

# South Dakota School of Mines and Technology

## THE HARDROCK™

A publication for our Alumni,  
Faculty, Staff, Students, and Friends

SPRING 2006

## Engineering Research Opens New Avenues

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...and much more!



## Perspectives



Dear Alumni and Friends,

I am pleased to welcome you to the inaugural issue of our combined *Hardrock* and *SDSM&T Magazine*. More than a year in planning, this volume merges the institution's marketing piece with the alumni's bulletin. Keeping the *Hardrock* masthead continues the long tradition of this valued publication.

The "new, improved" *Hardrock* permits alumni and friends of the School of Mines to have, in one place, current news of the campus with alumni class notes and announcements. Initially, the new *Hardrock* will have a combined circulation of more than 18,000 and will appear semiannually.

This revised magazine is one of several strategies now underway to better "tell the Mines" story. Our home page <www.sdsmt.edu> has a new look and structure. Please make visits often. Street banners, annual reports, brochures, advertising in key venues, and a biweekly president e-mail letter are now coordinated under the redesigned logo and mark.

The School of Mines has a long and distinguished history. It has a bright future as it moves to play an even larger role in the life of South Dakota higher education and meet the needs of the twenty-first century scientific and engineering work force. We are so pleased to tell our story far and wide.

As always, your thoughts and comments are welcome. I can be reached at <charles.ruch@sdsmt.edu>.

Very truly yours,

Charles Ruch  
President

P.S. If you are not on our president's e-mail list and would like to be included, please contact my office by e-mailing <carol.jensen@sdsmt.edu> or by phone at (605) 394-2411.

## SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY THE HARDROCK

SPRING 2006

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## On the cover:

**Crazy Horse Memorial Photo:** The Black Hills serve as an outdoor laboratory for students.

**Inset Photo:** Industrial Engineering faculty members were accepted into a prestigious National Science Foundation (NSF) cohort focused on educational research. Only 20 people were accepted into each of the two cohorts. *Story p. 6*

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Dear Alumni and Friends,

Welcome to the premiere issue of the new *Hardrock*. Last fall the Alumni Association Board of Directors began discussions with the Office of University and Public Relations on the possibility of combining the *SDSM&T Magazine* and the *Hardrock* into one publication. A decision to do so was approved, and I think you will enjoy this combined publication. The first issue of the new *Hardrock* marks the beginning of a semi-annual publication published in the spring and fall.

Furthermore, the *Hardrock* name remains the trademark of the SDSM&T Alumni Association as it has since 1934.

Within these pages you will find the same popular *Hardrock* sections that most alumni enjoy — Class Notes, Area Meetings, Alumni News, and the Memorial section. The new look includes enhanced campus news and features; student, faculty, and department highlights; research notes; and more. We also look forward to your feedback — and perhaps your support — regarding the advertising of alumni owned and alumni managed businesses. As you will see, these can be an effective medium to promote your business and advertise openings within your company.

I have now completed six months of my one-year term as your Alumni Association President. Association Director Tim Vottero (Chem84) and I have visited Casper, Denver, Spokane, Pierre, and Rapid City chapters, we have launched inaugural events for new chapters in Tennessee, Alabama, and Georgia, and we have supported several other area meetings hosted by campus representatives. It is a great treat for me to meet and visit with alumni from all the decades. There are two things that most of us share in common — an appreciation for the excellent education that we received and memories of many good times. Our Alumni Association provides a way for us to help support the next generation of students and to help us stay in contact with classmates and campus.

If you have not been back to a five year all-school reunion, you should not miss the next one in 2010 as they are great fun. This will mark the 125th Anniversary of our alma mater and it promises to be a tremendous event just like the *Five Days in '05* event was last summer. Among the many important functions of our alumni association, it also has coordinated these 5-year reunions since they began more than a half century ago. We welcome your feedback, your participation, and of course your support as we continue to play an important role in the past, present, and future of the School of Mines.

We look forward to hearing from you and visiting with you when we are in your area. Thank you for your support.

Sincerely,

*Ev Bloom*

Ev Bloom (MetE63)  
SDSM&T Alumni President



## Campus Profile

South Dakota School of Mines and Technology has been a national leader in preparing world-class engineers and scientists since 1885. Our graduates design, construct, and operate the most modern technology to meet complex challenges such as global warming, health care delivery, energy resource development, mineral extraction and processing, environmental quality, futuristic transportation, and national defense. Our alumni are held in the highest regard by their fellow leaders in industry, consulting, government, health, research, and education.

The School of Mines continuously adapts to meet the needs of engineering and science. Rugged individuals and pioneers in engineering and science founded the School of Mines' intellectual environment more than a century ago. Our faculty and students carry on that tradition today.

The School of Mines is a state supported university that provides graduate and undergraduate degrees in science and engineering.

### Fall 2005 Enrollment:

2,313 students from 40 states and 24 countries

### Costs and Fees:

A School of Mines education has never been more affordable. Annual undergraduate costs for tuition, fees, books, room, and board total less than \$10,300 per year for South Dakota residents. A new initiative passed this year for Fall 2006 sets out-of-state tuition for first-time freshmen and transfer students at a uniform rate of 150 percent of in-state tuition rates, currently totaling less than \$11,760.

### Research:

Researchers conduct state-of-the-art research that benefits the state, the region, and the nation through advances in technology and economic development. In fiscal year 2005, researchers were awarded \$12.7 million in funding for approximately 100 projects. Funding agencies included the National Science Foundation, the State of South Dakota, NASA, the Department of Education, Army Research Laboratory, and many more.

### Faculty:

The School of Mines employs 159 full-time faculty members, more than 90 percent of whom hold doctorate or other appropriate terminal degrees.

### Honors and Awards:

- One of America's Best College Buys for the eighth consecutive year
- One of approximately 215 Colleges of Distinction

### Placement:

Average starting salary offers to our graduates are approximately \$48,000. More than 90 percent of 2004-2005 graduates have found jobs in their career fields or in graduate or professional programs.

### Bachelor of Science Degrees

Chemical Engineering  
Chemistry  
Civil Engineering  
Computer Engineering  
Computer Science  
Electrical Engineering  
Environmental Engineering  
Geological Engineering  
Geology  
Industrial Engineering  
Interdisciplinary Sciences  
Mathematics  
Mechanical Engineering  
Metallurgical Engineering  
Mining Engineering and Management  
Physics

### Master of Science Degrees

Atmospheric Sciences  
Chemical Engineering  
Civil Engineering  
Computer Science  
Electrical Engineering  
Geology and Geological Engineering  
Materials Engineering and Science  
Mechanical Engineering  
Paleontology  
Technology Management

### Doctor of Philosophy Degrees

Atmospheric and Environmental Sciences  
Biomedical Engineering  
Geology and Geological Engineering  
Materials Engineering and Science  
Nanoscience and Nanoengineering

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## School of Mines and WDT form partnership

The South Dakota School of Mines and Technology and Western Dakota Technical Institute (WDT) have formed a partnership designed to create opportunities for students to learn the skills they need to succeed in their careers and contribute to our region and our communities.



Courtesy Rapid City Journal

*Dr. Dan Dolan, co-director of CAMP at the School of Mines, and Mr. Luke Steinmetz, lead instructor in the Welding Technology Program at WDT, represented their institutions at the press conference announcing the partnership.*

The agreement consists of three parts:

- WDT will offer School of Mines' students courses in shop safety and equipment operation. These will be coordinated through the WDT Business & Industry Training Center.
- WDT students may enroll in internships to serve on School of Mines Center of Excellence for Advanced Manufacturing and Production (CAMP) teams. WDT students will be an integral part of the teams.
- WDT shops will be available for CAMP team projects with scheduling through lead instructors.

Through this collaborative learning partnership, WDT's technical expertise and equipment will help make School of Mines students better engineers and scientists, and

the School of Mines will help WDT students become better technicians.

"What better way to prepare tomorrow's engineers and technicians than to give them the opportunity to develop and practice the kind of teamwork and communication skills they're going to need when they enter the workforce," Dr. Karen Whitehead, provost and vice president for academic affairs, said.

## School of Mines projects receive \$16 million in defense spending

The Defense Appropriations bill that passed in the U.S. Senate October 7, 2005, included \$16 million in funding for research projects at the School of Mines.

"We truly appreciate all the work of the South Dakota Congressional delegation," School of Mines President Dr. Charles Ruch said. "It is the delegation's continued support that allows School of Mines professors and researchers to undertake projects that will make our military more efficient while better protecting our troops in the field. Research infrastructure, new technologies, and equipment that are found no other place in the world, are now being used to



*The Defense Appropriations bill provides funding for research at the School of Mines, including \$2 million for the Next Generation Joining Technology Research Initiative through the Advanced Materials Processing and Joining*

transition technology and generate technology-based economic development.”

Since 2001, The School of Mines has received more than \$70 million in congressional appropriations for projects and research.

The proposed 2006 Defense projects include:

- \$4 million for Nano- Reinforced Structures and Advanced Multi- Functional Structures for Space Program (Air Force Research Laboratory)
- \$3 million for Strategic Defense Systems Manufacturing Technology (U.S. Army)
- \$3 million for Advanced Materials and Nanotechnology for Ammunition (Armament Research, Development and Engineering Center ARDEC)
- \$4 million for Future Affordable Multi-Utility Materials for the Army Future Combat Systems (Army Research Lab)
- \$2 million for the Next Generation Joining Technology Research Initiative (Edison Welding Institute)

### School of Mines holds 152nd commencement

The School of Mines held its 152nd Commencement December 17, 2005, and awarded more than 90 bachelor's, master's, and doctoral degrees.

**Cheryl Chapman** (Math/CE78) joined the School of Mines as commencement speaker. During the past 27 years, she has held progressively higher-responsibility, environmentally-based positions with a number of organizations.



*Commencement speaker  
Ms. Cheryl Chapman  
(Math/CE78), president,  
MATRIX Consulting  
Group, Inc. of Rapid  
City, S.Dak.*

Chapman has served as director of environmental engineering for a major architectural and engineering firm; principle deputy assistant secretary of the Navy for installations and environmental; and in

1999 became president and principle consultant of MATRIX Consulting Group, Inc. of Rapid City. Chapman has also been active in the community, serving as a Pennington County Commissioner and Chair of the Commission.

**David Burnett** (IE05) represented the



*Senior Class  
Representative Speaker  
Mr. David Burnett*

graduating class. Burnett has been a member of the Institute of Industrial Engineers, serving as the organization's treasurer and president. He was selected as Most Outstanding Underclassman his sophomore year and was also involved with Tau Beta Pi and Alpha Pi Mu honor societies, Residence Life, Peer Advising, Orientation, United Campus Ministries and Students

Against Drunk Driving.

The university also honored five alumni with "Distinguished Alumni" awards, given to graduates who have made outstanding contributions in their professions and to the School of Mines. The recipients: **Dr. Charles Braun** (Chem58), **Dr. Robert Chen** (EE73), **Tony Jensen** (Mine84), **Cliff Mumm** (ChE73), and **Dr. James Swartz** (ChE71).

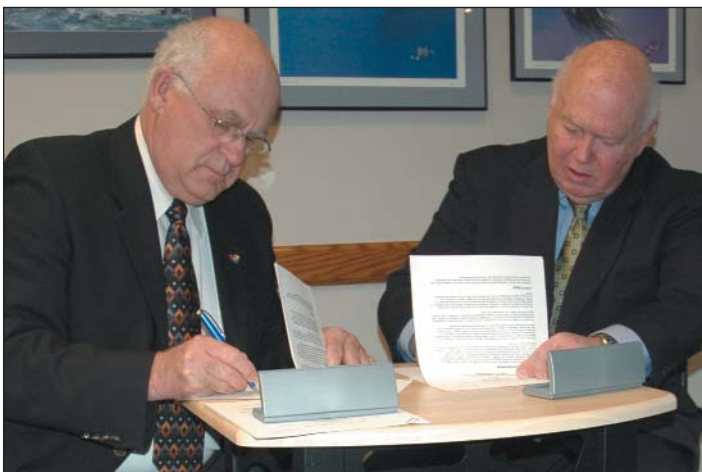
Citations for the honorees are posted under "Recent Alumni News" at [www.sdsmt.edu/alumni](http://www.sdsmt.edu/alumni).

### School of Mines and Center for EROS form partnership

The School of Mines and the Center for Earth Resources Observation and Science (EROS) of the United States Geological Survey have formed a partnership that will allow the institutions to benefit from each other's strengths.

This agreement will allow EROS and the School of Mines to collaborate on issues of mutual interest, including advanced technology development, training and education, remote sensing, digital image processing, geospatial information analysis and synthesis, pattern





*Mr. R. J. Thompson, EROS center chief, and Dr. Charles Ruch sign the partnership agreement between the School of Mines and EROS.*

recognition and image interpretation, and networking and computer systems.

The agreement is designed to coordinate the EROS and School of Mines research, education, and technology development activities to serve the interest of South Dakota and the nation.

"We are delighted to continue our partnership with EROS. We look forward to more opportunities to share our resources," School of Mines President Charles Ruch said.

### E-Week shows how engineers make a difference

The School of Mines celebrated the 29th



*Area students attended many Engineers Week activities, including the Hot Chemistry Cool Show, put on by chemistry students at the School of Mines*

annual Engineers Week by inviting students and community members to events showcasing the importance of engineers in our world.

Elementary, middle, and high school students built cardboard bridges, constructed buildings with interlocking blocks, designed intentionally complicated machines to perform a simple task, and took part in other activities to learn about engineering.

During the week, School of Mines students learned about opportunities to apply their technical skills to jobs and volunteer activities around the world.

### Outstanding recent graduates honored

Seven School of Mines alumni were honored as recipients of the 2006 Recent Graduate Award during the Engineers Week luncheon held February 23.

The Outstanding Recent Graduate program honors graduates who have achieved exemplary career progress and recognition within 10 years of graduation. The program was originated and is sponsored by the Alumni Association and the SDSM&T Foundation. The individuals selected for this award are considered excellent role models to show current students the importance of continued personal growth in a rapidly changing world.

The 2006 honorees: **June Alexander Knight** (CSc96), **Bernt Askildsen** (EE96), **Brian Bares** (ChE95), **Dr. Ernest Berney** (CE95), **Dr. Janet Bertog** (Geo95), **Dr. Robert Christensen** (Phys/ME95), and **Dustin Ellis** (MetE96).

Citations for the honorees are posted under "Recent Alumni News" at [www.sdsmt.edu/alumni](http://www.sdsmt.edu/alumni).



*Brian Bares  
(ChE95)*



*June  
Alexander  
Knight  
(CSc96)*



*Dustin Ellis  
(MetE96)*



# Engineering Research Opens New Avenues

*Two School of Mines faculty  
members join prestigious NSF cohort*



In 2005, two industrial engineering faculty members — **Dr. Stuart Kellogg** (M.S. EE82), program director and Pietz Professor, and Dr. Jennifer Karlin, assistant professor — were accepted into a prestigious National Science Foundation (NSF) cohort focused on educational research. Only 20 people in the nation were accepted into each of the two cohorts.

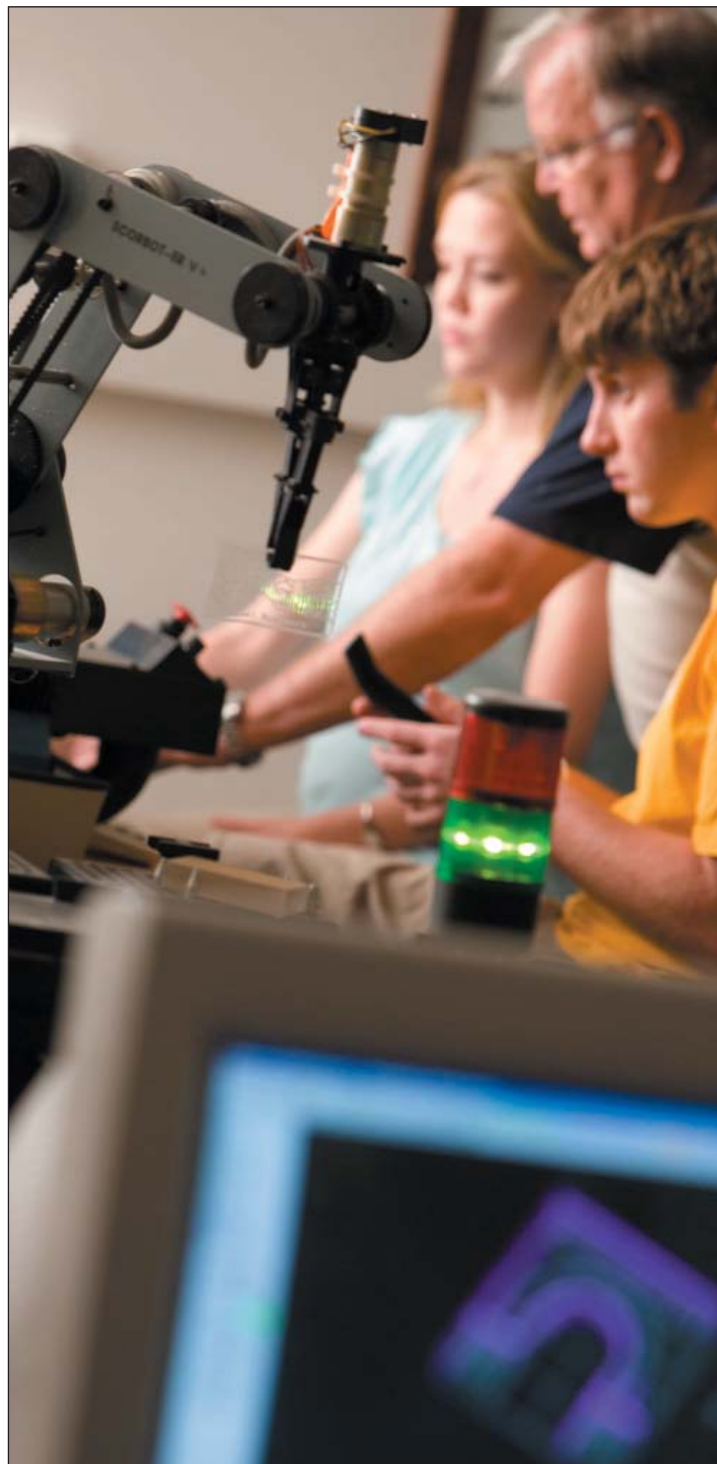
This project grew out of the ideas of a group of people in the engineering education community who came together and submitted a proposal to the NSF to create two cohorts which are focused on rigorous research in engineering education. Once funded, the Rigorous Research in Engineering Education project was born.

Dr. Kellogg and Dr. Karlin spent a week with their cohort and its organizers in Golden, Colorado, considering engineering education issues and gaining a footing to continue their research on the School of Mines campus.

According to Dr. Kellogg, the basis for the workshop is the idea that the engineering education community needs to continually grow and evolve.

“What you are seeing is a tremendous amount of national pressure for greater accountability in education. And, considering the global economy, and the way that industry has moved, that becomes very critical in engineering education. Engineering education is changing and it is not going to be the same 20 years from now,” Dr. Kellogg said. “There is an absolute critical need for educators — all educators — in higher education to have some people who really, truly understand education theory and how students learn.”

And with most new practices, the path to success is paved in research. According to Dr.







Karlin, when research is talked about, there is research in one's discipline, and then there is research in the way one teaches in one's discipline. It is the latter that Drs. Karlin and Kellogg are focusing on.

"Research in engineering education has all of the same fundamental principles of research in one's discipline — the same issues of rigor, the same issues of grounding in theory — but instead of focusing in on what it is that I do in my discipline, I'm looking at student learning," Dr. Karlin said.

The focus on student learning also shines the spotlight on teaching. According to Drs. Karlin and Kellogg, the way in which faculty members teach has a profound effect on how students learn. The amount of time needed to accomplish the higher levels of teaching and learning is considerable, but the rewards are huge. According to Dr. Kellogg, it's a difficult balance to strike, but an important one.

"We need people who are truly knowledgeable and engaged in rigorous methods for engineering education research. One of the things that is very tough, by virtue of the fact that we are all in the classroom, is that we all believe we have an understanding of what works. And to a certain extent, there is some truth to that," Dr. Kellogg said. "But people that are engaged in discipline research have to spend a great deal of time really understanding that research in order to publish. That is the way that it is going in engineering education. You have to really have the time to understand the learning theory that is involved. And that takes an enormous amount of work."

In Dr. Kellogg's opinion, through engaging in this research the School of Mines can create

an environment that stretches students to the best of their abilities and allows them to grow.

"To become the regional university of choice, we have to move to the forefront of engineering and science education, and that means research," Dr. Kellogg said. "What it means is that we need a few people out there doing the true engineering and science education research, and starting to build a name for the campus. And then we have to have people engaged in scholarship of teaching or scholarly teaching. And if we do that, and follow that research, my predication is that student learning and satisfaction will increase, and we will have more students here than we know what to do with."

Dr. Karlin agrees. One of the questions she would like to answer in her research is how, as a university, the School of Mines can create pathways and support structures to offer students the appropriate balance of challenge and support.

"If we offer all challenge, but no support, students retreat into themselves and they leave because

they don't believe that they can do it," Dr. Karlin said. "If we offer all support but no challenge, students go into stasis, because they believe that the status quo is just fine and they never grow. So we need to have that balance between challenge and support."

The research Drs. Karlin and Kellogg are engaged in puts them at the forefront of engineering education research, and the opportunities it offers are endless.

"One of the parts of our mission as an institution is to create leaders. This research can help us do that," Dr. Karlin said.

**"One of the parts of our mission as an institution is to create leaders. This research can help us do that."**

**Dr. Jennifer Karlin**

Assistant Professor, Department of Industrial Engineering



# School of Mines Hosts Gas Conference

*Coalbed methane conference draws industry leaders to campus*

In the fall of 2005, the School of Mines welcomed more than 110 participants representing industry, federal and state governments, consulting firms, advocacy groups, faculty, and students to campus for the 2005 Powder River Basin Coalbed Methane Education Conference.



The conference included 16 speakers on topics from production operations and future technology to gas supply and marketing. The two-day conference, held on October 20-21, with an optional field trip October 22, to the Gillette area that included tours of a coal mine and a coalbed methane (CBM) site in full production.

The conference was an opportunity for faculty, staff, and students from the School of Mines to meet with others involved in the industry.

"Through this conference, we contributed to our broader mission of public education — bringing information to more than 100 registrants," Dr. Alvis Lisenbee, co-chair of the conference and professor, geology and geological engineering, said. "Many of the attendees made potentially valuable contacts with others having similar interests in the CBM sector. We brought the School of Mines name forward as a resource for CBM."

With the conference creating ties between the School of Mines and the coalbed methane industry, graduates and researchers stand to benefit.

"People in industry are aware of research

opportunities, and look to us to hire skilled graduates," Nancy Anderson-Smith, director of educational programs and professional conferences and a member of the conference planning committee, said. "Our proximity to fields is close enough that it is a benefit for industry who work with us in the future."

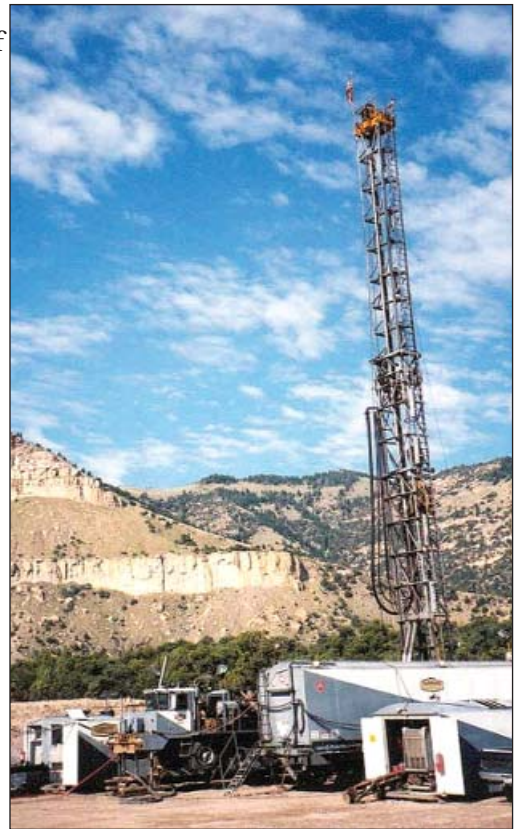
"One of the goals could be to make the School of Mines a regional hub for research, technology, and the professional exchange of ideas," **Creties Jenkins** (GeolE83), conference co-chair, said.

"Clearly, there are many needs in the exploration and

production of oil and gas in the Rockies that could be addressed by the science and engineering disciplines at the School of Mines — holding an annual conference would be a great way to showcase these."

The conference will return in 2006 with expanded offerings as the 2006 Rocky Mountain Unconventional Gas Convention (October 10-12). The conference will include additional short courses with a possible core sample session.

For more information on the 2006 Rocky Mountain Unconventional Gas Convention or to be placed on the mailing list, call (605) 394-2693 or e-mail <eppc@sdsmt.edu>.





# All-American Scholar Athletes

*Despite rigors, Hardrockers athletes continue to shine*



Kyle Kattke

This fall, Kyle Kattke (ME, Jamestown) was named a 2005 National Association of Intercollegiate Athletics Scholar Athlete in cross country. Kattke received this honor because of his 4.00 grade point average and his 26.23 time for 8k at the Region III Championship.

When Kattke received this award, he joined the ranks of Hardrocker athletes past. The School of Mines is no stranger to having its athletes recognized as top scholars.

"We get pretty exceptional kids here," School of Mines Athletic Director Hugh Welsh said. "We have more students here that are true student athletes, focused on the academic aspect as much as participating in athletics."

For students to receive this recognition, they must be well into their studies. They must have completed five semesters, have a GPA of at least 3.50, have a declared major, and have completed a minimum of 75 credits.

The prospect of winning an award isn't the only benefit Hardrocker athletes have. The skills they gain on the field or court will serve them long after they step off of it. Student athletes gain teamwork, communication, and time management skills that benefit them in their personal and academic lives.

"Consider that virtually every athlete that

we have not only has an in-season commitment, they have an out-of-season conditioning one too," Welsh said. "And they take the same class load as everyone else. They have to balance this all out."

Welsh also believes that the skills they gain will be an asset to the student athletes in their careers.

"The biggest thing is playing in a team situation — learning that the success of the team is paramount to everything that you are trying to do. It is more important than individual success," Welsh said. "You have to sacrifice your personal skills sometimes and work for the good of the team, and that is exactly what industry is looking for — people willing to do that."

Welsh is quick to point out that Hardrocker student athletes don't have an easy road. Their requirements are the same as every School of Mines student, and many times, more difficult than the teams they go up against.

"We have true student athletes here. Every one of them is bound by the same requirements as their peers. I've always thought that this is one of the neatest things about the School of Mines — students are all doing the same thing," Welsh said. "There's nothing easy about what they are doing. You just don't make it here if you are not focused on academics."



# Women Get WISE

## *A new program focuses on women in science and engineering*



Starting this year, women at the South Dakota School of Mines and Technology have gotten WISE.

Women in Science and Engineering (WISE) is a new, multifaceted program at the School of Mines that is dedicated to addressing the ongoing concern about the under-representation of women in science and engineering disciplines.

The purpose of WISE is to recruit, retain, and advance women students, faculty, and staff at the School of Mines. The concept of WISE is not new to campus, but its formation and development are.

Curtis Cook, director of WISE, was recently hired as a result of a grant written by Dr. Jennifer Karlin, assistant professor, industrial engineering, and Dr. Andrea Surovek, assistant professor, civil and environmental engineering. The 18-month grant, funded in August 2005, was written specifically for the Mentors and Mentees (M&M) Program, one of the many programs under the umbrella of WISE.

The M&M Program, one of the most active programs currently included in WISE, addresses the needs of women at the School of Mines by providing an inviting and supportive environment for women on campus. M&M gives women students the opportunity to meet, socialize, and learn from one another and from the experiences of industry and faculty speakers.

M&M matches junior and senior mentors who have completed at least one full year at the School of Mines with freshmen, sophomore, or transfer student mentees. Students are paired by class year, by major, and by hobbies and other interests.

In addition to the M&M Program, other equally important efforts benefiting women are taking place on campus as well.

The WISE Start Program is a scholarship program that was funded by the U.S. Department of Education through a grant proposal written by Dr. Karen Whitehead, provost and vice president for academic affairs. The goal of the program is to attract more Native American women students to science and engineering disciplines.

The program, in its pilot year, will provide scholarship support for at least eight low-

income, Native American women admitted to the School of Mines in science, technology, engineering, and mathematics programs. Women receiving WISE Start scholarships will receive a scholarship for their first year of tuition and room and board; they will be enrolled in the Summer Bridge Program for the four weeks prior



to fall semester; and they will be enrolled in the M&M program during the fall semester.

In addition to the WISE Start Program, Dr. Whitehead has also personally initiated another scholarship program on campus. The Women in Science & Engineering (WISE) Scholarship endowed fund was established by Dr. Whitehead last year. Once fully funded, the endowment will provide a yearly scholarship to an incoming female freshman at the School of Mines who is majoring in science or engineering.

"There is a vast need for more women in science and engineering programs in this country and on the School of Mines campus," Dr. Whitehead said. "I saw an opportunity to make a difference by establishing the WISE Scholarship endowment. This scholarship will provide assistance for women of our day and for women of the future."

If you are interested in contributing to the future of women in science and engineering, consider a contribution to the WISE Scholarship fund. Contributions may be made directly to the SDSM&T Foundation. Questions may be directed to <foundation@sdsmt.edu> or (800) 211-7591.





# School of Mines Identifies New Fossil Mammal

## Discovery suggests new trans-Atlantic route



A new mammal more than 66 million years old whose origins are in South Dakota has been identified in the Netherlands. **Dr. James Martin** (Geol71), professor emeritus, geology and geological engineering, identified the mammals while conducting research for the School of Mines Museum of Geology.

Two amateur collectors from the Netherlands, Roland Meuris and Frans Smet, discovered the fossil, which consists of a tooth. When paleontologists at the Natural History Museum of Maastricht showed a photograph to Martin, he was able to identify it because of his experience with fossils at the School of Mines Museum of Geology.

The Museum of Geology is an epicenter for the study of fossils, both regionally and worldwide. Although the museum has a collection of fossils from around the world, specimens from South Dakota make up a majority of the collections. Based upon these specimens, Dr. Martin was able to recognize the mammal.

In addition to the museum's library of fossils, Dr. Martin was able to draw on his personal experience with them. Some of the fossils that he collected in his senior year of college at the School of Mines helped him in identifying the new specimen.

The new species has been named after its discoverers and is called *Maastrichtidelphys meurismeti*, which means the "Maastricht opossum of Meuris and Smet."



*This image shows the tooth that School of Mines professor Dr. Jim Martin used to identify the new species named *Maastrichtidelphys meurismeti*.*

The fossil's closest relative is found in western South Dakota in Meade County. This relative suggests that these mammals were able to travel across a before unknown trans-Atlantic route.

"This find has world-wide implications," Dr. Martin said. "It changes the way we look at the history of climates and animal distribution."

According to Martin, paleontologists had assumed that these mammals had not made the crossing from North America until the Eocene epoch, which was 10 million years after the extinction of dinosaurs. The new fossil find suggests that during the end of the Cretaceous period, which was the end of the Age of Dinosaurs, temporary trans-Atlantic land bridges existed. The new find is so important because it changes views on the timeline of the



distribution of animals through history.

The description of *Maastrichtidelphys* appears in the *Journal of Mammalian Evolution*. The complete reference is:

Martin, J.E., Case, J.A., Jagt, J.W.M., Schulp, A.S. & Mulder, E.W.A. (2005). "A New European Marsupial Indicates a Late Cretaceous High-latitude Transatlantic Dispersal Route." *Journal of Mammalian Evolution* vol. 12, Nos. 3/4, 495-511.



# Big Things Start Small

*Local company turns small parts into a big future*



The first guess for the location of a growing technology firm whose focus is triaxial micro electro mechanical systems (MEMS) sensors and inertial measurement units might not be the Black Hills of South Dakota. But the headquarters of MEMSense are indeed located in Rapid City, where this equipment is being engineered, manufactured, and tested. Best of all, the company was cofounded by School of Mines alumnus **Chris Konvalin** (Chem94).

Konvalin is a Rapid City native. After graduating from high school he came to the School of Mines to study chemistry and then enter the medical field.

However, while Konvalin studied at the School of Mines, he found himself becoming

increasingly interested in computer science and the multitude of possibilities available in that field. He began taking computer science courses in addition to his chemistry curriculum, and after he graduated with a chemistry degree in 1994 he scrapped his plans for medical school and decided to continue his studies at the School of Mines. Under the mentoring of **Dr. Toni Logar** (CSC85), he earned a master's degree in computer science in 1997.

After graduation, Konvalin worked in the computer science field at two different local engineering firms. It was at one of these firms, Comuniq, that he met James Brunsch, an electronics engineer who received his degree from Southern Illinois University Carbondale.

As Konvalin and Brunsch worked together at Comuniq, which specialized in Voice over Internet Protocol (VoIP), they realized they had much in common, including the desire to begin a business on their own. In October 2001, they did just that and formed the forerunner to MEMSense. Together, the two provided a variety of consulting services, dealing mostly with VoIP, software, and hardware.

After Konvalin and Brunsch had been in business for a short while, they began to see a great opportunity on the horizon. Many sensors commercially available were mass-produced, large in size, and lacked precision or functionality in varying temperature extremes. Some companies specialize in sensor technology that is high volume with low cost and low precision. Other companies produce sensors that can be used in labs but are not suitable for real-world applications.

The market was wide open for micro electro mechanical systems (MEMS) inertial instruments, and Konvalin and Brunsch were determined to be the ones to fill the need. MEMSense provides MEMS-based sensors that are small and precise, built for varying extremes, and oftentimes, according to Konvalin, custom built for specific applications



**Chris Konvalin** (Chem94)





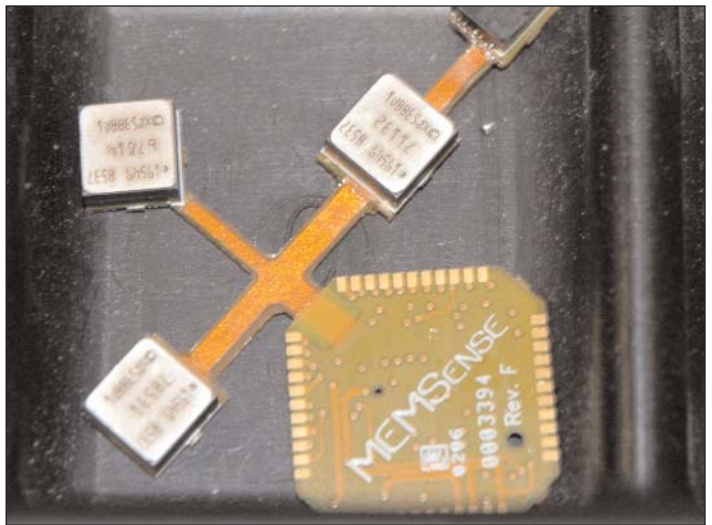
and needs.

"MEMSense's patented technology allows us to offer the smallest triaxial MEMS sensors and inertial measurement units available in the market," Konvalin said. "Our sensors are unique because of their small size, triaxial sensing, and temperature and alignment compensation."

Genesis Equity Fund, a local venture capital firm, provided initial funding to MEMSense that helped them move into their current Deadwood Avenue location. Shortly thereafter, the firm received a \$100,000 Small Business Innovation Research (SBIR) grant. The goal was to engineer micro sensors that could detect precise human motion in any direction; these sensors had to be small enough to be effortlessly worn by a person.

Since that early SBIR grant, MEMSense has continued to grow and meet consumer needs. Konvalin and Brunsch have settled into their roles as president and CEO respectively, and their products are sold worldwide with retailers located on several continents. They currently produce, market, and sell five different commercial products with a sixth one in the testing phase.

MEMSense products have been used or evaluated for use in a wide range of applications including military tactical guidance and control systems, automotive test

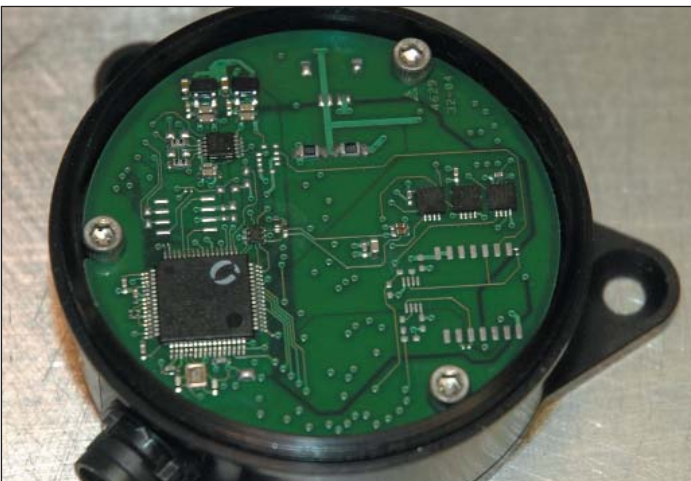


dummies, and unmanned aerial vehicle navigation. They have also been used in medical applications such as human motion analysis and human interface devices.

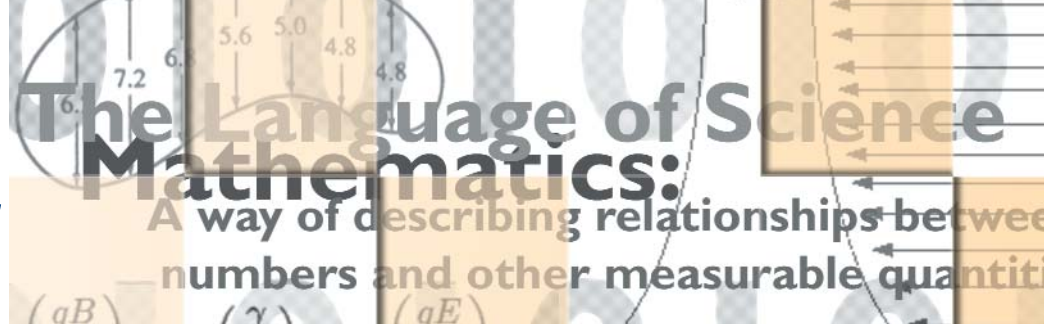
In addition to developing, testing, manufacturing, engineering, and marketing their products, MEMSense employees have been busy marketing their business. They recently received a \$1 million investment from a group of local investors that has allowed them to add staff, purchase new equipment, concentrate on projects, increase product development, and expand marketing capabilities.

Just as the scope of MEMSense has grown substantially, so has its staff, which has essentially doubled in the past year. Several of those employed by MEMSense are School of Mines graduates. They include Sam French (Phys99), Mike Gibson (EE93), Everett Hix (IE03), Joel Hrachovec (EE80), and Jeff Salisbury (M.S. EE05).

"We appreciate the School of Mines and are thankful not only for the science and engineering graduates it produces, but also for our regular interactions with so many of the knowledgeable, supportive faculty members who are always willing to lend a hand. The School of Mines has been a great resource for us," Konvalin said.



# ACM Team Goes Global



## Programming team earns bid to world finals

A team of South Dakota School of Mines and Technology students has been invited to compete in the World Finals of the Association for Computing Machinery (ACM) Programming Contest, scheduled for April 12, 2006, in San Antonio, Texas.

The invitation came after James Free (CSc/CEng, Rapid City), Dan Rausch (CSc/Math, Big Stone City), and Brandon Skari (CSc/Math, Wheatland, Wyo.) finished second in the regional ACM competition in November 2005. During the regional competition, the School of Mines competed against teams from 11 states and a number of Canadian provinces. Because of the region's large size, the top two teams were selected to advance to the world finals.

The contest requires a unique combination of skills: to solve each problem all team members must be able to write programs in C++ computer language and each team needs members with algorithm development skills, strong mathematical ability, and at least one person who is very skilled at debugging the programs the team writes.

"The problems are hard and mathematical in nature," **Dr. Toni Logar** (CSC85), team coach and professor, mathematics and computer science, said. "They can be solved with a computer, but just being a programmer won't even get you close to getting in this competition. It's all about problem-solving skills, teamwork, and a lot of math."

According to Dr. Ed Corwin, team coach and professor, mathematics and computer science, this is one reason the School of Mines has an advantage over many of their competitors.

"These competitions tend to be on the mathematical side of computer science, and those are the kinds of students we tend to get," Dr. Corwin said. "We get really good students here. When we get the right team together, we're competitive with pretty much anybody."

To get to this point, the team logged countless hours in preparation. One of the ways the team prepares is by using simulated

competitions.

"Drs. Logar and Corwin set it up to where we can take the problems from years past and



all of the schools and their results, so when we're two hours into the competition, the score sheet shows exactly what it showed then," team member James Free said. "The only difference is that our school is added in. It's exactly like a live competition."

This practice will be repeated many times leading up to the competition. According to the team, while nothing will mimic the exact competition, it allows them to learn techniques and remove some of the surprises that may come up.

"I think what it does is help you build up a tool box," Dr. Logar said. "You never know what the problems are going to be, but the more tools you have in the box the better off you'll be."

The School of Mines team will compete against 75 other teams in the World Finals. Thousands of teams attempted to qualify in regional competitions.

At the Finals, the School of Mines will join 17 other American universities, including California Institute of Technology, Carnegie Mellon, Duke, MIT, Princeton, University of Maryland, University of Nebraska, University of Wisconsin, and Virginia Tech.





# Student Spotlight

## Engineers Week chemistry magic show

School of Mines students entertained more than 600 middle and high school students during the Engineers Week chemistry magic show. The student performers used chemistry principles to make foam cups disappear, create loud explosions, freeze racquetballs, and perform other experiments. The show was designed to teach the younger students about chemistry and excite them about the field.

Chemistry Show Performers:

**Eric Olson** (Chem, Saint Cloud, Minn.)  
**Bobbie Laurenz** (Chem, Faith)  
**Kalub Hahne** (Chem, Faith)  
**Melina Bozzetti** (Chem, Rapid City)  
**Robert Cole** (Chem, Rapid City)  
**Kirre Wold** (Chem, Rapid City)  
**Margaret Smallbrock** (M.S. TM, Rapid City)  
**Patrick Lee** (Chem, Rapid City)  
**Tyler Earnest** (Chem/Phys, Rapid City)  
**George Larson** (Spec, Rapid City)  
**Amber DeWeerd** (Chem, Hudson)

## Student named Millennium Scholar

**Lyndon Pease** (CE, Billings, Mont.) has been named a 2005- 2006 Gates Millennium Scholar (GMS). The GMS program was created by the Bill and Melinda Gates Foundation to recognize the increasing diversity in American society and the compelling need to increase access to higher education to reflect this. Since the program's inception in 1999, only 9,050 academically talented students have been awarded a GMS scholarship.

## Students make phonathon a success

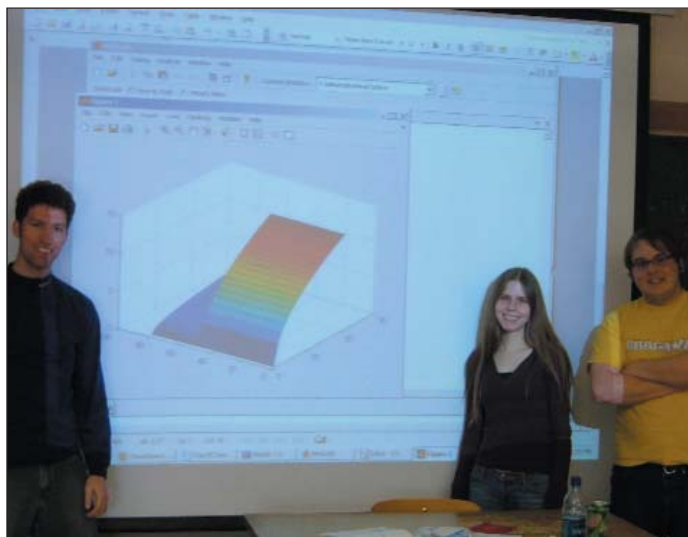
These students helped make the SDSM&T Foundation's spring 2006 phonathon a success. They made more than 5,700 phone calls that resulted in pledges and contributions that totaled more than \$48,000.

The students: **Katie Begeman** (ChE, Rapid City), **Christi Bubac** (IS, Rapid City), **Sarah DeHoogh** (Geol, Marengo, Iowa), **Kelly Hansen** (ME, Fruitdale), **Bob Hodgson** (IE, Lemmon), **Aubree Horan** (Chem/ChE, Mitchell), **FeMarie Miske** (Chem, Rapid City), **Adam Schulz** (CEng, Emery), **Joe Steinbronn** (ChE, Howell, N.J.), **Corinne Vottero** (IS, Rapid City), **Liz Weimer**

(ChE, Miles City, Mont.), and **Justin Williamson** (ME, Yankton).

## Students participate in math modeling contest

Three School of Mines students put their math modeling skills to the test when they competed in the 21st annual Mathematical Contest in Modeling. The team earned an honorable mention that places them in the



top half of an international contest which involves over 700 teams worldwide.

In the contest, teams of three undergraduate students were given open-ended complex problems. The teams needed to research the topic, develop a mathematical model, use a computer to simulate the model, and write a technical report.

The team worked on a sprinkler irrigation problem where the students needed to devise a procedure that would involve the setup and management of a portable aluminum sprinkler system that is commonly used to irrigate fields.

The students: **Benjamin Edwards** (CEng/Math, Casper, Wyo.), **Susan Larkin** (EE/Math, Highlands Ranch, Colo.), and **Daniel Rausch** (CSc/Math, Big Stone City).



# Campus Briefings

## Employers recruit students during career fair

More than 55 companies from across the country came to campus February 9 to recruit South Dakota School of Mines and Technology students for full-time employment and internships. This was the largest Spring Career Fair in the university's history.

Less than six months after graduation, more



than 90 percent of 2004-2005 School of Mines graduates found

work in their career fields or are attending graduate or professional programs. Those that entered the workforce received average starting salaries of approximately \$48,000. In addition, more than 76 percent of graduates had relevant work experience through co-ops and internships, which increased their marketability to employers.

"The trend in the past few years is companies are scaling back the number of schools that they are recruiting at," Darrell Sawyer, director of Career Planning and Placement at the School of Mines, said. "Companies spend a fair amount of resources and time to visit our campus, even though we're a small school and are not conveniently located. That speaks for itself."

## School of Mines holds health and wellness expo

The seventh "Matters of the Heart: A Health and Wellness Expo" was held February 16 at the School of Mines.

The annual fair focuses on health issues for young people, such as sports injuries, nutrition, drug, alcohol, and tobacco use and abuse, stress management, and other issues young



people face. The School of Mines also invites high school

students and young adults to attend. Highlights included massages, body fat analysis, dorm room workouts, healthy relationship information, and push-up and sit-up contests.

The purpose of Matters of the Heart is to increase awareness and provide information to students on health issues, as well as offer them free health screenings.

More than 400 people attended the February event in which community and campus organizations provided information and activities at 41 booths.

## School of Mines and partners receive funding for 2012 projects

The School of Mines, the City of Rapid City, and the Rapid City Area School District received funding for a 2012 project proposed under the program's civic improvements component to install high-quality, state-of-the-art artificial turf in O'Harra Stadium in order to further enhance the athletic facility.

This synthetic turf will allow for all-weather playability, intensive use, and low maintenance. More than 50,000 fans attend football games, track and field events, soccer matches, and other events at the School of Mines O'Harra Stadium each year. The upgrade of O'Harra Stadium's field surface to field turf will be the final piece in making Rapid City's outdoor stadium a first-class facility.

Other approved projects include portable bleachers for O'Harra Stadium and a connector road from St. Patrick Street to the campus.

## School of Mines professor recognized

Dr. Carter Kerk, associate professor, industrial engineering, was recognized by the American Society of Safety Engineers (ASSE) with the Distinguished Service Award.

In addition to this award, the ASSE Foundation has created the Carter J. Kerk Distinguished Service Award Scholarship. This scholarship provides an annual award of \$2,000 to one student pursuing an undergraduate degree in occupational safety and health or a closely related field.

"We are proud of Dr. Kerk's service commitment at both the campus and the national level," Dr. Stuart Kellogg (M.S. EE82), industrial engineering program director, said. "We congratulate him on this national award."



The School of Mines is committed to an active research program that expands knowledge, pushes technological and scientific advancement, and contributes to economic development in the state and region.

In fiscal year 2005, School of Mines' researchers received more than \$12.7 million in sponsored research and development funding, an increase of almost a million dollars over the previous year.

The School of Mines is home to several research institutions and centers. Plans are currently underway to expand the number of graduate degrees and to enhance the technology-transfer process.

**Casey Allen** (ME94), research scientist II, Advanced Materials Processing and Joining Laboratory; and **William Arbegast**, director, Advanced Materials Processing and Joining Laboratory, and instructor, materials and metallurgical engineering, received \$2,900 from the United States Department of Defense (Subaward: Rockwell Scientific, Inc.) for the project, "Friction Stir Processing of Cast NiAl Bronze."

**William Arbegast** and **Dr. Anil Patnaik**, assistant professor, civil and environmental Engineering, received \$50,000 in additional funding from the National Science Foundation for the project, "Friction Stir Processing Industry/University Cooperative Research Center."

**Dr. Andrew Detwiler**, chair and professor, atmospheric sciences, received \$127,002 from the National Science Foundation for the project, "Intergovernmental Personnel Act Associate Program Manager Assignment to National Science Foundation."

**Dr. David Dixon** (ChemE78), professor, chemical and biological engineering; **Dr. Kyle Felling**, former assistant professor, chemistry; and **Dr. Jacek Swaitkiewicz**, instructor and research scientist II, chemical and biological engineering, received \$99,990 from the United States Department of Defense—United States Army—ARDEC for the project, "Development of New Classes of Optical Materials Based on Dendrimer/Polymer Composites."

**Dr. Edward Duke**, manager of analytical services, Engineering and Mining Experiment Station, and professor, geology and geological engineering, received \$243,842 in additional funding from NASA for the project, "South Dakota Space Grant Consortium." **Dr. Duke** also received \$18,499 in additional funding from the National Science Foundation (subaward from Oglala Lakota College) for the project, "Technical Support for Oglala Lakota College (OLC) Environmental and Remote Sensing Labs."

**Dr. John Helsdon**, professor, Institute of Atmospheric Sciences, received \$100,000 in

additional funding from NASA for the project, "3-D Modeling Studies of Lightning-Produced Nitric Oxide with an Explicit Lightning/Electrification Model."

**Dr. Mark Hjelmfelt** (M.S. Mtro75), chair, atmospheric sciences, and professor, Institute of Atmospheric Sciences; and **Dr. William Capehart**, associate professor, atmospheric sciences and Institute of Atmospheric Sciences, received \$99,990 from the United States Department of Defense—United States Army—ARDEC for the project, "Atmospheric Sciences Technology and Applications to Support NAMK and NAGIK Projects."

**Dr. Jon Kellar** (MetE84), chair and professor, materials and metallurgical engineering; **Dr. Lidvin Kjerengtroen**, professor, mechanical engineering; and **Dr. William Cross** (MetE84), instructor and research scientist III, materials and metallurgical engineering, received \$150,000 in additional funding from the United States Department of Energy for the project, "Interphase Analysis and Control in Fiber Reinforced Thermoplastic Composites."

**Dr. Scott Kenner** (CE77), chair and associate professor, civil and environmental engineering, received \$55,923 from the United States Department of Defense—United States Army Corps of Engineers for the project, "Computer Modeling of Segment 7 of the Missouri River to Study Sediment Transport Relationships Relevant to Endangered Species Habitat Restoration."

**Dr. James Martin** (Geol71), professor emeritus, geology and geological engineering, received \$19,336 from the United States Department of Interior—National Park Service—Badlands National Park for the project, "Curatorial Backlog of Museum Specimens, Badlands National Park."

**Dr. Gautam Pillay**, vice president for research and professor, chemical and biological engineering; **Dr. James Sears**, director, Additive Manufacturing Laboratory; **Dr. Keith Whites** (EE86), professor and Steven P. Miller chair, electrical and computer engineering; **Dr. Vojislav Kalanovic**, chair and professor, mechanical engineering; **Dr. Robb Winter**, chair and professor, chemical and biological engineering; **Dr. Daniel Dolan**, professor, mechanical engineering, and co-director, Center of Excellence for Advanced Manufacturing and Production (CAMP); **Dr. David Boyles** (Chem78), professor, chemistry; **Dr. Hao Fong**, assistant professor, chemistry; **Dr. Karim Muci**, associate professor, mechanical engineering; **Dr. Teresa Corbin** (Chem80), research scientist II/computer programmer, graduate education and sponsored



## Research Notes *continued*

programs; **Dr. David Dixon**, professor, chemical and biological engineering; **Dr. Haiping Hong**, research scientist III, materials and metallurgical engineering; **Dr. Michael Batchelder**, professor, electrical and computer engineering, and co-director, Center of Excellence for Advanced Manufacturing and Production (CAMP); **Dr. Alan Anderson** (MetE90) former instructor and research scientist II, materials and metallurgical engineering; **Dr. John Weiss**, associate professor, mathematics and computer science; **Dr. Umesh Korde**, associate professor, mechanical engineering; **Dr. Brian Hemmelman** (EE92), associate professor, electrical and computer engineering; **Dr. Michael Langerman** (ME72), professor, mechanical engineering; **Dr. Lidvin Kjerengtroen**, professor, mechanical engineering; **Dr. Gregory Buck**, associate professor, mechanical engineering; **William Arbegast**, director, Advanced Materials Processing and Joining Laboratory, and instructor, materials and metallurgical engineering; and **Casey Allen**, research scientist II, Advanced Materials Processing and Joining Laboratory, received \$1,794,263 in additional funding from the United States Department of Defense—Army Research Laboratory for the project, “Advanced Materials and Processes for Future Combat Systems.”

**Dr. Pillay**; **Dr. Patrick Zimmerman**, director and professor, Institute of Atmospheric Sciences; and **Ms. Donna Kliche** (M.S. Mtro90), research scientist II/computer programmer, Institute of Atmospheric Sciences, received \$71,401 from the National Science Foundation (subaward from South Dakota State University) for the project, “National Science Foundation EPSCoR Rushmore Initiative for Excellence in Research (Tower Maintenance—Cottonwood Tower and Black Hills Flux Tower).”

**Dr. William Roggenthen** (GeolE69), professor, geology and geological engineering, received \$102,252 from the National Science Foundation (subaward: University of California—Berkley) for the project, “Deep Underground Science and Engineering Laboratory Site and Conceptual Design.”

**Dr. Karen Whitehead**, provost and vice president for academic affairs; **Dr. Jennifer Karlin**, assistant professor, industrial engineering; and **Dr. Andrea Surovek**, assistant professor, civil and environmental engineering, received \$168,564 from the National Science Foundation (subaward: University of Idaho) for the project, “Implementation of Women’s Mentoring Program to Increase Retention of Female Undergraduate Science and Engineering Students at the South Dakota School of Mines and Technology.”

**Dr. Robb Winter**, chair and professor, chemical and biological engineering; **Dr. Jacek Swiatkiewicz**, instructor and research scientist II, chemical and biological engineering; **Dr. Jan Puszyński**, professor,

chemical and biological engineering; and **Dr. Daniel Heglund**, chair and associate professor, chemistry, received \$310,251 from the National Science Foundation for the project, “Development of an Extended Wavelength Pulsed Laser System for Vibrational Sum-Frequency Generation Spectroscopy.”



**SOUTH DAKOTA**  
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**SCHOOL OF MINES & TECHNOLOGY**

# Visit Mines

**Friday, July 14, 2006 and  
Saturday, November 4, 2006**

Events begin at 8:00 a.m. and  
conclude at 3:30 p.m.

- Welcome Session
- Tour the campus with Student Ambassadors
- Tour departments and speak with professors
- Visit residence halls

South Dakota School of Mines  
and Technology  
Rapid City, SD

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# *Featured Major*

## *Biomedical Engineering Ph.D.*

- Annual stipends of up to \$30,000
- School of Mines researchers generate more than \$12 million in research awards
- World-class recreational opportunities in Rapid City and the Black Hills

The School of Mines, in conjunction with the nationally ranked University of South Dakota Sanford School of Medicine, will begin offering a Ph.D. in Biomedical Engineering July 1, 2006. The new doctoral program will focus on the emerging field in the delivery of health care by applying engineering and science methods to the analysis of biological and physiological problems. Applications are being reviewed. For more information, visit <http://sdmines.sdsmt.edu/BioMedEng>.

Current biomedical engineering focus areas of faculty research activity include:

- Biomaterials (nanomaterials, bioadhesives, and tissue engineering)
- Computational biomedical engineering (biomechanics, imaging, advanced modeling/simulations)
- Assistive Technology/Rehabilitation Engineering (advanced prosthetics, control, biomimetics)

## Prepare for your successful career at the School of Mines

### *Co-ops and Internships*

- More than 76 percent of School of Mines graduates have relevant work experience through co-ops and internships. That increases their marketability to employers.

### *Average Starting Salaries*

- 2004-2005 graduates averaged starting salary offers of more than \$48,000! That shows employers are looking for students with the kinds of skills School of Mines graduates have.





# Area Meetings



## Rapid City, South Dakota – M-Day 2005

Alumni President **Everett Bloom** (MetE63) accepted the gavel from outgoing Alumni President **Tom Zeller** (ME72) during the 2005 M-Week activities.



*Seniors pose with their plaque at the start of M-Week*

The campus descended en masse to the All-School Picnic, then ascended M-Hill to witness the right of passage for seniors and frosh. The senior plaque was set a week earlier and the annual markers have begun their path across the bottom of the “D” with this year’s class.



*Howard “Dean Pete” Peterson (GeolE50) sports a Senior Hat and Beanie at the M-Day game.*



*Past President **Tom Zeller** (ME72) and wife Sharon chauffeur Alumni President Bloom in the M-Day Parade.*



*Frosh take a lap around Dunham Field to become freshman.*



*Alumni **Art Hunt** (ME65) and **Everett Bloom** (MetE63) on left, and **Tom Zeller** (ME72) and **Paul Gnirk** (MinE59) on right, join Homecoming Queen **Jen Pazour** (IE, Pukwana) and Homecoming King **Clark Wismer** (EE, Britton).*

Saturday brought M-Day to its crescendo with the parade and homecoming game. Freshman quarterback Frank Vanskike tossed a 13-yard touchdown pass to Grant Neff with 6:42 to play in the game to give the Hardrockers and new coach Dan Kratzer a 19-18 win over Mayville State in the annual M-Day Homecoming game.

Sunday’s warm fall weather greeted foursomes of students, alumni, and staff at the fourth annual Student Alumni Connection (SAC) golf tourney and picnic. Sixty-five golfers participated in the 9-hole tournament. Special thanks go to SAC President Jen Pazour (Homecoming Queen) for organizing the event.





SAC Golf Tourney Alumni **Ken May** (CE61) and **Jerry Brown** (CE65) with student shooters **Brad Schaack** (ME, Vermillion) and **Mike Pontbriand** (ChE, Beulah, N. Dak).

## Casper, Wyoming

The fine dining at the Casper Petroleum Club once again proved a draw for area alumni in October 2005. So too was Alumni President **Everett Bloom** (MetE63) as he embarked on his first of many Area Meetings. Thanks go to Club member **John Dolan** (GeolE77), **Mark Opitz** (CE74), and **Rich Arnold** (GeolE96) for once again arranging a great evening and hosting the visiting President Bloom at his first road meeting.



**Jack Hoard** (Phys74) (left) talks with **Mark Opitz** (CE74) and **Everett Bloom** (MetE63).

## Twin Cities, Minnesota

A great cross-section of alumni and guests gathered in early November at Majors Sports Café in Bloomington, Minnesota, for an evening of School of Mines information, food, and fun. President Charles Ruch and Foundation Development Vice President **Brad Johnson** (EE92) joined the group to share the university's plans for the future and the "Building



**Brad Johnson** (EE92) addresses the Twin Cities audience.

the Dream" presentation. University Relations Vice President Julie Smoragiewicz also joined the event and continued to stay in the area for recruiting meetings. The Twin Cities chapter and many area alumni have helped the School of Mines for years with college recruiting fairs, high school visits, and an area scholarship. Thanks go to **Bob** (CE96) and **Rhonda Dehler** (CE92) for their help, despite being unable to attend due to the upcoming arrival of their new daughter.

## Denver, Colorado

Denver, Colorado area alumni kicked off the 2005 holiday season in December with several events for alumni, families, and friends of the School of Mines. The Denver, Colorado area is one of our largest and most active alumni chapters. President Charles Ruch, Alumni President **Everett Bloom** (MetE63), and other campus representatives attended two special alumni events: a Saturday evening dinner at Cinzetti's and a Sunday morning brunch at the Radisson Graystone Castle restaurant. Both venues involved attendees in a discussion



The Denver dinner group at Cinzetti's.



*The Denver brunch group at the Radisson.*

following the “Building the Dream” presentation. Several alumni and campus representatives also were involved in recruiting events on Sunday. Alumni are always welcome to help convey the value and education available at the School of Mines, and provide positive examples of student success and career accomplishments.

The Denver chapter thanks **Tania** (IS98) and **Jake Vogel** (GeolE99) for many years of leading the area meetings and events. If anyone in the Denver area would like to be Jake and Tania’s successors in the Front Range, please contact the Alumni Office at <alumni@sdsmt.edu> or (605) 394- 2347.

## Knoxville, Tennessee

**Dr. Larry Simonson** (EE69) gathered a few hardy souls from Knoxville, Tennessee early in December



**Dr. Ray Peterson** (MetE80), **Dr. Sally and Dana Peterka** (Chem67), **Drs. Billie and John Collier** (ChemE61), **Doug Roeber** (MetE69), **Mark Reimnitz** (ME81), and **Frances Roscoe VanWinkle** (ChemE42).

2005. Larry quipped that although he enjoyed seeing several MetE and other alumni, not a single EE alumni in the Knoxville area missed the meeting, (seeing how he was the only one and there are only six EE’s in all of Tennessee). Alumni in attendance look forward to gathering again for Alumni President **Everett Bloom** (MetE63) who was attending the Denver event on the same day. Thanks go to Larry for gathering an alumni crowd wherever he travels.

## Spokane and Woodinville, Washington

Spokane and Woodinville, Washington, welcomed distinguished representatives of both the Alumni Association and the Foundation early in December.



**Gene Skinner** (GeolE53) shows *Santa Skinner's* list of attendees.



*The Spokane Group in front of the Christmas tree.*





*Gina Ahlers, Rod Pappel (ME77), and Chris Ahlers (CEng00).*



*Steve Morgenstern (ME83), and Connie with Janis and Mike Morgenstern (MinE76)*



*Josh Sting (CEng03) and Jody Mayberry (IE03)*

The Eastern Washington Area's 17th Annual Alumni social during the Northwest Mining Association Convention was led once again by Area Vice President **Gene Skinner** (GeolE53). **Dave Shaddrick** (Geol71) and **Bob Turner** (CE52) advanced their perfect attendance once again.

Alumni President **Everett Bloom** (MetE63) made his first appearance in Spokane and past Alumni President **Paul Gnirk** (MinE59) returned to see old friends. Alumni Director **Tim Vottero** (Chem84) updated all on campus activities in Spokane. Foundation President **Rod Pappel** (ME77) joined the group on the west side of Washington to help with the meet and greet in Woodinville.

Seattle area alumni met at the Redhook Brewery for another season holiday mixer. **Chris Ahlers** (CEng00) helped with the arrangements both in Woodinville and in Redmond, Washington where Microsoft alumni gathered earlier that day for lunch and news from campus. Area alumni are on the lookout for a new venue for December 2006, so please let us know if you have any ideas for a good holiday social location.



*Rod Pappel (ME77), Marlene Nelson (ME74), Linda Barnes (Math74), and Paul Gnirk (MINE59).*

## Pierre, South Dakota

Even though it was zero-dark thirty on the morning of January 7, 2006, many faithful School of Mines alumni were already up and stirring about. Alumni in Pierre, outfitted in their lucky chef suits, were busy cooking chilis, soups, and mystery meats in



# School of *Reaching Out*



In the traditional Engineers Week Grubby Games, middle school students see engineering and science at work in hands-on activities.



During a press conference held at the Tech Center, Mike Derby and partners including the School of Mines and economic development ventures that...



More than 100 children constructed buildings out of blocks during the Kids' Block Contest at the School of Mines. The event was held during Engineers Week.



# of Mines ing Out



Development Lab, Black Hills Vision chairman  
ool of Mines outlined progress and plans for  
will benefit the city, region, and state.



Students built and embellished their own airplanes for  
competition during the Grubby Games.



Students, fans, and friends helped Grubby celebrate his 35th birthday this fall.



*Clyde Jundt (CE57), Everett Bloom (MetE63), Wally Larsen (MinE53), and Dustin Witt (CSC05).*

hopes of capturing prizes in the prestigious chili/soup and mystery meat food contests. For this day, you see, was to be held the 11th Annual SDSM&T Alumni Tailgate Party organized by Tracy (CE91) and Dan Painter (CE90).

Jeanne (GeolE79) and Jim Goodman (GeolE71) welcomed the tailgaters, while televisions to watch the football games were carried in and hooked up, tables arranged and draped with festive cloth, and crock pots began lining the walls. Chili/soup and mystery meat entries were an assortment the likes of which had never been seen.

Alumni Director Tim Vottero (Chem84) officially opened the party by recognizing our own Bob Longbons (GeolE80) for being inducted into the Christensen Hall of Fame football the past fall. Then Alumni President Everett Bloom (MetE63), recognized Wally Larsen (MinE53) and Clyde Jundt (CE57) as the most senior grads and Dustin Witt (CSC05) as the most recent grad in attendance. Following their remarks, both the football games and food contests began. There was a rush to the food line, and soon all through the cabin, 66 people were sampling and scoring each culinary delight.

By halftime, plates were empty, palates were burned, stomachs were full, and score sheets were turned in. Alumni Association Vice President Dr. Paul Gnirk (MinE59) and Steve Pirner (CE72) began the Tailgate half-time show by awarding the first game board prizes and a raft of door prizes. Meanwhile, Mike Cepak (MinE76) and Nayyer Syed (Geol94) burned up their calculators totaling the food scores in time



*Master Chefs – Steve Kropp (GeolE94), Bernie Clocksin (CE86), Steve Pirner (CE72), John Childs (CE92), Mike Perkovich (MinE83), and Tracy Painter (CE91).*

for Everett Bloom to announce the winners.

#### Master chefs in the chili/soup division:

- First place: “Scrumptious Cheesy Potato Soup” by **John Childs** (CE92)
- Second place: “Smoke’n Steak Chili” by **Bernie Clocksin** (CE86)
- Third place: “Smooth Taco Chili” by **Steve Pirner** (CE72)
- Fourth place: “Old Milwaukee Pork Stew” by **Mike Perkovich** (MinE83)

#### Master chefs in the mystery meat division:

- First place: “Grubby’s BBQ Beef” by **John Childs** (CE92)
- Second place: “Mountain Man Hot Poppers from Heaven” by **Steve Pirner** (CE72)
- Third place: “Mini Pigskins” by **Tracy Painter** (CE91)
- Fourth place: “Grubby Q” by **Steve Kropp** (GeolE94)



*Carol and Everett Bloom (MetE63) flanked by Gloria and Vernon Bump (GeolE61).*





*Herreid, South Dakota travelers Bonnie and Tom Ochsner (MinE78) with Rapid City traveler and sister Kristi Ochsner.*

With the food contests out of the way, it was time to get serious about the football games, playing pinochle, and dulling the still-flaming taste buds. All too soon, it was time for a second half-time show. Dr. Paul Gnirk led a cadre of alumni in a rousing chorus of that famous “Engineer’s Song”. They did so well that Dr. Gnirk promised to return next year to lead them in even more verses of this age-old favorite School of Mines song.

*Respectfully (and accurately) submitted by Steve Pirner.*



*Carol and Everett Bloom (MetE63).*



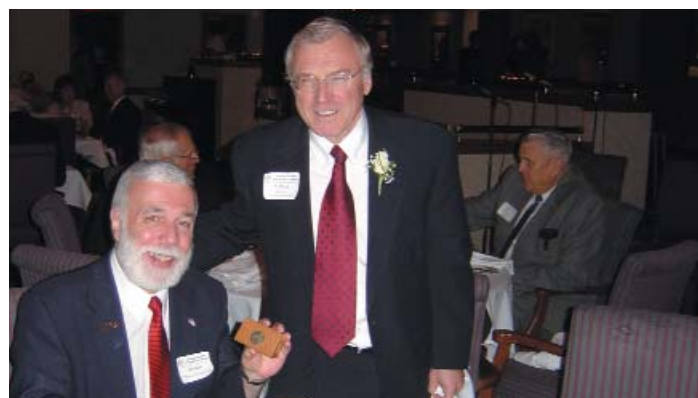
*Barbara Zell with the Blooms.*



*The Pierre Tailgate Posse.*

## Rapid City, South Dakota – 49th Annual Alumni President’s Dinner

A festive crowd of alumni, students, faculty, and friends — including the Mayor of Rapid City, local economic development leaders, and local legislators — joined past alumni presidents from four decades



*Rapid City Mayor Jim Shaw with Everett Bloom (MetE63).*

to help honor our 2006 International Alumni President **Dr. Everett Bloom** (MetE63). Everett serves as our fifty-eighth alumni president and his leadership, experience, and mentoring benefit our alma mater in many ways.

A native of Doland, South Dakota, he earned his



*Everett Bloom (MetE63) received the "Guidebook" from Tom Zeller (ME70).*

Bachelor of Science degree in Metallurgical Engineering in 1963 from the School of Mines. Dr. Bloom then earned his M.S. and Ph.D. degrees, also in MetE, from the University of Tennessee, Knoxville. Everett joined the Oak Ridge National Laboratory staff in 1964 with the Metals and Ceramics Division and served as its director through January 2006. Dr. Bloom also currently serves on the School of Mines Academic Advisory Board and received the SDSMT Distinguished Alumni Award in 2003.

Special thanks go to the School of Mines Master Chorale, School of Mines Music Director Dr. James Feiszli, and Barbara Zell and Immediate Past President **Tom Zeller (ME70)** for their time and talents providing entertainment at the event. Several additional photos from the evening are posted in files linked under "Recent Alumni News" found via the Alumni webpage at [www.sdsmt.edu/alumni](http://www.sdsmt.edu/alumni).

## Los Altos Hills, California

Marka and **Bill May (EE57)** hosted a special event at their home in February 2006 that welcomed several San Francisco area alumni and campus representatives. School of Mines President Charles Ruch and Foundation President **Rod Pappel (ME77)** joined the group with news from campus and a discussion of the "Building the Dream" presentation. Special thanks go to Marka and Bill for hosting this dinner.

Dr. Ruch and Pappel also presented **Dr. Robert I.**



*Rod Pappel (ME77), Dr. Charles Ruch, and Dr. Robert Chen (M.S. EE73).*



*Sally Ruch and Marka May*

**Chen (M.S. EE73)** with his 2005 Distinguished Alumni Award that evening. A native of Taiwan, Dr. Chen received his master's degree in electrical engineering from the School of Mines. He was selected for his tremendous successes in both corporate and entrepreneurial ventures. Dr. Chen was unable to attend the commencement ceremony in December 2005 to receive his award. His complete citation, along with those of the other four recipients, is posted under "Recent Alumni News" on the Alumni webpage at [www.sdsmt.edu/alumni](http://www.sdsmt.edu/alumni).





**1930's**

**Lester Basham** (MetE34) celebrated his 96th birthday in October 2005.

**1940's**

**Lew Beebe** (Geol43) sent updates on his children. "Steven is an architect with M.F. Twichell in Dallas; Pam is an RN in Lafayette, Louisiana; and Betty is with State Farm Bank in Normal, Illinois."

The Alumni Association was notified that Mary Colgan, wife of deceased alumnus **Arthur Colgan** (EE47), passed away September 2, 2005, in Eugene, Oregon.

Vera and **Harley Erickson** (EE49) continue to "live it up" on the shore of Lake Conroe, Texas. They drive into Houston every two weeks to M.D. Anderson Cancer Center for treatment of his disease. He is on a new infusion drug, Avastin, which seems to have arrested the growth of an inoperable tumor. They both feel great.

**Cliff Flittie** (MinE48) wrote, "I have been retired 17 years after 41 years in the international oil industry and still miss the travel and fascination of foreign oil exploration."

**James Grode** (EE40) was hoping to attend the 2005 reunion; however, a stroke in February changed his plans. "I can no longer play golf, but I can still drive an auto."

**Orvil Johnson** (EE43) had a pleasant visit with **George Whitehead** (EE43) in Aurora last summer. He writes that those "good old" days of the early '40s seemed better then ever. He also visited with **John Babcock** (CE43) in Watertown, South Dakota.

**Mitch Liss** (ChemE47) was hoping to attend the 2005 reunion, but his wife's health didn't permit them to travel. He was restricted at home for a total of three weeks from triple bypass surgery. He misses the Black Hills of South Dakota and the ability to drive.

**Tom Malone** (GenE40) has four new great-grandchildren for a total of 16!

**Harold Richardson** (MetE41) had two great-grandsons in 2005.

**John Shedd** (GenE42) and his wife Winifred are doing very well for being in their mid 80's. He adds, "The Lord continues to bless us and keep us in good health. We have 15 grandchildren—all wonderful children!"

**Ray Simpson** (MetE43) wrote, "Every Columbus Day weekend we miss the Alumni barbeques that **Joe Rowett** (MetE43) used to throw in Ojai, California."

**Elmer Tomsha** (EE42) reported that he had enjoyed his 86th birthday on the family farm that is being operated by the fourth generation. "How things have changed in my lifetime."

**Robert Winkler** (CE43) wrote to let us know that his wife Joan passed away on August 7, 2005.

**Chris Woods** (CE48) and his wife Alice spend summers in Edina, Minnesota and winters in Chandler, Arizona. Chris wrote, "Sorry we missed the reunion this year but we had a Woods' reunion in Colorado conflict."

**1950's**

**Chuck Braun** (Chem59) retired from Dartmouth in June 2005.

**Art Childers** (CE51) wrote, "I'm sorry we missed the reunion, but my wife Rachel broke her back and I suffered from kidney stones, gallstones, and liver problems. Next year is bound to be better. I'm still active as Chaplain for Sons of American Legion, driving cars for Enterprise Rent-a-Car, and a Methodist Church Trustee."

**Gerald Desjarlais** (CE57) reported that his company, Denali Materials, downsized in 2000 from a rather large general contractor to a material supplier. Their daughter Sherri and her husband Jack joined the company in 2003. They invite anyone coming to the Anchorage area to give them a call at (907) 243-4494.

**Al Dougal** (CE50) sent this note: "The 2005 reunion was the best ever. The cardiologist installed four stents in my heart last March and now plans to install a pacemaker in January. However, I feel fine and these new devices will keep me that way."

**Gary Evans** (Chem55) remarried in January 2005 to Frances Evans. Gary's first wife of 45 years, Joan, passed away in June 2002. Gary is enjoying his retirement.

**Max Gassman** (ME56) will teach one mechanical engineering course at Iowa State for the spring 2006 semester. "My granddaughter, Nicole, is studying mechanical engineering and will start work at the John Deere Product Engineering Center in May 2006. I worked at this facility for 29 years, so she will walk in some of my footsteps."

A note from **Albert Gilles**

(GeolE52): "I have been very fortunate to have good health. I am involved with church and community duties and I bowl two times a week. I had a very good time at this year's reunion and also my 60th high school reunion."

**Harold Hanson** (EE53) has been retired for 20 years. Occasionally he still has nightmares that he is back at work! Harold and his wife Julane traveled to Redmond, Oregon the summer of 2005 for the Great North American RV Rally. They spent Thanksgiving with their family in Fairfield and Elk Grove, California.

**Bob Hayes** (MinE51) writes, "My wife Barbara has had a non-malignant tumor removed four times and is suffering from dementia. I am fortunate that I am able to keep her at home. We just finished 42 years of marriage in November 2005. I write a weekly column for the Hill City Prevalier News. I have not missed a week for 13 years."

**William Hoskins'** (ME51) wife Virginia passed away on July 17, 2005.

Dorothy and **Harlan Isaak** (Phys57) moved to San Clemente, California over two years ago. "We love the area and the closeness to the beach. We have four grandsons and one granddaughter. We see them on a regular basis."

**Charles "Dave" James** (ME51) reported, "Lois and I celebrated our 55th wedding anniversary June 2005 during a trip—a family reunion in Nebraska. We were sorry to miss the Mines reunion in July, but our slow-down lifestyle prevented our being with

you all. Both of us will join the 80-year-old group in 2006."

**Bruce Johnsen** (CE59) is a management consultant. "Much of my work is focused on large and small partnerships and family businesses. The objective is to help them function smoothly and successfully and have some fun along the way. I'm trying to take more vacations too! Vancouver Island in September 2005 was a wonderland of beautiful shorelines, charming towns, and alpine mountains."

**Al Johnson** (Chem52) and his wife Elsie noted, "What a great summer we had with 23 weeks in the Black Hills and a great reunion. We've been to most of them but this one topped them all. We can't wait for the next one!"

**Gordon Johnson** (ME52) and his wife Evelyn enjoyed travel in their RV this past summer. "We're looking forward to more in 2006. Happily, we're pretty healthy and are enjoying Florida living."

**Alan Liffengren** (ME57) enjoyed Thanksgiving at Jeri and **Loren Henry's** (CE55). They celebrated his mother's 93rd birthday in September.

**Wesley Mendenhall** (CE58) now has a grandson, Matt Rumfield, attending the School of Mines.

**John Mohr** (EE56) went to the World Badminton Championship in Anaheim, California to watch the great players. "It was especially exciting when the USA men's doubles team won the gold. It was the first ever badminton medal for the USA in world or olympic competition. We had lunch with **Robert Bush** (CE57)

and his wife. They live nearby in Manhattan Beach."

**Neil Nerison** (ME58) and his wife Leah recently moved from Bothell, Washington to Sioux Falls, South Dakota.

**Donald Peterson** (ME50) wrote, "Health is great—no pills. With six months in New Jersey and six months in Florida, I'm slowly gaining in shooting my age in golf."

**Ward Spear's** (EE51) wife of nearly 57 years, Louise, died September 26, 2005 in Richland, Washington. "Louise and I were married November 25, 1948 in Rapid City, South Dakota."

**Horton "Curly" Steinmeyer** (EE50) wrote, "36 friends, neighbors, and family got together on October 9, 2005, to celebrate my 80th birthday—a great day!"

**Bert Thomsen** (GeolE59) really hated to miss the reunion in July. "Had to stay close to home and doctors, owing to some 'old age' problems."

**Bill Tucker** (GeolE56) reported, "Nancy traveled to South Korea with me in October 2005 for a board of directors meeting, and then we led a delegation to Taiwan at the invitation of the Taiwanese government. Both were wonderful trips. We had meetings with high-level government officials in Taiwan and also a university that is interested in a cooperative arrangement with the School of Mines. Nancy and I then spent two days in Hong Kong prior to returning to Washington, D.C."

**Tom White** (GenE59) and his wife



Elaine are enjoying good health and life in Arizona during the winter and Ohio and Kentucky the rest of the year. "I witness our faith by subbing in the local schools nearly every school day. Our four children and ten grandchildren are a joy."

**Monte Widdoss** (EE59) retired in 1998. He is consulting to Science Applications International (SAIC) Corporation normally two days per week. He plays golf three days a week.

**Ward Zimmerman** (ME50) wrote, "I see Warren Mitchell (Professor of Structural Mechanics and Dynamics, 1949- 52) and his wife, Margaret, frequently. I also see **Elinor** and **Jack Meeker** (EE47). Jack was a boarding house roommate with my older brother, **James Zimmerman** (EE43). Last April I flew with my brother **Robert** (Phys48) to Brazil, piloting his 1963 Mooney. We are both pilots, but he enjoys navigating and calculating aircraft performance in flight, so I get to pilot! Our longest non-stop leg was from Alta Florista in west-central Brazil to Ribeirau Preto in the east. It was 7 hours, 5 minutes. We had to switch to our reserve tank for fuel for our approach and landing. We saw some great scenery in Brazil!"

### 1960's

**Ted Andrews** (CE62) wrote, "Nothing exciting this year. I'm still able to golf, bowl and do yard work, but it takes longer now. We're still blessed with good help at 85 plus for both Louise and me. We just don't travel much anymore. We're still active in our church and enjoy visits from our family."

**Conrad Ballweg** (EE69) has

retired from the U.S. Army Corps of Engineers. "I have been doing some part-time math instruction at our local Arizona Western Community College."

**Warren Bamesberger** (Chem60) announced, "Our first grandchild, Kevin Lee Bamesberger, was born October 16, 2005, right here in Pullman, Washington. Maybe one never gets too old to become a grandparent."

**Warren "Barney" Barnum** (CE61) wrote, "My son Tom Barnum (MinE84) is now Lt. Col. W.T. Barnum, USMCR. He was recalled to active duty June 1 and left for Iraq on September 5, 2005. He is in Fallujah helping to rebuild the infrastructure. The rest of us are okay."

**Vince Bertolotto** (ME67) has been enjoying retirement most of the time. "Liz and I celebrated New Year's eve on the Riverwalk in San Antonio. After returning home, I slipped and fell on the ice in my driveway and broke my left femur. The rod to repair this leg gave me matching legs, since I did the same thing to my right leg in a car accident five years ago, shortly after retirement."

For our spring vacation we flew to St. Lucia in March and did some snorkeling and a lot of sightseeing. For our summer vacations we flew back to Houston to visit our youngest daughter Sara and family. While there my son-in-law and I drove down to Galveston and went on a four-hour fishing charter. We each got our limit of two sharks, 3-4 feet long, but that was about it. We also spent a week in Wisconsin's north woods enjoying the outdoors with our oldest daughter Dawn and her husband from McHenry, Illinois. "

**Karl Blaufuss's** (CE62) son Eric is working at the University of Maryland as Assistant-Research Scientist in Physics. He received his Ph.D. in Physics from LSU. Karl's daughter Diana is working for Daniel-Mann-Johnson-Mendenhall (DMJM-Harris) as a civil engineer. She received her BSCE from State Polytechnic University in Pomona, California.

**Harold Bross** (MetE68) has been working in Houston since September 1, 2005. "1,000 Shell employees evacuated from our New Orleans office due to damage to our homes and One Shell Square (OSS) in downtown New Orleans. We will all return to OSS by February 20—one week before Mardi Gras. I will be retiring on March 31 after almost 38 years with Shell. We are planning to remain in the New Orleans area. I will work as a Shell loaned executive dedicated to the rebuilding of New Orleans after Hurricane Katrina."

**Alfre Broz's** (Phys68) daughter, Alissa Ann, is a sophomore at St. Olaf College in Northfield, Minnesota.

**Carl Coad** (Math60) wrote, "Mom (Neva Coad) died on February 26, 2005, in Rapid City, so we were out there for her funeral, and then I returned the middle of May with my two sons-in-law to clean out Mom's house to prepare for sale. I sold it on June 30. With two trips to Rapid City already for 2005, I missed the reunion in July. It was the first one I had missed since 1965. I will try to be there in 2010, as that will be my 50th anniversary."

**James Copps** (ME66) retired after 14 years from the Department of Justice. He is enjoying his new

home and activities at Del Webb, Sun City, Texas.

**Jim Crouch** (MinE68) really enjoyed the alumni meeting and dinner in Casper, Wyoming. "Things are slowing down—the farm work is about all caught up, so I'm sitting in front of the fire to avoid the sub-zero Wyoming weather."

**Alan Frelberg's** (ME68) son Trent, a Clemsom mechanical engineer and Duke M.B.A., moved from Houston to Shanghai, China in January 2005. He is manager of Strategic Sourcing for Cooper Asia. He and his wife Charlotte had a second son, Alex, who joins big brother, Whit. "Since my airplane is not big enough nor fast enough to fly from Mobile, Alabama to Shanghai, I will be forced to take the airlines to visit these grandchildren."

**Thomas Grimshaw** (Geol67) has been living in Austin, Texas nearly 40 years. "I'm working for Shaw Environmental and Infrastructure, Inc., one of the largest firms providing services in the U.S. I am mostly engaged in organization development and major program planning. I'm really enjoying the role of internal consultant."

**Marin Hammer** (ME63) wrote, "Our son Scott is back living with us and going to school for his engineering degree after serving 20 years in the Navy. This summer we spent about two months in South and North Dakota going to RV rallies and having fun traveling in the motorhome. My friends said I wouldn't like retirement. Boy were they wrong."

**Gary Hansen** (Chem62) now has six grandchildren. Hansen

Minerals, LP will celebrate their 35th anniversary in 2006.

**Fred Hornstra** (EE60) wrote, "A highlight of the past year for us was a one-month trip to Australia, Tasmania, and New Zealand. We took a hot-air balloon ride over the Outback near Alice Springs, rode a camel, ate kangaroo and camel meat, and attended a concert at the Sidney Opera House. What surprised us most was the size of the Sidney Opera. It is immense. No picture does it justice."

**Art Hunt** (ME65) retired after 40 years with DuPont, and is now splitting time between homes in West Virginia and Rapid City, South Dakota. "Friends from the '60s and '70s visiting Rapid City, give me a call at (605) 721-1394."

**Andrew Johnson** (MetE64) continues to enjoy the winters in Arizona and summers in Ohio, with the springs and falls split between the two. He has been doing some program management on an Air Force contract for GE Aviation as a GE Pensioner and has also continued for a second year a consulting agreement with Ohio State University to program manage a NASA contract. They are very much looking forward to their daughter Heather's wedding, planned for February 19, 2006 in Phoenix, Arizona.

**Gary Johnson** (Geol63) will retire in May 2006, and then hopes to move to the Dallas-Fort Worth area. He will still continue research on Permian vertebrate fossils from Texas and Oklahoma.

**Jacquelyn and Gary Keffeler** (ME68) are enjoying retirement by doing some traveling in their travel trailer and finishing the new home they built in 2003.

They have a new addition to the family which makes grandchild number 13. Granddaughter Emily Rose was delivered to Garilyn and Glenn Wells (ME85) on December 27, 2005.

**John Larson** (ChemE67) has been with DuPont for 33 years in 2006. "I'm living in West Chester, Pennsylvania with my wife Maureen. We went to Tahiti for two weeks in 2005. It was our third vacation in Tahiti. We can't wait to go back again in a few years."

**Steven Lenards** (EE63) retired from Honeywell Aerospace in November 2004.

**Ken May** (CE61) wrote, "Dr. Jennifer (May) Miller and her husband Steve moved from Rochester to Rapid City. With their two daughters and Greg's four, Nancy and I are now the proud grandparents of six girls. Women are taking over the world! Get on board."

**Harlan Miller** (GeolE62) and his wife Betty went on a two-week cruise and tour with Holland America to Alaska. "The week on land took us to Prudhoe Bay and a two-day tour along the pipeline road. We also spent two days on the railroad with a day in Denali."

**Richard Moen** (MetE62) wrote, "After about 36 years on various ASME Boiler and Pressure Code committees, I finally backed away. I am now an honorary member of the main committee, subcommittee on materials, and the subcommittee on nuclear power. I continue to keep my book up-to-date (the 9th Edition came out in June) and use that in classes on ASME B&PV Code materials. So this is just another phase of 'retirement' allowing



more time to travel and pursue other interests.”

**Gary Nelson** (ME65) is still enjoying life in Georgia. He and his wife Lynn have five wonderful grandkids with number six arriving shortly. He has been retired for ten years and is playing lots of golf.

**Leonard Neugebauer** (CE69) is glad to have **Jacob Erpenbach** (CE05) working for DGR.

Alumni and their wives—Beverly and **James Neuharth** (ChemE68), Katy and **Jim Kotas** (EE68), Marion and **Don Orton** (EE68), Sandy and **Dennis Krause** (EE68), Jean and **Wayne Binfet** (EE68) and Kristin and **Craig Nordby** (EE68)—enjoyed their October 2005 Mediterranean cruise.

**Robert Peterson** (EE62) retired in 2002. “We now live in the heart of the Blue Ridge Mountains. I am teaching part-time in the engineering school at UNCA. We absolutely love it here.”

**Carol Reed** (Geol66) and her son **Marcus Schock** (ChemE92) visited the Alumni Association Office and had a nice chat with Tim. Carol enjoys getting the E-News.

**Ken Sageser** (Geol62) wrote, “Although I am now fully retired from the exploration and mine geology industry, Jane and I are now in the cattle business, so we won’t loaf all of the time.”

**Monte Schneider** (CE66) went to work full-time for the old South Dakota State Aeronautics Commission after his graduation from the School of Mines. By 1969, he had been promoted to chief airport engineer. During the late 1960s and ’70s, he oversaw

much of the construction of the modern system of airport runways across the state.

From 1973 through 1983, he was state director of aeronautics. He served as president of the National Association of State Aviation Officials in 1979 and ’80. In 1983, he helped put together the deal that brought an ambitious little commuter airline from Grand Rapids, Minnesota called Mesaba, into South Dakota. Shortly after that, he moved to a new role in organizing the construction projects for many of our state highways. In 1984 he became assistant project development engineer in the Division of Engineering. Two years later he was named as the head engineer for planning and programs in the Division of Planning.

Monte retired from South Dakota Department of Transportation in January 2006, and South Dakota Governor Michael Rounds declared January 6, 2006, “Monte Schneider Day.”

**Gerald Seebach** (Chem66) is still teaching at Transylvania University in Lexington, Kentucky where he is the chair for the Natural Science and Mathematics Division. He and his wife belong to the same golf club as Pat and **Bill Fox** (ME67).

**T.J. Smolik** (MetE63) wrote, “After retiring five years ago, I’m still working part time on projects in Canada, U.S., Mexico, South America, and Africa. Bonnie and I still reside in Birch Bay, Washington with spectacular views and summer weather.”

**Richard Snyder** (CE61) plans to retire from his county engineer job this winter and to begin enjoying retirement life on

Whidbey Island.

**Kenneth Yocom** (Math60) retired in June 2005 after 43 years at SDSU; however, the math department needed help, so he’s teaching again this year.

Congratulations to the following newlyweds:

**Larry Baruth** (ME66) married Jan Schulz on November 19, 2005. “Claudia and **Ed Opbroek** (CE66) were surprise attendees at our wedding dance. We had a great time at the July reunion. We got to see Barb and **Terry Rothenbuehler** (ME66) for the first time in over 30 years.”

### 1970’s

**Mike Bates** (EE70) had a terrific time at the reunion. “We really enjoyed celebrating the Triangle Fraternity 75th Anniversary. I came out of ‘retirement’ and enjoy working with a fine group of young project managers at Henry Carlson Company in Sioux Falls.”

**Marlin Brendsel** (ME73) welcomed their first grandchild Bret on May 30, 2005. He was born to their daughter Camille and her husband Jonathan.

Dian, wife of **Gary Callahan** (ME70) passed away October 18, 2005. Gary wrote, “She was truly a wonderful lady, and our children, Clint and Keli, and I, her family and her extended family will miss her very much.”

**Sammy** (ChemE78) and **Sharalyn Colvin** (Chem78) wrote, “The tradition continues—both sons, **Jacob** (Phys03) and **Matthew** (Math/ChemE05), have graduated from the School of Mines, and now Jacob’s new bride, Melissa Colvin, is a student.”

**Steve Cooper** (EE77) e- mailed from Iraq, "I am on a U.S. military camp in Baghdad, managing hardware and software field support efforts. Oddly, my biggest effort right now is overseeing the construction of a 30- trailer living area for contractors. (I knew I should have taken some of those civil engineering courses!) Most intriguing is my interaction with some of the Iraqi workers and, with limited linguistic skills, trying to understand their perspective on things.

Of my two children, my younger son just finished his first semester studying biology/genetics at Texas A&M in Corpus Christi. My older daughter will move to Colorado and start liberal arts studies at CU- Denver in January. So, my wife, Mel, will be home alone until I return to Germany in March. We will both be working on keeping two kids in college, paying out-of- state tuition, and learning how to be a couple again."

**Kevin DeSomber** (MetE78) is beginning his sixth year of working at Newmont Mining's Batu Hijau Operation on the island of Sumbawa in Indonesia.

**Rick Eide** (MinE79) is going on 11 years with BNI Coal in North Dakota. "Longest stretch so far. If everything goes okay, I should be able to retire here. I started in farming, then went to coal, copper, consulting, gold, snake oil, law enforcement, and now back to coal."

**Bob Erdman** (CE74) reported, "I volunteered to go to Mississippi as part of a disaster response team representing the Department of Interior, Bureau of

Indian Affairs. I was in the Hattiesburg, Mississippi area working as a quality assurance person under the direction of the Corps of Engineers for debris cleanup. Most of the debris consisted of timber cleanup within road right-of- ways. The original estimate for cleanup was 25 million cubic yards. By the time I left at the end of November they had reached about 10 million cubic yards. Over Thanksgiving (my one day off during my 30- day tour), I visited New Orleans and some of the Mississippi coastline. Words and news accounts do not describe what one witnesses when you can actually see the destruction of Hurricane Katrina. Cleanup will take years. It was a great experience and hopefully I can go back for another 30 days next spring."

**Mike Fiddes** (Math74) is responsible for Department of Transportation (DOT) and International Air Transport Association (IATA) regulations compliance including hazardous materials and dangerous goods regulations and federal motor carrier safety regulations for Lockheed Martin Aeronautics Company in the U.S. and internationally. Mike and his wife Divina have two children, Christopher and Kimberly, in high school.

**Francis Johnson** (CE74) recently retired as the Chief, Civil Engineering Section, Ellsworth Air Force Base, and as Sergeant Major, S.D. Army National Guard. "I'm enjoying retirement and will be going on a world cruise from January through April 2006."

**Donald Kellar** (Phys74) wrote, "I'm enjoying my 26th year in Engineering Standards with the

Snohomish County PUD in Everett, Washington. Our daughter Nicole is a senior at Washington State University, and our son Michael is a high school freshman in Mukilteo."

**Ron King** (CE78) loves hearing from and seeing former colleagues. He is confined to a wheelchair but enjoys hearing news. Ron's address is: 916 Mountain View Rd., Rapid City, SD 57702- 2521.

**David Knox** (ME75) is moving to a new position with Chevron Phillips Chemical as a Project Manager in a \$3.5 billion Olefin/Polyolefin plant to be built in Saudi Arabia. He will move overseas to Europe or Asia in 2007 and to Saudi the middle of 2009.

**Patricia Knox** (ChemE76) wrote, "In June our daughter, Krista, married Nicholas Skytland in Galveston, Texas. Nick works for NASA and Krista teaches second grade. Our son Steven and I regularly attend autism conferences, showing and selling his art. We give talks and present workshops on various topics concerning having and living with autism. Steven's art can be seen at <[www.BoundlessCreations.biz](http://www.BoundlessCreations.biz)>."

**Kirby Mellegard** (EE72) now has three titles at RESPEC. On the technical track he is resident consultant, on the management track he is the manager of the Materials Testing Laboratory, and on the corporate track he is the corporate secretary.

**Clair Menning** (CE73) reported, "I have been in Korea the past two years managing EPIC contracts for a 30,000 T tension legged



platform for installation off of Angola, and also a 10,000 T gas compression platform for installation off of Eastern Canada. I expect to stay here another couple of years managing an NGL project for installation off of Nigeria. Both kids are Texas A&M Aggies. One graduated and the other is in his senior year."

**Mark Meyer** (EE70) retired on April 1, 2005, with 35 years of Federal service. "We moved from Golden, Colorado to Brandon, South Dakota to be back among grandchildren, children, family, and friends. We built a house and now my winter project is finishing the basement. I am reacquainting myself with hunting, fishing, and golfing, which have been sorely neglected the past few years."

**Henry Mott** (CE73) wrote, "Our son Harrison will graduate from the University of Pennsylvania in May 2006 with a B.S. in physics, will marry Svetlana Lobochova on June 29, 2006, and plans to attend grad school in physics. Our son Graeme is in his second year as an English major at the University of New Mexico, but he hopes to transfer to Beloit College in Wisconsin next year. Our daughter Sarah has been accepted by Macalester College in St. Paul, Minnesota, to major in psychology. Marty and I just keep on truckin'."

**Lawrence Muellenberg** (ChemE73) wrote, "Hello from Lagos. I took a contract with Exxon/Mobile in Nigeria to help them put out the flares. Quite a departure from life in the U.S.!"

**Ken Nelson** (GeolE71) has been working for two years for

Hersrud Company in Sturgis as a farm equipment salesman. "In 2004 I had a three-month 'vacation' for cancer treatment. I'm still fighting related problems, but my PSA is lower."

**Donald Pawlowski** (ME72) returned from Iraq a year ago. "I'm working for **Patty Mamola** (CE86), as a project manager, and I'm thoroughly enjoying Reno and the Sierras. I have even taken up recreational ski racing and am trying to improve my golf handicap."

**Thomas Sheldon** (ChemE70) wrote, "Our son Matt is still a student in paleontology at the School of Mines. He works part-time in the fossil lab, and this summer he worked at the 'pig dig' in the Badlands."

**Janita Smith** (Chem77) reported, "Life is great! Bill owns a metal stamping company and we are about to see Jordan married in March 2006. He's currently in law school. There are a couple of more weddings in the not too distant future. We love to travel—Mexico, Central America, Europe—I made a trip to Israel last May!"

**Ronald Symens** (EE73) and his wife Kathy started the move to retirement two years ago by moving into a condo community. "We like it. We renegotiated our employment contract at that time also, so we are back to about 12 to 16 weeks of vacation each year. That makes working a little less demanding and makes the desire for full retirement less acute. So I think we will work for a while longer and not have to worry about health insurance. Kathy and I have been in good health. We have four

grandchildren ranging in age from two to eight. One of them is in D.C. and the other three are close by."

**Michael Trumm's** (CE77) daughter Jessica is a junior in electrical Engineering at the School of Mines, and his son Scott will be a freshman in mining engineering in 2006.

**Eugene Wasserburger** (CE72) retired from the Alliance of Architects and Engineers in January 2005, but still works part-time for the firm. He purchased a winter home in Casa Grande, Arizona, and is enjoying traveling and retirement.

**Mike Wendling** (ChemE76) retired as an officer of Patina Oil and Gas. His wife Rudy also retired in 2005. "We have moved to Breckenridge, Colorado where we plan to pursue our hobbies, including skiing, fishing, boating, biking, and golf."

**Mark Wismer** (EE78) has his first patent for a truss jig setting system. He designed the system in conjunction with his employment at Truss Industry Production Systems, a locally owned company based in Britton, South Dakota, that is venturing from roof and floor truss production to manufacturing equipment for use in truss plants. Mark and his wife Susan came back to Britton over 20 years ago. Like his father, **Dick Wismer** (GeolE54), he's tried a little bit of everything, from farming to consulting for his old employer (Battelle) to employment with a successful company with outside ownership (Horton), where his "I know better" attitude got him in trouble with the owner's heir

apparent, to a venture into rapid prototyping, to his current employment. Susan wrote, "Sometimes it's been a lonely life—not many of our high school or college friends are nearby. But in the meantime, our children were raised in South Dakota, next door to both sets of grandparents and lots of farm cousins. We enjoyed all the great things South Dakota has to offer, from the short drive to the family lake cabin to freedom from the hassles of big city life, and our community benefited from our college educations and Mark's volunteer expertise in everything from all things technological to fireman and ambulance attendant."

## 1980's

**Dr. Rosanne Bosch** (Chem89) and **Charles Gronewold** (MinE88) are proud to announce that their daughter Amy Gronewold has entered the engineering world as a freshman at the University of Colorado-Boulder in aerospace engineering. "Thank you to all of you who allowed her to join our PChem study groups when she was just learning to walk. Your kindness and patience have paid off."

The electrical engineering department received word in December 2005 from **Daniel Brett** (EE81) that his wife Donna passed away. Our condolences go out to Dan and family.

**Chuck Carda** (ME86) is entering his 15th year with John Deere in Waterloo, Iowa. My wife Bev and daughter Marcella are enjoying the new twins my sister **Karen** (ME01) had in August. I still enjoy golfing and working on my old Pontiac and hobbies."

**Jeanne Eha** (MetE85) wrote, "Sure miss South Dakota and my school days. The School of Mines made a positive impression on my life. Come to Colorado for the snow and skiing this year!"

**Rodney** (CE82) and **Dorothy (Soldatke) Eisenbraun** (CE82) are doing well in Denver. "Our daughter Val is currently at the School of Mines majoring in IT. Val also played on the volleyball team this fall."

**Jeff Johnson** (EE86) built a new house in 2005. "What a project! I'm still at Rockwell selling factory automation stuff. Connie is still at Nike. We're looking forward to kids in the near future (God willing). We would love to have some visitors now that we have plenty of room. Come on out to Oregon. The place is God's country still!" Jeff and Connie's e-mail address is <jeffandconniejohnson@yahoo.com>.

**Bill McMillan** (ME82) just completed 20 years at Lockheed Martin! He is presently the ILS Manager for the Block III Fire Control Radar upgrade to the AH-64D Apache Helicopter.

**Laura (Gronewold) Newman** (GeolE83) e-mailed: "Everyone is doing well here. My husband is now retired from the Air Force and we currently live in Helena, Montana where I am still employed with Tetra Tech EMI. We recently had our second child; Taylor Ann Newman was born on October 25, 2005. Everyone is doing well and enjoying life here in Montana. It is nice being back in this general area again and as a result we have made it back to Rapid City to visit the school a few times, including for the reunion last year."

**Douglas Stalheim** (MetE80) took on a new adventure this year by leaving corporate America and going out on his own. "After 23 years I started my own technical consulting service, DGS Metallurgical Solutions, Inc. It is a worldwide consulting service focused on the oil, gas, and primary metals industry. It has been an international learning experience that has been exciting. Visit us at <www.dgsmet.com>."

**Charlie Tapper** (Geol84) wrote, "I've been working in Alabama for a over a year now 'on loan' from the Farmington, New Mexico office, but last summer I accepted a transfer here to Birmingham, Alabama because I was spending way too much time away from my family. I am now an exploration and development coalbed methane geologist for the Gulf Theater of CDX gas, which is based in Hoover, Alabama. CDX gas is a small privately-held gas company that specializes in complex horizontal completions and has production in the Appalachians, the Mid-Continent, and the Rockies. I am one of two geologists responsible for the development of a substantial new coalbed methane field in the Cahaba Basin, as well as generative work on new ventures."

I have found that my mining background has served me well in understanding the nature of the reservoir and potential structural complexities. It's fun to learn new geology and new skills! The twins (7) and triplets (6) are enjoying their new school and all of us are enjoying the amenities of living near a larger city. The change from the high desert to the forest verdant has been interesting as well. My best to all at the School of Mines!"



### Congratulations to the following proud parents:

**Douglas Wilson** (ME89) wrote, "I've had big changes in my life the last couple of years. I was married to Misty in February 2004 and became an instant dad to her daughter Katie who is now five years old. Our son, Zachary, was born in March 2005. We will have to see if they both become future Hardrockers! I also changed jobs in that same timeframe, so it has been exciting times."

### 1990's

#### Carol Krull Toennessen

(ChemE96) wrote, "We moved from Norway back to the good 'ol USA the summer of 2005. It's been a great move for all of us. The job with Rockwell Collins is exciting! Rockwell is a very good employer with a lot of very good people. They are looking to add to their staff, so if you are looking for something new and challenging, check out their website or give me a shout!" Carol's e-mail address is <cktoenne@rockwellcollins.com>.

**William Lipko** (EE90) reported, "On October 16, 2005, I returned to active duty as the detachment commander of the 202D Engineering Installation Squadron. The 202D is currently involved in C4 ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) installations in Afghanistan, Iraq, Europe, and the U.S."

**Lisa Warne** (ME91) wrote, "As of 2003 I am happily settled into a new home on a tree-covered lot north of the Twin Cities, Minnesota with my boyfriend Jeff Stucynski, 'Stu.' He has three kids

from his previous marriage—Jaena (9), Jason (7), and Jack (3)—who keep us running when we have them part-time. I do software solutions consulting for Cornerstone Consulting, so we have had the chance to do work all over the Twin Cities area and just love it. My e-mail is <warne4688@yahoo.com> if anyone would like to say hello. Oh yeah, I'm the lead singer (with Stu on the lead guitar) of a rock/country/blues band called 'the eggs'! We're pretty new but have had a few successful gigs and it's just a blast."

**Ronnie Williams** (CE92) is still with the Wyoming Department of Transportation and was recently promoted to resident engineer in Buffalo, WY, which is where he is from.

### Congratulations to the following newlyweds:

**Nikki Mathis-Barkdoll** (IS93) wrote, "Ken and I just got married on May 30, 2005 in Akumal, Mexico. We were fortunate to spend a week enjoying the water and sun with family and friends before returning to live in Denver,



*Hali, Ken, and Nicole (Mathis) Barkdoll*

Colorado. Not only did I gain a husband, but a daughter as well. Ken's daughter, Hali, is 12 and lives with her mom in Oregon. We were delighted to have her join us in Mexico for all the festivities. My parents also hosted a reception over Labor Day weekend in Deadwood, South Dakota. There were approximately 135 family and friends in attendance including many School of Mines alumni—**Missy Mathis** (GeolE94), **Heath Mathis** (CE96), **Kyle Mathis** (CE98), **Shawn Veurink** (ME94), **Marty Jackley** (EE92), **Jim Peterson** (CSc92), **Julie (Anderson)** (EE95) and **Jason Erickson** (CEng97), and **Jaque (Cranston)** (Chem93) and **Josh Mann** (ME04).

"I left Denver International Airport in August 2004 after three years of managing the industrial storm water permit, (all those deicing and maintenance activities) and assisting with the development of an environmental management system to accept a position with the State of Colorado. At the state, I manage the Environmental Leadership Program. This voluntary program recognizes and rewards organizations that go above and beyond compliance. The position has been an interesting challenge, unlike anything else I've ever done. Hope this brings you up to date a bit. It's been quite a year between a new job, husband, and daughter!"

**Angelique** (Geol99) and **Jon Shawda** (ME02) were married in June 2002 and moved to Des Moines, Iowa shortly after. "Since then we purchased a house and have stayed busy working on projects. Jon and I both work with other School of Mines grads at our jobs."

Congratulations to **Mitch Slusarski** (IE95) and **Lyndsi Reed** who were married August 27, 2005, in Gillette, Wyoming. The couple lives in Rapid City. Mitch is an investment adviser with AIG Financial Advisors and Lyndsi is a physician assistant at Creekside Family Practice.

## Congratulations to the following proud parents:

**John Carter** (ME90) e-mailed word of Marcus Raymond Carter's arrival on November 30, 2005. Just in time for Christmas, several great family photos are posted at <http://home.comcast.net/~jksca>



*John and Marcus Raymond Carter*

[rter2/index.htm](#)>.

**Rhonda** (CE92), **Bob** (CE96), **Brianna** and **Brittney Dehler** "We just wanted to let you know that Brittney was born on Monday, November 21, 2005 at 5:13 p.m. We went to the hospital at 10 a.m. that morning. Everything went fine. Luckily Grandma was already here and took care of Brianna while we



*Bob and Brittney Dehler*

were gone. Brittney Lynne weighed a whopping 9 pounds, 11 ounces, (2 1/2 pounds more than Brianna and they were both born 5 days early!) and is 21 inches long."

**Brian Jenner** (CE94) sent photos of their new baby girl, **Bricelyn Sage Jenner**, born October 28, 2005. "Mother and daughter are both home and doing well."



*Bricelyn Sage Jenner*

**Paige Hilton** (ChemE95) reported, "Bill and I moved to Georgia last summer after spending two years living in Thailand on an Expat assignment with Kimberly Clark. We were blessed with the arrival of a little girl, **Abigail Leigh** in October 2004. She is keeping us very busy and extremely happy! Go Rockers!"

**Corey** (CE99) and **Kristin Lang** (CE00) welcomed their first child on September 18, 2005. **Nolan Edward** weighed 8 pounds 4 ounces and was 20 3/4" long.

**Paul Larson** (ME93) wrote, "God has truly blessed Amy and me as we grow our family. We now have four children with the addition of Elizabeth in February 2005. Amy is expecting our fifth child. She does a great job being a mom. I am still employed at Metropolitan Industries designing pump systems."

**Mary Louise** (CSc93) and **Udaysankar Nair** (Mtro91) are pleased to announce that there will be a new addition to their family in June 2006.

## 2000's

**Kevin Calloway** (ME01) wrote, "I have a 1 1/2 year old grandson in West Texas."

**Jennifer** (ME00) and **Mel Kemp** (Geol97/IE02) reported, "We bought a house the spring of 2005 and have been slowly working on the yard. We continue to be very active with the Society for Creative Anachronism (Medieval reenactment) and Mel has become quite a master home brewer."

**Nicole Konotopka** (IE04) wrote,



"I'm working as a 21st Century Learning Center Coordinator here in Rapid City. I am an employee of Black Hills Special Services. We are currently enjoying the new addition to our family and building a house in the hills. Justin is a database programmer for Fenske Media and has built 95 percent of our new home himself!"

#### **Congratulations to the following newlyweds:**

Congratulations to **Ross Castelli** (CEng03) and **Jessica Duba** (EE05) who were married in Rapid City on May 28, 2005. The couple lives in Marion, Iowa and both are engineers with Rockwell Collins in Cedar Rapids.

**Mark Fauske** (ME00) and **Alyson Morris** were married December 3, 2005, in Excelsior, Minnesota. Mark is a mechanical engineer with Michaud Cooley Erickson. The couple lives in Eden Prairie, Minnesota.

**Mike Pridgeon** (EE03) married **Kimberly Lutz** on July 9, 2005, in Rapid City during the 2005 reunion. "We had a great time seeing friends from near and far! We are expecting our first child the spring of 2006."

#### **Congratulations to the following proud parents:**

**Karen** (Carda) **Buerkle** (ME01) and her husband **Bryan** are happy to announce the birth of twin girls in August 2005. **India Marie** and **Monet Michel** join their big brother **Kye**. Karen says, "I'll be ready to get sleep again some day!"

**Jennifer** and **Ryan Vaughn** (ME00) wish to announce the birth of

**Connor Vaughn** on August 27, 2005. He joins proud big brother, **Logan Patrick**.

**David Westhoff** (MinE04) e-mailed, "Our little girl arrived on September 10, 2005, and is doing great. We named her **Rachel Elizabeth**. She has already spit up on, wet on, and crapped on me so I guess that makes me a father. **Gretchen** is also doing fine.

I will be going underground in December after our new engineer finishes her induction training. I will be underground for one year, training on everything from equipment operation to jackleg and mechanized mining. After that I will go into projects."



*Rachel Elizabeth Westhoff*



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# Memorials

## KENNETH LEROY BERG

**Kenneth LeRoy Berg** (CE51) was born on June 24, 1927 in Newell, South Dakota. He passed away at Salem Memorial Hospital. After high school graduation and his 18th birthday, he entered the U.S. Navy. After his discharge from the service, Ken enrolled at the School of Mines. He married Betty May Taft of Newell while in college. After graduation, Ken took a position with the Oregon Highway Department, moving to Bend, Oregon, in 1951. He was resident engineer for construction projects at various locations in Oregon. In 1963, he was transferred to Salem, where he worked as a specifications engineer for the State of Oregon. He traveled the highways of Oregon as part of his job and was familiar with all the roads, small towns, and landmarks, which made him an excellent tour guide when traveling throughout Oregon. Ken retired in 1987. He is survived by Betty, his daughter Judith Ann Berg, and sons James, Jon and Jeffrey. He will also be missed by his seven grandchildren.

## BRENT DUANE BERLAND

**Brent D. Berland** (GeolE84) passed away as a result of an automobile accident. Born on April 4, 1962 in Eureka, California, his family moved to Milaca, Minnesota. After graduation he worked three years for NL McCullough Wireline Services in Pampa, Texas and Ardmore, Oklahoma. In 1988, he moved to Corpus Christi, Texas and worked at ARCADIS G&M Inc, until his death. He was married to Peggy (Roesch) Berland for 16 years, and is also survived by their two children, Stephanie and Daniel Berland, his parents, sisters, and families.

## DONALD VERNON BIGELOW

**Donald V. Bigelow** (MinE41) passed away in Oklahoma City,

Oklahoma. He arrived in Rapid City September 1938 from Worthington, Minnesota. After graduation he went to work for The Magnolia Oil Co. in Texas and Oklahoma. He then went to Venezuela, Alberta, and Canada and moved back to the states in 1966. He retired in 1983 in Denver and returned to Oklahoma City. He is survived by his wife Doris, daughters Carol and **Jerry** (GeolE66).

## ROBERT EDWARD BOYLE

**Robert Boyle** (EE49), age 79, is at rest. He was a loving husband to Giovanna "Ge Ge" for 49 years; dear father of Marcia, Marisa, Maria, and Margo; and fond grandfather of eight grandchildren. He served in the U.S. Navy during World War II.

## HAROLD WAYNE BROWN

**Harold Brown** (ME51), 81, of Cedar Falls, Iowa passed away December 31, 2005, in the hospital. He suffered a heart attack while fighting a cold. He had a long history of heart problems and had undergone several heart procedures of various kinds. He married Grace Dahlih in 1949 in Bonilla, South Dakota and they were later divorced. He married Dorothy Brown in 1988 in Wessington. Harold served in the U.S. Army during World War II. After graduation, he was employed by John Deere Waterloo Tractor Works from 1952 until 1984, retiring as manager of durability testing. He was past worshipful master of Black Hawk Lodge No. 65 AF & AM, past worthy patron of Cedar Falls No.78 OES and past president of Cedar Falls High 12. Survived by his wife; two daughters, Cynthia and Denise, son Steven, stepdaughters, stepson, grandchildren, and a great-grandchild.

## DANA CHRISTINE BYRD

**Dana Byrd** (Chem93), 43 died in an apartment building fire in Ogden, Utah on November 11, 2005. The fire was apparently set

deliberately. Dana used to work for Thiokol Propulsion as a rocket scientist.

## KERMIT JAMES CLARK

**Kermit Clark** (EE35) passed away on December 8, 2005. He is survived by his two children, Jim Clark and Denielle Janikowski, five grand children, and five great-grand children.

## PAUL A.M. DANIELLS

**Paul A.M. Daniells** (MinE70), 58, formerly of Gillette, Wyoming, passed away in Phoenix, Arizona after a brief and courageous battle with amyloidosis. He is survived by his loving wife, Kathy, plus many relatives, in-laws, and friends.

## VERNON CHARLES DAVIS

**Vernon Davis** (MinE43), 83, passed away in Pleasant Grove, Utah. He was born November 28, 1920 in Sheridan, Wyoming. After graduation, he worked in Amidon, North Dakota, where he met Donna Atkinson and they were married in 1943. Vernon served in the Navy during World War II. After the war, he resumed his career and interest in precious ores and mining, and worked in Dakotas, Wisconsin, Utah, and Washington. In 1964 he moved to Albuquerque, New Mexico where he lived until 2002. He and Donna then moved to Brigham City, Utah. Vernon is survived by his wife Donna, a sister, two sons, Harry and Steven, two daughters, Susan and Laura, 15 grandchildren, and 22 great grandchildren.

## LANCE CHESTER DECORY

**Lance C. DeCory** (CE49) was born January 26, 1925 in South Dakota and passed away March 20, 2005 in Mesa, Arizona. He is survived by his wife Ardie, and children, Lanette and Jed.

## LEONARD CLAIR DEJONG

**Leonard DeJong** (MetE54) passed away May 1, 2005, in Prescott, Arizona. He was born March 4, 1932, in Mitchell, South Dakota. In



1953 Leonard married Betty Beittle, also of Mitchell. After graduation from college, Leonard joined the United States Marine Corps and retired with the rank of Captain. Leonard then began a long and successful career in Metallurgical Engineering in the uranium and copper industry that took him all over the world. He and his family lived in New Mexico, Peru, California, Australia, Mexico, Utah, and Chile. Leonard is survived by his wife of 52 years and his three children, Michael, Laureen and Kenneth, four sisters, and two grandsons.

## MARK ALAN ENGELSTAD

**Mark Alan Engelstad** (CSc91), 56, died at his home in Rapid City. Survivors include his wife, Louise Engelstad, two sisters, Marcia Ehorn and Laurie Corell, one brother, the Rev. David Engelstad, and his parents.

## HARRY GEORGE GARLICK

**Harry Garlick** (GenE47) passed away peacefully in June 2005 in Boise, Idaho. Born September 15, 1917, his parents were both descended from early South Dakota pioneers. Harry grew up in Sturgis, South Dakota. His college education was interrupted by World War II. He spent three years serving his country in the Army Air Corps. Harry spent 18 months of his military duty in Guam building airstrips and under constant threat of enemy fire. After the war, he returned to the States and married Dorothy Shelton in St. Louis, Missouri. Following graduation, he went to work for Peter Kiewitt Sons Construction as an engineer. During these early years, Stephanie and Greg were born.

Harry worked his way up to general superintendent for Kiewitt, building many roads and airstrips including large sections of I-90 and major expansions at Ellsworth Air Force Base. His innovative thinking was responsible for many new concepts in road construction. He was also involved with

construction of the nuclear warhead missile silos built all across western South Dakota.

In 1964, Harry was transferred to Fairbanks, Alaska where he was in charge of two phases of China Hot Springs road. In 1966, he went to work for Burgess Construction and was in charge of building present-day Airport Road from Barnett Street to University Avenue, which was the largest road project undertaken in Fairbanks at that time. In 1966, Harry and Dorothy divorced. Harry later met Liselotte Sherrer. They married in 1969 and moved to Idaho where Harry bought several businesses. One of those businesses was Robertson Auto Body which Harry managed for the next ten years. Harry and Lisa sold the body shop in 1979 and moved to a country home just outside Emmett. Harry enjoyed many woodworking projects and helping his son build a log home in the mountains.

## WENDY ERTL HALLAUER

After a one year battle with cancer, **Wendy Hallauer** (GeolE82) passed away on Tuesday July 19, 2005. Wendy was born May 17, 1955, in Keystone, South Dakota. Wendy married Patrick Hallauer (ME76) on August 9, 1974. Their children are: Amber married to Matt Topping (their daughter is Ayden); Ashleigh; and Christopher. Wendy was a leader that had a positive impact on her community and her alma mater.

## LARRY GALE HANSON

**Larry Hanson** (EE67), 60, passed away August 7, 2005, in Rapid City. Larry worked at the Ellsworth Air Force Base as a chief of Engineering design. Survivors include his wife, Trish, two sons, Dan and David, his mother, Marty Hanson, two sisters, and one brother.

## ORRIE BERTRAN HANSON

**Orrie "Bert" Hanson** (GenE52) was born September 6, 1926 in Wilmont, South Dakota. He was a

World War II U.S. Navy veteran and a Caltrans civil engineer for 34 years. He was active in several groups, including the Pilgrim Congregational Church in Redding, the Caltrans Quarter Century Club in Redding, Seniors in Retirement in Redding, and various square-dance clubs in the area. He passed away in San Francisco. Survivors include wife Evelyn, daughter Jillene, brother, Milton, and two grandchildren.

## ALBERT JOE HOFFMAN

**Albert Hoffman** (CE36) was born September 12, 1932, in Kadoka, South Dakota. He passed away in September 2005. He is survived by his wife Gertrude and two sons, Michael and Martes.

## LAWRENCE HAILEY HUNT

**Lawrence Hunt** (CE35), 90, long-time resident of River Forest, Illinois died on January 19, 2005. Born June 28, 1914, he graduated from Rapid City High School in 1931. He was a member of Triangle Fraternity of Engineers and Sigma Tau. He came to the Chicago area in 1936 and married his wife of 63 years, Mary. He served in the U.S. Navy during World War II in Washington, D.C. After his return to the Chicago area, he attended the Northwestern University Business School in Evanston. He resided in River Forest since 1945.

He was employed at McGraw-Hill Inc. in Chicago from 1946 until his retirement in 1983. He served as a member of the River Forest Board of Education from 1957 to 1963, and as a president from 1961 to 1963. He was an active member of the River forest Tennis Club for 63 years and he was a member of the Board of Religious Education at First United Church of Oak Park.

Lawrence was an accomplished fly fisherman, and took his children on a number of fishing trips over the years, including several trips to the Black Hills in

# Memorials

South Dakota. In River Forest, he made ice skating ponds in his backyard for the enjoyment of his children and neighbors for 15 successive winters. Lawrence is survived by his wife Mary, his seven children, and eleven grandchildren.

## THOMAS BASKERVILL HYDE

**Tom Hyde** (CE49) passed away on New Year's Day 2005 from heart failure.

## JOHN ALVIN IHLI

**John 'Jack' Ihli** (GeolE55) went to be with the Lord on May 20, 2005. Born in Watertown, South Dakota on June 12, 1930, the family moved to Pierre in 1937 where he finished schooling. He served in the Marine Corp during the Korean War. He married Rae Eldridge from which union two children were born, Michael John and Katherine Rae. His first employment was with Shell Oil Co. After working on a number of assignments with Shell in the western states, he was moved to Billings in 1957. In 1962, he resigned from Shell and went into business as an independent consulting petroleum engineer and independent oil operator. In 1975, he married Bonnie Wangerin. Jack pursued a number of activities, such as flying (instrument rated pilot), woodworking, and drawing. He was preceded in death by his son, Michael, his brother Leo, his parents, and numerous aunts and uncles.

## CLIFFORD CHAUNCEY KETTERING

**Clifford Kettering** (EE40), 90, passed away May 11, 2005. He was born January 14, 1915, on the family farm in South Dakota. He was preceded in death by his loving wife Grayce. Survivors include his sister and four children, Chuck, Marsha, Doug and Mark. The light of his life were his seven grandchildren. His favorite companion was his furry friend

Moe.

## FLOYD LESLIE KIEFFER

**Floyd Kieffer** (EE68) passed away from multiple myeloma. He cloaked his illness and pain from most who knew him. In an agreement between him and his wife Judy there was no obituary or memorial service. His ashes were scattered over the South Dakota land that he loved so well. This last request was done in his favorite season, spring. In his quiet passing, his life lives on in the lives of those who knew him and loved him. His last request was that there be no mourning, but for all to live their lives to the fullest.

## LOUIS H. KING

**Louis King** (CE40) passed away. Born December 22, 1912, in Eureka, South Dakota, he began work upon graduation from the School of Mines with the Soil Conservation Service in Alcester, South Dakota. While employed there, he helped build Ellsworth Air force Base. He was also involved with the construction of the ALCAN highway. In 1947 he joined Garland Construction Co. in Rapid City, and, in 1960, became its president. He retired in 1975. He leaves behind his wife Olive, two sons, and one sister.

## RICHARD LEROY KLAPPAL

**Richard Klappal** (Chem70) was born on April 11, 1947, at Winner, South Dakota. He passed away May 6, 2005, after a short battle with cancer. Richard was a Member of the Technical Staff at Lucent Technologies for a number of years. He was a Certified Software Quality Engineer. He was an active member of the Fox Valley Astronomical Society for many years and served as an officer and on the board of directors. He was also a member of Alpha Chi Sigma, a professional chemistry fraternity. His special interests were astronomy, computers and photography. Survivors include his son, Byron; his mother, Melba Stapleton; one brother, Gary; and ex-wife Elaine Klappal.

## ROLF FLOHR KNUDSEN

**Rolf Knudsen** (EE90) passed away in 2005. He was born in Norway and lived there.

## MAURICE EDWIN LEWIS

**Maurice Lewis** (GenE56) passed away at home in Ponte Vedra Beach, Florida, from pancreatic cancer on October 29, 2005. He is survived by his wife Randa and two children, Mark and Mia. He worked for Armco for 35 years. He was director of materials management, with responsibility for division-wide coordination of raw materials and inventories.

## ARCHIE ALBERT MCCOLLAM

**Archie Albert McCollam** (CE50) passed away on May 7, 2005. Born on December 1, 1918, he grew up in the Dixon/Gregory area of South Dakota. Archie entered military service in July 1942 and served in Northern Africa and Italy until being honorably discharged in November 1945. On February 20, 1946, he married Darlyne Young and they made their home in Rapid City. To this union three children were born — Pamela, Sharon, and Gregg. With Archie's career as a civil engineer, working for the U.S. Geological Survey-Water Resources Division, they made their homes in Rapid City, Yankton, and Indianapolis. In 1980, they retired and spent their winters near Edinburg and Donna, Texas and always came home to the place they loved — Burke and Gregory — for the summers. They continued this routine until 2002, when they went to Scottsdale, Arizona to stay with their daughter. Having family to be with and close by, they were able to care for Archie at home. Archie had a tremendous love for his family and country. He was a member of the Masonic Lodge in Yankton for 48 years, Eastern Star, the American Legion, and was a lifetime member of the VFW. He is survived by his wife, daughters, son, grandchildren and seven special foster grandchildren, sister,



and brother.

## THOMAS CARL MOHR

**Thomas Mohr** (MinE52), 78, passed away on March 24, 2005, at Rapid City Regional Hospital. He served in the U.S. Navy from 1944 to 1946. He was supervisor, Mine Operations at U.S. Steel- Mintac. He has been active in Scouting in many positions. Among them, he has been a leader to both the National Jamboree in 1977 and Philmont in 1978. Survivors include his wife, Marilyn Mohr, two sons, Jay and Ross, daughter Lisa, eight grandchildren, two brothers, and two sisters.

## DONALD L. MUFFAT

**Donald Muffat** (ChemE38) passed away in Lansing, Illinois.

## JAMES IRA MUNSON, JR.

**James Ira Munson, Jr.** (ChemE40) passed away three days after celebrating his 90th birthday. He was born on October 9, 1914. After graduation, he worked for Permutit Company in New York City for 26 years. While working there he did consulting work with the Los Alamos Atomic Energy Plant and the Tennessee Valley Authority. He also consulted with American Electric Power. In 1966 he and a partner, Bob Bruns formed their own company, International Hydronics Corporation, in Princeton, New Jersey. He was a member of the Masonic Order, and the American Society of Chemical Engineers. He is survived by his wife Shirley, daughter Nancy and son James, 6 grandchildren, and 14 great grandchildren.

## WILLIAM RANKIN NEAL

**William Neal** (IS93), 57 passed away on October 25, 2005, at his home in Rapid City. He was born on October 21, 1948, in Tucson, Arizona. Survivors include his wife Diane, one daughter, Michelle, one son, Michael, one brother, Robert, and six grandchildren.

## LIND BARNETT NELSON

**Lind Nelson** (MetE41) passed away

at Baywind Nursing Home on January 17, 2005. He was born in Lander, Wyoming on March 21, 1919. During World War II, he served in the U.S. Navy, being honorably discharged in 1946 as quarter master 2nd class with 2 bronze stars. He moved to Texas City in 1947, where he married his South Dakota sweetheart, Jean, who has been married to him for 57 years. He served as director of municipal utilities in Galveston from 1952 until 1973 upon retirement. Then he moved to Dickinson to become water superintendent for Galveston County WCID #1 until his second retirement in 1987. He is survived by his wife, Jean, daughters, grandchildren, and younger siblings.

## JACKSON LEWIS PELLETT

**Jackson Pellett** (Mtro74), 60, passed away at his home after a brief battle with pancreatic cancer. Jack was born March 22, 1944, in Mineola, New York. He spent his early life in Colorado, Virginia, and Pennsylvania, and especially loved summers at his camp on a lake in New Jersey. After graduation from Denison University, he was commissioned into the Air Force and received further education in meteorology at Pennsylvania State University. In 1967, he married Patricia Davidson and they made their home at Wurtsmith AFB, Korea and Loring AFB, Maine. After that Jack earned his degree from the School of Mines. Meteorological positions with state and federal government took Jack and Pat and their children to South Dakota, North Dakota, North Carolina, Wisconsin and Maryland and finally to Marquette where he retired as the warning coordination meteorologist at the National Weather Service Office in 2001.

While working as a meteorologist, he served in the Air National Guard and retired in 1997 as the commander of the 121st Weather Flight. He was an active member of the First Presbyterian

Church and he was an outdoor enthusiast. In 2002, he fulfilled his dream of thru-hiking the Appalachian Trail. He shared his love of the wilderness by leading backpacking trips for Boy Scout Troops and at Presbytery Point. He is survived by his wife, his son, his daughter, granddaughter, his father and stepmother, sisters, and brothers.

## ANTHONY WILLIAM III PIEPER

**Anthony Pieper** (EE71) passed away. He was born November 11, 1947, in Hackensack, New Jersey.

## WILLIAM LEE REUTER

**William Reuter** (EE56, MSEE58), 71, passed away November 10, 2005, in Sioux Falls, South Dakota. Bill was born July 21, 1934, at Hartford, South Dakota. He earned his Doctor of Philosophy Degree in 1967 from Iowa State University. On August 23, 1959, he married Loreli James of Hills, Minnesota. Dr. Reuter taught at the School of Mines from 1960 to 1972, and then from 1972 to 1979 he was manager of research and development at Dunham Associates. Beginning in 1979 he was employed by Pete Lien & Sons as chief engineer (1979- 1981), quarry division manager 1981- 1982, and vice president of operations (1982- 1996). Bill was very proud of the South Dakota companies he co- founded in Rapid City, including RESPEC, Rapidata, and SymCom.

While teaching at the School of Mines he wrote a textbook with Professor Cy Cox, *Circuits, Signals and Networks*, which was used in the classroom. Bill belonged to the Rotary Club, served on the Rapid City Board of Education, was on the Hardrock Club Executive Committee, and was SDSM&T Alumni Reunion Chairman. Because of his many accomplishments, he was honored by the School of Mines as a recipient of the Distinguished

# Memorials

Alumni Award in 1999. Education was always very important to him. He thought that the future needed the wisdom that came from learning, and supported many efforts giving young people a good chance to develop into useful, happy people. Bill is survived by his wife Loreli, son Lee, daughter Lisa, two granddaughters, and one sister.

## ALBERT LOUIS RIEMENSCHNEIDER

**Albert Riemenschneider** (EE59, MSEE62) passed away in Alliance Nebraska. Dr. Riemenschneider joined the School of Mines electrical engineering faculty in 1967 and served the department of electrical and computer engineering until his retirement in the spring of 1998. He obtained his Ph.D. from the University of Wyoming in Laramie. He served as department head from 1983 through 1995. Among the initiatives that he led were the acquisition of the first PCs on campus in 1984 and the development of the B.S. in computer engineering in the early 1990s. He retired in May 1998 and received the title professor emeritus. He was member of Theta Tau Fraternity and served as an advisor for the fraternity at the School of Mines. His survivors are his wife Sandra, two sons Richard and David, daughter Barbara, six grandsons, and one granddaughter.

## THEOPHILUS MARCUS RIZZI

**Theophilus Rizzi** (GeolE52) was born October 7, 1917, in Lead, South Dakota and passed away January 10, 2005, in Denver, Colorado. He had to take time off from the School of Mines for World War II. He was a reconnaissance pilot for the Army Air Force. After World War II, he was a squadron commander for the Berlin Airlift. He married Maudie in 1962, and they had a daughter, Teresa. He worked from 1934 to 1982, when

he retired. He continued to work as consultant for Homestake on a full time basis until 1992. He was chief geologist in the Exploration Division of Homestake.

## MARION CLIFFORD ROWLAND

**Marion Rowland** (MetE40) was born July 23, 1919, in Lead, South Dakota. He passed away in San Jose, California. For a number of years he worked for General Electric in New York state and then California, where he worked on atomic reactors in San Jose.

## ARTHUR O. SEMMLER

**Arthur Semmler** (ME50) passed away. He was employed with the Tomlinson Fleet Corp. in Cleveland, Ohio as their marine superintendent. Later he retired from U.S. Government Department of Labor where he worked as safety inspector.

## FOREST CHARLES SEXTON

**Forest Sexton** (MetE59) passed away. He was born December 24, 1932. He worked as patent attorney for United States Steel in Pittsburgh, Pennsylvania.

## LOWELL JEROME SIMONS

**Lowell Simons** (GenE58) passed away from respiratory arrest and heart failure. He was born November 7, 1932, in Wolsey, South Dakota. He was a lawyer, real estate broker, general contractor, and private pilot. Survivors include wife Marilyn, sons Gary and Greg, daughters Lynn, Judy and Connie, brothers, and eight grandchildren.

## DAVID LEE SMIZER

**David Smizer** (CE82) worked for Henkel Corp. He passed away April 6, 2005. Survivors include wife Carla and children Morgan and Dexter.

## JOSEPH WENDELL STEPHENS

**Joseph Stephens** (EE36), 91, of Denver passed away in Louisville, Colorado. Preceded in death by wife, Ruth and daughter Nancy, he is survived by a brother, grandchildren, and great

grandchildren. He was senior electrical engineer for Public Service Co. for more than 40 years.

## KENYON GRANT SUNDING

**Kenyon Sunding** (ME58) passed away on November 18, 2005, from liver cancer that was aggressive. He worked for Dugan Air Inc as sales marketing manager.

## ROLLIN GEORGE TAECKER

**Rollin Taecker** (ChemE41), Ph.D., passed away on August 19, 2005, in Naperville, Illinois at the age of 86. He was respected internationally for his contributions to global nuclear nonproliferation as an educator in the peaceful uses of nuclear energy and science. He was director of the International Institute of Nuclear Science and Engineering at Argonne National Laboratory, and was chief of fellowships and training for the United Nation's International Atomic Energy Agency. Dr. Taecker also served his local community as an elected Commissioner for Naperville and a trustee for the college of DuPage.

The son of pioneers in Naperville and South Dakota, after his Bachelor degree, he earned his doctorate in chemical engineering from University of Wisconsin in Madison. Dr. Rollin Taecker's career began at a time when nuclear science was just emerging. His early research identified processes for nuclear separation and oil refinement, which aided America in World War II. After receiving his doctorate in 1942, he was appointed as a professor in chemical engineering at Kansas State University in Manhattan. In 1953, he helped initiate President Eisenhower's "Atoms for Peace" program at Argonne National Laboratory. In 1956, he became Argonne's director of the International Institute of Nuclear Science and Engineering, a move that allowed his young family to sink new roots in his mother's home town, Naperville.

His career took him throughout the world as he assisted efforts for the peaceful



use of atomic energy. In France, Dr. Taecker was a fellow at the Saclay Nuclear Institute from 1962-63. In Vienna, Austria, Dr. Taecker served the United Nation's International Atomic Energy Agency (IAEA) as its chief of fellowships and training from 1969-71. Major assignments also took him to the Philippines, Brazil, South Korea, and Japan. Rollin's intellect, professionalism, and his warm and earnest style made a positive and lasting contribution to friendly relations between the United States and other nations.

In 1958, he was elected to Naperville's City Council and served as commissioner for public works. In 1975, Dr. Taecker was elected to the board of trustees at the College of DuPage. His wife, Patricia Precourt Taecker, survives him and assisted him as an ambassador of American friendship and leader in the community. Together, they helped initiate programs for the support of the mentally ill in DuPage County. Rollin is also survived by three sons, Kevin, Kurt and Matt; five grandchildren; and sister-in-law Nel Taecker.

## **WILLIAM FRANK VOBEDA**

**William Vobeda** (CE42) died March 25, 2005, of heart failure. He was well known in the community for his civic activities and as a civil engineer. He was born December 5, 1918 in Lodgepole, South Dakota. During World War II, he designed airplanes in Columbus, Ohio. In 1942, he married Virginia Parker and they had six children. For most of his career he worked for Martin-Marietta, Colorado. He was a Boy Scout master for many years and earned the honor of Silver Beaver. He belonged to the Englewood Lions Club and the Denver Chess League. He served on the Englewood City Council and was an avid golfer and chess player. He is survived by his wife Virginia and five children, William, Margaret, Mary Jo, Barbara and Lori, 15 grandchildren, and eight great-grandchildren.

## **WALLACE STEPHEN WELLS**

**Wallace Wells** (EE47), age 80, of Minneapolis, died peacefully on August 8, 2005. Born on June 23, 1925, in Deadwood, South Dakota, he grew up in Rapid City. After graduation he moved to Minnesota. Preceded in death by son, Stephen; survived by wife, Jean; daughters Nancy and Diane. Wally was proud of his 56 years of marriage to Jean and his family. He enjoyed fishing, canoeing, and playing the stock market.

## **GEORGE FRANCIS WELSH**

**George Welsh** (ME59), 74, passed away Sunday, January 8, 2006, at St. Mary's Healthcare Center, Pierre. George was born on July 9, 1931, in Carter. After graduation he was employed in the Winner area before entering the U.S. Army in 1952. He served until he was honorably discharged in 1954. After graduation he worked for a construction and engineering firm. He changed jobs in 1963 and worked for the SD Highway Department in Winner. He was transferred to Pierre where he continued working with the highway department, and later the federal government, before starting his own business. George owned a liquor store, laundromat, and a cement company in Fort Pierre. George worked for a number of South Dakota road construction contractors until his retirement in 1996. He is survived by his wife Mary, five sons, and three daughters.

## **MACK JAMES WEST, JR**

**Mack West** (EE53), 76, died at his home from the complications of cancer. He was born April 9, 1928, in Xenia, Ohio. After high school, he joined the U.S. Army Air Force. His last assignment was at Weaver Air Force Base, Rapid City, South Dakota.

He married DeAun Kurtz in 1948. He worked as a lineman at Black Hills Power & Light Company, and retired in May 1990 as senior vice president of engineering after 37 years of

service. Mack was a voracious reader and lifelong student of the Bible. He taught high school and adult Sunday school classes for years at First Presbyterian. He is survived by his wife, DeAun, daughter Shari, and son Dana.

## **THOMAS ALLAN WETHE**

**Thomas Wethe** (ME60) passed away. Born in South Dakota on August 23, 1926, he married Lavonne (former Rapid City resident) and they had one daughter, Ann. He joined Scorpion in October 1968 as Fabricating Manager. In 1972 he was promoted to vice president of manufacturing for Scorpion.

## **CHARLES JOSEPH WILDER**

**Charles Joseph (Joe) Wilder** (EE50), retired executive of General Electric, died at his home in Glenville, New York. During World War II he served as a naval aviator. He worked for GE for much of his career. He and his wife were active members in their community. Joe is survived by his wife, Agnes, five sons and two daughters, 15 grandchildren, and four great-grandchildren.

## **ALICE WILKERSON**

**Alice Wilkerson**, 90, of Rapid City, died Sunday, January 9, 2005, at a local nursing home. Alice worked as a secretary for the Liberal Arts Dept. at the School of Mines. She retired in 1981.

## **HOWARD LINCOLN YEAGER**

**Howard Yeager** (EE60) was born June 29, 1932, and passed away in February 2005.



# Personnel Changes

## Welcome:

**Dr. Stephen M. Woessner**,  
Exempt, Research Scientist I,  
Center for Accelerated  
Applications at the Nanoscale  
(2/13/06)

**Mitchell S. Vander Vorst**, Exempt,  
Director of Communications,  
University and Public Relations  
(1/17/06)

**Christi R. Carter**, Exempt,  
Assistant Director of Admissions,  
Admissions (1/9/06)

**Dr. Cynthia A. Holte**, Faculty,  
Instructor, Chemical and  
Biological Engineering (1/2/06)

**Dr. Darrin C. Pagnac**, Faculty,  
Haslem Postdoctoral  
Fellowship/Assistant Professor,  
Geology and Geological

Engineering (1/2/06)

**Heidi L. Sieverding**, Faculty,  
Instructor, Geology and Geological  
Engineering (1/2/06)

**Stacey E. Jackson**, CSA,  
Accounting Assistant, Office of  
Sponsored Programs (11/21/05)

**Nina (Ginny) V. Byers**, CSA,  
Secretary, Mathematics and  
Computer Science (11/21/05)

**Kelli K. Kammerer**, CSA,  
Information Specialist, University  
and Public Relations- Educational  
Programs and Professional  
Conferences (11/8/05)

**Michael T. Greenwald**, temporary  
Exempt, Research Scientist II,  
Museum of Geology (10/17/05)

## Farewell:

**Joshua A. Boyer**, Exempt,  
Intercollegiate Athletics (2/3/06)

**Alisha M. Reinhart**, CSA, Library  
(1/30/06)

**Dr. Fernand Marquis**, Faculty,  
Materials and Metallurgical  
Engineering (12/20/05)

**David Janovy**, Faculty, Electrical  
and Computer Engineering  
(12/31/05)

**Dr. Richard Pendleton**, Faculty,  
Mechanical Engineering  
(12/31/05)

**Richard Wold**, Faculty, Chemistry  
(12/31/05)

**Miaken L. Zeigler**, Exempt,  
Admissions (12/15/05)

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**Deanna M. Bies, CSA,**  
Information Technology Services  
(12/9/05)

**Amber R. Kurtz,** temporary  
Exempt, University and Public  
Relations (10/21/05)

**Jamie L. Lembke,** Exempt,  
Admissions (11/18/05)

### **Change:**

**Dr. Haiping Hong,** from Exempt,  
Research Scientist I, Materials  
and Metallurgical Engineering, to  
Exempt, Research Scientist III,  
Materials and Metallurgical  
Engineering (2/1/06)

**Patrick W. Baker,** from Exempt,  
Coordinator of Multicultural  
Activities/Assistant Football  
Coach, Multicultural  
Affairs/Intercollegiate Athletics  
to Exempt, Admission  
Counselor/Assistant Football  
Coach, Admissions/Intercol-  
legiate Athletics (12/9/05)

**Barbara J. Hughes,** from CSA,  
Academic and Enrollment  
Services, to temporary CSA,  
Program Assistant I, Academic  
and Enrollment Services — Title  
III (12/7/05)

**R. Scott Wiley,** from temporary  
Exempt, Counselor, Student  
Affairs to Exempt, Suicide  
Prevention Coordinator,  
Counseling and ADA Student  
Services (11/1/05)



# Personnel Changes

## Advertise in the Hardrock

### **For more information contact:**

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South Dakota School of Mines and Technology  
phone # (605) 394- 6081  
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# Calendar of Events

Visit the on line calendar for details:  
<http://sdmines.sdsmt.edu/sdsmtcalendar>

For details about K- 12 events:  
<http://sdmines.sdsmt.edu/SDTechK-12>

For details about athletic events:  
[www.sdsmt.edu/athletics](http://www.sdsmt.edu/athletics)

For details about adult and professional  
educational opportunities:  
<http://sdmines.sdsmt.edu/learn>

## May 5

Cinco De Mayo

## May 8-12

Final Exams

## May 10

Employee Recognition Awards - Surbeck Center  
Ballroom, 2:30- 4 PM

## May 13

Spring Graduation - King Center - Goodell  
Gymnasium, 9 AM

## May 15

West River Math Contest - SDSM&T Campus

## May 20

Compass Day

## May 26-27

State Track Meet - O'Harra Stadium

## May 30

Memorial Day

## June 7

Summer Payment Day

## June 16-17

Orientation - FIRST Connections Residential

## June 19

Orientation - Summer Drive-in at the Mines  
/ FIRST Connections Academic

## July 4

Independence Day

## July 13-14

Orientation - Miner's Camp

## July 14

Visit Mines Day

## July 17

Orientation - Summer Drive-in at the Mines II

## August 12

Orientation - HardRocker Academy

## August 25-30

Welcome Week

## August 28

Classes Begin

Welcome Convocation

- Surbeck Center Ballroom, 9 AM

## August 29

President's Picnic - Quad, 5 PM

## September 4

Labor Day

## September 24

Senior Frosh Picnic

## September 28

Coronation

## September 29

All-campus picnic and M-Hill climb

## September 30

M-Day

M-Day parade

Football vs. BHSU, 1 PM

## October 1

SAC Golf Tournament

## October 9

Native American's Day - No Classes

## October 11-13

2006 Rocky Mountain Unconventional Gas  
Conference - Surbeck Ballroom, 8 AM - 5 PM

## November 3-4

Family Weekend

## November 4

Visit Mines Day

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and the TSP Scholarship Fund.

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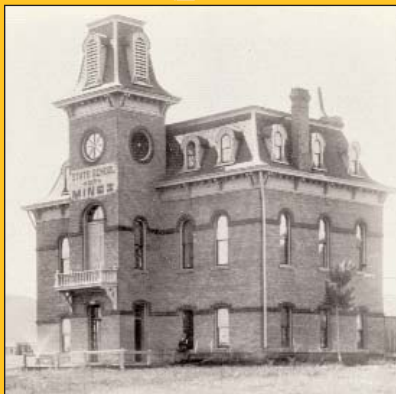
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# Tech Trivia

## Did you know that...

- The advertisement for the 1888-89 school year proclaimed the School of Mines "a school of technology" and listed the three courses leading to the bachelor of science degree in civil engineering, engineering, and mining? According

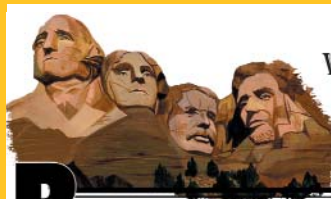


to an early 1889 *Journal* article, the School of Mines was reported as "well established" with an excellent faculty, and it was "destined to do a vast amount of good".

- The Aurum, named for the chemical symbol "Au" for gold, was first printed on November 15, 1901 in the *Rapid City Journal's* print shop? S.S. Arentz, class of 1904, was the first editor.



- When Dakota School of Mines was established March 7, 1885, Rapid City and other Black Hills settlements were still new and rough-hewn? Gold had been discovered only 11 years before by Horatio Ross on French Creek near Custer in 1874. That discovery paved the way for the Gold Rush that brought prospectors and other fortune seekers into the land the Indians called the Paha Sapa (Black Hills).



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- Rent space while developing designs and prototypes, testing products, conducting market research, creating marketing materials, and searching for capital.
- Have access to the business development groups and mentors located in the incubator.

### Support organizations located in the Center:

- Rapid City Economic Development Partnership, Genesis Equity Fund
- West River Business Service Center
- SCORE

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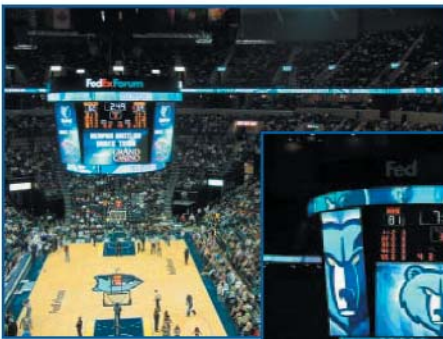


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