aldinger Company of Detroit was the general contractor.

Major green features of the building include:

- A field of 88 geothermal wells sunk 300 feet through five geological layers heats and cools the Taubman Center, which has no boiler, furnace, or even a gas meter. The heating, ventilating and air conditioning systems contain no CFC-based refrigerants, HCFCs or halons.
- The low-e glass skin is oriented to promote natural lighting and is designed to reduce heat loss and maximize daylight.
- A 10,000-square-foot green roof reduces runoff and associated pollutants, offers more effective insulation than traditional roofs, and expands and contracts with seasonal changes. It is expected to last about 40 years, more than twice the lifespan of traditional

materials.

- A system of weirs, tile fields and long-rooted grasses and trees prevents 60 percent of the rainwater that falls on the adjacent campus quadrangle from running into the Rouge River. This bioswale of vegetation naturally purifies the water by filtering out pollutants commonly found in snow and rain.
- Lighting is controlled by sensors and astronomically synchronized timers that adjust three times a day to accommodate seasonal lighting needs.

In addition, the Taubman Center was designed as a "living laboratory" of sustainable design and engineering, according to Joseph Veryser, Lawrence Tech's university

architect and associate dean of the College of Architecture and Design.

The building's many sustainable design components create a "perpetual field trip" that provides students an up-close view of real-world applications of sustainable design and engineering. Many of the heating, ventilation and air conditioning controls and mechanisms are visible for study by students. The concrete flooring tiles throughout the building are elevated 18 inches, making all wiring and piping easily accessible by lifting panels of the completely modular floor.

"Lawrence Tech students also learn from conducting tests and collecting data to determine the tangible results of sustainable design," Veryser said.

Nobel Peace Prize Winner Speaks at Lawrence Tech



On April 24 the College of Management launched its Center for Global Leadership and Understanding Speakers' Series by hosting Dr. Shirin Ebadi, the 2003 winner of the Nobel Peace Prize. Close to 400 people attended her presentation at Ridler Field House. In the photo, Lawrence Tech President Lewis Walker reads submitted questions to Dr. Ebadi, center, and her interpreter, Sherin Eshadi.

Government Leaders Help Dedicate CIMR

An impressive list of speakers helped Lawrence Tech dedicate the Center for Innovative Materials Research (CIMR) on May 2.

The U.S. Army, the U.S. Department of Transportation, and the Michigan Department of Transportation (MDOT) have funded projects at CIMR that help save lives, save taxpayer money and keep people safe. CIMR researchers have done work in the defense, homeland security, transportation infrastructure, construction and automotive industries.

President Lewis N. Walker praised University Distinguished Professor Nabil Grace, chair of the Civil Engineering Department, for his vision in developing CIMR as a premier research facility with a national reputation. Mark Brucki, director of technology partnerships at Lawrence Tech, spoke about the strong support provided by state and federal officials and the military.

The national importance of CIMR was underscored by the attendance of Congressman Joe Knollenberg; Kirk Steudle, director of the Michigan Department of Transportation; Grace Bochenek, director of TARDEC in Warren; Major Gen. (Ret.) Bradley Lott,



WWJ AM 950 radio reporter Marie Osborne interviewed University Distinguished Professor Nabil Grace at the dedication ceremony for the Center for Innovative Materials Research on May 2.

director of the Defense Contract Coordination Center of the Michigan Economic Development Council; Oakland County Executive L. Brooks Patterson; and Southfield Mayor Brenda Lawrence.

Both U.S. Sens. Carl Levin and Debbie Stabenow had planned to attend the dedication ceremony, but were unable to fly out of Washington, D.C., due to bad weather.

MDOT Designates Research Center of Excellence at Lawrence Tech

The Michigan Department of Transportation (MDOT) has awarded the Civil Engineering Department at Lawrence Technological

University the designation as a Center of Excellence for Sustainable Infrastructure & Structural Testing that can improve the

structural integrity and longevity of concrete bridges. This MDOT Center of Excellence is located in the Center for Innovative Materials Research (CIMR).

MDOT engineers will ask Lawrence Tech to participate in the development and research of new ways to increase the longevity of bridges and decrease maintenance costs, according to MDOT Director Kirk Steudle.

“Research is happening right here in Michigan at Lawrence Technological University that isn’t happening anywhere else in the country. Lawrence Tech’s Center for Innovative Materials Research is doing research on carbon reinforcement and testing that ultimately will result in bridge structures that will last longer than ever before. We are proud to partner with Lawrence Tech as the CIMR develops innovative technologies that will benefit current and future generations by

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The Center for Innovative Materials Research (CIMR) is testing a girder-type highway bridge model meeting specifications of the American Association of State Highway Officials (AASHTO) in which steel has been replaced by carbon fiber reinforced polymer (CFRP) composite materials. The research is sponsored by the U.S. Department of Transportation.

Aero Design Team Flies Proudly at International Competition

By Andrew Gerhart, Associate Professor of Mechanical Engineering

If only an engineer could eliminate the intangibles, like predicting the weather. Six students from the 2008 Lawrence Tech SAE Aero Design Team found themselves battling the weather more than the other universities when they competed in the international SAE Aero Design East Competition held in Marietta, Ga., April 17-20.

Lawrence Tech team members Chris Jurczak, Ryan Beebe, Brad Belcher, Erica Bieke, Matt Elwart and Victoria Wilds with faculty advisor Andrew Gerhart competed against 38 other schools including Georgia Tech, Ohio State, Florida Tech, Kansas State, Cal State-Long Beach, and the University of Virginia. Twelve institutions from outside of the United States were also entered into the competition, including teams from Poland, Brazil, Puerto Rico, Venezuela and Canada.

The Aero Design competition sponsored by the Society of Automotive Engineers challenges engineering students from around the world to design, build, test and fly a radio-controlled, heavy-lift cargo airplane. The goal is to airlift the most weight possible operating within a given set of constraints.

Some design constraints are the same each year: the aircraft must use an unmodified OS 0.61 FX engine, take off within 200 feet, land within 400 feet, and contain a cargo bay area of at least 5 inches by 5 inches by 10 inches.

On the other hand, aircraft dimension constraints change each year. For example, some years a maximum wing span is allowed; other years a minimum wing span is allowed. This



Papa Smurf was Lawrence Tech's entry in the SAE Aero Design East Competition held in Georgia in April.



The 2008 Lawrence Tech Aero Design Team included (L-R) Associate Professor Andrew Gerhart, Matt Elwart, Erica Bieke, Chris Jurczak, Victoria Wilds, Brad Belcher and industrial advisor Bill Brown. Missing from the photo is Ryan Beebe.

year entailed a tougher constraint. The aircraft was only allowed a maximum linear dimension (length plus width plus height) of 175 inches. This means that the shorter the body (in length and height), the longer the wings can be.

Unfortunately, a short body means that the wings are closer to the tail, creating concerns about "dirty" air behind the wing that can affect the tail and result in loss of airplane control.

After extensive research and creative engineering design, the Lawrence Tech team developed an airplane that looks rather different than a traditional airplane. It has a full fuselage with a T-tail. Mounting the tail up high takes it out of the wings' "dirty" air.

Other aspects of the plane include wings with an Eppler E420 airfoil and a 95-inch span with a slight taper to reduce drag. Given the blue color scheme and unique profile of the plane, it was dubbed "Papa Smurf." The plane flew beautifully here in Michigan two weeks before the competition.

On the first day of the competition in Georgia, the judges awarded high marks to Lawrence Tech for the written design report and the team's oral presentation. In the first few flight rounds on the second day, the plane again flew beautifully, while some teams were

crashing spectacularly.

But the real threat turned out to be wind gusts blowing perpendicular to airstrip (known as cross winds). In the third round of flights, Papa Smurf lifted a cargo of 8 pounds. Along with the aircraft weight, Lawrence Tech had 22 pounds successfully flying through the gusty spring conditions. By the fourth round, Papa Smurf was loaded with 14 pounds of payload for a total weight of 28 pounds. The gusts were buffeting the plane for take-off, and it struggled to maintain a straight take-off path. Finally the strain collapsed the landing gear. After a hasty trip to Home Depot and some on-the-spot repairs, Papa Smurf was ready to fly again.

Much to everyone's dismay, the cross winds persisted on Sunday. With a total weight of 29 pounds, Papa Smurf lifted into the air, but the low take-off speed and ground effects brought the plane down quickly.

In the end, based on points awarded, Lawrence Tech finished 14th out of 39 teams, and was 16th in the final standings – an admirable finish.

The 2008 Aero Design Team thanks its sponsors: VITEC USA, SeverStal North America, the Lawrence Tech Alumni Association, and Bill Brown.

Abdulahad Wins Both Marburger and Marcum Awards

By Eric Pope
Tech News Editor

Ammar Abdulahad, the operations specialist at the Computer Help Desk, became the first winner of the Mary Ann Marcum Customer Service Award and then was selected as the staff member to receive the Mary E. and Richard E. Marburger Excellence in Achievement Award.

Associate Professor Robert Fletcher of the Mechanical Engineering Department was named the faculty recipient of the Marburger Excellence in Achievement Award. LTU Online Executive Director Alan McCord won the award as an administrator.

Associate Professor Joongsub Kim, director of the Detroit Studio in the College of Architecture and Design, won the Marburger Distinguished Achievement Award: the Champion for Institutional Excellence and Preeminence.

Abdulahad is from Iraq and received his bachelor's degree in electrical engineering from the University of Mosul in 1999. He spent three years in France before coming to the United States in 2004. He joined the Computer Help Desk staff in April 2006 and was named operations specialist in February 2007.

In nominating Abdulahad for the Marburger Award, co-workers noted his dedication to his job, the long hours he puts in and the tireless assistance that he offers to other staff members and the people who need help with their computers.

He is known as the "go to guy" for user problems and was instrumental in the response to the attack on the university network in October 2007.

The Marcum Award has been funded by Mary Ann Marcum's husband, Frank. It will be presented twice a year to Lawrence Tech employees of any job classification (faculty, staff or administration) who provide customers (the public, students and/or other university employees) with outstanding assistance, service and cooperation.

Fletcher was born in British Columbia and grew up in Massachusetts and Seattle. He had a series of interesting jobs in industry and continued to work full-time while earning an engineering master's degree in manufacturing systems at Lawrence Tech and then a Ph.D. in chemical engineering from the University of Michigan.

Fletcher joined the Mechanical Engineering Department in 2003 to establish the alternative energy engineering program and currently

serves as the program director.

He established the Alternative Energy Engineering Laboratory that contains fuel cell and hydrogen generation systems, as well as equipment for solar (thermal and photovoltaic), biomass, wind and other alternative and renewable energy sources.

Fletcher's research grants have provided additional educational opportunities for Lawrence Tech students, and he has helped students tackle ambitious projects such as the international Formula Zero racing competition for karts powered by a hydrogen fuel cell.

Many students nominated Fletcher as the Marburger faculty member. "Dr. Fletcher is really devoted to his students. He is willing to help them outside and inside the classroom. He is willing to go out of his way to help students with classroom problems and real life problems," one student wrote.

McCord grew up in Hazel Park and performed at two Rose Bowl games as a member of the marching band at the University of Michigan, where he majored in environmental education. He earned his Ph.D. in instructional technology and

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Attending this year's Marburger Awards ceremony are (L-R) Associate Professor Robert Fletcher, Mary Marburger, President Lewis N. Walker, LTU Online Executive Director Alan McCord, President Emeritus Richard Marburger, Ammar Abdulahad of the Computer Help Desk staff and Associate Professor Joongsub Kim.

Volunteers Needed for Grand Prix

Volunteering is a great way to experience the 2008 Detroit Belle Isle Grand Prix, which is returning Labor Day weekend, Aug. 29-31.

The Detroit Grand Prix Association, a 501(c)(3) non-profit organization, is the official volunteer group of the Detroit Belle Isle Grand Prix and has assisted in the staging and production of the race since 1982. There is an annual \$15 membership fee, which entitles members to benefits such as race credentials for all three days of the race, an official DGPA volunteer uniform, a DGPA patch and lapel pin, a great kick-off party in August and ticket/merchandise discounts.

Detroit Grand Prix Association volunteers will be assigned to a variety of areas, such as circuit marshals, credentials, customer relations, food services and golf cart shuttle.

Click [here](#) to volunteer for the 2008 Detroit Belle Isle Grand Prix.

Honors Society Serves Brunch at Ronald McDonald House

The Lawrence Tech Honors Society served brunch twice this academic year at the Detroit Medical Center's Ronald McDonald House – one of many community outreach projects that Lawrence Tech student groups have undertaken.

“The families said that they had been living off coffee and donuts since they had been there and that our home cooked meal was much needed,” said Honors Society Treasurer Amanda Cleghorn, who served the meal in April along with Honors Society members Allie Sowa, Amy Tsang and Dan Witting.

Honors Society students have worked with multiple sclerosis patients and raised money for the Michigan chapter of the National Multiple Sclerosis Society. They have supported a can drive for a food bank and organized a science learning day for students from Logan Elementary School.

“We're fortunate as college students, so we should help those in need,” Cleghorn said.

Since Lawrence Tech has been stressing both service learning and leadership in the curriculum, these efforts are important, according



Allie Sowa and Dan Witting were part of the Lawrence Tech Honors Society team that served brunch at the Detroit Medical Center's Ronald McDonald House in April.

to Professor James Rodgers, coordinator of the honors program at Lawrence Tech.

“And it's not just honors students. Other

student organizations are doing similar work,” Rodgers said.

Lawrence Tech Professor Wins \$400,000 Grant

Assistant Professor Elin Jensen of the Civil Engineering Department has won a \$400,000 Faculty Early Career Development (CAREER) grant from the National Science Foundation for her work on the mechanical behavior of

concrete and structural elements exposed to severe fire.

According to Jensen, the effects of severe fire on concrete are not well understood, and there is a lack of engineering data and

models needed to design concrete structures to withstand a severe thermal environment. Jensen's project will develop thermo-mechanical models of concrete under fire and loads.

The grant will fund experiments to be conducted over a five-year period beginning in May in Lawrence Tech's Center for Innovative Materials Research (CIMR). Jensen will use CIMR's new large-scale fire chamber that can test structural components in temperatures up to 2300 degrees Fahrenheit and simulate the conditions created by real fires of various types and duration. The test results should help with structural design and the development of fire safety codes.

Jensen earned her Ph.D. in civil engineering at the University of Michigan in 2002 and joined the Lawrence Tech faculty in 2003. Her major areas of teaching and research are mechanics analysis and performance of concrete materials, structures and pavements.

She is director of the Civil Engineering

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Lawrence Tech Assistant Professor Elin Jensen explains to civil engineering students (L-R) Julie Vander Meer, Aaron Wright, Tierra Logan and Trevor Shaheen how the fire/loading chamber in Lawrence Tech's Center for Innovative Materials Research can help evaluate the performance of carbon fiber composites in reinforcing concrete.

Knight Foundation Provides Grant for Design Detroit Initiative

What would it take to attract a thousand designers, architects and other creative professionals to live in Detroit and work in the region?

The John S. and James L. Knight Foundation has posed that question to Glen LeRoy, dean of Lawrence Tech's College of Architecture and Design, and other advisors representing the architecture, design, and economic development leadership in Detroit.

Lawrence Tech is a member of the consortium launching the Design Detroit Initiative through a planning grant from the Knight Foundation, which invests in Detroit and 25 other U.S. communities where the Knight family owned newspapers.

"The Knight Foundation is committed to building Detroit's creative economy and supporting ideas and projects that create transfor-

mational change," said Brenda G. Price, the Detroit program director.

Spearheaded by the Arts League of Michigan, the Design Detroit consortium includes the architecture and design schools at Lawrence Tech and the University of Michigan, the College for Creative Studies, Cranbrook Academy, Detroit Renaissance, and SDG Associates, LLC. The consortium has hired Reese Fayde, former CEO of Living Cities in New York, as a consultant.

"We are defining what a plan would look like to bring more architects, automotive designers and creative people into the city," said LeRoy.

So far, ideas to attract and retain "creatives" have included offering a financial stipend for living in the city. Another incentive is the availability of part-time teaching opportunities at the area's highly regarded art and architec-

ture schools.

"Hiring working professionals for the faculty has always been the practice here at Lawrence Tech," LeRoy said. "We welcome a larger talent pool.

"We also need to offer opportunities for creative people to make a design statement," LeRoy said. "Through our design studio in the New Center area of Detroit and our urban outreach program, we could engage design professionals in community service."

Lawrence Tech's Detroit Studio is dedicated to community-based architectural, urban design and community development projects. The next step for the consortium is to present a plan to the Knight Foundation and other grant makers to secure funding for implementation.

Green Box City Sends a Message **Steenkamp wins Horltd Award**



Dean Glen LeRoy of the College of Architecture and Design provided a guiding hand for students of East Middle School in Plymouth as they built a Green Box City to demonstrate how wind farms, solar energy and other sustainable technologies can be used in urban development. Several Lawrence Tech students also helped on the model city, which was part of the May 3-4 Green Street Fair that touted the benefits of green, organic and eco-friendly products and services.

Professor Lerine Steenkamp, director of the College of Management's Doctor of Management in Information Technology (DMIT) program, has won the Horltd Award for Excellence in Teaching.

The annual award is funded by Lawrence Tech alumnus Henry Horltd in honor of his father who was a professor of mechanical engineering at Ohio Northern University.

Steenkamp helped develop the curriculum for the DMIT program and has served as its director and as an instructor since it was launched in 2002. A

native of South Africa, Steenkamp has served as an information technology consultant to private and governmental organizations in Africa, the United Kingdom, the Netherlands and Belgium. In the last four years alone, she has delivered papers at 12 international conferences.



Lerine Steenkamp

High-Tech, High-Touch Interactive Donor Wall Unveiled

A generous gift from instructor Al Turfe of the Mathematics and Computer Science Department enabled the Office of University Advancement to introduce a 42-inch, interactive, touch-screen Donor Honor Wall display that publicizes the generosity of donors to the University.

The touch-screen display was unveiled by Vice President of University Advancement Stephen E. Brown at the annual Winterlude Celebration for donors, which was held in March at the Detroit Institute of Arts. "We wanted to honor our donors in the high-tech fashion worthy of a technological university," Brown said. "This interactive donor wall will do just that."

The interactive, touch-screen display has been installed in the Taubman Student Services Center. A second has been installed in the UTLC, and more are planned.

Collaborating with Symon Communications of Plano, Texas, and VDS of Farmington Hills, the Office of University Advancement created the system that includes an LCD display screen offering viewers the opportunity to call up a photo, profile, or video clip of major donors at the touch of a finger. In addition, the breakthrough technology also allows the University to play the current Lawrence Tech campaign video in a continuous loop, run a live feed from CNN, and scroll a continuous roster of every donor to the most recent campaign.

"When we saw this technology, we were blown away," Brown said. "To be able to make a dynamic, personalized display for each major donor seemed so much more appropriate – and appreciative – than a traditional plaque or other static display."

"This system allows us to tell the Lawrence Tech story in a way that we never could before, and it is befitting a technological university that we use this high-tech, high-touch medium to tell our generous donors' stories as well," said Dino Hernandez, assistant vice president for major gifts and campaign director.

The server-based, campus-wide communications system will continue to be updated with new material, and it will allow University officials to broadcast a wide variety of messages and event information to specific



Math instructor Al Turfe demonstrated the interactive features of the Donor Honor Wall during the Winterlude Celebration at the Detroit Institute of Arts.

screens in specific locations or to the entire system all at once.

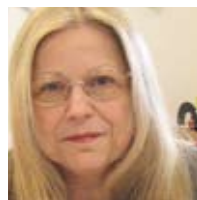
"Another key feature of this system is its ability to broadcast security announcements to the entire campus, should that become

necessary," said Bill Wachob, executive director of IT services. "In addition, its flexibility and large range of campus-wide communication options, makes this a real service to the University community."

Ilg Named Staff Member of the Month

Sallie Ann Ilg, evening secretary for the College of Architecture and Design, has been named staff member of the month for April by the Lawrence Tech Staff Recognition Committee.

Ilg came to Lawrence Tech in 2001 as the first staff person assigned to provide administrative support for the University Technology and Learning Center (UTLC) when it opened. Since her hours are 1-8 p.m. Monday through Thursday, she is often the only staff person available for the adjunct faculty members who teach evening classes.



Sallie Ilg

Ilg has administrative responsibilities for the Detroit Studio and the sophomore studios for the College of Architecture and Design, but she is best known for the variety of ways

she helps faculty and students. She answers questions when all the other offices are closed, provides safekeeping for projects that need to be turned in, takes attendance when needed, provides band-aids for exacto-knife cuts, and dispenses candy to students who need a break.

"Students come down here for candy and a little TLC. They need a place to vent," Ilg said. "I describe my role as a bartender for the faculty and a housemother for the students."

Ilg was nominated for staff member of the month by someone who has been a student, staff member and adjunct faculty. "She is highly organized, very competent and professional. She always makes herself available to students," according to the nomination letter.

The nomination gave an example of how Ilg went beyond the call of duty when asked by a student to help on a survey about the architecture studios.

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CIMR: Center of Excellence

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improving the nation's infrastructure," Steudle said.

For more than a decade, University Distinguished Professor Nabil Grace, chairman of the Civil Engineering Department, has conducted research on using noncorrosive carbon, glass and aramid fiber reinforced polymer (CFRP, GFRP, AFRP) and other advanced composites to replace steel reinforcement bars in bridge construction.

Bridges become faulty because chemicals and water cause steel to rust and undermine the structural integrity of the surrounding concrete. Composites are more expensive than the steel used to reinforce bridges, but eliminating corrosion reduces maintenance costs and can double the longevity of bridges, according to Grace.

"The designation as a Center of Excellence by MDOT will help us continue this important research. It not only provides a tremendous opportunity to develop the next generation of bridges, but also the next generation of engineers," Grace said.

The first test bridge in the country using CFRP materials was built for the city of Southfield in 2001, and Southfield plans to use CFRP reinforcements instead of steel on the Beech Road bridge scheduled for construction next year.

In 2010, the Metro Region Office of MDOT will use CFRP composites during reconstruction of three bridges across the Southfield Freeway.

Lawrence Tech's CIMR is a unique research facility that offers four ways to test materials used to reinforce concrete for bridges:

Bridge components up to 100 feet long can be tested for stress under both static and repeated loads up to a million pounds of force.

An environmental/loading chamber to be built this year will measure the impact of both repeated and static loads in simulated climatic conditions ranging from Antarctica to equatorial South America.

A fire/loading chamber installed in 2007 can test structural components up to 2300 degrees Fahrenheit and approximate conditions at the World Trade Center on Sept. 11, 2001.

Lawrence Tech and OCC Make Transferring Easier for Architecture Students

Lawrence Tech and Oakland Community College (OCC) have signed an agreement that makes it easier for architecture students at the community college to complete a bachelor's degree in architecture at Lawrence Tech.

Students who complete an associate's degree in architecture at OCC can transfer up to 84 credits when they enroll in the bachelor's degree program at Lawrence Tech – significantly more than typically allowed when students transfer from one academic institution to another.

To make the transition easier, OCC will offer two required courses in Lawrence Tech's bachelor degree program and will retain a

Lawrence Tech faculty member as an adjunct professor to teach one element of the first course.

Lawrence Tech President Lewis N. Walker and OCC Chancellor Timothy R. Meyer signed the articulation agreement on April 2.

"Oakland Community College provides its students with a strong foundation for a bachelor's degree in architecture, and we welcome the opportunity to help those students attain their educational goals," Walker said. "It is our hope that this agreement will encourage architecture students to continue their education with a bachelor's degree and eventually a master's degree."

Lawrence Tech Now Offers Degrees at LCC



Lansing Community College hosted a signing ceremony for an articulation agreement with Lawrence Tech, which began offering 10 degree programs through LCC's new University Center for the spring term. Among those representing the two institutions are (L-R) Kim Light, Lawrence Tech's admissions counselor at the LCC University Center; Kristi Webster, assistant admissions director at Lawrence Tech; LCC President Judith Cardenas; Lawrence Tech Interim Associate Provost Steven Howell; Art Michalski, a Lawrence Tech admissions counselor; and Joan Hartwig, the post-secondary articulation coordinator for LCC.

Nanotechnology testing equipment can measure such things as the tensile strength of carbon nanotubes (CNTs) in reinforced concrete.

Calvin Roberts, MDOT's engineer of research and best practices, said the next step is to define the work to be done at the

new Center of Excellence for Sustainable Infrastructure & Structural Testing.

"MDOT anticipates that this new center of excellence will offer many opportunities to assist us in achieving our strategic initiatives in the years to come," Roberts said.

Center for Nonprofit Management Gets Support for Microenterprise Program

Lawrence Tech's Entrepreneur and Microenterprise Development Program in the Osborn neighborhood of Detroit is helping to create and strengthen locally owned and family-owned businesses.

Launched in September 2007 with a \$257,000 grant from the Skillman Foundation's Good Neighborhoods Initiative, the project has received additional support from other foundation and business partners.

According to Bob Inskeep, Lawrence Tech College of Management professor and executive director of the Center for Nonprofit Management, the Knight Foundation, Comerica Bank, St. John Health System, and Matrix Human Services have come forward with consultation, funding, equipment and services.

A \$26,000 grant from the John S. and James L. Knight Foundation donor-advised

fund at the Community Foundation for Southeast Michigan will provide state-of-the-art research and document production services for the Osborn Business Development Center recently opened at St. John Conner Creek Village, 4777 E. Outer Drive in Detroit. The funding covers computers, copy and fax machines, Internet expenses, resource library purchases, and other office equipment to give neighborhood program participants the resources they need to launch successful new businesses.

"The Knight Foundation is invested in Detroit and new ideas to help the city move forward," said Brenda G. Price, Detroit program director for the foundation. "With great partners such as Lawrence Tech participating at the neighborhood level, we can foster innovation and the entrepreneurial spirit in our community."

Comerica Bank is helping program organizers network with community service organizations the bank works with in the area. Comerica Vice President Hubert Wiley and his office also are providing technical resources and instruction in business banking, micro loans, and personal financial literacy.

"We are excited about the project and the potential it has for changing people's lives," said Louise Guyton, vice president of public affairs at Comerica. "We are committing \$4,000 for the Osborn business plan competition. The awards will assist the students and entrepreneurs in launching or growing their business concepts."

Individual meetings and discussions of preliminary business plan ideas began in December. The strategy is to provide immediate, tailored support to residents who are at various stages of business development, including those who already have opened modest business enterprises.

For more information about the microenterprise program, visit ltu.edu/management/osborn.asp or call Bob Inskeep at ext. 3077. Howard Davis, Lawrence Tech director of corporate and foundation relations at Lawrence Tech, can be reached ext. 2316.

Open House 5K Run



Lawrence Tech's Student Recreation team celebrated Open House and the 75th anniversary with a 5K run and walk on May 3. More than 40 came out early on Saturday morning for some good exercise and a T-shirt. The two winners were Allie Sowa, kneeling on the right, and Matt Shaheen, standing second from the right.

Jensen: Wins CAREER Grant

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Graduate Program at Lawrence Tech and serves as faculty advisor to Lawrence Tech's Steel Bridge Team and Concrete Canoe Team.

Her recent research projects include "Model Development for the Evaluation of Cost Effectiveness of Concrete Framing Systems for Low-, Mid- and High-Rise Buildings" sponsored by the Portland Cement Association, "Use of Unbonded Carbon Fiber Composite

Cable(s) for Transverse Post-Tensioning of Side-by-Side Box Beam Bridges" sponsored by the Michigan Department of Transportation, and "Application of Ductile Hybrid Fabric and Design Methods in Composite Configuration for Vehicle and Other Components" sponsored by the U.S. Army Research Lab and TARDEC.

Jensen is the first faculty member at Lawrence Tech to receive an NSF CAREER award.

Marburger: Annual Awards Ceremony

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computer-based education in 1985.

He was executive director of University Computing at Eastern Michigan University and held several positions in information technology at U-M. He joined the College of Management faculty in 2003 and is now the director of LTU Online.

"AI is an innovator par excellence. He has done more than anyone I know of over the

past few years to move LTU forward in the area of technologically enhanced learning," a Lawrence Tech staff member wrote.

A native of South Korea, Kim worked in the Middle East for two years before coming to the United States. He has a Ph.D. in architecture and a master's degree in urban planning from the Massachusetts Institute of Technology. He came to Michigan for a Ph.D. in environmental psychology.

Kim began teaching for the College of Architecture and Design in 2000. He currently coordinates the Graduate Urban Design Program. He is director of the Detroit Studio

located in the New Center area of Detroit, where students study urban planning issues for specific neighborhoods in Detroit and other municipalities.

Kim has developed the Detroit Studio into one of the university's best community outreach initiatives. This year the Detroit Studio is partnering with a university in South Korea.

"Dr. Kim wears many hats ... and he handles each of his duties with the utmost attention and detail. He has a dedication and passion that is wonderfully contagious," a staff member wrote.

Leader and Innovator of the Year



Velcura Therapeutics CEO Michael Long was named 2008 Grant Thornton Leader and Innovator of the Year as part of a business recognition program co-sponsored by Lawrence Tech and WWJ AM 950. Attending the awards program held in the UTLC gallery on May 1 are (L-R) Grant Thornton LLP Partner Terry Conley, WWJ's Great Lakes IT Report Editor Matt Roush, Long, Lawrence Tech President Lewis N. Walker, and NextEnergy CEO Jim Croce, the 2007 award recipient who presented this year's award.

GREEK NEWS

Phi Kappa Upsilon

On May 10 Phi Kappa Upsilon attended the Relay for Life at Southfield-Lathrup High School. This is an event to support American Cancer Society, honor cancer survivors, pay tribute to the lives lost to the disease, and raise money to help fight it. Relay is a time to celebrate those who have battled cancer, remember those lost and get inspired to fight back. If you're interested in supporting this effort, please email Stephen Bonamy at sbonamy@gmail.com.

Phi Kappa Upsilon is planning its first annual golf outing on Saturday, Aug. 23, at Glen Oaks. In addition to 18 holes of golf, the event includes lunch at the turn, goodie bags, prizes, and dinner back at the castle.

– Joe Yona

Lawrence Tech Finishes Second in SAE World Congress Competition

The Lawrence Tech student chapter of the Society of Automotive Engineers took second place in the booth competition for SAE collegiate chapters held in conjunction with SAE 2008 World Congress at Cobo Hall in Detroit April 14-17.

Western Michigan University won the competition between 13 student teams. The second-place finish earned a \$900 prize and was the best showing for a Lawrence Tech team in many years.

Chris Jurczak, George Placinta and Jill

DeGowske took the lead, and other student chapter members helped build the display of photos, CAD drawings, renderings and other information about Lawrence Tech's Formula SAE, Baja SAE and Aero Design SAE teams for 2008.

The Lawrence Tech team brought the 2006 Formula SAE car, the 2007 Baja SAE car, and the 2007 airplane for display. The collegiate teams made a formal 10-minute presentation and then discussed their booth display with judges.

The presentation followed the World Congress theme, "A Climate for Change," by highlighting the 2008 Formula SAE team's use of E85 fuel. Rian Johnson wrote and delivered the presentation, and he was assisted by Carolyn Snyder in the presentation. Tommy Beetham helped get everything transported and set up.

"We really had a great team effort from all three major SAE collegiate design competition teams," DeGowske said.

Commencement: Two Honorary Doctorates

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government of Maharashtra, India's most developed and urbanized state, second most populous, and third largest in geographic size. Mumbai, its capital, is India's largest city and business center.

In 1991, he was appointed India's defense minister. In 1995, he was elected to India's



Sharad Pawar

parliament (Lok Sabha, the House of the People) and became leader of the Congress party. In 2001, he became vice chairman of the National Committee on Disaster Management.

Pawar is a strong advocate of education. One of India's leading K-12 international schools is named in his honor. In 1972, he founded Vidya Pratishthan, a primary, secondary and collegiate institution serving 16,000 students and offering degrees through the graduate level.

Pawar is also president of Pune's Vasantdada Sugar Institute for post-graduate and certificate-level academic study, research, technology development and consulting. Improving educational opportunities is core to his belief that his nation can continue to develop as a global hub for software production, telecommunications, biotechnology and information technology.

Pawar has stood for a society free from the caste and communal biases that tend to influence politics in India. He was India's first chief minister to formulate a progressive gender policy.

Active in the United Nations and World Health Organizations, Pawar won praise for his leadership of the UN Disaster Management Team that provided relief for earthquake victims of Maharashtra's Latur and Osmanabad districts. In recognition of his role in parliament and public life, he was conferred the Outstanding Parliamentarian Award in 2007.

His policies as agriculture and food minister have helped revive his nation's agricultural sector. Harvests of wheat, rice, oilseeds, cotton and sugarcane have markedly improved. The India-U.S. Knowledge Initiative launched during his tenure has increased pio-

neering research in technology and agriculture between the two nations. He also serves as president of the Board for Control of Cricket in India (BCCI).

Lawrence Tech alumni achievement awards will be awarded to Keith Pratt, BSIM'82, and Kirk Steudle, BSCE'87.

Components created by Pratt's companies have been used on Mars, in the Hubble Space Telescope, and in artificial hearts. Pratt is chairman and CEO of Shared Vision LLC, a 55-employee company that produces precision machined parts and sub-assemblies for a variety of clients in the aerospace, defense, medical, automotive and heavy equipment industries. The ISO 9001-2000 certified company is based in Warren and includes Panda Precision Inc. and Schwartz Industries.

After growing up on Long Island in New York, Pratt moved to Detroit to work for General Motors, where he held positions in product development, emissions, testing and advanced vehicle engineering at the GM Tech Center and Proving Grounds. He has also worked for IBM and competed in road racing and Funny Car drag racing.



Keith Pratt

In 1993, he founded Panda Precision with the goal of creating unique, complex machined parts with a consistently high level of quality. Pratt acquired Schwartz Industries in 2001 to further expand his capabilities in this field. Most new clients are acquired by word of mouth, attesting to the firms' sterling reputation for innovation, service and solutions.

Pratt is also very active working to improve higher education. He serves on the board of visitors of the Pratt School of Engineering at Duke University. He recently served on the Dean of Engineering Search Committee at Lawrence Tech, and now serves his alma mater on the campaign steering committees for the College Entrepreneur Organization and Lawrence Tech's Proud Heritage, Bold Future Capital Campaign. He is also a charter supporter of the Lawrence Tech Invitational golf outing that provides student scholarship and program support.

Born and raised in Adrian, Steudle is a

licensed professional engineer who began his career with the Michigan Department of Transportation (MDOT) in 1987 and was appointed state transportation director in March 2006. He administers a highway program with 9,716 miles of state trunkline and 4,400 state highway bridges, a department with 2,800 employees, and multi-modal transportation programs that include transit, rail, air, marine/port and non-motorized transportation.

He represents MDOT on the Michigan Transportation Asset Management Council, and chairs both the American Association of State Highway and Transportation Officials (AASHTO) Subcommittee on Asset Management and the Standing Committee on Highway Traffic Safety.



Kirk Steudle

Steudle is a national expert in Vehicle Infrastructure Integration (VII), the technology that enables vehicles to communicate with the road network for greater safety and mobility. He is a director of the Intelligent Transportation Society of America (ITSA). He also serves on the Strategic Highway Research Program (SHRP) II oversight committee and chairs the group's implementation committee that reports to Congress. He served on the Essexville City Council from 1995-99.

Steudle has been actively involved with Lawrence Tech and is a member of the Department of Civil Engineering Advisory Board. MDOT has designated the department as a Center of Excellence for Sustainable Infrastructure and Structural Testing that can improve the structural integrity and longevity of concrete bridges. It is housed in the University's Center for Innovative Materials Research.

Four Elected to Staff Senate

Four members have been elected to the Lawrence Tech Staff Senate: Marilyn Hotaling, Library; Will Liska, Enrollment Services; Brandon Spencer, Arts & Sciences/Marketing and Public Affairs; and Tracy Kash Thomas, Arts & Sciences.

Ford Challenge: Model T for This Century

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University of Michigan-Dearborn. Teams of both undergraduate and graduate students will work to create revolutionary concepts that address transportation needs of the future.

Each university received \$75,000 in funding from Ford Global Technologies LLC to support the creation of a vehicle concept through sketches, models, research papers and potentially even working models.

The teams have until Sept. 1 to design the Model T for this century. Five judges from Ford Motor Company will determine which two concepts best embody the Model T spirit, personify the Ford brand and meet the challenge criteria. On Oct. 1, the official centennial date of the introduction of the Model T, two teams will be awarded \$25,000 in scholarship funds for their universities.

The competition was announced at a press conference at the Automotive Hall of Fame in Dearborn on May 12 by Paul Mascarenas, Ford's vice president of Engineering for Global Product Development.

"The Model T is a true product of an engineering genius. Although simple and practical, it changed the way we live, work and play and met the needs of millions," Mascarenas said. "Through this challenge we're looking for the students to push the boundaries and deliver an alternative transportation concept for tomorrow – and beyond."

The teams are challenged to create a vehicle that is simple, durable and lightweight. Each vehicle must accommodate at least two passengers and offer solutions that address assembly, power train and sustainability. The vehicle must have a range of at least 200 kilometers (approximately 125 miles) and a base price of only \$7,000.

The competition will be a major test for the first class of students in Lawrence Tech's transportation design degree program who enrolled as freshmen last fall. They are joined by three engineering students and an architecture student.

"This is a great opportunity for our students to bring together knowledge and concepts from both design and engineering, which is

also the underlying goal of our transportation design degree program," said Lawrence Tech President Lewis N. Walker. "Combining academic disciplines should produce the revolutionary thinking that the Ford judges will be looking for."

Working on the Lawrence Tech team are David Boehmer, William Consiglio, Jamie Dobrowolski, Ben Graf, Jason Falenski, Scott Lindberg, Taylor Manuilow, Christopher Nichols, Kyle Post and Jeffrey Saunders.

The faculty advisors are Keith Nargara and Vance Hanna, co-directors of the Transportation Design degree program; Kenneth Cook, director of the Technology Engineering degree program at Lawrence Tech; and Thomas White, an adjunct faculty member.

Ilg: Staff Member of the Month

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"Sallie helped organize the survey; gave me feedback on its form and content; and tabulated all of the results for over 135 surveys. She bound the results in folders and helped me to present the findings to students, faculty and administrators."

Ilg said she gets to know many students well when they are in sophomore studios and then watches them grow and mature. "When they graduate, it's like losing one of your own," she said.

After seven years, Ilg continues to find her job exciting. "I think what I enjoy most is that I am constantly learning new things, from both the faculty and the students," she said.

Inspection Tour at Lawrence Tech



James Finley, deputy undersecretary of defense for acquisition and technology, visited Lawrence Tech in April to review the academic programming for the Senior Service College Fellowship (SSCF) that enables civilian leaders in the Department of Defense to earn a master's degree in global leadership and management. In the photo (L-R) are Finley; Lawrence Tech President Lewis N. Walker; Provost Maria Vaz; Col. Christopher Bogden of the Air Force, an aide to Finley; Maj. Lawrence Kokocho of the Air Force, program manager of the Defense Acquisition University's Midwest Senior Service College Fellowship Program; and Carl Hayden, acting dean of the DAU Midwest Region.