A MODERN MENTOR

CHANCELLOR CHERYL B. SCHRADER LEADS THE WAY FOR A NEW GENERATION

6 WETLAND WARRIOR

14 END-OF-YEAR GIVING SUMMARY

28 HASSELMANN HOUSE BOOSTERS
Better than a sweater

As you consider your spending and giving decisions this year, remember this: your tax-deductible gift will help Missouri S&T continue its legacy of preparing passionate, hard-working students to meet the challenges of tomorrow.

MISSOURI S&T

Go online to give.mst.edu — a gift today helps S&T do more, sooner. (And it will never go out of style.)
IN YOUR WORDS
Q&A and Letters
What is the one thing you couldn’t have survived at Rolla without?

AROUND THE PUCK
Wetland warrior
Donald Hey, CE’63, is restoring wetlands.

An oil against obesity
Wild almond tree oil affects insulin resistance.

An app for depression?
Internet usage could signal the blues.

Homecoming overview
Miner Road Trip review.

Overview: inductions and commencement
“The sky is not the limit.”

Investing in the future
A look at the year in giving.

Queen of speed
Nikia Chapman races to win ... in Elmo socks.

FEATURES
A modern mentor
Get to know S&T’s 21st leader.

Need for a house hits home for Miners
Finding a place to call home.

BEYOND THE PUCK
Section events
List of upcoming events.

Class notes
Find out what your former classmates are up to.

Memorials
We remember our classmates and friends.

Donor
Steve Frey, MS Phys’86

ON THE COVER
Chancellor Cheryl B. Schrader (atop Centennial Hall) intends to take Missouri S&T to new heights.
BRIEFLY {BY THE NUMBERS}

8,000,000 Gallons per year of water savings projected from the geothermal energy project.

600 Wells to be drilled on campus as part of the geothermal energy project. Drilling began in the spring.

82 Percentage of S&T freshmen receiving financial aid or scholarships.

2014 Year the geothermal energy project is expected to be completed.

17 Summer camps for kids in first through 12th grades hosted at S&T last summer.

25 Percentage of S&T freshmen who are first-generation college students.
Dear fellow alumni:

It is my great pleasure to introduce to you Cheryl B. Schrader, the 21st leader of Missouri S&T. Since arriving in April, she’s wasted no time getting to know the campus and its people, as well as alumni and government leaders. Now it’s time for you to get to know her.

Her story is compelling. A champion of STEM education and women and minorities in education, Schrader has a passion for mentorship and understands how powerful positive role models can be for young adults. On the following pages, you’ll learn about her own role model and about the ways she mentors today’s students. You’ll learn about her research background, meet her family and learn about her vision for the future of Missouri S&T.

A large part of that vision involves you, fellow alumni. As we continue to raise funds for the Hasselmann Alumni House, we do so with the dream of having a comfortable place for Miners to gather (and share their own stories) when they come back to Rolla. Chancellor Schrader supports that vision and gave the project a boost this fall by earmarking a $500,000 estate gift for the house. The bequest will be used as a challenge grant to attract more contributions. When the challenge is met, we’ll be $1.5 million closer to completion of the project. Read more about the project, including ways that you can contribute, on page 25.

Keeping in touch with Miner alumni — and faculty, staff and students — is one of Chancellor Schrader’s goals. One of the ways she’s doing that is through social media. Follow her on Twitter at @SandTChancellor.

Read on, and enjoy the Fall/Winter issue of Missouri S&T Magazine!

Mary Helen Stoltz
Engl’95
news & features editor

CORRECTIONS

Thank you to Dave Zimmerman, CE’69, for pointing out that we misidentified one of the cars displayed by Dick Burdick, ME’52, in his classic car garage in Texas. What we labeled a 1957 Chevrolet Bel Air convertible in the photo on page 41 of the Summer 2012 issue is actually a 1956 Chevrolet Bel Air.

On page 30 in the “On the road” section, we mislabeled two of the photos. Photo No. 2 is actually the Camaro owned by Stephen Rode, ChE’84. Photo No. 3 is the Galaxie owned by Lloyd A. Meffert, ME’88, and his wife, Deanna. We apologize for these two errors.

1) Did you know Chancellor Cheryl B. Schrader was honored by the White House for mentoring women and underrepresented minorities in engineering? Read her story on page 18.

2) Karl F. Hasselmann, MinE’25, was one of the first people to successfully drill for oil in the Gulf of Mexico. Read more about the namesake of the Hasselmann Alumni House — and learn more about giving opportunities — on page 26.

3) An S&T grad competed in track and field at the London Olympic Games. Find out how he did on page 40.

4) People with symptoms of depression use the Internet differently than others. Read more about the research behind that finding — and plans to create an app to trigger a diagnosis — on page 8.

5) 2013 marks the 105th Best Ever. Come back to campus March 16 and help us celebrate.
What is the one thing you couldn’t have survived at Rolla without?

Everybody has one. You know, that one thing that got you though school. For some it was a laptop, a calculator or a slide rule. For others, it was all about friends and family. Here are a few things Miners say they couldn’t have lived without during their time on campus.

**Q:** What is the one thing you couldn’t have survived at Rolla without?

**A:**

It would be my HP calculator. I had an HP 28S in Thermodynamics. Without it, I would never have been able to graduate. I will always live in an RPN universe. Shame on you, TI and Casio lovers. And also a beer or two, but that’s a given.

**Richard A. Geisler,** EE’89
Indian Trail, N.C.

Nothing was better on a cold night after hitting the books than loading up a bunch of guys from the gym in one of the old jalopies and heading out to Ramey’s for a cheeseburger, a cold beer and those greasy French fries, listening to that loud juke box.

**Dick Boyett,** CE’58
Fort Smith, Ark.

My wife, Jan. We were married the summer before I started and that gave me a purpose to stay focused. We celebrated our 41st anniversary in July 2012.

**Tom Mittler,** CE’75
Longview, Texas

A roof-mounted FM dipole antenna. ... I vividly recall the day I braved brisk winds and a very steep roof atop the old three-story Sigma Nu “White House.” I was able to secure an inexpensive dipole antenna to the brick chimney, after which I sat on the peak of the roof for what seemed like a long time. My prolonged rest had less to do with a fabulous view than it did with my appreciation for the danger of going down backward over shingles rendered smooth and brittle by decades of sun and rain. The effort, however, paid dividends far in excess of the investment. For years I listened to (St. Louis radio station) KSHE FM from midnight to whenever I finished my homework. ... Who knows? Perhaps I could have survived without the antenna, graduated without KSHE, and learned to embrace music by One Hundred and One Strings or “Coal Miner’s Daughter.” Maybe I could have a useful and fulfilling life without the inextricable linkages induced by “Hijack” or “PNS” or the frequency-modulated alchemy of the counterculture expressed as song; but I cannot imagine a better place and time to visit in my music-induced reveries. Oh, please don’t tell my mother about the whole roof thing. Even though the event is more than 40 years in the past, she still worries.

**Ron Durbin,** EE’75
Shalimar, Fla.

My slide rule. Because God did not give me enough fingers and toes.

**Terry Wormington,** EE’71, MS EE’72
Satellite Beach, Fla.

Watch for the next question in your Miner Alumni Association eNewsletter.

Email your answers to alumni@mst.edu, or via Facebook or Twitter, by Jan. 1, 2013.
On Nov. 23, 1965, I took possession of a 1966 Pontiac GTO hardtop in Rolla, Mo. I was a college graduating senior. I had no job. I had, as yet, no firm job offer. Nonetheless, the dealer offered a financing deal: my old 1958 Hillman Minx, no payments for 30 days. The first year’s insurance was included in the purchase price and the first three payments were $25. The deal was closed in less than 30 minutes. The dealer gave me the keys and told me to drive it off of the showroom floor, which I did. I bought the car with every intention of keeping it forever. So far so good.

The week of July 4, 2012, the National GTO Convention was held in Loveland, Colo. I entered my Goat in the unrestored (or factory original) category. I received a plaque certifying that I am the original owner. The car (not me) received a Concours Bronze Award (as did about 10 other cars). I missed silver by only 13 points. And, the crowning glory — Best of Show for Factory Original.

I am thrilled to have received these awards. I just had to share this with you.

Dave Bufalo, CE’66
Denver

I very much enjoyed reading the latest magazine — particularly the article on the two young rally competitors.

Back in the day, there were other alumni who did well in this sport. Mike Muenter, CSci’81, was an accomplished co-driver, winning mid-divisional championships in 1985 and 1986.

After getting prescription glasses, I was Southwest Division driver champion in 1988, 1989, 1992 and 1994. Mike and I shared great times. He changed to the driver’s seat and we had matching paint jobs for a season or two.

Many, many miles and many chocolate chip cookies with beer. Great times. We still get together when I am back in Missouri.

Dave Thomas, ME’81
Waxahachie, Texas

Zeno’s Motel and Steakhouse closed down shortly after Homecoming 2011. The establishment was founded in 1957 on what was then U.S. Highway 66 by the Zeno Scheffer family. It featured a first-class restaurant, cocktail lounge, renowned gift shop, 50 rooms of lodging, banquet rooms, and indoor and outdoor swimming pools. Over the past 54 years, it played a part in the lives of many students and alumni during Homecoming and St. Pat’s celebrations, fraternity party weekends and other functions. Mike and Tracey Scheffer operated the facility through 2011. It was a living tribute to a lifestyle that seems to be sadly fading and will be missed by many old alumni.

Jim Toutz, ME’54
Dodd City, Texas

Raymond Lasmanis, GGph’63, Ranier, Wash.

For years, Internet security has been a pet peeve of mine. Specifically, the absurd belief that replacing password characters with black dots somehow makes the whole process secure.

Typing any complex series of characters, often from a very small keyboard, is difficult and fraught with errors. Many Internet users select a simple, easy-to-remember (and type) password to avoid the inconvenience of dealing with a strong password. Worse yet, they use that same password universally. As they type their dog’s name, for example, seeing each character being replaced by a black dot, they mistakenly believe their account on the ‘secure’ website they are entering is, in fact, secure. Laughable, to put it bluntly.

Your research on the FREEDM project might consider my simple and secure technique for real website security. If users on the smart grid are challenged with the black-dot password entry you can be sure that their mother’s middle name will be used as a password then as often as it is today. How secure will the grid be then?

Don Laughlin, Math’64
Colorado Springs, Colo.

Details of Laughlin’s website security technique are available online at magazine.mst.edu.
DONALD HEY: WETLAND WARRIOR

Crusade: Donald Hey, CE’63, executive director of Wetlands Research Inc. in Wadsworth, Ill., is passionate about proving the effectiveness, sustainability and economic efficiency of using restored wetlands for water quality management and flood control. He believes wetlands are the answer because they’re good for conservation and the economy alike.

The problem: Over the past 200 years, the loss of more than 70 million acres of wetlands in the Mississippi River Basin has caused poor water quality, increased water pollution and flood damage, and reduced wildlife habitat and biodiversity. Hey says, “Water used to sit on the ground between eight and 20 days after it rained or snow melted. Now it is gone in less than 24 hours due to drain tiles, agricultural outlet ditches, storm sewers, and canalized streams and rivers.”

The solution: “Wetlands are a natural solution for flood water storage,” Hey says. They will also remove contaminants like nitrogen and pharmaceuticals, and sequester phosphorous and mercury now contaminating our water resources. “Aquatic plants absorb the contaminants, die and sink below the surface of the water where they become peat,” Hey explains. “As long as we don’t try to use the newly formed peat for animal feed or human consumption, we are safe.”

Next big thing: Hey hopes to create a riverine national park — a 14-million-acre wetland restoration project in the upper Mississippi River floodplains.

His plan: Convince farmers in the basin to give up growing commodity crops like corn and soybeans, and convert their fields to wetlands, creating what he calls a “nutrient farm.” Land owners participating in the riverine national park would keep their land, build trails and lodges, and collect fees for hunting, fishing and camping. At the same time, the owners would produce and sell other ecosystem services: water quality credits, flood water storage and carbon sequestration. These services would generate three to four times the income that the landowners now earn from raising livestock or growing commodity crops, Hey says. “We have a lot of work to do to get our lives in balance with nature but we can do it. That’s what I’m working for.”
AN OIL AGAINST OBESITY

By affecting microorganisms in our bellies, an oil made from wild almond tree seeds could help our bodies fight obesity and diabetes, says Daniel Oerther, the John and Susan Mathes Chair of Environmental Engineering.

Adding sterulic oil to the diets of obese laboratory mice increased their sensitivity to insulin and improved their glucose tolerance. The oil suppresses the bodily enzyme stearoyl-CoA desaturase 1, which is associated with insulin resistance, a condition that can lead to diabetes and obesity.

Ph.D candidate Shreya Ghosh studied 28 male mice — 14 of them obese and 14 normal. She separated the mice into four groups and for nine weeks fed a standard diet to one group of obese mice and one group of non-obese mice. Over the same period, she added 0.5 percent of sterulic oil to the diets of one group of obese mice and one group of non-obese mice. Ghosh recorded the weights, food consumption and glucose levels of the mice during the nine-week period.

A DNA analysis of the gut microbiota, conducted at King Abdullah Institute of Science and Technology in Saudi Arabia, confirmed a correlation between the diet, improved glucose tolerance and groups of microbes. Even though the mice fed a diet with sterulic oil did not experience weight loss, both Ghosh and Oerther believe their findings could lead to new insights into controlling diabetes and weight gain.

Oerther and Ghosh presented their research last June at the 2012 American Society for Microbiology general meeting in San Francisco. ■

A RARE VIEW OF VENUS

Wyatt Aegan, 8, of Vichy, Mo., views the transit of Venus across the sun through the filtered 80-milimeter telescope at Missouri S&T’s observatory near sunset on June 5. Below Aegan is an iPad showing a view of the sun through a telescope in Hawaii. Venus is the black dot silhouetted against the orange solar disc. The observatory was busy for the entire transit time between 5:05 p.m. and sunset with hundreds of area residents lining up to see the rare sight. The next chance to see Venus transit the sun will occur in December 2117. (Photo by Terry Barner/ Missouri S&T)

PEABODY ENERGY GIFT

Peabody Energy recently contributed $250,000 to a rock mechanics laboratory at Missouri S&T.

The facility gives students a place to prepare and test rock samples, characterize rock formations, check safety and stability, and model and analyze ground control.

VIRTUAL MINING

Mining engineering students can now get simulated training in surface mining techniques, heavy machinery and materials handling systems, all without leaving the comfort of McNutt Hall.

S&T’s Virtual Surface Mining Facility was funded through gifts from Caterpillar Global Mining, Luminant Energy, Immersive Technologies and P&H Mining — all members of the Mining Engineering Development Board.

The facility houses two AES 2B base simulators, one dragline conversion kit and one shovel-dump truck conversion kit. In addition to teaching S&T students, the facility will allow for industry training and development.

IN PRINT

September Hope: The American Side of a Bridge Too Far, by John C. McManus, associate professor of history and political science.

Design for Six Sigma in Product and Service Development, co-edited by Elizabeth Cudney, PhD EMgt’06, assistant professor of engineering management and systems engineering.
College students who show signs of depression tend to use file-sharing services, send email and chat online more than their counterparts, according to Sriram Chellappan, assistant professor of computer science. Chellappan studied the link between Internet usage and depression, and hopes to use his findings to create software that could track Internet usage and alert users if their patterns indicate symptoms of depression.

Chellappan’s study is believed to be the first that uses actual Internet data, collected unobtrusively and anonymously, to associate Internet usage with signs of depression. Previous studies relied on surveys to collect data. He believes surveys are less accurate because people’s memories fade over time and they tend to answer questions in a way that will be viewed favorably by others—a tendency called social desirability bias.

In the study, Chellappan and Raghavendra Kotikalapudi, MS CSci’11, tested 216 Missouri S&T undergraduates for signs of depression. About 30 percent of the students in the study met the minimum criteria for depression based on the Center for Epidemiologic Studies-Depression scale. The researchers then collected a month’s worth of Internet data for those students, assigning pseudonyms to keep their identities hidden. They found that the depressed students used the Internet much differently than the other study participants.

Chellappan and his colleagues found that depressed students tended to use higher “packets per flow” applications, those high-bandwidth applications often associated with online videos and games, than their counterparts.

Students who showed signs of depression also tended to use the Internet in a more “random” manner—frequently switching among applications, perhaps from chat rooms to games to email. Chellappan thinks that randomness may indicate trouble concentrating, a characteristic associated with depression.

A paper describing the research, titled “Associating Depressive Symptoms in College Students with Internet Usage Using Real Internet Data,” is scheduled to be published in the December issue of IEEE Technology and Society Magazine.

Kotikalapudi is the paper’s chief author. His co-authors are Chellappan; Frances Montgomery, Curators’ Teaching Professor of psychological science; Donald C. Wunsch, the M.K. Finley Missouri Distinguished Professor of Computer Engineering; and Karl F. Lutzen, information security officer for Missouri S&T’s IT department.
PREHISTORIC ROCKS OFFER CLUES ABOUT CLIMATE CHANGE

*For most of the past decade, Wan Yang has spent his summers camping and hiking in the Bogda Mountains in northwest China, collecting rock samples that predate dinosaurs by millions of years. His goal? To better understand the Earth’s climate history and gain clues about future climate change.*

“The formation of rocks has everything to do with climate,” says Yang, associate professor of geological sciences and engineering. “Different climate settings have different sediments, soil types and vegetation. The beauty of the geological record is that we can see changes in the past, which gives us some guide to predict future changes.”

Yang spends his summers working in the high desert of northwest China because it’s one of the few places to have a land record from Pangea, the supercontinent that existed between 200 million and 350 million years ago. Land records are hard to preserve because they are exposed to the elements, Yang says, so most research has typically been done using marine records instead. The seawater offers better protection of the rocks below, as Missouri S&T students saw first-hand in June during a field course led by Yang and two other professors from Trinity and Guizhou universities in southern China.

“Most people don’t realize that 250 million years ago the greatest, most severe mass extinction in the Earth’s history occurred,” Yang says.

Yang returned to Rolla in early August with more than 300 pounds of volcanic ash (known as tuff). Zircon, a special mineral in the ash, can be used to accurately date the rocks and will help to more precisely determine the pace of the terrestrial mass extinction and climatic change, he says.

“There are so many things we would like to know,” he says.

HIGH-TECH GRAVE HUNTING

Using modern technology, a group of geological science and engineering researchers from S&T helped a Phelps County cemetery locate old grave sites dating back before the Civil War.

“Corn Creek Cemetery has graves dating back to the 1830s, and many graves are marked by only a simple natural stone, if that,” says Neil Anderson, professor of geological sciences and engineering.

Using ground-penetrating radar technology, the researchers found six locations where there are likely grave sites with no identifying grave stones. Evgeniy Torgashov, a graduate student in geological sciences and engineering, used the technology to differentiate potential grave sites from things like buried rocks, roots and other ground disturbances.

The cemetery association plans to mark the six locations found with natural stones out of respect for the buried remains and to help ensure that the final resting places remain undisturbed.
At the 2012 Homecoming Legends Banquet, the Miner Alumni Association honored a select group of alumni and faculty for their accomplishments and their devotion to the association, the campus and students. Selected from an impressive list of nominees, these awardees represent some of S&T’s most talented and dedicated alumni, faculty and staff. Chancellor Cheryl B. Schrader and John Eash, AE’79, MS EMgt’90 (below, center), president of the Miner Alumni Association, are pictured with the recipients (from left).

Congratulations to the following award recipients:

- **Milt Murry**, EE’64, MS EE’80, adjunct professor at Jefferson College received the Frank H. Mackaman Alumni Volunteer Service Award
- **Forest Breyfogle III**, ME’68, president and CEO of Smarter Solutions received the Alumni Achievement Award
- **Sarah Stanley**, assistant professor of business and information technology at Missouri S&T, received the Class of 1942 Excellence in Teaching Award
- **Jason Brinker**, ChE’97, Vistamaxx PBE brand manager at ExxonMobil Corp. received the Distinguished Young Alumnus Award
- **Preston Carney**, CE’02, MS CE’03, estimator/project manager at Sheehan Pipeline Construction Co. received the Distinguished Young Alumni Award
- **Joel Burken**, associate chair and professor, civil, architectural and environmental engineering at Missouri S&T, received the Alumni Merit Award
- **Harry Laswell**, Phys’78, managing partner at American River Ventures received the Alumni Achievement Award.
The Miner Alumni Association celebrated Homecoming 2012: Miner Road Trip in style on Oct. 13 with a Cruise-In for alumni and friends to show off their hot rods and vintage cars, and a tailgate party before the football game.

1. Miner spirit was on display at the tailgate party. More than 400 people came to the event.

2. Joe Miner helped spruce up the cars on display at the Cruise-In.

3. Former S&T softball player Diane Butrus, CSci’85, visits during the Silver & Gold Gathering with Don Kennedy, head softball coach at S&T, and starting catcher Kaylea Smith of Blue Springs, Mo., a senior in civil and architectural engineering.

4. Jacob Careaga, CE’98, and his son, Maksim, enjoy Saturday’s tailgate party.

5. Despite the wind during the Homecoming football game, the Miners beat the William Jewell Cardinals 52-17. The win assured the Miners of their second straight winning season. The Miners sported pink socks in support of Breast Cancer Awareness month.

(Photos by Terry Barner and B.A. Rupert)
ACADEMY INDUCTIONS

This year, 26 alumni and friends were inducted into Missouri S&T academies. Academy membership recognizes a career of distinction and invites members to share their wisdom, influence and resources with faculty and students.

ACADEMY OF CHEMICAL ENGINEERING
RICHARD A. BAUSELL, ChE’70, of Chesterfield, Mo., retired director of pipeline and power URS Corp.’s
DAVID R. SCHARF, ChE’78, of Tulsa, Okla., president of natural gas gathering and processing with ONEOK Partners LP

ACADEMY OF CIVIL ENGINEERS
BRETT HANKE, CE’72, MS EMgt’84, of Wentzville, Mo., president of Hanke Constructors
ALAN A. KAMP, CE’64, MS CE’66, of Kansas City and Branson, Mo., vice president and senior project manager for Black & Veatch Co.’s oil and gas business line
PAT MCCOWN, CE’74, of Kansas City, Mo., CEO of McCownGordon Construction LLC
RANNEY MCDONOUGH, CE’66, of Dunwoody, Ga., president of McDonough Engineering
STEPHEN H. MCVEIGH, CE’72, of Houston, an independent oil and gas producer
MICHAEL J. FERRY, CE’80, of St. Louis, president of HBD Construction Inc
AMY STRAUSS, CE’90, MS CE’91, of Springfield, Mo., senior engineer in power generation for City Utilities of Springfield
PAUL WOCIECHOWSKI, CE’83, of Wildwood, Mo., senior associate and St. Louis office manager for Alta Planning + Design

ACADEMY OF COMPUTER SCIENCE
PAM LEITERTMAN, AB’75, of Sunnyvale, Calif., retired from Hewlett-Packard
SUSAN ROTHSCCHILD, CS’74, of St. Louis, a CPA with John T. Straub

ACADEMY OF ELECTRICAL AND COMPUTER ENGINEERING
BARRY D. FREINER, EE’85, of St. Louis, president of Rogers-Schmidt Engineering Co.

STEPHEN R. NELSON, EE’77, of Gunter, Texas, vice president of IC Design for KEMEC Defense and Space
STEVEN PFLANZ, EE’87, of St. Louis, association and 16 electrical engineer for CRB Consulting Engineers Inc.
DAVID C. WANG, EE’77, of Langley, Wash., president of Boeing China
KORY G. MATHIES, EE’84, of Ballwin, Mo., vice president and program manager for Boeing Defense, Space and Security and vice president and program manager of the Phantom Works division

ACADEMY OF ENGINEERING MANAGEMENT
WENDEL L. “BUDDY” BARNES, EMgt’73, of The Woodlands, Texas, client services manager for MWH Americas in the municipal wastewater division in Southeast Texas
BILL DAUGHTON of Colorado Springs, Colo., former professor and chair of engineering management and former special assistant to the provost for eLearning at Missouri S&T
DAN HINKE, EMgt’78, of Sugar Land, Texas, owner of a contract-laboring firm that represents clients before the Texas legislature and regulatory agencies

ACADEMY OF MECHANICAL AND AEROSPACE ENGINEERS
EDWARD H. GERDING, MS’84, of St. Charles, Mo., director of engineering for the global services and support division of Boeing
CHARLES P. KETTERER, ME’89, of St. Charles, Mo., vice president of information technology and supply chain for Emerson Hermetic Motors

ACADEMY OF MINERALS AND METALLURGY
ROBERT T. BERRY, CE’72, of St. Louis, retired vice president and general manager of Burns & McDonnell’s St. Louis office, football team
JOHN BORTHWICK, Pett’86, of Clinton, Mo., project manager for Shaw Environmental, cross country and track teams
DICK BOYD, CE’58, of Fort Smith, Ark., a retired civil engineer in the coal production industry, football team
DIANE BUTRIS, CS’85, of St. Louis, chief operation officer of Diba Imports, softball team
TERRY BUZZEE, EMgt’77, of Marshalltown, Iowa, president of Fisher Controls International, basketball team
DAVID GADOFF, ChE’96, of Gainesville, Va., director of partner solutions for PureIntegration, swimming team
KENNETH CAGE, ME’63, MS NucE’66, of Bumpass, Va., an attorney with McDermott, Will and Emory, football team
DONALD J. DOWLING JR., ChE’51, of Sun City, Ariz., retired product manager for Buckeye Cellular and retired chemical and production engineer for Proctor and Gamble, football team
GENE EDWARDS, CE’53, of Pecos, N.M., a retired general manager for EP Energy, football and track and field teams
CECILIA ELMORE, EMgt’86, of Rolla, Mo., director of student diversity, outreach and women’s programs at Missouri S&T, basketball and softball teams
CURT ELMORE, GeoE’86, of Rolla, Mo., professor of geological sciences and engineering at Missouri S&T, cross country and track and field teams
LOYD FLOWERS, CE’88, of Marietta, Ga., senior project manager with McCarthy Building Companies, football and track and field teams
JOHN FREKING, CE’87, of Columbia, Mo., business development manager at Engineering Surveys and Services, football team

JOHN GIBSON, EMgt’74, of Tulsa, Okla., chair, president and CEO of ONEOK Partners, basketball team
KEVIN GRIESEMER, EMgt’83, of St. Louis, principal of C&W Consulting Engineering Co., football team
MORRIS E. HERVEY JR., MinE’81, of St. Louis, co-founder and president of TSI Engineering Co., football team
TONY KACZMAREK, LSc’87, of Rolla, Mo., a physician at Central Missouri Urology Clinic, football team
JEFFREY KIPP, ME’81, of Denver, co-owner and vice president of operations for Conception to Reality Inc., basketball team
J. GARY MCALEPIN, CE’73, of Plantation, Fla., director of coastal zone management for Collier County, Florida, football and wrestling teams
DONALD MCGOVERN, ME’58, of Lake Saint Louis, Mo., retired vice president and general manager of McDonnell Douglas’ Joint Advanced Strike Technology Program, football team
STEVE McVEIGH, CE’72, of Spring, Texas, a consultant with Celerant Consulting, football team
JAMES MURPHY, ME’56, of Stamford, Conn., president of Murphy & Murphy Realtors and Meinnings Apartments Inc., football team. Mr. Murphy died Aug. 3, 2012
ZEBULON NASH, ChE’72, of Houston, retired plant manager of ExxonMobil Chemical Co.’s Baytown Chemical Plant, wrestling team
THOMAS OWENS, CE’58, MS EMgt’71, of Easton, Pa., retired vice president of the University of Houston, basketball and track and field teams
ERIC POTTS, CE’73, of Houston, a retired U.S. Army colonel now working as deputy director of the Houston Airport System, football, baseball, basketball, and track and field teams

PERRIN ROLLER, GeoE’80, of Spring, Texas, a principal at Upstream Forensics, football and wrestling teams
RONALD ROSENFELD, AE’89, of Lake Ozark, Mo., director of environment, health and safety for Haas Group International, cross country and track and field teams
PAUL STRICKER, LSc’82, of San Diego, a sports medicine physician with Youth Sports Awareness Enterprise, swimming team
ROYCE VESSILE, CS’76, of St. Louis, president and owner of VMPC Resources, basketball and golf teams
CHARLES “PETE” WEITZEL, ME’55, of Rolla, Mo., president of Weitzel Construction Co., football and track and field teams
NEWTON WELLS, ME’59, of College Station, Texas, retired general manager of Dover Corp., football team
BILLY KEY of Rolla, Mo., retired director of athletics, basketball coach and professor emeritus of physical education at Missouri S&T, honorary member
MARK MULLIN of Rolla, Mo., director of athletics and former swimming coach at Missouri S&T, ex-officio member

ACADEMY OF MINES AND METALLURGY
CHARLES D. GROSSMANN, NucE’81, of Edgewood, N.M., senior manager at Sandia National Laboratories
PHILLIP D. FERGUSON, NucE’88, MS NucE’93, PhD NucE’96, of Knoxville, Tenn., neutron source group leader and neutronics team leader at Oak Ridge National Laboratories
RICKY L. MARTIN, MetE’82, MS MetE’84, of St. Charles, Mo., enterprise manager of Metallic Material and Process at Boeing
PHILIP D. MCPHERSON, CerE’83, of Yorktown, Ind., senior vice president and general manager at Saint-Gobain
‘THE SKY IS NOT THE LIMIT,’ MAGNUSSAYS

In her May 2012 commencement speech, former NASA astronaut Sandra Magnus, Phys’86, MS EE’90, told graduates to believe in themselves and use their problem-solving skills. “Big hairy problems do not overwhelm you nor paralyze you with fear — you have already conquered a bunch,” said Magnus, who flew aboard the final shuttle mission in July 2011.

Magnus, now executive director of the American Institute of Aeronautics and Astronautics, said she knew she wanted to be an astronaut when she was in college, but she also said that it is never too late to keep asking yourself what you want to be when you grow up.

“The sky is not the limit,” she said. “Trust me.”

CARNEY RECEIVES CHANCELLOR MEDAL

Former S&T Chancellor John F. Carney III received the Chancellor Medal during commencement ceremonies in May. The medal is awarded to individuals who have contributed to the well-being, growth and development of the university.

S&T AWARDS

PROFESSIONAL DEGREES

Four Missouri S&T alumni received honorary professional degrees during Spring Commencement. The degrees recognize these graduates for professional achievement:

- C. John Brannon, Phys’85, CerE’85, PsyC’86, MS CerE’86, PhD CerE’89, a patent attorney with Brannon, Robinson, Sowers, H Hughel and Doss in Indianapolis
- John Fairbanks, EE’71, owner of Tossers Vending in Lincoln, Calif. Fairbanks is one of S&T’s 28 Alumni of Influence
- Fred Byron Parks, ME’69, chief executive officer for NDS Surgical Imaging in Tucson, Ariz.
- Robert M. Saxer, CE’61, MS CE’62, an active alumni association volunteer and a civil engineer who retired from the international chemical engineering firm AMCEC.
INVESTING IN
THE FUTURE

People who give charitably do so because they are passionate about their cause. They believe in investing in the future. At Missouri S&T, that generosity — and your passion for S&T — is what keeps the university thriving for our students.

You — our alumni — believe in higher education. You believe in opportunity. You believe in the value of an S&T education. And you believe in the importance of science, technology, engineering and math to the future of our nation. You know Missouri S&T is a good investment and your generosity is shaping our future. During fiscal year 2012, you helped raise $10.6 million for your alma mater.

For many years, Missouri S&T has enjoyed a stronger alumni participation rate than the national average. Miners get great jobs, and they appreciate the advantages their education provided. Our alumni participation rate is a clear illustration of the loyalty and pride of a Rolla Miner. During fiscal year 2011–12, 17.1 percent of our alumni made gifts to Missouri S&T. Last year the national average at public colleges and universities was 9.4 percent.

As alumni, you are critical to our future success, which is why we have some changes planned to strengthen your Rolla connection. We want to make sure all of our donors know how much we appreciate them and that their money is being put to good use, regardless of the size of their gift. Every donor now gets a personalized thank-you note and we created an annual report on giving for our donors that will debut next month. We have also improved and expanded the annual stewardship reports we send to all endowment donors.

The Miner Alumni Association has developed a new strategic plan that focuses on building relationships with our younger alumni. We want to be relevant to Miners of all ages.

We are also working to improve the ways we connect with you in today’s mobile society. We are reaching out to you more frequently and in different ways through monthly email updates that provide news and information of interest to you. We want to hear what you think about our alumni and fundraising efforts. And of course, we welcome your input.

Call or email Joan Nesbitt, vice chancellor for university advancement, at nesbittj@mst.edu or 573-578-7808, or Darlene Ramsay, executive director of alumni relations and advancement services, at ramsayd@mst.edu or 573-341-4584.
GOLDEN MINERS RETURN

1. The Miner Alumni Association hosted 43 members of the Class of 1962 for this year’s Golden Alumni Reunion. With their guests, more than 80 people attended the celebration held May 21 and 22. Members and guests strolled around campus, visited the Kummer Student Design Center, toured their departments and heard Chancellor Cheryl B. Schrader discuss today’s campus. In a special recognition ceremony, Schrader and past Miner Alumni Association President Darlene Ramsay, MetE’84, presented class members with their 50-year pins and certificates.

2. During Monday night’s banquet, Elvis Presley and Marilyn Monroe tribute artists entertained class members. Pictured during the dinner, far left, are D. Eugene Morgan, CE’62, and Karl L. Brown, MetE’62.

3. Also during the event, the Miner Alumni Association presented Gary Havener, Math’62, with the Robert V. Wolf Alumni Service Award, in honor of his bold leadership in transforming the university through his dedication and loyal support.

4. Gary Trippensee, ME’62, and his wife, Concha, are pictured with “Elvis” and “Marilyn.”
SAVE THE DATE: OGS ANNUAL WEEKEND

Join your fellow Order of the Golden Shillelagh members April 19–21, 2013, in Rolla. For more information regarding the OGS Annual Weekend, please contact Megan Ace at 573-341-6359 or acem@mst.edu.

PLAN NOW FOR THE 105TH BEST EVER

Alumni and friends are invited to the St. Pat’s pre-parade party from 8:30–11 a.m. Saturday, March 16, in the Leach Theatre lobby of Castleman Hall, 10th and Main streets. Join us for hot cinnamon rolls and beverages.

Immediately following the St. Pat’s parade, come back to Castleman Hall for pizzas and $1 beer while they last.

Make plans to travel to Rolla for St. Pat’s or attend one of the section events in your area and help make the 105th celebration the Best Ever. Event information will be available at alumni.mst.edu/events/stpats.html.

STAT CELEBRATES NEW SCHOOL YEAR

Students Today, Alumni Tomorrow (STAT), the alumni student organization, hosted a barbecue during its first meeting of the year on Aug. 29. More than 75 students came for free grilled hot dogs and hamburgers, and information about STAT.

SPORTS BY THE NUMBERS

Individual athletes winning conference championships during the 2011–12 season.

S&T student-athletes who earned all-academic awards from the Great Lakes Valley Conference, Great Lakes Football Conference or New South Intercollegiate Swimming Conference during the 2011–12 academic year.

Academic all-district athletes during the 2011–12 academic year.

Sacrifice flies hit by baseball player Andy Hall — more than any other NCAA Division II player in 2012.

Athletes who earned Capital One Academic All-America honors during the 2011–12 academic year, tying the highest one-year total in school history.

All-conference athletes during the 2011–12 athletic season.
NIKIA CHAPMAN:
QUEEN OF SPEED

Stats: sophomore in geological engineering from Columbia, Mo.

Member of: Spelunking Club and Human-Powered Vehicle Team.

Claim to fame: Led the Human-Powered Vehicle team to a first-place win in ASME’s Human-Powered Vehicle Competition in Tooele, Utah, by winning first place in the women’s drag race and riding the four required “female laps” of the endurance race.

Why HPV: “I was asked to join because they were looking for a girl rider and I agreed because it sounded like fun. I like the competitive aspect of the race. I’ve never been on a sports team so this is the first time I’ve ever been in something this competitive. It’s also a good way to challenge myself on a physical level.”

Battle scars: “In a competition in Pennsylvania, I took a few spills in the endurance race. One happened when another team’s bike ran into me. The crashes resulted in multiple large holes in my jersey and leggings. The EMT had to cut my Under Armour shirt sleeve off because my arm had swelled up so large. I have a fairly large scar. It stopped me from completing the number of laps required by a female rider, but a girl from one of our competitors — Rose-Hulman — completed the laps for me.”

Good luck charm: Chapman competes wearing red Elmo socks.

Goals for the year: “I am team secretary. I want to be more involved with the team both in and out of the shop. I will also be shadowing team president Dashiell Moore (a senior in engineering management) in hopes of taking his place next year.”

Female rider Nikia Chapman helped lead the Human-Powered Vehicle Team to victory ... in Elmo socks. (Photo by Bob Phelan)
A modern mentor

Chancellor Cheryl B. Schrader leads the way for a new generation.

story by Andrew Careaga (acareaga@mst.edu) | photos by B.A. Rupert
Cheryl B. Schrader believes in the power of storytelling. And not just because she loves a good tale.

Over the past 10 years, Schrader, an electrical engineer specializing in systems and control, has become more interested in the different learning styles of students. Her research in this area has focused on how women and minorities learn, and she has found that a good story can help these students become more confident in their own abilities. That greater self-confidence in turn could motivate more of them to graduate and move on to successful lives beyond college.

These days, Schrader is especially interested in sharing the untold stories of women and minorities who have become successful in the so-called STEM fields of science, technology, engineering and mathematics.

“Everybody knows the story of Alexander Graham Bell and the invention of the telephone,” Schrader says. But similar stories about women inventors are less familiar.

“In some academic circles, the impact of women in technological development is becoming clearer,” she says. Beyond the walls of academia, however, “those stories aren’t well-known. They’re not woven into the fabric of our culture.”

Schrader hopes to “bring the contributions of women in engineering and science to light, and to have those contributions become a part of the common knowledge of history.” Ultimately, she would like to create an inspiring first-person monologue theatrical performance that could be presented at colleges and universities across the country.

Schrader’s own story, from her days as an undergraduate student, might fit well into that monologue.

“Role models, or the lack thereof, can have a big impact.”
— Chancellor Schrader

RESEARCH INTERESTS:
• Increasing interest in STEM (science, technology, engineering and mathematics) education
• Creating and assessing innovative learning methods to help students of all ages succeed in the STEM areas
• Exploring the power of storytelling “to bring the contributions of women and underrepresented groups in engineering and science to light”
It begins one day during her junior year at Valparaiso University in Indiana. Schrader had just finished an exam. Leaving the classroom, she and a classmate discussed the test. “Our answers didn’t agree,” she recalls, and their conflicting perspectives concerned her. “I was not confident in my answers,” she says, “so I assumed I had failed the exam.”

Many college students can relate to that sickening sensation — that knot in the gut that foreshadows impending failure. But the sensation overwhelmed Schrader. “I was distraught,” she says. “I was sure I had just ruined my opportunities to become an engineer.”

That night, she phoned her mother to discuss the situation and her fear of failure. Her mother suggested she meet with her professor to talk it over. So she did.

That meeting altered the trajectory of Schrader’s academic career. The professor, Demosthenes Gelopulos, reassured Schrader that she had passed the test. “It turned out I did very well on the exam,” she says. When the conversation turned to Schrader’s career plans, “He said that I reminded him of himself when he was younger, and he asked me if I had ever considered becoming a professor. I was shocked,” she says. “I had never thought about that.”

When Schrader was in college, there were no female professors on Valparaiso’s engineering faculty. “I hadn’t seen or met any women in that role,” Schrader says, “so it never occurred to me that I could pursue that career path.”

That discussion not only opened a new path for Schrader, it also “opened my eyes to just how important it is for faculty to express interest in their students’ career development. It’s essential.”

That’s a lesson Schrader has taken to heart. Throughout her academic career, she has tried to be a role model for students who are not well represented in the STEM disciplines, including underrepresented minorities and women. “Being a role model is very important,” she says. “Role models, or the lack thereof, can have a big impact.”

Some of Schrader’s former students think she has made a great impact on their lives. So much so, in fact, that they nominated her for the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. The former students worked together from far-flung corners of the country to prepare a proposal to recognize Schrader’s influence. In 2005, she attended the awards ceremony at the White House, where President George W. Bush recognized Schrader for her “enduring, strong and personal commitment to underrepresented engineering students and faculty.”
A NEW STAGE

In April, when Schrader became chancellor of Missouri S&T, she assumed the most visible and significant role model position of her career. As one of only a few female engineers in the nation to lead a university, Schrader is keenly aware that she has stepped onto a new stage.

“When you’re different — such as when you’re a person who is underrepresented in your field — you will be remembered,” she says. “Since I know I will be remembered, I strive to be remembered for positive things.”

There’s no doubt about Schrader’s confidence these days. And she has left a positive impression on those she has worked with in the past.

Robert W. Kustra, president of Boise State University — where Schrader served as dean of engineering and associate vice president for strategic research initiatives prior to joining S&T — calls Schrader “the clear choice to take Missouri University of Science and Technology to the next level.” Her noteworthy accomplishments at Boise State included building “an outstanding team of faculty and staff who are lifting Boise State to national prominence” and “establishing connections and collaborations with community, government and industry partners,” Kustra says.

AWARDS AND HONORS:

- Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring from the White House (2005)
- IEEE Education Society Hewlett-Packard/Harriett P. Rigas Award (2008)
- Idaho Women Making History Award (2005)
- WebCT Exemplary Online Course Award (2003)
- Named to Valparaiso University’s Top 150 Most Influential People (2009)
- Alumni Achievement Award, Valparaiso University (2011)
Don P. Giddens, dean and professor emeritus at Georgia Tech, worked with Schrader when they both served on the American Society for Engineering Education Deans Council. He says Schrader’s work with ASEE has been instrumental in “helping change the conversation nationally about engineering.”

Schrader’s interest in serving as a mentor to underrepresented students began during her 12-year tenure at the University of Texas at San Antonio, which enrolls many Hispanic students. When she joined Boise State University in 2003 as dean of engineering, she continued to reach out to college students as well as high schoolers, younger students and adults. She wants to reach students of all ages — “from K through gray,” as she puts it.

During the past 10 years, the importance of mentoring has become a key component of her research to develop new approaches to teaching STEM students and guiding them toward graduation.

INCREASED EXPECTATIONS, DWINDLING RESOURCES

Schrader becomes chancellor of Missouri S&T amidst challenging economic times. State funding for public higher education has eroded in recent years, but the pressure on colleges and universities to remain affordable is greater than ever. Schrader describes this situation as “the new normal of increased expectations amid dwindling resources.”

Despite these challenges, Schrader is optimistic about S&T’s position in the higher education landscape.

“The global competitiveness, economic vitality and quality of life in this state and nation clearly depend upon institutions like Missouri S&T to step forward as leaders,” she says. “In doing so, S&T not only has a tremendous legacy upon which to build, but it also has the potential and momentum to become truly world class.”

Schrader sees four major challenges facing S&T — and all of public higher education — in this “new normal”:

- An increased interest in accessibility from the public, state government, alumni, corporate partners and other groups. “There is a need to keep college affordable and accessible,” she says. Missouri S&T’s return on investment, in terms of starting salaries for graduates and other measures, helps position the university well in relation to
other institutions nationally. Schrader likes to share the fact that when it comes to starting salaries for new graduates, Missouri S&T ranks second among all public universities in the nation.

- Globalization and diversity. “Working across boundaries, cultures and ethnicities is becoming more and more important in today’s global culture,” Schrader says. “Our students need to be prepared to enter this global work force.”
- Economic development and the changing role of the research university. “A university is no longer just an intellectual silo,” Schrader says. “It’s a social, intellectual and economic development hub.” She expects a university’s role in economic development to grow, especially as companies look to universities like S&T to conduct R&D work that companies once performed in-house.
- The “game-changer” of cyber infrastructure. “The teaching mission of the university is no longer place-bound,” Schrader says. With the advent of online courses, “there’s an expectation that we should increase our reach” beyond the traditional residential campus, and “an expectation to use technology in ways that improve learning.”

Schrader has direct experience with distance education. In 2003, while at the University of Texas at San Antonio, she and colleague Johnny Flores received WebCT’s Exemplary Online Course Award for teaching abstract concepts online.

“PLAY TO YOUR STRENGTHS”

In the midst of these disruptive economic and societal forces buffeting campuses across the nation, how can Missouri S&T reach that world-class potential Schrader envisions? It boils down to focus and differentiation.

“It’s important to determine not only what you’re going to focus on, but also what you’re going to stop doing,” she says. “You have the opportunity to play to your strengths.

“You have to be focused and very strategic in your thinking,” she says. “It’s more important than ever to have a shared strategic plan that is at the center of all you do.

FAMILY:
Married to Jeff Schrader, an attorney and former chief legal counsel for the Idaho State Board of Education. The Schraders have two children: Andrew, who is studying mechanical engineering at Valparaiso University, and Ella, who is in kindergarten. The Schraders also have a dog named Sydney.

HOBBIES:
Traveling, hiking, gardening, sports (“I think we’re becoming some of the Miners’ biggest fans,” she says), cultural activities such as theater and musical performances, reading.
So Schrader is working across campus, and with UM System officials, to develop that road map for the next five to 10 years. During the first few months as chancellor, her focus has been on “listening, observing and communicating.”

“Every organization has a sense of place,” she says, “and I need to fully understand Missouri S&T to be its best leader, ambassador and advocate. I want to hear what the various stakeholders envision for the future.”

She has wasted no time meeting with S&T students, faculty and staff. She has also met with several alumni groups on campus and on the road. Last April, Schrader met with members of the S&T Board of Trustees, Order of the Golden Shillelagh, Miner Alumni Association and various departmental academies. In May, she met more alumni during a swing through Texas, then met with local governmental and community leaders, as well as military leaders from nearby Fort Leonard Wood. In June, she hosted Missouri Gov. Jay Nixon and his top education and economic development advisors to talk about S&T’s value to the state. She also hosted U.S. Rep. Jo Ann Emerson, whose 8th congressional district includes Rolla, to discuss national STEM education issues, and traveled to Washington, D.C., to meet the Missouri congressional delegation and other national leaders. This fall, she connected with more alumni during Homecoming and other recent events, including section events in Denver and California’s Bay Area.

“Our graduates have an uncommon loyalty, passion and commitment to this institution,” she says. “It’s because this institution helped our graduates fulfill their dreams. Our graduates and students best exemplify what this institution is.”

Alumni and their success are key players in the continuing story of this university. It’s a story that Schrader is more than happy to tell.
It’s called a house. But the vision for the Hasselmann Alumni House is to provide a comfortable place for S&T graduates — more than 52,000 of them — when they come “home” to Rolla.

There won’t be any beds. This isn’t a hotel or a bed and breakfast. But there will be plenty of room for alumni to gather, whether they’re back in Rolla to reconnect with old classmates, celebrate St. Pat’s and Homecoming, or conduct the business of the Miner Alumni Association.

Today’s economic climate makes it more challenging to fund such large projects. Yet Missouri S&T grads have stepped forward to help support an alumni house. Such houses are “commonplace” at universities, says Bill Brune, CSci’73, who serves on the Miner Alumni Association’s Board of Directors.

Construction on the 12,000-square-foot Hasselmann Alumni House will begin when fundraising is complete. At press time, S&T had raised 45 percent of the estimated $3.85 million construction cost. The project received a recent boost when Missouri S&T Chancellor Cheryl B. Schrader designated a $500,000 estate gift from the late Beverly Koeppel, EE’38, to be used as a challenge grant to attract additional funding for the alumni house. (See the story on page 28 for more about this challenge.)

Alumni have made gifts in support of the project to honor loved ones, fellow alumni, mentors — even rival fraternities.

(continued on page 27)
When he came to Rolla as the university’s first Karl F. Hasselmann Chair in 2001, J. David Rogers was curious to find out more about the man responsible for his title. So Rogers, a geological engineering expert, conducted some research on Hasselmann’s life. Some things were easy to uncover. Hasselmann played football and ran track at MSM. He was awarded a professional degree in 1945 and an honorary doctorate in 1966. He was also a past president of the Miner Alumni Association. But it was information about Hasselmann’s career that Rogers found especially interesting. Here are some of the things Rogers discovered:

- Hasselmann was one of the first people to successfully drill for oil in the Gulf of Mexico.
- As president of Salt Dome Production Co. in Houston, Hasselmann was noted for his work in the development of a gravitational method for shallow-sea oil exploration.
- Decades ago, Hasselmann created an endowment, which accrued interest for 24 years, until sufficient funds were available to establish the chair in geological engineering that Rogers now holds.
- In addition to establishing the Karl F. Hasselmann Chair in Geological Engineering at what is now Missouri S&T, Hasselmann and his wife, Marjory, established chairs at Rice University and at the Mayo Clinic. Hasselmann died in 1976, but his legacy lives on. The Hasselmann estate continues to grow, and some of that money — as well as income from mineral rights Hasselmann left to the university — served as a lead donation for the alumni house.

The Hasselmann Legacy

The seed money for the alumni house was provided by the estate of Karl Hasselmann. You’ve seen his name. But who was this man?

During a discussion about naming opportunities at a director’s meeting of the alumni association, the topic of restrooms and fixtures came up. There were objections because, well, it didn’t seem proper. But Chris Ramsay, MetE’83, MS MetE’85, thought it was a funny idea to dedicate urinals to various people. “A group of Pikes purchased a urinal in honor of our friends at Tau Kappa Epsilon, and our friends at TKE have committed to purchase one in honor of the Alpha Kappa chapter of Pi Kappa Alpha. Everybody had a big laugh,” Ramsay says. “And this silliness raised an additional $10,000 for the Hasselmann House.”
Not too long after Dick Bauer, ChE’51, passed away in 2010, his wife, Shirley, decided to make a gift in her husband’s honor to fund the bar in the Hasselmann Alumni House. During Homecoming celebrations and reunions, Dick always liked to gather at a bar — or sometimes tend it — in order to swap stories with old friends. Now the Bauer Bar will provide that gathering spot in the Hasselmann Alumni House for generations of friends to gather, enjoy a drink and share memories.

Chris Ramsay, MetE’83, MS MetE’85, thinks the Bauer Bar is a great idea. “I can hear Dick Bauer saying to us all, ‘Let’s go to the bar for a hooter,’ or (former alumni association president) Bob Wolf (ME’51, MS ME’52, who passed away in 1999) saying we should stop by for a ‘short snort,’” Ramsay says. “I miss those guys. So when the Hasselmann House is finished, we will all go there to have one in honor of Dick, and one in honor of Bob.”

So far, donors have contributed to personalize rooms, tables, bar stools, outdoor areas, and, for fun, even urinals (see page 26). John O. Farmer III, PetE’63, made a significant gift to name the lounge in honor of his father, John O. Farmer, MinE’33, who was friends with Karl Hasselmann, MinE’25. (Read more about Hasselmann on facing page). The elder Farmer started an oil and gas production company based in Russell, Kan., in 1946. His son has been president since 1989. Now, thanks to John O. Farmer III’s gift, the John O. Farmer Alumni Lounge will stand as a testament to his father’s longtime friendship with Hasselmann.

“The alumni house will be a great gathering place. Every significant school has one,” says Farmer III. “I wanted to make a gift in memory of my father and Karl Hasselmann.”

The Hasselmann Alumni House will be located at the corner of Pine and 11th streets in Rolla, on the eastern edge of the campus. “It will reflect our alumni and their achievements, recognizing our philosophy of giving back to the university,” says Brune.

Brune lives in Houston and comes back to Rolla about twice a year. “The opportunities and accomplishments of our faculty and students are beyond anything we would have imagined 40 years ago,” he says.

Like Brune, Art Giesler, ME’77, comes back to this neck of the woods two or three times a year. Giesler, who is also active with the alumni association, says the location of the alumni house is perfect for those who return for the annual St. Pat’s celebration and the parade, which, of course, is held on Pine Street.

In addition to St. Pat’s activities, the Hasselmann Alumni House will be home to reunions, banquets, lectures and, appropriately, Homecoming events.

Daniel Jackson, ChE’90, who lives in San Diego, is another member of the alumni association’s board of directors. “This will be a gateway to campus for all returning alumni,” Jackson says. “With the Hasselmann House, anyone on campus will be able to point you to the alumni office.”
Challenge fund provides 1~ to ~ 2 match for donors

Thanks to a generous gift from the estate of the late Beverly Koeppel, EE’38, alumni donations to the Hasselmann Alumni House can now be even more valuable. Missouri S&T Chancellor Cheryl B. Schrader recently designated the $500,000 unrestricted bequest to be used as a challenge grant to attract additional contributions for the alumni house. The Koeppel Challenge will provide $1 of matching money for every $2 an alum gives to the Hasselmann Alumni House for gifts of $25,000 and above.

This means that donors interested in making gifts to the project may now claim naming opportunities for one-third less money. For example, a gift of $200,000, matched by $100,000 from the Koeppel estate, would fully fund the Hasselmann Alumni House courtyard.

When completed, the Koeppel Challenge will bring the alumni association $1.5 million closer to the goal of completing the Hasselmann Alumni House.

“Missouri S&T and the Miner Alumni Association are partners in ensuring that S&T remains vibrant and relevant well into the future, and the Hasselmann Alumni House will play a pivotal role in that future success,” says Schrader. “This matching fund represents not only the pride we have in our alumni and their legacy but also the importance placed on engaging our alumni in shaping S&T’s future.”

To find out how to take advantage of this matching gift fund, contact Darlene Ramsay, MetE’84, of the Miner Alumni Association at 573-341-4584.

At a glance

- Address: 1100 N. Pine St.
- Architectural style: Modern traditional
- Exterior building materials: brick facade
- Onsite parking will accommodate easy access
- Close proximity to campus
- Location will be the ideal viewing spot for St. Pat’s parades
- The Grand Hall will offer a formal setting for banquets, distinguished lectures, reunions and large receptions
- The spectacular Paul T. Dowling Hall of Honor will recognize alumni and friends for their generosity
- Architectural firm: Cunningham and Associates, Columbia, Mo.
With thanks to those donors who have already given

**Alumni Lounge**
- John O. Farmer III
  (named in honor of John O. Farmer)

**Bar**
- Shirley Bauer
  (named in honor of Dick Bauer)

**Bar Stools**
- John and Marie Eash
- David Grimm
- Bill and Ann Horst
- Riley and Helene Hardy Pierce
- Chris and Darlene Ramsay
- Dotty Wolf
  (named in honor of Robert Wolf)
- Joan and James Woodard

**Board Room**
- Roller Family

**Director’s Office**
- Susan and Sandy Rothschild

**Garden**
- Fred and June Kummer

**Grand Hall (half)**
- Pete Kinyon

**Hall of Honor**
- Michael W. Bytnar
- Robert H. Harper
  (joint gift named in honor of Paul T. Dowling)

**Historic Emblems**
- Ron Tappmeyer
- Art Giesler

**Office Hub**
- Bayless Family

**Offices**
- Robert Brackbill
  (named in honor of Cay Brackbill)
- Billy Gerhart
- William and June Patterson

**Parking Space**
- Rich Eimer

**Restroom Facilities**
- Pi Kappa Alpha
- Tau Kappa Epsilon

**Welcome Center**
- Berry Family
MISSION, GOALS AND BENEFITS

MISSION
The association proactively strives to create an environment — embodying communication with and participation by Miner alumni and friends — to foster strong loyalty to the university and growth of the association. The association increases its financial strength and provides aid and support to deserving students, faculty and alumni.

GOALS
• Increase alumni pride in their association with Missouri S&T and the Miner Alumni Association
• Increase alumni involvement, especially that of young alumni
• Increase alumni contributions, both in the number of alumni making a financial commitment and in the dollars raised to benefit Missouri S&T and the Miner Alumni Association
• Strengthen relationships with faculty, staff and students on behalf of the alumni association.

The officers and other members of the association’s board of directors provide leadership and personal participation to achieve these goals and fulfill this mission. For their efforts to be a success, they need YOUR active participation as well, in whatever alumni activities you choose.

BENEFITS

CAREER ASSISTANCE
Missouri S&T’s career opportunities and employer relations will help you in your job search. For information, call 573-341-4343.

Missouri S&T’s career opportunities and employer relations will help you in your job search. For information, call 573-341-4343.

SERVICES
Online Community
including searchable directory at mineralumni.com
Access to alumni office via email (alumni@mst.edu)
Address update service so you don’t miss your Missouri S&T mail
Insurance discounts
Travel opportunities

MINER MERCHANDISE
Chairs, lamps, watches, pendants, Joe Miner credit card, license plates for Missouri residents and the official Missouri S&T ring.

BEYOND THE PUCK {ASSOCIATION}

MISSION, GOALS AND BENEFITS

MISSION
The association proactively strives to create an environment — embodying communication with and participation by Miner alumni and friends — to foster strong loyalty to the university and growth of the association. The association increases its financial strength and provides aid and support to deserving students, faculty and alumni.

GOALS
• Increase alumni pride in their association with Missouri S&T and the Miner Alumni Association
• Increase alumni involvement, especially that of young alumni
• Increase alumni contributions, both in the number of alumni making a financial commitment and in the dollars raised to benefit Missouri S&T and the Miner Alumni Association
• Strengthen relationships with faculty, staff and students on behalf of the alumni association.

The officers and other members of the association’s board of directors provide leadership and personal participation to achieve these goals and fulfill this mission. For their efforts to be a success, they need YOUR active participation as well, in whatever alumni activities you choose.

BENEFITS

CAREER ASSISTANCE
Missouri S&T’s career opportunities and employer relations will help you in your job search. For information, call 573-341-4343.

SERVICES
Online Community
including searchable directory at mineralumni.com
Access to alumni office via email (alumni@mst.edu)
Address update service so you don’t miss your Missouri S&T mail
Insurance discounts
Travel opportunities

MINER MERCHANDISE
Chairs, lamps, watches, pendants, Joe Miner credit card, license plates for Missouri residents and the official Missouri S&T ring.

POLICY

FOR SUBMISSIONS

We are happy to announce weddings, births, promotions, and other happy occurrences after they have occurred.

We will mention a spouse’s name if it is specifically mentioned in the information provided by the alumni/alumna

We will print addresses if specifically requested to do so by the alumni/alumna submitting the note

We reserve the right to edit alumni notes to meet space requirements

We will use submitted photos as space permits

Due to the production time required for each issue, submissions may take up to six months to appear.

Your patience is appreciated.

UPCOMING EVENT: HOUSTON SECTION

Every year, nearly 30 alumni in the Houston area come together for the section’s annual holiday party. This year the party will be held on Saturday, Dec. 1, at the home of Phil ’70 and Arni Ilavia. Join your fellow Miners for a night of fellowship, holiday carols and delectable foods. To attend, the cost is a $25 minimum donation, and the proceeds are given to S&T’s petroleum engineering program. Houston grads: Don’t miss out on the opportunity to share in the holiday spirit with alumni in your area.
UPCOMING SECTION EVENTS

St. Pat’s section events

Austin-San Antonio
5 p.m. Friday, March 15, 2013
Central Market
4001 N. Lamar Blvd.
Austin, Texas
512-206-1000

Bay Area
Saturday, March 16, 2013
Time and location TBD

Carolina Piedmont
Saturday, March 16, 2013
Time and location TBD

Dallas-Fort Worth
2-7 p.m. Saturday, March 2, 2013
Wilhelms Restaurant
432 S. Main St.
Crapevine, Texas
817-481-7511

Driftless
Saturday, March 9, 2013
Time and location TBD

Enchanted
5:30 p.m. Saturday, March 23, 2013
Chama River Brewery
4939 Pan American Freeway
Albuquerque, N.M.
505-342-1800

Flint Hills
5 p.m. Thursday, March 7, 2013
Tailgators
2025 Southwest Usd Road
Topeka, Kan.
785-272-1432

Houston
6–9 p.m. Saturday, March 9, 2013
Chad’s Head Pub
2528 Portsmouth St.
Houston
713-552-9322

Indianapolis
6–9 p.m. Friday, March 8, 2013
Claddagh Irish Pub-Northside
5835 E. 96th St.
Indianapolis
317-569-3663

Lincolnland
Sunday, March 17, 2013
Time and location TBD

Mid-Missouri
Friday, March 22, 2013
5 p.m. Happy Hour, 6 p.m. Dinner
Munichburg Tavern
418 W. Elm St.
Jefferson City, Mo.
573-761-4046

Mid-South
Friday, March 22, 2013
Time and location TBD

Motor City
Noon–2 p.m. Saturday,
March 16, 2013
Location TBD

NE-IA
5 p.m. Friday, March 8, 2013
Lucky Bucket Brewery
11341 Cantwell Road, Suite 1
La Vista, Neb.
402-763-8686

New Orleans
Krewe of Tidbit Parade Party
11:30 a.m. Sunday, Feb. 10, 2013
Parade begins at noon
Meet at the home of Sean O’Donnell, ‘04 and Leah Bahr ‘07
816 A State St.
New Orleans

Peoria
5 p.m. Tuesday, March 12, 2013
Kelleher’s Irish Pub and Eatery
619 SW Water St.
Peoria, Ill.
309-673-6000

Phoenix
6 p.m. Thursday, March 14, 2013
Ruma Rula
Tempe Irish Pub and Restaurant
401 S. Mti Ave.
Tempe, Ariz.
480-929-9500

Portland
Friday, March 15, 2013
6 p.m. Happy Hour, 7 p.m. Dinner
Hopworks Urban Brewery
3947 N. Willamette Ave.
Portland, Ore.
503-287-6258

Rocky Mountain
Saturday, March 9, 2013
Time TBD

St. Louis
5 p.m. Tuesday, March 12, 2013
Kelleher’s Irish Pub and Eatery
619 SW Water St.
Peoria, Ill.
309-673-6000

Society of Mining, Metallurgy and Exploration
Annual Meeting and Exhibit Reception
5:30 p.m. Tuesday, Feb. 26, 2013
Location TBD

St. Louis
Holida Party
Friday, Nov. 30
Time and location TBD

New Orleans
Mardi Gras Event
Krewe of Thoth Parade Party
11:30 a.m. Sunday, Feb. 10, 2013
Parade begins at noon
Meet at the home of Sean O’Donnell, ‘04 and Leah Bahr ‘07
816 A State St.
New Orleans

SECTION WRAP UP:
ST. LOUIS GOLF TOURNAMENT

On Saturday, June 23, the St. Louis Section gathered for its annual Scholarship Golf Tournament. Here, 110 golfers came together, played a round of golf, reminisced with fellow Miner alumni and dined on pork steak. Watch for next year’s announcement and a chance to compete.

First-place winners ($75 gift certificate):

A Flight
Steve Brunts ‘78

B Flight
Anthony Mayer ‘11

Second-place winners ($50 gift certificate):

A Flight
Steve Kadyk ‘99

B Flight
Michael Scarey ‘07

Closest to Pin ($50 gift certificate):

Women: Denise Hale ‘00
Men: Chris Hooley

GET MORE INFORMATION

Want to know who else is planning to attend a section event in your area? Need more details about an upcoming event? Just click on the link at mineralumni.com and register online to see a list of other attendees in the online community. The attendee list is also available by clicking on the events tab.
A true champion of S&T, Steven Frey, MS Phys’86, is director of applied research for Lockheed Martin Corp. in Orlando, Fla. He has been with the company since he finished graduate school.

Uber advocate: Frey took it upon himself to recruit S&T students to Lockheed Martin on his own dime, using vacation time. “I feel strongly about recruiting from S&T — I know the school’s value and the caliber of its students. Lockheed Martin needs the engineers S&T produces. I come to campus a couple of times a year to give talks at the career center and do informal recruiting. I get the resumes of really qualified students into the hands of the right people. And our intern program is a win-win for us — not only do the students gain skills that will give them a head start on their careers, their fresh ideas help us gain innovative perspectives that could help us penetrate additional markets.”

He’s also started several research projects with S&T professors to “mine some great technology they are working on to get it out of the lab and into industry.”

Something extra: “My master’s degree really differentiated me from others looking for jobs when I graduated. And I was only able to afford grad school because of a teaching assistant position, which I assume was paid for by a donor. I figured I ought to be willing to do the same for someone else.” Frey is a member of Order of the Golden Shillelagh donor recognition society and has given to the physics development fund.

The next generation: Frey and his wife, Michelle, have two children. Lydia, 20, a junior at S&T studying chemical engineering, and Grant, 16, who recently attended S&T’s Jackling Summer Camp. Grant likes to stay with his sister on campus while his parents attend OGS events.

Yes, S&T is cool: Frey and his son recently encountered members of the Formula SAE car team from the University of Florida. “I mentioned that Lydia goes to S&T and they said they have the greatest car there, the design is unbelievable, it’s got a really cool green and gold paint job. One guy just went on and on about it. It was pretty gratifying to hear, especially considering the millions that some of the big universities spend on their cars. Grant and I both felt some pride in that.”

“LOCKHEED MARTIN NEEDS THE ENGINEERS S&T PRODUCES.”

— Steven Frey, MS Phys’86
SPOTLESS!
Carl Mathews of Rolla, Mo., showed off his 1937 Chevrolet during the 2012 Homecoming Cruise-In. (Photo by Terry Barner)
HARD HATS AREN'T REQUIRED — JUST YOUR PRESENCE.

Join us as we break ground on Bertelsmeyer Hall, the 68,500-square-foot chemical and biochemical engineering building, at 1:15 p.m. April 18, 2013, on the northwest corner of State and 11th streets.

The Missouri S&T family extends our deepest gratitude to Jim Bertelsmeyer, ChE ’66, Bipin Doshi, ChE ’62, and more than 50 other alumni whose generosity turned the dream of a new chemical and biochemical engineering building into a reality.

Parents: If this issue of Missouri S&T Magazine is addressed to your son or daughter who has established a separate permanent address, please notify us of the new address: 573-341-4145 or alumni@mst.edu.