



Black Diamonds

From the
 Department of Mining Engineering
 COLLEGE OF ENGINEERING AND MINERAL RESOURCES
 WEST VIRGINIA UNIVERSITY

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James "Buck" Harless Presented the Spring 2006 Poundstone Lecture "Success"

On April 20, James "Buck" Harless presented the Poundstone Lecture to a packed house of students, professors, alumni and friends. His lecture was simply titled, "Success", and he is certainly uniquely qualified to discuss this topic. Buck was born 86 years ago in Logan County, West Virginia (WV). The intervening years have seen him grow a single sawmill into a multi-million dollar, multi-national company (International Industries) in the timber, coal and land businesses. Along the way, he earned six honorary doctoral degrees from higher institutions in WV and KY, including WVU, became a visionary leader in the WV lumber and coal industries, and has generously given back to his local and state communities as a distinguished philanthropist.

At the start of the lecture, Buck presented three important questions for the students to ponder: 1) What does success mean? 2) How do we know that we have achieved success? and 3) Who determines if a person is successful? To assist the students in their pursuit of success, and the meaning of success, Buck proceeded to relate a number of his personal thoughts and experiences in the area. First, Buck noted that there are different areas for success: social, personal and business, and

that these areas are very inter-related. Buck then credited his foundation for success to three specific aspects of his childhood: 1) a very loving and nurturing home, which in Buck's



James "Buck" Harless at the podium during his lecture.

case was the result of his aunt who raised him after his mother passed away when he was four months old; 2) a supporting community, including teachers and coaches who taught him

that success often requires hard work and sacrifices; and 3) a strong faith to provide spiritual and moral guidance.

Another secret of success is recognizing opportunity. Specifically for the students, Buck noted that education is an opportunity and is important to maximizing an individual's opportunities. Throughout his career, Buck related how he had advanced his businesses interests by buying and selling his various assets as the best opportunities presented themselves. Buck wanted to make sure that the students understood that business is good for society. Specifically, he stated that "no institution in society contributes more to our well being than economic enterprise. The finer aspect of society such as schools, churches, etc., are only possible when businesses make a profit". And Buck certainly understands this (See Harless, Page 2)

MAJOR STORIES

- James "Buck" Harless presented Poundstone Lecture.
- Raymond Blower Endowed Scholarship to Mining Engineering Program.
- Marshall Miller awarded with WVU Honorary PhD.
- Dr. Su received the first SME Syd S. Peng Ground Control in Mining award at 2006 SME Annual Meeting.
- Visiting Committee discussed curriculum and recruiting Initiatives.
- Alumni feature articles & news.
- Alums, faculty and students received awards and scholarship at Spring Award Banquet.

Raymond H. Blowers Endowed Scholarship

The Department of Mining Engineering is the recipient of a new undergraduate scholarship named, **The Raymond H. Blowers, Jr. Scholarship**. The scholarship was established by his will in his estate. Raymond H. Blower, Jr. was a 1951 Mining Engineering graduate of the

former School of Mines of West Virginia University (WVU).

The undergraduate scholarship will give first preference to qualified Ohio residents enrolled in the Mining Engineering Program at WVU. If there are no qualified Ohio residents, then the scholarship is open to quali-

fied Mining Engineering students from all other states. Mr. Blowers was a resident of Gallipolis, Ohio and devoted the major portion of his professional life to the electric power industry. Mr. Blowers died in May 2004.



Marshall Miller Honorary Doctoral Degree, WVU



Marshall S. Miller (right) received the Honorary Doctoral Degree from David C. Hardesty, Jr., WVU president at the Commencement.

Marshall S. Miller, a member of the Visiting Committee, Department of Mining Engineering, WVU, was awarded Honorary Doctoral Degree at the 137th Commencement WVU on May 14, 2006.

Marshall S. Miller started his own company in 1976, Marshall Miller and Associates, Inc., and he is chairman and CEO of the company. The company has since become one of the largest consulting firms for the coal industry in the United States, and has offices in eight states as well as in China, South America, and Canada. It has been recognized as a top engineering and design firm by Engineering News-Record, and Mr. Miller has been honored as "Entrepreneur of the Year" by various groups.



James "Buck" Harless, David Hardesty, president, WVU, and Dr. Syd S. Peng, Chair of Mining Engineering Department, CEMR, WVU.



Dean Gene Cilento, CEMR, welcomes and Presents gifts to Mr. Harless.



The audience packed the auditorium to listen to Mr. Buck Harless presenting the Poundstone lecture.

(Harless from Page 1)

connection personally having donated considerable time and money to society.

At the end of the lecture, Buck answered one of his original questions by suggesting that maybe success is measured by the person himself. And in closing, he charged the students with maintaining a good work ethic and promised that there is still a lot of opportunity available for those that are willing to work hard.



James "Buck" Harless received the crystal trophy from Dr. Syd Peng, Chair of Mining Engineering Department.

Department Visiting Committee Met to Discuss Curriculum and Recruiting



Attending the Visiting Committee Meeting were (from left): Stanley Suboleski, Federal Health & Safety Review Commission; John Murphy (Chair), University of Pittsburgh; James Boyd, J. T. Boyd Company; Bill Raney, WV Coal Association; Michael Peelish, Foundation Coal; James Corsaro, Penn Virginia Resources; Ron Stovash, CONSOL Energy; Jeff Wilson, Wilson Energy Advisors; Jeff Kelley, ICG; Jim Laurita, Mepco Inc.; and Marshall Miller, Marshall Miller and Associates.

The Department Visiting Committee met on April 20, 2006. Among the issues discussed were the BSMInE curriculum, recruiting, and computer support and space. The Committee explored the possibility of additional courses on "business aspects" of the energy industry, and reviewed the progress of high school recruiting program and college computer support and the need for more space for Mine Design Laboratory.

by Steve Tadolini (PhDMinE '03),
Chair, SME S. S. Peng Ground
Control in Mining Award

Dr. Daniel Su Received the First SME Society Syd S. Peng Ground Control in Mining Award

The Syd S. Peng Ground Control in Mining Award is presented annually to recognize outstanding professionals who have demonstrated insight and understanding of ground control issues by developing concepts, theories or technologies that have been adopted by the mining community or the successful implementation of ground control designs or practices. The first recipient was **Dr. Daniel W. H. Su (PhDMinE, '82)**, Sr. Geomechanical Engineer of CNX Coal Operations' Engineering Group, CONSOL Energy who received the award at the 2006 Annual SME Meeting in St. Louis, MO.

The Syd S. Peng Award was presented to Dr. Daniel Su in recognition of his distinguished record of integrating theoretical and technical solutions to solve real-world operational ground control problems. Dr. Su has spent nearly 35 years in the



Dr. Syd S. Peng, Chairman and C. T. Holland Professor, West Virginia University, presenting SME Syd S. Peng Ground Control in Mining Award to Dr. Daniel Su.

coal business joining CONSOL Energy in 1986 where he serves the vital role in overseeing all aspects of geotechnical design and problem solving for 14 underground complexes and 13 longwalls. Dr. Su has published and presented 14 technical papers at the International

Conference of Ground Control in Mining (ICGCM) that highlighted his expertise on complex ground control issues such as longwall geomechanics, subsidence, shield design, pillar design, entry and floor stability, roof and rib support, horizontal stress, and in situ stress meas-

urement.

Dr. Su has been a pioneer in the development of accurate numerical modeling software programs, horizontal stress concentrations and the concept of stress shadowing, the estimation of large-scale coal pillar strengths, and hydraulic fracturing techniques to reduce frontal abutment stresses for longwall face supports. Dr. Su is invaluable to the CNX COAL operations staff and consulted when changes in ground conditions occur, when mining scenarios are being modified, and for all standing and intrinsic support system designs. Dr. Su's impact can be summarized by a quote from a Mine Superintendent who stated, "When Daniel talks, everyone listens".

Note: For Award selection criteria, visit, <http://www.smenet.org/SCRD/SCRDViewAward.cfm?BUID=0&TypeID=44>

Letter from Josh Moran in Northeastern Iraq

Jan 6, 2006
Dr Peng, Staff and MinE Students:

Josh Moran here, in northeastern Iraq. Here is what I drive every day, an uparmored freightliner. I haul all sorts of stuff like vehicles, lumber, parts, etc., on a 40 ft flatbed trailer. This is what I gotta wear when we go out the gate of my base. About 25 lbs of protection you see there. I am doing great - keeping busy and making the time fly. I have 9 more months to go. Thanks for all of your thoughts and prayers. Our prayers go out to the families of those miners. I am anxious to get back into the program so I can help make a difference in the



industry. There's always room for improvement. Take care, see you in spring '07.

Sincerely,

Josh Moran



Editor's Note: Josh, a native of Fairmont, WV, is a junior in mining engineering. He enlisted and went to Iraq in Spring 2005. Throughout his active duty, he has been in correspondence with Mining Engineering faculty and students through his advisor Dr. Syd S. Peng. Here is his latest letter report. His e-mail is: bugsyman1060@aol.com

Alumni

- **Gerald Clark, Sr. (BSEM '53 MSEM '60)** passed away in March 2005.
- **Douglass Fala, P.E. (BSMinE '99)** was promoted to the superintendent, Harris #1 Mine, Eastern Associated Coal Corp., a subsidiary of Peabody Energy.
- **Joseph Ferrell, P.E. (BSEM '81)** resides in the Strasburg, Virginia area. He is the Vice President/General Manager of O-N Minerals, Inland Operations.
- **Gerry Finfinger (PhD '03)** has been appointed interim director of NIOSH - Spokane Research Laboratory, Spokane, WA. Gerry has been the chief scientist for NIOSH Mine (See Alumni News, Page 4)

by **Richard W. Lee**
(BSEM, '47)

A Great Number of Happy Memories at WVU

Thanks for the Memories! This was a popular song years ago. I thank WVU for a great number of happy memories. As you get older the happy memories erase the bad situations that occurred during your life in school and work. Why do we alums love WVU so reverently? I think it is due to the time spent getting a degree to be able to be a proficient engineer. The fellowship with persons from different areas of the state and elsewhere, the memories of professors, classes, cramming for finals, Thanksgiving and Christmas breaks, and the graduation ceremonies were happy and equally sad times as we parted company with friends and the University.

I started WVU the fall of 1938, but spent 40 months in service. The Morgantown Post stated that over 3,000 students enrolled at WVU that fall. The tuition at that time was \$40.00 per semester, used books pur-



Richard W. Lee at 2006 CEMR Emeritus Club Luncheon.

chased at the book exchange were \$10.00, and cab fees were \$2.50 for the semester. I worked in and around a coal mine earning \$4.40 per day. Nine months pay covered two semesters tuition. The rest helped with incidental needs.

We, as freshmen, had to purchase and wear at all times, a blue and gold beanie and tie. How about wearing the woolen army uniform to ROTC classes and how they made you itch in the fall and spring heat!

Several professors were re-

membered for their care, teaching, and antics; Professor Boomslder, Ed Jones, W. W. Hodge, and Professor Davis, and Renolds, all come to mind. Ask any emeritus engineer who their favorite professor was and 99 times out of 100 it would be "Big Cather" or "Screaming Carl", one and the same. Most remember him for making us better students and good engineers.



Richard Lee in WVU Geology class: Doing dip and strikes in Decker's Creek (1939).

Do you remember Ernie's Lunch Room across from the Armory where you could eat and check out the girls from Women's Hall? Incidentally, you had to have your date back in Women's Hall by 10:00 p.m. or you were locked out. Many of us married the girls we met and had long and happy lives with them. Remember the occasional panty raids? Saturday nights were fraternity dances at the Armory or the Sadie Hawkins dance when the women invited the men. The ROTC Scabbard and Blade held an annual dance. The queen was the most popular girl on campus.

In those days we had many freezing rains and snowstorms. Students could be found sled riding on North High Street, boys trying to ski on barrel staves, and the popular snowball fight between the Delts and the Tekes. Football players were standing outside Men's Hall on North High Street in zero degree weather wearing only Tee shirts. Show Offs!

2006 CEMR Emeritus Club Luncheon for '40 and '50 Emeriti

On April 28, 2006 CEMR held its Emeritus Club Luncheon in Morgantown to honor the Emeriti from both the 1940's and 1950's.

The Mining Engineering Department saw four alums return for the event. Seated at Chairman Syd Peng's table were Edmund Bookman, with his wife Jane, Richard W. Lee, and Fred Miller, with his wife Mary. Also present at an adjacent table was Paul Farmer, with his wife Marlene.

Edmund Bookman (BSEM, '52) said, "I graduated from the School of Mines on June 2nd 1952, by June 15th I was in the army. Bookman began a lifelong career in the army. He did a tour in Korea and two in Viet Nam. He and his wife Jane resides at Wil-



Fred Miller at 2006 Emeritus Club Luncheon.

ilmington, North Carolina.

Paul C. Farmer (BSEM, '56) remembered WVU that at the time all males were made to take ROTC. Later he pursued a law degree at George Washington and still practices procurement law at this time.

Richard W. Lee (BSEM, '47)

took the trip from his home in Fairmont, WV. He shared many happy memories of his time at WVU (See the article above). He has 39 years of underground mining experience. "I wouldn't trade it for the world. I loved mining."

Fred Miller (BSEM, '56) described a difficult two years as he began school. He says, "My freshman and sophomore year I worked in a coal mine at night and went to school during the day." He credits his wife Mary with helping him get through those years. He continues, "I've worked just about every position, from laborer to supervisor." Fred and Mary Miller returned to Morgantown from Louisiana to retire and have certainly been enjoying this banner year in Mountaineer sports.

(Alumni News from Page 3)

Health & Safety. So this is an additional duty for him.

- **Jonathan Gordon (BSMinE '06)** Is working on Tunnel Ridge project this summer for Alliance Resources in Triadelphia, WV. Jon is planning to attend Law School this coming Fall.
- **Ron Hite (BSEM '81)** has been promoted to chief operating officer, Asian American Coal, Inc. in Beijing, China.
- **William Mark Hart (MSEM '95)** has been appointed president of West Hawk Development, an exploration and mining company located in Vancouver, Canada.
- **Gary Jarrell (BSEM '80)** stopped by a couple of times to visit former advisor Dr. Syd Peng, and MinE faculty. His son, (Alumni News, Page 5)

Charles McGlothlin, Jr., Received 2006 ASSE Educator Award

Charles W. McGlothlin, Jr., was the recipient of 2006 William E. Tarrants Outstanding Safety Educator award, from the American Society of Safety Engineers (ASSE). The recipient of this award is recognized for his contribution to the education in the occupational safety, health and environmental field, and the Society. Dr. McGlothlin received his B.S. in 1966 and M.S. degrees in 1968 in Mining Engineering from West Virginia University, and his Ph.D. in Education and Human Resource Studies at Colorado State University. Dr. McGlothlin is the Department Head and Assistant Professor in occupational safety and health program, Oakland University located in Rochester, Michigan. Charles is also the President of the ASSE Greater Detroit Chapter. He was also voted for the safety professional of the year in 1997.

Charles has 25 years of ex-



Charles McGlothlin, Jr. (BSEM '66 and MSEM '68).

periences in safety, health and environmental related fields, with Bethlehem Steel, PA, Atlantic Richfield and Kaiser Coal Corporations, UT and KN Energy, CO. Charles began his teaching career at Trinidad State Junior College (TSJC) in 1993. During his years there he was instrumental in developing the TSJC degree for online delivery and gaining ABET accreditation, the first time a two-year college in America was given accreditation.

Jim Dean Appointed as Acting Director of WV Office of MHS&T

James M. Dean (MSEM '90) was appointed as Acting Director of the West Virginia Office of Miners' Health, Safety and Training (MHS&T), by Governor Joe Manchin on February 14, 2006, for a period of six months while the

state is searching for a permanent director. Jim is the Director of the Mining Extension Outreach Service, CEMR, at West



Jim Dean (right) was the guest speaker at Kanawha Valley Mining Institute (KVMI) Annual Meeting. He was introduced by Jim Cosaro (left), president of KVMI.

Virginia University. Jim is also a certified instructor through the U.S. Mine Safety and Health Administration.

ABET accreditation for the program was achieved this year. Dr. McGlothlin is working with School of Business Administration to offer a Master of Science in Safety Management degree.



(Alumni News from Page 4)

Jason, graduated with a BSAE in May 2006.

- **Richard L. Lewis II (BSEM '82)** is an attorney. He currently works for Steptoe & Johnson Attorneys at Law in Charleston, West Virginia.
- **Bradley C. Lewis (BSEM '78)** joined ICG ADDCAR Systems, LLC as director of marketing and sales, launching its Narrow Bench Highwall Mining system.
- **Lucas O'Neal (BSMinE '06)** is a coal preparation engineer with Peabody Energy, Charleston, MO.
- **Scott Pack (BSEM '83)** has been promoted to senior Vice President in charge of Corporate marketing and sales, Foundation Coal Corporation, and president of Foundation Energy Sales. Congratulations!

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Doug Fala Coordinated Mine Rescue Team Contest, Boone County, WV

Doug Fala (BSMinE '99), superintendent of the Harris Mine, coordinated the mine rescue team contests in Madison, Boone County, WV on June 9, 2006. Harris #1 Mine is owned by Eastern Associated Coal Corp. (EACC), a subsidiary of Peabody Energy. There are six rescue teams competing in Madison. They came from Southern West Virginia, Eastern Kentucky and Morgantown, WV, including teams from Eastern, Arch Coal and Massey Energy.

The event was a part of one of the dozens of mine rescue



Doug Fala, Superintendent of Harris #1 Mine, EACC, Peabody Energy.

team contests the Joseph A. Holmes Safety Association holds every year throughout the coalfields, with the assistance from MSHA and the State Office of Miners' Health, Safety and Training. The safety teams worked through disaster scenarios in annual competitions which help mine rescue teams sharpen their skills to do the things they need to do underground during an emergency.



Making A Gift to the MinE Department

Thinking of making a gift to benefit our Department in your will, living trust, IRA, or other manner? If so, the proper wording is very important to ensure that your gift works out the way you intended.

Have your attorney include a provision directed "to the West Virginia University Foundation, Inc. (i.d. #55-6017181) to benefit the Department of Mining Engineering in the College of Engineering and Mineral Resources." Your gift provision can provide for the **creation of an opportunity fund, a faculty development fund, a scholarship** — whatever you choose. It will help us in an important way to further our educational, research and service mission.

If you would like further assistance with your gift plans, call Bob Bragg, CEMR at (304) 293-4821 Ext 2240, or Syd Peng, Department Chair at (304) 293-7680 Ext 3301.

Reflections on My Experience as a Mining Engineering Student

by **Samantha Stahle**
BSMinE '06

When I graduated high school I thought I wanted to be a civil engineer "when I grew up"... needless to say, I was wrong. As most freshmen do, I changed my mind. I was impressed by the scholarships that were awarded for mining engineering. I could try it, and if I didn't like it I could always try something else. But obviously, I stayed. At first I wondered what I had gotten myself into, I was outnumbered being one of only two girls in the Mining Engineering Department, and completely out of my element, but for some reason I was drawn to it.

The Department and SME Student Chapter provide students



Samantha "Sami" Stahle

first hand exposure to the mining industry. We are able to interact with industry representatives and establish lasting relationships, whether through school functions or summer internships. We feel welcome and are able to make our place in the mining world.

After my freshman year I took an internship with Pennsy Supply, Inc. in Harrisburg, PA. This subsidiary of OldCastle Materials Group is one of the largest aggregate producers in central PA. I worked in the quality control lab as a technician the first summer and as an operations intern the second summer. I was able to experience how a quarry operation functions; from exploration drilling, mine planning, blasting, haulage, and screening plant operations. The third summer, I thought that it would be a good idea to do an internship with a coal company. I took a summer internship with MEPCO, Inc., Morgantown, WV, with Mr. James Laurita, Jr., President, and Brian Osborn, Senior Mining Engineer. My

responsibilities ranged from doing mine plans to surveying, and mineral tax work. I am thankful for the opportunity that they gave me; I learned so much and was able to apply what I had learned in the classroom.

The time that I spent at WVU prepared me for the mining engineering career that I am starting at MEPCO, Inc. as a staff engineer. I feel as though not only have I come away with a satisfying education and degree in Mining Engineering but also with lasting relationships within the Mining Engineering Department. So a big thank you to all that have helped me along the way, I couldn't have achieved my goals without your help and support over the past four years.

Touring Mountain Laurel Mine Complex, Logan County, WV

Mountain Laurel mine complex is Arch Coal's newly developing mine located outside of Sharples, Logan County, WV. Mining Engineering students and faculty visited the mine courtesy of Calvin Kidd and Arch Coal. The new mine has two continuous mining sections to extract Alma seam coal. The Mountaineer II longwall mine is under development and will begin production of Cedar Grove seam coal in 2007. The ROM coal belt conveyor from underground to surface has a 12 degree 1600 ft long slope. Jeff Roberts (BSMinE '03), MinE Alum, greeted us at the mine.

Cardinal coal preparation

plant has 2,100 tph capacity. The new plant structure and equipment are already in place, but electric wiring, some piping, and exterior walls need to be completed. This makes the plant tour extremely beneficial because we can ask the guides questions and perceive the answers on-the-

scene. The plant has three modules. Each module has four coal cleaning circuits, using, a dense-medium vessel, dense-medium cyclones, spirals and a flotation column. The product quality is monitored by a gamma ray mineral analysis



system. The products are shipped on CSX rail system. The Plant will process both Alma and Cedar Grove seam coals, and multiple seam coals from adjacent Spruce Fork surface mining operations. A combined total of approximately 10 million tons clean coal product will be produced annually.

The plant and material handling facilities are uniquely capable of blending raw coals and/or cleaned products or bypassing the cleaning plant, using 4 raw coal and 4 product stacking tube stockpiles to

meet multiple market specifications.

The tour of the new underground mine, plant and surface facilities provided WVU students the experience of seeing how new technologies are applied in the field. The Mining Engineering Department appreciates Calvin Kidd and the engineers of Arch coal for their hospitality. We also thank Jim Corsaro's (BSEM, '58) invitation to attend the Kanawha Mining Institute meeting and dinner prior to the mine trip.



Shuttle is ready to go underground mine.

Spring Mineral Resources Awards Banquet

To the surprise of no one except Calvin Kidd, he received the first "industry service" award created by Kevin Rakes (BSMinE '05) and the Department. Kevin recognized Calvin's lifetime of support for WVU mining students with a commemorative plaque. Kevin recalled his anticipation of the trips to Charleston each April to attend "Continental" mine visits.

Many other students and faculty were recognized for their participation, service, and our expectations of productive and safe careers in mining. Their awards are explained in the captions below the photos.

And thanks to outstanding planning and execution, Royce Watts and Nancy Ireland provided all the Mineral Resources Alumni Chapter attendees a time of fellowship over dinner.

(Alumni News from Page 5)

- **Walter J. Scheller, III (BSEM '86)** has been named Senior Vice President of strategic operations, Peabody Energy, with responsibility for leading the company's continuous improvement initiatives and implementing standard operating procedures. Congratulations!
 - **Samantha Stahle (BSMinE '06)** accepted a job from MEPCO Co. She is a mining engineer working in the Engineering Department.
 - **Don Swartz (BSMinE '03)** was promoted to assistant shift foreman at Blacksville No. 2 Mine, CONSOL Energy in Blacksville, WV.
 - **David G. Zatezalo (BSEM '77)** is president of CAM Ohio, LLC with operating coal mines in Cadiz, OH. **Burt Garofalo (BSEM '75, MSEM '86)** is also with him as a sr. mining engineer.
 - **Hua Zhao (MSMinE 05)**, following her husband, Dr. Bo Yu (PhDMinE '05), has joined Agapito
- (Alumni News, Page 14)



Lucas P. O'Neal received the OLD TIMERS Award. Lucas is also a recipient of the Charles T. Holland Award.



Benjamin G. Worley received CAREERS in COAL Award.



Brijes Mishra and Jun Lu received Mining Engineering Faculty "Hammer" Awards.



Jonathan A. Gordon received MRAC Award.



Calvin Kidd received Best Service Award.



Dan Alexander received SME Student Chapter Outstanding Faculty Award.



Morgan Sears received the Mining Engineering Faculty "Hammer" Award.



Bryan N. Schwalm received Joy Machinery Scholarship, SME Student Chapter, and Mining Engineering Faculty "Hammer" Awards.



Samantha J. Stahle received The West Virginia Coal Mining Institute Award.

137th WVU Commencement, May 14, 2006



Attending the Commencement reception and Ceremony were: (from left to right): Lucas O'Neal, BSMinE; Dr. David Tang, PhDMinE; Dr. Felicia Peng; Dr. Syd Peng; Dr. Tom Barczak, PhDMinE; Dr. Dan Alexander, PhDMinE; Hongyan Sun, MSMinE; Dr. Yi Luo, Dr. Wahab Khair.

Bill Wooten
Sales Engineer
Minova USA, Inc.
Member of MIEB, WV

West Virginia Mine Inspector Examining Board (MIEB)



MIEB members and staff (let to right): C. A. Phillips, Hoya Clemens, Charles Justice, Bill Wooten, Tina Miller, Rick Glover and Dr. Syd Peng (Chair).

The State of West Virginia had created the Mine Inspectors Examining Board for the purpose of establishing a register of qualified, eligible candidates for appointment as mine inspectors. This five member board is appointed by the Governor with the consent of the State Senate. Two members represent the viewpoint of coal mine workers while two members represent the viewpoint of coal mine operators. The remaining member, who represents the public and sits as chairman, is the Director of the School of Mines at West Virginia University.

The state mine inspectors are under the supervision of Director (currently, Jim Dean, Acting Director) of West Virginia Office of Miners' Health, Safety and Training (OMHS&T) in Charleston. There are 65 inspectors and 12 safety instructors distributed in four regional offices: Fairmont, Oak Hill, Danville, and Welch. Among the inspectors, there are 42 underground mine inspectors, 10 surface mine inspectors, and 12 electrical inspectors. Inspectors and safety instructors are se-

lected by taking and passing the exams administered by the Mine Inspectors Examining Board (MIEB). Those passing the exams are placed in the roster in ranking order for hiring by the Director of OMSH&T. The exams are scheduled and announced state-wide, whenever needed, and consist of three components: written, hands-on, and oral interview. MIEB also reviews complaints filed by the inspectors and safety instructors.

In recent years, this board has taken the candidate examination process to a higher level under the guidance of

Dr. Syd Peng, chairman. Prior to Dr. Peng's arrival, the Board's work languished in unchanged, unimaginative examinations which did not challenge candidates. Coupled with Dr. Peng's efforts, the four remaining board members, all coming from very diverse backgrounds, have put aside differing political viewpoints in order to achieve a higher degree of excellence and to strive for better working conditions and a safer work place for all coal miners.

Hoya Clemens, chairman of the UMWA Safety Committee at the McElroy mine and Rick Glover, retired UMWA International Safety Representative,

represents the mine workers point of view. Charles Justice, President, Justice Mine Service; and Bill Wooten, Sales Engineer for Minova USA represents the mine operators' viewpoint.

These men have effectively mingled their collective 120+ years of mining experience to provide unparalleled innovations in the improved examination process. Computer programs which generate exams from a pool of questions; randomly created exams; hands on identification and use of tools and devices and video inspection exams are some of the areas this board has worked on to challenge candidates and help identify the best potential employee for the State. This board continues to push for more modern updated training and continuing education for all mine inspectors. The OMHS&T is mandated to inspect and provide assistance to all mine operators in this State. The success of this office is totally dependent upon the proper functioning of the Mine Inspectors Examining Board.

Visiting Jerry Bays, Inc. and Thomas Howard, Inc. Mt. Hope, WV



This group photo was taken in front of what once was the New River CO. office building. (Back row) The second from right is Charles Howard. Tom Howard is in front of Charles.



Mining Engineering students visited Bays Inc., and Tom Howard Inc., Mount Hope, WV on April 12, 2006. The design and consulting firms are headed by MinE alumni: Neil and Jerry Bays (BSEM '62), Tom Howard (BSEM '44, MSEM '55) and Charles Howard (BSEM '83). The photo shows the mining engineering students and faculty with Mr. Jerry Bays in his office. We would like to thank Mr. Bays and Mr. Howard for their hospitality.

Articulation Agreements : Dual Degree Majors and Feeder Programs

by *Syd S. Peng, Chair and C. T. Holland Professor*



In response to the growing needs for mining engineers and improving services to Southern West Virginia, MinE has established several articulation agreements with related majors at WVU and other West Virginia institutions as feeder programs during the 2005-2006 academic year, including WVU's Civil Engineering and Geology, WVU Tech in Montgomery, WV, and Southern Community and Technical College in Logan, WV.

BSCE-MinE Dual Degree

The Mining and Civil Engineering dual degree program requires 158 credit-hours for five years. The program combines the requirements for both B.S. degrees in mining and civil engineering. The four-year BSMInE requires 134 credit-hours while that for BSCE is 131 credit-hours. But due to

several common courses and mutual agreement of technical electives, the combined dual degree requires only 158 credit-hours and can be easily completed in five years. The recommended course schedule involves course sequencing that follows the individual programs very much. Students enrolled in the program will have to follow the recommended course sequence in order to complete both programs on schedule. Upon completion of the recommended course work, students will receive both BSMInE and BSCE degrees.

BSGEOL-MinE Dual Degree

The Mining Engineering and Geology dual degree program also requires 158 credit-hours for five years. The four-year BS degree in Geology requires 128 credit-hours. Similarly, due to several common courses and mutual agreement of technical and science electives, the combined dual degree program also requires 158 credit-hours and can be completed in five years. Upon completion of the recommended course work, students will receive both BSMInE and BSGeology degrees.

BSCE-MinE Dual Degree (4+1), and BSMInE (2+2)

Experience gained from high school recruiting in southern parts of the state during the past 10 years shows that many students believe WVU Morgantown campus is too far and too big. They prefer to stay closer to home and enroll in local colleges. In order to accommodate this concept of attending colleges, MinE developed articulation agreements with WVU Institute of Technology in Montgomery and Southern Community and Technical College in Logan.

BSCE-MinE- WVUTech.

The agreement with WVU Tech covers two programs with the Civil Engineering major: 2+2 and 4+1. The 2+2 program is, strictly speaking, a four-year BSMInE program involving 134 credit-hours. In this program, students enroll in the Civil Engineering program at WVU Tech in Montgomery for the first two years, and then transfer to WVU in Morgantown for the last two years. Upon completion of the program, students will receive a BSMInE degree from WVU.

The 4+1 program is a dual degree program. In this program, students first enroll and

complete the four-year civil engineering degree program, receiving a BSCE from WVU Tech, and then transfer to WVU for one year to complete and receive a BSMInE from WVU. Due to WVU's residency requirement, this program involves 171 credit-hours in five years. In order to implement this program, some MinE courses needed to be offered in Montgomery so that course prerequisites can be met. Therefore, effective with the Fall Semester, 2005, MinE offers one course each semester in Montgomery, MinE 205 Introduction of Underground Mining Systems in Fall and Introduction to Surface Mining Systems in Spring. Other required mining and geology courses are being considered.

The forthcoming governing changes between WVU and WVU Tech, as mandated by the 2006 WV legislative session, may allow the total number of credit-hours to be reduced to the level similar to those dual majors of MinE and CE, and MinE and Geology as stated previously.

BSCE-MinE-Southern Community & Tech.

The agreement with Southern Community and Technical College is a 2+2 program, similar to that with WVU Tech. This program began in 2003 and enrollment headcount has been staying around 4-6.

Dow Chemical Visited MinE Dept



Dow Chemical Group visited Mining Engineering Department on May 10, 2006, and discussed mining research with MinE faculty. (From left to right): Dr. Dan Alexander, Dr. Syd Peng, Dr. Manuk Colakyan, Dr. Keith Healey, Brian Keen, Ailene Phillips, Dr. Wahab Khair, John Henley, and Dr. Yi Luo.

Jennet Cooley, New Staff Member

Occasionally when a new person joins an organization, she (or he) adds some life that was otherwise missing. Jennet Cooley recently joined the Department of Mining Engineering as a Recruiting Assistant to help grow the number of students in mining and support the existing faculty and staff to do a better job of keeping our stakeholders informed, reach out to alumni and the public.

She describes herself as a "mature, responsible, dedicated achiever with excellent written and oral communication skills." Her background includes newspaper reporting and managing small consumer oriented businesses. She holds a BA in English, Summa cum Laude, Ohio University.

Come in and meet our newest member of the expanding mining program at WVU.

Ryan Murray on Tips to Mine Management

Ryan Murray (BSMinE '02) was the first speaker invited to speak to the SME Student Chapter for the Spring Semester 2006 on January 17. Ryan is mine superintendent of Century Mine, Alledonia, OH which is a longwall mine with an annual production of 6.6 million tons in 2005. He talked about

his experience on running the mine. Other than technical issues, he also presented the social and economic issues associated with longwall mining. He also touched upon how to manage people productively and safely. Students were extremely interested and impressed by his speech.

Jim Laurita on Water Pool in Abandoned Pittsburgh Seam Coal Mines

Jim Laurita (BSEM '82), president of MEPCO, Morgantown, WV, presented a seminar on May 2, 2006 to SME students. He said all the abandoned mines in the Pittsburgh seam are flooded and interconnected hydraulically. The flooded water level is rising and must be pumped off in order to

mine the Sewickley seam, which is approximately 80-100 ft above the Pittsburgh seam. He then talked about his company engaging in a huge water pumping project with a designed capacity of 6,000 gallons per minute for pumping the water.

Provide Support for Mining Engineers of the Future

Debrah Miller, J. D., Director of Planned Giving WVU Foundation, Inc.

Those who provide the day-to-day energy and expertise to educate students in the Department of Mining Engineering know that the results are quite impressive. Students truly grow and mature during their years in the program. Each new class of graduates makes us very proud to have been a part of the process of molding them as engineers of the future. Everyone has the opportunity to aid this important process in a truly personal way. A choice to include a gift provision in your Will is one option.

Supporting the Department's greatest needs - an opportunity fund, a professorship, or a scholarship - can be done with the wording **"to the West Virginia University Foundation for the benefit of Department of Mining Engineering, the College of Engineering & Mineral Resources"** in your Will. Your attorney can add the appropriate language to carry out any of these important choices for support.

You may also choose to have any of **those funds function as an endowment** that will operate in perpetuity and will provide annual income for the Department to fulfill your specifications. You may name the endowed fund for whomever you wish to honor in this special way.

Yes, it's possible to be part of shaping the progress made by the future mining engineering majors who walk in the doors at WVU and say "I'm here to learn!"

Senior Mine Design Class visited Federal No. 2 Mine, EACC

Blair McGill, Operations Manager, invited the senior mine design class to see how mine services are provided at Federal No. 2 Mine. During the February visit, John Kucish, mine manager, reviewed the long history of the mine and how the present operation is organized. We were especially interested in the critical role the outby mine infrastructure plays in achieving production goals.

As future engineers, the WVU Mining Students will often be responsible for de-

signing, constructing and maintaining the mine fresh water, power, rockdust, ventilation, communications, supply and drainage systems. The seniors can use what they learned on the mine tour in their senior mine design project reports.

John Ewell, Randy Findaffer, Danny Curry (BSMinE '02) and Ben Worley (BSMinE '06) were excellent guides and were enthusiastic about the need to keep the mine running smoothly. It was a pleasure to visit a well run efficient mine.

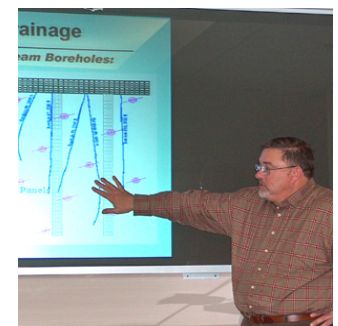


(From left to right): Josh Moran, Jonathan Gordon, Dan Alexander, Brandon Willianson, Dr. Keith Heasley, Ben Worley, and Luas O'Neal.

Schwoebel Presented Directional Drilling Techniques

Jeffrey J. Schwobel, Director of REI Drilling, made a presentation on "Long Hole Directional Drilling and Innovative Methane Drainage Technique," on March 1, 2006 at a SMESC Seminar. Jeff provided excellent general information on the techniques of directional longhole drilling for methane drainage. The seminar was well attended and enjoyed by faculty, and students in multidisciplinary team project from the Departments of Mining Engineering and Petroleum & Nature Gas Engineering.

Mr. Schwobel directs overall



corporate activities in REI Drilling (<http://reidrilling.com>), and is a recognized international expert in methane drainage, directional drilling applications, and coal mine methane commercialization.

by Patrick Pelley
MinE Sophomore

CONSOL Energy Summer Internship

Coal mining is something that half of the United States doesn't even realize goes on in today's world. Coal mining, however, is exactly what I did for ninety days straight in summer 2005. I remember going into Dr. Syd Peng's office and asking him if he would be able to find me a job in the mining industry for the summer. He then told me that CONSOL Energy interviews would be coming up within the next week; I asked him to sign me up. I was worried that CONSOL would not be interested, since I was a freshman at the time; luckily that was not the case. Signing up for that interview was one of the best choices that I have made. I was very excited the day I received the job offer. I was eager to see what coal

mining was really like, and if it was something I would want to do for the rest of my career.

I remember my first day going underground at Enlow Fork Coal Mine. I was nervous, but yet excited to start working as a real coal miner. I remember them telling me that I would be

working on conveyor belts for the day. I was thrilled to see how these belts really ran, and see all of the fresh coal leaving the coal mine on them. Finally eight o'clock came and I went down on the elevator cage with my crew.

I learned a lot that first day; the different working sections in the mine, both continuous miners and longwalls, the different



Patrick Pelley and his truck.

regulations and standards, and everything else that I wanted to know. The miners that I went with were experienced and helped me out in every way they could. Soon enough four o'clock came and I left the mine. On the way home I was thinking about my experience and decided that this is something that I could love doing.

From May 23rd to August

20th I only took off one day, the Fourth of July. I grossed over \$17,000 in that short period of time. I worked between sixty to sixty-five hours a week. With the money that I earned I was able to pay off my rent for the whole year, buy a truck, pay for college, and save enough to last me through the year. I would encourage undecided engineers to give mining engineering a chance. Mining engineering has opportunities all across the world and gives you the chance to further your education. I would like to thank CONSOL Energy for giving me this opportunity, West Virginia University Mining Engineering Department for the scholarship money, and most of all Dr. Syd Peng for helping out all of his undergraduate students including myself.



2006 SME Annual Meeting in St. Louis, MO

2006 SME Annual Meeting was held in St. Louis, MO from March 25 to 27. Faculty, visiting scholars and students from the Department attended the meeting by a chartered WVU bus. Graduate students and Faculty presented technical papers in various sessions at the Meeting. The students enjoyed the meeting & exhibits, socialized with alumni and vendors, and toured the Arch in downtown St. Louis.

After the Meeting, the mine tours were planned to Gundlach Crusher; Doe Run (formerly St. Joseph Lead Co.), Buick Mine; and Farmersburg Coal, Black Beauty Surface mine. See articles on tours to mines in this newsletter.



**Wenbing Guo, Ph.D.,
Associate Dean, and
Associate Professor**

Visiting Scholar from Henan Polytechnic University

I came from Henan Polytechnic University (HPU), China as a visiting scholar. I am studying at West Virginia University (WVU) for one year under Dr. Syd Peng's supervision. I specialize in mining subsidence and control technology.

HPU, located in Jiaozuo City and founded in 1909, was the first coal mining university in China. Today, it has expanded to become a comprehensive university consisting of many institutes and graduate schools. There are 1,758 faculty and staff and about 26,000 undergraduates and graduate students. The School of Energy



Drs. Wenbing Guo and Syd Peng at 2006 SME Annual Meeting, St. Louis, MO.

Science & Engineering is well-known in China for its programs in mining technology, ground control, and rock mechanics.

WVU Mining Engineering Department has the best faculty in U.S. coal mining schools and is famous in the world. So study and working with such a group of outstanding researchers is of great benefit to me in many ways. Since my arrival in September 2005, I have had many terrific memories of experi-

ences such as attending the regional and national professional meetings and visiting high-production mines in vari-

ous states. In the mean time, I have also gained some knowledge about the longwall mining subsidence issues in the U.S., including its effects on the surface structures and ground or surface water, etc.

In addition to gratifying research and professional experiences, the rich cultural diversity brought in by students from different countries with different socioeconomic backgrounds also enriched my outlook on other aspects of life. The great experiences I gained from the Department of Mining Engineering at WVU will play an important role in my future career.

Gundlach Crusher Manufacturing Plant Tour

After attending the 2006 SME Annual Meeting, a group of 23 students and faculty members visited the T. J. Gundlach Manufacturing Plant in Belleville, Illinois. Gundlach provides a wide variety of crushers and crushing solutions to the coal, steel, chemical, petroleum coke, mineral, electric power and recycling industries (www.tigundlach.com).

This manufacturing facility has complete fabricating, machining and assembly services. Using computer aided manufacturing, Gundlach's cutting and machining equipment is programmed directly to its cus-

tomers' specifications to create the crushing equipment and parts required. Robotic welding is used to manufacture crusher rolls to exact standards.

Our hosts spent their valuable time to show the group the entire manufacturing operation at the facility and to answer questions. The Department of Mining Engineering at West Virginia University would like to



Observing the robotic welding operation

take this opportunity to express its gratitude to Jim Compton, Jim Korte, and Mark Kohler, Vice President for making our trip possible.

Standing on 115 Cu. Yard Dragline Bucket, Farmersburg Mine, Black Beauty Coal, IN



Farmersburg Mine, Black Beauty Coal CO., an subsidiary of Peabody Energy, is located near Farmersburg, IN. The mine uses a B&E 2570 dragline with a 115 cu yd bucket. The photo shown above is the group of mining engineers from WVU with engineers of the company standing on the bucket during the mine tour. The photo on the right was Mark Sebree, General manager explaining their mining plan and operations prior to the



mine tour. The Department thanks Mark Sebree, Jerry Kempf, Mid West Director of Surface Mining, and Bob Mitchell, Human Resource for their hospitality.

Visiting Doe Run, Buick Mine and Plant, Viburnum, MO

One of the post-SME meeting mine trips was to visit Doe Run Co., Buick mine, Viburnum, MO on March 31, 2006. Buick Mine is in the middle of a long 40 mile north-south line of lead mines. All of the mines are connected for ventilation. You can drive 18 miles underground. The production of Buick mine is 5 million tons of rock a year, of which 1.6 million comes from pillar recovery using cemented rock backfilling. The mine recovers 80% of in-place ore. The ore can be up to 100 ft thick, and mining proceeds from multiple levels with the

intervening sill extracted last. They used drill jumbos and ANFO loader vehicles to blast the ore. They scale and mark the roof and rib. All of the inter-sections are bolted with 6 ft no. 7 rebar. These mines are very different from underground coal mines.

The Viburnum Trend is a Mississippi Valley Deposit with galena, sphalerite and chalcopryite deposits in the Bonnetree dolomite (CaMgCO_3). We had a chance to "pick" some pure lead, dolomite, zinc, and sphalerite and chalcopryite ore samples to take home. The ore

averages about 10.5% Pb, and their cut-off grade is 6% lead and 1.2% zinc.

The mineral processing starts from underground. A gyratory crusher is used to reduce the fractured ore to minus 5-in size. At the surface, cone crushers further reduce the size to minus 3/4-in. In the milling plant, a rod mill and a closed circuit of ball mill and hydrocyclones produces 55% passing minus 75 micron size, with 40% solid feed by wt for the flotation circuits. Initially, at the lead concentration circuit, both galena and chalcopryite are floated and sphalerite is depressed to the sink. The float is separated into galena and chalcopryite in

the copper concentration circuit. The sink is further floated in the zinc concentration circuit. The concentrated ores are thickened, filtered and stockpiled, separately. The lead is concentrated to 80%, copper to 32%, and zinc to 56%. The concentrated products are shipped by barges to the local smelter for refining. Tailings from zinc concentration circuit is disposed of into the slurry pond 3 miles away.

Visiting the base metal mine, and concentration plants is a new experience for most of our students. The Department would like to thank Bob Dunn, George Moelering, Tom Yanske, and others of Buick mine for their excellent guide and accommodation.



At Buick Underground Mine, observing roof and rib scaling operation in very large stopes.



Over looking tailings. In the background are the lead and zinc concentrates thickeners.



SME Doe Run mine tour (from left to right): Zhengxing Gu, Brijes Mishra, Dr. Yi Luo, Dr. Keith Heasley, Dr. A. Wahab Khair, Jun Lu, Rajagopala Kallu, Dr. Felicia Peng, Tom Appel, Dr. Syd Peng, Mathew Vance, Anil Ray, Dr. Wenbing Guo, Hakan Gurgengi, Mathew Bonnell, Qinghua Jin, Dr. Takashi Sasaoka. (Front row): Jonathan Gordon, Lucas O'Neal, Ryan Critchfield, Ted Klemetti, Dr. Qingxiang Huang.

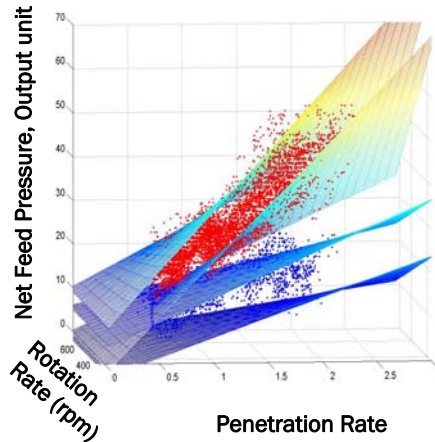
by **Syd S. Peng, Ph.D.**

Chair and C. T. Holland Professor

Mapping Coal Mine Roof Geology Using Roof Bolter

In order to employ the correct roof bolting system for underground coal mine roof support, the roof geology must be known correctly in advance. But underground coal mine roof changes from place to place, very often drastically. These include changes in rock type, rock layer thickness, bedding plane separations, or fractures, etc. Roof bolting systems must change as the roof geology changes. Otherwise, roof falls will occur. Experienced roof bolters can tell what kinds of rocks they are drilling by carefully listening to drilling sound, drill rod vibration, drill penetration rate, etc. But this is seldom recorded systematically for analysis. Besides its perception varies with individu-

als, thus may not be quantitatively reliable. It follows that if the drilling parameters, such as thrust, torque, revolution per minute, penetration rate, etc., are recorded in real time, they can be analyzed for determining the rock type being drilled, including separations and fractures. With this concept in mind, a project, in partnership with J. H. Fletcher & Co., NIOSH, and U.S. DOE, was launched in 2001. DOE provided the funding; J. H. Fletcher provided the drill control unit, lab facilities, and roof bolter operators; NIOSH provided the roof bolter and lab facilities; and WVU performed data analysis and software development. During the past six years, the system was extensively tested in the laboratories, 10 coal mines and two limestone mines.



Distribution and approximate boundaries for sandstone (red) and shale (blue).

A method has been developed for identifying the location and size of bed separations and fractures, and determining the ranges of rock strength. It will produce a stratigraphic column showing variations in rock strength and location and size of bed separations and fractures. Based on the results, J. H. Fletcher & Co. has refined the drill control unit on an operating roof bolter. The system is now under testing in producing mines.



PI: Dr. Syd Peng, Chairman of MinE, WVU; and Co-PI: Doug Hardman, president of J. H. Fletcher & Co.



Research team members involved in the project (left to right): Dr. Takashi Sasaoka (Research Associate) with Kyushu University; Japan; Mr. Benjamin Mirable (MSMinE, '04); Dr. Gerald Finfinger (PhDMinE, '03) with NOISH; and Dr. David Tang (PhDMinE, '06) with DBT.

Calendar of Events

March 25-31 2006 SME Annual Meeting and Exhibit, St. Louis, MO, and post-meeting Mine Field Trips.

April 6-7 Kanawha Coal Mining Institute Meeting, Charleston, and Mine Trips—Mountain Laurel Complex, Arch Coal, Sharples, Logan County, WV.

April 9 Mineral Resources Award Banquet, LakeView Resort, Morgantown, WV.

April 20 William Poundstone Lecture, Mineral Resources Bldg, Morgantown, WV.

April 21 Mining Engineering Dept Visiting Committee Meeting.

May 4 WV Coal mining Institute and WV Coal Association Joint Meeting, Stonewall Jackson State Park, Roanoke, WV.

May 14 West Virginia University 137th Commencement.

(Alumni News from Page 7)

Associates in Grand Junction, CO as a project engineer working on numerical simulation in ground control.

- Ben Worley (BSMinE '06)** is a mining engineer working at Eastern Associated Coal, Inc., Federal No. 2 Mine, Peabody Energy, Fairview, WV. Ben is a very happy father. The Worley family welcomes a new arrival: Zadie Reese Worley, born May 4, 2006. She weighted 6 lbs 3 oz. She will be the seventh generation of future coal miners, that includes the Grandpa Phil Worley MS degree student in WVU.



Proud papa, Ben, and his baby Girl—a future woman mining engineer.



Shelley Shalvis (BSMinE '00) and Matthew Gager at their wedding ceremony on May 13, 2006 in Knoxville, TN.

WVU Won 2005 SME Student Chapter Membership Challenge "Grand Prize Award"



SME has announced that the SME Student Chapter of West Virginia University won the 2005 Student Chapter Membership Challenge Grand Prize Award with the highest percentage of member renewals and the number of new members recruited. The chapter recruited 18 new members and 20 members renewed their memberships for SME and the Student Chapter. The grand prize award is a \$ 400 check.

Recruiting Program for Mining Engineering

by William Ryan
Special Recruiter

The recruiting program for Mining Engineering at West Virginia University (WVU) has undergone many changes in 3 years. For first contact, we visited high schools to inform counselors of our program. Presentations about our program were made to the students and information was handed out or mailed to the students. The numbers of high schools contacted increased from 45 to 54 and 89 for the three year period.

Major changes were made during the 2005-06 school year. By contacting 5 Junior and community colleges with Pre-engineering programs in Western MD, Southwestern PA and WV. More schools that have this

type of program will be contacted this coming year. The students requesting information concerning our program increased from 34 to 46 and 73. High school students admitted to mining engineering major was also increased from 2 to 2 and 12.

Included in the changes was an attempt to develop an interest in mining engineering with students who are underclassmen in high school. This was done by presentations at college fairs at various high schools. So far 54 underclassmen requested information concerning the program at WVU. 22 of those have requested additional contact. We will continue correspondence during the summer and meet with them in the fall.

Come, Join the whitewater rafting at the end of April. Dr. Keith Heasley leads a group of faculty, students, and friends in a high adventure raft trip in the Cheat River each spring before finals week.



New Students, Fall, 2006

The Department anticipates a total of 19-22 new students, including 12 new freshman recruited from high schools, and seven students from freshman general engineering class, and transfer. Additionally two students from Civil Engineering (CE) have declared for double major in Civil Engineering and Mining Engineering.



CEMR Engineering Week Basketball Game Competition: MinE team won 2nd Place.



The study tour group from Aachen University, Germany, visited MinE and discussed on-going research on May 2, 2006. The group consisted of seven members including four seniors led by professors Ralf Schulte, Jorg Kramer and Axel Preusse.

SME Student Chapter New Officers for 2006-2007

| | |
|------------------|----------------|
| President: | Morgan Sears |
| Vice-President: | Jeremy Holt |
| Secretary: | Mathew Vance |
| Treasure: | Mathew Bonnell |
| Programs: | Patrick Pelley |
| GEM Coordinator: | Alison Sears |



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<http://www.mine.cemr.wvu.edu/>

Longwall Mining

2nd Edition (October 2006)
by Syd S. Peng

The 1st edition was published in 1984. It was and still is the most comprehensive book on the subject. The 2nd edition has been completely re-written to emphasize the practical aspects of longwall mining operations based on the author's world wide research and consulting experiences in the past 30 years. It covers the following 14 chapters:

U.S. Longwall Mining
Design Considerations for Panel Layout
Strata Mechanics
Panel Development
Shield Support – General
Shield Support – Design & Selection
Coal Extraction – the Shearer
Coal Extraction – the Plow
Coal Transportation
Application Issues with Longwall Mining
Ventilation and Methane, Dust and Noise Controls
Longwall Move
Longwall System Control and Power Distribution
Surface Subsidence

For further information, contact: Syd.Peng@mail.wvu.edu

Chair's Message

Dear Alumni and Friends:

I have exciting news to report to you. Dr. Chris Bise, currently chair of mining engineering program at Penn State has agreed to take over as chair of WVU's Mining Engineering Department effective September 1, 2006. I will step down and continue teaching and research. I thank you for your continuing support for the past 29 years during my tenure as your Department Chair.

We have also selected and appointed Dr. Yi Luo as Associate Professor, responsible for mine ventilation.

With these two appointments, coupled with the rising enrollment, WVU's Mining Engineering program is in excellent position for growth.

The Spring 06 Poundstone lecture was deliv-

ered by Buck Harless. The success story of his life impressed so many people that we received requests for his lecture notes even long after his lecture.

Interest in mining engineering is convincingly increasing as reflected by more rising sophomore and also high school seniors from across the state, declaring major in mining engineering, as reported by Bill Ryan, our special recruiter. The obvious downside of expanding job market on our graduate program is that students are taking jobs before finishing their thesis or dissertation.