### South Dakota School of Mines and Technology

THE HARDROCK

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

### FALL 2006

### SOUTH DAKOTA

# 2010 Research Center Announced



& TECHNOLOGY

New bioprocessing research center will be headquartered on the School of Mines campus p. 10

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### Perspectives



Dear Alumni and Friends,

The School of Mines has a long and distinguished history. As the State of South Dakota's technological university, we look to continuing the tradition of excellence that has served this institution since its opening in 1887. While the tradition has not changed, the world has, and we must work to keep pace with the challenges and opportunities that face us. In this issue of the *Hardrock* we chronicle several of these new efforts.

We are excited to play an ever-increasing role in the region's economic development through research and industry partnerships with both developing and established companies. Our research interests in the area of sustainable energy received a boost through the awarding of the Center for Bioprocessing Research and Development (CBRD) — the newest of the 2010 centers created through Governor Rounds' 2010 Initiative for Economic Development. A collaborative effort between the School of Mines and South Dakota State University, the CBRD is headquartered on the School of Mines campus. We are at the forefront of developing new technologies to make our world a better place in which to live.

The fall 2006 semester marked the full implementation of a two-college system at the School of Mines, and we are pleased to welcome our two Deans: Dr. Duane Abata, Dean of the College of Engineering, and Dr. Duane Hrncir, Dean of the College of Science and Letters.

It is important to us that our students succeed, and as such, we have initiated new admission standards. Programs have also been instituted to help those students who meet the requirements, but need assistance in certain areas. We want to ensure that our students are prepared to meet the rigorous demands of science and engineering.

As in years past, the School of Mines is ever on the move to find new ways to continue our tradition of excellence.

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

Very truly yours Thank (Kuch

Charles Ruch President

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



FALL 2006

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### On the cover:

*Cover Photo:* A new bioprocessing research center will be headquartered on the School of Mines campus. The Center for Bioprocessing Research and Development (CBRD) will operate in conjunction with South Dakota State University. *Story p. 10* 

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#### Dear Alumni and Friends,

By the time you receive this fall 2006 addition of the *Hardrock* I will have recently completed my one year term as President of the SDSM&TAlumni Association. This year has gone by incredibly fast as always seems to be the case when you are enjoying the "job."

During the spring and summer of my term we visited alumni chapters in Knoxville, Tennessee; Huntsville, Alabama; Atlanta, Georgia; Sioux Falls, South Dakota; Omaha, Nebraska; Bremerton, Washington; Seattle, Washington and attended the SME meeting in St. Louis, Missouri. We did not get to California as hoped, but the Alumni Office has promised that I can tag along for a trip planned for late 2006 or early 2007.



In addition to the normal oversight of Alumni Association business, the Board of Directors took two very important steps over the last year. The first was a decision to join with the School of Mines Office of University and Public Relations and combine the *SDSM&T Magazine* and *The Hardrock* into one publication — retaining the name *Hardrock*. You should have received the first issue in the spring and of course this is the second. The new *Hardrock* keeps all of the alumni news intact in the same format as in the past, but presents much more news and information about the School of Mines.

Secondly, in January we began to discuss in earnest two issues that have been developing over the past decade or so — decreasing participation in the Alumni Association activities and nearly constant contributions that sustain funding for the Association in a period when all costs are rising. At our July board meeting, each of the standing committees was asked to contribute to the development of a plan for increasing alumni involvement and financial support. This activity will be completed under **Doug Aldrich** (ChemE62), our new Alumni Association president.

Our Alumni Association is more important and contributes much more to the School of Mines than I realized a couple short years ago. It provides a way for us to stay in contact with classmates and with the university. If you have not been back to a five-year All-School Reunion you should not miss the next one in 2010 as they are great fun. It will also be the 125th Anniversary of the School of Mines (founded in 1885). The Alumni Office has coordinated the All-School Reunions since they began in 1950 following the first ever reunion in 1946. All reunions and get-togethers are a great way to stay connected with college friends and campus. If you want to find a classmate just look in the SDSM&T Alumni Directory, send an e-mail via the *Hardrock E-News*, or find news of classmates in the *Hardrock* Class Notes section (p. 33).

The Alumni Association is also important to the future of our alma mater. For example, ABET accreditation now requires the university and its departments to track the careers of their alumni as one measure of the quality of the institution's educational programs. The Association maintains the database of addresses and contact information for all graduates for this and other important initiatives. The Association participates in recruiting of students, campus planning, governance, and contributes financially to campus projects. To continue these activities the Association needs your support and participation.

In closing, I would like to thank Alumni Director **Tim Vottero** (Chem84), the Alumni Office staff, and the Association Board of Directors (BOD) that served with me this past year (see adjacent list). Special thanks go to outgoing Board members **Mike Alley** (GeolE73), **Vern Bump** (GeolE61), **M.R. Hansen** (CE69), **Mark Ingalls** (CSc92), and **Jamie Lembke** (ChemE02) for their terms of service. I want to both congratulate and thank our incoming President, **Doug Aldrich** and our new BOD members — **Barb Dolan** (CSc87), **Marlene Nelson** (ME74), **Scott Rausch** (EE75), **Dale Skillman** (ME73), **Nayyer Syed** (Geol94), and **Gene Woodle** (ChemE70). I look forward to continuing with the BOD next year as the Immediate Past President (**please read the amendment proposal on page 44, and vote by filling out the bottom tear- off business reply card ballot located on the inside back cover).** 

I plan on staying involved as it is both enjoyable and important to the School of Mines.

El Bloom

Ev Bloom (MetE63) SDSM&T Alumni President

Perspectives

### 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.

#### 2006-2007 Enrollment:

2,124 students from 39 states and 32 countries

#### **Costs and Fees:**

A School of Mines education has never been more affordable. Annual undergraduate costs for tuition, fees, books, room, and board total approximately \$11,450 per year for South Dakota residents. A new initiative passed this year for Fall 2006 sets out-of-state tuition for first-time freshmen and transfer students at a uniform rate of 150 percent of in-state tuition rates, currently totaling approximately \$12,650.

#### **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 2006, researchers received nearly \$14 million in funding for more than 100 projects. Funding agencies included the National Science Foundation, the State of South Dakota, NASA, the Department of Education, Army Research Laboratory, and many more.

#### Faculty:

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

#### Honors and Awards:

- $\cdot$  One of America's Best College Buys for the ninth consecutive year
- $\cdot$  One of approximately 200 Colleges of Distinction

#### **Placement:**

Starting salary offers to our graduates average nearly \$50,000. More than 90 percent of 2005-2006 graduates have found jobs in their career fields or graduate professional programs after only three months.

#### **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 \*Proposed Ph.D. program

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# Golden Nuggets

### School of Mines holds 153rd commencement

The School of Mines held its 153rd commencement May 13, and awarded degrees to nearly 300 undergraduate and graduate students. In addition, 18 alumni from the class of 1956 attended the ceremony and received certificates commemorating the 50th anniversary of their graduation.

Todd Kenner (CE83) delivered the



Commencement speaker **Mr. Todd Kenner** (CE83), president, Post, Buckley, Such, and Jernigan (PBS&J).

commencement address. Kenner currently serves as president of Post, Buckley, Shuch, and Jernigan (PBS&J), a multidisciplinary engineering, environmental science. and architectural consulting firm. He is also the national director for PBS&J's business development and marketing activities. Since joining

PBS&J in 1989, Kenner has led the development of the firm's west region, taking it from six people to more than 600. In 2005, *Engineering News-Record* ranked PBS&J as the twenty-first largest engineering firm in the United States and third (out of 500) in the nation for pure design. PBS&J currently employs nearly 4,000 professionals in 76 offices.

#### Jennifer Christensen (EE06) and Jennifer

**Pazour** (IE06) represented the graduating class.

Christensen was extensively involved with residence life during much of her time at the School of Mines. She was also involved in a



Senior class representative speaker Ms. Jennifer Christensen (EE06)



Senior class representative speaker **Ms. Jennifer Pazour** (IE06)

recitation leader for college algebra.

The School of Mines also honored **Jack Meeker** (EE47/ME48) with the Guy E. March Medal. Meeker first enrolled at the School of Mines in 1939, but took a leave of absence to join the Navy during World War II, returning after being discharged.

Upon earning two bachelor degrees from the School of Mines, Meeker taught at the

variety of other activities, including the Leadership Development Team, Tau Beta Pi, the Institute of Electrical and Electronics Engineers (IEEE), and the Society of Women Engineers. In addition, she served as a student ambassador and an orientation leader. Active on

campus while at the School of Mines, Pazour was involved in Student Association Senate, Institute of Industrial Engineers, Tau Beta Pi, Alpha Pi Mu, and Phi Eta Sigma honor societies. She also served as an M-Week tri-chair, president for Student Alumni Connection. resident assistant, peer advisor, and

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### Golden Nuggets continued



university until 1951, when he joined the Boeing Company in Seattle, Washington, where he served as principal engineer for the Boeing Aerospace Division until his retirement in 1985. Meeker's 34-year career included many notable assignments, including the Lunar Orbiter, Lunar

*Guy E. March Medal recipient Mr. Jack Meeker* (EE47/ME48)

Lander, Hydrofoil Boat, and White Sands SOFT rocket tests.

### Concert choir and master chorale tops in Ireland

The School of Mines Concert Choir and Master Chorale recently competed against more than 50 choirs from Ireland, Great Britain, and the United States during the Association of Irish Musical Societies (AIMS) Choral Festival,



Back Row: Joe Cass (CE96), Martin Drefs (ME92), Edward Corwin, Jason Whittington (IE, Rapid City), Patrick Lee (Chem, Rapid City), Garrett Schmitz (ME, Minneota, Minn.), Joshua Job (CSc/CEng, Spearfish)

**3rd Row:** James D. Feiszli, **David Herbst** (EE87), Jamin Eben (Gen, Rapid City), Joshua Green (ME, Peoria, Ill.), **Adam Stone** (CSc95)

**2nd Row: Marci Eben** (Gen03), Terri Hertz (IS, Armour), **Antonette Logar** (CSc85), Phyllis Dixon, Amanda Masteller (IS, Rapid City), Hamilton Sims

Front Row: Aly Oltmanns (GeoE, Piedmont), Kristine Murphy (ChemE/EnvE, Rapid City), Michelle Feiszli, Emily Weissenfluh (ChemE, Twin Brooks), Antoinette Brumbaugh, Kat Drefs



On behalf of the Concert Choir, **David Herbst** (EE87) and Emily Weissenfluh (CE, Twin Brooks) accept the Whitten Haslem Memorial Trophy for the choir's first-place finish in the Sacred Music Competition.

held in New Ross, County Wexford, Ireland. When they returned to the School of Mines at the end of their tour, they brought with them three first-place trophies and a second-place certificate from the four competitions they entered.

The Master Chorale received first place in the Open Competition, and the Concert Chorale received first place in the Sacred Music and Gospel Music Competitions, and second place in the Open Competition.

The School of Mines ensembles were hailed by the adjudicators for their choice of literature, solo singing, sense of style, and sensitive ensemble singing. In addition, Dr. James Feiszli, School of Mines music director, was praised for his conducting technique.

#### Program selected for Western Regional Graduate Student Exchange

After receiving approval from the South Dakota Board of Regents, the School of Mines' master's and Ph.D. degree programs in materials engineering and science join the Western Regional Graduate Program operated by the Western Interstate Commission for Higher Education (WICHE).

The Western Regional Graduate Program offers students access to master's and doctoral degree programs that are of demonstrated



The School of Mines materials engineering and science master's and doctoral degree programs program were selected for Western Regional Graduate student exchange.

quality and not widely available in the western region. The School of Mines nominated the materials engineering and science program and, after a review conducted by WICHE, the program was selected.

This allows graduate students from WICHE member states who enroll in the materials engineering and science programs at the School of Mines to qualify for the resident graduate tuition rate, rather than a higher out-of-state rate.

WICHE states participating in this program include Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

#### T-28 flies into history

This summer, the School of Mines' T-28 storm-penetrating aircraft flew into history from the Rapid City Airport. The destination for the historic aircraft was the Strategic Air and Space Museum located near Omaha, Nebraska.

The T-28 storm-penetrating aircraft was a dream come true for scientists who study storms, weather patterns, and weather modification. Its more than 30-year career is a true testament to the ingenuity and determination of scientists who wanted to better understand weather phenomena. The T- 28 is the only aircraft ever developed that has routinely and safely penetrated vigorous thunderstorm updrafts with wind speeds up to 100 miles per hour and encountered hail ranging up to golf ball size and larger. To those in aviation, this is a one-of-kind aircraft, unique in the history of aviation.

Because of its contributions to science, the T-28 was retired to a place where a national audience can view it, and be inspired by its work and the ingenuity of those who developed and operated the aircraft for the past 34 years. The Strategic Air and Space Museum was chosen because of its specialized commitment to atmospheric-related research.



The School of Mines' T-28 storm-penetrating aircraft.

# Small Science, Big Business

With South Dakota Governor Michael Rounds' recent announcement of a cooperative agreement with Zyvex Corporation of Richardson, Texas, the South Dakota School of Mines and Technology's well-established ties to nanotechnology just got stronger.

Under the new agreement, Zyvex, the world's first molecular nanotechnology company, will establish a Nanomaterial Prototyping, Testing and Characterization Facility at the School of Mines' Composites and Polymer Engineering Laboratory (CAPE).

Additionally, Zyvex opened its first satellite facility in the recently established Black Hills Business Development Center <www.blackhillsbiz.com> located on the School

of Mines campus. Zyvex-South Dakota will

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initially manufacture pilot-scale quantities of Zyvex's NanoSolve<sup>®</sup> material, and will also become a major user of the School of Mines' CAPE Laboratory, utilizing those facilities to produce and characterize new nanomaterial-based products. Work has already begun in the

Our partnership with Zyvex has already been tremendously successful, and we look forward to it becoming even more so in the future.

#### **Dr. Charles Ruch**

President, South Dakota School of Mines and Tecnology

facility for Zyvex's sporting goods customers, with a production rate of up to 800 pounds of NanoSolve<sup>®</sup> Enhanced Epoxy per month. This material is used to make carbon fiber composite structures even stronger and stiffer, and is finding significant acceptance in the high performance sporting good market.

"Zyvex's nanomaterials business has grown significantly this year," Zyvex Founder and Chairman Jim Von Ehr said. "We have been looking for a production facility to allow us to scale up to tons of NanoSolve concentrate per month. We have also been renting access to processing and characterization equipment at



other universities to supplement our own development lab. The polymer center is a superb facility and we are thrilled to establish a branch there to commercialize new nanocomposite materials."

The establishment of Zyvex-South Dakota is not the first partnership between the School of Mines and the nanotechnology company. In 2005, Zyvex designated the School of Mines as the exclusive provider of integrated circuit board (ICB) failure analysis services to the semi-conductor industry.

Under the agreement, Zyvex outsources all of its testing services to the Center for Accelerated Applications at the Nanoscale (CAAN), located at the School of Mines. The agreement involves the use of the most

> advanced integrated system developed for ICB probing and nanomanipulation, and the School of Mines is the first university to have this type of fully integrated system installed and operational. "Our

partnership with Zyvex has already been tremendously

successful, and we look forward to it becoming even more so in the future," School of Mines President Dr. Charles Ruch said. "The continuance of this outstanding partnership is thanks to the work of our many partners, including those in the Office of the Governor, the Office of Economic Development, Rapid City Economic Development Partnership, the Black Hills Business Development Center, and many more. These entities are working together to match the Black Hills Vision goal of a technology corridor."

The presence of nanotechnology on the School of Mines campus goes far beyond the



partnership with Zyvex.

Established in 2004, CAAN was created through the governor's 2010 initiative, part of which is aimed at growing the state's economy by targeting investments in specialized research at South Dakota public universities. CAAN is a multi-investigator and multi-disciplinary effort that involves faculty and research staff from numerous departments at three of the state's research institutions. The center emphasizes applied research and development on a variety of nanomaterials applications with commercial potential.

Aligning with the focus of CAAN is the School of Mines' Ph.D. program in nanoscience and nanoengineering. The program is a crossdisciplinary degree in the field of nanoscience and nanotechnology. Students benefit from faculty expertise in theory and modeling and computational physics, theory, and applications of nanocomposite materials, direct-write fabrication of electronics, and synthesis and processing of inorganic and organic nano-scaled materials. Students also work closely on research involving nanotechnology. Recent grants have provided funding for research involving semiconductor spintronics, new types of dental fillings, and flexible antennas.



Zyvex's NanoSolve® epoxy concentrate with multiwalled nanotubes.



The photograph shows a Zyvex Nanomanipulator system at work. The School of Mines purchased a system like this from the Zyvex Corporation of Richardson, Texas.

The School of Mines is also the lead institution for the North-Central Nanosystems Consortium that includes faculty at research universities in South Dakota, Nebraska, North Dakota, and Wyoming.

While the science of nanotechnology is on a tiny scale, the opportunities for the School of Mines, the region, and the state are huge.

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# Meet the Deans

The 2006-7 academic year marks a new beginning in university leadership, with two deans heading the new two-college system. Breanna Bishop, South Dakota School of Mines and Technology public information coordinator, sat down with founding deans Dr. Duane Abata, College of Engineering, and Dr. Duane Hrncir, College of Science and Letters.

Dr. Duane Abata, a past president of the



American Society for Engineering Education (ASEE), is a mechanical engineer with more than 20 years of experience in research, education, and academic administration as well as management experience at the National Science Foundation (NSF) and the Department of Energy Interdisciplinary Center for Advanced

Propulsion. Dr. Abata's research focuses on high pressure transient combustion with ethanol, methanol, and other alternate fuels.

### What made you decide the School of Mines was the place for you?

"I knew the School of Mines had an excellent reputation in the engineering community. The profile of the university is such that science and engineering are primary, and it is a small institution where one can do a lot in a short period of time. This is an excellent location located next to a national monument, which certainly has the potential of aiding national visibility to the institution, and in the Black Hills, a beautiful area with an excellent climate. Also, the importance of economic development in the area, and the link between the School of Mines and economic development, is very important to me because this is what engineering education and the profession of engineering is really about."

### How do you think your experience will be helpful in your new position?

"I've been very fortunate in my career in that I spent a substantial amount of time at an institution that had a very similar profile to the School of Mines, and then I was able to move on to the National Science Foundation. Those previous experiences, coupled with my work with the American Society for Engineering Education as president and the international exposure I was

### Dr. Duane Abata College of Engineering

able to gather through travel with the NSF and ASEE, all fits together nicely. I bring these experiences to the School of Mines, at a point when the university really is beginning to establish national prominence and international visibility."

### What are some of the challenges and opportunities facing your college?

"Certainly the new structure is a challenge; the faculty members are beginning to become accustomed to the two-college structure, and leadership is more focused. Improving the minority profile and developing much stronger links between tribal colleges and the School of Mines are very important. I also see enrollment a challenge because the demographics of the region indicate that the population we currently draw from is dropping, which means that we are going to have to develop national visibility in order to survive, as well as improve the perception of science and engineering so that more students are interested in pursuing these types of careers. These challenges come along with some tremendous opportunities to move the college of engineering, and for that matter, the university, forward."

#### What are your goals in the upcoming year?

"A number of things: to achieve a balance between faculty leadership and administrative leadership in respect to the new university structure, improve the minority profile, set the foundations for a stronger research profile for the college of engineering and the university, but most importantly, to ensure that the quality of undergraduate education continues and is enhanced over this next year."

#### Where do you see the college in five years?

"The college and the university will certainly be a leader in the state of South Dakota, in terms of bringing economic development to the area. We will have a much stronger research profile, stable enrollments in science and engineering, a very strong faculty, national visibility, an active alumni base, and a very vibrant student body excited and interested in science and engineering."



## Meet the Deans Dr. Duane Hrncir College of Science and Letters

**Dr. Duane Hrncir** brings 25 years of



experience in research and administration to the South Dakota School of Mines and Technology. Before joining the School of Mines, Dr. Hrncir served as chemistry department chair and faculty member at the University of Texas at Dallas and dean of

natural sciences and mathematics and interim vice president for academic affairs at Mesa State College in Colorado.

### What made you decide that the School of Mines was the place for you?

"I spent most of my career at a large graduate education school, where the emphasis was on Ph.D. education. Research and graduate education were a big deal there. The last six years I was at a school in Colorado where they focused on undergraduate education. The School of Mines is a perfect synthesis of those two experiences. We do a wonderful job of teaching science and engineering to undergraduates, but we also have a strong and growing presence in graduate education. So I'm looking forward to helping this institution move forward in this stage of its evolution."

### How do you think your experience will be helpful in this position?

"I came up through the ranks as a faculty member in Texas, was a department chair for a number of years, acted as dean of natural sciences and mathematics in Colorado, and served for a year as an interim vice president, so I have a lot of experience in administration. I think having had that experience I am going to be a much better dean here at the School of Mines."

### What are some of the challenges and opportunities facing your college?

"We've redesigned the interdisciplinary sciences degree, and we have to get the word out about what that degree is not, and what it has become. I think we'll have a much larger enrollment in that program in the years to come. I also want to focus on increasing research for students, both at the undergraduate and graduate levels. There is tremendous potential for this institution."

### What are your goals in the upcoming year?

"There are a number of things we need to work on internally; one is to better define what workload for faculty is and how that translates into promotion and tenure. On the student side, I want to work with our Office of Admissions to help recruit more students in science and letters.

What we need to get out is that you can come to the School of Mines and get as strong an education in the sciences as anywhere else. There are some ways that education is enhanced here that students may not find other places. One is that this is a small school, and the interaction between the students and the faculty is really good. You don't normally see that in a school where there is a focus on research and scholarly activity. That is a real strength for an undergraduate because we have fantastic equipment, we have research-active faculty, and undergraduates can be involved in research in a way they normally wouldn't at most schools."

### Where do you see the college in five years?

"One of the things that I am asking the departments to do is define where they would like to be in five years. I would hope that we have grown the graduate programs in the sciences, increased the number of grants and external funding in the sciences, and maintained and strengthened the quality of the undergraduate experience."



# 2010 Research Center Announced

Following an announcement from the South Dakota Governor's Office, the Center for Bioprocessing Research and Development (CBRD) will be created on the South Dakota School of Mines and Technology campus, in conjunction with South Dakota State University (SDSU).



The center, which will be created with \$500,000 in first-year funding from the state, joins four other highly-specialized research centers already in operation, one of which is also located at the School of Mines — the Center for Accelerated Applications at the Nanoscale (CAAN).

The center's principal investigator, Dr. Robb Winter, professor of chemical engineering at the School of Mines, is joined by 10 other leading engineering and science collaborators from the fields of agricultural engineering, biochemical engineering, biochemistry, chemical engineering, mechanical engineering, and microbiology. A primary focus of the state support will be to augment current expertise by hiring new research faculty and support staff.

The new bioprocessing research center will be headquartered on the School of Mines campus, but research activities will be jointly conducted and co-located on the School of Mines and SDSU campuses. The center will focus on research that leads to new technologies for processing plant-derived materials into biomaterials such as ethanol and key building block chemicals. It is anticipated



that these efforts will reduce the nation's dependence on petroleum and lower the production of greenhouse gases.

Because of the unique geographical location of the center, local industry by-products, such as agriwaste and debris left over from logging, will play a significant part in alternative chemical and fuel research, which has the potential for a far-reaching impact on the economy of the Black Hills, agribusiness, and the state as a whole.

Another key to the long-term success of the CBRD is the School of Mines' proposed Ph.D. in chemical and biological engineering. The center would provide cutting-edge equipment and support for research done by the doctoral students enrolled in this program.

"This research has the potential for national and international impact," Dr. Winter said. "Participating will give students invaluable experience."



The research centers are an integral part of the governor's 2010 economic development initiative. Governor Michael Rounds noted that after only 24 months in operation, the four original research centers now report a \$40 million economic impact from a state investment of \$5.4 million.

"Already in the short life of these research centers, they have made a significant impact in helping South Dakota become a recognized leader in research and technology development," Rounds said. "I am confident this new operation will have similar success."



# Hardrockers Lead the Pack The 2005-6 academic year was a good one for the Hardrockers.



For the second consecutive year, the School of Mines was named the recipient of the Dakota Athletic Conference (DAC) Scholars Award.



The award is presented annually to the school with the highest percentage of athletes honored as DAC Scholar-Athletes. In all, 43 percent of Hardrocker athletes were honored for their academic achievements.

In order to be recognized as a DAC Scholar-Athlete, a student athlete must have a cumulative grade point average of 3.25 or better and have earned 12 or more credit hours for a semester in which he or she participated in a conference sponsored sport.

But the recognitions didn't end there. Two School of Mines athletes were also singled out for their achievements.

Men's basketball guard Blake Tideman (CE,



Blake

Tideman

Winner) was the recipient of the Emil S. Liston Award. The award, presented annually by Daktronics, recognizes a male and female junior basketball player based on scholarship, character, and playing ability. Awarded since 1950, the award honors the memory of the National Association of Intercollegiate Athetics' (NAIA) first executive director Emil S. Liston.

"Blake has been a key player on our basketball

team the past three seasons," School of Mines Athletics Director Hugh Welsh said. "He works hard every day, is a joy to coach, competes with tenacity, and is an outstanding team player. During his years at the School of the Mines, Blake has been a consummate student-athlete."

In addition, Kyle Kattke (ME, Black Hawk) was



a recipient of the prestigious A.O. Duer Award from the NAIA. Presented annually since 1967 to a junior men's and women's studentathlete in any sport who has excelled in character, playing ability and scholarship, the Duer Award honors former NAIA executive director Al Duer, who was responsible for the NAIA's role

Kyle Kattke

as the first fully-integrated collegiate organization.

Kattke, who competes in the DAC in cross country and track and field, was selected by the NAIA Council of Faculty Athletics Representatives from a field of NAIA member institution nominees. Candidates must achieve a minimum grade point average of 3.75 on a 4.00 scale.



"Kyle is a joy to coach because he has a great work ethic and even more so because he is a student of the sport," Jerald Schafer, School of Mines cross country head coach, said. "From the very beginning of his time in the cross county and track and field program, he has asked questions about training and racing in an effort to do his best for the team and himself."

# Top Jobs Start at the School of Mines



According to a recent survey, some School of Mines students are well on their way to the best job in America.

The survey named software engineering as the top job, indicating what can only be a bright future for computer science and computer engineering students at the School of Mines. The survey, which had more than 26,000 participants, was published in *Money* Magazine's May 2006 issue.

To rank the jobs, the study weighed job growth and income along with less quantifiable factors such as stress levels, flexibility, and creativity. The job of software engineer found first place based on strong growth prospects, average pay, and potential for creativity.

The numbers at the School of Mines back up the magazine's findings. Recent computer science and computer engineering graduates command salaries of \$50,373 and \$53,533 respectively, and placement rates that show that they have the skills employers are looking for.

James Free (CSc/CEng06) agrees. A 2006 School of Mines graduate, Free is now employed as a software development engineer at Avaya, a communication systems, applications, and services company. While many graduates across the country are finding it harder than they anticipated to find a job, Free chose from three job offers, a typical occurrence for School of Mines graduates.

"The School of Mines places a strong emphasis on fundamentals and covers a wide variety of topics that make its engineers particularly adept and entering a new job, adapting, and contributing early on," Free said. "I had a number of opportunities to participate in projects outside of the classroom, and I was also able to arrange internships and other work opportunities through the school, not to mention finding my current employer. I've met a number of students from other schools during these activities, and I've always seen School of Mines students outperforming their peers."

The outside projects that students participate in at the School of Mines help prepare them for success in the job market, and Free has already experienced this.

The emphasis on project work and teamwork that upper level classes at the School of Mines have really relates well to professional work," Free said. "My coworkers have been very impressed by my ability to integrate into their team and their project, and my superiors have applauded my early contributions. I feel my background at the School of Mines has a lot to do with this."

The good news doesn't end there. An article in Business 2.0 Magazine listing the top 10 fastest growing jobs showed that five were in computing, including network systems and data communications analyst (1); computer software engineer, applications (3); computer software engineer, systems software (4); network and computer systems administrator (5); and database administrator (6). All of the jobs are predicted to see double-digit growth by 2014.

These positive outcomes aren't limited to just computer science and computer engineering graduates, however. Less than four months after graduation, 2005-6 graduates in environmental engineering, geological engineering, industrial engineering, and mining engineering and management have reached 100 percent placement, with civil, electrical, and mechanical engineering not far behind.

"Our students graduate with a very high level of technical skills," Darrell Sawyer, director of career planning at the School of Mines, said. "The combination of intern and coop experiences with the projects student work on as part of their education make our graduates very attractive to employers."



# **Student Team Successes**

#### 2006 Aero Design West Competition

The School of Mines team placed first in the international competition for the second consecutive year.



The traveling team members: **Brian Amick** (ME, Wessington Springs), **James Beat** (M.S. ME 06), **Casey Bergstrom** (MetE, Williston, N.D.), **Kelsa Christopher** (ME, Rapid City), **Gustavo Hernandez** (ME, Fort Worth, Texas), **Eric Musil** (ME, Huron), **Neil Pratt** (MetE, Mitchell), **Tyler Relf** (ME, Rapid City), **Steve Sigdestad** (ME, Pierpont), **Andy Tate** (IS, Hermosa), and **Chris Vickery** (ME, Luverne, Minn.).

#### American Society of Mechanical Engineers (ASME) student conference

The School of Mines design team placed second out of 15 teams at the regional competition. They were the only team to receive a perfect score on their written report and also placed first in the accuracy of casting.

The team members: **Mike Malone** (ME06), **Justin Wenner** (ME, Lemmon), **Travis Whitehead** (ME, Rapid City), and **Shawn Wock** (ME, Dickenson, N.D.).

#### Institute of Electrical and Electronics Engineers Region 5 Competition

The School of Mines robotics team placed in the top 25 percent out of 32 teams at the competition.

Also, **Justin Kasemodel** (EE06) placed second in the Student Paper Contest.

The team members: **Tony Amundson** (EE/CEng, Hutchinson, Minn.), **Chris Baird** (EE, Custer) **Josh Bates** (EE, Sioux Falls), **John Brosnahan** (EE, Lead), **Matt Cross**, (EE, Lingle, Wyo.), **Simon Haumont** (ME/CEng06), **Jonathan Huft** (EE, Pierre) **Evan Hyatt** (EE, Longmont, Colo.), **Justin Kasemodel**, **Nick Kingsbury** (EE, Rapid City), **Ryan Kroetch** (EE, Rapid City), **Steve Larsen** (CSc, Pierre), **Jacob Oursland** (Math/CSc, Rapid City), **Chris Rauch** (ME, Rice, Minn.), **Cyrus Robinson** (EE, Rapid City), and **Bryce TeBeest** (EE, Casper, Wyo.).

## Association for Computing Machinery (ACM) World Finals

The School of Mines ACM team competed against 75 other teams in the World Finals, where they earned an Honorable Mention. Also finishing in the Honorable Mention category were institutions such as Duke University, Georgia Institute of Technology, Rice University, University of Nebraska – Lincoln, and Virginia Tech.

The team members: **James Free** (CSc/CEng06), **Dan Rausch** (CSc/Math06), and **Brandon Skari** (CSc/Math, Wheatland, Wyo.).

#### 2006 Mini Baja West Competition

The School of Mines Mini Baja team finished in seventh place at the competition. In addition to the overall placing, the team was also awarded an honorable mention for the Sportsmanship Award for helping another team rebuild their frame after it failed to meet technical inspection.



### Student Team Successes continued

The team members: **Briana Bichler** (MetE, Wausau, Wis.), **David Dowling** (ME, Draper), **Cody Egle** (ME, Palisade, Neb.), **Jason Fields** (ME, Milbank), **Shane Grimme** (ME, Tyndall), **Craig Grunenfelder** (ME, Billings, Mont.), **Stephanie Jackson** (ME, Rapid City), **James Knutson** (ME06), **Amery Kuhl** (ME/Phys, Worthington, Minn.), **Kristopher Lepine** (ME, Rapid City), **Brandon Lingle** (ME, Rapid City), **Cody Petersen** (ME, Hermosa), **Austin Powell** (ME06), **Joseph Treinen** (ME06), **Trevor Urban** (ME06), **Michael VanDerWerff** (ME, Platte), and **Jason Williams** (ME, Piedmont).

#### Formula SAE West Competition



The School of Mines team finished 24th overall against 71 teams at the international competition.

The team members: **Wayne Baker** (ME06), **Joseph Dexter** (ME06), **Aaron Guliuzza** (ME, Rapid City), **Clay Hammock** (ME, Sturgis), **Chris Hanson** (ME06), **Dan Harmon** (ME, Sturgis), **Chad Kirby** (ME, Rapid City), **Shawn Kirkpatrick** (ME, Sioux Falls), **James Lunders** (ME, Rapid City) **Clay Pojorlie** (ME/CEng, Grassy Butte, Neb.), **Mark Sattgast** (ME, Huron) **Wes Snaza** (ME, Webster), **Jason Wendling** (ME, Bryant), and **Nathan Zastrow** (ME, Big Timber, Mont.).

## 2006 National Concrete Canoe Competition

The School of Mines team placed 21st in design, 13th in oral presentation, 12th in final product and tied with four other schools for 19th place overall. The team earned the bid to the national competition after placing first at the Rocky Mountain Regional Conference, held



at the School of Mines in April. The team has represented the the Rocky Mountain Region at the national conference for 13 of the past 16 years.

The team members: Julie Abrams (CE, Rapid City), Jennifer Davis (CE, Math, Rapid City), Brent Hardy (CE06), Wade Lein (CE, Batesland), Adam Riley (CE, Pierre), Matt Samuelson (CE, Columbus, Neb.), Teresa Serie (CE, Mitchell), Tyler Smeenk (CE, Newell), Vanessa Sevier (CE, Pierre).

## 2006 International Aerial Robotics Competition



The School of Mines UAV team finished first at the international competition in just its third year of competition. According to the sponsor, the Association for Unmanned Vehicle Systems International, this year's competition was the most difficult and challenging mission in the history of the International Aerial Robotics Competition.

The team members: **Tony Adams** (CEng, Grand Forks, N.D.), **Josh Job** (CEng/CSc, Spearfish), **DJ Kjar** (IE, Custer), **Karthik Kiran** (M.S. ME, Rapid City), **Simon Haumont** (CEng/ME06), **Jason Howe** (M.S. EE, Spring, Texas), **Jake Oursland** (CSc/Math, Rapid City), **Brian Stone** (CSc, Rapid City), and **Mark Sauder** (M.S. ME, Rapid City).

# Student Spotlight

#### Student receives national scholarship

Josh Koehnen (IE, West Fargo, N.D.) has



been awarded the Carter J. Kerk **Distinguished Service Award** Scholarship from the American Society of Safety Engineers (ASSE) Foundation.

The ASSE Foundation created the award for Dr. Carter Kerk, an

associate industrial engineering professor at the School of Mines, after he was recognized by the ASSE with the Distinguished Service Award.

#### **Five Students inducted into Leadership** Hall of Fame

Briana Bichler (MetE, Wausau, Wis.), Jennifer Christensen (EE06), Bernard Frankl (CE06), Mitchell Nachtigall (IE06), and Justin Wenner (ME, Lemmon) were inducted into the university Leadership Hall of Fame. The School of Mines Leadership Development Team created the Hall of Fame to raise awareness about the importance of student leadership and to recognize the valuable contributions student leaders make. The Hall of Fame recognizes students based on their contributions to the campus community.



Leadership Hall of Fame inductees Mitchell Nachtigall (IE06), Bernard Frankl (CE06), Briana Bichler, Justin Wenner, and Jennifer Christensen (EE06).

#### Ph.D. student awarded fellowship

Lori Groven (Ph.D. Nano, Sturgis) is the recipient of a National Science Foundation (NSF) Graduate Research Fellowship for her proposal, "Combustion Synthesis of Carbon Nanotube Reinforced Nanostructured Materials."

The fellowship, which is awarded to only approximately 1,000 students in the United States, provides for three years of support with a \$30,000 per year stipend and \$10,500 in tuition assistance.

#### School of Mines students lead Tau Beta Pi

The School of Mines leads the nation with 10 students named Tau Beta Pi Scholars for the 2006-7 academic year. The chapter with the next largest number has just five scholarship recipients. Each student receives a \$2,000 scholarship.

The students: Cassandra Degen (MetE, Rapid City), Nicole Gaffney (IE, Berthoud, Colo.), Adam Grajkowske (CSc/Math, Parkston). Justin Hill (EE. Banner, Wvo.). Wade Johnson (EE, Buffalo), Kyle Kattke (ME, Black Hawk), Matt Lyndoe (ME, Custer), Blake Tideman (CE, Winner), Travis Walker (CE, Winner), and Travis Zelfer, ME/MetE, Black Hawk).

#### Purple Heart awarded to School of **Mines student**

Freeman Park (IE, Marion) has been



awarded a Purple Heart for his service in Iraq. Park received the honor for injuries sustained in a roadside bombing December 4, 2005.

The Purple Heart is awarded to members of the United States

armed forces who are wounded by an instrument of war in the hands of the enemy and posthumously to the next of kin in the name of those who are killed in action or die of wounds received in action. It is specifically a combat decoration.



Student Spotlight

# Campus Briefings

#### School of Mines professor named Meritorious Music Educator

The South Dakota Music Educators Association (SDMEA) awarded the Meritorious Music Educator award to **Dr. James Feiszli**, School of Mines director



of music and professor, for his 30 years of service to music education. With the School of Mines since 1983, Dr. Feiszli created and established the music curriculum

for the institution — founding the concert choir, master chorale, symphonic band, and courses in music theory, history, and vocal instruction.

#### **Professor receives fellowship**

**Dr. Andrea Surovek**, assistant professor, civil and environmental engineering, has been awarded the 2006 Gerald R. Seeley Fellowship by the American Society for Engineering Education (ASEE).

The Seeley Fellowship is awarded annually to a civil engineering faculty member with five or fewer years teaching experience and is based on the awards committee's assessment of papers submitted for presentation at the 2006 ASEE Annual Conference. Dr. Surovek's paper, titled "Beyond the Classroom: Using a Lecture Series Format to Give Engineering Students a Societal and Global Context," was co-authored with industrial engineering assistant professor Dr. Jennifer Karlin.

### Fulbright Scholarship awarded to School of Mines professor

**Dr. Thomas Fontaine**, associate professor, civil and environmental engineering, has been awarded a Fulbright Scholarship.

Dr. Fontaine received one of only two Fulbright Scholarships awarded to Uganda. He will spend two semesters at Makerere University in Kampala, Uganda, where he will be teaching several civil engineering courses and also conducting research.

Another focus during Dr. Fontaine's time in Uganda will be building a humanitarian engineering program for students at the School of Mines. In the past, Dr. Fontaine has taken students working on their senior design projects to developing countries including Mozambique and Guatemala, but his focus is now on building and growing a program where teams of students from the School of Mines can travel to Uganda and collaborate with Ugandan engineering students to design humanitarian projects such as schools and medical facilities.

#### Incubator open for business

This July, the Black Hills Business Development Center hosted its grand opening. The facility, also



Governor Michael Rounds speaks at

the grand opening of the Black Hills

known as the Business Incubator, is located on the School of Mines campus.

State and local government and business supporters, including Governor Michael Rounds, Senator Tim Johnson (D-SD), School of Mines President Dr. Charles Ruch.

Business Development Center. And Rapid City Mayor Jim Shaw, gave an overview of the facility and the benefits it will have for the

community. The Business Development Center is a 40,000square-foot facility, of which 10,000 square feet are home to several government and private agencies. The rest of the facility is open space that can be modified to meet the needs of entrepreneurs, who will have access to the business development groups located in the facility. After spending a limited number of years in the incubator, developed businesses should have a viable product or service, a strong business plan, and be ready to enter the marketplace.

### Professor awarded national mentoring honor

**Dr. Carter Kerk**, associate professor, industrial engineering, has been recognized by the Tau Beta Pi Association with the 2006 McDonald Mentoring Award.

The award celebrates excellence in mentoring and advising among Tau Beta Pi educators and engineers who consistently support the personal and professional development of students and colleagues. It recognizes achievements that exemplify the diverse contributions that engineers make to society, unselfish activity and care and concern for others.

Tau Beta Pi is the only engineering honor society representing the entire engineering profession.

#### **Researchers awarded patent**

Two researchers at the School of Mines have been awarded a patent for their work with metals.

**Dr. Kenneth Han**, distinguished and Fuerstenau Professor, materials and metallurgical engineering, and dean of graduate education, and **Dr. Peter Nam- Soo Kim** (Ph.D. MES04), research scientist I, Center for Accelerated Applications at the Nanoscale, have officially been awarded Patent No. 7,067,090 by the U.S. Patent and Trademark Office.

Their invention relates to the recovery of platinum group metals from various sources.



**Campus Briefing** 

## Research Notes

Mr. William Arbegast, director, advanced materials processing and joining laboratory (AMP), and instructor, materials and metallurgical engineering; and Dr. Anil Patnaik, assistant professor, civil and environmental engineering, received \$156.000 in additional funding from the National Science Foundation (NSF) for the project, "Friction Stir Processing Industry/University Cooperative Research Center." They also received \$135,000 in additional funding 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."

Mr. Arbegast also received \$69,855 in additional funding from the Friction Stir Processing Industry/University Cooperative Research Center and National Science Foundation for the project, "Intelligent Process Control System Algorithms for Aluminum and Steel Friction Stir Welding.'

Dr. Teresa Corbin (Chem80), research scientist II, graduate education, received \$180,000 from Dugway Proving Grounds for the project, "IPE Assessment for Real Time Swatch Detection System."

Mickelson Professor Dr. Arden Davis (M.S. GeolE79), geology and geological engineering, and Dr. David Dixon, professor and chair, chemical and biological engineering, received \$12,918 from South Dakota State University for the project, "Fixed-Bed Adsorption Column Studies and Engineering Scale-Up Design of a Limestone-Based Metals Removal Technology for Small Water Supply Systems."

Dr. Andrew Detwiler, professor, Institute of Atmospheric Sciences, received \$2,412 in additional funding from the National Science Foundation for the project, "Intergovernmental Personnel Act Associate Program Manager Assignment to National Science Foundation."

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



**Engineering and Mining Experiment** Station, received \$289,000 in additional funding from the **Experimental Program to Stimulate** Competitive Research (EPSCoR) and National Aeronautics and Space Administration (NASA) for the project, "The Use of Remote Sensing for Monitoring, Prediction and

Management of Hydrologic, Agricultural and Ecological Processes in the Northern Great Plains."



Dr. John Helsdon, professor, Institute of Atmospheric Sciences, and Ms. Donna Kliche (M.S. Mtro90). research scientist II/computer programmer, Institute of Atmospheric Sciences, received \$19,996 from the National Science Foundation for the

project, "Storm Penetrating Aircraft Workshop; Rapid City, South Dakota; Fall of 2006."

Dr. Mark Hjelmfelt (M.S. Mtro75), chair, atmospheric sciences, and professor, Institute of Atmospheric Sciences, received \$ 125,119 in additional funding from the National Science Foundation for the project, "Collaborative Research: Effects of Non-Uniform Surface Conditions on Lake-Effect Systems."



Dr. Jon Kellar (MetE84), chair and professor, materials and metallurgical engineering; Dr. Lidvin Kjerengtroen, professor, mechanical engineering; and Dr. William Cross (MetE84), instructor and research scientist III, materials and metallurgical engineering, received \$22,500 from the Automotive

Composites Consortium for the project, "Proposal to the Automotive Composites Consortium.'

Dr. Kellar and Steven P. Miller Chair Dr. Keith Whites (EE86), professor, electrical and computer engineering, received \$629,562 from South Dakota State University for the project, "The 2010 Initiative: Science-Based Leadership for South Dakota."

**Dr. Alvis Lisenbee**, former professor, geology and geological engineering, received \$3,007.39 in additional funding from West Dakota Water Development District for the project, "Preliminary Aquifer Vulnerability and Susceptibility Study of the Black Hawk Quadrangle, South Dakota.

Dr. Lisenbee; Mickelson Professor Dr. Arden Davis, geology and geological engineering; and Dr. Larry Stetler (GeolE79), associate professor, geology and geological engineering, received \$13,538 from West Dakota Water Development District for the project, "Aquifer Mapping (1:24,000) of the Hermosa North West Quadrangle, South Dakota."

Drs. Lisenbee and Stetler also received \$20,212 from West Dakota Water Development District for the project, "Preparation of a 1:24,000 Scale Geologic Map of the Hermosa North West Quadrangle."



**Dr. Patricia Mahon**, vice president, student affairs, and dean of students, received \$142,000 in additional funding from the United States Department of Education for the project, "Campuses Community Prevention Coalition.'

Dr. James Martin (Geol71), professor, geology and geological

engineering, and paleontology program coordinator/curator of vertebrate paleontology, received \$1,000 from the United States Department of Interior - Bureau of Land Management for the project, "Fossil Lake Field School," and \$13,580 from the United States Department of Interior-National Park Service—Badlands National Park for the project,

### Research Notes continued

"Curatorial Backlog of Museum Specimens, Badlands National Park."

**Ms. Jolie McCoy**, director of counseling/student ADA services, received \$24,000 from South Dakota Department of Health for the project, "State University Tobacco Prevention Pilot."

**Dr. Colin Paterson**, director, Black Hills Natural Sciences Field Station, and professor, geology and geological engineering, received \$12,630 from Black Hills State University for the project, "Biology and Earth Science for Teachers (BEST)."

**Dr. Andre Petukhov**, professor, physics, **Dr. Mikhail Foygel**, professor, physics, and **Dr. Vladimir Sobolev**, associate professor, physics, received \$557,247 from the United States Department of Defense – Office of Naval Research, Defense Experimental Program to Stimulate Competitive Research (DEPSCOR), for the project, "Modeling and Experimental Studies of Spin Transport for Multifunctional Semiconductor Devices." Dr. Petukhov also received \$30,000 from NASA for the project, "Theory of Quantum Computing on Long-lived Donor State."

**Dr. Gautam Pillay**, vice president, research and professor, chemical and biological engineering; and **Dr. Mark Hjelmfelt**, chair, atmospheric sciences, and professor, Institute of Atmospheric Sciences, received \$124,936 in additional funding from the United States Department of Defense – Armament Research, Development and Engineering Center (ARDEC) for the project, "Atmospheric Sciences Technology and Applications to Support NAMK and NAGIK Projects."

**Dr. Pillay** and **Dr. Umesh Korde**, associate professor, mechanical engineering, received \$148,971 in additional funding from the United States Department of Defense – Air Force Research Laboratory for the project, "Ultra-Lightweight Space Structures, Advanced Multi-functional Space Structures, and Nano-Reinforced Structures Development, Fabrication and Evaluation."

**Dr. Pillay** and **Dr. James Sears**, director, Additive Manufacturing Laboratory, received \$200,000 in additional funding from the United States Department of Defense – Armament Research, Development, and Engineering Center (ARDEC) for the project, "Direct Write Explosive Technologies for MEMS and MEI Applications."

**Dr. Pillay** and **Dr. Robb Winter**, professor, chemical and biological engineering, received \$148,972 in additional funding from the Department of Defense – Air Force Research Laboratory for the project, "Ultra-Lightweight Space Structures, Advanced Multi-functional Space Structures, and Nano-Reinforced Structures Development, Fabrication and Evaluation."

**Dr. Pillay, Dr. Winter** and **Dr. Dan Dolan**, professor, mechanical engineering, received \$217,312 in additional funding from the United States Department of Defense – Armament Research, Development, and Engineering Center for the project, "Lightweight Applications to Unmanned Aerial Vehicles."

Dr. Jan Puszynski, professor, chemical and



biological engineering, and Dr. Jacek Swiatkiewicz, instructor and research scientist II, chemical and biological engineering, received \$570,585 from the United States Department of Defense – Army Research Development and Engineering Center for the project, "The Formation and Processing of Nanopowders for

Energetic/Structural Applications."

**Dr. William Roggenthen** (GeolE69), professor, geology and geological engineering, received \$8,672 in additional funding from Black Hills State University for the project, "A Black Hills Science Teaching Project to Prepare K-8 Teachers for the New Millennium."

**Dr. James Sears**, director, Additive Manufacturing Laboratory, received \$25,000 from the South Dakota Spinal Cord/Traumatic Brain Injury Research Council for the project, "Direct Write Technology Applications for Nerve Cell Research."

**Dr. James Stone**, assistant professor, civil and environmental engineering, and **Dr. Larry Stetler**, associate professor, geology and geological engineering, received \$25,000 in additional funding from United States Department of Agriculture-Forest Service for the project, "Ground Water Quality Assessment in the North Cave Hills Area of North West South Dakota."

**Dr. Stone** also received \$201,976 from the National Science Foundation for the project, "Degradation of Antimicrobial Agents Tylosin and Chlorotetracycline During Swine Waste Treatment," and \$21,242 from the South Dakota Board of Regents for the project, "Governor's 2010 Individual Research Seed Grant Award."

**Dr. Patrick Zimmerman**, director and professor, Institute of Atmospheric Sciences, and **Dr. Karen Updegraff**, research scientist I, Institute of Atmospheric Sciences, received \$109,816 from the United State Department of Energy (subaward from Montana State University) for the project, "Big Sky Regional Carbon Sequestration Partnership – Phase II."

**Dr. Zimmerman** also received \$170,375 from the National Science Foundation for the project, "He Sapa Oyate: Geoscience Community at the Heart of Everything That Is (OEDG Track 2)."



## <u>Feat</u>ured Major

Nanoscience and Nanoengineering Ph.D.

- Research grant funding available for students
- School of Mines researchers generate nearly \$14 million in research awards annually
- World-class recreation opportunities in the Rapid City and Black Hills area

The doctor of philosophy program in nanoscience and nanoengineering is a cross-disciplinary degree in the emerging interdisciplinary fields of nanoscience and nanotechnology. The Ph.D. curriculum integrates fundamental science principles with the fields of nanoscience, nanoengineering, and nanotechnology. The Ph.D. program is oriented toward focused applications of nanoscience, including nanoscale utilization of regional minerals.

For more information, contact: Dr. Steve Smith Associate Professor of Nanoscience Nanoscience and Nanoengineering Ph.D. Program Director (605) 394-5268 Steve.Smith@sdsmt.edu

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

### **Co-ops and Internships**

• Nearly 80 percent of School of Mines graduates have relevant work experience through co-ops and internships. That increases their marketability to employers.

### Average Starting Salaries

 2005-6 graduates averaged starting salary offers of nearly \$50,000! That shows employers are looking for students with the kinds of skills School of Mines graduates have.





#### Chapel Hill and Charlotte, North Carolina

**Dr. Larry Simonson** (EE69) hit the road early this year and headed for the southeast to visit alumni while he also attended meetings and conferences on behalf of the School of Mines. Alumni provided a warm welcome in North Carolina February 10-11, 2006, for Dr. Simonson, and enjoyed seeing other alumni in the area. We appreciate Larry's willingness to travel and help gather Miners across the country and beyond.



Chapel Hill, N.C. — Front: Avery Schick (ME95) and Kay and Roger Warfield (ME71). Back: Fritz Brunssen (CE69) and Susan Brunssen, and Mike Harris (CSc83).



Charlotte, N.C. — Front: **Myron Visser** (EE64), Jennifer (niece) and **George McCaskey** (MetE56), and **Justin Schott** (ME03). Back: **Janet Visser**, Helen and **Jim Gassen** (ME50), **Rod Schmuland** (Phys75), and **Jade Kizer** (EE99)

#### Orlando, Florida

**Dr. Larry Simonson** (EE69) continued his southeast travels to Orlando, Florida and met with alumni on February 17, 2006, at Barney's Steak and Seafood Restaurant. As always, Larry's homemade South Dakota jellies sweetened the event. Special thanks go to Kathy and **Steve Miller** (EE69) for arranging the location and helping greet area alumni.



Front: Bev Krier, Shirley Solid, and **Jocelyn Haisch-Linn** (Phys95). Back: **Scott Vangen** (EE82), **Mitch Ahrendt** (EE82), **Monte Krier** (ChemE72), **Lee Solid** (ME59), Kathy (not pictured) and **Steve Miller** (EE69), and **Jim Boyd** (ME70) and JoAnne Boyd.

#### Pittsburgh, Pennsylvania

Area Vice President **Susan "Booty" Banks** (GeolE75) organized another memorable luncheon for the Pittsburgh, Pennsylvania area alumni during the St Patrick's Day weekend in March. The group gathered at Louis Tambellini's just south of the Liberty Tunnels. Alumni Director **Tim Vottero** (Chem84) updated the group on campus happenings, and also thanked **Susan, Dennis Poage** (EE67), and **Steve Uttecht** (EE92) for their ongoing efforts to recruit students from Pennsylvania.

During the same trip, School of Mines President Dr. Charles Ruch and others met with Pittsburgh area high school students and parents. Later last spring, Susan attended a banquet at the prestigious Kiski School in Saltsburg, Pennsylvania to present a



The Saint Patty's Lunch Bunch in Pittsburgh

Presidential Scholarship to **Brandon L. Marini** (Geol, Pittsburgh, Penn.), who plans to pursue a degree in Geology at the School of Mines. Brandon graduated first in his class.

Brandon's three brothers, his parents, and grandparents all attended. Susan was the only college representative to present a scholarship in person, and she answered several questions regarding the School of Mines throughout the evening. Other alumni interested in helping recruit students in your area should contact the Alumni Office via e-mail at <alumni@sdsmt.edu> or toll free at (800) 394-2394.



Susan Banks (GeolE75) and scholarship recipient Brandon Marini (Geol, Pittsburgh, Penn.)

#### Knoxville, Tennessee, Huntsville, Alabama, and Atlanta, Georgia

Alumni President **Dr. Everett Bloom** (MetE63) and Alumni Director **Tim Vottero** (Chem84) embarked



The barbeque crew at Calhoun's at Fort Loudon Marina

on a 1,000-plus mile Southern Springtime Sojourn in March 2006 to visit alumni and help establish new alumni chapters in the Southland. Several casual events included news from the School of Mines and learning about area alumni, spouses, and guests, along with true southern hospitality. Of course, no trip to Tennessee would be complete without a quick tour of the Jack Daniels Distillery in Lynchburg along the way to Huntsville (samples not included).



Can you spot Everett and Tim in the Rickyard tour?



A hardy Huntsville group of alumni and friends



Everett and the Jeitzs pose with Atlanta alumni

Special thanks go to Carol and **Everett Bloom** (MetE63) for their tremendous hospitality and accommodations at their home in Tennessee. Special thanks also go to **Tex Longcor** (EE64) for arranging the venue in Huntsville, and to Jean and **Ron Jeitz** (CE69) for opening their lovely home in Reynolds Plantation southeast of Atlanta for a Sunday brunch. Many alumni in these areas look forward to future events on a regular basis.

#### St. Louis, Missouri

This year's Society for Mining, Metallurgy, and Exploration (SME) 2006 Alumni Reception at the Renaissance Grand Hotel, downtown St. Louis, in late March attracted a strong showing of mining and metallurgical industry goers, along with many



School of Mines students attending SME



Foundation VP Brad Johnson (EE92) with Everett



Kurt O'Bryan (MetE82) and Jody Kelso (MetE80) at SME

School of Mines alumni representing their various companies and colleges. Several campus faculty, staff, and students also attended, joining Alumni President **Dr. Everett Bloom** (MetE63) in greeting SME Annual Meeting attendees. The 2007 SME event is set for Tuesday, February 27, and should prove one of the largest gatherings of alumni given its Denver location.

#### Quad Cities, Illinois and Peoria, Illinois

School of Mines President Charles Ruch and Foundation Vice President **Brad Johnson** (EE92) joined alumni and friends and shared the university's plans for the future with the "Building the Dream" presentation. Biaggi's Ristorante Italiano



Dr. Ruch with Betty and Bob Heirigs (CE56)

in Davenport, Iowa and Lariat Steak House in Peoria, Illinois provided the backdrops for these fun and informational gatherings last spring. Many alumni in the area are closely connected to School of Mines through John Deere, Caterpillar, and a variety of other successful companies. Hosting an alumni event in your area can also include functions at your place of business, and serve as a great way to include area high school students to demonstrate the quality of employers that hire our graduates. Thanks go to all in attendance and to Dr. Ruch and Brad for representing the college.



*Scott Lyons* (*ME98*) and Andrea with Andrea and *Corey Enderle* (*ME98*) not pictured

#### **Columbus**, Ohio

Columbus, Ohio area alumni welcomed **Dr. Larry Simonson** (EE69) professor of electrical and computer engineering, to an alumni event on Saturday, April 8, 2006, at El Vaqueros in Dublin, Ohio. Dr. Simonson's news from campus was once again a welcome visit to area alumni and friends. We appreciate his extra efforts in arranging area meetings in addition to his travels on behalf of the campus and the department.



Doris and Conrad Fuchs (ME59), Dale Corrington (GenE41), Betty and Fred Ehrman (ME58)



Anthony Nikodym (MetE94), Todd Morrison (ME00), Kelly Runser, Cari Schimpff, JT Thuringer (ME01), Jason Fink (ME01), Troy Porter (EE05)

#### Sioux Falls, South Dakota

Alumni and friends in the Sioux Falls area were treated to a special evening during their spring banquet in April listening to the music of Master Chorale, the School of Mines' top performing ensemble, under the direction of Dr. James D. Feiszli. School of Mines President Dr. Charles Ruch and Alumni President **Dr. Everett Bloom** (MetE63) were also in attendance to share news from campus and the Alumni Association. Special thanks go to **Dean Herll** (CE92) for organizing the evening and for everyone who helped accommodate the students on this spring concert trip, and of course to the talented students and Dr. Feiszli for performing on the road at our event.



Alumni past, present, and future pose in Sioux Falls

#### Omaha, Nebraska

The Ironwood Golf and Country Club was the site for Omaha alumni and friends to gather for a Spring Banquet and Master Chorale performance on April 9, 2006. Special guests included School of Mines

More than 62 million people across the nation watched the televised 2006 Mount Rushmore Independence Day fireworks display.

Photo courtesy of South Dakota Tourism



Students enjoying a laugh with Tim Vottero (Chem84)

President Charles Ruch and Alumni President **Dr. Everett Bloom** (MetE63). This special event spotlighted the music of Master Chorale under the direction of Dr. James D. Feiszli. It was a wonderful evening with a chance for the students to mingle and network with area alumni. Everyone appreciated the generous hospitality of alumni **Eve** (Math91) and **Gary Norton** (CE92), and Linda and **Larry Pearson** (ME72) in accommodating the students and visitors. Most of all, we appreciate the students and Dr. Feiszli for taking time from their busy college careers to perform for alumni.



The Master Chorale with Dr. Feiszli at Ironwood

#### **Rapid City, South Dakota**

The annual spring concert at the Rushmore Plaza Civic Center — Echoes of Spring — featured the Concert Choir joined by members of the Alumni and Friends Choir, and the Symphonic Band on April 22, 2006. Always a popular event, the concert was followed by a wonderful crowd at the "After Hours" gathering, a post-concert gathering of friends, music, and fun. Many alumni participated

#### at both events, (Go to

<http://sdmines.sdsmt.edu/music> for complete lists) and enjoyed performing with the students and faculty. The music groups at the School of Mines perform for numerous events in support of campus and alumni events each year, and we greatly appreciate these talented students, faculty, alumni, and friends.



Alumni President **Everett Bloom** (MetE63), **Jim Green** (ME74), and Past Alumni President and choir performer **Tom Zeller** (ME72) enjoying the After Hours

The following weekend greeted dozens of alumni for the Alumni Sports Weekend, April 27-29, 2006. This annual event is open to all and is filled with numerous events to see former classmates and campus. From the welcome reception in the Christensen Hall of Fame to the Golf Tournament at the Red Rock course, from "pickup" basketball and volleyball games to the annual Alumni/Varsity Football Game on Dunham Field at O'Harra Stadium, the weekend is full of activities.

This year the alumni broke the varsity winning streak with a record scoring mark. **Nick Wald** (MetE03) passed for 333 yards and four touchdowns and **Ryan Cadwallader** (CE96) caught 11 passes for 158 yards and one touchdown to lead the SDSM&T Alumni to a 33-13 win over the varsity. The win snapped a six game losing streak in the series for the alumni and leaves the varsity with 13 wins in the series to the alumni's 11. **Derek Colling** (IS04) was the MVP on defense for the alumni with seven tackles and a fumble recovery, while Wald and Cadwallader shared offensive MVP honors.



Mike Mueller (ME85), Al Baue (MinE82), Carl Clements, and Rick Wass (IS96)



Harry Orville and **Duff Erickson** (MinE55)



Brian Butterfield (CEng98) and Troy Thorson (Math98)

#### Class of 1956 Reunion and Spring Commencement

Alumni who graduated fifty years ago returned for their 50-Year Reunion, and received recognition during the spring commencement ceremony. From the 96 surviving members of the Class of 1956, 19 members from across the U.S. and from Norway gathered to reminisce and see the many advances made in the past fifty years at the School of Mines. Eighteen of the 19 attending alumni also participated at graduation, in addition to other activities on and off campus.

The 1956 alumni in attendance included **Myron Andersen** (GenE) Centennial, Colorado; **Roland Baker** (ME) Ridgecrest, CA; **Jim Bell** (CE) Albuquerque, NM; **Jay Brink** (EE) Rapid City, SD;



Elinor and **Jack Meeker** (EE47/ME48) greeted by 2000 March Medalist **Duff Erickson** (MinE55)

Erich Brueschke (EE) Hinsdale, Illinois; Marv Christmann (Phys) Afton, Minnesota; George Dunham (ME) Rapid City; Wayne Echelberger (CE) Tampa, Florida; Max Gassman (ME) Ames, Iowa; Chuck Gukeisen (GenE) Yankton, Dick Haigh (EE) Buchanan, Michigan; Bob Heirigs (CE) Muscatine, Iowa; John Linn (ME) Elm Springs; George McCaskey (MetE) Columbia, South Carolina; Peder Mikalsen (CE) Sore Neset, Norway; John Mohr (EE) St. Louis, Missouri; Dean Oliva (GenE) Granada Hills, California; David Padgett (CE) Custer, and Robert Walker (EE) Madison.

The same weekend was the School of Mines' 153rd Commencement. Nearly 300 undergraduate and graduate students received recognition in the King Center Goodell Gym, along with the Class of 1956. Jennifer Christensen (EE06), of Bloomington, Minnesota, and **Jennifer Pazour** (IE06), of Pukwana, delivered the senior class message. Todd J. Kenner (CE83) delivered a heartfelt and meaningful commencement address. Mr. Kenner currently serves as president of Post, Buckley, Shuch, and Jernigan, a multidisciplinary engineering, environmental science, and architectural consulting firm. **Jack A. Meeker** (EE47/ME48) received the Guy E. March Medal at commencement. Jack hails from Rapid City, and first enrolled at the School of Mines in 1939. He left the School of Mines to enlist in the

Navy during World War II, and returned to earn two bachelor's degrees from the School of Mines. Mr. Meeker taught at the School of Mines until 1951, when he joined the Boeing Company in Seattle, Wash., and served as principal engineer for the Boeing Aerospace Division until his retirement in 1985. Mr. Meeker also holds the distinction of serving as School of Mines Alumni Association President for two consecutive terms in 1992-3 and 1993-4, which is a term of service matched by only 13 other alumni presidents, including Mr. Meeker's father, **Eugene Meeker** (CE27).



2005 March Medalist **Harold Fritzsche** (ME51) poses with **Jack Meeker** (EE47/ME48) beside March Medal plaque



Dean Oliva (CE56) and Marlene Oliva with Betty and Jay Brink (EE56)



Class of 1956 tour at the Arch

## Cincinnati, Ohio, Louisville, Kentucky, and Green Bay, Wisconsin

**Dr. Jim Munro** (Chem72) traveled last spring on behalf of the School of Mines Foundation and hosted alumni area meetings in Cincinnati, Ohio, Louisville, Kentucky, and Green Bay, Wisconsin in mid-May 2006. Alumni and friends in each location joined in the fun and forum visiting about our alma mater and news from South Dakota. Thanks to all who attended and to Dr. Munro for providing a gathering point for alumni in his travels.



Cincinnati Dinner Attendees (alpha): Dale Corrington (GenE41), Kathi and Mike Godber (GeolE85), Jim Munro (Chem72), Ken Patrick (ChemE73), Scott Patrick (ChemE94), Debra Ruehlman, John Stieha (ChemE80), Shannan Tanner (ChemE82)



Louisville Dinner Attendees (alpha): **Ted Iverson** (ME73), **Stephanie Jetson- Amado** (IE01), Nan and **Dave Malthouse** (GenE59), **Jim Munro**, and **Mary Pederson** 



Green Bay Dinner Attendees (alpha): Mark Anderson (MetE80), Jane Barnes (ChemE79), Pam and Kerry Belden (ME73), Jim Munro (not pictured), Sherry and Keith Mutchler (ME71), Jaelene and Dave Wentland (CE73), and Gene Wingert (ChemE44)

#### New Ross, Ireland

The School of Mines Concert Choir and Master Chorale competed against more than 50 choirs from Ireland, Wales, Scotland, and England during the Association of Irish Musical Societies Choral Festival Competition, held in New Ross, County Wexford, Ireland on May 20, 2006. The School of Mines ensembles had four entries in three of the most popular and difficult categories: Open Competition, Sacred Music, and Gospel Music.

The results were as follows:

**Open Competition** – Waterford International **Festival of Light Opera Shield Master Chorale** – first place **Concert Choir** – second place **Sacred Music** – Whitten Haslem Memorial Trophy **Concert Choir** – first place **Gospel Music** – Tipperary Crystal Trophy **Concert Choir** – first place



Joshua Green (ME, Peoria, 111.) and Kristine Murphy (EnvE/ChemE, Rapid City) accept the Waterford International Shield on behalf of the Master Chorale

The following students were in the choral ensembles in Ireland: Jamin Eben (Gen, Rapid City), Joshua Green (ME, Peoria, Ill.), Terri Hertz (IS, Armour), Joshua Job (CSc/CEng, Spearfish), Patrick Lee (Chem, Rapid City), Amanda Masteller (IS, Rapid City), Kristine Murphy (ChemE/EnvE, Rapid City), Aly Oltmans (GeolE, Piedmont), Garrett Schmitz (ME, Minneota, Minn.), Emily Weissenfluh (ChemE, Twin Brooks), and Jason Whittington (IE, Rapid City). They were joined by alumni Joe Cass (CE96), Martin Drefs (ME92), Marci Eben (Gen03), Dave Herbst (EE85), and Adam Stone (CSc95); faculty **Toni Logar** (CSc85) and Ed Corwin; and friends Toni Brumbaugh, Phyllis Dixon, Kat Drefs, Michelle Feiszli, and Hamilton Sims. Dr. James Feiszli conducted the choirs. Dr. Feiszli has led the choir for numerous trips overseas and is currently the President of ChoralNet, The Internet Center for Choral Music, which he founded in 1993.

#### Ulaanbaatar, Mongolia

Alumnus, alumni board member, and professor **M.R. Hansen** (CE69) and admissions counselor Barbara Hansen led a group of civil engineering students from the School of Mines in late May to spend nearly a month in Mongolia completing work on their senior design projects. Each of the students worked with Mongolian professors and students on projects that addressed critical rebuilding needs in Mongolia that resulted from decades of communist rule, including deteriorated infrastructure, pollution, and dangerous working conditions.

While there, Dr. Hansen helped establish a new Mongolian chapter of the School of Mines Alumni Association. The chapter and officers were approved at the July 2006 Alumni Board Meeting. We appreciate their interest, look forward to their future activities, and sincerely thank M.R. and wife Barbara for promoting our alumni across the globe.



M.R. Hansen (CE69) with Sugar Mijir (M.S. CE05) chapter vice president, Baigalimaa Shurka (M.S. CE04), chapter secretary, and Enkhbaatar Baasanjav (M.S. TMgt03) chapter president and Alumni Association Area VP

#### Bremerton and Seattle, Washington

Alumni President **Dr. Everett Bloom** (MetE63) and First Lady Carol Bloom traveled to the Pacific Northwest in mid-June for a variety of alumni gettogethers. Along with scheduled events, the Blooms visited Microsoft and met with alumni hosted by **Chris Ahlers** (CEng00), lunched with **Skip Bush** (CE59) and **Doug Kotrba** (Math64) in Tacoma, visited the Tacoma Art Museum briefly, and enjoyed a lovely dinner with Alumni President Elect **Marlene Nelson** (ME74) and husband Curt Chenoweth.

The alumni events included a relaxed, impromptu gathering of Bremerton, Washington area alumni at the Boat Shed. **Steve Morgenstern** (ME83) helped find the location and rally a few attendees. Then the Blooms were treated to the signature Seattle, Washington event — the Spring Luncheon — hosted



The Boat Shed Crew in Bremerton, Washington



**Everett Bloom** (MetE63), **Jack Meeker** (EE47/ME48), Carol Bloom, and Elinor Meeker at Spring Luncheon



Dave Frerk (ME61), Everett Bloom (MetE63), and Vernon Abild (EE50)

by Elinor and **Jack Meeker** (EE47/ME48) at the Doubletree Hotel in Southcenter. Jack received the Guy E. March Medal at commencement in May and Alumni Director **Tim Vottero** (Chem84) showed the attendees a video clip of the presentation, along with news and slides about campus. Special thanks go to **Owen Tripp** (ME50), **Vernon Abild** (EE50), **Harold Fritzsche** (ME51), and many others for championing Jack as a long-overdue March Medal candidate. Of course, no Spring Luncheon would be complete without Elinor and Jack.

#### **Rapid City and Sioux Falls, South Dakota Golf Tourneys**

The second Annual School of Mines and Community Golf Tournament was a huge success in July, with proceeds from the tournament totaling \$26,000 and benefiting both academic and athletic scholarships. Twenty-one teams of golfers comprised of both alumni and community supporters gathered at



*Golfers* **Miles Nelson** (EE47) and Harry Orville ready for the tourney



*Rick Wass* (IS96) and *Steve Malone* (*ME83*) share a good luck hug

Arrowhead County Club in Rapid City to participate in the modified scramble. Representatives of several student teams were also present along with their vehicles and were scattered throughout the course visiting with golfers along the way. At an evening banquet following the tournament, golfers enjoyed a buffet dinner while prizes were awarded for top finishers in three different flights. Winning teams included: Division I – 1st Gross: Chuck Miller. Andrew Morse, Jim Gray, Gary Heglan and 1st Net: Rod Pappel (ME77), Bill Masterson, Pat Burchill, Mike Derby; Division II - 1st Gross: Jane Pfeifle, Bob **Morcom** (CE74), Tim Cheever, Craig Pfeifle and 1st Net: John Walker, Craig Steinman, Bob Hoover, Rick Belsaas; and Division III – 1st Gross: Laura Orville, Kathy Cline, Lisa Steever, Pat Steinman and 1st Net: Mike Bender, Ed Corwin, Leo VanSambeek (MinE72), **Kerry DeVries** (ME87). Special thanks go to the School of Mines Foundation, many sponsors, local alumni and friends, and campus faculty, students, and staff for all the support, hard work, and participation to make this another successful event.

The Sioux Falls, South Dakota chapter held its ninth annual golf outing at the Brandon Municipal Golf Course on a very hot and humid July afternoon. Temperatures were in the upper 90's with heat indexes above 100, so the beverages were extra special and required. They had 31 golfers in eight groups and 36 people attended the after-golf dinner and social at the golf course, even though they forgot to relay dinner plans to the kitchen staff.

The First Place team included **Mark Ingalls** (CSC92), **Andrew Ingalls** (CSC87), **Lonny Ackerman** (ME95), and **Kelly Whiting** (Math89). Second place went to **Mike Haase** (IE96), **Dan Herbst** (MetE92), **Dave**  **Herbst** (EE85), and **Corey Jacobs** (ME91). Third place honors went to the team of **Dave Crumrine** (CE86), **Scott Buss** (ChemE89), **Greg Crowser** (EE89), and **Tom Rieger** (CE80).

The event raised enough money from the tournament to fund the annual scholarship for a Sioux Falls area student at the School of Mines. Thanks to Area Vice President **Dean Herll** (CE92) for carrying the ball in Sioux Falls, especially since it was a day before his birthday. Dean said it so hot that he forgot about pictures, so the others in attendance will be anonymous until next year, which may be a good thing considering the fun this group has in Sioux Falls.

#### Louisville, Colorado

Hardrocker Head Football Coach Dan Kratzer and professor of electrical and computer engineering, and alumnus **Dr. Larry Simonson** (EE69) made a special trip to visit Dr. Harvey Fraser in Colorado. An ardent Hardrocker fan, Hall of Fame inductee, and the seventh President of the School of Mines (1966-1975), Dr. Harvey Fraser was thrilled by the visit and was joined by several of his family members. Dr. Fraser celebrated his 90th birthday on August 11, 2006.

Dr. Fraser replied recently with a letter:

"I recently celebrated my 90th birthday and the outpouring of notes and e-mails from the Tech community has brought back many warm memories of my ten years at Mines.

Professor Larry Simonson sent out a prompt on his jungle drums to many colleagues and fellow students from thirty or more years ago, encouraging this throng to send birthday greetings. I have received over one hundred birthday greetings by card and e-mail, many from the Mines' community. The incredible warmth of these greetings tells me that we must have done something right. Many remembered how I encouraged them to succeed and how I tried to model behavior such as continually picking up trash around campus. Some recalled my challenge to the student body to have a more classy cheer at football games when something went wrong. You know, from "Oh S---", to something classier. Then for the rest of my time at Mines, when a setback occurred on the athletic fields, the students yelled, "Oh Harvey!"

My family and I have been thrilled at this

outpouring of support from the Mines' gang. I appreciate the many people who documented their feelings and shared them with me so kindly.

So thanks, Hardrockers, for your wonderful greetings. I wish I could get up to Rapid City to cheer for those Mines' teams again. Thanks for carrying that torch for me. Go Hardrockers!"

While in Colorado, Coach Kratzer and Dr. Simonson also visited alumnus **Chuck Meyers** (EE50) and former football player **Steve Butherus** (CE79) in Greeley, Colorado. The Alumni Office is grateful to Larry and all the School of Mines faculty and staff who travel on behalf of the School of Mines and visit our alumni.



Coach Kratzer and Dr. Harvey Fraser



Larry Simonson (EE69), Steve Butherus (CE70), Coach Kratzer, and Chuck Meyers (EE50)

#### **Rapid City, South Dakota**

A group of freshman involved in the FIRST program (See <http://reslife.sdsmt.edu/FIRST.html>) was scheduled for an annual barbeque at the home of Tami and **Tim Vottero** (Chem84) at the start of the semester in late August. This FIRST group — Spirit & Pride — have a weekend of activities focused around their group theme and in support of all students enrolling and returning to campus after the summer break.

Unfortunately, the Sunday BBQ was rained out, so a Pizza Picnic was brought to the Surbeck Center, while the Spirit & Pride group worked on several projects. The Student Activities and Leadership Center in Surbeck is always looking for active volunteers to work with students on a variety of projects and events. The Student Alumni Connection is another actual student organization committed to the same connection between current students and alumni. If you want more information on either of these opportunities to get involved, please contact the Alumni Office.



Spirit & Pride group at Surbeck

#### <u>1930's</u>

**Theodore Allen** (EE39) retired from Westinghouse Electric after 40 years of work. He played in a big band for 55 years. He now lives in Denver, Colorado.

#### <u>1940's</u>

We were very saddened to learn news of a tragic and fatal car accident taking the life of Mike Goth, eldest son of Perry "Pat" Goth (ChemE44). Mike was killed in a one car accident on May 20. 2006. Pat shared an e-mail with the Alumni Office: "One of those things that happen as quickly as a bat of the eye and the car went out of control, rolled over, and hit a tree. Mike passed away about four hours after the accident. To lose the eldest son is a great shock. You don't expect to outlive your kids. All are doing as well as can be expected." Mike and his siblings attended nearly every All-School Reunion at the School of Mines, even though they were not graduates. Our sincere condolences go to the entire Goth family.

**Gale Hanks** (MetE40) moved into a high-rise apartment house that has an indoor pool, hot tub, Jacuzzi, hot, dry, and wet sauna baths, large rec room, pool table, and so on. His apartment has a balcony with great views of the city and mountains. He thinks he will like living there. He is still driving with excellent eye sight. Gale turned 89 in August and adds, "Everything on me works, only not very well".

#### <u>1950's</u>

**Franklin Dvoracek** (EE54) is now fully retired and has moved to Placerville, California. He is now a volunteer at the Gold Bog Park teaching school kids how the oldtimers did hard-rock mining for the gold in the quartz veins, typical in the California foothills of the Sierras.

The Alumni Office was informed that **George Hokenstad** (EE52) lost his wife Phyllis this summer. She passed away on July 9, 2006. Our sincere condolences go to the family.

The Alumni Office and many friends of **Bernie Hoogestraat** (GeolE56) were saddened to hear that his wife Helen passed away on June 11, 2006. Our sincere condolences go to all who miss Helen.

Jo and **Glen Madsen** (ChemE50) e-mailed, "After having lived in Texas for 32 years, we have moved to Tennessee. We sold our house in Arlington and our furniture arrived in Tennessee on August 24, 2006. We downsized on our house size. As a result, we have been selling or trashing things for the last couple of months. We have a lot of boxes in our garage. We will need time for getting settled."

**Jan Waage** (ME58) is in good health. His daughter is a lawyer and her family is in Oslo, Norway. His son is a civil engineer and his family is in Stockholm, Sweden. Jan is living 90 kilomters south of Oslo on the slopes just above the Oslofjord. He adds that he has nice memories from Rapid City with a large number of fine slides to look at.

#### 1960's

The Society for Mining, Metallurgy, and Exploration, Inc., (SME) 2006 Rock Mechanics Award was presented on March 29, 2006, at the SME Annual Meeting in St. Louis, Missouri, to **Francis S. (Frank) Kendorski** 



Francis S. (Frank) Kendorski (MinE69)

(MinE69) "for innovative work in ground-behavior characterization, in full-extraction mining, in hard rock and coal and in the application of rock mechanics to practical mining problems improving the working environment, especially in rockreinforcement design." Kendorski is a principal and vice-president with Agapito Associates. Inc., in Lombard, Illinois. Kendorski holds a B.S. in mining engineering from the South Dakota School of Mines and Technology and an M.S in geological engineering from the University of Arizona. He is a registered professional engineer in 10 states. He has more than 35 years experience in mining and underground construction, mineand tunnel-failure investigations, underground stone-mine design and subsidence engineering.

**Steve Parker** (MinE68), president of Pittsburg & Midway (P&M) Coal Company, has elected to retire from Chevron following 38 years of distinguished service. Steve, a native of South Dakota, joined P&M as a Mine Engineer and soon held positions of increasing responsibility as Division Engineer, Mine Superintendent, and, subsequently, Vice President - Marketing, Vice President -

Operations, and, in August 1999, President of P&M Coal. While president, Steve led P&M to industry leading safety results. Steve also served on a number of industry associations, including the Rocky Mountain Coal Mining Institute, the National Mining Association, and the Center for Energy and Economic Development.

Roger Rollins (Phys67) retired from the Department of Energy in January 2005 and immediately went back to work. He started an organization called the Family & Marriage Coalition of Alken, Inc. (FAMCO). The goal of FAMCO is to help couples prevent marriage and family problems early, before they become irreparable. And Roger adds, "The only successful marriage plan is to follow God's design for the family by letting Jesus be Lord. My wife, Barb (formally Barb Dittman of Rapid City) continues to teach and direct a band of about 45 home schooled youth. We have three grandchildren. God is good."

#### <u>1970's</u>

**Bob Apa** (Chem72) continues working in Umatilla destroying nerve gas and as he writes, "It is a great feeling knowing you are getting rid of some nasty chemicals. I think this is going to be my last job. I am looking forward to retirement, and I have a lot of plans. In January I got a new granddaughter (to my son **Terry Apa** (ChemE00)). My nephew **Jason Apa** (ME94) is working in the Seattle area, so we keep in touch."

Susan "Booty" Banks (GeolE75), Sue Jorgensen (CE76), Kathy Miller (Chem74), and Anita Freeman (EE76), pictured in center column, enjoyed a mini-



The Grubby Girls

Mines Reunion this summer in California's Wine Country and at Anita's home. Wherever the "Grubby" girls gather there is sure to be a fun time.

As a senior staff engineer, **David Berrien** (EE75) is still working for Seagate Technology, Product Assurance Engineering. His wife Diane continues to work for Ceridian. Daughter Nicole is in the 7th grade and already anticipating high school.

After 29.25 years with the State of Alaska, Dept of Environmental Conservation, **Ronald Grimm** (Chem70) decided to retire. His job was moving to Anchorage which meant an hour commute or more in winter, so he "pulled the plug". Now he fishes, hunts, and skis when he wants. He also spends a lot more time with his aging mother this past year. They have thought about moving back to South Dakota, but he would miss the Alaska summers.

**Russell Guenthner** (EE73) and his wife Cindy are working on the same project for the first time ever after working at the same company together for 30 years. Their children Tami and Kelly are both attending Glendale Community College. Their son Devon is a fourth grader at Martin Luther School in Phoenix.

#### Janeen and Jim Hildebrand

(ME71) e-mailed that they "will be forever indebt at 6607 Conifer Cove in Austin, Texas. We now have a bit more room, so y'all come by and say 'howdy' when you can. Just give us a holler before showing up to make sure we are not golfing, swimming, at a football game, soccer game, etc."

Leo A. Daly, an international planning, architecture, engineering, and interior design firm headquartered in Omaha, has named **Susan A. Jorgensen** 



Susan Jorgensen (CE76)

(CE76), PE, LEED AP a senior associate. Jorgensen, a licensed structural engineer and LEED Accredited Professional, has 17 years of professional experience and has been with the firm for nine years. She serves as a Senior Structural Engineer and is licensed in six states. Jorgensen is a member of the American Concrete Institute, the American Institute of Steel Construction, the American Society of Civil Engineers, and the Structural Engineers Association of Nebraska

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PolyOne Corporation, a leading global polymer compounding and distribution company, announced in February the appointment of Stephen D. Newlin (CE75), president of the Industrial Sector of Ecolab Inc., as its chairman, president, and chief executive officer. Newlin, 53, brings to PolyOne an extraordinarily strong background in sales and marketing. He also has significant experience in international operations, merger and acquisition, integration and change management. Newlin has been with Ecolab, a specialty chemical company, since 2003. Prior to joining Ecolab, Newlin spent 23 years with Nalco Chemical. Starting as a sales representative in 1980, he progressed rapidly through a series of sales management and general management positions and was named president of Nalco Pacific in 1992. In 1994. Newlin embarked on a three-year assignment as president of Nalco Europe, with responsibility for all aspects of the company's businesses throughout Europe and the Middle East, including all commercial functions, research and development, manufacturing, finance and support services. Returning to the United States, Newlin was named president of Nalco's Specialty Division, then was elected president and a director of the company in 1998. He added the responsibilities of chief operating officer and vice chairman in 2000. That same year, he became chairman of Nalco Exxon Energy Chemicals, a ioint venture of Nalco and Exxon Energy Chemicals. He elected to leave Nalco in 2001. Newlin is a member of the Board of Directors of Black Hills Corporation, a diversified energy company based in Rapid City, South Dakota. He also serves on the Board of Trustees of the South Dakota School of Mines Foundation. Newlin currently resides with his family in Medina, Minnesota. He and his wife, Terry, have two teenage sons: Scott and Grant.

#### <u>1980's</u>

Tom (MinE81) and Frances Alexander (MinE81), e-mailed from Kingwood, Texas that "Our move is due to a promotion and transfer for Tom. He is Project Manager of the Arkoma Asset Team for Southwestern Energy Company and has been involved with the inception and development of the Fayetteville Shale play in central Arkansas. We have raised an Aggie! Our daughter Elizabeth graduated from high school with honors and will be a freshman at Texas A&M majoring in chemical engineering.

An update from **Todd Brick** (EE86) included, "I finished up the last four of my 20 years as an assistant professor of electrical engineering at the U.S. Military Academy at West Point. I have accepted a job at MIT/Lincoln Laboratories in Lexington, Massachusetts to work on Tactical Wideband Communications. My family and I will be living in Nashua, New Hampshire. My oldest daughter, Ashley, will be starting eighth grade and my youngest, Annie, will be in preschool. Carmen, my wife, will be busy turning our first house into a home."

The leading precious metals royalty company, Royal Gold, Inc. announced that its Board of Directors has elected President and Chief Operating Officer **Tony Jensen** (MinE84) to the position

of Chief Executive Officer. The press release stated that Tony demonstrated outstanding leadership and management acumen since joining Royal Gold as President and COO approximately three years ago. He has played a major role in making Royal Gold what it is today. Tony Jensen has more than 23 years of experience in the mining industry. During his career, Tony worked at Placer Dome Inc., holding various senior operating positions domestically and internationally, as well as corporate positions in San Francisco, California and Santiago, Chile. He was also the Mine General Manager for the Cortez Gold Mines, and Director, Finance and Strategic Growth of Placer Dome Latin America. Jensen holds a Certificate of Finance from Golden Gate University in San Francisco. He serves as a Director of Royal Golf, the Colorado Mining Association, the Industrial Advisory Board of the South Dakota School of Mines and Technology, and the Nevada Mining Association. Tony received the Distinguished Alumni Award in 2005.

**Tami Nelson** (MetE86) e-mailed, "Many of you know I have loved my assignment in China so I leave with mixed feelings, but my new assignment will provide some new adventures for me." Tami was Supply Chain and Logistics manager in Xuzhou, China, and has been promoted to Marketing Support Manager within the Global Mining Division with Caterpillar based in Peoria, Illinois.

The Lund Partnership that provides civil engineering and surveying to transportation, commercial development and



Jamie K. Overgaard, P.E. (CE84)

infrastructure design projects for both public and private clients throughout Colorado, promoted **Jamie K. Overgaard**, P.E. (CE84) to principal of the firm. She joined the Lund Partnership, a civil engineering and surveying consulting firm headquartered in the Denver area, in 1997. She is a Registered Professional Engineer in Colorado and California with over 17 years of experience in land development for residential, commercial and industrial developments.

Richard Larsen (Chem83), scientific applications manager for Jasco, Inc., in Easton, Maryland, now leads ASTM Committee E13 on Molecular Spectroscopy and Separation Science as its chairman. An ASTM International member since 1994. Larsen is also vice-chairman of Subcommittee E13.03 on Infrared and Near Infrared Spectroscopy and a member of Committee D02 on Petroleum Products and Lubricants. Outside ASTM International. Larsen is a member of the American Chemical Society, the Coblentz Society, the International Union of Pure and Applied Chemistry, Sigma Xi, and the Society for Applied

Spectroscopy. After earning his Ph.D. in physical chemistry from the University of South Carolina, Larsen took a position as infrared technical specialist for Perkin Elmer in Norwalk. Conn. He gained additional experience as a filed applications specialist and a customer support specialist at Perkin Elmer and as a chemical consultant at Spectral Consulting before joining the Jasco Staff. He assumed his current role last year. Throughout his career, Larsen has provided scientific and technical support for various types of analytical equipment.

### Congratulations to the following proud parents:

#### Doreen (Wenzel) Shrivastava

(CSC86) and her husband Manu added to their family Kimberly Alicia on December 9, 2005. She is a three-year-old girl that they adopted in Guatemala. She joined big sister Julia, age six, and has transitioned wonderfully. "We are so blessed to have two wonderful daughters."



Julia and Kimberly Shrivastava

**Ken Simon** (CE81) and his wife Juvy wish to announce the birth of their son, Alvin Maranan Simon. He was born on March 9 at Kadlec hospital in Richland, Washington. He weighed 8 lbs. 3.3 oz. and was 21 inches long at birth.

#### <u>1990's</u>

Charles Asp (ME98) sent our office this update, "I am currently working for John Deere. I am located in Dubuque, Iowa and work for the Construction and Forestry division. I have worked here for 5.5 years and all of those years have been for the Cab group, which is a really great group because we get to work on multiple vehicles. For the first 4.5 years, my main priority was the 4wd Loader cab and now I am working on the Skid Steer cab. So, I have gone from the biggest machine to the smallest machine. Yes, it is funny to see me sit in a Skid Steer. They do not have a lot of room and they are very hard to operate when you have a big foot. I really love John Deere and plan on finishing my career with them. My first job out of school was with Goodyear in Norfolk, Nebraska where I spent 2.5 years. (See wedding and birth announcement on p. 38.)

During a company (Williston Basin Interstate Pipeline) get together to bid farewell to **Scott Besmer** (CE96), the opportunity came to



Scott Besmer (CE96), John F. Veit (EE92) and Roger Kotschegarow (ChemE90).

snap the attached photo which includes School of Mines alumni: **Scott Besmer** (CE96), **John F. Veit** (EE92) and **Roger Kotschegarow** (ChemE90). "I would like to point out that we do have alumni in the area and have not got to hear any music masters at work soliciting funds (just kidding, Brad). Scott transferred from WBIP in Glendive, Montana to MDU in Bismarck, North Dakota; Roger and I are still pounding out the hours in Glendive. Regards, John."

Karolyn and **Eric Braun** (ME96) emailed, "We wanted to give you an update on our family. First of all we are living outside of Wichita because Eric Braun, who received his P.E. license in 2002, is now working for Spirit Aerosystems as a lead on a project for Boeing. Karolyn (Karge) Braun, a former employee at the Devereaux Library, received her Masters in Library Science in 2002. She is now a stay-at-home mom for our



The Braun Family

two children. Natasha turned three at the beginning of July, and our newest edition, Donovan, was born the end of July.

**Jackie (Moriarty) Flowers** (CE92) and her family are moving west. Jackie has accepted the position of General Manager with Idaho Falls Power (city of Idaho Falls) in Idaho. His power utility owns and operates four hydropower plants on the Snake River as well as providing the distribution/transmission service to our customers in Idaho Falls. Their children Gaven (nine) and Mary (six) are looking forward to being right in camping/skiing area.

**Marty Jackley** (EE92), a Sturgis native, was sworn in as U.S. attorney this summer. President Bush and Senator John Thune, the ranking Republican from South Dakota, nominated Jackley for the position and the U.S. Senate confirmed the appointment. Jackley had been a partner in the Rapid City firm of Gunderson, Palmer, Goodsell and Nelson. Jackley's responsibilities include enforcing federal criminal law in the state and representing the state in all federal civil actions.

Garland Krabbenhoft (ME99) sent the Alumni office this note, "I am happy to say at the time of this email I am starting my 10th month in Mosul, Iraq. Two more months to go and I will return home to Alaska. It is good to see familiar faces in the Hardrock. Since graduation my wife Heather (BS Elementary Ed from BHSU in 1999) and I have lived in Germany, Missouri, and Alaska. I have been deployed a couple times. This deployment I am serving as the Commander of the 562d Engineer Company (Stryker). My company has a number of different missions including counter IED patrols, training/partnering with Iraqi Army Engineers and completing general construction projects. We have found over 200 IEDs, safely responded to 130 more and have been hit by over 40 IEDs. This is enough to keep me very busy. It



#### The Krabbenhoft Boys

has been one eventful year with many high and some low points. I look forward to returning home to Heather and my three boys, Nicholas (six), Alexander (three), and Ethan (one). I should be back for moose season this September and all the holidays this fall and winter. Attached you will find a picture of my three boys and myself (mom had to take the picture). Thank you for the magazine, it is a nice touch of reality and brings back great memories of a different time when life was a little simpler."

#### Kelly (Cowles) Olson (IS92)

graduated from the Baylor College of Medicine in May, and she is currently a pediatric resident with Baylor at Texas Children's Hospital in Houston. **Steve Olson** (ChemE96) completed a four-year assignment with Shell International E&P on the sand control team at Shell's research laboratory in Houston, and rejoined the South Texas Well Servicing Group in January. (See birth announcement on the next page)

Congratulations to the following

#### newlyweds:

**Brian Henry** (ChemE96) married Jennifer Beck of St. Paul, Minnesota on June 10, 2006 at their home. They were fortunate to have all of their family and friends attend the surprise ceremony. Brian also e-mailed, "I left my job with Nalco after four years and accepted a position with Sonoco which will keep me in Minneapolis for the next few years. Jennifer works as a special education teacher within the Orono School District."

**Greg Warder** (ME92) got married last fall to Claudia Guarin. She is an attorney who is originally from Bogotá, Colombia. They live in



Claudia and Greg Warder

Menlo Park, California. Greg currently works for a large bayarea law firm. His practice involves representing technology companies in intellectual property matters such as a patent litigation and prosecution. He and his wife Claudia are looking forward to visiting South Dakota and enjoying some School of Mines events.

### Congratulations to the following proud parents:

**C.J. Asp** (ME98) updated our office that he "got married to

Karisa Klock (IS97). She played ball for the women. We were married on May 15, 1999 in Sioux Falls, so we are coming up on our seventh anniversary. She worked for some hospitals and banks for a while, but for the last 2.5 years has been at home. She is now a stay-at-home mom, which is the best part of our family right now. On October 26, 2003 our son was born. Charles Arnold Asp, and we are calling him Cody. He is the fourth generation of Charles. I am guessing you remember calling me C.J., which my friends and family use. I am sorry I have not kept up with you; I just have been very busy. The joy of our lives is waiting at a park for me and if it is dark when I get there, I will be in the doghouse."

**Kurt Leibel** (ChemE97) and Marty have a son. Karsten James, born on January 12, 2006.

Jeff Majors Ph.D. (MetE99) emailed Dr. Stan Howard. This excerpt includes notice of a his job, family, and daughter. "I took a position with The Lincoln Electric Company here in Cleveland, Ohio. I will eventually be taking over the position as head of microscopy, mechanical testing, and pilot plant operations. It is a perfect fit for me. I really like what I am doing. My wife Lori is doing great and is becoming more comfortable every day with Ohio. We had a little girl (Natalie Anne Major) on February 22, 2005. She is the most beautiful little girl. I could not be prouder. Life has certainly changed since my days at the School of Mines."

**Kelly (Cowles) Olson** (IS92) and **Steve Olson** (Che96) are announcing that their daughter Elizabeth Helen entered the world on April 5, 2006. **Cheyenne Winkler** (IS97) and **Paul Winkler** (ME94) are announcing that Clint Winkler was born on July 30, 2006 weighing in at 10 lbs 10 oz and measuring 21 inches.



**Clint Winkler** 

#### <u>2000's</u>

**Matt Goeden** (EE03) accepted an associate attorney position at the law firm, Mueting, Raasch & Gebhardt in Minneapolis. He graduated from law school and was sworn into the Wisconsin Bar, moved to Minneapolis, and started a bar review course.

#### A note from Angie (Gering)

Hinker (IS01) included, "My husband, I, and big brother Ethan welcomed Clayton Wayne Hinker to our family. Clayton was born October 13, 2005 in Rapid City. I am now working for the Black Hills National Forest as the Assistant Dispatch Center Manager at Northern Great Plains Interagency Dispatch Center. Our dispatch center mobilizes resources (mostly wild land fire resources) for wild land fires across the area including South Dakota, Nebraska, Wyoming, and North Dakota, along with supporting fires throughout the nation. We also support hurricanes including Katrina and all other types of risk incidents such as the Space Shuttle

recovery. I take great pride in my job."



Clayton Wayne Hinker



Big brother Ethan Hinker

**Garret Johnson** (EE02) has been transferred by his company ENSCO to Singapore for the construction of a semisubmersible (floating) offshore drilling rig. Garret recently got engaged to Terra Frederick from Eunice, Lousiana. She is finishing up her last year of chemical engineering at the University of Louisiana in Lafayette.

Jonathan Lefor (ChemE04) emailed, "I hope that everything is going great at the School of Mines. I really miss school, but the real world calls. I work for Halliburton Energy Service/Field Technology Engineer (production enhancement engineer). My time at the School of Mines was an unforgettable experience with an opportunity to receive an education that is second to none. The staff in the chemical engineering department is excellent and deserves a lot of credit for all of the hard work that they do for the students."

For the first time in the 27 Kwajalein Rust Man triathlons at Marshall Islands, a wife and husband team came in first and second overall. **Krystal Peterson** (IE02) and **Brent Peterson** (CE01) took first and second place respectively.

### Congratulations to the following newlyweds:

**Alexa Maxwell** (EE00) and Nick Eike were married on May 28, 2005 at solid Rock Church in Spearfish. The bride is an engineering manager at Rockwell Collins in Cedar Rapids, Iowa. The groom graduated from Maquoketa Valley High School, Delhi, Iowa in 1991. He is a farmer. The couple lives in Manchester.

### Congratulations to the following proud parents:

**Steve Acheson** (EE01) e-mailed that he has moved back to Cedar Rapids, Iowa. "I helped with the closing of the company's Seattle facility and was then offered a new job with Rockwell Collins in Cedar Rapids. I am currently with the eFlight system. My wife Natalie and I have also had our first child Ezri Acheson.

**Christina Nath** (IE02) and her husband Jon are excited to announce the birth of their first child, Cella Jean on January 26, 2006. She is growing very quickly, and they are enjoying every minute with her.

### SIGN-UP FOR THE E-NEWS!!!

For real time news from the South Dakota School of Mines and Technolgoy, Rapid City, and South Dakota, get online with

#### THE HARDROCK E-NEWS

This concise, timely electronic newsletter includes items from campus, western South Dakota, and the state via e-mail. Hyperlinks are included to more information when available.

All we need to add you to the list is your e-mail address. Send your request to be added to the list to alumni@sdsmt.edu.

Also, please keep us current with your work, home, and family information via the same Alumni Association e-mail address.

see you in the e-news! alumni@sdsmt.edu



# Memorials

#### **MERLIN JOHN BROCKMEYER**

Merlin "Mick" Brockmeyer (EE51) passed away at home on June 25 after a long struggle with cancer. Mick was born on May 4, 1924, in Douglas, Wyoming. At age 19, he answered his nation's call during WWII. At Air Force basic training, Mick was recognized for his marksmanship skills he gained while growing up in the Wyoming back country. He trained others, and rose to the rank of Staff Sergeant. Upon his deployment, Mick was assigned as a turret gunner aboard a B-24 Liberator. Mick and his crew saw action in Central Europe, the Balkans, Normandy, Italy, Northern and Southern France, and the Rhineland. Mick was awarded the Bronze Star for heroism and bravery. His recommendation for technical improvements to the gun turret and other airplane systems helped save the lives of his and future airplane crews. After graduating from the School of Mines, Mick accepted a job with Boeing in Seattle. While in Seattle, he met and married Loretta. Mick enjoyed his job immensely and retired after 40 years. Among his favorite programs were the KC-135, the YC-14, and the B-2 bomber. He is survived by his wife, Loretta, and his four sons, David, James, Robert and Patrick.

#### **RONALD ANGELO CETRONE**

**Ronald Cetrone** (GeolE57) passed away January 31, 1997. The Alumni Office recently received confirmation of Ron's passing. Ron was born on March 20, 1934 in Wyoming. He had been living in Humble, Texas.

#### FRANCIS RICHARD COURNOYER

**Francis Cournoyer** (CE43) passed away July 11, 2006 in Sisseston, South Dakota. Frank was born on the Yankton Indian Reservation on November 29, 1918 and was one of 13 children. He was a member of the Yankton Sioux Tribe and a WWII Veteran. He was in the first

graduating class of Marty Mission Indian School in Marty, South Dakota. In 1942 he married Luella. They had one daughter, Kathy. Frank was the first American Indian to graduate from the School of Mines with an engineering degree. Upon graduation, he worked for a defense contractor and was eligible for a deferment from WWII which he declined. He served honorably in the Navy until March 1946. During his career he worked for the Yankton Sioux Tribe, the Army Corps of Engineers and the South Dakota Department of Transportation (SDDOT). While at the DOT, he was in charge of the SDDOT Transit Funding which provides transportation to community residents. He was one of the engineers that built the Ft. Randall Dam at Pickstown, South Dakota. It is memorable that a young tribal member was one of the engineers that built a lasting legacy on the land that was the home of the Yankton Sioux. He was preceded in death by his wife Luella and daughter Kathy. He is survived by his wife Joan.

#### **ROBERT JAMES DAVIS**

Robert Davis (CE40), retired Boeing engineer and volunteer, died December 17, 2005 of kidney failure. Bob lived in Philadelphia, Pennsylvania. During the Depression, he worked for the **Civilian Conservation Corps** fighting forest fires. After graduation he worked for Boeing in Seattle. He married Martha Hill in 1945. The couple had met when they were maid of honor and best man at their siblings' wedding. After retiring in 1978, he continued to consult for Boeing Vertol and Piasecti Helicopter. He is survived by sons James and Richard, daughter Marilyn and two grandchildren.

#### JERRY NORMAN DEMOS

**Jerry Demos** (CE73) died June 17 in Borger, Texas. Jerry was born on January 19, 1951, in Rapid City, South Dakota. Jerry married Shari Meador in 1973. Since moving from Oklahoma to Texas in 1998, Jerry was maintenance and clean fuels supervisor for Conoco Phillips. His passions were his family, photography, Corvettes, golfing, and teasing people. He is survived by his wife, Shari; and three daughters, Alyssa, Anthea, and Chloe.

#### JOHN LELAND DROWN

John Drown (EE47) passed away in June 2005. He had been living in Florida. Jack retired after a long career with Westinghouse Electric. He was one who of the many individuals who took on the tremendous task of reviewing and revising world standards. In early eighties Jack traveled to Paris, France for a meeting called by the International Electrotechnical Commission (IEC). This is a group which reviewed established standards and recommended revisions for low-voltage circuitbreaker standards. As specialist in low-voltage breakers, Jack was a technical advisor for the committee.

#### **ROBERT VERNON FLINT**

Robert Flint (MetE37) passed away in Pittsburgh, Pennsylvania on April 14, 2006 of multiple myeloma. He was born on September 16, 1914 in Laurel, Nebraska. Bob worked for U.S. Steel for more than 50 years, serving as chief industrial engineer and as a consultant for the international steel industry in 34 countries. He ended his career in the 1970s as director of management for U.S. Engineers & Consultants. During more than 30 vears of retirement. Bob was an avid follower of financial and world news and a great collector of stamps and Indian artifacts. He also had amassed more than 1,000 spheres and could name every mineral. Bob received the School of Mines Distinguished Award in 1998. He was predeceased by his wife Helen. He is survived by his daughters; Nancy, Barbara, and Carol; and by his son, Robert, Jr.

#### **JEFFERY DALE GREEN**

**Jeffery Green** (Chem72) passed away April 16, 2002. The Alumni Office recently received confirmation of Jeffery's passing. He was born on June 25, 1948 in Scottsbluff, Nebraska.

#### **MALCOLM EUGENE GREENE**

**Malcolm Greene** (CE49) passed away on March 10, 2004, and the Alumni Office received this information from his family recently. He was born November 4, 1921 in Terraville, South Dakota. For years he worked for the City of Wichita and in 1980 retired as Director of Flood Control. He is survived by his wife Joyce, daughters Kathryn and Janice, and son Michael.

#### **ORVILLE EUGENE HAGSETH**

**Orville Hagseth** (Cheme49) passed away in October 28, 2005 in Texas. Orville was born May 6, 1924 in South Dakota. During his career Orville worked as a process engineer for numerous refining oil companies.

#### **TIMOTHY RALPH HARTER**

Timothy Harter (MinE87) died January 7, 2006 from injuries sustained in an automobile accident. He was born January 6, 1964 in Winner, South Dakota. Tim had been living in Avon, Ohio. He began his career in mining, working in various gold and silver mines throughout the west, including mines in Colorado, Nevada and Alaska. Later, he was the general manager of the Cargill Salt Mine in Cleveland. For the past three years, he worked as a financial planner for Primerica Financial Services in Cleveland. He was recently honored by Primerica for his performance in sales and recruiting and received the **Outstanding Recent Graduate** Award from the School of Mines for achievements after graduation. He was active in his children's lives. Tim is survived by his wife, Jackie, daughters DaNell and Camela, and son Benjamin.

#### **DELBERT N. HEDIN**

**Delbert Hedin** (CE43) passed away on October 2003. His son, **Nyle Hedin** (Chem69) recently informed the Alumni Office.

#### **TOBIAS ABRAHAM HEGDAHL**

Tobias Hegdahl (ME67) passed away July 2006 in Seattle. He was born in Aberdeen, South Dakota on November 1, 1944. Tobias also received an MBA from Seattle University in 1975. In 1967, he received his officer's commission as Lt. in the United States Public Health Service and was assigned to the new office of the **Environmental Protection Agency** (EPA). He continued in the EPA, earning the Surgeon Generals Meritorious Service Medal in 1976 for his exemplary performance of duty pertaining to solid waste management and resource recovery efforts within the U.S. He retired from the USPHS in 1992. Tobias is survived by his daughter Teresa and his son Paul.

#### **MELVIN ARNOLD HOWARD**

Melvin Howard (ME51) passed away March 29, 2006. He was born on August 1, 1924 in South Dakota. Melvin served four years in the U.S. Marine Corp. in the Pacific Theater during WWII. He was awarded the Purple Heart. He married Arlene in 1947. After graduation from the School of Mines in 1951, he moved to Richland, Washington to work for G.E. In 1957, the family moved to Rochester and he worked for IBM. After retiring, the couple moved to Adams, Minnesota. Survivors include his wife Arlene, two sons, Michael and Steve, seven grandchildren and three greatgrandchildren.

#### **JACK DUANE INGWERSEN**

**Jack Ingwersen** (EE58) was born in Hay Springs, Nebraska on March 2, 1932 and passed away on January 17, 2006 in California. After graduation he worked at the U.S. Naval Air Missile Test Center in California. In 1964, he was drafted into the Army and was stationed

## Memorials

in Japan. Jack continued to tirelessly study electronics and design electronic devices. From his first marriage, Jack had five children: Larry, Gordon, Yvonne, Jay, and Anita. He is survived by his second wife Mona and their three children: Arlen, Leila, and Celine.

#### **BRIAN ALFRED KAMMERER**

**Brian Kammerer** (CE79) passed away February 24, 2006 at his home in Salt Lake City, Utah. Born January 5, 1957 in Rapid City, he grew up at a family ranch in South Dakota. In 1979, Brian moved to Salt Lake City. He worked at Kennecott Utah Copper for more than 25 years. He is survived by his children, Kathryn and Jonathon and their mother, Kelli.

#### **AMOS SHINE LINGARD**

**Amos Lingard**, 94, a long-time Rapid City resident and retired School of Mines chemist passed away February 21, 2006. He earned his doctorate in physical chemistry from Kansas University in 1940.

#### **BOB D. MACE**

**Bob Mace** (GenE50) passed away on December 15, 2005. He was born on June 26, 1926 in Iowa. After graduation, Bob worked in Florida, Arkansas, and South Dakota before moving the family to Montana where he eventually purchased his own business. Bob was married to Judy from 1948 until her death in 1988. He was then married to Ruth until her death. Bob is survived by his wife Helen and children Nickie, Rusty, and Laurie.

#### **RICHARD DONALD MARQUARDT**

**Richard "Kroky" Marquardt** (MinE33) passed away April 6, 2006 in Rapid City. He was born December 2, 1907 in Ft. Dodge, Iowa. While attending the School of Mines, he captained the Hardrocker football team and was a member of the Theta Tau Fraternity. Kroky was employed at

# Memorials

the South Dakota State Cement Plant for more than 40 years, retiring as Plant Manager. He was preceded in death by his first wife, Frances. He is survived by two sons, Dick and Bill, two grandsons and three great-granddaughters.

#### **THOMAS EARL MCMAHON**

Thomas McMahon (GenE38) passed away on November 10, 2005 in Lowell, Massachusetts. Tom was born February 12, 1916 in Rapid City. Thomas grew up in Hermosa, South Dakota. After graduation he served with the Corps of Engineers, U.S. Army from 1938 until 1941 in Pittsburgh. From 1943 until 1945, he was a U.S. Army Staff Sergeant and he served with the Army Intelligence Section, Corps of Engineers, in Hawaii. He also served in 1942, 1946-48 in the Omaha, Nebraska district as reports engineer. Tom moved to Butler, Pennsylvania in 1948 and he took up private practice as a civil engineer. He later was appointed to the position of Butler's City Engineer in 1953. Tom also held the distinction of being the first municipal engineer in Monroeville, Pennsylvania in 1961. He served the municipality for more than 25 years. He was predeceased by his wife Marie. He is survived by his sons John and Brian, a daughter Ojela, three grandchildren and a greatgrandchild.

#### **PAUL WESTON MISTEREK**

Paul Misterek (CE64) passed away December 13, 2005, as the result of an accident while vacationing in Mexico. He was born July 11, 1941 in Mitchell, South Dakota. Paul spent his early years in Delmont, South Dakota. After graduation, he received a commission in the U.S. Army Reserve and served two years of active duty, primarily in Germany. Upon completion of military service in June of 1966, Paul accepted a position with the Alaska Department of Highways

and began work in the Bridge Design section in Juneau. In 1967 he accepted a position in Valdez and in 1977 he became Regional Materials Engineer in Fairbanks. He retired in April 1997 and enjoyed traveling, curling, reading, cooking, and playing bridge.

#### WARREN IRVING MITCHELL

Warren Mitchell, ex-professor of Structural and Fluid Dynamics at the School of Mines from 1948-1953 passed away on March 1, 2006. He came to the School of Mines in 1948 as an assistant professor where he stayed until leaving in 1953 to take a position as a control system engineer at the had encouraged everyone to Boeing Aircraft Company in Seattle, Washington. Later assignments in the Space Division included Navigation and Controls System supervisor for the Lunar Orbiter on which the accomplishments of his system far exceeded the 90-day requirements for performance and mission life. Instead, it lasted for over one year enabling the high-resolution mapping of the entire lunar surface. Another assignment was the "flight" control system for the Boeing Hydrofoil. Mitch retired from Boeing in 1979 and he and his wife Margaret moved to Kent, Washington. An avid volunteer. Warren also was an appreciator of music. He became a member of a barbershop singing group for several years and sang the lead part in a quartet until just a few years ago. His quartet won first place honors in an international competition. He is survived by his wife of 63 years, Margaret Mitchell, a son, Steve, a daughter, Peggy.

#### **KEVIN JOHN MURPHY**

Kevin Murphy (EE87) of Westminster, Colorado passed away on April 13, 2006. Kevin peacefully finished his journey with metastasized testicular cancer in his sleep at the age of 40. Kevin was born October 14, 1965 in Brookings, South Dakota. After graduating from high school in Yankton. South Dakota in 1983. he attended the School of Mines,

where he joined Triangle Fraternity and received an Electrical Engineering degree in 1987. After moving to Chicago and taking a job with then AT&T (now Lucent Technologies), Kevin received his Masters in Electrical Engineering from Illinois Institute of Technology in 1992. He moved to Denver, Colorado in 1993 and married Patti Wiles in 2005. He stayed employed at Lucent Technologies from 1987 to his death. Kevin was a loving husband and cherished son and brother. He is survived by his wife, Patti, his mother Joyce, four siblings, and several nieces and nephews. Kevin donate to cancer research and survivor support organizations, specifically the LIVESTRONG Lance Armstrong Foundation. Kevin was an avid outdoors enthusiast and a close friend to many alumni. More than seventy alumni. friends. and family recently rendezvoused at Lower Cataract Lake near Heeney, Colorado to remember Kevin during a gathering in his honor. Kevin is missed and loved by all and touched everyone in his own unique, fabulous way.

#### **GORMAN R. NELSON**

Gorman Nelson (M.S. Math63), long time resident of Brookings and former professor at South Dakota State Uniersity (SDSU), died September 14, 2005. Gorman was born December 12, 1911 in Watertown, South Dakota. He began his career as a mathematics and physics teacher at Canton High School in 1934, and retired from SDSU as a mathematics professor in 1973. During WWII he served as a research engineer for the U.S. Air Force in Minneapolis, Indianapolis, and Oak Ridge, Tennessee. He was also a member of the mathematics faculty at Augustana College. He held patents on various devices and tools utilized by the Air Force in its training facilities; and while at SDSU, authored a mathematics textbook. In his retirement, he and his wife Dorothy, developed The Country Shop outside of

Brookings, where, for 22 years, he designed and fabricated beautiful pewter ware. He is survived by his wife Dorothy, son David, and daughter Sonja, five grandchildren and five grand-grandchildren.

#### **NELAN FREDERICK PETERSON**

**Nelan Peterson** (EE56) passed away on October 11, 2005 in Louisville, Colorado. He was born December 11, 1929 in South Dakota. Nelan retired as Vice President and General Manager of Astro Aerospace Corporation in Boulder, Colorado.

#### HAROLD WILLIS RICHARDSON

Harold Richardson (MetE41) passed away on December 5, 2005. Harold retired from US Steel with over 39 years of service. Harold is survived by his wife Florence, son Roger and daughter Gwen. Gwen wrote that her father "was very proud that he was a Mines graduate" and she has "even been up on the Hill to see his name."

#### **THOMAS EUGENE RICHL**

Thomas Richl (CE50) passed away on July 10, 2006 after a year long battle with ALS. Born in Nebraska, Thomas lived there until he joined the US Navy at age 17. He served on several ships in both the Pacific and Atlantic war fronts until being honorably discharged in 1945. During his senior year, he married his wife of 56 years, Eileen. After graduation, Thomas moved to Seattle to work for the Boeing Co. and continued working for 26 years as a Structures Engineer until 1978. While at Boeing, he learned to fly single engine airplanes and obtained a pilots license. In 1968, he attained a **Professional Engineering** Certificate and starting private consulting. He designed his retirement home at Colony Surf Club near Hoodsport, Washington and completed construction in 1974. He is survived by his three children: Michael, Thomas Jr. and Darlene.

#### **DAVID LAUREL ROBBINS**

David Robbins (CE61) died peacefully in his sleep at his home in Wasilla, Alaska on May 22, 2006. He enrolled to study engineering at the School of Mines in 1953. In 1955 he decided to take a break from school and went up to Alaska to work. During this time he was drafted into the Army and was sent to Korea where he met and married his wife. Two years later he returned to South Dakota to finish college. He was a member of the Theta Tau Fraternity. Upon graduation, David started working for the U.S. Army Corps of Engineers. His career took him to Florida, Okinawa, Hawaii, and Alaska, where he retired as Chief of Construction for the Alaska Division in November 1990. Dave received many commendations including the Bronze Order of the De Fleury Medal. He is survived by his wife Mija, son Everett, daughter **Kim Vik** (GeolE86), and five grandchildren.

#### VERNE WAYNE SIMKINS

**Verne Simkins** (MetE41) passed away on April 17, 2006 in Homestead, Florida. Verne was the youngest of five children, four of whom graduated from college thanks to a determined and hard working mother and in spite of the untimely death of his father. After graduation, Verne worked 30 years at St. Joe Lead Company near Pittsburgh, Pennsylvania. Verne and his wife Laura had four children. They had passion for dancing and they also square danced. In 1989, he and Laura retired and moved to Florida to help raise their grandson and stay warm in the winter.

#### FORD CARL SODERGREN

**Ford Sodergren** (MetE47) was born on April 30, 1916 in Ishpeming, Michigan. He passed away on January 5, 2006, in Fort Richey, Florida where he moved after retiring from General Motors in Dayton, Ohio.



#### PHILIP HAROLD THOMPSON

**Philip Thompson** (EE47) Passed away December 7, 2005. He was born on October 4, 1923 in Cando, North Dakota. Phillip was preceded in death by his first wife Mary. He is survived by second wife Kathleen Cork, son Bruce, daughter Linda, and grandchildren.

#### **GENE GILBERT TURNER**

**Gene Turner** (ME61) passed away August 6, 2004 in Noblesville, Indiana. He was born May 26, 1932 in Nebraska. Turner was a veteran of the United States Air Force. He worked at Dow Chemical as a product manager. Survivors include three daughters; Jane, Amy, and Diane; two sons, Bradley and David; and 11 grandchildren. The family recently informed the Alumni Office of Gene's passing.

#### **ORAL VANBUSKIRK**

**Oral VanBuskirk** (ChemE51) passed away April 29, 2005 in Wilmington, Delaware. He had a 20-year career with DuPont.

#### HAROLD RICHARD JAMES WALSH

**Harold Walsh** (CE49), 85, of Sun Lakes, Arizona, passed away July 19, 2005. A World War II veteran, he served over 20 years in the Army Air Corps and US Air Force as a pilot and engineer. Harold was director for Research and Training Center at Indiana State Highway Commission. Later he worked for the Arizona Department of Transportation. He is survived by his wife Phyllis; children Dick, Kathy, Patti, and Ken; and ten grandchildren.

#### WALTER LEO WEBER

**Walter Weber** (CE51) passed away August 26, 2005. In 1972, Walter was elected president and director of Aviquipo, Inc., a supplier of aerospace products world-wide. Prior to that, Walter worked for 20 years at Lockheed, and was assistant manager of the S-3A

# Memorials

program. He held senior management and engineering positions on a number of other aircraft programs, and represented the Lockheed Corporation in Washington, D.C. from 1960 to 1965. He did postgraduate work at University of California-Los Angeles and University of Southern California in aerospace sciences, and participated at the University of California's executive management course at Berkeley. Walter worked for Lockheed in California as Vice President of Government Marketing. He is survived by his wife Glenna and children Jeanette and Sharon.

#### **DIGLEY ROLLIN YOUNG**

The Alumni Association was recently informed that **Digley Young** (EE31) has passed away. Digley was born June 27, 1906 in Sioux City, Iowa and had lived in Deadwood, South Dakota.

#### TO: FROM: SUBJECT:

SDSM&T Alumni Paul Gnirk, SDSM&T Alumni Executive Vice President Amendment to the Constitution of the SDSM&T Alumni Association (see ballot on inside back cover) October 1, 2006

DATE:

#### **INTRODUCTION**

On July 28, 2006, at a scheduled meeting, the Board of Directors approved by unanimous vote a motion to propose an amendment to the Constitution of the SDSM&T Alumni Association, adding the position of Immediate Past President as an officer, and member of the Board of Directors and the Executive Committee. As required by Article VII of the Constitution, this proposed amendment must be submitted to the members of the Alumni Association for their concurrence or rejection.

An Immediate Past President would be elected by the Board of Directors in the spring of each year, together with the other officers and Board members. The Immediate Past President position would help to provide continuity of leadership for the SDSM&T Alumni Association. The motivation for adding this position is due to a desire by the Board to enhance Alumni communication and involvement.

#### AMENDMENT

(The underlined phrases below are the amendments to the appropriate Sections of the Constitution)

Amend Section 1 of Article III to read: "Section 1. OFFICERS. The officers of the Association shall consist of a President, President Elect, <u>Immediate Past President</u>, Executive Vice President, one Area Vice President from each Area, Managing Director, Secretary, and Treasurer."

Amend Section 2 of Article III to read: "Section 2. BOARD OF DIRECTORS. There shall be a Board of Directors composed of the President, President Elect, <u>Immediate Past</u> <u>President</u>, Executive Vice President, Treasurer, Managing Director, and twelve (12) Regular Members."

Amend Section 9 of Article III to read: "Section 9. EXECUTIVE COMMITTEE. The Executive Committee will consist of the President, President Elect, <u>Immediate Past</u> <u>President</u>, Executive Vice President, Treasurer, and Member at Large from the Board of Directors.

Amend Section 1 of Article IV to read: "Section 1. OFFICERS. The duties of the President, President Elect, <u>Immediate Past President</u>, Executive Vice President, Secretary, and Treasurer of the Association shall be those commonly pertaining to such offices and such other duties as the Executive Committee may from time to time prescribe. They shall also be the officers of the Executive Committee and of the Council."

Amend Section 1 of Article V to read: "Section 1. The President, President Elect, and <u>Immediate Past President</u> of this Association will be elected on an annual basis in the manner prescribed by the By-Laws."

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# School of Mines



The School of Mines welcomed more than 150 students to campus for the 14th SD GEAR UP Honors Program, a six-week residential program that prepare American Indian students to be successful in the college setting.



Dunham Field at O'Harra Stadium was the setting for the 2006 Boys and Girls South Dakota State High School Track and Field Meet.

# Reaching Out



High school students learned first-hand what engineering is all about at the Youth Engineering Adventure, a residential summer camp where students participate in hands- on projects and activities.



The School of Mines hosted "A Day with Dr. Alan Berkowitz," a community conference sponsored by the South Dakota Network Against Family Violence and Sexual Assault and the Campuses Community Prevention Coalition, a collaboration between National American University, South Dakota School of Mines and Technology, and Western Dakota Technical Institute.

# **Personnel** Changes

#### Welcome:

**Joseph G. Zogg**, exempt, assistant football coach/video coordinator, athletics (8/24/06)

**Bradley E. O'Brien**, CSA, computer support specialist, ITS (8/23/06)

**Bradley D. Blume**, exempt, sports information director, intercollegiate athletics (8/21/06)

**Kellie A. Kirk**, CSA, secretary, chemistry (8/17/06)

**Michael A. Keegan**, exempt, coordinator, student activities and leadership center (8/17/06)

**Randy R. Sauter**, faculty, instructor, civil and environmental engineering (8/15/06)

**Dr. Wael M. Fathelbab**, faculty, assistant professor, electrical and computer engineering (8/15/06)

**Dr. Jianbin Wei**, faculty, assistant professor, mathematics and computer science (8/15/06)

James G. Rhodes, faculty, instructor, chemical and biological engineering (8/15/06)

James A. Nelson, faculty, instructor, mathematics and computer science (8/15/06)

**Dr. Yan Zhan**g, faculty, instructor, chemistry (8/15/06)

**James G. Parsons**, faculty, instructor, chemistry (8/15/06)

**Dr. Scott Phillip Ahrenkiel**, faculty, assistant professor, nanoscience and nanoengineering (8/15/06)

**Dr. Michael K. West**, faculty, assistant professor, materials and metallurgical engineering (8/15/06)

**Dr. Gerald Grellet- Tinner**, faculty, assistant professor, geology and geological engineering (8/15/06)

**Dr. Michael P. Terry**, faculty, assistant professor, geology and geological engineering (8/15/06)

**Dr. Linxia Gu**, faculty, assistant professor, mechanical engineering (8/15/06)

**Dr. Justin P. Meyer**, faculty, assistant professor, chemistry (8/15/06)

**Dr. Rajesh K. Sani**, faculty, assistant professor, chemical and biological engineering (8/15/06)

**Dr. Zhengtao Zhu**, faculty, assistant professor, chemistry (8/15/06)

**Prince Y. Amattoe**, exempt, admission counselor, admissions (8/9/06)

**Michael A. Cook**, CSA, computer support specialist, ITS (8/7/06)

**Richard K. Lutes**, CSA, athletic equipment manager, intercollegiate athletics (8/7/06)

**Anthony K. Amert (EE04)**, exempt, research engineer II, electrical and computer engineering (8/1/06)

**Ronald C. Marshall**, exempt, technical assistance provider, civil and environmental engineering (8/1/06)

**Cartier Walker**, exempt, assistant football coach/strength and conditioning coach, intercollegiate athletics (8/1/06)

Kristina M. Grinnell, exempt, chemical materials manager, chemistry (7/31/06)

**Margaret A. Smallbrock**, exempt, chemical and instrumentation specialist, chemistry (7/31/06)

**Dr. Duane L. Abata**, faculty, dean, College of Engineering and professor, mechanical engineering (7/1/06)

**Charles D. Claymore**, exempt, director, admissions (7/1/06)

**Dr. Yingsong Zheng**, exempt, research scientist I, materials and metallurgical engineering (7/1/06)

**David L. Turner**, CSA, programmer/analyst, admissions (6/19/06)

**Laura L. Baker**, exempt, hall director, Peterson Hall (6/15/06)

**Roberta L. Rancour**, CSA, senior secretary, admissions (6/13/06)

**Lonnie L. Messick**, exempt, assistant football coach/wellness center supervisor/intramural assistant, athletics (6/12/06)

**Anita C. Brenneman**, CSA, accountant, business and administration-administrative services (5/1/06)

**Dr. Ming Tian**, exempt, visiting research scientist I, chemistry (5/1/06)

Jamie M. Hillyer, CSA, secretary, business and administration – business services (4/24/06) Zane D. Tibke, CSA, communications network analyst, ITS (4/5/06)

**Dr. Duane C. Hrncir**, faculty, dean, College of Science and Letters and professor, chemistry (3/6/06)

#### **Farewell:**

Sara B. Freng, CSA, library (8/23/06)

**Heidi R. Peterson**, CSA, chemistry (8/18/06)

**Dr. Glen A. Hansen**, faculty, mathematics and computer science (8/15/06)

**David R. Coleman IV**, faculty, chemistry (7/28/06)

**Paula M. Demars**, CSA, chemistry (6/30/06)

Jaque M. Mann, exempt, chemistry (6/30/06)

**Christina M. Schmit**, exempt, Student Activities and Leadership Center (6/30/06)

**Merle D. Swenson**, exempt, civil and environmental engineering (6/30/06)

Jason R. Ward, exempt, electrical and computer engineering/CAMP (6/30/06)

**Charles R. Henris**, CSA, Center for Accelerated Applications at the Nanoscale (6/16/06)

**Dr. Wei Chian**, faculty, chemical and biological engineering (5/31/06)

**Travis Everhart**, exempt, athletics (5/31/06)

**Leah M. Novicki**, exempt, athletics (5/31/06)

**Cheryl L. Holt**, exempt, residence life (5/31/06)

Jason J. Kusler, CSA, athletics (5/31/06)

**Dr. Dale E. Arrington**, faculty, chemistry (5/19/06)

**Dr. Gale A. Bishop (Geol65)**, faculty, geology and geological engineering (5/19/06)

**Harold Carda**, faculty, mathematics and computer science (5/19/06)

**Dr. Li Chen**, faculty, electrical and computer engineering (5/19/06)

**Kristopher Jensen**, faculty, electrical and computer engineering (5/19/06)

**Dr. Alvis L. Lisenbee**, retired faculty, geology and geological engineering (5/19/06)

**Dr. John C. Quinn,** faculty, social sciences (5/19/06)

**Dr. Scott A. Williams**, faculty, chemistry (5/19/06)

**Shawn R. Moulton**, exempt, residence life (5/15/06)

**Cheryl M. Arguello**, CSA, multicultural affairs (5/12/06)

**Patrick W. Baker**, exempt, athletics (5/8/06)

**Bonnie L. Cecil**, CSA, Surbeck Center (4/28/06)

**Joseph L. Piette**, CSA, civil and environmental engineering (4/28/06)

**Dr. Alan J. Anderson**, exempt, materials and metallurgical engineering (3/31/06)

Valerie F. Nathan, CSA, business and administration-business services (3/24/06)

Changes

Personnel

# Personnel Changes

#### **Change:**

**Dale N. Skillman**, exempt, director, technology transfer (7/1/06) (remains faculty, assistant professor, mechanical engineering)

**Kelli R. Shuman**, from CSA, personnel assistant, human resources, to exempt, assistant director, human resources (7/22/06)

**Dr. James E. Martin (Geol71)**, from professor emeritus, geology and geological engineering, to faculty and paleontology program coordinator, geology and geological engineering (5/1/06)

**Ellen I. Haffner**, from CSA, secretary, admissions, to CSA, secretary, civil and environmental engineering (5/1/06)

**Patricia L. Casey**, from temporary CSA, university and public relations, to CSA, secretary, Surbeck Center (4/17/06)

**Scott R. Hall**, from CSA, library clerk, Devereaux Library, to CSA, library technician, Devereaux Library (2/28/06)

Jacqueline R. Anderson, from CSA, accountant, business and administrationadministrative services, to CSA, budget analyst, business and administration, administrative service (4/3/06)

### **Mines Info Nights**

For each event there will be a reception for high school students and family members at **6:30 p.m.** (Alumni are welcome)

Colorado

· Fort Collins - November 9

Minnesota • Bemidji - December 19 • Eden Prairie (Minneapolis) - November 21

Montana • Billings - November 9

Nebraska • Omaha - December 10 • Scottsbluff - December 7

Nevada • Las Vegas - October 19

North Dakota · Bismarck - October 26 · Fargo - December 28

South Dakota

Aberdeen - November 14
Pierre - December 14

• Sioux Falls - November 16

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### Calendar of Events

Visit the on line calendar for details: http://sdmines.sdsmt.edu/sdsmtcalendar For details about K-12 events: http://sdmines.sdsmt.edu/SDTechK-12 For details about athletic events: www.gorockers.com For details about adult and professional educational opportunities: http://sdmines.sdsmt.edu/learn

November 3-4 Family Weekend November 4 Visit Mines Day Communiversity Day Football - Dickinson State, 2 PM November 10 Veteran's Day - No classes November 22 - 24 Thanksgiving Break - No classes November 29 - Dec 2 Volleyball NAIA National Tournament **December 6** Parade of Trees - Surbeck Ballroom, 3-4 PM December 11 - 15 Final Exams December 13 South Dakota Board of Regents Meeting on campus December 16 Fall Commencement Hanukkah begins December 25 Christmas Day Holiday December 26 - January 1 Kwanzaa January 1 New Year's Day Holiday January 11 All-Campus Planning Session January 15 Martin Luther King Jr. Holiday - No classes January 16 Registration Spring Orientation Evening classes begin, 4 PM January 17 Spring classes begin January 17 Payment Day January 26 Grubby's Birthday - King Center, 5:30 PM February 14 Valentine's Day February 15 Matters of the Heart Health and Wellness Fair - Surbeck Ballroom, 10 AM - 3 PM February 18 - 24 Engineers Week February 22 Order of the Engineer and Outstanding Recent Grad Luncheon - Ballroom, 11 AM March 5 - 9 Spring Break - No classes March 11 Daylight Saving Time Begins (Turn clocks ahead) March 18 - 24 Greek Week March 30 - 31 Cultural Expo - Surbeck Ballroom April 6 Good Friday - No classes April 8 Easter April 9 Easter Monday - No classes April 3 Honors Convocation - Ballroom, 11 AM April 28 Junior Preview Day May 5 Cinco de Mayo May 7-11 Finals Week **May 12** Spring Commencement

# SDSM&T Alumni

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