

# South Dakota School of Mines and Technology

## THE **HARDROCK**™

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

**SPRING 2008**

### Successful Presidency Leaves Lasting Legacy

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...and much more!

# Perspectives



Dear Alumni and Friends,

As I write this, it is with the realization that my tenure as president of the South Dakota School of Mines and Technology is fast coming to a conclusion. June 30, I retire and Dr. Bob Wharton becomes the 18th president of our wonderful institution. I share your confidence in his selection and look forward to watching the evolution of the School of Mines under his leadership.

These past five years have gone all too fast. During this period it has been my great pleasure to travel across the country to visit with many alumni and friends, tour corporations employing School of Mines grads, and learn about the ever-changing work of science and engineering in the 21st century. What an opportunity! Thank you to all who have shared time and energy to encourage and educate me.

On reflection, the campus has achieved much these past years. New doctoral programs, research centers, and academically stronger and growing entering freshman classes, broader ties with economic development through an on campus business incubator, new facilities, and an enlarged reputation now characterized as "the Mines".

And the future is even brighter. The legislature passed and Governor Rounds has signed a bill permitting the Regents to bond for new science/laboratory facilities. For the School of Mines, this means a new chemical and biological engineering/chemistry building and a new paleontology building will soon grace the campus. Coupled with the St. Joseph Street/St. Patrick Street connector road (supported by the city and federal funds) through the south side of campus and renovation of the Surbeck Center (supported by student fees), the face of the campus is evolving. Several more capital projects are in the planning stage.

Clearly, the 21st Century will be characterized by technological changes. Engineering and science are in the forefront of importance to the future positioning of the United States in the world community. The School of Mines, its faculty, staff, students, and alumni are well positioned to make significant contributions as they have over the course of our 123 year history.

It was Sally's and my great pleasure to be a part of this great adventure these past five years. We leave with appreciation to all for your support and friendship and with great admiration for your past achievements, present accomplishments, and future ventures. We take fond memories of the Black Hills and a bit of the "Hardrock" spirit with us.

As always, your thoughts and comments are welcome. I can be reached at <charles.ruch@sdsmt.edu> through June 30, and at <charlesruch@hotmail.com> after July 1.

As always,

Charles Ruch  
President

P.S. If you are not on the bi-weekly president's e-mail newsletter 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 2008

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## On the cover:

**Cover Photo:** On June 30, 2008, the South Dakota School of Mines and Technology will say goodbye to Dr. Charles Ruch after five years of presidency. *Story p. 6*

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Dear Alumni and Friends,

I am honored to represent the 16,000 living alumni of the School of Mines. It affords me an opportunity to give back to an institution of which I am proud to be a part. The diplomas we carried off stage at commencement were our passports to a world of opportunity, and I am always amazed to know the places you have been and the things you have accomplished.

I have been actively engaged in the Alumni Board for some 18 months now and I am grateful for the continuity gained through addition of the president elect and the past president to the board. Your board members bring passion to their work, and fellow executive committee members Doug Aldrich (ChE62), John Davies (ChE72), Paul Gnirk (MinE59), Mike Langerman (ME72), and Ralph Wagner (CE75) along with Tim Vottero (Chem84), your alumni director, are dedicated and committed individuals of the finest kind.

Your board spent our first quarterly meeting of 2008 setting out a "desired future state" for the Alumni Association:

- Alumni are connected with each other and the campus via interactive communication tools.
- Alumni/student interactions are valued by all and alumni are connected with capstone design projects and labs.
- Alumni are actively engaged across the country and around the world.
- Alumni of every generation value the programs and services of the Alumni Association from graduation onward.
- We have a waiting list of alumni and friends wanting to serve on the Alumni Board and committees.

The Alumni Association has a rich history of generations of alumni with generations more to join us. Currently one in seven of us send an annual contribution to the Alumni Association and yet every graduate that provides current contact information receives the Hardrock, E-News, and access to resources (including the Alumni Directory) of the Alumni Office. Our current level of contributions will not support the services we provide or the needed improvements to the alumni database and website.

For the past two years, our focus has been on participation and funding - these efforts continue but have not achieved desired results. We need your feedback on the "desired future state" outlined above. Participation and funding are an outcome when value is recognized, and my challenge as your president is to ensure that you find value in the services of our Alumni Association.

Please contact me [<nelsonmd@aol.com>](mailto:nelsonmd@aol.com) or any of your board members to share your thoughts and good ideas, and if you have time and inclination we can use your help on a committee.

Warm regards,

*Marlene Nelson*

Marlene Nelson (ME 74)  
SDSM&T Alumni President

**Our mission:** *To advance the interests, influence and reputation of the South Dakota School of Mines and Technology, by fostering and developing the continued interest and active support of alumni and friends.*

## 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 university that provides graduate and undergraduate degrees in science and engineering. The School of Mines is an AQIP institution, accredited by the Higher Learning Commission and committed to quality and continued improvement.

### 2007-2008 Enrollment:

2,070 students from 42 states and 32 countries

### Costs and Fees:

A School of Mines education has never been more affordable. 2007-2008 annual undergraduate costs for tuition, fees, books, room, and board total approximately \$13,170 per year for South Dakota residents and \$14,490 for non-residents.

### 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 2007, researchers received more than \$17.1 million in funding for 72 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 116 full-time faculty members, more than 80 percent of whom hold doctorate or other appropriate terminal degrees.

### Honors and Awards:

- One of America's Best College Buys for the 10th consecutive year
- One of approximately 200 Colleges of Distinction

### Placement:

Starting salary offers to our graduates average approximately \$54,000. More than 99 percent of 2006-2007 graduates have found jobs in their career fields or graduate 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  
Biomedical Engineering  
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  
Chemical and Biological Engineering  
Geology and Geological Engineering  
Materials Engineering and Science  
Nanoscience and Nanoengineering

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The *Hardrock* is published semiannually by the SDSM&T Alumni Association and the South Dakota School of Mines and Technology Office of University and Public Relations. The *Hardrock* is a trademarked name of the SDSM&T Alumni Association. Subscriptions are available free of charge. Submissions of articles, photographs, and artwork are encouraged but will not be returned without a self-addressed, stamped envelope.

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## New School of Mines President Named

The South Dakota School of Mines and Technology will welcome **Dr. Robert A. Wharton**, provost and vice president for academic affairs at Idaho State University (ISU), as the 18th president of the university on July 1, 2008.



*School of Mines  
incoming president  
Dr. Robert A. Wharton.*

"I am honored to be selected by the Board of Regents to serve as the next president of the South Dakota School of Mines and Technology," Wharton said. "I am enthusiastic about leading the dynamic growth and stewardship of this elite, world-class

university and continuing the institution's proud heritage of excellence in preparing students to serve as leaders in the professions of engineering and science."

As the chief academic officer at ISU, Wharton has been responsible for advancing the academic and scholarly life of 13,280 students and 670 faculty members on the Pocatello campus and at four outreach centers. He successfully led the first campus-wide effort to implement and align evidence-based strategic planning, budgeting, and assessment at ISU, and led student recruitment and retention efforts that resulted in a four percent enrollment increase as of fall 2007. Dr. Wharton is a tenured professor of biology at ISU and previously served as its chief research officer, leading the university's efforts to foster, support and expand its research enterprise.

President-elect Wharton is married to Carolyn R. Fassi Wharton, a native of St. Louis, Missouri. Dr. Fassi Wharton has 20 years of experience working in health care administration at the federal, state, and local levels, in private industry and in academe as a faculty member. Her doctorate in public administration is from the University of Southern California

and she holds a master in public health degree from San Jose State University. The Wharton's son Matthew, is a software engineer with Medtronic Corp. in Colorado.

## Outstanding Recent Graduates Honored

Eight School of Mines alumni were honored as recipients of the 2008 Recent Graduate Award during the Engineers Week luncheon held February 21.

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 2008 honorees: **Eric Broughton** (EE97), **Joshua Goddard** (ME97), **Jennifer Kennedy** (Chem98), **Christopher Kinney** (MetE97), **Matthew Potts** (CEng/EE97), **Lance Roberts** (CE98), **Shawn Wilczynski** (MinE97), and **Todd Youngman** (CSc/EE/CEng97).



*School of Mines outstanding recent graduate honorees:  
Front row (l-r): **Eric Broughton** (EE97), **Joshua Goddard** (ME97), **Christopher Kinney** (MetE97).  
Back row (l-r): **Lance Roberts** (CE98), **Todd Youngman** (CSC/EE/CEng97), **Shawn Wilczynski** (MinE97), **Matthew Potts** (CEng/EE97).  
Not pictured: **Jennifer Kennedy** (Chem98).*

## School of Mines Wins CASE Honor

The School of Mines received recognition from the Council for Advancement and Support of Education (CASE) during the council's District VI awards program on January 14 in Denver.

The School of Mines was named the Bronze



Award winner in the Student Recruitment Series category for the "Invent Tomorrow" series.

The District VI region includes institutions in Colorado, Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota and Wyoming, such as the Colorado School of Mines, Creighton University, Iowa State University, Kansas

State University, the University of Nebraska – Lincoln, and more. The School of Mines was the only institution in South Dakota to receive an award.

## School of Mines holds 156th commencement

The School of Mines held its 156th Commencement Dec. 22, 2007, and awarded degrees to more than 100 undergraduate and graduate students.

**Gerard A. Baker** delivered the commencement address. Baker is superintendent of Mount



*Commencement speaker*  
**Gerard A. Baker,**  
*superintendent of Mount  
Rushmore National Memorial*

Rushmore National Memorial.

Baker, a graduate of Southern Oregon State University, with degrees in criminology and sociology, is a full-blood member of the Mandan-Hidatsa Tribe of the Fort Berthold Indian Reservation, Mandaree, North Dakota.

He has had a widely varied career, serving as a deputy sheriff, a campground ranger, law

enforcement ranger, wilderness ranger, park ranger-historian, and a park superintendent. In May 2004, he assumed the position of superintendent, Mount Rushmore National Memorial, and responsibility for more than 1,200 acres, which include the magnificent monument. Mount Rushmore National Memorial visitation is nearly three million visitors per year.

**Micah Sheldon** (GeolE07) represented the



*Senior class representative  
speaker* **Micah Sheldon** (GeolE07)

graduating class. While attending the School of Mines, Mr. Sheldon invested his time in Intervarsity Christian Fellowship (IVCF), Reserve Officer Training Corps (ROTC), Ranger Challenge, Phi Eta Sigma honor society, Society of Economic Geologists, and Tau Beta Pi honor society. He has

served as a small group leader and as president of IVCF, competed in five Ranger Challenge Competitions leading the team to a fourth place finish as captain, and participated in the Baaton Memorial Death March marathon, finishing in the top 40. Phi Eta Sigma voted him vice president for two consecutive years. In addition, he has served as a peer advisor, FIRST assistant, intramural athlete, and an employee in the Surbeck Student Center.

Also during the ceremony, the School of Mines honored four alumni with "Distinguished Alumni" awards, given to graduates who have made outstanding contributions in their professions and to the School of Mines.



**Dr. Gary Dirks** (Chem73), **Lowery Smith** (GeolE51),  
**James Green** (ME74), and **Steve Newlin** (CE75)



This year's Distinguished Alumni: **Dr. Gary Dirks** (Chem73), **James Green** (ME74), **Steve Newlin** (CE75), and **Lowery Smith** (GeolE51).

### Defense bill proposes \$8.83 Million for School of Mines projects

U.S. Senators Tim Johnson and John Thune recently announced that the Fiscal 2008 Defense Appropriations bill that passed recently included more than \$8.83 million in funding for the School of Mines to fund research projects designed to improve our nation's military. Previously, Representative Stephanie Herseth Sandlin announced the bill was passed by the House.

Since 2001, The School of Mines has received more than \$80 million in Congressional appropriations for projects and research.

The 2008 Defense projects proposed by the Senate include:

- \$6.4 million: Future Affordable Multi-Utility (FAMU) Materials for the Army Future Combat Systems
- \$400,000: Control System for Laser Powder Deposition
- \$400,000: Improvised Explosive Device (IED) Simulation in Different Soils
- \$300,000: Transparent Nanocomposite Armor
- \$500,000: Small Unmanned Aerial Vehicles (UAVs) and Sensors
- \$350,000: Shielding Rocket Payloads
- \$480,000: Novel Extremity Body Armor

### CAMP celebrates ten years

The School of Mines hosted students, alumni, and supporters of the Center of Excellence for Advanced Manufacturing and Production (CAMP) on Oct. 26, 2007, as they celebrated the 10th anniversary of CAMP.

The program included messages from current and past students and keynote speaker Tana L.



Utle, chief technology officer and vice president of the Technology & Solutions Division at Caterpillar Inc; and an announcement of a \$200,000 donation from Caterpillar for the Caterpillar Excellence Fund to benefit CAMP students.

A highlight of the program was a series of special resolutions from South Dakota Governor Michael Rounds, Rapid City Mayor Alan Hanks, and the South Dakota Board of Regents declaring Oct. 26, 2007, the Center of Excellence for Advanced Manufacturing and Production Day.

CAMP was officially dedicated in October 1997. Modeling the multi-disciplinary, team-based philosophy to which we remain committed, CAMP is currently directed by **Dr. Michael Batchelder**, professor, electrical engineering, and **Dr. Dan Dolan**, professor, mechanical engineering. The CAMP program reports to Dr. Duane Abata, dean, college of engineering. For more information about CAMP, visit <<http://camp.sdsmt.edu>>.

### School of Mines named one of "America's 100 Best College Buys"

The School of Mines has been named one of America's 100 Best College Buys for the 10th consecutive year.



The survey reported average costs of attendance, including tuition, fees, room and board. The survey found that the

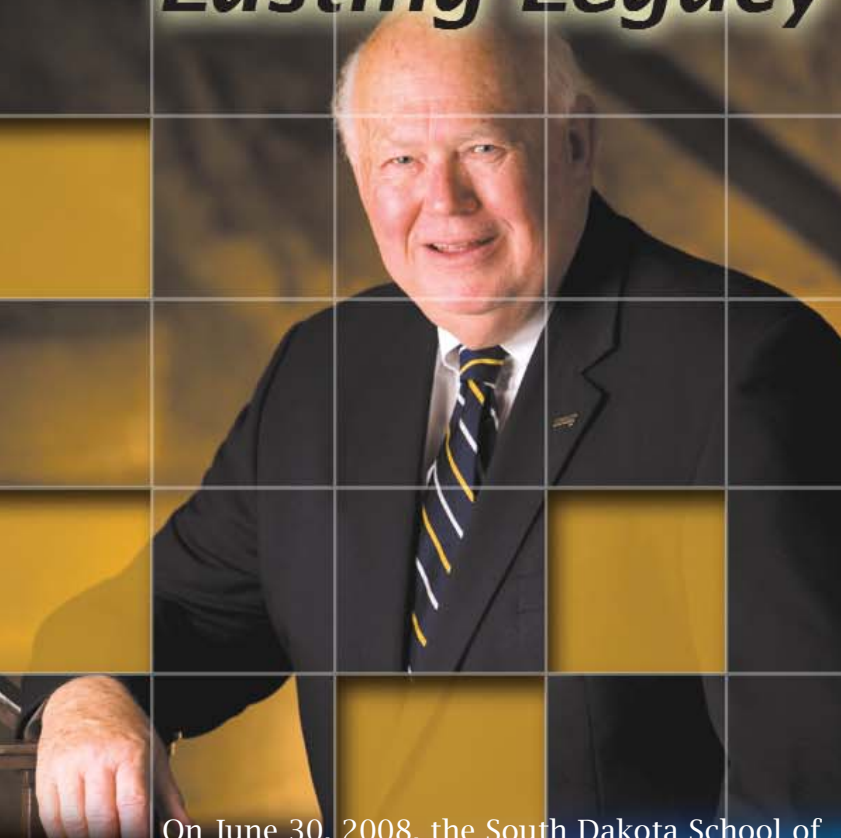
average 2007-2008 cost of attendance based on the regular cost at a private institution and the out-of-state cost at a public institution is \$26,190. School of Mines costs are \$ 12,203 for South Dakota residents and \$13,441 for non-residents.

This year's America's 100 Best College Buys is the 12th list published by Institutional Research & Evaluation, Inc., a research and consulting organization that specializes in the recruiting and retention of students for universities. The organization sends surveys to each institution that meets its criteria and makes selections for the list. This year, 1,152 universities responded to the survey.

Survey results showed that the average national ACT score for entering college freshmen was 23 and the average high school grade point average was 3.28. Entering freshman at the School of Mines earned an average ACT average score of 25 and a GPA average of 3.53.



# Successful Presidency Leaves Lasting Legacy



On June 30, 2008, the South Dakota School of Mines and Technology will say goodbye to Dr. Charles Ruch and his first lady, Sally after five years of presidency.

Ruch became the 17th president of the School of Mines in 2003 after retiring from Boise State University, where he served as president for 10 years. Previously, Ruch spent 19 years at Virginia Commonwealth University, first as an associate dean and dean, and as provost and vice president. His first university assignment came at the University of Pittsburgh, where he was a faculty member and department chair. Ruch holds master's and doctorate degrees in education from Northwestern University and a bachelor's degree in chemistry from The College of Wooster (Ohio).

According to Ruch, one of his most important jobs arriving on campus was to find consensus across the institution – the faculty, staff, students, stakeholders, alumni, foundation, and community – as to what the university needed to move toward and what our future was going to hold.

“When I first arrived, there were issues of mission and mission creep, so early on we need to decide what we were going to be, and then to

move ahead to say, ‘What does it mean to be a premiere technological university in the 21st century?’” Ruch said. “Well, it means to have outstanding students, terrific faculty, a robust research program, an involved graduate program, and serious links to the business and economic community. So that’s what we set out to do.”

To accomplish these ends, Ruch opened lines of communication with the community, created a focus on using research on campus to spur economic development, and began a strategic planning process. The planning process has allowed the campus to develop a vision and a course for the university with input from its diverse constituents.

During Ruch’s tenure, the university has reaffirmed its mission to be the technological university for the State of South Dakota, to be dedicated to being a leader in 21st century education, and to be recognized as the university of choice for engineering and science not only within the state but around the world.

As a result, the university began setting a course to reach these goals through initiatives such as implementing higher admissions standards; expanding doctoral programs; building the research program with projects, centers, and activities; tying into the economic development of the community through the Black Hills Business Development Center, housed on campus; and a number of campus development projects, such as the new Paleontology Center and the Chemical and Biological Engineering/Chemistry Building.

And these changes are just the beginning for the School of Mines. Ruch hopes to see the university continue on this successful path in the years ahead.

“I want to see the School of Mines get even stronger and better known as a major player in the world of engineering and science, in this part of the world and beyond,” Ruch said. “I want to see it be successful across the board, and we are in a position to make that happen.”

Ruch ends his tenure at the School of Mines with the positive, focused attitude characteristic of his leadership.

“I’ve enjoyed my time here so much. I appreciate the spirit, support, and the excitement that everyone brings to the place,” Ruch said. “We’ve worked hard, but more importantly, we’ve had fun doing it.”





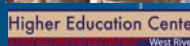
# Timeline of accomplishments

2003



- July 1, 2003 Assumed Presidency
- December, 2003 Mission as a technological university was reaffirmed by the South Dakota Board of Regents.  
Establishment of Strategic Agenda / Mission, Vision and Goals:
- May 11, 2004 Implemented Strategic Plan

2004-2005



- Interdisciplinary Science degree curriculum re-designed
- Summer bridge program for new incoming students piloted
- New Ph.D. in Nanoscience and Nanoengineering established
- Created Atmospheric and Environmental Sciences Ph.D.
- New undergraduate admissions standards approved
- Awarded Center for Accelerated Applications at the Nanoscale (CAAN) Center (Governor's 2010 Plan)
- Awarded Friction Stir Welding Industry University Cooperative Research Program (IU/CRC) by the National Science Foundation
- Opened the West River Higher Education Center
- Reorganized organizational structure of the university
- Updated the campus master plan
- Achieved maximum ABET accreditation for 9 of 11 engineering programs
- Designed with SDSM&T Foundation a plan for a major all resource fund raising campaign.
- Completed Capital Campaign internal and external feasibility studies
- Foundation initiated Tech Ventures

## Facilities Completed:

- Peterson Residence Hall
- Tech Development Lab
- Library Renovation (Phase I)
- Cooling infrastructure
- Supersonic wind tunnel

2005-2006



- Implemented the Women in Science and Engineering program (WISE)
- Quiet phase of Foundation \$50M campaign began
- Conducted pilot of the Tablet PC Program
- Ph.D. program in Biomedical Engineering with USD established
- Implemented community coalition on student health and safety issues and lead comprehensive community project
- Provided summer education and conferencing opportunities for professionals and educators in the region, college-bound and potentially college-bound youth
- Achieved maximum re-accreditation from the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools
- Completed campus restructuring, including: hiring two new college deans and revising committee structure
- Completed strategic review of enrollment management issues (Noel-Levitz), nomenclature study, design of logo, recruitment plan, and branding statement (Stamats), and restructured enrollment management
- Redesigned the website architecture and homepage and moved the housing application process, room assignment notification, and information for staff members to the web
- Composite and Polymer Engineering Laboratory (CAPE) opened

## Facilities Completed:

- Portable bleachers and artificial turf for Dunham Field (City of Rapid City 2012 Project)

2006-2007



- Implemented the Tablet PC Program with incoming freshman class
- Re-designed governance of graduate programs, role of graduate dean and implemented new structure
- Developed Strategic Enrollment Management (SEM) approach to enrollment management
- Awarded Center for Biochemical Research and Development (CBRD) - (Governor's 2010 Plan)
- Established Office of Tech Transfer
- Significantly expanded summer activities for K-12 students
- Presented Montileaux painting to Smithsonian National Museum for the American Indian
- Significantly increased the number of freshman scholarship awards

## Facilities Completed:

- Computational Mechanics Laboratory completed
- Black Hills Business Development Center opened

2007-2008



- 10th Anniversary - Center of Excellence for Advanced Manufacturing and Production
- Initiated request and legislation passed for bonds to fund the construction of new Paleontology Center and Chemical and Biological Engineering/Chemistry buildings
- General Activities Fee increase approved for Surbeck Center renovation
- Road connecting St. Patrick Street to School of Mines campus approved by Legislature
- First Economic Impact Study completed
- Planning Grant for NSF IU/CRC Biochemical Processing funded

## Facilities Completed:

- Foundry addition completed
- Maptek Lab (mining engineering) opened
- Temporary paleontology laboratories opened

# Off to a WISE Start

In recent years, the South Dakota School of Mines and Technology has set a priority goal of not only increasing the number of Native American students enrolled in science, technology, mathematics, and engineering (STEM), but also increasing the retention of these students.

To help meet this goal, a new program was proposed: the WISE Start Program. WISE Start goes the extra mile by adding support components that address the needs of a specific group that is underrepresented in the science and engineering disciplines: Native American women.

"The purpose of this pilot program, funded by the U.S. Department of Education's Women's Educational Equity Act program, has been to explore ways of getting our Native American women students off to a good start academically and socially at the School of Mines," Dr. Karen Whitehead, provost and vice president for academic affairs, said. "Of the 10 students who participated in the program over the past year and a half, nine are still pursuing their educational goals, eight of them at the School of Mines. Our retention rate for these students is 80 percent compared to our institution's overall first to second year retention rate of 76 percent."

To increase the number of Native American women entering and continuing in science and engineering programs, the WISE Start program works with the students to provide them with better preparedness for the demand of science and engineering disciplines; financial incentives to enter and remain in college; both peer mentoring and mentoring by successful female role models; and accountability for individual success.

The first two students were admitted into the program in the Fall 2007 semester. The students, **Deanna Shoup** (interdisciplinary science, Rapid City) and **Channing Thompson** (chemistry, Rapid City), have both found success and continued with their education at the School of Mines.

"This program gave me an instant group of people that could support me and encourage me. They are driven, but want to help other people who are just starting out," Shoup said. "Because they were women, I felt like they had a better understanding of the challenges I would face at this school."

"I decided to participate in the program because

**"**This program gave me an instant group of people that could support me and encourage me. **"**

**Deanna Shoup**  
**Interdisciplinary Science**  
**Chemistry**  
**Rapid City, SD**



it was a great scholarship opportunity," Thompson said. "It has also allowed me to make connections with professors and get my foot into the door of the Women in Science and Engineering program on campus."

An important component of the program is to prepare the participants to become role models and mentors for future Native American women students. Both Shoup and Thompson volunteer their time to help ensure the success of other Native American women.

Thompson volunteers her time as a tutor, and Shoup serves as a leader in the Mentors & Mentees (M&M) Program. M&M is an organization for women students that focuses on creating an environment in which each participant is valued, encouraged, and accepted by her peers; the sharing of experiences to create a stronger confidence in the participant's choice of engineering as a career; and the means for coping with career, personal, and academic issues.

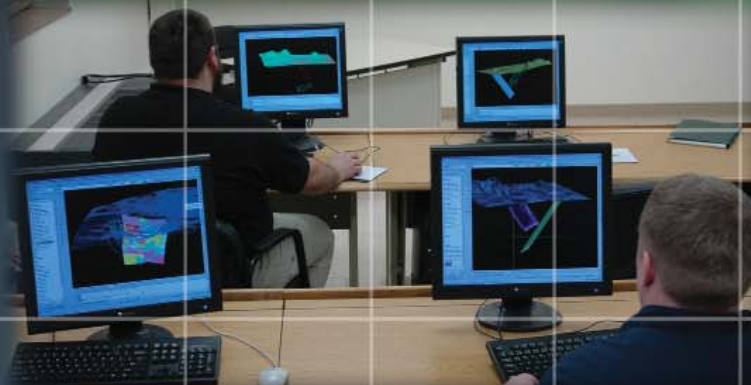
For the women in the program, they are off to a WISE start, and the future looks bright.



# Maptek Establishes Mining Engineering Laboratory



This spring, the South Dakota School of Mines and Technology became home to a new, state-of-the-art computer lab and global communications center.



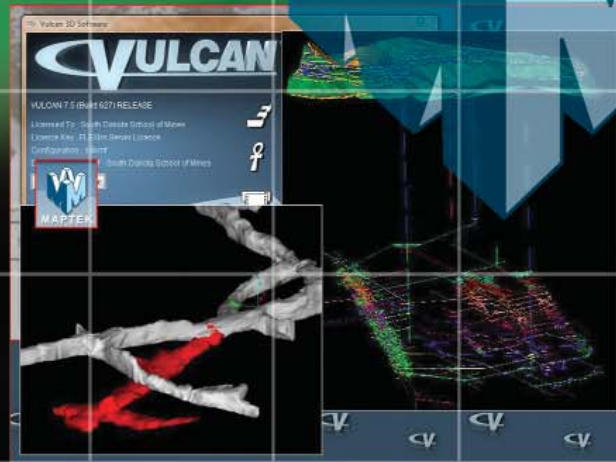
The mining engineering and management program at the School of Mines has been a leading institution that has focused heavily on detailed mine design by leveraging the Vulcan software from Maptek. Today, many of the senior and executive engineering positions in the mining industry are held by School of Mines mining alumni.

With the rapid growth of the mining engineering and management program on campus, with student numbers climbing to 80, the need for a state of the art mine design lab to accommodate 25 computer stations and a global communication center, became evident.

A generous donation from Maptek made it possible to remodel existing rooms and create this new mine design lab. More companies from the mining industry, including Royal Gold, Inc. and Austin Powder Company, and alumni are continuing to donate towards equipment to complete the lab.

"On behalf of the entire university, I would like to thank these companies for their generous gifts," Dr. Charles Ruch, School of Mines president, said. "We are fortunate to have partners such as these that want to take part in educating and training top engineers and scientists."

The Maptek Advanced Mine Design Center will enhance the faculty's ability to promote and teach advanced technical aspects of the mining industry, with emphasis on 3D-modeling and design. Due mainly to South Dakota's recent enhancement of the curriculum to include mining business and management and the resulting increase in enrollment, students were forced to share computers in a cramped classroom. The new facility is twice the size and will enable 25 students access to computers.



*3-D modeling Vulcan software donated by Maptek helps students learn advanced technical design aspects of the mining industry.*

Other features of the new center include:

- Video conferencing capabilities for distance education and global communications
- Dedicated wall space for both a large plasma screen and blackboard
- A ceiling mounted air projector that is networked to all tablet PCs and desktops
- Ergonomic seating and new equipment furniture
- New flooring and improved lighting
- Updated heating, ventilation, and air conditioning

This lab, in addition to quality training of students, also serves as a major design hub for the DUSEL geomechanics activities.

Established 25 years ago, Maptek offers a range of cutting-edge software and hardware technologies. Vulcan software, a 3D geological modeling and mine planning system, is currently used at more than 600 sites worldwide. It is also be used as a teaching tool at the South Dakota School of Mines and Technology.



*Maptek general manager Mr. Jon Larson and School of Mines President Charles Ruch at the new Maptek lab ribbon cutting ceremony.*



# Nucor Makes Million-Dollar Gift

Officials from the South Dakota School of Mines and Technology and Nucor Corporation have announced the first \$1 million gift of 2008.

"On behalf of the entire university, I would like to thank Nucor for its generous gift," Dr. Charles Ruch, School of Mines president, said. "We are fortunate to have a visionary partner such as Nucor to help support our mission to develop engineers and scientists that help our industries evolve and our nation respond to the unprecedented challenges facing today's world."

Nucor's gift will be used to create the Nucor Endowed Professorship for Metallurgical and Steelmaking Technologies in the materials and metallurgical engineering department at the School of Mines. The School of Mines plans to have the endowed professorship in place for the start of the 2008-2009 academic year.

"The Nucor gift will help transform our program in a very positive manner, much the same way Nucor has helped to transform the steel industry," **Dr. Jon Kellar** (MetE84), chair of the materials and metallurgical department, said. "We are proud to be teammates with Nucor."

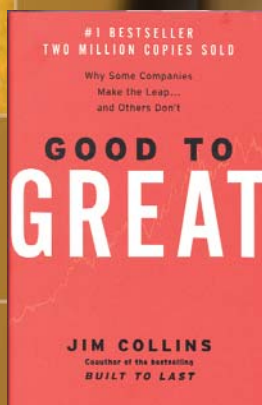
The new professorship will provide critical support for steelmaking research and ensure the continuation of higher education in the field. Funds will also be used to support graduate and undergraduate students working with the named faculty, support travel, dues, professional enrichment, and other necessary research and teaching expenditures.

“The Nucor gift will help transform our program in a very positive manner, much the same way Nucor has helped to transform the steel industry.”

**Dr. Jon Kellar** (MetE84)  
chair and professor  
materials and metallurgical  
engineering department

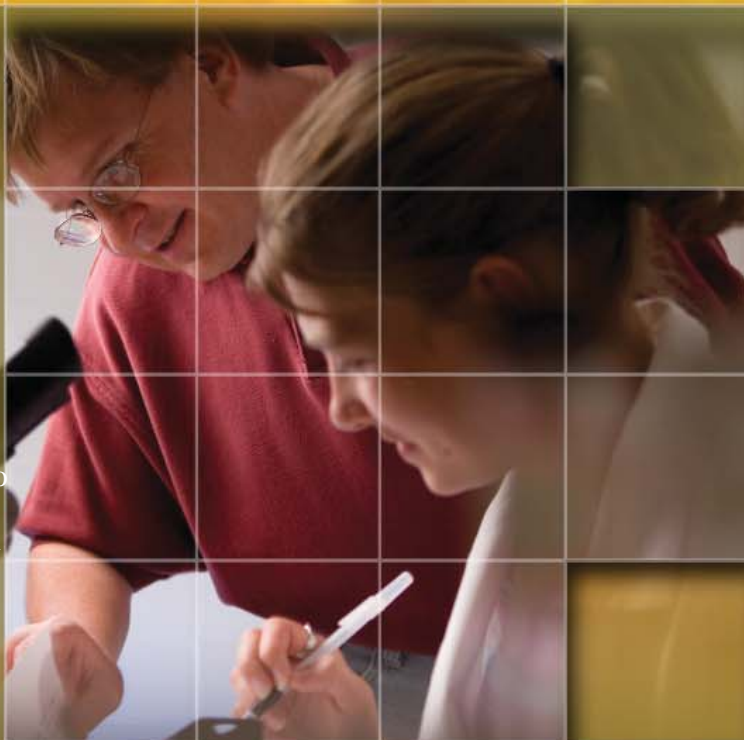
Nucor's donation highlights a long-term relationship between the steel company and the School of Mines. Nucor has hired the university's metallurgical engineering graduates and supported the department for years.

Nucor and affiliates are manufacturers of steel products, with operating facilities primarily in the U.S. and Canada. Products produced include carbon and alloy steel — in bars, beams, sheet, and plate; steel joists and joist girders; steel deck; fabricated concrete reinforcing steel; cold-finished steel; steel fasteners; metal building systems; light gauge steel framing; steel grating and expanded metal; and wire and wire mesh. Nucor is North America's largest recycler.



Nucor has been recognized as a "Good to Great" company, resulting from a five-year project to determine what it takes to change a good company into a great one. The study, led by Jim Collins, author of "Good to Great," studied 1,435 established companies to find those that went from average to

great results. This was measured through stock returns that exceeded the general stock market by at least three times over 15 years, independent of its industry. Nucor Corp., one of the only 11 good-to-great companies they found, exceeded the market by 5.16 times. Learn more about Nucor at [www.nucor.com](http://www.nucor.com)





# New Admissions Standards Transforms Student Body

For the second year following the implementation of new admissions standards, the School of Mines welcomed a well-prepared, academically strong, and diverse group of incoming freshmen to campus for the 2007-08 academic year.

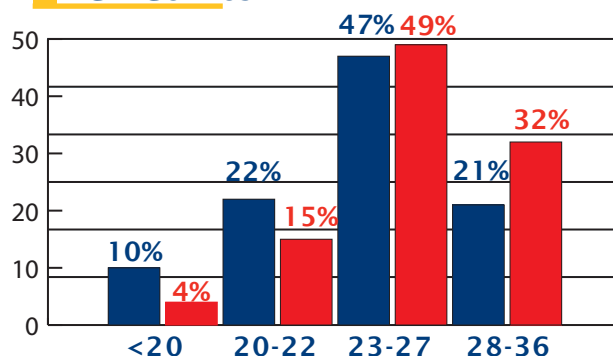
## The Fall 2007 freshman class:

- Their credentials reflect increases in both ACT Composite and Math scores.
- The grade point averages for incoming students and their rank in high school graduating class have increased.
- The 2007 freshman class has a greater percentage of geographic diversity.
- The 2007 freshman average course load as measured by credit hours has increased.
- The 2007 freshman class was 23.9 percent larger than the 2006 freshman class.

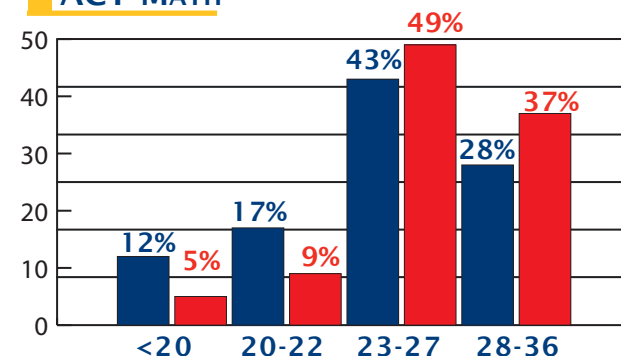
In addition, the retention rate of the 2006 class is 76.3 percent, the highest of all of the Regental institutions and a significant increase over previous years. The new admission standards — implemented in fall 2005 for the fall 2006 class — align admission requirements with the expectations students will encounter when they enter degree programs. With these changes in admission, the School of Mines can better serve the students admitted and increase competitiveness with peer institutions.

■ Fall 2005 freshman class  
■ Fall 2007 freshman class

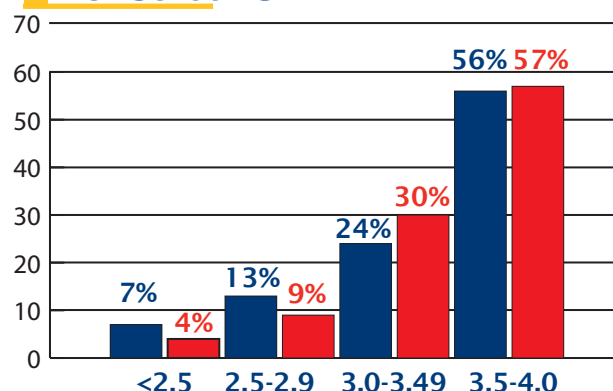
## ACT COMPOSITE



## ACT MATH



## HIGH SCHOOL GPA



# World-Class Collection to get Facelift



*Paleontology building concept design by  
Anderson Mason Dale Architects*

The Museum of Geology's collections are about to receive a facelift, and **Sally Shelton** is just the woman to take on the job. This February, Shelton joined the School of Mines as the collections manager for the School of Mines.

Shelton received a bachelor's degree in wildlife and fisheries science with an option in museum studies from Texas A&M University, a master's degree in museum science with a thesis in vertebrate paleontology from Texas Tech University, and a post-graduate diploma in geological conservation from the Sedgwick Museum's Geological Conservation Laboratory at the University of Cambridge in the United Kingdom.

She put her training to use at the Invertebrate Paleontology Laboratory at the University of Texas, the Los Angeles County Museum of Natural History, and the San Diego Natural History Museum before joining the Smithsonian as collections officer at the National Museum of Natural History in 1988.

During her time at the Smithsonian, Shelton assisted in creating high-level policies, including serving as a contributor to



the development of the national policy for removing fossils from federal lands.

"The Museum of Geology has more than 300,000 specimens in the collections, including over 100 type-specimens. It needed a full-time professional to manage this large and diverse collection," Dr. Duane Hrcir, dean of the College of Science and Letters, said. "Sally has extensive experience in natural science collections management at a number of



*Ms. Sally Shelton*

important museums. The School of Mines and Rapid City is fortunate to have attracted a scientist of her caliber to the region."

As collections manager at the School of Mines, Shelton will focus on the physical care of the collection, and the creation of policy and procedures for collection's care. She

will also focus on getting the collection well-stored, documented, and, most importantly, available.

"I knew the collection here was world-class," Shelton said. "This is not just a regional resource, it is a truly world-class collection, and is totally irreplaceable."

Currently the Museum of Geology houses approximately 300,000 fossil specimens, one of the largest collections in the United States and some of the best scientifically documented in the world. The collections support education and research for the university's faculty and

**"This is not just a regional resource, it is a truly world-class collection, and is totally irreplaceable."**

**Ms. Sally Shelton  
collections manager  
Museum of Geology**

students and researchers from around the world. The university offers the only master's degree in paleontology and enrollment continues to grow. The collections are currently housed in a building that leaves them vulnerable and largely inaccessible for study.

The Paleontology Center will provide a safe, environmentally controlled environment for the Museum of Geology's fossil, geological, and archival collections, assuring the protection of this rich heritage. For Shelton, the planned building was one of the major draws to her new position.

"The new building will allow us a fantastic resource to show the collection in the way that it has always deserved," Shelton said. "It will open up avenues that we're not even able to imagine right now."





# Back in Black

Thanks to a grant from the National Science Foundation, **Dr. Dana Medlin** and colleagues are Back in Black.

Medlin, associate professor, materials and metallurgical engineering, is the principal investigator on the project, which is a course, curriculum, and laboratory improvement project that focuses on integrating the art and science of blacksmithing into the engineering curriculum. Medlin is joined on the project by **Dr. Jon Kellar** (MetE84), chair and professor, materials and metallurgical engineering; **Dr. Stuart Kellogg** (EE82), chair and Pietz professor, industrial engineering; **James Rattling Leaf** of Sinte Gleska University, **Dr. Michael West**, assistant professor, materials and metallurgical engineering, and **Ms. Deborah Mitchell**, associate professor, humanities, and director of the APEX Gallery.

The project took root several years ago when materials and metallurgical engineering faculty encountered high school students that had developed an interest in blacksmithing. These students were unique in that they were interested in both the hands-on aspect of the craft and the engineering behind it. These encounters triggered discussions among the faculty as to how they could use blacksmithing as a tool to garner student interest and understanding in metallurgical engineering, physical science, and engineering as a whole.

To test this idea, in 2005 Medlin and Kellar approached the John Deere Foundation with a proposal to purchase basic blacksmithing equipment. They chose the John Deere Foundation because of the company's metalworking core principles and because the original John Deere was himself a blacksmith. The proposal was supported, and in 2006 they put their theory to the test.

During the summer of 2006, they worked with a number of summer camp students on metalworking, and the results were so encouraging that the concept was introduced to more than 200 School of Mines students in an introduction to engineering course. The interest garnered from these students led to the creation of an extracurricular program called the weekly Hammer-In. The Hammer-In is an open forge time every Friday afternoon that attracts an average of 15-20 students each week.

The interest shown by students wasn't the only positive, though — Medlin noticed in course discussions that those students with hands-on experience with blacksmithing





techniques had a better grasp of many metallurgical engineering concepts.

"We wanted to use blacksmithing as a gateway to improve the undergraduate student understanding and application of fundamental structure/property relationships relevant to all materials," Medlin said. "Blacksmithing will give students more of a hands-on approach to learning these concepts early in their academic career and hopefully better comprehension and application of these concepts in the more advanced metallurgical engineering courses."

Last fall, Medlin and his colleagues took



**Dr. Dana  
Medlin**

these findings and created a curriculum and laboratory proposal to the National Science Foundation. The proposal was funded, and the ultimate goal of the Back in Black program is to use blacksmithing as a gateway to improve student understanding and application of fundamental structure/property relationships relevant to all materials.

Sophomore through senior laboratories are being redesigned to include metalworking components with the thought that integrating the hands-on aspects of blacksmithing into the curriculum will lead to improved student understanding.

Another important aspect of the project is outreach. The outreach portion of the projects was implemented with the goal of increasing participation in engineering by females and minority students.

Outreach activities focus on high school students and involve on-site visits by student ambassadors and faculty. What makes the visits unique is that, with the donation of a trailer by alumnus **Craig Willan** (MetE76), they can bring a portable blacksmithing operation directly to the students. These hands-on demonstrations not only introduce students to blacksmithing techniques, they give them an understanding of the scientific principles behind metalworking.

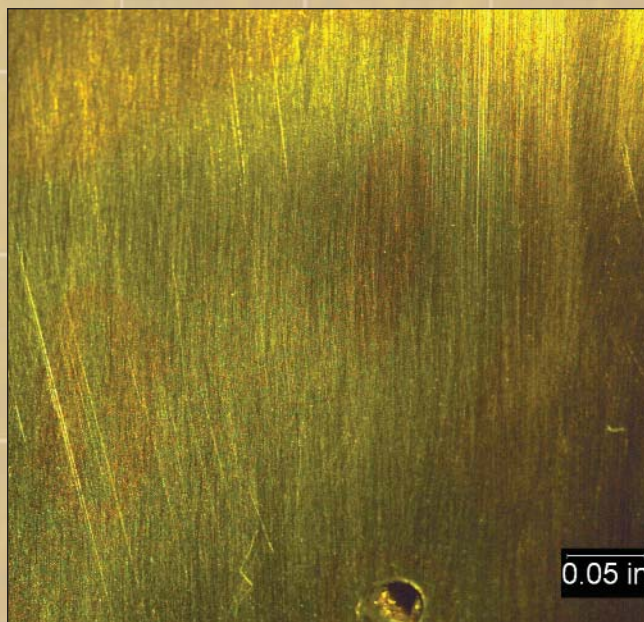
"We found that most middle school, high school, and even undergraduate students are not familiar with metallurgical engineering until their second or third year of college. Usually, this is too late to successfully recruit new students into the program," Medlin said. "Using blacksmithing as an outreach tool captures students' attention, even at the middle school level, and gives them a memorable hands-on blacksmithing experience that also introduces



them to the basic concepts of metallurgical engineering."

These hands-on demonstrations will also occur with middle- and high-school students that are on campus for activities and summer camps, such as the Youth Engineering Adventure, Science Technology Engineering Preview Summer Camp for Girls, and Engineer's Week activities.

The power of blacksmithing allows the students to take something old and create something new. Back in Black uses that idea to transform traditional engineering into something exciting and dynamic, and shows the students that they can shape their education as readily as the metal they are working with.



*Example of a Mokume Gane microstructure, which means, "wood eye metal" in Japanese, dates back to the late 1600's, and was used to decorate samurai swords. In modern times Mokume Gane has been used primarily for jewelry.*



# School of Mines Leaves \$200 Million Imprint

## Report shows multi-million dollar impact

The School of Mines recently released a new report that provides an overview of the institution's economic impact on the State of South Dakota. The report found that the university generates approximately \$200 million in economic impact to the State of South Dakota.

### Other key findings:

- The School of Mines annually contributes an estimated \$108.1 million in total output to the South Dakota economy, and supports 1,379 full- and part-time jobs that provide \$37.7 million in income to South Dakota workers.
- Alumni living in South Dakota create an \$82.5 million in additional income.
- Every \$1 in state dollars invested in the School of Mines nets \$7.57 in statewide economic activity.
- The School of Mines and its related activities support \$101.3 million in total economic output and 1,304 full- and part-time jobs that provide \$36.5 million in income to Pennington County workers.
- Approximately one in 33, or 3.2 percent, of all jobs in Pennington County are associated with expenditures linked directly to the School of Mines.

In addition to the impact outlined in the report, the School of Mines also provides significant far-reaching impact through a variety of means include the value of new discoveries by faculty staff students, and alumni on South Dakota business and industry; the creation of new businesses in South Dakota; support provided to existing business and industry in South Dakota; and availability of students to meet workforce needs of local businesses as full- and part-time employees.

The report was produced by the School of Mines Office of University and Public Relations with data analysis provided by Dr. Todd Gabe, associate professor at the University of Maine School of Economics. The full report can be read at <http://impact.sdsmt.edu>.

## Alumni Impact

School of Mines graduates benefit the South Dakota economy in a number of ways. In South Dakota and nationwide, scientists and engineers provide a substantial boost to the economy through new discoveries and innovations that improve existing products and services. These activities are reflected in the higher wages and salaries earned in the workplace.

For the purpose of this report, alumni who graduated after 1960 and reside in South Dakota were analyzed, resulting in a total pool of 2,407.

**The study finds that the average South Dakota resident with at least a four-year college degree working in a science and technology occupation earned 1.47 times as much as the average four-year college graduate.**

**Applying these premiums to the 2,407 South Dakota-based School of Mines alumni, the report finds that they generated an additional \$82.5 million over non- science and technology employees to the South Dakota economy.** This benefited the entire state through greater purchasing power and greater spending, which also created additional jobs and revenues.

In addition, School of Mines alumni drive the development of technology-based companies that employ thousands of South Dakotans. Although the impact of the businesses they have created was not quantified, their significance can not be overlooked. A few examples of the many South Dakota businesses established by School of Mines alumni include:

- \$ **Daktronics**, Brookings.
- \$ **RESPEC**, Rapid City.
- \$ **Innovative Systems**, Mitchell.







## Black Hills Business Development Center Impact

Faculty, staff, and students also play a significant role in the creation of technology based companies.

The School of Mines campus is home to the **Black Hills Business Development Center**. The center houses several businesses all with ties to the School of Mines:

- **Zyvex, South Dakota**
- **C-Lock Technology Inc.**
- **Evans & Sutherland**
- **Innovative Systems**
- **and others**



Courtesy SD Tourism

## Employee Spending

The School of Mines directly employed 770 full- and part-time employees in FY07 (including student workers). These employees then in turn purchased goods and services, injecting money into the economy and supporting local jobs.



## R&D

The School of Mines is an active partner in research and development. More than \$14.4 million in federal dollars were expended in FY07. In addition, the School of Mines provides new discoveries that result from campus research that impacts state business and industry.



## Student Spending

Through expenditures such as housing, food, entertainment, transportation, and personal items, School of Mines students made a big impact, infusing more than \$18 million into the local and state economy.



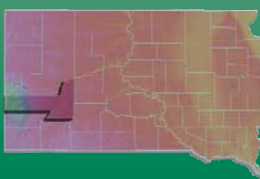
## Visitor Spending

The School of Mines welcomed more than 25,000 visitors to campus in FY07, who were responsible for a more than \$3.1 million impact on the state economy.



## O&E Budget

The day-to-day operations for the School of Mines has had a significant impact on the economy of South Dakota. The total impact of School of Mines operations (purchase of goods and services and payroll) was \$87 million in FY07.



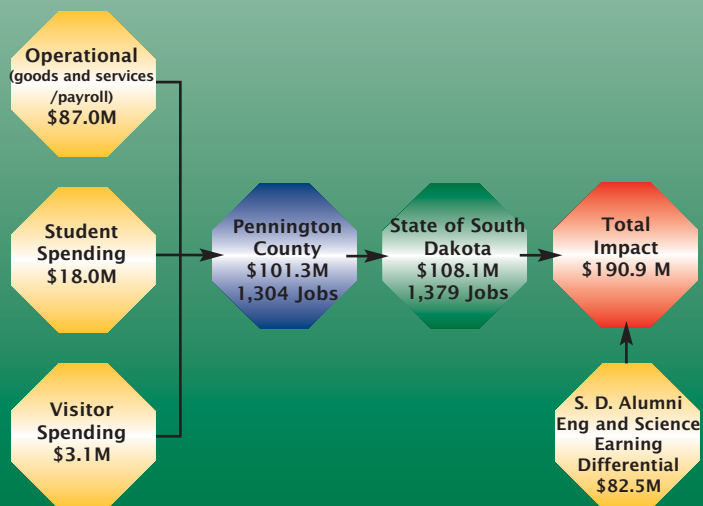
## State and County Impact

The School of Mines and its related activities created \$101.3 million in total economic output and 1,304 full- and part-time jobs in Pennington County. Statewide, the School of Mines had a total economic impact of \$108.1 million, supporting 1,379 full- and part-time jobs providing \$37.7 million in income to South Dakota workers.

"The combined economic impact from a fully occupied Business Development Center is expected to exceed \$39 million and this impact will be repeated each three to five years as the companies graduate and others take their place."

— James H. Mirehouse  
CEO, Black Hills Business Development Center

## Impact Summary





## School of Mines Students Receive National Scholarships

Six South Dakota School of Mines and Technology students have received nearly \$15,000 in scholarship funds from the Women's Auxiliary to the American Institute of Mining, Metallurgical and Petroleum Engineers, Inc. (WAAIME).

The students: **Robbie Hahn** (ME, Sioux Falls), **Collin Rogers** (MEM, McKinleyville, Calif.), **Stephanie Pashina** (MEM, Minnetonka, Minn.), **Andrew Johnson** (MEM, Chisago City, Minn.), **Jordan Hoff** (MEM, Rapid City), and **Brandon Fredrickson** (MEM, Fort Collins, Colo.).

## School of Mines Student Named U.S. Presidential Scholar

**Katherine Aurand** (EnvE, Rapid City) has



**Katherine Aurand** (EnvE, Rapid City), and President **Charles Ruch**.

been named a United States Presidential Scholar. Aurand is one of approximately 141 students chosen for what is one of the nation's highest honors for graduating high school students. Initiated by President Lyndon Johnson, the Presidential Scholars Program annually selects one male and one female student from each state, the District of Columbia, Puerto Rico, Americans living abroad, 15 at-large students, and up to 20 students in the arts on the basis of outstanding scholarship, service, leadership and creativity through a rigorous selection and review process administered by the United States Department of Education.

## Homecoming King and Queen Crowned

**Sam Tlustos** (MetE, Sioux Falls) and **Shana Bauer** (IS, Pierre) were elected Homecoming King



Homecoming king **Sam Tlustos** (MetE, Sioux Falls) and queen **Shana Bauer** (IS, Pierre).

and Queen during the 2007 M-Week ceremonies. Tlustos has been involved with Alpha Chi Sigma, Order of Omega, Material Advantage, Interfraternity Council and served as an orientation leader. Bauer has been involved with Alpha Delta Pi and United Campus Ministries and has served as Leadership Chair and Historian and as a resident assistant.

## Student Association Selected

School of Mines students recently elected class representatives to the Student Association, the student governing body.

**Graduate students:** **Marius Pettersen** (CSci, Mysen, Norway), **Hakon Skillinghaug** (EE/TM, Holmestrand, Norway)

**Seniors:** **Adam Sanders** (CE, Millfield), **Mariah Tooley** (Math, Platte)

**Juniors:** **Marcus Bartlett** (ME, Timber Lake), **Joseph Cass** (Math/CSci, Sturgis), **Mike Grave** (ME, Hartford), **James Kenney** (IE, Rapid City), **Justin Neth** (ME, Scotland), **Evan Waddell** (ChE, Indianola, Iowa), **Jonathan Warner** (ChE, Hankinson)

**Sophomores:** **Lukasz Dubaj** (IS-S, Rapid City), **Emilia Juhl** (MetE, Luverne, Minn.), **William Knight** (EE, Rapid City), **Patrick Satchell** (IE, Milford), **Melanie Satchell** (IS, Pleasant Dale, Neb.)

**Freshmen:** **Katie Aurand** (EnvE, Rapid City), **Luke Bsharah** (IS, Rapid City), **Erica Kjar** (engineering, Akron, Iowa), **Derek Nordby** (MetE, Stanton, Neb.)

## School of Mines Student Receives National Scholarship

**James Sanovia** (GeolE, Rapid City) has been awarded a scholarship from the United States Geospatial Intelligence Foundation (USGIF). This year, the Foundation awarded a total of \$54,000 to 12 recipients. All scholarship recipients were chosen based on their academic and professional excellence in a field related to the geospatial intelligence tradecraft.





# Campus Briefings

## C-Lock Technology Inc. partners with IBM

Business Development Center tenant C-Lock Technology Inc. has partnered with IBM Business Partner Enterprise Information Management, Inc. and Evergreen Energy Inc. to develop a greenhouse gas meter called GreenCert, which can calculate carbon reductions across multiple industries and devices.

**Dr. Patrick Zimmerman**, former director of the South Dakota School of Mines and Technology's Institute of Atmospheric Science (IAS) and inventor of the technology, serves as director of technology for C-Lock Technology Inc. Zimmerman is owner and inventor of C-Lock Inc., which has licensed its process on a worldwide basis to C-Lock Technology Inc.

## Employers recruit School of Mines students during career fair

Companies from around the country were on the School of Mines campus Tuesday, February 12, to recruit School of Mines students for full-time



employment and for internships.

Ninety-nine employers attended, making this the School of Mines' largest spring career fair in campus history. A list of employers who attended can be found at <http://sdmines.sdsmt.edu/careerfairdirectory>. The Fall 2007 Career Fair was also a success, bringing 121 employers from 25 states, making it the largest career fair in campus history.

## Professor receives international recognition



During a special international conference in Chernogolovka, Moscow Region, **Dr. Jan Puszynski**, professor, chemical and biological engineering, was honored by the Russian Academy of Sciences and the International Association of Self-Propagating High-Temperature

Synthesis for his contribution to science and education.

Dr. Puszynski was one of five researchers from the United States who received this prestigious recognition by the international community. During this conference, he also presented an invited lecture on "Historical Perspective and Accomplishments of U.S. Scientists and Engineers in the Field of Combustion Synthesis."

## Professor named journal editor



**Dr. Roger Johnson**, professor, mathematics and computer science, has been appointed editor of the journal Teaching Statistics.

The journal serves biology, business studies, economics, geography, mathematics, sciences and social sciences teachers by showing how statistical ideas can assist in their work and how to use statistics in their teaching. It is also directed towards those who teach statistics as a separate subject and to those who teach statistics in conjunction with mathematics courses. The emphasis of the articles is on teaching and the classroom.

## Professor named to ABET, Inc. board of directors



**Dr. Arden Davis** (GeolE79), Mickelson Professor, geology and geological engineering, has been appointed to the ABET, Inc. Board of Directors. Dr. Davis has previously served ABET as a commissioner on the Engineering Accreditation Commission and team chair for accreditation visits. ABET, Inc., formerly the Accreditation Board for Engineering and Technology, is the recognized accreditor for college and university programs in applied science, computing, engineering, and technology.

## Admissions website ranked among top in the country

The National Research Center for College & University Admissions' (NRCCUA) recently recognized [www.GoToMines.com](http://www.GoToMines.com) as one of the top websites in the country. The School of Mines was one of only 140 institutions that received an "A" ranking. The School of Mines website was rated 111 overall out of more than 3,000 institutions, and ranked no. 5 on the list of Top-10 Specialty Institutions. Additional information on the EPI study is available at [www.nrccua.org/epireport](http://www.nrccua.org/epireport).

# Campus Briefings

## Professor Named “Revolutionary Mind”



**Dr. P.V. Sundareshwar**, assistant professor, atmospheric sciences, has been named a Revolutionary Mind for 2007 by Seed Magazine. Last year, the magazine launched its Revolutionary Minds series, which profiles emerging thought leaders of our culture — people who are influencing the way we see our world, our selves, our minds and our universe. For this third installment of the series, the magazine looked within the scientific community for people whose ideas have the potential to create social change. They canvassed the scientific community, journals and blogs and tapped their circle of editors, finally identifying eight young researchers who they felt fit this description.

## School of Mines Professor Named ASM Fellow



**Dr. Dana Medlin**, associate professor, materials and metallurgical engineering, has been named an American Society for Metals (ASM) Fellow. Medlin was chosen by the society for his outstanding contributions to innovative design and development of medical devices, dedication to the development and education of future medical device professionals, and prolonged outstanding service to ASM.

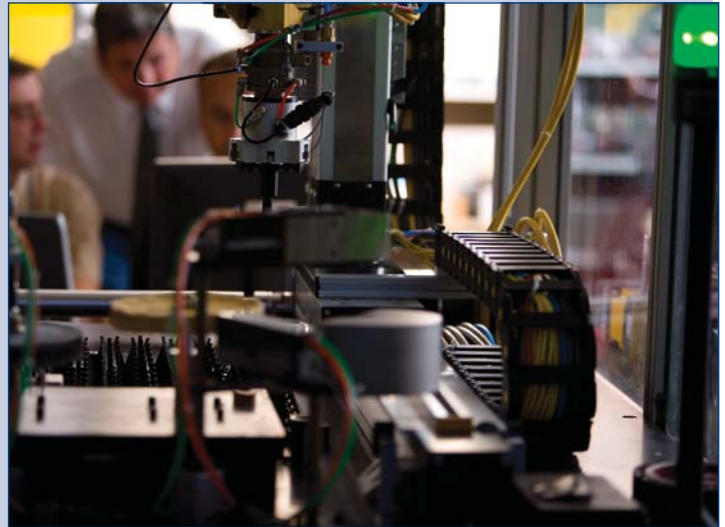
In 1969, ASM established the Fellow of the Society honor to provide recognition to members for distinguished contributions to materials science and engineering and develop a broadly based forum of technical and professional leaders to serve as advisors to the society.

## School of Mines Professor Awarded Patent



**Dr. Vojislav Kalanovic**, professor, mechanical engineering, has been officially been awarded Patent No. 7,241,200 by the U.S. Patent and Trademark Office.

The patent makes a fundamental contribution to the field of modular robotics, as used in Dr. Kalanovic's previously patented Flexible Robotic Environment® (FRE) system. The newly patented control approach may be used for control of processing machines for use



*Dr. Kalanovic's patented Flexible Robotic Environment® (FRE) system*

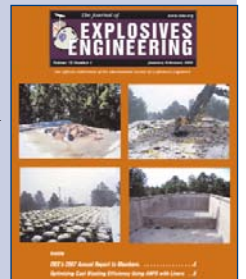
in various different applications, such as material removal and part shaping, polishing of parts, welding, glue dispensing, laser jet cutting, assembly, palletizing, laser deposition, pick/place and the like.



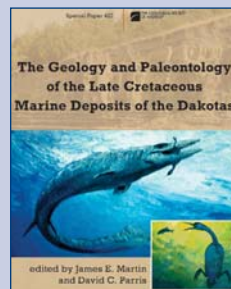
## Publications

**Dr. John Helsdon**, dean, graduate education, and Richard Farley, research scientist IV, Institute of Atmospheric Sciences, co-authored the paper, “Cloud-Scale Model Intercomparison of Chemical Constituent Transport in Deep Convection” for the journal *Atmospheric Chemistry and Physics*.

**Dr. Charles Kliche** (MinE74), professor, of mining engineering and management, co-authored the paper, “Removal of the Top of an Aged Water Supply Reservoir Using Explosives,” which received the cover of the *Journal of Explosives Engineering*.



**Dr. James Martin** (Geol71), professor, geology and geological engineering, co-edited the volume, “The Geology and Paleontology of the Late Cretaceous Marine Deposits of the Dakotas,” published by the Geological Society of America.





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.

School of Mines faculty members and researchers received 72 awards totaling more than \$17.1 million during the 2007 fiscal year. The funding came from many different agencies, including the National Science Foundation, the State of South Dakota, NASA, the Department of Transportation, Army Research Laboratory, Air Force Research Laboratory, and many more.

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 office.

**Dr. Scott Ahrenkiel**, assistant professor, nanoscience and nanoengineering, received \$23,361 from the South Dakota Board of Regents for the project, "Growth Kinetics During Recrystallization of Amorphous Silicon."



**William Arbegast**, director, advanced materials processing and joining laboratory (AMP), and instructor, materials and metallurgical engineering, and **Dr. Anil Patnaik**, former assistant professor, civil and environmental engineering, received \$26,000 in additional funding from the National Science Foundation for the project, "Friction Stir Processing Industry/University Cooperative Research Center."

**Arbegast** also received \$96,250 in additional funding from the Friction Stir Processing Industry/University Cooperative Research Center Memberships for the project, "Intelligent Process Control System Algorithms for Aluminum and Steel Friction Stir Welding," and \$96,250 from the Friction Stir Processing Industry/University Cooperative



Research Center Memberships for the project, "Design, Analysis, and Performance of "Built-Up" Aluminum Friction Stir Welded (FSW) and Friction Stir Spot Welded (FSSW) Structures."

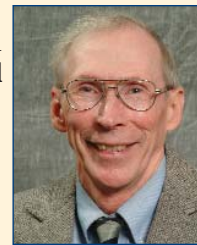
**Arbegast**; **Dr. Robb Winter**, professor, chemical and biological engineering; and **Dr. Dan Dolan**, professor, mechanical engineering and director, Center of Excellence for Advanced Manufacturing and Production, received \$32,500 from Boeing for the project, "Boeing FSJ (PW-2007-0780): Friction Stir Joining of Polyphenylsulphone (PPSU)."

**Dr. Sookie Bang**, professor, chemical and biological engineering, received \$500,000 from the South Dakota Board of Regents for the project,



"Center for Bioprocessing Research and Development."

**Dr. Arden Davis** (GeolE79), Mickelson Professor, geology and geological engineering; **Dr. David Dixon** (ChemE78), professor and chair, chemical and biological engineering; and **Dr. M.R. Hansen** (CE69), professor, civil and environmental engineering, received \$11,873 from the United States Geological Survey for the project, "Leaching Tests for Encapsulation of Waste after Arsenic Removal from Drinking Water."



**Dr. Shawn Decker**, director, Center for



Accelerated Applications at the Nanoscale, received \$585,000 in additional funding from the South Dakota Board of Regents for the project, "Center for Accelerated Applications at the Nanoscale."

**Dr. David Dixon** (ChemE78), chair and professor, chemical and

biological engineering, received \$10,000 from the National Science Foundation for the project, "Center for BioFuel Research and Development."

**Dr. Daniel Dolan**, professor, mechanical



engineering, and co-director, Center of Excellence for Advanced Manufacturing and Production; **Dr.**

**John Weiss**, professor, mathematics and computer science; **Dr. Michael Batchelder**,

professor, electrical and computer engineering, and co-director, Center of Excellence for Advanced Manufacturing and Production; **Dr.**



**Brian Hemmelman** (EE92), professor and chair, electrical and computer engineering; and Elaine Linde, instructor, electrical and computer engineering, received \$200,000 in additional funding from the U.S. Department of Defense - Armament Research, Development & Engineering Center - Army Research Laboratory for the project, "Ultra-wide Band Sensing for UGV."



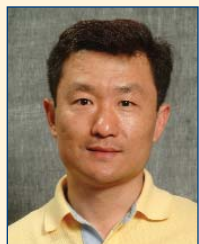
**Dr. Edward Duke**, manager of analytical services, engineering and





## Research Notes *continued*

mining experiment station, and professor, geology and geological engineering; **Dr. Hao Fong**, assistant professor, chemistry; **Dr. Shawn Decker**, director, Center for Accelerated Applications at the Nanoscale; and **Dr. Myung-Keun Yoon**, assistant professor, mechanical engineering, received \$750,000 from NASA for the project, "Continuous Nano-Scaled Carbon Fibers with Superior Mechanical Strength and



Their Innovative Composites for Aeronautics and Space Applications."

**Dr. Duke** and **Dr. William Capehart**, associate professor, Institute of Atmospheric Sciences, received \$737,843 from NASA (EPSCoR) for the project, "Land Cover Dynamics, Regional Hydrometeorology, and the Vulnerability of Rain-Fed Agriculture to Climate Change Under Scenarios of Extensive Cultivation of Biofuel Feedstocks."

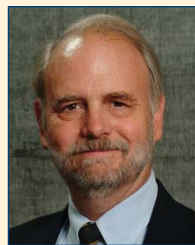


**Dr. Duke** also received \$410,000 in additional funding from NASA for the project, "National Space Grant College and Fellowship Program;" \$28,000 in additional funding from NASA for the project, "Exploration Systems Mission Directorate Higher Education 2007;" and \$125,000 from NASA for the project, "South Dakota NASA EPSCoR Research Infrastructure Development Program."

**Dr. Patrick Gilcrease**, assistant professor, chemical and biological engineering, received \$150,000 from Ciris Energy, Inc. for the project, "Detection and Characterization of Methanogenic Populations from Coal Seams."



**Dr. John Helsdon**, dean, graduate education, received \$40,500 from the National Science Foundation for the project, "Graduate Research Fellowship Program."



**Dr. Jon Kellar** (MetE84), professor and chair, materials and metallurgical engineering, and **Dr.**



**Keith Whites** (EE86), professor and Steven P. Miller chair, electrical and computer engineering, received \$215,300 in additional funding from South Dakota State University for the project, "The 2010 Initiative: Science-Based Leadership for South Dakota."



**Dr. Carter Kerk**, professor, industrial engineering, received \$1,139 from the National



Institute for Occupational Health and Safety for the project, "Heartland Center for Occupational Health and Safety."

**Dr. Patricia Mahon**, dean of students and vice president for student affairs, received



\$49,805 from the Department of Public Safety for the project, "CCPC's High Risk Driving Education Program." Dr. Mahon also received \$12,500 from Black Hills Special Services for the project, "Tobacco Prevention."

**Dr. James Martin** (Geol71), professor, geological and geological engineering, and curator of vertebrate paleontology, received \$25,000 from the U.S. Department of Interior - Bureau of Land Management for the project, "Curation of Oregon Horse Fossil." Dr. Martin also received \$19,594 from the National Park Service - Badlands National Park for the project, "Curatorial Backlog of Museum Specimens, Badlands National Park."

**Ronald Marshall**, technical assistance provider, civil and environmental engineering, received \$14,553 from South Dakota State University for the project, "Local Rural Road Safety Audit and Safety Tool Box."

**Jolie McCoy**, director of counseling/student ADA services, received \$75,000 from the U.S. Department of Health & Human Services for the project, "School of Mines Campus Suicide Prevention Program (CSPP)."



**Dr. Dana Medlin**, associate professor, materials and metallurgical engineering; **Dr. Kellar**, **Dr. Michael West**, assistant professor, materials and metallurgical engineering; and **Dr. Stuart Kellogg** (EE82), chair and Pietz Professor, industrial engineering, received \$150,000 from the National Science Foundation for project, "Blacksmithing Metallurgy: A Multifaceted Curriculum and Laboratory Plan."

**Dr. Medlin** and **Dr. Kellar** also received \$15,000 from Radiance Technologies for the project, "Advanced Electronic Rosebud Integration (AERI) Research and Development Program."

**Dr. Todd Menkhaus**, assistant professor, chemical and biological engineering, and Dr. Patrick Gilcrease,





professor, chemical and biological engineering, received \$199,786 from the United States Department of Agriculture for the project, "Simultaneous Enhancement of Solid-Liquid Clarification and Reduction of Fermentation Inhibitory Compounds from Biomass Slurries."

**Dr. Andre Petukhov**, chair and professor, physics, received \$15,000 from the University of Nebraska - Lincoln for the project, "Spintronic Devices Enabled by Semiconducting Boron Carbide."



**Dr. Gautam Pillay**, vice president, research, and **Dr.**

**Haiping Hong**, research

scientist III, materials and metallurgical engineering, received \$100,000 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. William Roggenthen** (GeolE69), professor, geology and geological engineering, received \$138,054 from the National Science Foundation for the project, "Collaborative Research: Towards the Transparent Earth."



**Dr. Rajesh Sani**, assistant professor, **Dr. Sookie Bang**, professor, and

**Dr. David Dixon**, chair and professor, chemical and biological engineering, received \$14,855 from South Dakota State University for the project, "Permeable Reactive Bio-Barriers for Uranium Removal: Role of Iron Minerals on Uranium Fate and Transport."



**Dr. Sani** also received \$95,682 from the United States Department of Energy for the project, "Biogeochemical Mechanisms of Nanocrystalline Uraninite Oxidation by Fe(III)-(hydr)oxides."

**Dr. James Sears**, director, Additive



Manufacturing Laboratory, received \$23,000 from Carpenter Powder Products for the project, "Development of Functionally Graded Materials for Manufacturing Tools and Dies and Industrial Processing Equipment."

**Dale Skillman**

(ME73), assistant professor, mechanical engineering, and director, Office of Technology Transfer, received \$40,000 in additional funding from the West River Foundation for Economic and Community Development for the



project, "Genesis of Innovation for South Dakota." Skillman also received \$20,000 from the West River Foundation for Economic and Community Development for the project, "Genesis of Innovation for South Dakota / Technology Transfer and Entrepreneur Center Project."

**Dr. P.V. Sundareshwar**, assistant professor, atmospheric sciences, received \$75,000 from the National Science Foundation for the project, "SGER: An Opportunity to Study the Impact of Nutrient Pulsing in an Oligotrophic Forest Stream in South Dakota." Dr. Sundareshwar also received \$13,750 from the United States Department of Interior - United States Geological Survey for the project, "31P NMR Analyses in Prairie Pothole Wetlands Across a Land Use Gradient."



**Dr. Michael Terry**, assistant professor, geology and geological engineering, received \$42,144 from the Capella Resources Ltd. Nevada Exploration Office for the project, "Structural Analysis of the Tinton Project Area and the Age of Gold Mobilization in the Homestake Deposit, Northern Black Hills of South Dakota."

**Dr. Karen Updegraff**, research scientist I, Institute of Atmospheric Sciences, received \$43,193 in additional funding from Montana State University for the project, "Big Sky Regional Carbon Sequestration Partnership - Phase II"

**Dr. Jianbin Wei**, assistant professor, mathematics and computer science, received \$150,000 from the National Science Foundation for the project, "CSR-PDOS: Non-Intrusive Monitoring and Management of End-to-End Performance for Secured Internet Service."

**Dr. Robb Winter**, professor, chemical and biological engineering, received \$171,555 in additional funding from the National Science Foundation for the project, "Intergovernmental Personnel Act Program Manager Assignment to National Science Foundation."



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# area MEETINGS

## Rapid City, South Dakota – M- Day 2007

Armed with a pirate-themed M-Week Jolly Roger flag, **Marlene Nelson** (ME74) ascended to the helm as our alumni president, marking the 74th anniversary year of operations for the SDSM&T Alumni Association. Marlene and husband Curt Chenoweth live in Bellevue, Washington, where she has had a tremendous career with Boeing. Currently, Marlene is the director of aviation safety for all Boeing Commercial Airplanes. Marlene has been a pioneer as a woman in many of the Boeing positions she has held: first female ground school instructor, one of three first women production pilots, first woman in commercial airplane sales, and first woman director in final assembly production. Appropriately so, congratulations go to our first woman graduate from mechanical engineering (1974) and our first woman alumni president.



*Sharon and **Tom Zeller** (ME70) with **Marlene Nelson** (ME74) and Curt Chenoweth*



*Sally and Chuck Ruch, **Mary Jane Green** (CE78), **Marlene Nelson** (ME74), and Curt Chenoweth*



*Homecoming Queen **Shana Bauer**, (IS, Pierre) and King **Sam Tlustos** (MetE07)*

The M-Day tradition began in 1912 when a large "M" measuring 112' x 67' constructed on Cowboy Hill attracted attention and excited people's interest in the School of Mines. This year's M-Week swashbuckler court included **Shana Bauer** (IS, Pierre), and **Sam Tlustos** (Met07) Sioux Falls, elected as this year's Homecoming Queen and King, respectively. Bauer has been involved with Alpha Delta Pi and United Campus Ministries, and has served as leadership chair and as a resident assistant. Tlustos has been involved with Alpha Chi Sigma, Order of Omega, Material Advantage, Interfraternity Council, and served as an orientation leader.

Saturday's September 29, 2007 M-Day schedule included a parade and football game. Despite a thrilling interception by **Dustin Meneley** (IS, Napels, Fla.) and his 100-yard return for a touchdown with



*2007 alumni office staff: Biljana Kalanovic, **Tim Vottero** (Chem84), and Becky Oliver*





*Seniors and others with the Class of 2007-08 plaque*

no time left in the first half, the Hardrockers lost 17-10 to Minot State. The School of Mines and the Hardrock Club also honored the 2007 Hall of Fame inductees to culminate this year's M-Day activities at a banquet in the Christensen Hall of Fame. Alumni **Kris Griffith** (EE86), **Dave Jackson** (ME70), **Roger Opp** (M.S. Math65), **Dan Ptak** (EE86), **Gary Trohkimoinen** (EE73), and **Tammy (Peterson) Williams** (CE82) were each honored individually, along with the 1972-1973 men's basketball team coached by Mike Riley. Please visit <http://www.sdsmt.edu/athletics/halloffame.html> to read more about the 2007 inductees.

September's and M-Week's end included students, staff, and alumni playing in the fun nine-hole, sixth annual Student Alumni Connection (SAC) golf tourney and picnic on Sunday. Thirty attendees joined the fun at the Executive Golf Course. The team **Jade Herman** (IS, Rapid City), **Sam Hermanson** (IE, Rapid City), **Emilia Juhl** (MetE, Luverne, Minn.), and **Kyle Sparger** (GeolE, Tracy, Calif.) won the nine-hole tourney with a team score of five under par. Special thanks go to SAC President **Liz Roberts**



*Emilia Juhl (MetE, Luverne, Minn.), Sam Hermanson (IE, Rapid City), Kyle Sparger (GeolE, Tracy, Calif.), and Jade Herman (IS, Rapid City)*

(ChE07) and Vice President **Nicolle Paulson** (CEE, Buffalo, Minn.) for organizing the event.

## Haskell, Kansas

Several former Hardrocker football players relived memories of their playing days by attending the School of Mines football game against Haskell University in Lawrence, Kansas on September 8, 2007. **Mark Ree** (MinE77) and a few others were also at the game. **Larry Simonson** (EE69) also reported that "none of the former Rockers suffered any injuries during the game nor did they have any after-game aches."



*Former gridiron Hardrockers Justin Tomac (IE93), Dennis Clary (ME01), Jeff Hoffman (ME84), and Vic DeJong (ME64) at the Haskell game*

## Denver, Colorado

There were at least four School of Mines alumni at the joint Colorado Association of Stormwater and Floodplain Managers/Association of State Floodplain Managers Arid Regions Conference in Breckenridge last September. Thanks go to **Bill DeGroot** (CE69)



*Janet (Skulborstad) Herman (CE84), Bill DeGroot (CE69), and Jamie (Skulborstad) Overgaard (CE84)*



# area MEETINGS

for the photo below. Bill added that “the fourth we know of was **Rick Moser** (MinE84), but we couldn't find him for the photo.”

## Bismarck, North Dakota

Bismarck area alums gathered for pizza on September 21, 2007. Thanks go to **Ron Espeland** (ME82) for being in charge of the arrangements, and also to **Larry Simonson** (EE69) for bringing news from campus.



(seated) **Holly Watts** (EE02), **Nancy (Ash) Heuther** (Ex80), **Ron Espeland** (ME82), **Carole Fawcett**, **Darlene Becker**, **Patty Dressler** (ChE82); (standing) **Jim Warne** (CE04), **Bill Heuther** (ME80), **Art Anderson** (EE50), **Don Asheim** (EE77), **Harlan Fawcett** (CE57), **Jerry Becker** (MinE73), **Julie** (GeolE80) and **Dan Dorfschmidt** (GeolE80), **Ross Friesz** (EE02), **Jim Sheldon** (EE05), **Amanda Palkrabek**, **Kevin Alishouse** (ChE79) and **Carol Alishouse**.

## Chicago, Illinois



**Mike Poirier** (CE69), **Larry Simonson** (EE60), **Randy Baker** (MinE86), **Jon Hortness** (CE95), **Eric Broughton** (EE97), **Jeff Nielson** (ME95), **Ted Thorson** (ChemE70)

**Larry Simonson** (EE69) found his Tau Beta Pi travels taking him through Chicagoland, which made for a great reason to renew old friendships with some Delta Sig friends. The group met for dinner at Nick's Fishmarket in Rosemont, Illinois on October 18, 2007 and shared stories about their respective days at the School of Mines.

## Hibbing, Minnesota



**Red Thompson** (ME52), **Wayne Dalke** (MetE51), **Steve Bauer** (MinE79), **Fred Fawkes** (MinE60), **Jim Robertson** (ME49)

**Steve Bauer** (MinE79) organized a dinner for School of Mines' alumni in Hibbing on October 19, 2007 when **Larry Simonson** (EE69) was traveling through the area. Thanks go to all who attended and keep the 'fires burning' in the Iron Range. (We are saddened to report that **Wayne Dalke** (Met51) passed away in December 2007 at Sanford Medical Center in Sioux Falls, South Dakota after suffering a heart attack. His memorial is in this issue of the *Hardrock*.)

## Omaha, Nebraska



**Mike Faust** (Kiewit Foundation), **President Ruch**, **Mike Hansen** (CE90), **Larry Pearson** (ME72), **Brad Johnson** (EE92), **Tim Turner** (CE82), and **Steve Carlisle** (Kiewit Human Resources); not pictured **Tony Ritter** (MinE82)



School of Mines President **Chuck Ruch** led a multifaceted mission to Omaha in late October 2007. The goal was to enlist several alumni to help with recruiting in the area. Several alumni attended the events, including **Patrick Hallauer** (ME76), **Larry Pearson** (ME72) and Linda Pearson, **Melissa Polito** (CE05), and **Kip Squire** (CE78). While in Omaha, several School of Mines representatives attended a lunch with alumni and representatives from the Kiewit Company to thank them for their ongoing support.

## Front Range, Colorado – Littleton, Colorado Springs, Denver

Late October 2007 and the Front Range of Colorado set the stage for a variety of events that attracted alumni and friends from across various decades and varied interests. Dr. Duane Hrnir, dean of the college of science and letters at the School of Mines presented news about the geology, geological engineering, and paleontology initiatives, including the planned Paleontology Center on campus. Several hardy souls gathered at the Ritz Grill in Colorado Springs for a fun evening and a general overview of campus activities. Then a group of alumni, faculty, and friends attended the Group Alumni Reception as part of the 2007 Geological Society of America (GSA) in downtown Denver. Special thanks go to all those that traveled and helped welcome the Front

Range area alumni, including Alumni Association President Elect **Ralph Wagner** (CE75).



*The Colorado Springs, Colorado group – Barb and Jim Hauck (GeolE61), Jim Youngman (CSc87) and Marisa Neuzil, Doreen and Tim Ward, and Ralph Wagner (CE75)*



*The Denver, Colorado group – Bill Roggenthen (GeolE69), ???, Eileen Roggenthen, Doug Aldrich (ChE62), Jill Nelson (MinE81), Joe Kulik (GeolE61), Ralph Wagner (CE75), Nuri Uzunlar (Ph.D. Geol93), Tim Vogt (M.S. Geol84), Michael Terry (School of Mines faculty)*



*The Littleton, Colorado group – (standing) Brian Goetsch (ME98), Courtney Lindquist, Tom Gardner (CE74), Marty Amble (CE68), Duane Hrnir (School of Mines dean), Tim Vottero (Chem84); (seated) Alex Toskey (CE98), Ralph Wagner (CE75), Jill Nelson (MinE81), Dave Nold (ChemE72), Grant Shelton (ME70); (foreground) Pope Benedict XVI*

## Richland, Washington

Travel to the Tri-Cities of Washington is always a pleasure thanks to the gracious hospitality of **Dr. George Garlick** (EE58). The trip in early December 2007 also proved to be informative and interesting. This venture included Mr. Jim Mirehouse, CEO of the Black Hills Business Development Center (See [www.blackhillsbiz.com](http://www.blackhillsbiz.com)). Dr. Garlick spotlighted the interactions among the Pacific Northwest National Laboratory, Tri-Cities Research District, Tri-City Development Council (TRIDEC), and private companies like Garlick Enterprises, which serve as perhaps a glimpse of what the Black Hills Technology Corridor could become in the future.



# area MEETINGS



*The Richland, Washington venture – **Tim Vottero** (Chem84), **George Garlick** (EE58) and Carol Garlick, LoAnn Ayers (WSU Tri-Cities), **Paul Gnirk** (MinE59), and Jim Mirehouse (CEO BHBDC)*

## Spokane, Washington

The 113th Northwest Mining Association conference rotated back to Spokane for December 2007. Alumnus **Gene Skinner** (GeolE53) once again welcomed alumni and friends from the area and the NWMA convention. Alumni Executive Vice President **Paul Gnirk** (MinE59) and Director **Tim Vottero** (Chem84) also pitched-in with the set-up and tear-down, as did all in attendance. Next year's event in Reno, Nevada should prove another packed crowd for the convention and a great way for alumni to gather at the social.



*Holiday wishes from the 2007 NWMA Social – (standing): **Ross Grunwald** (Geol64), **Laurin "Slim" Henton** (MinE47), **Gene Skinner** (GeolE53), **Bill Bond** (Geol82), **Linda Barnes** (Math74), John Conway (Bureau of Mines), **Bob Tridle** (Chem81), **Bill Griffith** (MetE47), **Jaaron Johnson** (ME02), **Deepak Malhotra** (EE86), **Eve Skinner**, and Jim Mirehouse (BHBDC); (seated): **Bob Turner** (CE52), Darlene Turner, Gratia Griffith, **Dave Shaddrick** (M.S. Geol71), Barbara Grunwald, and **Paul Gnirk** (MinE59)*

## Denver, Colorado

The Men and Lady Hardrockers kicked off the New Year on the road with games in Denver, Colorado against Johnson & Wales. Between game days, alumni, family, and friends attended an NBA Basketball game with the Denver Nuggets and the Philadelphia 76ers at the Pepsi Center. Coach Barb Felderman and the Lady Hardrocker basketball team spent time with the group and shared their success story to date. Thanks go to Tom Rudebusch, **Ann Konenche** (IE99), and **Jill Nelson** (MinE82) for organizing the event. Thanks also go to **Paul Gnirk** (MinE59) and **Larry Simonson** (EE69) for helping welcome the area guests.



*Lady Hardrockers ready for action in Denver, Colorado*

## Pierre, South Dakota

With 50 alumni and a total of 89 alum, spouses, kids, and friends, the 13th Annual SDSM&T Alumni Tailgate Party in Pierre, South Dakota was another record-breaker for alumni get-togethers to start the New Year. The planning committee expanded the party plan to include three cooking contests – Crock Pot Classics, Miner's Miscellaneous Masterpieces, and Gold Digger Delights. First place honors went to **Marc Macy** (GeolE04) for his "Grubby's Cheesy Pheasant and Bacon Chowder"; **Dale Healey** (IE06) for his "Hardrocker Jalapeno Hotbites"; and **Steve Kropp** (GeolE94) for his "Grubby's Caramel Goodies". Alumni president **Marlene Nelson** (ME74) traveled all the way from Seattle, Washington to join this time-honored, New Year celebration. Alumni Association Past President and Executive Vice President **Paul Gnirk** (MinE59) joined Pierre-area Vice President **Steve Pirner** (CE72) as the emcees of the largest door prize



## area MEETINGS

drawing in the history of the event with more than sixty door prizes. Of course, no early January event in Pierre would be complete without the singing of "Happy Birthday" to former alumni board member



**Jim Goodman (GeolE71) with Marlene Nelson (ME74)**  
displaying his door prize from the drawing



**Winners of the cooking contests (l to r): Steve Kropp (GeolE94), Alan Bakeberg (GeolE87), Tammy Williams (CE82), Dale Healey (IE06), Tracy Painter (CE91), Marc Macy (GeolE04), Dustin Witt (CEng05), Steve Pirner (CE72), and John Childs (CE92)**



**Brandon Fried (CE07) and Wally Larsen (CE53)** span 54 years of civil engineering in Pierre

**Vern Bump (GeolE61)** and current Alumni Board member **Nayyer Syed (Geol94)** given the proximity of their respective special days to the event's date.



*Alumni at the 13th Annual Tailgate Party*

### Rapid City, South Dakota – 51st Annual Alumni President's Dinner

Amidst the crescendo of the 2008 Black Hills Stock Show and Rodeo, this year's 51st Annual SDSM&T Alumni Presidents Dinner corralled area alumni and guests at the Arrowhead Country Club to honor our 2008 International Alumni President, **Marlene Nelson (ME74)**. Marlene is the 60th alumni president since the Alumni Association began in 1934, and her ascent models many other firsts in her career. Marlene has been a pioneer woman in many of the Boeing positions she has held. Born and raised in Martin, South Dakota, she was the first female graduate in mechanical engineering from the School of Mines and is our first female alumni president.



**2008 International Alumni President Marlene Nelson (ME74) and Curt Chenoweth**



# area MEETINGS

Marlene also earned a master's degree in business administration from Seattle University in 1989, followed by an executive MBA from MIT. Marlene's 33-year career at Boeing has spanned nearly every phase of the commercial airplane business from sales and marketing to final product test to accumulating some 1,000 hours of flight time in 737, 757, and 767 airplanes. Marlene Nelson was named director of aviation safety in July 2003, responsible for leading all commercial airplanes product safety-related activities including accident investigations, continued airworthiness efforts, and safety assessments for new and derivative airplanes.

Marlene is a Boeing Executive Focal for the School of Mines, and a member of the Academic Advisory Board. She is an executive champion for the Boeing Women in Leadership Affinity Group, and last year the Women In Aerospace (WIA) organization bestowed the Lifetime Achievement Award to Marlene see <[www.womeninaerospace.org](http://www.womeninaerospace.org)>.



*Marlene with the 2008 School of Mines Master Chorale*



*After Hours group: Curt Chenoweth, Larry Simonson (EE69), Bonnie Berg, Marlene Nelson (ME74), Dave Berg (ME73), Cindy Pappel, Rod Pappel (ME77), and Tami Vottero*

Marlene and husband Curt Chenoweth, (also a former Boeing executive) reside in Bellevue, Washington.

## Houston, Texas

An entourage of alumni and friends followed Alumni President **Marlene Nelson** (ME74) as she embarked on a three-event weekend in early February 2008, including an "amazing coincidence" when **George Arnold** (ME97) just happened to be at the Ragin' Cajun restaurant (for the first time ever) and saw the School of Mines Reunion sign. Special thanks go to **Brad Johnson** (EE92), **Jill Nelson** (MinE81), and **Bob Miesen** (CE61) for their hard work in making all the arrangements that made these events successful. Marlene added that she is "always struck by the sense of kinship most of us feel when we gather together and talk about the people we know and the places we've been and sing some old songs." Unfortunately, there were no photos available at the time of this printing.

## Orlando, Florida

Kathy and **Steve Miller** (EE69) hosted several Delta Sigs and their spouses in Orlando on February 21-23, 2008 as part of a mid-five-year School of Mines reunion. Most of those attending were from the late 60s and early 70s. **Larry Simonson** (EE69) was in attendance officiating from the School of Mines.



*(front) Steve Stahly, John Fromelt (EE68), Ron Stember (ME67), Ron Jeitz (CE69), Bill Guetz (EE67), Jim Devine (ME72), and Don Hamann (ME71); (back) Ken Larsen (EE68), Steve Nordaker (ChE68), Larry Simonson (EE69), Steve Steele (ME70), John Heinemann (EE67), Mike Poirier (CE69), Carv Trudeau, Bill DeGroot (CE69), Randy Parcel (MinE67), Keith Mutchler (ME71), and Steve Miller (EE69)*



## Titusville, Florida

**Ron Jeitz** (CE69) and **Larry Simonson** (EE69) were joined by area alumni for lunch at Dixie Crossroads in Titusville, Florida on February 26, 2008. The restaurant lost power just as everyone was finishing lunch. Some of those attending had to hurry back to work while others were able to stay for a longer visit.



(front) **Craig Jacobson** (EE82), **Scott Vangen** (EE82), and **Ron Jeitz** (CE69); (standing) **Travis Uecker** (EE04), **Jim Boyd** (ME70), **Lee Solid** (ME59), **Monte Krier** (ChE73) and **Bev Krier**, **Rodney Iwan** (EE56) and **Charlotte Iwan**, and **Tony Tysdal** (Chem61) with daughter **Melanie** and grandson **Spencer**

## Salt Lake City, Utah

Each year in February, a late-winter event marks a time-honored alumni gathering revolving around the mineral industry. The Society for Mining, Metallurgy, and Exploration ([www.smenet.org](http://www.smenet.org)) held its 2008 SME Annual Meeting & Exhibit and the



**Doug Fuerstenau** (MetE49) and **Peggy** with **Maurie Fuerstenau** (MetE55)



**Tom Zeller** (ME70), **Ralph Wagner** (CE75), and **Paul Gnirk** (MinE59)



Staffing the booth: **Craig Johnson** (MEM, Baltic), **Jill Nelson** (MinE82), **Brad Johnson** (EE92), **John Nielson** (MEM, Chancellor), **Ryan Horton** (MEM, El Dorado Hills, Calif.), **Ryan Hoel** (MinE98), and **Shashi Kanth** (M.S. MinE93)



Back row (standing): **Eva Dierkes** (MEM, Germany), **Brandon Lampe** (GeolE, Salem), **Adam Dutil** (MEM, Champlain, N.Y.), **Matt Begeman** (MEM, Rapid City), **Jordan Hoff** (MEM, Rapid City), **John Nielson** (MEM, Chancellor), **Steve Hector** (MEM, Omaha, Neb.), **Craig Johnson** (MEM, Baltic), **Pradeep Chintalapati** (Geol, India), **Joshua Dedic** (MEM, Rapid City), **Andrea Beasley** (CEE, Box Elder), **Andrew Johnson** (MEM, Chisago City, Minn.), **Chris McCarrick** (MEM, Rapid City), **Tim Vottero** (Chem84), **Collin Rogers** (MEM, McKinleyville, Calif.); Middle row (seated): **Brijesh Misra** (RESPEC), **Shashi Kanth** (M.S. MinE93), **Charles Kliche** (MinE74), **Zbigniew Hladysz** (faculty), **Clarita Begishe** (MEM, Kayenta Ariz.), **Paul Gnirk** (MinE59), **Jim Mirehouse** (BHBDC); Front row (sitting): **Jordan Anderson** (MEM, Vermillion), **Blake Werning** (MetE, Parkston), **Brandon Fredrickson** (MEM, Fort Collins, Colo.), **Tyler Adler** (MEM, Deadwood), **Matt Sudbeck** (MEM, Dimock), **Alex Ferguson** (MEM, Sioux Falls)



# area MEETINGS

110th National Western Mining Conference in Salt Lake City, Utah. Students, faculty, alumni, and friends have attended this annual alumni social for decades in support of the South Dakota School of Mines and Technology. This winter's event was once again a great meeting place for those attending the conferences. The 2009 SME conference will be in Denver, Colorado. Special thanks go to Atlas Copco Company and Cate Equipment Company, the MEM and MetE departments, and the SDSM&T Foundation for their sponsorship for this year's event.

## Sun Lakes, Arizona

Betty and **Jay Brink** (EE56) once again graciously opened their home to alumni in the area for patio party on March 1, 2008. Many are friends from their college years and beyond. Special thanks go to **Duff Erickson** (MinE55) for bringing the photo and caption to the alumni office.



**Loren Henry** (CE55), **Ed Bearg** (GenE58), **Jay Brink** (EE56), **Mark Lux** (MinE80), **Al Liffengren** (ME57), **Bernie Hoogestraat** (GeolE56), **Earl Hagen** (ME56), and **Duff Erickson** (MinE55)

## Gold Canyon, Arizona

While traveling through Arizona, **Larry Simonson** (EE69) captured a rare event on his camera – he snapped a photo of an alumni area meeting where 100 percent of the alumni in the area attended the event! The photo above shows 100 percent of the Gold Canyon, Arizona residents who have the distinction of being true “Miners” (e.g. graduates of the School of Mines). Congratulations to this distinctive group – we look for more 100 percent

attendances in the future!



**Andre Zoutte** (MetE57) and **Bev Zoutte** with **Marge** and **Don Range** (EE51)



## LandSat 7 Image of the Black Hills South Dakota School of Mines and Technology Alumni Association



This high-resolution, full-landscape image ships digitally printed on 20"x40" matte finish paper. Prints are available for \$20.00 PLUS \$5.00 Shipping & Handling\*, which includes a color description sheet denoting image landmarks, and ships in a 3" mailing tube. The SDSM&T Alumni Association thanks you for your support through your purchase of this panoramic print.

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## 1930s

**John Buckingham** (ChE34) and Kay Buckingham hosted an afternoon visitor, **Dale Corrington** (GenE41) from Mason, Ohio in October 2007 at their home in Oxford. **Larry Simonson** (EE69) made the arrangements when he was traveling through Ohio. John was a classmate of Dale's older brother, **Murlan Corrington** (EE34), who now resides in Moorestown, New Jersey.



**Dale Corrington** (GenE41) with Fay and **John Buckingham** (ChE34)

**Garfield Muchow** (CE34) and his wife Edith have moved to a senior living community near their daughter and son-in-law in south Orange County, California. In December he celebrated his 96th birthday in San Luis Obispo, where they attended their grandson's college graduation from California Poly San Luis Obispo.

In November 2007 **Ralph O'Neill** (CE36) celebrated his 100th birthday. His note says, "I still live in my house. I drive my car short drives. I do work, wash my clothes, get wood in as I have a wood burning stove in the lower

level. My hobby work is stamps, barbwire, sorting pictures, and putting them in albums. I live by myself most of the time - sometimes a brother stays with me." Ralph was honored by the State of South Dakota with the declaration of November 18, 2007 as "Ralph O'Neill Day." Ralph was born near Folsom and was the first of seven brothers. In the fall of 1928, he began studying civil engineering at the School of Mines in Rapid City, but after two years, his education was interrupted by the bank failure of 1929. Due to the drought and grasshoppers there was not much farming to do, so O'Neill worked for the WPA, graveled roads, and built dams near Folsom. In the fall of 1934, a professor at the School of Mines helped him to return to school and complete his education. In June of 1936, O'Neill went to work for the State of South Dakota. His work involved a lot of surveying for mapping purposes. From 1940-1949, a South Dakota map designed by Ralph was used to guide motorists through the state. He also worked on bridges and played a large part in the reclamation work that needed to be done to bridges and roads after the flood of 1972. In 1937, O'Neill married his wife, Charlotte Mayree Roebuck. The couple had four children: Ken, Eileen, Charlene, and Randy. In 1997, Charlotte died of a stroke just a few months before the couple's 60th anniversary. After more than 38 years of working for the state, he moved on to do engineering work for Aaron Swan & Associates, retiring due to a knee injury in 1996 at the age of 89 after 60 years in the workforce. O'Neill is a very active member of the Custer community. He is



Classmates **Ralph O'Neill** (CE36), 97 years old, and **George Hatch** (CE36), 91 years old at the July 2005 Reunion - the most "senior" alumni in attendance

passionate about athletics and is a big follower of Custer Lady Cats and School of Mines Lady Hardrock basketball teams.

**Ernest Thurlow** (Geol39) lost his wife of 65 years, Rose Marie. She passed away in April 2007.

## 1940s

**Lewis Beebe** (GenE43) had a father, Gordon Alcott Beebe, who was professor of civil engineering at the School of Mines for more than 20 years.

**John Colgan** (EE42) celebrated his 88th birthday with a visit to campus. Alumni and friends at the SDSM&T Foundation were ready with his annual birthday cake and visit near year's end (December 28).





**Did You Know...**  
Every state record brook trout in South Dakota history except for one has come out of Deerfield Lake?

"It's pretty phenomenal," South Dakota Department of Game, Fish & Parks fisheries biologist Gene Galinat said. "The state record was broken in 2004 with a 9-pound brook trout and then this year, we had an 11-pound and a 10-pound come out. So there are definitely some big ones in there."

— Rapid City Journal, 2007

Deerfield Lake is 14 miles northwest of Hill City in the center of the Black Hills National Forest. The Deerfield area offers a variety of outdoor recreational activities, including mountain biking, hiking, fishing, canoeing, camping, hunting, and ATV, snowmobile, and horseback riding.





Photo courtesy of Melinda Poyourow  
Publications Manager

The Hardrock Spring 2008



# class NOTES



**John Colgan (EE42)** on his 88th birthday

Can you guess what kind of cake it was?

A note from **Lloyd Darnall** (CE44) shared that he and his wife Maxine celebrated their 60th wedding anniversary in October 2007. And he adds, "We actually celebrated all summer. We visited our daughter, two granddaughters, and four great grandchildren in Alaska for a couple weeks in June. Then we met our three kids and spouses at Teton Village, Wyoming, in September for a long weekend. Coming home we found the energy to walk around Devils Tower. I had a nice summer in Rapid City with my brother and sister."

An update from **Donald Dittman** (ChE42) said, "I have a walk-in basement apartment at my daughter's house in Webster, New York. I drive and fish some, but gave up golf. I get to Florida about three months in the winter, spend a month in the Black Hills in the summer, and do some fishing in the Hills and around

Fort Pierre."

Hope and **Horace Hansen** (CE41) have been married 61 years. Both of their children live in Brookings, Oregon, and he is still doing engineering.

**Warren I. Finch** (GeolE48) recently self-published "My Memoir, Alone - My Guardian Angel - Gunga Din" containing more than 150 stories in 117 and a purple cover with a photo of the "Warren Finch Family Crest." The memoir starts with the genealogy of the Finch Family that came over from England to America on the famous John Winthrop fleet in 1630. It continues with stories of Warren's life surviving the Great Depression of the 1930s in South Dakota; serving in World War II; his 60-year career with the U.S. Geological Survey and the International Atomic Energy Agency (IAEA); quadrangle mapping, engineering geology, discovery of ancient Lake Paducah, and Peccary paleontology in Kentucky for seven years; bird watching experiences starting in 1968; the formation and management of the USGS Uranium and Thorium Branch program 1973-1978; and research developing methods to estimate undiscovered uranium resources. Other stories are about professional and holiday travel to more than 60 countries on seven continents, discussions of naturalist and religious views, and other topics. "Intertwined with my professional life were the meeting and marrying my soul mate Mary in 1951, and sharing stories of our three children, both happy and sad, over the past 56 years. The future of the Finch family is in a dozen grandchildren," e-mailed Warren. A copy of the memoir is in the School of Mines library and available via

purpfinch@aol.com

Joyce and **Kasmier Kubik** (Geol44) got another addition to the family - their grandson Jacob was married recently. Jacob returned from Iraq, where he got a Purple Heart and promotion to sergeant. Kasmier adds, "My wife and I are surviving. She had a hip replacement, then fell walking our dog and cracked her pelvis. This takes time to heal."

I am currently taking a procedure where the doctor injects a fluid by needle into your eye. Sounds tough, but it is not. Someone has to drive to home and I've given up driving. We have been lucky in many ways. We exercise five times a week and we have help for house work. The kids and grandkids are a great help."

Janice and V. **Mitchell Liss** (ChE47) retired to Fairwinds Retirement Country with a round of activities and friends. He stays active sketching the members, staff, and performers. His health is excellent (20/25 vision) and he is active golfer and hiker.

Rosaline and **Thomas Malone** (GenE40) observed their 65th wedding anniversary in December 2007. Later this spring, surrounded by his wife of 65 years and several of their six children, 17 grandchildren, and four great-grandchildren, 91-year-old Tom Malone was presented with the Living Spirit Award of the interfaith Spiritual Life Center for "outstanding contributions to share spirituality with the larger community in Connecticut" on April 19, 2008. Last year at this time, Tom also received an honorary doctorate at the 175th commencement ceremony at Wesleyan University in Connecticut, along with that



commencement's speaker Jim Lehrer (of PBS's News Hour with Jim Lehrer). Congratulations go to Tom on his many distinctive accomplishments.

A note from **Emil Pietz** (ChE40) shared, "Last summer while on a trip to Tripp, South Dakota, to attend a family reunion I ended up spending six days in the Rapid City Hospital. I passed out at Mt. Rushmore and had to have a pacemaker implanted. Everything is going well now. I was accompanied by three of my children and one grandson."

**Norbert Vinatieri** (MetE43) was very pleased to be informed that the Homestake Mine has been selected as the site for the 4,800-foot laboratory. The school will surely be an important part of that new science research.

## 1950s

Bette and **Frederick Beeman** (GeolE50) have two daughters and both of them now live in Kingman, Arizona. They are so glad to have them close.

**Dale Bridenbaugh** (ME53) went on three weeks holiday in Southern Africa, where much readjustment is underway.

**Carl Buttemeier** (EE59) writes, "Still having fun. Daughter Robin and grandchildren live nearby. I am still working as a consultant post time at B/E Aerospace - all work via e-mail. I rebuilt my 1960 Austin Healey - looks great."

**Max Gassman** (ME56) will continue to teach mechanical engineering courses at Iowa State University in 2008. His son Philip completed work for the Ph.D. degree in agriculture and

biosystems engineering in 2007. "We also have two grandchildren attending ISU, so we are at home here." His School of Mines education continues to serve his engineering career very well.

**Charles Hall** (ME50) enjoys getting back to South Dakota as often as he can to spend time on farm property he owns near Meadow, South Dakota, and to visit family in Canton, South Dakota. He retired after working 30 years for U.S. Bureau of Reclamation in the Denver Federal Center office.

The alumni office received a note from **Harold Hanson** (EE53) stating, "Nearly 55 years since graduation, 22 years since retirement, and my next birthday will be 80! We visited relatives in Hot Springs, Langford, and Watertown last September/October. We attended the 'Norka Hogt fest' in Mino, South Dakota. We are traveling by RV and enjoying it. We have five grandchildren (13-27) and one great-grandchild (3). I had colon surgery in 2007 and now recovering, minus 55 lbs, and enjoying life again."

**Charles James** (ME51) and his wife Lois moved to a retirement community in Riverside, California in July 2007. They are now closer to all their children. Their daughter Diane and husband George live there. Their sons David and his wife Kia and other son Bill came from San Francisco and Sacramento for Thanksgiving.

**Bruce Johnsen** (CE59) writes, "Another good year in Monterey. Work with partnerships and family business continues to

interest and challenge me. Between times, tennis, backpacking, skiing, and traveling keep me busy. It is always good to hear about life at School of Mines - keep up the fine work!"

**Al Liffengren** (ME57) conveyed that they enjoyed the May graduation and the 50-year celebration for the Class of 1957. He said they "had a great time sharing old war stories and experiences with those in attendance. The School of Mines staff did a superb job of treating us quite royally and arranging a most memorable reunion. Hats off to you all."

**Jim Miller** (GeolE59) sent an update via e-mail, "I worked within oil exploration and production departments for Shell Oil Co. and the Louisiana and Land Exploration Co. in various positions from engineering to management. Business took me to 36 states and nine foreign countries. With the down turn in the oil industry, I took early-retirement in 1991. My wife Marsha and I moved with our twin daughters Ann and Elizabeth from Houston to Lufkin, Texas where I started a new career - teaching science and math at the junior high school level. My memories of the four years in the Black Hills and of the School of Mines are positive and strong. Marsha and I plan to return for the 50th graduation anniversary in May of 2009."

**Calvin Morgan** (EE52) lost his wife of 53 years on June 2, 2007.

**Lyle Mudge** (ChE59) and his wife Lois are enjoying the winter in Panama City, Florida. Their son and family live there.



# class NOTES

**Donald Myers** (ME59) wrote a note, "I pray for rain here. We have harvested wheat on our place and have straw baled. I am currently enrolled in the locksmithing program at Stratford Career Institute."

In 2007, **Robert Paullin** (ME50) returned to Virginia from South Dakota at the request of his grandchildren. They are happy they made the right decision.

**Bill Rowe** (ChE51) e-mailed that "It was 60 years ago this fall (1948) that I started the first chemical engineering classes with Dr. Andrew Karstens. I had started at the School of Mines in fall of 1945 with the returning WWII veterans, but me fresh out of Watertown High School. After that freshman year, when Art O'Toole and I fired up the boiler plant in the early mornings, I spent the next two years in the Army, as a drummer in Army Bands in Austria and Germany. I was in the first-ever graduating class of ROTC at the School of Mines and it was my good fortune to be the first-ever cadet captain. After graduation in 1951, I spent two years in the Army in Korea, during that war. I received an M.S. in chemical engineering from Iowa State, joined 3M Company 1956, and retired from 3M after 33 years. I am now 80 years of age."

**Donald Schlegel** (EE56) is busy being retired. He is hiking as often as he can in the Smoky Mountain National Park.

**Bob Schwarz** (ME52) visited us in October of 2007. We found out that his wife Loretta passed away.

**Bob Smith** (EE54) sent the alumni office a note, "All is well. We had some good auto trips this year. In June 2007 I rode the motor car from Silverton to Durango. What scenery! What fun! In September it was New Mexico, Texas, and Arizona."

**Leroy Solid** (ME59) continues to enjoy retired life on Florida's space coast. He and his wife Shirley celebrated their 50th wedding anniversary and the lives of their 15 grandchildren. He is serving as advisor to NASA and the State of Florida on matters concerning space - especially the exploration program.

**Roy Strom** (EE53) had the opportunity to return to South Dakota this past October and hunt pheasant. He adds, "I frightened a lot more than I bagged. On the trip up, I spent a delightful evening with Ken Burnham (GenE53) and his lovely wife Connie. They live in Salina, Kansas, since his retirement."

**Derral Thompson** (ME52) informed us that his wife Georgia M. Thompson passed away May 4, 2007.

The alumni office received this note from **Bert Thomsen** (GeolE59), "My travels in 2007 included trips to the Badlands and Black Hills for three weeks in July, and to Iowa and Wisconsin for two weeks in October. My pacemaker has done good job of keeping my heart ticking for the past year, but I am not too happy about my memory. I do have great memories of classmates and comrades at the 'Mines' and I wish them well."

**William Tyrrell** (ME50) and his wife Ruth have four offspring

with three in-laws, three stepchildren with two in-laws, and seven grandchildren. Their youngest was baptized in December of 2007 and oldest stepdaughter celebrated her birthday in December also.

**George Wulf** (GeolE51) is supposedly "retired," although he is quite busy in oil and gas exploration in Southeast Asia and Wyoming, and some gold ventures in Asia. They enjoy living in the north Texas woods on the east shore of lake Lewisville.

## 1960s

**James Ackermann** (EE66) is retired now.

**Richard Albertus** (Phys65) is still active in oil gas exploration in the Rocky Mountains. In 2006, the Rocky Mountain Association of Geologists named him the "Outstanding Explorer of the Year."

The alumni office received the following update from **Theodore Andrews** (CE62): "Not much change this past year. We don't travel anymore, but keep busy in Fresno. We both bowl twice a week and I golf on Mondays, but don't ask me what I shoot now. I just enjoy our foursome of octogenarians. Our girls and grandkids visit often. Still active in our church. Our 64th anniversary is coming up in June!"

Ardie and **Glen Barber** (CE60) are doing well. Their son Bill has taken over the construction business in Rapid City! Their son Jim and partner have a variety theater in Branson, Missouri. Their son Jim is a ventriloquist. Their daughter Nancy is a high



school councilor and teacher. They have three grandchildren – one senior at Berkley, one sophomore at Cal Poly, and one six-year-old in Missouri.

**Vincent Bertolotto** (ME67) is still working six-eight months a year at Ingenium Technologies in Rockford, Illinois, doing contract stress analysis for Sundstrand (now owned by United Technologies) where he retired in 2000. Primary jobs have been the emergency power systems for the A380 commercial jet and the A4 military transport for the European Consortium. Their daughters Dawn, Sara, and families live in McHenry, Illinois, and Sugar Land, Texas. He and his wife Liz spent Christmas, New Year's, and half of January in Texas and Sarasota.

Jean and **Wayne Binfet** (EE68) retired in October, left Chanhassen, Minnesota and moved to Sioux Falls, South Dakota to be closer to family.

Twila and **Dean Brown** (CE60) continue to enjoy “sunny” San Diego. They celebrated their 50th wedding anniversary in June 2007 with family friends at the Mission Bay Hilton Hotel. In June 2007, Dean discovered his heart had gone back into A-Fib so he had to slow down.

**Richard Chambers** (ME66) moved back to Rapid City after being away for 40-plus years. He is interested in starting a high school robotics program in one of the high schools here, to promote engineering.

**James Crouch** (MinE68) has hired two alumni in Wyoming – **Nick Bielstein** (MetE07) and **Tom Ochsner** (MinE78) – and he is working on hiring more.

**Gerald Daughenbaugh** (MetE61) was in Rapid City in September 2007 for his 50th high school class reunion. He took some time out to climb up M-Hill and get some pictures of Class of '61 plaque. He is certain there has been some extreme geologic activity around Rapid City because, “I know for a fact that M-Hill was not that tall the last time I climbed it!”

Dean of the College of Engineering at Rowan University, **Dr. Dianne Dorland** (ChE69), was honored as 2008 Engineer of the Year by the Delaware Valley Engineers Week Council at Loews Hotel in Philadelphia. The engineering school at Rowan was made possible by Henry and Betty Rowan, who made a \$100 million pledge in 1992. The school, formerly Glassboro State College, was renamed for the Rowans. Dr. Dorland earned her undergraduate and masters degrees in chemical engineering from South Dakota School of Mines and Technology. She worked as a research and development engineer for Union Carbide and as a process engineer for DuPont, both in West Virginia, before earning her Ph.D. in chemical engineering from West Virginia University. She then worked for the Department of Energy in Morgantown. Dr. Dorland next made her foray into education, joining the chemical engineering department at the University of Minnesota Duluth. Four years later, she was named department chair. (From article posted by Bob Shryock via <http://blog.nj.com/southjerseylife>)

**Alan Freiberg** (ME68) flew his airplane up to Myrtle Beach, South Carolina during the first week in January to visit his son Trent and

family who were back in the U.S. from Shanghai, China. They will be moving to Singapore soon.

**Leland Gordon** (CE62) is still enjoying retirement. He attended a 50th high school reunion in Pierre, South Dakota in September and a Gordon family reunion in Aberdeen. Eldest son and family relocated to Seattle area from Michigan last month. Now they are all on the same coast and time zone.

For **James Gross** (Chem68) 2007 was a year of change – early retirement from Buckeye Technologies.

**Larry Henry** (CE61) enjoyed seeing a number of alumni at various places. In 2007, he saw several during his 50th Rapid City High School reunion. He is retired and has been playing golf for the past five years.

Marit and **Thore Hornes** (CE66) stopped by the alumni office – all the way from Norway! The least



*Marit and Thore Hornes (CE66) at March Dake Plaza*



# class NOTES

we could do was walk them around campus. We stopped by the March Duke Plaza (see photo) and visited the Civil Engineering department. Thanks also go to Dr. Lidvin Kjerengtroen, professor, mechanical engineering, for making time to visit with his fellow countryman.

On May 5, 2007, **Fred Hornstra** (EE60) experienced a great deal of excitement when a tornado marched from the south right up to their front yard, where it danced around and first declined in intensity, then quickly enhanced in a frightening manner, and only miraculously, to turn east after leaving some shingles from their house and leaving no structural damage! On its way to their house, it totally destroyed one home and inflicted structural damage on several others. A video on this tornado was on the web for several weeks.

**John Hoven** (ME67) was joined at his retirement party, held at Manhattan Beach Country Club on



**Wally Gutzmer** (Chem67), **Cheryl** and **John Hoven** (ME67), **Larry Simonson** (EE62), and **Bill Guetz** (EE67)

January 5, 2008, by several Miners. **Bill Guetz** (EE67), **Wally Gutzmer** (Chem67), and **Larry Simonson** (EE69) attended. Bill and John went to school together from grade school in Selby through college at the School of Mines. Wally and John were roommates at the School of Mines. John retired as vice president of operations from Pelican Products.

**Richard Howard** (ChE64) and Carol are thoroughly enjoying retirement. Their number one priority is trying to equally spoil (or support) their 12 grandchildren from age two to 23, who are residing in Alaska, Arizona, and South Dakota.

**Olav Johanneson** (Chem67) is planning to retire in 2008. He may continue work on a part-time basis for another year or two as long as his health is staying good.

**Fred "Jim" Knight** (M.S. GeolE63), the driving force behind the fundraising committee for the LSSU C. Ernest Kemp Mineral Resources Museum, has received Lake Superior State University's "Outstanding Alumnus Award." Knight was recognized during a program on October 19, 2007 in the LSSU Cislser Center. At his retirement in 1997, Jim was executive vice president of Gannett Fleming Inc. in Harrisburg, Pennsylvania, one of the nation's leading engineering firms. Jim and his wife, Virgean, recently celebrated their 50th wedding anniversary. The couple has four children and six grandchildren. (From press release via [www.lssu.edu](http://www.lssu.edu))

**Roger Lange** (ME63), a financial advisor for Lange and Associates and Longmont City Council member, won the Longmont,

Colorado mayoral race. Prior to working as a financial advisor, Lange had worked for US West in management and executive positions for 33 years. (From news release via [www.yourhub.com](http://www.yourhub.com)).

**Lawrence Mazlack** (EE66) was cross country skiing at Old Faithful in Yellowstone Park over New Years. This was the 20th straight year.

**Harlan Miller** (GeolE62) and his wife Betty enjoyed a trip to the outback of Australia and a cruise to Tasmania and New Zealand. They even sampled kangaroo and crocodile meats. And he adds, "Kangaroo tasted like beef and crocodile like chicken!"

**Richard Moen** (MetE62) wrote that "occasional jobs and teaching gigs mess up real retirement." The pending 10th edition of his book on ASME B&PV and piping code materials also took its toll, but it is essential tool in the course he teaches. His wife Mary Jo retired as pediatric RN, but will continue to work occasionally as a substitute. They like to travel and they do!

**James Neuharth** (ChE68) traveled some. Visited Marian and Don Orton (EE68) last October and their new home in Tuscon, Arizona. He enjoyed a round of golf with Don.

**George O'Clock** (EE62) published a text book "Electrotherapeutic Devices: Principles, Design, and Applications," published by Artech House, Boston, Massachusetts (2007). He is finishing up a revised 24-chapter, 275-page version of his religious/spiritual book "Isaiah's Leper" (now available via [www.ebookmall.com](http://www.ebookmall.com) and other



## ISAIAH'S LEPER

GEORGE D. O'CLOCK, Ph.D.

A CATHOLIC ASKS THE QUESTION: "WOULD  
JESUS HAVE ANYTHING TO DO WITH THE  
ROMAN CATHOLIC CHURCH?"

*Isaiah's Leper by George D.  
O'Clock, Ph. D. (EE62)*

book sellers). George is still doing research and development work in the areas of electrotherapy for visual disease applications and magneto therapy for Parkinson's disease and other neurological disease applications.

October 19, 2007 was a red-letter day for **Neil Olien** (Phys60) at an award ceremony at the National Institute of Standards and Technology (NIST) in Gaithersburg, Maryland. He was one of 10 former staff members recognized by NIST in 2007 and his portrait and citation were placed in the NIST Gallery of Distinguished Scientists, Engineers, and Administrators.

**Roger Roehl** (ChE66) is enjoying retirement. He and his wife Myrna spend winter in Cape Coral, Florida area.

**Warren Satterlee** (ME65) has retired a couple of times, but continues to jump back into the fray. He finds work O.K., as long as it does not interfere with

motorcycle trips to Canada, Alaska, and South America on his Beemer.

The family of **Charles Schmidt** (MetE63) continues to grow - now they have six granddaughters. He and his wife Rosemary are spending their time traveling to visit them. He still keeps active with golf and Basketball. He talked with old friends and classmates **Ev Bloom** (MetE63) and **Jim Smolik** (MetE63) for the first time since they graduated in 1963. He writes that it was great catching up.

Judi and **Monte Schneider** (CE66) are enjoying retirement especially times spent with their nine grandkids. They vacationed with them in their motor home during summer months and travel south with it in the winter.

**Theodore Smolik** (MetE63) is still in Blaine, Washington with his wife, Bonnie, and son Steven. They visited South Dakota in May for a nephew's wedding and again in November for family get-together and two days of pheasant hunting.

**Kathleen Stechmann** (Math69) retired from teaching high school math in June 2007.

A sad note from **Conrad Sterkel** (MetE60), "Phyllis Delores (Gramm) Sterkell, wife of Conrad, passed away on July 13, 2007, after a brief battle with lung cancer. Phyllis was the first ever homecoming queen at the School of Mines. I can assure you she represented our college in that regard extremely well during her entire life."

**John Synhorst** (EE68) and his wife Anneliese had a fantastic European trip last August and

September. He had two week cruise through the Baltic Sea and three weeks in Germany visiting his wife's family.

The new Geologic Map of North America was published in 2005. **Brian Tucholke** (Geol68) spent more than 20 years of his part time mapping the seafloor data for the map, based on all original and unpublished data that he could access. For the first time, this new map puts the detailed geology of North America in full plate-tectonic context. Their daughter Rachelle is a registered nurse, and daughter Dacia works for an environmental firm. They both live in Albuquerque, New Mexico.

**Gary Vaplon** (MetE69) retired from Cabot Corp as Director of Global Operations in 2002.

**Krishnakant Vernenkar** (M.S. MetE64) and his family are all doing well. He is still involved doing consulting work and that keeps him busy all the time. His wife Meera works in Lord & Taylor in charge of the jewelry department. One son, Dr. Vic, bought a new house three years ago. He has two boys, one five-year-old and one five-month-old. The other son, Prasanna, bought a condominium last year near Washington, DC.

**Thomas Warborg** (ChE63) enjoyed recent visits with **Doug Aldrich** (ChE62), **Larry Henry** (CE61), **Bill Richardson** (ME59), **Don Rinzel** (ChE61), **Dick Lauritsen** (GenE62), and their spouses. He adds that it is great to have friends from the School of Mines wherever you travel.



# class NOTES

**James K. Washenberger** (Math60) of Blacksburg, Virginia and associate professor of mathematics in the College of Science at Virginia Tech, was conferred the “associate professor emeritus” title by the Virginia Tech Board of Visitors. A member of the Virginia Tech community since 1966, he was instrumental in introducing the use of computer technology into the calculus sequence and the use of excel spreadsheet technology into the business calculus sequence. Washenberger has been the director of the mathematics education degree option since its inception and twice directed a revision of its curriculum. Dr. Washenberger has won many certificates of teaching excellence. From news release at VT News via <www.vtnews.vt.edu>.

**Darwin Wika** (ChE63) is still enjoying retirement and living in Pennsylvania. He celebrated Christmas in South Dakota after 15 years of going to Texas. He was in South Dakota four times earlier and in October of 2007 he went hunting. Their oldest grandchild is a senior at United States Naval Academy, and she has qualified for a commission in the Marines.

Susan and **Donald Zoss** (GeolE69) have a new grandson. Don is working part time for nationwide consulting firm.

## 1970s

Deb and **Gary Anderson** (EE73) were recently honored as local “Conservationists of the Year” at the annual meeting of the

Minnesota Association of Soil and Water Conservation Districts. They were selected by the Fillmore Soil and Water Conservation District for the award.

**Paul Bachman** (EE74) is interested in hiring some EE’s with experience in the power industry. He had moved back to South Dakota to open an energy services section for Ulteig Engineers in Sioux Falls. Ulteig is based in Fargo. Contact Paul via <paul.bachman@ulteig.com>.

Vista Gold announced that **Carlos Calderon** (M.S. MinE71) was appointed as vice president, project development. He will also have the title and duties of general manager and legal representative for Minera Paredones Amarillos, S.A. de C.V. and will focus primarily on the development of the Paredones Amarillos Project. During the past 36 years he has managed exploration, construction and operational projects in Latin America and the U.S. (From press release via <www.trading-markets.com>.

**Thomas Callan** (Math72) has a son David who graduated from Indiana University Law School and has passed the bar exam. Son Scott will graduate from Northern Illinois University in May 2008.

At the recent annual Matters of the Heart Health and Wellness Fair, the Black Hills Area Habitat for Humanity booth was staffed by two Alumni Board members, **John Davies** (ChE71) and **Wayne Greaves** (GeolE71) along with fellow alumnus **Terry Fuller** (EE70). The three alumni were representing <http://blackhillshabitat.org/> and the “Wall Raising” efforts of the local



**John Davies** (ChE71), **Terry Fuller** (EE70), and **Wayne Greaves** (GeolE71)

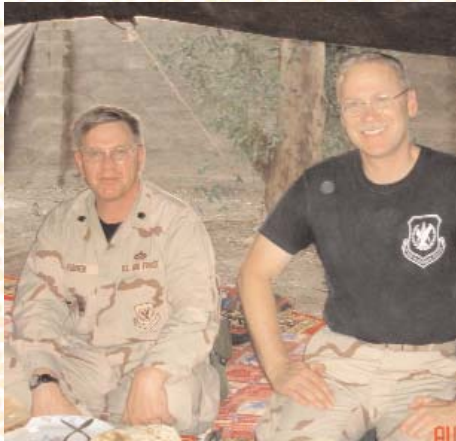
chapter. If any Black Hills Area Alumni would like to get involved in a School of Mines Alumni Habitat for Humanity project envisioned for fall 2008, please send your interest and inquiry to <alumni@sdsmt.edu>.

**Monte Dirks** (MetE74) is still chairman of Black Hills Regional Eye Institute. He is involved with glaucoma clinical research with spouse **Luanne** (Ex74). Brother, **Gary Dirks** (Chem73) is still CEO of BP-China. The family misses brother **Bill Dirks** (Ex73), who died on Thanksgiving 2007. Daughter **Anne** (GenSt02) and husband **Jason Lamont** (CSc02) had a new son in December 2007.

**Mike Fiddes** (Math74) was recently recognized by his employer with a special recognition award and with the Lockheed Martin Corp Fleet Material Handling Council 2007 Recognition Op Excellence Award.

**John Floden** (CE71), P.E., an Air Force Reserve lieutenant colonel, was awarded the Bronze Star Medal for meritorious service after completing a six-month tour in Iraq during 2006. Floden, a resident of Stilwell, Kansas, is an





*Lt. Col. **John Floden** (CE71), left, sits down to a Bedouin dinner in a tent in Baghdad with Col. Richard Fryer*

associate engineer with CDM – a consulting, engineering, construction, and operations firm – working in CDM's Kansas City office. Air Force officials said the civil engineering officer “distinguished himself by exceptionally meritorious conduct” in his assignment as officer-in-charge of construction operations for the Air Force Center for Engineering and the Environment, which has its headquarters at Brooks City-Base in San Antonio, Texas. The work involved constructing facilities for the Iraqi military and police forces. They added that his leadership was critical in spearheading a “major portion of the largest national reconstruction effort since the Marshall Plan, creating thousands of jobs for Iraqi workers and supporting efforts of the coalition forces to bring peace and stability to the population of Iraq.” John has 25 years of service with the Air Force, both on active-duty and in the reserve. Additionally, in October 2007 Floden was selected for promotion to full colonel in the Air Force Reserves.

## **George T. “Rusty” Gray III**

(MetE76) was named to serve on the National Materials Advisory Board, an organization of the National Academies. The National Materials Advisory Board is the preeminent source of independent materials assessments for the Nation. The board, which includes members from industry, academia, and other national laboratories, is the principal source of objective, independent, and informed scientific, technological, and policy assessments of materials, processes, and applications for use by U.S. industry, government agencies, and universities. The Materials Board focus is on those materials and systems issues that have the greatest importance to the nation's security, health, and welfare. Gray is a Fellow of the American Physical Society, ASM International, and LANL. He earned B.S. and M.S. degrees in metallurgical engineering from the School of Mines and a Ph.D. in metallurgical engineering from Carnegie Mellon University.



**George T. “Rusty” Gray III** (MetE76)

Laurie and **Kim Haarberg** (MetE79) met with **Alan Larson** (ME79) and his family over New Years.

Madonna and **Robert Heier** (ME73) are still living in Louisiana. Last year they have seen Julie and **Pete Birrenkott** (ME71), Lani and **Bob White** (CE72), Sharon and **Mike Bates** (EE70), Nancy and **Wally Sieck** (ME70), Sue and **Phil Boland** (ME68), and Lee and **Les Thiel** (ME67).

**Donald Keill** (GeolE72) retired January 2008 from Bureau of Land Management after 34.5 years evaluating placer gold deposits.

**Deb** (GeolE78) and **James Keller** (GeolE78) are still living in Norway and working for Shell. Their son is a C-17 aircraft commander and is on deployment in Middle East. His wife and two children are in Honolulu. Their daughter completed her Annapolis service. She is married to a Navy pilot, and just began work for General Electric as an engineer.

Marcella and **Kenneth Keys** (EE75) have three boys and all are enrolled in the University of Arizona.

The alumni office received the following via e-mail: “**David** (ME75) and **Pat Knox** (ChE76) have moved to Yokohama, Japan. David is the project manager for a grass roots ethylene plant to be built in Saudi Arabia. Detailed engineering will be done in Yokohama during 2008 and 2009 and then it is off to Al-Jabail, Saudi Arabia for construction and startup. Our United States phone number is (281) 990-9547 and is good after 4 p.m. (CST) while our Yokohama phone number is 81-45-624-3887.”



# class NOTES

Foundation Coal Holdings, Inc. announced that **Kurt Kost** (MinE78) has been promoted to president and chief operating officer (COO) of the company. In his new role, Mr. Kost will share in the executive management of the company and will work with strategic planning initiatives and investor related activities. Kurt served as executive vice president since June 2007. He was also senior vice president, Western Operations and Process Management, overseeing Foundation Coal's Powder River Basin operations, increasing production while maintaining an outstanding safety record. He has been with Foundation Coal and its predecessor companies since 1980. From press release via <www.foundationcoal.com>.

**Lennis McClung** (ME77) enjoyed a wonderful Thanksgiving with Dan Keiner (ME73) and his family at their "home farm" south of Chamberlain.

**James McNulty** (Math74) is sad that his friend **Fevzi Aydin** (EE75) passed away.

**Ken Petersen** (ME70) was taken by surprise at the WECA annual banquet in Madison, Wisconsin that he was being named the 42nd recipient of the Ally of Cooperative Electrification (ACE) Award, WECA's highest honor. The only thing better than the award itself was "being able to have this room full of friends to share the moment," Petersen said. Petersen is credited with engineering a turnaround in Barron Electric Coop's fortunes, beginning when he took over as general manager in 1984. Clearly moved by the honor, Petersen

credited board members and staff for the cooperative's success.

After 17 years in Portland, Lindsey and **Michael Psiropoulos** (MinE76) moved to Cedar Rapids to work for HP. Lindsey retired and now three of their kids are married.

Carrie and **Roy Pulfrey** (CE76) have son and daughter. James is a junior at Dakota Wesleyan studying history and criminal justice. Laura is a junior at Langford High School.

**Douglas Ramsey** (CE75) retired in September 2007, after working more than 32 years for Wyoming Department of Transportation in Sundance, Wyoming. He now does consulting with his business, Ramsey Consulting, in Sundance, Wyoming.

International Beryllium Corporation announced in January 2008 the additional board appointment upon completion of an RTO, namely **Lee Rice** (M.S. Geol70) who brings important geological expertise to the company. Lee is a founding partner of Rare Earths Limited, LLC, which is a private Colorado-based company that provides satellite imagery, mapping, deposit evaluation, and other technical, geological, and consulting services with a special focus on the rare earths sector.

**Bill Simpson** (Ex79) emailed that he "attended the School of Mines from the summer of 1976 through the fall of 1979 in the masters program in vertebrate paleontology. I completed all my coursework, did 3 summers of fieldwork at my thesis site, wrote a 250-page masters thesis, published a 35-page summary of

it in Dakoterra, but never took the foreign language exam. At the time, this exam was a requirement for most (all?) of the Ph.D. programs, and one masters program - vertebrate paleontology! But I've always looked back fondly at the time spent at the School of Mines. The experience and training I received there got me a job in vertebrate paleontology at the Field Museum of Natural History in Chicago in November of 1979, and I am still here! I began as a laboratory preparatory, then became head of the lab, and for 15 years now have managed the vertebrate paleontology research collections. Even though I am not a formal alumnus of the School of Mines, I am still regarded by my peers as a member of the large and successful group of paleontologists who got their start there!" Bill can be reached via wfsimpson@comcast.net

Stephanne and **Brett Stenson** (MinE79) have a son **Sean Stenson** (GeolE07) who works for Rio Tinto. Daughter Samantha plans to get married in August 2008 during Rally.

**Doyle D. Tubandt** (ChE75) has



*Doyle Tubandt (ChE75)*



been promoted to president of Grain Processing Corporation. Mr. Tubandt is a 29-year employee with GPC, holding roles in both operations and, most recently, the position of executive vice president.

**Tom Winkler** (CE79) continues to work as a Structural Engineer in the Sarasota / Bradenton Florida area. The firm of Wilson Structural Consultants is interested in young engineers from the School of Mines. Tom and Patti's oldest son, Clay, was accepted to a medical school in Florida and they are very proud of him, as well as their daughter Danielle, who is a dental assistant. The youngest one is Chase.

## 1980s

A note from **Daniel Borling** (GeolE81) shared that, "Sandy, Danny and I left Bairoil, Wyoming during July 1995 for Cairo, Egypt. After six years working in the Gupco Joint Venture at their remote operating base in Ras Shukheir on the Gulf of Suez, we were transferred to Sharjah in the United Arab Emirates. Amoco was purchased by BP in 1998 and I still work for the company. After five years in Sharjah from 2001-2006 and a very successful under balanced coiled tubing drilling program, we were transferred to Moscow in the Russian Federation. Sandy and Danny enjoy the international life. Danny especially enjoys the schools. I was promoted to director of new interventions in TNK-BP."

**Cheryl Breidenbach** (MetE85) emailed, "**Phil** (MetE85) was transferred from South Carolina to Idaho in February [last year]. The children and I followed [last]

summer. We had been in South Carolina since graduation -- 22 years. My children had never even seen a tumble weed before! The temperature in the mornings in Idaho has been about the coldest we saw in South Carolina. We'll see how an Idaho winter goes! Our new address is 5112 Shadow Creek Dr., Idaho Falls, ID 83401. Our e-mail is <cbreid@aol.com>"

**David Crumrine** (CE86) enjoyed attending the Career Fair last fall and seeing some old faces. His company Interstates has recently "found" some School of Mines grads to add to teams in Sioux Falls and northwest Iowa. He concludes that it is great to see a few more Hardrockers around the office.

**John Devitt** (CE82) retired from United States Public Health Service in 2006. He moved from Pierre, South Dakota to Cherokee, Iowa to work as a project manager for Kuehl and Payer, Ltd.

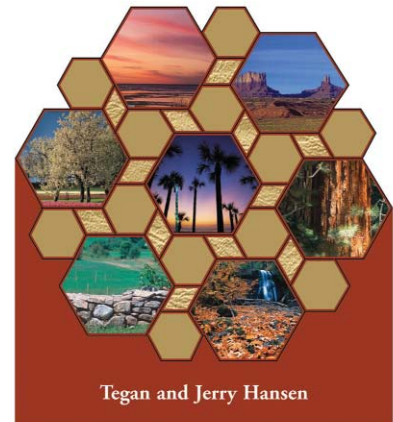
**Vivian Greni** (ME88) and **Sterling Greni** (ChE81) celebrated the birth of their fifth child, Noah Alexander Greni.

**Mark Hanley** (EE88) is on his way to Baghdad for a year to be the director of public works for the Green Zone.

**Jerry Hansen** (EE85) has published a book entitled "State Boundaries of America: How, Why and When American State Lines Were Formed." From the publisher's description, "The United States is a layer cake of interstate boundaries laid down over centuries. This definitive reference, available for the first time in one convenient volume, offers a unique approach to understanding the formation of

## STATE BOUNDARIES OF AMERICA

*How, Why and When American State Lines Were Formed*



*State Boundaries of America: How, Why and When American State Lines Were Formed by Jerry Hansen (EE85)*

these boundaries and the accession of states." Jerry added in an e-mail that "in the introduction I mention my early curiosity as to why there isn't an 'East' and 'West' Dakota." The book is available via <[www.heritagebooks.com](http://www.heritagebooks.com)>.

**Ken Koemmpel** (ChE83), carrier special projects manager, was



**Ken Koemmpel** (ChE83)



# class NOTES

presented the Navy Distinguished Civilian Service Award during a recent ceremony with family, friends and co-workers at the Puget Sound Naval Shipyard & Intermediate Maintenance Facility (PSNS & IMF) in Bremerton, Washington. This is the highest award the Department of the Navy can bestow upon a civilian of the department. "The criteria for this award fit this gentleman like a glove," stated William Ryzewicz, U.S. Pacific Fleet deputy chief of staff for fleet maintenance, who presented Mr. Koemmpel with the award via video teleconference (VTC) from Pearl Harbor, Hawaii. The award was in recognition and appreciation of Mr. Koemmpel's distinguished services and the citation was signed by Secretary of the Navy, Dr. Donald C. Winter

**Craig Koopersmith** (GeolE80) sent this update: "After 11 years as a confirmed bachelor, I finally tied the knot with my true soul mate Anije on Thanksgiving day in St. Thomas, United States Virgin Islands." Craig will continue as CEO of The Sabre Group of Marketing Companies, albeit on a much reduced schedule, now that he has something better to do! Daughter Sarah has followed in Dad's engineering footsteps, recently graduating as a chemical engineer from Trinity University in San Antonio, and is having a great time designing human/machine interfaces for Mustang Engineering in Houston.

**Robert Mackay** (MinE80) is now president, chief executive officer and director of Stans Energy in Canada.

Qatargas 2 Project announced that **Mr. Michael Maisey** (Phys88) has been promoted to the position of safety superintendent - reporting to the on-shore EHS&S manager. Maisey will oversee all of the construction and commission safety activities for the on-shore Portion.

**William Murray** (EE85) and spouse Beth have three kids in college, and the forth little one is a "tornado of energy and activity" now. In the early morning hours Bill is working on starting a LinkedIn School of Mines group. To invite members, send out an e-mail invitation with the link to the SDSM&T Alumni Group on LinkedIn <[www.linkedin.com](http://www.linkedin.com)>.

After 26 years with Maytag, **Mark Parriott** (EE81) left the company in November for an exciting new challenge leading Cretex Concrete Products Midwest. Wife Tammy continues her teaching and they will to reside in Newton, Iowa.

Alumni office received this update from **Brian Pelton** (MetE89), "Life is good. My boys are smarter and cuter than any other children in the world. My soccer coaching company gives me time to spend with them, as well as work in world without cubicle walls, memos, or tps reports."

**Jacqueline Sargent** (EE89) and **Donald Sargent** (EE80) are doing well. Jackie is still with Black Hills Corp after 19.5 years. Don left and is now working for West Plains Engineering. Daughter **Ericka Oberembt** (CE04) is with Bechtel of Houston, Texas, and son **Clark Oberembt** (Me06) plans to pursue MS in Materials Engineering.



**Garrett "Buck" Swanson** (CE83)  
and his cattle

**John "Bones" Rathbun** (MinE84) sent a photo that he took of Theta Tau brother and alumnus **Garrett "Buck" Swanson** (CE83) of Valentine, Nebraska last fall. John reported that "the photo captures Buck with his constituency in the Sand Hills of Nebraska."

Quantenna Communications, Inc., a fabless semiconductor company creating advanced chipsets for wireless technology, announced the appointment of industry veteran **Richard Sekar** (M.S. ME85) to its executive team. As vice president of marketing, Sekar will lead the product management and worldwide marketing initiatives to introduce Quantenna's disruptive wireless products into the market. Prior to joining Quantenna, Sekar was the founder and CEO of LiteBand Communications, Inc. Sekar has helped build several successful companies including Ikanos Communications, Copper Mountain Networks, and Ascend Communications. (From press release via [www.quantenna.com](http://www.quantenna.com))

**Tim Walter** (ME80) is a president of Dakota Valley Products. The South Dakota company is mixing



sunflower seeds with some of the same ingredients found in energy drinks. Walter buys the seeds from area farmers and they are delivered to his plant. However, the real secret to Sum Seeds happens behind the doors where the process of roasting the ginseng, caffeine, and lysine happens down into the kernel.

An update from **Rick Workentine** (ChE88): "I can't remember the last time I wrote, but I know a lot has happened since. I'll try to be brief. I was deployed during OIF I to Iraq with the 244th Engineer Battalion out of Denver as a vertical construction inspector. During my 11 months on the ground, I managed to bump into a few familiar faces from the 109th Engineer Battalion at the Baghdad Airport, and drove across the bridge they built a few times. Since redeploying, I held the position of first sergeant for a couple years, and have recently taken a staff position to ease myself into retirement from the Army Reserves after 25+ years of service. My family is doing great! My wife, Jami, has a very busy schedule with working full time, craft activities, and shuttling our son around everywhere. Our son, Jacob, is well into the groove of first grade. He's a bright kid and we really enjoy relearning everything that's important from his perspective. He has discovered the joys of playing soccer, riding bike, fishing, flying kites, climbing trees, and jumping off of things. He's also a HUGE flirt and uses his blue eyes, dimples, and shy-boy routine to his advantage - we're going to have a handful when he's a teenager! I am continuing my career in environmental consulting with All-Phase Environmental Consultants, Inc. in Pueblo. We're a small company,

but are definitely capable of big things. The owner and I entered into a partnership to purchase the office building we occupy and are sharing the 'joys' of property management. I recently was elected as the chapter president for the Coalition of Pueblo Engineers, which is the Southern Chapter of the Professional Engineers of Colorado. I expect that somewhere in my official capacity over the next two years I will bump into a School of Mines PE at one of our state events. I think that's as short as I can get to cover the last five years of my life. I'm still the only Workentine in the Colorado phone books, so if you're passing through and want to relive 'old times' in Connelly Hall, etc. give me a ring or drop me an e-mail via [rworkentine@yahoo.com](mailto:rworkentine@yahoo.com) We have a lot of great local microbrews out here that I'd be more than happy to introduce you to."

Colonel **Lisa L. Zacher** (Chem84), was recently awarded the Bronze Star Medal distinguishing herself "by exceptionally meritorious performance and outstanding combat service to the United States" in Baghdad, Iraq. Formerly the Department of Medicine chief at Brooke Army Medical Center in San Antonio, Texas, Dr. Zacher voluntarily deployed to Baghdad in the International Zone in late July to spend six months in Iraq.



*Brigadier General James Gillman presenting Bronze Star to Colonel Lisa L. Zacher (Chem84)*

She is the only board-certified critical care specialist in a 70-bed hospital with a 20-bed intensive care unit that once treated Saddam Hussein's family.

Congratulations to the following proud parents:

**Audra (Bonhorst) Hawkinson** (ChE89) and her husband Christian had their first child on August 6, 2007. Audra is working with SAP at Kone, an elevator and escalator manufacturing company.

## 1990s

**Bob Beshara** (IS97), owner of the Colonial House restaurant in Rapid City, South Dakota, was recently diagnosed with amyotrophic lateral sclerosis (ALS), commonly known as Lou Gehrig's disease. His family and friends have put together several fundraisers to help pay the bills that the insurance does not cover, to make his house wheelchair accessible, and to get him a van for use to get around. The website - [www.bobbeshara.com](http://www.bobbeshara.com) includes Bob's bio, photos, a calendar of events, a guestbook, and a way to support the F.O.B. (Friends and Family of Bob) effort. Several family connections to the School of Mines include Bob and Pam (Saxer) Beshara's daughter, Nicole Beshara, who is pursuing a master's degree there.

Peabody Energy has named **Scott Durgin** (MinE90) operations manager for the Rawhide Mine near Gillette, Wyoming. Scott has been instrumental to the development and support of the mining engineering and management (MEM) program at the School of Mines. The first full



# class NOTES

class of seniors graduates in May 2008, many of whom have enjoyed summer jobs, fulltime offers, and meaningful experience during their college career thanks to the efforts of Scott and many other dedicated alumni and friends of the MEM program. Congratulations and thanks go to Scott for both these accomplishments.

Shannon and **Justin Griffin**



**Justin Griffin (ChE96)** with 'quite the catch'

(ChE96) welcomed the arrival of a bouncing baby boy. Maclain Grayson Griffin was born on January 5, 2008, at St. Vincent's Hospital in Santa Fe, New Mexico. He weighed 5 lbs 7.5 oz and was 18.25 inches long. The family makes their home in Los Alamos, New Mexico where Justin works for Los Alamos National Laboratory's international threat reduction group to find and secure unwanted radioactive sources from all around the world.

**Rachel Hagen** (ME98) has been in Racine for eight years now. Her

husband, Brian, and she made the decision for her to stay home with their kids (Kyra-two years and Tyler-11 months) just before their second one was born almost a year ago. They are already expecting third in February 2008. She says that her time at home is more physically and mentally challenging than any engineering job she has ever had!

**Kenneth Hargens** (IS96) got his second bachelor of science degree as a registered nurse. After he accepted a position as registered nurse (BSN) at the Ft. Meade Veterans Administration Medical Center. With his history of a long military career and his science background he finds this present position to be very fulfilling. Kenny has an infant granddaughter, Emma, born in March 2007. Kenny continues to restore and race vintage motorcycles.

**Greg Hintgen** (EE99) emailed: "Libby Shannon and I were married last summer, 7-7-7, in downtown Minneapolis at St. Mark's Episcopal Cathedral. Our Best Man was **Chuck Cox** (ME00), who also happens to be the bride's "cousin." In addition to



Mr. and Mrs. **Greg Hintgen** (EE99)

Chuck, there were several other Triangle Fraternity members in our wedding including Ray Aljets, **Ben Dines** (MetE97), **Denny Harts** (IE99), Steve Snuggerud, and **Kameron Williams** (IE03). The reception was held in Chaska, Minnesota at the University of Minnesota Landscape Arboretum. Libby is also originally from Yankton, but her family moved to Eden Prairie, Minnesota when she was two, it just took us 27 years to finally meet! Libby graduated from the University of South Dakota in 2000. We are living in Sioux Falls, South Dakota and I am starting my ninth year with Johnson Controls as an account executive, covering the entire state of South Dakota."

**Curtis Finnegan** (ME92) moved east! He is now working for Tyco Electronics.

A sad note from **Sheila Iverson** (CE90) shared, "My husband Brian passed away July 13, 2007 from cancer just two months before the birth of our second child - a son named Iver August Iverson. Although losing Brian was a terrible tragedy, it was tempered by the new baby. We are adjusting to life without him and I will be returning to work soon."

**Shane Matt** (CE96) and Carol still live in Rapid City. He has been with the same company for almost 10 years, although the company name has changed to Four Front Design, Inc.

**Curt Nesbitt** (EE93) is still working in Sioux Falls, although Pulizzi Engineering was acquired by Eaton Corp. He is currently a senior electrical design engineer in their electrical division developing Remote Power Distribution products. Curt and his wife, Carol, have four children: Annie, Joe, Sam, and



Aaron, and one grandchild on the way. Curt also continues his music, playing in several bands in the Sioux Falls area.

**Margaret Parmenter** (CSci91) is currently enjoying all the kids and the assignment in Kuala Lumpur. She and her husband Tim and the children have been in Malaysia for two years and love it.

**Tricia (Mohrhauser) Schwaller** (EE98) was surrounded by family and friends last fall to remember her husband and alumnus **Shawn Schwaller** (EE95) who passed away September 9, 2007, after a short battle with leukemia. Shawn's memorial appeared in the fall 2007 Hardrock. Shawn's passion for life and sense of humor touched the hearts of everyone he met. He will be missed by all. The photo shows several alumni and close friends that were able to attend Shawn's service and provide support for



(front row) **Larry Simonson** (EE69), **Heather (Shoup) Velder** (CE95), **Lafe Swingholm** (EE94), **Tricia (Mohrhauser) Schwaller** (EE98), **Tracy (Beckler) Johnson** (ChE97), **Beverly Snyder** (Math03). (back row) **Jason Holdaway** (ME05), **Kermit Velder** (ME93), **Ronnie Snyder** (EE94), **Stacy Johnson** (CE98), **Jerald Byg** (CE72), **Lonnie Snyder** (EE94), **Brandon Johnson** (CSc95)

Tricia. Thanks go to **Larry Simonson** (EE69) for helping get the names and information back

to the Alumni Office.

A very sad note from **Edward Seaver** (ME98), "It is with great sadness I must tell you that, Catherine, my wife of 21 years, died in an automobile accident on April 16, 2007."

Congratulations to the following newlyweds:

On the front lawn of their rural Blakesburg home, **Donald Stephenson** (ChE92) and Alicia Siefker were united in marriage on the first evening of September, 2007. The bride was escorted to the garden arbor by her sons, Nate and Bryce, where they joined the groom and his son, Jordan, for the exchange of their vows.

Congratulations to the following proud parents:

Richard and **Tami Adam** (ChE98) are proud parents of Chloe Marie Adam born on October 25, 2007, weight 7 lb. 7 oz. and length 19.5in.



*Chloe Marie Adam*

Michael and **Jessica Ryan** (IS95) had two new additions to their family last summer - Annie and Katherine were born July 17, 2007 - identical twins. Life is busy, but they are extremely blessed.



*Amelia Schaeffbauer*

"I thought I'd write to let you know that my husband Mike and I had a baby on June 21, 2007. Her name is Amelia. We are so excited!" emailed **Tammy Schaeffbauer** (Math98).

## 2000s

**Angela (Holeton) Bucholz** (IS02) obtained a master of science from SDSU, and married **Aaron Bucholz** (CEng03) in 2005. They welcomed their first child, a baby boy named Asher, in 2006.

A cheerful note from **Sarah Center** (IS02), "Just wanted to send you a brief update from Colorado. I know a few of you up there know that **LeRoy Ellis** (CSc00) and I have been together for a few years. I just wanted to drop you all a note to let you know that he proposed on July 24, 2007. We set the wedding date for June 1, 2008 here in Denver. As things progress in our lives, we'll be sure to keep you all up to date with any other big news from the Front Range!!"

**Ahmed "Jemie" Dababneh** (Ph.D. AEWR08) joined Herbert, Rowland & Grubic, Inc. (HRG) as part of the firm's civil service group in Harrisburg,



# class NOTES

Pennsylvania. He will be responsible for designing diverse civil infrastructure for public and private sector clients throughout central Pennsylvania.

An update from former alumni office work-study **Megan Harbour** (CE07), "Things are going good. I was transferred to New Mexico around the same time as the holidays. Between taking time off to see family, packing, saying bye to new friends, and moving I have been pretty busy. Two guys I were working with in Arkansas helped

drive the moving truck out here in exchange for my driving them to Las Vegas, Nevada and flying them back to Arkansas from there after a night's fun. I had a nice time though it was tiring; we put 2,000 miles on my car in three days. Then Sarah [sister] and I had to drive back to Santa Fe on Monday so I could be at work at 7 a.m. on Tuesday. P.S. Alumnus **David Smith** (CE07) is also working for Kiewit. I ran into him at a seminar in Little Rock a couple of months ago. Last I knew he was posted in Osceola, Arkansas on Plum Point Power Partners."

**Jessica (Kienow) Hartman** (ChE03) emailed the following note: "Just wanted to drop you a note to give you my new email address and advise you that I have moved companies and taken a new role. After almost three years in domestic supply chain management and one year in global transportation & logistics at Ecolab in St Paul, I decided to accept a job at Northwest Airlines in Eagan, Minnesota. I will be managing multi-functional teams

on procurement projects and negotiating contracts for general purchasing items - everything from flight simulators and spare parts to onboard trash bags. This is not a traditional 'engineering' role, but I was surprised to learn that most of my colleagues and other managers/directors in this area have some kind of technical degree - lots of mechanical and chemistry/chemical engineers. Best wishes and stay warm!" Jessica can be reached via [Jessica.Hartman@nwa.com](mailto:Jessica.Hartman@nwa.com)

**Cynthia Holte** (Ph.D. AEWR03) is currently teaching Microbiology, General biology and Ecology at SDSMT.

**Marc Frutiger** (CE04) passed the Principles and Practice of Engineering exam. He is currently working for R&M Consultants.

**Thomas Nelson** (IE00) is currently working for Fed Ex ground as a route delivery driver in Sioux Falls, South Dakota. He married Linda on October 8, 2005 in Irene, South Dakota. They welcomed their first child, daughter Charley, on June 13, 2007 (7 lbs. 6oz., 19 in.)

**Amy Ormseth** (CE00) and Matthew welcomed the addition of their third son Payton on November 5, 2007.

**Donovan Slag** (CE01) passed the Professional Traffic Operations Engineer (PTOE) exam. Donovan joins a small group of engineers nationally that have reached this milestone. He works for Kadrmas, Lee & Jackson in Bismarck, North Dakota.

**Justin Strauss** (Geol05) is currently working toward a masters in evolutionary biology at San Diego State University.

**James D. Van De Ven** (ME01) is a new faculty member at Worcester Polytechnic Institute as an assistant professor of mechanical engineering.

**Justin Wenner** (ME06) wrote to the alumni office, "Sara and I are really enjoying our new jobs in Kansas City. My job at Garmin is exactly what I was looking for. A majority of my workday is spent designing new parts using solid works design software. My first project will go into production by the middle of next year and will be part of the avionics in Embraer's new executive jet, the Phenom 300. Sara is working at Fry Orthodontics as a receptionist and office administrator."

Laser Cladding Services (LCS) announced that **Dr. Eswar Yarrapareddy** (M.S. MES04) joined the team to serve as the company's laser cladding development engineer. Yarrapareddy's appointment supports the company's goal of being at the pinnacle of continued leadership and research to develop and evolve the laser coating industry. A recipient of prestigious 2006 Arthur F. Focke LeaderShape award from ASM International, Yarrapareddy holds a Ph.D. degree in mechanical engineering from Southern Methodist University and a B.S. degree in metallurgical engineering from JNT University in India. (From press release via [www.lasercladding.com](http://www.lasercladding.com))

Congratulations to the following newlyweds:

**Seth Brakke** (CE02) and Jesse Brakke were married in Ketchikan, Alaska on August 11, 2007.



**Steve Lamecker** (ME07) emailed, "I started working at 3M Brookings on July 23, 2007. I was married on September 22, 2007." Steve married Ann Saunders and the couple lives in Volga, South Dakota.

**Sarah Lungren** (IE06) and **Jesse Suek** (CEng04) tied the knot on July 7, 2007 in Alaska. They live in South Jordan, Utah.



**Sarah (Lungren) Suek** (IE06) and **Jesse Suek** (CEng04)

**Mary Ann (Harms) Palmer** (CEng02) emailed, "I married Ryan Palmer on January 5, 2008 in Minneapolis, Minnesota. Since last June, we've been living just outside of Raleigh, North Carolina. I continue to work for IBM in nearby Research Triangle Park."

**Ryan Thompson** (EE01) and Thoeun Lem were married on June 23, 2007. Thoeun is



**Mr. and Mrs. Ryan Thompson** (EE01)

attending nursing school and Ryan works as an electrical engineer for Burns & McDonnell in Kansas City. The couple resides in Belton, Missouri.

**Katherine (Begeman) Wismer** (ChE06) married **Clark Wismer** (EE06) on September 29, 2007 in the Chapel at Camp Rimrock near Rapid City, South Dakota, where the couple first met several years ago. Among the immediate family members present at the wedding were nine alumni, among them father of the bride **Mark Wismer** (EE78). The couple lives in Atlanta, Georgia where they work for LaFarge.

Congratulations to the following proud parents:

On September 19, 2007 Courtney and **Carson Merkwan** (ChE05) welcomed a baby boy, Gary Dennis Merwan.

**Anne Putnam** (ChE05) and Jon had a baby girl, Alivia Grace Putnam, on July 1, 2007.



## Display Your Hardrocker Pride with Grubby decals!!

The Grubby decals are available from the SDSM&T Alumni Association and the organizational license plates are available from your South Dakota county treasurer.

Call (60394-2347 for details or simply send your \$50 tax deductible contribution with a request for a pair of decals to:

**SDSM&T Alumni Association**  
501 E. St. Joseph Street  
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# Memorials

## **BERNARD FRANCIS ADAMS**

**Bernard Adams** (MinE31) passed away at the age of 94 in Ventura California. He was employed by the Sunland Packing House Company in Porterville, CA and the State Relief Administration in Porterville, CA. He retired from Lockheed in 2001.

## **ARTHUR LAWRENCE ALLEN**

**Arthur "Larry" Allen** (ChemE44) passed away at the age of 85 at the University of Tennessee Medical Center. Larry was a very active in his community and an elder at Second Presbyterian Church. Larry was assigned to a special engineering detachment with the Army during World War II. After serving his country, Larry worked for Union Carbide and retired in 1984 after 40 years of service. He was a member of the Civil War Round Table and the American Chemical Society. Larry was preceded in death by his son Gerald Lawrence Allen. He is survived by his wife of 61 years, Lavada Howe Allen; sons Steve, Tim, and Craig Allen; two sisters; and five grandchildren.

## **DONALD DEAN ALLGAIER**

**Donald Allgaier** (EE56) Commander, Civil Engineer Corps, U.S. Navy (retired), passed on October 30, 2007. He was born in Madison, SD on July 7, 1934. He received his early education in South Dakota, culminating with a BS in Electrical Engineering from SDSM&T. He also earned a M.S. in Engineering Electronics from the US Naval Postgraduate School. He was a registered electrical engineer in California. During his twenty-year US Navy career, he served in such exotic sites as Pearl Harbor, HI; Sigonella, Sicily, Italy; and Saigon, Viet Nam. Upon his retirement, he was awarded the Joint Services Commendation Medal. After his Naval career, he worked fourteen years for the Bechtel Corp. in San Francisco, CA

as a project engineer and project manager on military-related engineering projects. After retirement, he enjoyed extensive international travel, used his engineering skills for an expansion project at his church, sang in his church choir and volunteered in the community. He will be remembered by his family and friends for his generous spirit, punctual nature, and the many fine meals he prepared. He was pre-deceased by his first wife, Gayle, and a step-son, Gregory Wheeler. He is survived by his loving wife, Sylvia, his two daughters Kimberly Kreth and Stacey Dembroke, along with their families. He also leaves three step-sons: Michael Wheeler, Charles Wheeler, and Jeffrey Wheeler and their families, plus several grandchildren.

## **RALPH EDWARD ARNOLD**

**Ralph Arnold** (ChemE36) was born in Rapid City, SD and passed away at the age of 89 in Shasta, CA. Ralph graduated with honors and he was involved in football the spring of 1932.

## **FEVZI AYDIN**

**Fevzi Aydin** (EE75) of Eagan, MN, passed away April 10, 2007. He was born and raised in Turkey. Fevzi, benefiting from winning a national scholarship, completed his secondary education at an elite science and language government school in Diyarbakir, Turkey. He also greatly treasured his year spent as an AFS exchange student in Carthage, MO. After earning his degree at SDSM&T, he worked for NATO Integrated Communications Systems Management Agency (NICSMA) as the Field Manager in Turkey from 1978-1982. After relocating to Minnesota and working several years at Control Data, he spent the past 20 years as an electrical engineer for Honeywell. Fevzi loved fishing, soccer, volleyball, bowling, and

coaching high school club soccer. Fevzi was preceded in death by his father and mother, Ahmet and Fadime Aydin, and brothers Kasim and Bekir. He is survived by his wife, Kathleen "Kate", beloved dog, Quincy, three brothers, a niece, and extended family including the Paul & Carol Anderson family of Rapid City, the Russell & Virginia Smith family of Apple Valley, and countless friends.

## **ROBERT BYRON BARRETT**

**Robert Barrett** (ME49) was born in Kansas City, MO in 1925 and passed away in Beloit, WI at the age of 82 after several years battling Parkinson's and Alzheimer's disease. His family was blessed with help that made it possible for Bob to remain at home throughout his illness. He is survived by his wife Ellen Barrett and his daughters Penny Jongward and Robin Leusink.

## **JOHN LOUIS BAUCH**

**John L. "Jack" Bauch** (ME57) died this past February at the age of 73 in Bloomington, MN with his family by his side after a brave battle with pancreatic cancer. Originally from Sioux Falls, SD, Jack graduated from Washington High School and spent most of his career as an engineer with North American Manufacturing. Jack is survived by his children, John, Julie, Linda Ray and Lisa; two grandsons; his brother Jim and family; and many kind and loving friends.

## **DEAN DWAYNE BEHRENS**

**Dean Behrens** (MinE82) was born in Le Mars, IA and passed away at age 46 in the Exempla Saint Joseph Hospital in Denver, CO following his battle with brain cancer. Following his graduation from SDSM&T, Dean worked for an oil and well service company in Texas. He joined the Air Force and served in Germany from 1987 to 1990 as an Intelligence Officer.



While there, he earned his masters degree in Business Management through Troy University. He completed six years of active duty in the Air Force and was in his 14th year in the Reserves. Dean lived in Westminster, CO since 1996 and was a co-owner of Spirit Express Trucking Company for the last seven years. Prior to that, he worked as a truck driver and a dispatcher. He was married to Laurie Kruse and they have three children: Nathan, Michael, and Bethany.

## FRANCIS RAYMOND BROOKS

**Francis Brooks** (EE49) passed away on at the age of 88 from complications of Parkinson's disease. He was born in Tuthull, SD, and was the youngest of four children. Frank met Nanette Parks on Christmas Eve, 1943, in North Platte, Nebraska. They were married in Jacksonville, FL in 1945. They then moved to Rapid City, SD, so that Frank could finish college and earn his degree in Electrical Engineering. After graduation, Frank obtained a position with the Nebraska Public Power Company in Columbus, NE. He designed and built their first real home from scratch. The couple stayed there for three years and had two children, Steven and Janice. In 1953 they moved to Chula Vista, CA where Frank was employed at Rohr Industries for twenty years. After the move to California they welcomed a third child, Randy, into the family. After Frank's retirement, he and Nan enjoyed traveling in and outside of the US. Frank was also the proud grandfather of one granddaughter and three grandsons.

## HARRY GEORGE BROWN

**Harold Brown** (ChemE49) passed away at the age of 83 in Rapid City, SD. Before retirement he was employed as a chemist at the Anaconda Copper Mining

Company in Great Falls, MT.

## JAMES ALFRED BURNS

**James Burns** (ChemE37) passed away in McDonald MO at the age of 90. He was born in Chicago, IL. His activities while attending SDSM&T included Intramural Basketball and Chemical Engineering Society.

## FRANK JAMES BURRIS

**Frank Burris** (EE27) passed away on January 20, 2008 at the remarkable age of 104, fifty-four days short of his 105th birthday. Living in Fallbrook, CA, Frank Burris was well known for donning engineer garb, climbing aboard his self-built steam engine and participating in downtown parade festivities. Burris was an "honorary lifetime member" of the Antique Gas and Steam Engine Museum. Frank was in his 90's when he bought his first computer and attended a computer club in Fallbrook. One of Frank's first positions upon graduating from SDSM&T was as an electrical and mechanical engineer with RKO Pictures in California. Before coming to California, he worked for General Electric in New York, and still had the (tube) radio mock-up he built for G.E. in 1929. Frank spent thirty-three years working for "Uncle", retiring in 1973. He worked more than twenty of those years for the Federal Communications Commission and another ten with the United States Air Force. Frank Burris spent the past thirty-something years working full-time on writing his autobiography, building and using computers, gardening outside his home, and other endeavors, including "attacking those country-wrecking politicians". Frank Burris lived at home with his second wife Connie. Iva Mary-Beth (Nicholls) Burris, his first wife for more than "fifty years of married bliss", passed away in their home in 1987. His

two daughters, Jacqueline Marie and Barbara Cecile survive their father.

## WAYNE LOREN DALKE

**Wayne Dalke** (MetE51) died in December 2007 at Sanford Medical Center in Sioux Falls, SD after suffering a heart attack. Wayne was born in 1928 on a farm near Freeman, SD and he attended Freeman High School and Freeman Junior College prior to attending SDSM&T. Wayne married Joanne Waltner in Freeman in 1949. In 1951 they moved to Coleraine, MN where Wayne was employed at the Trout Lake Concentrator. Wayne and Joanne soon started a family, eventually having three children, Marie, Gwenn, and Lisa. The family moved to the Chisholm area where Wayne's career in mining spanned more than 40 years. He worked for U.S. Steel for 36 years in various plants across the Iron Range, spending the majority of those years at Minntac in Mountain Iron. He was involved in the original planning of Minntac and retired as its general manager in 1987. During his career, Wayne also spent four years living in India and one year in Guyana, South America, consulting on mining projects. After retirement, Wayne continued to share his talents and experience, serving as commissioner of the Iron Range Resources and Rehabilitation Board (IRRRB), city administrator of Hibbing, president of Smart Screen Systems (S3I), and consultant to Minnesota Iron and Steel (MIS) and other organizations. He was an active supporter of the Minnesota Museum of Mining in Chisholm and also served on various boards in the Iron Range area. A long-time member of Chisholm Baptist Church, Wayne served in many capacities including youth leader, deacon, and treasurer. His family dearly loved him and misses him deeply. Wayne is survived by his



# Memorials

wife, Joanne; his brother, Jon; his three children and nine grandchildren.

## **ROGER JOHN DERUDDER**

**Roger Derudder** (ME66) 62, of Scottsdale, Arizona passed away in July 2007. Roger was born in Detroit, Michigan. He is survived by his wife, Kathleen and children Jason, Chris, Jamie, and Carrie. He was employed as the Chief Engineer for the Honeywell Power and Thermal Management system in Phoenix, AZ.

## **WENDELL E. DUNN, JR**

**Wendell E. Dunn, Jr.** (former Professor) arguably South Dakotas' most prolific inventor, died in Tucson, Arizona on December 24, 2007, at age 85. A widower, Dr. Dunn had resided in Spearfish and the Black Hills area for nearly thirty-five years. Born in Baltimore, MD in 1922, he was the first son of educators. A graduate of Baltimore City College, Wendell Jr. was awarded a BE in Chemical Engineering from The Johns Hopkins University in early 1943, thereafter serving to Captain with the US Army Air Force until 1946. After completing the Harvard/MIT V12 program in 1944, he was engaged in aircraft terrain avoidance radar research in both the US and Occupied Germany. It was during his time at Cambridge that he met his wife of forty-eight years, Lillian (Billie), a gifted organist, who predeceased him in 1992. He was repatriated in 1946, returning to his young family and his studies, earning the PhD at Hopkins in 1950, soon after joining E. I. DuPont de Nemours in Wilmington, DE. He was a key member of the research and development team, which perfected DuPont's process for the production of high-purity titanium dioxide as a paint pigment and received his first sole-inventor U.S. patent in 1954. He remained with the firm for nineteen years during

which time its process grew to become the dominant technology worldwide. In 1968 he left DuPont to form his own contract research and development firm in Delaware and Sydney, Australia. He worked closely for several years with major Australian mining house Peko-Wallsend Limited to develop a technology to produce a low-cost titanium process feedstock. Thereafter he returned to his boyhood home and, for the next three decades, continued from the Black Hills his signature contributions to the field of high-temperature chlorination of metal ores. Between 1975 and 1995 he consulted to a variety of international corporations - Reynolds Metals, Kerr-McGee and DuPont, among others - and performed R&D, which formed the bases for several start-up ventures in South Dakota and beyond. He worked with the Lien Brothers and others in the Rapid City area to develop processes for the extraction from ore of ultra-pure niobium and tantalum metals for use in electronic applications, and for the efficient separation and recovery of gold from low-grade ore and scrap. From the late-1980s until the late-1990s he joined with European and Asian interests to develop a process for low-cost titanium-based pigments, working in India for months at a time. Throughout much of this period, he was also an active adjunct faculty member at the South Dakota School of Mines and Technology. Dr. Dunn continued to consult and invent until late 2005 after which failing health limited his activities. In addition to multiple recognitions by DuPont, he was issued during his lifetime nearly 100 US and international patents. While at least one new patent application remained incomplete at the time of his death, several of his inventions were still actively in use in the US, Mexico, India and

elsewhere. He was known widely for his quick, sharp wit, a fondness for deep technical or philosophic discourse, and his generosity - he gifted the carillon at the School of Mines. He was a 'soft touch' for any in need, whether a battered woman or the local volunteer fire department - whose station sits on his donated land. He is best remembered by his children and others as an extraordinary bedtime storyteller whose fantastic tales had few equals in print. His one non-technical book, *The Sex Tax*, a political fantasy first published in 1979, has proven popular with a variety of readers. During his years in Delaware, Dr. Dunn was an active private pilot and aircraft owner and, throughout his life, as time permitted, an avid fly fisherman. His early morning treks to the creek at the bottom of his "compound" in beautiful Spearfish Canyon were rewarded, more often than not, with a creek full of brown trout - a unique breakfast treat for any lucky enough to be his and Billie's guests. Dr. Dunn is survived by his brother, Thomas B. Dunn; by his four children Wendell E. Dunn III, Pamela Dunn Lehrer, Shelley Dunn Carda, and Edythe ("Dee") Dunn Randolph; and by one grandchild, Elissa B. Dunn.

## **JAMES CARL EWING, JR**

**James Ewing, Jr.** (CE50) passed away in November 2007 at the Dept of Veterans Affairs in Hot Springs, SD. James was born in Rapid City in 1925. He graduated from SDSM&T and later received his Masters in Architecture from the University of Texas. James married Billie Louise Tombaugh in San Marcos, Texas in 1945. They moved to Rapid City where James worked as an architect with his father at Ewing and Forrett and later established his own firm, James C. Ewing, architect. He designed several churches,



buildings, and schools in Rapid City and the surrounding area. He was a member of the VFW, the Masonic Lodge #25, the Shriners and the Naja Clowns. Survivors include his three sons, Robert, Scott, and Carl; daughter-in-law, Rita Ewing; one sister, eight grandchildren, and nine great-grandchildren. He was preceded in death by his parents; one son, Richard Ewing; his wife, Billie Louise; an infant grandson; and two sisters.

## DENYS GENE FREDRICKSON

**Denys Fredrickson** (EE52), 79, went to be with his Lord in October 2007 at his home in Wichita, KS. Denys Fredrickson was born in Loyalton, SD where he attended Loyalton Grade School, Ipswich High School and graduated from Roscoe High School in 1946. Denys joined the Army and served with the Military Police in Italy during WWII. After two years at Northern State College in Aberdeen, he met and married Marjorie Lee Wagner in 1950. After graduation from SDSM&T he was offered a job at Boeing in Wichita, KS. He worked there for thirty-five years as an electronics engineer and two years at Lear Jet. Fredrickson Electronics was a business he started in 1968. His hobbies were being a magician, ham radio operator, chess player, and model airplane builder. He is survived by his wife, Marjorie of fifty-seven years, daughters, Nancy Fredrickson, Diana Wangberg, Lynette Burger and LouAnn Voth; and seven grandchildren. He was a member of the First Wesleyan Church of Wichita.

## CURTIS MARVIN GEIST

**Curtis Geist** (MetE38) passed away in Burbank, CA at the age of 76. He was born in Northville, SD. Upon graduating from SDSM&T he worked for Lockheed in California and never left the company until

his retirement.

## RALPH FREDERICK HADE

**Ralph Hade** (ME52) passed away in August 2007. He was born in Oacoma, SD. He was married to Violet M. Hade and they had four children; Douglas, Gaylan, Janice, and Terri Jo.

## ARTHUR EUGENE HEGVOLD

**Arthur Hegvold** (GenE50), died in February 2008 at the Rapid City Regional Hospital Hospice House from cancer. Art was born in 1922 in Mitchell. He was raised there along with his three brothers and four sisters. In 1941 he joined the U.S. Army Air Corps and served until the end of the War as a B-24 pilot in the South Pacific. After the war he earned his degree at SDSM&T. From 1950 to 1952 he served as a pilot in the South Dakota National Guard and as a helicopter pilot for the Army Corps of Engineers during the Korean War, along with a short stint as an instructor at West Point. After Korea he worked for Hughes Tool Company, Aircraft Division, as a structural engineer. Art entered the FBI in January 1955. His first office was Houston, TX and then in New York City. In 1957 he was assigned to the Laboratory Division in Washington, DC, as an examiner of Questioned Documents and lived in Arlington, VA. While there he worked on the John Kennedy assassination case with many others, and represented the FBI as an Expert Witness on many other cases throughout the country. After retiring in 1976, he took a position with the Honolulu Police Department as an examiner in their Forensics Department. He also conducted examinations on a private basis in partnership with Palmer G. Tunstall, another retired FBI agent. When he again retired he made his home in Rapid City, where he enjoyed his family as a beloved father, grandfather,

brother, and favorite uncle. He also enjoyed spending time with his many golfing buddies and his many friends made through his years of service in the law enforcement community. He is survived by his sister, two daughters, Candice Morris and Lesly McDevitt, and their families, including ten grandchildren and two great-grandchildren.

## RONALD ROY HUBER

**Ron Huber** (Phys70) died as the result of an accident on April 30, 2004 in Houston, TX. He was born in 1947 in Vermillion, SD. They moved to Watertown and then Pierre, SD where he lived through High School and graduated from T.F. Riggs High School in 1965. He then graduated from SDSMT and married Sue Dawson in 1970. They moved to Houston, TX where he continued his employment with Western Geophysical Company. They had two children, Erica and Brett. He found many varied employment opportunities over the years but he chose to live his adult life in the Houston area. He and Elaine Franchiseur were married in 2000. He is survived by his wife Elaine; daughter Erica and son Brett; three stepdaughters Donna, Rhonda, and Dawn; his mother, one brother, and his former wife. He was preceded in death by his father.

## ROBERT SHANE JONES

**Robert Jones** (CE48) passed away September 2007 in Corpus Christi, TX. He was born in Pierre, SD in 1922. He was married to Dorothy Jones and they had three children Bobby, David, and Karen.

## MAW- TSUEY (MARK) JONG

**Mark Jong** (EE65) passed away in 2006 due to cancer of the liver. He retired from WSU shortly before his death. He and his family had moved to California to be with his grandchildren until he died. His wife continues to live in



# Memorials

California.

## **PHILIP D. LIDEL**

**Philip Lidel** (M.S. MinE71) died in November 2007 at home with his family. He was born February in 1934 on the family farm near Pierpont, SD. He grew up on the farm and received his education in the Pierpont Public School, where he excelled in academics and played sports, including football, basketball, and baseball. He was part of the first Pierpont basketball team to make it to state. Philip served in the army after graduating from high school in 1951. He was part of an intelligence team that decoded Russian communications in Korea from 1953-1956. He then attended the University of South Dakota and majored in geology. He also received a master's degree in Mining Engineering from SDSM&T. He married Virginia Waage in Pierpont, SD in 1959. They lived in Pierre where Philip worked as a geological engineer for the SD Highway Department. The couple had two children, a daughter Autumn, and a son Forest. Philip was an active member of the United Methodist Church, the Masonic Lodge, the Shriners, the York Rite, the American Legion, and the Exchange Club in Pierre, SD. Virginia passed away in 1978. Philip continued to raise his children alone until 1987 when he married his second wife, LaVon Youngberg, of Pierre, SD. LaVon brought two sons, Steve and Mike, into the family. They lived in Pierre until 1992 when they moved to Rapid City, Philip's favorite area in the state. Philip was an avid sports fan and particularly loved football and baseball. He attended many Rapid City Legion baseball games. He also loved the Black Hills and would spend long hours driving, hiking, and rock-hunting in the area. He and LaVon loved to travel and went on many trips together -

their favorite trip was to New Zealand where he went skydiving. Survivors include his wife LaVon, son Forest, daughter Autumn, a step-sons Steve and Mike, a brother and ten grandchildren.

## **PAUL MACCREADY**

**Dr. Paul MacCready** (Hon04) an honorary graduate of SDSM&T and pioneering designer of the first fully capable human-powered flying machine, died August 28, 2007 at age 81. On August 23, 1977, the MacCready-designed, lightweight Gossamer Condor made the first sustained, controlled flight powered solely by a human. The flight, pedal-powered by pilot Bryan Allen, lasted just 7.5 minutes but covered a figure-eight course with pylons a half-mile apart at the airport in Shafter, CA. The plane, made of aluminum, foam, piano wires and Mylar weighed just seventy pounds. The flight won MacCready the \$95,000 Henry Kremer Prize, which had been established in 1959, and earned him the title "father of human-powered flight." In 1979, MacCready had another first when his Gossamer Albatross, also seventy pounds and sporting a 96-foot wingspan, made the first human-powered flight across the English Channel. Paul was also the human engine for that flight, which lasted nearly three hours and covered 22 miles. He is survived by his wife, Judy, and three sons.

## **MARVIN EUGENE MATHISEN**

**Marvin Mathisen** (EE40) passed away in January 2007 after a brief illness. He was born in Lead, SD in 1918. He is preceded in death by his loving wife Helen. Their children are Mary, Nancy, and Lisa.

## **KEITH EUGENE MCAMIS**

**Keith McAmis** (EE65) passed away in August 2007 at the age of 63.

Keith was a 40-year employee of Unisys. He is survived by his wife, Ingrid-Ann; daughter Nicole Mason, son Brian, and their families including three grandsons; and many family members and dear friends. Ingrid and Keith were active members of their church and helped with Meals on Wheels until Keith was not healthy enough to participate.

## **TOM WILFORD MCCRARY**

**Tom McCrary** (MetE40) passed away in Los Angeles, CA and the Alumni Office recently received confirmation. He was born in Hill City, SD.

## **KENNETH SCOTT MEYER**

**Kenneth Meyer** (ChemE80) died in December 2007 shortly before his 50th birthday at his home. Ken was born at Edwards Air Base in Victorville, CA and attended school in New Underwood, graduating from New Underwood High School in 1975. After graduating from SDSM&T, he married Judy Troxel in 1984. He was a Chemical Engineering Specialist at Monsanto for twenty-seven years. He was a member of the Moose Lodge #388, National Chemical Engineering Society, and Theta Tau Fraternity. Ken loved boating, fishing, hunting, woodworking, carpentry, and Harley-Davidson Motorcycles. He also loved watching his girls participate in many activities. Survivors include his wife Judy; two daughters Lindsey Herlein and Randyl Meyer; and numerous siblings, beloved family members, and close friends. Services were at the Ralph J. Wittich-Riley-Freers Funeral Home in Muscatine where memories and condolences were offered by many who knew and loved Ken.

## **RICHARD MICHAEL MONDLOCH**

The Alumni Office was informed that **Richard Mondloch** (EE60)



died in November 2005 at the age of 68. His wife Mary and he lived in Murphys, CA at the time, where he retired from Filenet Corp as Area Manager.

## **DONALD CLARK MYERS**

**Donald Myers** (ME59) died in August 2007 at Cozy Corner Assisted Living in Elkton, SD. Don was born in December 1933 on the family farm near Elkton. Don is survived by his brother, Dwayne Myers and was preceded in death by his parents.

## **DEAN JUNIOR NATION**

**Dean Nation** (GeolE54), died in September 2007 at his new home in Anchorage after a brief battle with cancer at age 82. Dean was born in Highmore, SD. He entered the U.S. Army Air Corps in June 1943 and served his country as a B-29 pilot until August of 1946. He married his wife, Mary, in February 1946. Dean worked throughout South Dakota, North Dakota, Montana, and Wyoming until he followed his dream to Alaska. Dean came to Alaska with his wife, daughter, and son in July 1969. His eldest daughter and her family arrived later, courtesy of the Army. Dean worked for the Department of Natural Resources as the chief of water resources until he retired in 1983. Dean enjoyed spending summers at his home in Willow with his wife and motoring around the Lower 48 in his motor home in the winters. He also enjoyed spending time with his family and friends. One of Dean's favorite pastimes was dip netting for salmon in the Chitna and Kenai rivers. His family wrote, "Papa lived his life with integrity and honesty. Those that knew him knew he had an opinion about everything and was not afraid to share it with you even if you didn't want it." He is survived by his wife, Mary; daughters Dudlee Pense and Reb Hanson and families, son Daniel Nation; and

numerous grandchildren and great-grandchildren.

## **EDWARD PETER PALLANSCH**

**Edward Pallansch** (GeolE49) passed away in Larimer, CO. Born in Sioux Falls, SD, he was married to Elizabeth Webb and they had two children, Lee and Lisa. His career entailed positions as a Geologist with Long Co. Tech Services in Casper, WY, owner of Pallansch Logging Services in Ft Collins, CO, and also the General Manager with Anders Engineering Services also in Ft Collins.

## **EVERETT FLOYD POMPY**

**Everett Pompy** (EE50) died in October 2007 at Rapid City Regional Hospital. Everett joined the U.S. Air Force and was commissioned 1st Lt. In 1944, during World War II, Everett married Faye Young in Ft. Lauderdale, FL. After completing his duty with the military, he returned to continue his studies at Southern State Teacher's College. Later, the family moved to Rapid City where he graduated from SDSM&T. Everett began his career as a section foreman for Black Hills Power and Light Company (BHP&L). He later became a management trainee and was transferred to Spearfish and then to Newcastle, WY, serving as district manager in both locations. His career advancements with BHP&L brought him to Rapid City where he served as vice president of Human Resources. He retired in 1985 after thirty-five years with BHP&L. Everett was an active member in the community, serving as president of the Spearfish Chamber of Commerce, president of the Spearfish Lions Club, member of the American Legion, life member of the VFW (Cosmopolitan Club member since 1968), president of the Boy Scout Council from 1971-72 (where he received the Silver Beaver Award), a member of the Arrowhead and

Meadowbrook Golf Clubs, and an active member of the South Canyon Lutheran Church. In his leisure time, he enjoyed golfing, playing the saxophone in the New Horizons Band, reading, fishing with his family, traveling, and restoring classic cars. Everett was a dedicated alumnus and served his alma mater for many years, highlighted by his service as the 1975 President of the Alumni Association during that year's All School Reunion. Survivors include three sons, Michael, James, and Donald; daughter, Jackie Oeleis; six grandchildren; and two great-grandchildren. Services were at the South Canyon Lutheran Church, followed by burial with military honors provided by Rushmore VFW Post 1273 Honor Guard at the Black Hills National Cemetery near Sturgis. Memorials have been established for South Canyon Lutheran Church and the Pompy Scholarship Fund at South Dakota School of Mines & Technology Foundation.

## **DOUGLAS DWIGHT RAMES**

**Doug Rames** (CE65) passed away in November 2007 at the age of 65. Douglas Rames was born in Colorado Springs, CO and graduated from Rapid City High School in 1960. He married Audrey Satter in 1963. They had a son, Steven, and two daughters, Wendy and Eydee. Doug was with the Colorado Department of Transportation for thirty-three years, ending his career as Region Director (District Engineer) for Region 4, which covers northeast Colorado. During his career with CDOT, he managed a variety of projects, including the construction management of many of the projects to build I-70 through the mountains of Colorado. He spent four weeks in China as a paving expert for a World Bank project. He was a commissioner on the Greeley Urban Renewal Authority and a



# Memorials

member of the Greeley Entryway Committee. Doug also was a member of the ROTC and the Theta Tau fraternity during his college years and always looked forward to the Theta Tau reunions every five years. Doug is survived by his loving wife Audrey, their children and families including five grandchildren, many other family members, and close friends.

## **HARRY WILLIAM ROBERTS, JR**

**Harry Roberts, Jr.** (MetE49) passed away in 2007. He was born in Sioux Falls, SD. He was married to Marjorie Baker Fletcher. Harry retired in 1987 after a career that included positions at Honeywell and Northrop Aircraft Inc.

## **DELMAR DUANE SCHLEY**

**Delmar Schley** (EE56) died in October 2007. He survived thirteen years with Wegener's Granulomatosis. Survivors include his wife of fifty-three years, Grace; son Steven, daughters Karen Driessen and Susan Claseman, and their families, including his four grandchildren; and his brothers, sisters, and their families.

## **WILLIAM FLOYD SCOWN**

**William Scown** (ChemE47) passed away in May 2007. He was born in Lead, SD. He married June Goodrich and they had three children - Bill, Sue, and Mike. He retired after many years with the 3M Company.

## **JOHN SCULLY**

**John Scully** (former Professor) passed away at his Buffalo, WY home in March 2008. John was born in November 1935 in Buffalo, NY. He grew up in Buffalo and graduated from Nichols High School. He later graduated from Dartmouth College and went on to get his Ph.D. at Purdue University. John went on to become a civil engineer and worked in Greenland and on the highways in South

Dakota. He was a professor of Civil Engineering at the South Dakota School of Mines and Technology. He moved to Buffalo, WY in 1994 where he lived until the time of his death. While in Wyoming, John created the John Scully Foundation Trust for college scholarships for local students. John loved animals, children, the outdoors, and sports. John enjoyed decorating his yard for Christmas holidays and was a multiple year winner in local contest. He is survived by his brother George Scully, four nieces, and three nephews.

## **MARVIN CLARK SELLERS**

**Marvin Sellers** (GenE53) passed away from cancer in 2006. He was born in Whitewood, SD. Upon graduation, he worked for 3M from 1976 through 1992 when he retired in Tutsin, CA.

## **DUANE BLAIRE SKOGEN**

**Duane Skogen** (ChemE56) passed away peacefully at his home in Santa Rosa, CA in August 2007. Duane was preceded in death by his beloved wife of fifty-four years, Arliss. He is survived by this brother Bruce, his daughters Laurie Lavelle, Nancy Higgins, and Connie Skogen; seven grandchildren and two great-grandchildren. His lifelong career with Continental Oil Co. included opportunities to live and work in several cities including Ponca City, OK, Billings, MT, Houston, TX, and Paramount, CA then in England for fourteen years before he retired from DuPont Conoco in 1990. Duane enjoyed golfing, salmon fishing, and was an avid turkey hunter during his retirement. He was active in his church and was a churchman in every sense of the word.

## **NORBERT JOSEPH SOCOLOWSKI**

**Norbert Socolowski** (MinE44), first president of the SMTA and

industry icon, passed away in February 2008. He was 85. Norb is survived by wife Jean. Norb endured Parkinson's disease and long-term diabetes. He and Jean lived in Las Vegas and in Little Egg Harbor, NJ. Norb was manager of product development at Alpha Metals, Inc., and spent 18 years with the company (now Cookson Electronics) in development and engineering of solder assembly materials, focusing on SMT and hybrid package assembly products. He had also worked at Thiokol Chemical Corp. and Curtiss-Wright Corp. Beyond the SMTA, he held industry memberships in ISHM and SME. Norb also earned a bachelor's in industrial engineering from Stevens Institute of Technology. He had remained active in the SMTA throughout his life, including his term as president, and served as chairman of the IPC Solder Paste Specification Committee.

## **JAMES JOSEPH SOLON**

**James Solon** (ChemE44) of Spearfish, SD, died in December 2007 at Spearfish Regional Hospital at age 84. James was born in Terraville, SD but lived in Kadoka, SD until he was in the 6th grade when the family moved to Rapid City. He graduated from Cathedral High School in Rapid City and then from the School of Mines. Jim enlisted in the U.S. Navy after graduation and served his boot camp at the Great Lakes Naval Training Station in Illinois. He was then assigned to Officer Training School at Columbia University in New York City, where he graduated with a commission of Ensign. He served at the Naval Gun Factory in Washington, DC and the Ammunition Depots in Hingham, MA and Port Chicago, CA. He was discharged from the service in 1946 and returned to Rapid City. In the fall of 1952, he attended BHSC for one quarter to



complete work on his teaching certificate and began teaching math in Lemmon, SD. During his stay in Lemmon, Jim earned a Masters Degree in secondary education from USD. He remained in Lemmon for nine years - three as a teacher and six years as the high school principal. In Lemmon, he married Eileen Valley in 1953. In 1962 he was hired as the high school principal in Hot Springs, SD and he served in that capacity for three years. In 1965 he was hired as the principal of Huron Senior High School in Huron, SD. He held that position for twenty years. He retired in 1985 after serving our state as a school administrator for thirty years. Upon retirement he moved to Spearfish and has lived there since 1988. Jim was an avid sports fan. He played five years with the Rapid City American Legion Baseball team. As a senior in high school he was an all-state basketball player at Cathedral. Jim was a member of St. Joseph Catholic Church and a member of the Spearfish Lions Club, Knights of Columbus, and Spearfish Senior Center. Jim is survived by his wife Eileen; sons David and Brad; daughters Cheryl Holt and Gerri Moore; nine grandchildren; and three great-grandchildren.

## **WILLIAM CARL SRONCE**

**William Sronce** (MetE78) passed away in March of 2007 in Mount Pleasant, SC. He is survived by his wife, Arlene and their children Cory and Nicole. After nineteen years in the steel business he took an opportunity with Price Waterhouse Coopers and then with IBM Business Consulting Services.

## **RONALD BUD STOTELMEYER**

**Ronald Stotelmeyer** (MinE57) passed away in August 2007. He was born in Rapid City, SD in 1934. "Stony" leaves behind his widow, Vida Mae and their sons

Ronson and Tim. He spent thirty-one years with the U.S. Bureau of Mines. He enjoyed his retirement by RV-ing and vacationing in such places as Costa Rica and Baja, CA.

## **MORRIS ALFRED SWANSON**

**Morris Swanson** (ME59) passed away in October 2004, the Alumni Office was recently informed. He was born in 1937 in Pukwana, SD. Morris worked for Caterpillar in Peoria, IL.

## **HARROLD HARVEY SWARM**

The Alumni Office received notice recently that **Harrold Swarm** (MetE58) passed away. Harrold retired from Howmet Aluminum Corporation as a metallurgist. He also was a member of Delta Sigma Phi.

## **WILLIAM WENTWORTH**

**William "Bill" Wentworth** (MinE41) passed away at St. Mary's Hospital in November 2007. He was 92. Bill was born in Rapid City and spent his childhood in Wyoming, Iowa, and Nebraska. Bill graduated from high school in Blair, NE, then he attended SDSM&T. On August 3, 1943, Bill married Jean Chassell in Lima, Peru. Jean preceded Bill in death. Throughout his life, Bill was a resident of many places, including Lakewood, CO; Victor, ID; Iran, Eureka, UT; Ouray, CO; Creede, CO; and assorted mining camps in Peru and Northern Rhodesia (now Zambia). Bill was a member of the Elks and SME/AIME. Bill had many hobbies and special interests, which included flying, looking up information on almost anything, music and musical instruments, and building and repairing objects in unique and inventive ways. Bill leaves behind a legacy of three daughters: Ann Fanjoy, Ellen Dodds, and Susan Wentworth. Survivors also include his two sisters, seven grandchildren, and sixteen great-grandchildren.



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# Personnel Changes

## Welcome:

**Sally Y. Shelton**, exempt, collections manager, Museum of Geology (2/4/08)

**Rachel L. Howard**, CSA, registration officer, graduate education and office of research affairs (1/29/08)

**Bradley R. Jorgenson**, exempt, composites and polymer processing specialist, Composites and Polymer Engineering (CAPE) Laboratory (1/29/08)

**Dr. Anuradha R. Shende**, faculty, instructor, chemical and biological engineering (1/24/08)

**Andrew T. Brady**, exempt, composites and polymer processing specialist, Composites and Polymer Engineering (CAPE) Laboratory (1/14/08)

**Krista L. Tyler-Raye**, exempt, assistant financial aid director, financial aid (1/14/08)

**Nancy L. Feiler**, CSA, secretary, human resources (1/2/08)

**Dr. John Foster Sawyer**, faculty, instructor, geology and geological engineering (1/2/08)

**George Wayne Douglas**, faculty, instructor, materials and metallurgical engineering (1/1/08)

**Curtis V. Price**, faculty, instructor, geology and geological engineering (1/1/08)

**Katherine A. Standish**, faculty, instructor, chemical and biological engineering (1/1/08)

**Carla Heavlin**, CSA, bookstore buyer, Bookstore (10/23/07)

**Dr. Perry Marteny**, exempt, director, Composites and Polymer Engineering (CAPE) Laboratory (10/1/07)

**Natalie M. Honey**, exempt, admission counselor, admissions (9/24/07)

**Pamela M. Escott**, CSA, secretary, business and administration – business services (9/17/07)

**Tamara M. Moore**, CSA, secretary, admissions (9/14/07)

**Elaine C. Mundell**, CSA, secretary, educational programs and professional conferences (9/12/07)

**Kelly R. Combs**, faculty, instructor, industrial engineering (9/5/07)

**Bret T. Budd**, faculty, instructor, civil and environmental engineering (8/15/07)

**Dr. Terje Preber**, faculty, professor, civil and environmental engineering (8/15/07)

## Farewell:

**Ms. Julie (Volimas) Looman**, CSA, graduate education/research affairs (2/28/08)

**Gwenn Markham**, CSA, multicultural affairs (2/21/08)

**Joan M. Clements**, CSA, academic and enrollment services (12/31/08)

**Julie Hutton**, faculty, electrical and computer engineering (12/31/07)

**Tamara L. Gregoire**, CSA, president's office (12/31/07)

**Rita T. Sabe**, CSA, industrial engineering/CAMP (12/31/07)

**Dr. Jianbin Wei**, faculty, mathematics and computer science (12/31/07)

**Irene L. Vanderbush**, CSA, financial aid (12/21/07)

**Sharon L. Reid**, exempt, sponsored programs (11/21/07)

**Dr. Ying Dai**, exempt, materials and metallurgical engineering (10/1/07)

**Petra B. Bredberg**, CSA, library (9/28/07)

**Zhong Tao Cai**, exempt, Institute of Atmospheric Sciences (9/21/07)

**Charles F. Layton Jr.**, exempt, mining engineering and management (9/21/07)

**Karen D. Henrichsen**, CSA, Bookstore (9/18/07)

## Change:

**Robert L. Rancour**, from CSA, senior secretary, Admissions, to CSA, to senior secretary, president's office (2/7/08)

**Dr. Rajesh V. Shende**, from faculty, research scientist I, chemical and biological engineering, to faculty, assistant professor, chemical and biological engineering (1/24/08)

**Sarah R. Steiner**, from CSA, secretary, admissions, to program assistant I, admissions (8/22/07)

**Jeanette R. Nilson**, from CSA, program assistant II, to exempt, administrative support coordinator, research affairs (11/5/07)

**Ms. Karmen A. Aga**, from CSA, senior accountant, to CSA, interim director/senior accountant, sponsored programs, effective (11/22/07)

**Ms. Jennifer L. Bauer**, from CSA, bookstore buyers, Bookstore, to purchasing/property management officer, Bookstore (10/22/07)





## Featured Major

### Civil Engineering

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- 80 percent of graduates gain real-life experience through internships and co-ops
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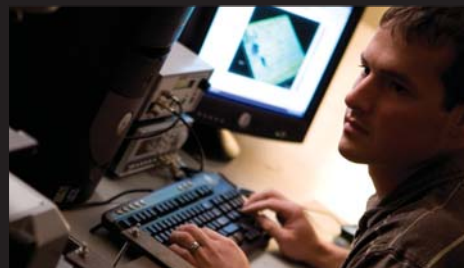
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# School of Mines Reaching Out



*During the United Way Day of Caring, a team of staff and students from the School of Mines cleared brush and branches from Chapel in the Hills.*



*Engineers and Scientists Abroad (ESA) recently traveled to Paramaribo, Suriname, in search of potential humanitarian projects. The group has most recently done humanitarian work in Chile.*





*The School of Mines welcomed area youth to the Annual Children's Christmas Party, where they enjoyed holiday festivities including a story from President Ruch.*



*More than 200 people participated in the Matters of the Heart Health and Wellness Fair held at the School of Mines. Participants received free health screenings and wellness information from 35 campus and community organizations.*



*School of Mines students entertained more than 1200 middle- and high-school students during the Engineer's Week chemistry show.*



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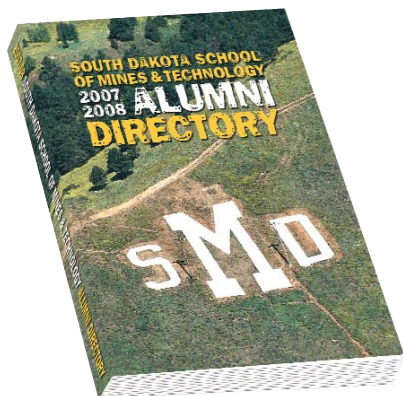
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Visit the on line calendar for details:  
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For details about K-12 events:  
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For details about athletic events:

[www.gorockers.com](http://www.gorockers.com)

For details about adult and professional  
educational opportunities:

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## June 1-August 19

Youth Camps and Classes. See details at:  
<<http://sdmines.sdsmt.edu/learn>>

## June 2

Payment Day

## June 22-23

FIRST Connections COMPASS  
Day/Orientation, 8:30 AM

## June 26-27

South Dakota Board of Regents Meeting  
— Brookings, SD

## July 1

Dr. Wharton assumes office as the 18th  
President of the School of Mines

## July 4

Independence Day Holiday — No Classes

## July 18

Visit Mines

## August 9

Football and Volleyball Orientation

## August 21

Global Environmental Climate Change  
Lunch-N-Learn — Surbeck Center  
Ballroom, 11:30 AM

## August 25

President's Welcome and Convocation —  
Surbeck Center Ballroom, 9:30 AM

## August 27

New Faculty, Staff, Exempt, and CSA  
Employee Orientation — Surbeck Center  
Bump Lounge, 8 AM

## August 28

International Student Orientation

## August 30

Last Available Orientation Session

## August 31

FIRST Adventure Weekend

## September 1

Labor Day Holiday — No Classes

## September 2

Non-Traditional and Open Student  
Registration

## September 2

Evening Classes Begin  
Tablet PC Orientation, 10 AM and 2 PM

## September 3

Classes Begin

## September 3

Fee Payment Day

## October 4

M-Day

## October 13

Native American Day Holiday — No  
Classes

## October 14-17

Rocky Mountain Unconventional Gas  
Conference — Surbeck Center Ballroom,  
8 AM

## October 22-23

South Dakota Board of Regents Meeting

## October 24

Midterms

## October 31

Halloween



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