

Making a Difference

A monthly sampler of educational, cultural, and economic contributions of Maine's public universities

UMaine Team Develops a New Method to Make Composites



Testing beam strength at AEWC

ORONO – Researchers at UMaine's Advanced Engineered Wood Composites Center (AEWC) have recently invented a revolutionary new process for producing high performance, cost-competitive com-

posite materials through resin infusion.

Barry Goodell, professor of Wood Science and Technology in the College of Natural Sciences, Forestry and Agriculture, Roberto Lopez-Anido, associate professor of Civil and Environmental Engineering in the College of Engineering, and former UMaine graduate student Ben Herzog, currently a scientist with APA – The Engineered Wood Association, have been granted a patent for ComPRIS, the Composites Pressure Resin Infusion System.

ComPRIS improves on previous methods by applying pressure to infuse resins to create composite materials and it produces a more consistent, evenly distributed resin. It realizes both cost and labor savings, it provides the ability to produce more complex infusions and it is environmentally safer.

According to Goodell, "With the ComPRIS process we can produce very thick composite products without voids and we can do three things at once: laminate materials (such as lumber), as well as reinforce the laminate, and in addition provide greater long-term durability of the final product in the environment."

USM Site for "National Entrepreneurship Week" in Maine Events

PORTLAND – USM was the host site for several events that were part of National Entrepreneurship Week in Maine, including a celebration with special guest Thomas Moser on Wednesday, February 27, a "Pitch an Angel" event allowing participants ten minutes to pitch a business idea to possible investors, and the Junior Achievement—Bank of America Titan™ Challenge for high school students.

Moser's presentation took place at USM's Abromson Center on the Portland campus, where he and others

explained how Thos. Moser Cabinetmakers began as one man's attempt to restore the lost art of fine woodworking, and how after 35 years has grown to employ nearly 100 cabinetmakers with showrooms in eight cities around the world.

Later in February, entrepreneurs signed up for informal, private sessions with several members of the Maine Angel Private Equity Investment Network. Each participant had 10 minutes to pitch his or her idea and get feedback from Maine Angel members who, since 2003, have invested almost \$2 million in 16 promising companies.

UMF Buildings Receive U.S. Green Building Council LEED Certification



Pictured in the geothermal pump room in the UMF Education Center are Theodora J. Kalikow, UMF President, and Robert Lawrence, UMF director of Facilities Management.

FARMINGTON – Two newly constructed "green" buildings at University of Maine at Farmington have received official LEED certification from the United States Green Building Council.

The \$8.8 million, 44,000 square-foot Education Center received LEED "silver" certification and was designed to serve as an ecological teaching tool for UMF

students, K-12 students, practicing teachers and the region. Green features include a geothermal heating system and the use of construction materials with recycled content, interior materials and furnishings that do not emit indoor pollutants and a sustainable landscape design.

Frances Allen Black Hall, UMF's new \$4.5 million residence hall, was the university's first green building to receive LEED certification, receiving "LEED Certified" status. The 32,000 square-foot, 102-bed residence hall qualified for this distinction based on a number of green features including developing the building site with the least amount of environmental impact, using over 10 percent recycled construction materials and nearly 35 percent locally available construction materials, and increasing thermal efficiency by approximately 25 percent by using continuous rigid insulation on the building's exterior.

UMA Architecture Students Have Designs on Hallowell Waterfront

AUGUSTA – Seven teams of students from UMA's architecture program presented a variety of waterfront designs for consideration by Hallowell's waterfront advisory committee and town residents. The town's response was overwhelmingly enthusiastic.

"These types of projects provide a great opportunity for our students to take what they learn in the classroom and create something for the outside world. It provides them with tremendous experience," explained assistant architecture professor Eric Stark.

Stark and his students were asked by the chair of the waterfront committee to put together proposals which took into consideration the historical context of the site, and incorporate a performance space, a waterfront path, a public restroom facility, parking, and other elements.

UMaine Engineers Unveil Blast-Resistant Wood Building Technology

ORONO – New technology, developed at the University of Maine, has led to the construction of a prototype blast-resistant wood building at the university's Advanced Engineered Wood Composites (AECWC) Center which was unveiled at a press conference held at UMaine on February 19.

UMaine engineers, including undergraduate and graduate students, constructed the building inside the AECWC facility. AECWC technology, including a design methodology and coating treatments applied to the construction material, gives the building properties that will allow it to withstand blasts and severe weather. This construction has potential applications for military troop deployments, homeland security, and hurricane-resistant construction.

This project follows the AECWC development of ballistic tent panels for the U.S. Army. The prototype version of those panels, which go inside tents and protect soldiers living in combat situations from nearby blasts, was presented to the Army last year. That technology was recognized for the American Composites Manufacturing Association as the "Best of the Best," signifying its status as the top composites technology innovation in the world in 2007.

Representatives from the Army Corps of Engineers, Senator Susan Collins, and Representative Michael Michaud were on hand for the event.

UMFK Offers Programs for Future French Teachers

FORT KENT – UMFK announced in February that it will offer an integrated French-language education program beginning this fall which will allow students to complete a major in French and a minor in education; each tailored specifically to French teachers.

Students also will complete a semester of student teaching and graduate with a teaching certificate in French. The program is offered, partly, in response to the critical need for language teachers in both the United States and Canada.

The French-language education courses will take students out into the field, allowing them the unique experience of conversing in French in the St. John Valley, as well as in neighboring Canada. For their student teaching experience, students may choose to be in a local or Canadian high school, or in a nearby elementary French immersion program.

UMM's Winter Carnival – A Downeast Community Gathering

MACHIAS – Students and families across the region participated in UMM's Winter Carnival held February 2.

UMM recreation management students organized several snow events on the campus mall area including snow kickball, ice bowling, an obstacle course, a tug-of-war, snow dodgeball, and cross country skiing team events. Hot chocolate and cookies were served, as well as a festive community meal at Kilburn Commons. The festivities culminated with fireworks in the evening.



Cathie Pelletier

Pelletier, UMPI's Writer-in-Residence, Offers Reading

PRESQUE ISLE – Author Cathie Pelletier performed a reading at UMPI from her recently completed manuscript in mid-February. The event also included a question and answer session and a book signing.

Pelletier, who is UMPI's Writer-in-Residence, is also an award-winning novelist, screenwriter, and literary agent who was born and raised in Allagash.

As part of the residence program, she is offering two 8-week courses for the campus and community. In delivering the courses, Pelletier brings her wide-ranging experiences as a writer. She has written nine novels – two of which have been turned into movies.

UMA Law Enforcement Expert Speaks at International Conference in Asia

AUGUSTA – Assistant professor of criminal justice Richard Mears was one of a number of law enforcement experts from across the globe who spoke at a conference titled, "Law Enforcement, Human Rights and Global Security: Experiences in Uzbekistan and Other Countries" held in Tashkent, Uzbekistan.

Mears also made a presentation at a conference in the Uzbek city of Bukhara. The conferences were sponsored by Eastern Kentucky University, along with the U.S. Agency for International Development, the Institute for New Democracies and the Uzbek Foundation for Regional Policy.

Mears, a national community policing expert, spoke about the successful techniques involved in establishing a community policing program. He also spoke on the topics of crisis prevention and crisis management.

In a *Portland Press Herald* article, Mears noted, "As the world gets smaller, we spend more time interacting with other organizations and other cultures."

USM and UM Host Junior Achievement—Bank of America Titan™ Challenge

PORTLAND – In late February thirty teams of high school students competed in the Junior Achievement—Bank of America Titan™ Challenge, which pitted teams of three high school students and one volunteer business advisor against each other to see who would run the most profitable company.

Twenty teams from York, Androscoggin, and Cumberland counties competed at USM's Glickman Family Library on the Portland campus, while 10 teams from Penobscot County competed in the Foster Innovation Center at the University of Maine in Orono.

In Portland, USM's School of Business L.L.Bean /Lee Surace Endowed Chair of Accounting hosted the competition with assistance from USM's Students in Free Enterprise (SIFE) Team. In Orono, The Foster Innovation Center was host along with SIFE students from Maine Maritime Academy assisting.

UTC, UMaine Students Prepare for Robotics Competition

ORONO – High school students from the United Technologies Center in Bangor and their engineering student mentors from the UMaine Robotics Club are teaming up for a second year to build a robot as part of the 2008 FIRST (For Inspiration and Recognition of Science and Technology) Robotics Competition to be held in March at Boston University.

Beginning with a common kit of basic parts – but no instructions – the 15-member team has only about six weeks to design, build, program, and test its robot, which will be shipped to Boston after its public unveiling. There, the robot – 130 pounds, 4-feet tall, with an arm that can reach 8-feet high – will race competitors around a track and earn points by manipulating large inflated balls.

This year's competition will involve more than 37,500 high school students from every U.S. state as well as Brazil, Canada, Chile, Israel, Mexico, the Netherlands, and the United Kingdom. The championship will be held in Atlanta in April.

Binnacle's Ultra-Short Competition Deadline is March 15

MACHIAS – The University of Maine at Machias is hosting the fifth annual Ultra-Short competition, which has attracted

considerable international interest among writers and poets.

The best of the contest entries end up in *The Binnacle*, UMM's literary and arts magazine. It's open to writers in Washington County and Maine, as well as from around the globe. Interested writers of short narrative of fewer than 150 words, and poetry of 16 lines or fewer, are welcome to submit their works. Prizes will be awarded in May for both categories.

More than 300 submissions have been received from 18 states, 10 countries, four continents, as well as from students on campus. More information is available at www.umm.maine.edu/binnacle.

Momentum Aroostook and UMPI Offer Young Professionals Institute

PRESQUE ISLE – Momentum Aroostook and the University of Maine at Presque Isle are teaming up to provide the area's young professionals with a one-of-a-kind leadership development opportunity.

The two entities will host the Young Professionals Institute, a professional development short course designed specifically for emerging leaders looking to hone their professional skills. The pilot program will be offered at the University during five afternoon sessions between March and April.

Participants in the Young Professionals Institute will learn through role-playing scenarios and hands-on activities how to write eye-catching proposals, deliver successful oral presentations, use best practices in written communication, and work effectively with the media.

The Institute will be facilitated by President Don Zillman, members of Momentum Aroostook, and several local business and community leaders, who are excited about the course and how it has been tailored for young professionals.



Momentum Aroostook received financial support from UMPI and MMG Insurance. Celebrating the sponsorship are: Jay Trainer, mA board member; President Don Zillman; Nathan Berry, mA board chairman; Matt McHatten, senior vice president with MMG Insurance; and Sarah Fischer, mA board member.

Farmington Features Presentation as part of African-Americans in Maine Lecture Series

FARMINGTON – As a part of its year-long series on Africa and African-Americans in Maine, UMF featured the lecture "Malaga Island — The Destruction of an African-American Community" in mid-February.

The presentation was made by Rachel Talbot Ross, director of the office of Equal Opportunity & Multicultural Affairs for the City of Portland; and Nathan Hamilton,

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Rachael Talbot Ross

USM professor of archaeology. They examined the bitter history of the destruction of the African-American community on Malaga Island, located in Casco Bay near Phippsburg, in the early 20th century.

“Very Special Arts of Maine” exhibit at UMM

MACHIAS – “A Matter of Perception,” featuring artwork by Mainers with disabilities, opened February 15 at the UMM Art Galleries in Powers Hall.

The show, presented by the Very Special Arts of Maine organization, is on display through March 21.

It has been more than 10 years since VSA of Maine decided to organize an exhibition of art made by people with disabilities. The program’s goals are to provide an opportunity for these artists to exhibit their work, to increase awareness within the general population about the creativity and talent of people with disabilities, and to promote improved accessibility within Maine’s arts and cultural facilities.

Every piece of art submitted for “A Matter of Perception” in 2008 will be shown at least once at one of the 11 displays statewide.

UMaine Business School Team Named National Competition Semifinalist

ORONO – The UMaine student chapter of the American Marketing Association has been named one of eight semifinalist teams in one of the nation’s most prestigious college business presentation competitions.

Team members are: Morgan Bickford of Lebanon (chair); Bethany Brown of Farmington; Heather Conary of Orrington, Joshua Lagasse of Wells; Bethany Mealey of Farmingdale; Emin Okutan of Ankara, Turkey; Julie Salvato of Winslow; and Amy Shepard of Rockland.

The case competition involved students from more than 60 of the country’s top business schools analyzing a hypothetical business marketing dilemma and proposing marketing strategies. The case under consideration was to develop a marketing plan for a book publisher trying to market its products and services on the Internet.

The Maine Business School students proposed a realistic model that included “some very creative avenues,” says Omar Khan, an assistant professor of marketing and chapter advisor. “They actually had this idea for an application that heightened the interactivity among the students, the professors and the book publisher.”

Competition organizers said they had the largest number of case submissions ever this year.

The eight semifinalist teams will receive award plaques in New Orleans in April and will be narrowed to one winner in a follow-up contest.

UMPI President, Scientist Offer First-ever Course on Climate & Energy

PRESQUE ISLE – UMPI President Don Zillman and Dave Putnam, chair of the School of Science and Mathematics, are co-teaching “Climate, Environment, and Energy,” a 15-week course that tackles the science and history of the earth’s climate system, the human impact upon it, and the economics of the environmental concerns that have followed.

It is the first course offered at UMPI which deals with the science, law, and policy connected with the world’s energy situation.

Students majoring in everything from science to criminal justice are taking part in the highly interdisciplinary course. The class offers components of geology, earth sciences, chemistry, economics and political science.

The course was created as part of a University of Maine System initiative and based on campus desire to discuss the crucial issues of climate change, energy supply, and environmental protection.

St. John Valley Elementary Students Flock to UMFK Acadian Archives



FORT KENT – Elementary students from across northern Aroostook County are visiting the UMFK Acadian Archives to tour the Marcella Bélanger Violette exhibit and to participate in learning activities. The exhibit was in place for the month of February.

Madawaska elementary students and their teachers visited the Marcella Bélanger Violette exhibit held at UMFK’s Acadian Archives.

Four stations in the exhibit were based on Maine’s Learning Results:

- **Bloom Where You Are Planted:** students learned about the importance of being a responsible, involved citizen and were introduced to the idea of being a lifelong learner;
- **Families of Yesterday and Today:** students were asked to talk with an older family member or friend, for example a grandparent, about what it was like when he/she was a child, and what and how things have changed over the years;
- **Information from the Past:** students selected items from the local newspaper and shared why the picture or story chosen was important to them and how it captures history;
- **The Acadian People:** students learned how the French settlers of the St. John Valley lived in the late 18th century. The students learned a number of French vocabulary words associated with land, farm, family, and life.