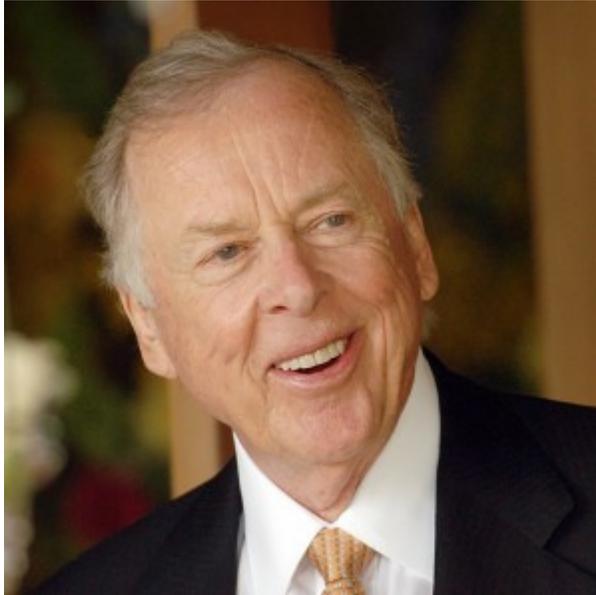


## Spectrum

Volume 36, Number 3, April 2009

### Getting energized: Missouri Energy Summit to feature prominent energy leaders



T. Boone Pickens

There is energy in the air as the four campuses of the University of Missouri System put finishing touches on the first-ever Missouri Energy Summit April 22-23 on the University of Missouri-Columbia campus.

Designed to focus on “all things energy,” the summit includes an [impressive lineup](#) of state and national speakers on topics ranging from energy policy and research to energy security, management and consumption. T. Boone Pickens, a visionary in our nation’s future energy strategy, will serve as the keynote speaker to a packed auditorium April 22. More information on the summit can be found at [missourisummits.com](http://missourisummits.com).

“The purpose of the Missouri Energy Summit is to engage in a comprehensive discussion on energy policies and issues that affect Missourians and beyond,” said Missouri University of Science and Technology Chancellor John F. Carney III, who is chairing the summit. “The university has an important mission in enhancing the economic development of the state, and through its impressive program, the summit will help the state focus on current and future energy needs.”

#### **The power of the classroom**

Select portions of the summit are being extended to schools and libraries across Missouri through the Missouri Research and Education Network (MOREnet), one of the nation’s first statewide

research and education telecommunications networks. MOREnet will provide a live video stream of most summit speakers so students and others in Missouri can use the presentations for class discussions and enhanced learning opportunities.

“Our future energy leaders are sitting in Missouri’s classrooms right now, so we are pleased to make the Energy Summit available to them as a learning tool,” said University of Missouri System President Gary Forsee. “They will hear from outstanding energy experts across the country and also be introduced to faculty who will showcase cutting-edge energy research under way across our campuses. The private-public partnerships, new collaborative opportunities and investment coming out of this summit will lead to important new energy jobs that these students will be able to pursue.”

### **Go mobile**

The university continues to believe that part of its mission is to connect the world to science and education. As a result, our summit also will test and evaluate new mobile platform applications to enhance the educational and networking experience of summit attendees.

Those unable to attend the summit can listen to select presentations via a [live video stream](#) at [missourisummits.com](http://missourisummits.com). The entire summit will be available on demand from the Web site following the summit.

General admission seating is still available for summit presentations beginning at 1 p.m. Wednesday, April 22 and from 7:30-9:30 a.m. Thursday, including remarks by Gov. Jay Nixon at 8:30 a.m.

[Podcasts](#) and a [video gallery](#) on impressive energy research underway at the university’s four campuses are available on the Energy Summit site and are being profiled in the Research news section of this month’s *Spectrum*.

## Safeguarding your identity



The university is in the midst of a systemwide spring cleaning—of Social Security numbers. The project, which takes place on all four campuses, University of Missouri Health Care, Extension and UM system, will replace all Social Security numbers necessary to UM business with alternate identification numbers and delete all those unnecessary.

“The university takes seriously its responsibility to safeguard the personal information and identity of our faculty, staff, students, alumni, retirees, friends and donors,” said UM President Gary Forsee. “This project will go a long way toward protecting the security and personal identity of our associates.”

An Information Services team has been created to secure Social Security numbers in a centralized database and replace them with alternate identification numbers. Social Security numbers that are no longer necessary will be deleted to prevent exposure to outside sources. This is a huge project and will require the cooperation of everyone across the entire system.

### **What can you do?**

Begin by searching your electronic and paper files for Social Security numbers and deleting or shredding those that are no longer necessary.

Additional information can be found [here](#).

## UM system establishes social media presence



Early this year, the University of Missouri System introduced profiles on popular social media Web sites [Facebook](#), [Twitter](#) and [YouTube](#).

Users of these sites can now become “fans” of the system, receive news updates related to the system or watch short videos about people, places and programs across the system.

“This represents an inexpensive and efficient way for us to reach students, staff, faculty, citizens and journalists with news from around the four campuses,” said Michael P. Hill, Web coordinator for UM system strategic communications.

UM system’s [Facebook page](#) is updated several times a day with system-related news and events and currently has more than 40 “fans,” including alumni, employees, students and friends of the university. Facebook is a social networking site that allows its more than 200 million users to connect with friends, companies and organizations around the world. Readers who do not have a Facebook account can register for a free account [here](#).

UM system is also on [Twitter](#), a site that allows users to post brief news updates called “tweets.” A Twitter account is not required to view the system’s page; however, by [signing up](#) users can receive updates as they are posted.

The university system can also be found on [YouTube](#), the world’s largest site for sharing videos. Recent frequently viewed video posts include stories about turning algae into fuel, wind power and starting a business. A YouTube account is not required to watch UM system videos; however, [signing up](#) is free and gives users the ability to create playlists and leave comments.

“In the short time we’ve been doing this, we’ve already had more than 1,500 clicks on items we’ve posted to Twitter and Facebook,” said Hill.

The following campuses of the University of Missouri System also have profiles on popular social media sites.

- **Mizzou:** [Facebook](#); [Twitter](#)
- **UMKC:** [Facebook](#); [Twitter](#); [YouTube](#)
- **Missouri S&T:** [Facebook](#); [Twitter](#)

## Alumni Alliance to honor outstanding alumni



The University of Missouri Alliance of Alumni Associations and Extension will honor six individuals for service to the university at its 2009 Outstanding Alumni Service Awards dinner April 21 in Jefferson City, Mo.

### **Outstanding Alumni Service to the University of Missouri System: U.S. Sen. Claire McCaskill**

Sen. McCaskill received a bachelor's degree from the University of Missouri-Columbia and a law degree from the University of Missouri-Columbia School of Law.

She has served the state of Missouri since graduating from the university, first in the Missouri Court of Appeals, then as an assistant prosecutor in Kansas City. Following more than a decade of service to the state legislature, Sen. McCaskill went on to become the first female prosecutor in Jackson County. She was sworn in as Missouri Auditor in 1999, a position she held until 2006 when she became the first woman from Missouri elected to the United States Senate.

Sen. McCaskill has been extremely supportive of the University of Missouri System during her tenure in the General Assembly and as state auditor. In addition, she was particularly supportive of UMKC while serving as an assistant prosecutor in Kansas City. As a U.S. senator, she has represented the interests of the university and the state of Missouri in Washington, D.C.

### **Outstanding Alumni Service to the University of Missouri-Columbia: Rep. Bryan Pratt**

Rep. Pratt received a bachelor's degree in business administration from the University of Missouri-Columbia and a law degree from the University of Missouri-Columbia School of Law, where he served as associate managing editor of the Missouri Law Review and was awarded Order of the Coif and Order of the Barristers.

First elected to the House in 2002, Rep. Pratt serves as chairman of the House Judiciary Committee and speaker pro tem. As a member of the House, he has focused on tax relief, eminent domain, immigration and economic development.

Rep. Pratt received the prestigious Henry S. Geyer Award from the Missouri Legislative Network of the Mizzou Alumni Association, which recognizes public officials and citizens who have made a positive contribution to higher education in Missouri.

He is also a member of the Missouri and the Kansas City Metropolitan Bar Associations and the University of Missouri Alumni Association.

### **Outstanding Alumni Service to the University of Missouri-Kansas City: Dr. Reaner Shannon**

Dr. Shannon has been involved with UMKC for more than three decades; first as a student, receiving a master's degree and a doctorate of education, than as an educator and advocate for minority students interested in the School of Medicine.

In myriad other ways Dr. Shannon's service and generosity have helped strengthen the connections between the UMKC School of Medicine and gifted minority students. For example, she was involved with several outreach programs within the School of Medicine, including the Summer Scholars and Saturday Academy programs, which help expose academically gifted minority students and disadvantaged high school students to careers in the health care industry.

Under her leadership, the Summer Scholars program helped eighty-one underrepresented students gain admission to UMKC's prestigious six-year medicine program.

Though she retired from the university in 2008, Dr. Shannon continues to tirelessly promote the importance of education for the next generation of students by participating in various community service activities, such as youth reading programs. Thanks to her efforts, countless young people have been able to pursue their dream of a career in health care.

### **Outstanding Alumni Service to the University of Missouri-St. Louis: Rep. Rick Stream**

Rep. Stream received an associate degree from Meramec Community College and a bachelor's degree in business administration and an M.B.A. from the University of Missouri-St. Louis.

Throughout his time in Jefferson City, Rep. Stream has demonstrated his continued support of the university, and the St. Louis campus in particular.

First elected to the Missouri House in 2006, he currently serves as vice chair on the House Budget Committee. Rep. Stream has also been named Outstanding Legislator by his peers.

Prior to serving the Missouri House of Representatives, Stream worked as a budget/project manager for the Department of Defense, Army Aviation and Logistics Commands, and as a United States Naval Officer. He also served on the Kirkwood School Board for more than a decade and as president of the board for two years.

**Outstanding Alumni Service to the Missouri University of Science and Technology:  
Darlene Ramsay**

Darlene Ramsay earned a bachelor's degree in metallurgical engineering from Missouri S&T, formerly the University of Missouri-Rolla. Prior to her position as director of advancement services, Ramsey served as a research specialist at Missouri S&T's center for materials research.

She has previously held positions as a business instructor, quality assurance manager and a metallurgical engineer. At her current position, Ramsay is responsible for annual giving, alumni records and prospect research within Missouri S&T's university advancement department.

Ramsay is a past president of the Miner Alumni Association and has served on the Missouri S&T board of trustees. She is currently a member of the University of Missouri System's Alumni Alliance and the Order of the Golden Shillelagh. Additionally, she serves as co-chair of the scholarship committee of the Women's Auxiliary to the American Institute of Mining, Metallurgical and Petroleum Engineers and recruitment and panhellenic advisor for Chi Omega sorority.

Ramsay was honored as "Advisor of the Year" by the Order of the Omega and is also a member of Missouri S&T's speakers' bureau.

**Outstanding Alumni Service to the Missouri Extension: Sam Hawkins**

Mr. Hawkins has chaired the University of Missouri Extension State Council since 2004. As chair, he oversees the eleven-member state council, which provides support and advocacy at all of levels of government for Extension programs at the University of Missouri and Lincoln University. State council members play a vital role in our state, acting as liaisons among the more than two thousand county Extension members, university administrators and the citizens of Missouri.

Prior to his position as council chair, Mr. Hawkins chaired the Shelby County Extension Council and the Northeast Regional Extension Council. He also served as co-chair of the MU Extensions County Council Leadership Development Committee and as a member of the MU Extension Business Development Advisory Board.

Mr. Hawkins is the owner of Hawkins and Milner, LLC, a golf cart and lawn mower sales company. He has been an active member of the University of Missouri Alumni Alliance for more than a decade. Friends of Mr. Hawkins say he is best known for his "unflagging zeal" for the University of Missouri Extension's land-grant mission and his ability to educate legislators, county commissioners and other influential citizens about the value and importance of Extension's work across the state of Missouri.

## News briefs



### **Missouri Senate confirms Downing as UM curator**

The Missouri Senate confirmed Don Downing's appointment to the University of Missouri Board of Curators Thursday April, 2. Downing was appointed to a six-year term by Gov. Jay Nixon March 9 to replace the seat vacated by retiring curator Marion Cairns of Webster Groves.

Downing, originally of Kennett, Mo., is currently employed as attorney at Gray, Ritter and Graham, P.C., in St. Louis. Prior to that appointment, he was with Stinson Morrison Heckler, LLP, also in St. Louis. He has also served as chief deputy attorney general in the office of the Missouri Attorney General. Downing has received numerous professional awards, including being named among the "Best Lawyers in St. Louis" by St. Louis Magazine. He has also served on the University of Missouri-Columbia Law School Foundation Board of Trustees and the Law Library Campaign Committee, and he is an active member of the University of Missouri Jefferson Club.

Downing received a bachelor's of business administration degree from the University of Missouri-Columbia and a juris doctorate from the University of Missouri-Columbia School of Law.

The nine-member board of curators serves as the governing body of the University of Missouri. Curators are appointed by the governor, and must be approved by the Senate.

Terms of service for curators are six years, with the terms of three curators expiring every two years. There are two remaining seats on the board for the term beginning in 2009; Gov. Nixon has not yet made these appointments.

### **Board votes to keep tuition flat**

The University of Missouri Board of Curators voted to keep Fiscal Year 2010 tuition levels flat contingent on no reductions in the FY09 base state appropriations. This would keep base tuition for full-time Missouri undergraduate students at \$7,368 for the upcoming academic year before any scholarships or grant aid is applied.

The board also approved no increases in graduate and professional school tuition rates for FY10.

Undergraduate fees for student activities, facilities and health services will remain the same in FY10 on all campuses except MU, where they will decline by 36 cents. The activity fee for graduate and professional students at MU will increase by \$1.26 per semester and reflects the

addition of a new sustainability fee that was passed by graduate and professional students voting in an electronic referendum in February. These fees are assessed predominantly on a per credit hour basis, and will go into effect in summer 2009.

## Research news



### **MU researchers developing more practical natural gas storage tanks using corncob waste, landfills**

Researchers at MU, in conjunction with the Midwest Research Institute and nine other institutes, are working to develop natural gas tanks made from Missouri's corncob waste and methane from landfills.

"Missouri's corn can supply raw material for natural gas tanks for all the cars in the United States," said Peter Pfeifer, professor and chair of the Department of Physics at MU. Pfeifer will speak about his research at the upcoming Missouri Energy Summit April 22-23 in Columbia. To learn more about the team's research on natural gas tanks, click [here](#).

### **Missouri S&T's "Internet for energy" concept gains strength with new NSF center**

Missouri University of Science and Technology is one of seven universities in the United States and Europe involved in a new National Science Foundation research initiative that aims to transform the nation's power grid into an Internet for energy that will speed renewable electric-energy technologies into every home and business.

"We're excited to be playing a lead role in helping to solve the nation's energy infrastructure problems in collaboration with our university and corporate partners through this new initiative," says Mariesa Crow, the Fred W. Finley Distinguished Professor of Electrical and Computer Engineering at Missouri S&T and director of the university's Energy Research and Development Center.

Crow will speak about her research at the Energy Summit. To learn more about the "Internet for energy" concept, click [here](#).

### **UMKC researchers prove energy matters**

Anthony Caruso, assistant professor of physics at UMKC, says researchers at the university are rethinking sources of raw energy; methods of storing energy; energy efficiency; reaction products created in energy transfer; and the monetary cost of materials and devices that would alter or mitigate all of the above.

Toward this goal, UMKC researchers are looking into the use of carbon or organic-based magnets to reduce the weight of electrical transformers and motor cores, a technology that can reduce the amount of energy required for electrically-powered locomotives or automobiles.

Caruso will lead a panel on nuclear energy at the Energy Summit. To learn more about energy research at UMKC, click [here](#).

**UMSL professor developing nanocatalysts to produce affordable alternative energy**

Jingyue “Jimmy” Liu, professor of physics and chemistry and director of the Center for Nanoscience at the University of Missouri-St. Louis, and his team of researchers are working to develop nanocatalysts that can convert hydrogen into electricity, which, in turn, can be used to power a car.

Liu will present “Nanocatalysis for Energy” at the Energy Summit. To learn more about Liu’s research, click [here](#).