Bill Raney, President of the West Virginia Coal Association (WVCA), presented the William B. Poundstone Lecture entitled “Coal – America’s Best Friend” on November 11, 2004. The room was packed for the lecture, including: WVU President, David Hardesty, CEMR Dean, Gene Cilento, and many distinguished mining engineering department alumni, students and friends.

Mr. Raney has a long history in the West Virginia coal industry. After graduating from WVU, he worked for the West Virginia Department of Natural Resources. Then, from 1977 to 1992, he served as Vice President of the West Virginia Mining and Reclamation Association. In 1992, Bill Raney was appointed President of the West Virginia Coal Association, Inc. (WVCA) which is a trade association representing more than 90 percent of the state’s underground and surface coal mine production and its related supply and service industries.

In his lecture, Bill talked about changes that have taken place in the coal mining industry over the past three decades. He highlighted the importance of coal as a source of energy and its role in the economy of West Virginia.

For the latest, visit our web site at http://www.mine.cemr.wvu.edu/
The major renovation was finished this fall and the new computer and teaching lab was used extensively this semester with few problems. Joe Zirkle (BSMinE '04) tested all software during the semester as he completed his Mine Design Project.

The renewal project began in 2001 when the Mine Design Course was updated to emphasize computer applications for geologic modeling, mine planning and forecasting.

Dr. Heasley and Dan Alexander attended a Carlson SurvCADD software training session in early 2002. As the students worked with the programs, the existing hardware limitations interfered rather than enhanced project work. Old computers were replaced as funds allowed but having nine different configurations stretched the available technical support resources and it became obvious that new compatible hardware was required. In addition, the data and power wiring was inadequate, we needed a projector for instruction and additional storage cabinets.

A proposal to upgrade the Mine Design Lab was assembled in 2003 and a fundraising campaign begun that summer. Through the generosity of four coal industry leaders’ donations, funding was completed in March 2004, construction began in the summer and the new high end graphics PCs were installed at the beginning of the Fall 2004 semester, just in time for the seniors to start their projects.

Bill Raney praised the mineral barrels of foreign oil. “Of coal replaces 3.8 of tomorrow”, and for facing the challenge of leading men and women into the earth to mine the energy for today’s world. He challenged the students to be “technically competent, and to be strong and adaptable for varying conditions” and complicated circumstances” with an eye always on the future.

Mr. Raney praised the Mining Engineering Department as “the foremost coal mining program in the country. But he emphasized that there needs to be an “institutional reaffirmation and a statewide commitment” to the programs here in Morgantown to make sure they are “the best” in the country and the world. In concluding, Bill stated that the recent political victories and the strong employment growth in the industry should insure that Coal will be America’s Best Friend for many years to come.

Through the generosity of four industry leaders, the Mine Design Computer and Teaching Laboratory was completed. The dedication plaque reads “In grateful appreciation for the mining industry leaders who funded the 2004 renewal of the Mine Design Computer and Teaching Laboratory: John T. Boyd Company, Rosebud Coal Company, Mr. Thomas Garges, and Mr. George & Mrs. Janet Desko”.

Alumni NEWS

- Hilaria Ireland (BSMinE '03) returned to WVU to visit her former professors during the Christmas Holiday. She is now doing mine permitting projects for Marshall Miller & Associates in Lexington, KY. She is also recently engaged and planning for an October wedding.
- Jay Kramer (PhDMinE '97) left MSHA’s Technical Support in Pittsburgh, PA after a long period of employment to join Lapina and Associates in Boston, MA as a forensic engineer, where his work is still related to mining. In his recent correspondence, he said “the WVU Mining Department has an excellent reputation in mining. I did not realize how important this is until I began working independently of MSHA, .......”.
- Ryan Murray (BSMinE '02) was promoted in September 2004 to Superintendent of Century Mine (a Longwall mine), American Energy Corporation, Alexander, OH.
- George Schuller (BSEM '86) was transferred to Australia in charge of Peabody Coal’s underground operations. Jim Downey (BSEM '79) replaces him as general manager of Pine Ridge Coal in Seth, WV.

(See Alumni News, Page 6)
School of Mines, WVU, 1946-1950

The Fall of 1946 saw the campus of West Virginia University swollen with students like never before. Something like 5,600 students were registered, and most of them were veterans of World War II. These students, mostly men, were the first to take advantage of the G.I. Bill and were either entering as Freshmen or returning to college to complete their interrupted college studies. The School of Mines was no exception.

Professor Charles T. Holland was there to greet the largest class of Freshmen that the School of Mines had seen—a total of 55. All but four were veterans and I was one of the four. Registration for all Freshmen entering WVU was held in the Field House, now known as Stansbury Hall. It was a hectic time, getting those first-year classes arranged. Offices for the School of Mines were in the Mineral Industries Building, commonly referred to as the M.I. Building, now named White Hall. All buildings were on the Downtown Campus, the only campus in those years.

Classes were scattered about the campus. I remember having my English Literature class in Oglebay Hall, Algebra in the Chemistry Building (now Clark Hall) as well as Chemistry in the auditorium at the west end of that building with 300 of us in Professor Collett’s lecture—a real shocker. Accommodating the large number of students must have been a real challenge to the University Administration and professors. Housing was a problem for all.

Many of the veterans were married and had to find apartments. Out-of-state students, like myself, were not eligible for the limited dormitory space. I found a room in a private home on the hill overlooking the old Mountaineer Stadium. I believe that my Sophomore year was the most difficult with Calculus, Physics, Statics, followed by Strength of Materials, and Quantitative Analysis along with Mine Surveying and Military Science. Being a non-veteran I was required to take Basic R.O.T.C. Eighteen and nineteen credit hours of courses was the norm for engineering students. I found the veterans to be very mature and hard working, and usually good students, eager to make up for those years spent in military service.

The Sophomore summer saw us engaged in the summer Mine Surveying program. It involved six weeks of intensive study and “hands on” surveying both in the field and underground at the Pitt-Consol Arkwright Mine near Osage. We worked in teams. The evenings were spent in the drafting room in the M.I. Building working up surveys and plotting our maps.

Professor Charles T. Holland moved on to (See Bradbury, Page 4)
(Laurita from Page 1) For vital programs such as yours, the Resource Industry will always be a major component of the revenue to West Virginia and its people, and supporting the programs that directly support the people of West Virginia, is essential.

We pledge to support your program by committing $0.02 per ton for every ton of coal we mine and sell from our mining operations for five years. Current production levels are at approximately 1.2MM tons per year, and planned production levels are to continue to climb to approximately 3MM tons per year over the next five years.

We wish these dollars to be invested solely into the Mining Engineering Program to be used for the continuing operation and expansion of the program and to support the coal industry of West Virginia. We want to set up the Laurita Family Endowment and these dollars stated previously are to be deposited in this Endowment. These dollars should be invested and the interest or income generated be used for the sole benefit of the Mining Engineering Program at the discretion of the program chair.

Use of the Endowment Fund other than for the Mining Engineering Program can only be modified by me or my designated linear descendant.

Sincerely, James L. Laurita Jr. President

cc: Dean Eugene Cilento, Duke Perry

Field Trip to Laurita Aggregate Mine. (From left to right) Nancy Dorset, Kris Lilly, Jim Laurita and Dr. Keith Heasley on April 14, 2004

(SME Young Leader Class of 2005—Shelley Shalvis)

Shelley Shalvis (BSMinE ’00) was selected as a member of the 2005 SME Young Leaders Class. SME has created this program to help equip young professionals with the tools needed for success in both the SME and the mining profession. She will serve for 4 years on the Young Leaders Committee of SME.

Those going into the coal industry were entering at the beginning of the technology revolution and helped sustain it by making the industry a safer and more productive one over the 35-40 years of our careers. The School of Mines and its professors had provided a good foundation for us just as the professors are doing today.

Notes: Some are not be able to be recognized with their names in the photo in Page 3. If you know them please let us know. The original photo is displayed in the COMER Museum.

Personal Note:

"The newest member of the Mining Engineering Department," Samuel Kenneth Heasley, arrived April 22nd, 2004. As you can see, he spent all fall rooting for WVU Mountaineers.

(Bradbury from Page 3) V.P.I. at that time to head up their Mining Department. I remember them both to be very qualified as well as very good mining instructors. As upper classmen we were to have many more classes under Professor Spindler than we had with Professor Holland. Our other instructors were Richard Laird, Don Bondurant and Dick Ahrenholz. Joe McClung was an assistant instructor during those years.

A vivid memory I retain was becoming proficient in the use of the slide rule, as a second year student. We engineering students were easily identified on campus with the slide rule dangling from our belts.

By the time we had entered our third year at WVU we were taking coal mining and petroleum courses. Most of our time was spent in the M.I. Building. Mechanics subjects, E.E. courses in A.C. and D.C. electricity, Business Law and Special Trig are some that I remember taking in old Mechanics Hall. What an eye-opening day it was when the plotting of Descriptive Geometry "snapped in" to my mind.

In our Senior year we knew we were approaching the day when we would leave the School of Mines and enter the industry. Mine Design courses provided the opportunity to put into practice our learning exposure of the three previous years. Some of the veterans had completed their courses and had graduated in August of 1949 or in January of 1950. The Spring of 1950 saw us leave on a Senior field trip to visit mining operations in the southern part of the state. A few 3rd year students were included. There were 42 students, Professor Spindler, Don Bondurant and Joe McClung on that trip, a busload of eager and ambitious men. I turned over the photograph of that group, as we posed beside the bus, to MRAC in 2000 (see photo on Page 3). The graduating class of 1950, by my count, was 56 and included those who finished in January and August.

Interviews were being conducted on campus by a number of coal companies in the Spring of 1950. A number of individuals already had job commitments, in several cases in their home communities. Most of the Mining option graduates found jobs in West Virginia, Pennsylvania or Kentucky. The Oil & Gas option graduates were finding jobs that were more widely located. All in all, the students of 1946-50 have done alright for themselves and have contributed significantly to the coal and petroleum industries.

Olayemi Akinkugbe (MSMinE ’04) recently completed the creation of a 2-D boundary-element program, LaM2D. This program can be used to quickly and easily calculate the displacements, stresses, strains and safety factors associated with two dimensions multiple seam mining situations. Copies of the program are available from Dr. Keith Heasley

Keith.Heasley@mail.wvu.edu
David Zegeer Received a Pioneer Award from WVU College of Engineering and Mineral Resources

David Zegeer, a native of Jenkins, Ky., for his outstanding achievements and many contributions to the community.

Zegeer, Zegeer moved to Jenkins, Ky., as a surveyor. He became a section foreman and claims that working with the laboring people was the best experience of his career. He was witness to many of the industry’s innovations and has spent the majority of his life surrounded by coal mines and its people.

After 31 years in Jenkins, Zegeer retired and moved to Lexington. He began evaluating coal properties and investigating mine explosions. During this period, Zegeer had the opportunity to travel a great deal, studying mines in every corner and crevice of the world. His trips took him to places such as South Africa, Canada, Australia, Nova Scotia, South America, China, and Russia.

In 1983, Zegeer decided to move to Washington D.C. where he worked for the Department of Labor as the Assistant Secretary of Labor. He was the Director of Mine Health and Safety Administration for every coal and mineral mine throughout the country. At this time, approximately 600,000 people worked in the industry and many of the safety techniques that Zegeer implemented set the standard for the health laws in use today.

“I always tried to think of the men in the mine as if they were my children,” said Zegeer. Zegeer’s techniques were so successful, that the first year he held the title was the first year the mining industry ever experienced less than 100 fatalities. That was a very significant moment for the progression of health and safety for miners.

Zegeer and his wife now reside in Lexington, KY but his memories of Jenkins and its people are very dear to him. The town recently named a coal and railroad museum after him, and he is planning on donating many of his old personal photographs to them very soon. Even after all of his accomplishments, Zegeer still does a little private consulting occasionally, but jokes that “Father Time” is telling him to slow down a little bit.

WVU’s College of Engineering and Mineral Resources and its Department of Mining Engineering are very proud to call David Zegeer an alumnus, a friend, and a true pioneer in the mining industry.
Work in China Mining Industry

In April 2001 I accepted the position of General Manager of Shanxi Asian American Daning Energy Company, located in Eng County, Shanxi Province PRC. The Daning Mine will produce 4.2 million tons per year commencing in 2005. The reserve base of Daning Mine is over 170 millions of anthracite coal with an average seam height of approximately 5 meters. The mine plan is based on using one high seam longwall system and two Joy 12/27 continuous miners. Daning procured the best mining and coal processing equipment made in the world while blending in domestically made support equipment. The vision of all the shareholders in this project is to have a world-class, safe, high production, low cost mine in China. When both operation and engineering rely on each other and communicate well, the safety of the operation and systems that support the operation continually improve due to the synergism generated. The operating staff implements technical plans into the daily operation and long term planning, while the engineers need operational feedback to stay current.

During my years as a student at WVU, the entire staff of COMER reinforced the mining engineering skill needed throughout our career in mine design, ventilation, rock mechanics and economics. I still remember the discussions in White Hall about the same rock mechanican and ventilation principles I used today.

To me, Mining Engineering is one of the most challenging engineering disciplines. In my opinion students today need to take advantage of the array of classes WVU offers not only in mining but in mineral economics, coal processing and business. In the competitive coal and mineral market at home and around the world, a mining engineer is expected to blend all of these parameters in daily decision making and long term planning. My advice to students today is to take advantage of all you can at WVU. I do believe it is the best mining program in the world, and you will be expected to be the best when you graduate.

And if you are ever in China stop in for a visit.

OBITUARIES

Stanley J. “Stan” Moskal (BSEM ’84, MSEM ’89) passed away at Ruby Memorial Hospital, Morgantown, WV on October 17, 2004. At the time of his death he was employed with West Virginia Environmental Protection in Fairmont, WV.

Hilary Gerard “Gerry” Kelley (BSEM ’78) passed away peacefully among his family and friends from cancer on October 8, 2004. Gerry was the son of Dr. Jay Kelley, Dean of School of Mines–COMER, 1970-1978.

He owned Kelley Legal Services, PLLC in Philippi, WV and was a tried and true champion for the underdog. His funeral was held at Our Lady of Grace Catholic Church in Greensburg, PA. Alumni attending the funeral included Richard Clonch (BSEM ’76), Bradley Lewis (BSEM ’78), Jason Witt (BSMinE ’01) and Dr. Syd S. Peng.

Alumni Back Together Again

September 18, 2004. Friends and family gathered to witness the marriage of Doug Fala (BSMinE ’00) and Carri Jones. Among friends were mining graduates who stay close - not only in the industry, but in personal lives as well. It just proves that even away from WVU, mining alumni are always close at heart. Congratulations and Best Wishes to Mr. and Mrs. Doug Fala.
I feel honored to have the opportunity to share my summer internship with all those who receive the Black Diamond News Letter. As a senior in the Mining Engineering Department at WVU, I have used my past summer internships to prepare for my future after graduation. This summer I had an opportunity that offered a learning experience I could not imagine learning in any classroom or out of any textbook. I was given the opportunity to be a project manager over the construction of a ten million dollar processing plant for an aggregate quarry in New Jersey that is owned and operated by Tilcon NY.

Over the past three years, I have participated in summer internships at Tilcon New York Inc. The summer of 2002 and 2003 I worked in the Engineering department and was involved with many different mining projects. In May 2004, I embarked on a project to erect a 1000 ton per hour aggregate processing plant, that many of my peers or people in my major do not get the opportunity to be involved with in the quarry industry. By the time I returned to school in August, I left behind a safe, MSHA inspected plant, that was capable of running production starting on September 1st, 2004.

Tilcon New York Inc.’s investment in this new aggregate plant was needed at their Millington Quarry location because the remaining mine reserves were located under the existing plant. Tilcon decided it was necessary to purchase a new plant, erect it and make it fully operational before the old plant would stop production and be dismantled. The 1000 ton per hour modular plant was purchased from Telsmith. All of the components of the plant were constructed at the Telsmith facility in Milwauk ee, Wisconsin. The components were shipped to New Jersey via tractor trailer and then erected by Joule, a contract erection company.

The plant itself consists of a 150-ton hopper, vibrating grizzly, primary crusher, surge pile, scalping screen, secondary crusher, two tertiary crushers, two finishing screens, and twenty-one conveyors. All of the equipment utilizes the latest in crushing and screening technology. At this time the aggregate plant is the most technologically advanced aggregate plant in the country.

A typical day of crushing will yield approximately 10,000 tons/day. Seven different marketable items are sold as construction products around central New Jersey and New York City.

Upon completion of my summer internship, I was offered a full time position with Tilcon New York Inc., as the Plant Production Supervisor of this new plant. I have accepted this position. Upon graduating in December, I will begin my career and a new page in my life story. The advice I would like to leave to all future mining engineering students is take advantage of all opportunities and internship programs. Work experience is key for your career and your future.
Dr. Syd S. Peng Received Medal of Excellence from UK

Morgantown, W.Va. – West Virginia University’s Chair and Professor of Mining Engineering, Syd S. Peng, was recently selected as the recipient of the Medal for Excellence for 2004 by the Institute of Materials, Minerals, and Mining (IOM3), United Kingdom—the oldest mining institution in existence. The award was given at a black-tie banquet in London on June 15, 2004.

The Medal of Excellence award is the highest award given by the century-old Institute for lifetime contribution to the area of mining. This year, Dr. Peng was the unanimous choice of the Council of the Institute for his contribution in the area of longwall mining. “To receive a premier award from the oldest mining institution where the technology began is highly significant. I am honored to be selected by the Institute,” said Dr. Peng.

Dr. Peng is widely recognized as the leading researcher for underground coal mining in a number of areas including ground control, longwall mining, and subsidence measurement and prediction.

When he began his research career in the early 1970’s, the underground coal mining industry was attempting to adapt European longwall mining technology to U.S. conditions. The industry struggled with implementing the technology, primarily because of ground control differences between the two continents, and a significant number of mining operations failed. Dr. Peng began studying the technical and scientific issues for longwalls and over the years published extensively in the field of longwall mining and ground control. As his research progressed he became one of the leading researchers in the field who is sought after for advice and guidance for longwall mining systems. Today, U.S. longwall technology is the most productive in the world.

Donald S. Swartz II received the 2004 First Prize Mine Design Award. The purpose of the Mine Design Awards is to serve as a tangible stimulus excellence and to recognize outstanding effort by the student in the preparation of the senior engineering design project. We have very good record of our students receiving the Award in the past. They include Ryan Toler and Shelley Shalvis, 2001; Ryan Murray, 2002; and Rebecca Hardy and Hilaria Ireland, 2003. Brandon Williamson was the recipient of 2004 SME Pittsburgh Section Scholarship Grant Award.

There were two days of technical sessions, Students presentation and Award session in the Joint Meeting. Dr. Yi Luo made a technical presentation about subsidence damage mitigation. Dr. Keith Heasley also made a presentation on gas well damages.
The Department of Mining Engineering, West Virginia University, in partnership with CONSOL Energy and Stolar Research Corp., received the prestigious R&D 100 Award at R&D Magazine’s Annual Award Banquet. Labeled the “Oscars of Invention” by the Chicago Tribune, the R&D 100 Awards are evaluated individually according to their technological significance.

The Radio Imaging Method (RIM-IV), is designed to identify and locate geological anomalies or hazards in the advance of mining and was funded by the U.S. Department of Energy’s Industry of Future program.

The project team consisted of Stolar Research Corp. that developed the RIM-IV technology: WVU Department of Mining Engineering’s Chairman Dr. Syd Peng and Professor Yi Luo who conducted the underground tests, refined the software, and performed computer modeling analysis; and CONSOL Energy that provided a mine site for demonstration of the technology. For 47 years, the R&D 100 Awards have been helping researchers obtain international recognition for the best products developed for the year.

The winning of an R&D 100 Award provides a mark of excellence known to industry, government, and academia as proof that the product is one of the most innovative ideas of the year. This year, the winners came from the U.S., Japan, Germany, UK, Australia, Austria, Liechtenstein, Poland, Sweden, and Switzerland, and represented all major industrial organizations such as GM, IBM, Intel, Kodak, Sun Microsystems, Daimler-Chrysler, Toyota, and Hitachi. It’s very gratifying to know that the U.S. coal mining industry is using cutting-edge technology just like any other discipline.

2004 SME-CAS and WV CMI Joint Meeting at the Greenbrier, WV

The Joint Meeting of WV Coal Mining Institute (WVCMI) and SME/CAS was held from October 22 to 23, 2004. This joint meeting provides opportunities for MinE students to meet our alumni and industry people. There were three technical sessions, including a special presentation session for the graduate students from mining schools. This year in addition to Dr. Syd Peng’s presentation, two graduate students from MinE Dept made the presentation, Becky Hardy on recent improvements to coal mine ventilation modeling, and Zhengxing Gu on reverse dolomitic phosphate pebble flotation.

Rebecca Hardy sang in front of crowd at Pittsburgh Pirates Game

On Wednesday July 28, 2004, Becky sang the National Anthem in front of a crowd of nearly 23,000 people at the Pittsburgh Pirates versus the Atlanta Braves baseball game at PNC Park in Pittsburgh. It was a little unnerving and very exciting. She has been singing for over 10 years now and in May of 2003, she received her BSMine in Mining Engineering with a minor in Vocal Performance from WVU. She has enjoyed singing for her church, the events at the Greene County and Washington County Fairs, various WVU sporting events, and Wildthings baseball games out of Washington, PA (the Wildthings are a minor league professional baseball team, one of their pitchers is Clayton Ewen, a CEMR MAE student).
Guest Speakers for SME Students
Chapter Seminars

As part of SME Student Chapter’s activities, guest speakers were invited to present their experiences in their profession and specialized fields. The photo on the top right shows Dr. Barbara Arnold, president of PrepTech, Inc., specialized in coal/mineral processing plant equipment and design, giving a presentation about Coal Cleaning Flowsheet Development on November 17, 2004.

On October 27, 2004, Mr. Terry Dayton made a presentation on “Permitting under the Mining Program” Mr. Dayton is a staff Environmental Engineer with Pennsylvania Services Corp. of the Foundation Coal Corporation—Emerald and Cumberland Mines, Wayensburg, PA, for more than 30 years (Photo below).

Both presentations were very well attended by the Faculty and MinE Students.

Cumberland Mine Coal Preparation Plant, Kirby, PA Visited

Sophomores in Engineering Computer Aided Design class visited Foundation Coal Corporation’s Cumberland Mine, Coal Preparation Plant in Kirby, PA on September 1, 2004. The Plant has 1,800 TPH capacity, using dense-medium vessel, dense-medium cyclones, spiral concentrators, and froth flotation cells. Students were introduced to the coal preparation plant flow-sheet, unit operations and plant operations. For most students, this was their first coal cleaning plant visit. We thank Paul Brady, Mining Engineer, Charles Barnhart, Plant and Surface Manager; Sam Cario, General Manager of Cumberland Mine, and Dr. Jinsheng Chen, (PhDMinE ’97), Chief Geotech Engineer for hosting the visit.

The Students visited Pinnacle Mine are (back row, left to right) Morgan Sears, Kevin Rakes, Jack Toombs, Joel Helbig, Gary Dankovich, Ben Worley, Joe Zirkle, Kimberlee Eldridge (in front of Zirkle), Michael Moten, Derick Reel, Michael Mullins, Dan Alexander, (front row) Dr. Yunqing Zhang, Joshua Moran, Justin Morton, David Tang, Ryan Critchfield.

Seventeen students and faculty composed mostly of the Sophomores in the Underground Mining Systems class toured the Pinnacle Mine No. 50 in Pineville, WV on October 12-13, 2004. PinnOak Resources, LLC was created from the remaining US Steel mines on June 30 2003. The students saw a CM development section and the only plow longwall in the country. The Plow longwall is operating in Pocahonts #3 coal seam with a mining height of 42-in, and producing 3-4 million tons of metallurgical coal annually. Thanks are due to Ben Statler (BSEM ’73), President, Barry Dangerfield (BSEM ’72/MSEM ’81), Chief Operating Officer, Doug Williams (BSEM ’84), General Manager, Bill Barnard, Jim Bennet, Shane Berry, Russell Combs (BSEM ’79), Mine Superintendent, and Teddy Davis for hosting the visit.
Investigation of multi-seam mining effects at Crawdad No. 1 Portal, Maidsville, WV on December 1, 2004.

MinE Students visit CONSOL Drilling Site, November 2, 2004

No Man’s Words and Appearance Remain in Human Memory but His/Her Deeds...

by Victor Nazimko, Professor, Donetsk National Technical University, Ukraine

The first time I discovered the Mining Engineering Department, West Virginia University was 20 years ago when I found the book “Longwall Mining” by S. S. Peng and H. S. Chiang in the Moscow library. This book accumulated then worldwide longwall mining experience. The most interesting part of this book, for me, was its coverage in ground control because it was my major subject. Later I met Professor Peng personally in 1994 when I was a member of the Ukrainian group visiting West Virginia University. Dr. Peng helped me greatly during my stay in USA. He introduced me to new efficient technologies that have been employed in American coal mines. It was exciting to visit modern coal mines and to learn about rock bolting, continuous miners and the shear scale of American longwall mines producing 30,000 tons per day while 1,000 tons per day has been considered as an outstanding achievement in many other countries. In addition, Professor Peng introduced me to international specialists at the Annual International Ground Control Conference hosted by WVU. Such an opportunity was impossible to quantify because personal communication is the most efficient way to exchange knowledge and ideas.

Syd Peng is a special man who may work for 25 hours per day. I have not known another such energetic, creative and modest person before. That is why his professional interests cover such a wide range of mining subjects. Mining subsidence is one of them. When subsidence is delayed it becomes very complex. We won a research grant from CRDF in 1997. In this project, Professor Peng visited Ukrainian coal mines and supervised actual closing of an abandoned vertical shaft. It provided excellent experience in dynamic cooperation and was a collective breakthrough for my research team.

As a result of the cooperation, new technologies have been developed. Now, we are introducing American experience in Ukrainian coal mines where mechanical rock bolting technology has been adopted. Our students make use of the Proceedings of the Ground Control Conferences and other books and study materials provided continuously by Dr. Peng. Every time we use these gifts we recall a saying that no man’s words and appearance remain in human memory but his/her deeds do.

MinE Students visit CONSOL Drilling Site, November 2, 2004

Where does that core data we talk about in the MinE 306 Mining Exploration and Valuation class come from? To answer that question WVU asked Ernie Thomas, Coal Geologist for Consol Energy to show us a wire-line coring drill rig in the field and explain how he sets up a drilling program, locates suitable sites, deals with landowners, permits drilling, reclamation and logs the core. (Left to right) Ernie Thomas explained and showed the drilled coal core samples to MinE students, Murali Gadde, Sami Stahle, Jonathon Gordon.

Investigation of an abandoned vertical shaft filling it with waste rock material. (from left to right) Alexandrov, S.N., Director of Mining Institute, Donetsk National Technical University, Ukraine; Petrov, V., Main Engineer of Zasidko coal mine, Ukraine; Nazimko, V., Professor Donetsk National Technical University; Syd Peng, WVU.
MinE Students Hold the Second Annual Minerals for Kids Booth

Each child that comes through the MinE booth receives a free mineral kit containing ten minerals and a booklet explaining what they are used for. Special packets of mineral information, posters and lesson plans are also sent to teachers. The Mining Engineering students started these activities for WV kids as a public service project.

Over 200 children handled mineral specimens and listened to the college students describe how we use coal and minerals everyday. In about 5 minutes the kids and their parents move through the booth and collect their free mineral kit. Along with the mineral and coal stories they hear, we know they gain a better appreciation of the importance of coal and minerals in their lives. Many kids have stories of their own about rocks and mining that they are eager to share with us. And adults also enjoy learning about coal and minerals.

This is the second year the WVU Student Chapter of the Society for Mining, Metallurgy & Exploration (SME) has put up a Minerals for Kids booth. The WVGEES Gem, Mineral, & Fossil Show is sponsored each year in the fall by Sunset Minerals at the Cheat Lake, Mont Chateau offices of the WV Geologic & Economic Survey. The volunteers from the Department of Mining Engineering (MinE) staffed the Minerals for Kids booth on October 2nd & 3rd, 2004 (Saturday and Sunday). The MinE faculty and students volunteers are Dr. Syd Peng, Dan Alexander, Kevin Rakes, Sami Stahle, Mike Moten, Cade Mason, Nancy Dorset, Jisheng Han, Jun Lu, Brijes Mishra and Arun Rai.

Mineral kits were provided by the Central Appalachian and Pittsburgh Section of SME.

Seward Electric Generating Station Use Coal Refuse Feedstock

On October 20, 2004 students in Mine Design classes and Dan Alexander visited the 521 MW repowered Seward Electric Generating Station with representatives of Fluor Engineers and Reliant Energy. Colin Kelly, President of Prairie State Generating Company (a subsidiary of Peabody Coal) set up the trip for us. The Seward Plant burns 3.5 million tons of waste coal per year from refuse areas in mid-PA. It is the largest fluidized bed dual unit in the United States.

Both Peabody and Alstom, who built the steam turbine, made generous contributions to the WVU SME MinE Students Hold the Second Annual Minerals for Kids Booth.

Dr. Khair, Mining Expert and USGS member visits Afghanistan for Resources Restoration

Dr. A. Wahab Khair served as the Mining Engineering Expert as members of Geologic Survey, U.S.D.O.I., visited Afghanistan as an Afghanistan Reconstruction Team from November 22 to December 9, 2004. Dr. khair met high-level government officials, engineers and World Bank Representatives to discuss the revitalization of coal mining for future power plant, privatization of coal operations, and building up the mining industry. He also visited a number of mines to assess the resources and operational methods used. As a result, he completed a preliminary report for the use of Dara-I-suf coal as the most economical use of natural resources for power plant.

Roof Mapping Project at Point Mining, Campbells Creek, WV

MinE and J.H. Fletcher & Co have a joint research project to map roof geology using roof bolter drilling signature while drilling for roof bolt holes. Underground experiments had been conducted in several southern WV coal mines in the past 4 years.

Michael Proffit, Reliant’s Project Engineering Manager explained the problems with the coal handling system. (Left to right) Mike Mullins, Proffit, Kevin Rakes, Christian Warfield, Colin Kelly (Peabody) and Bill McKinley, Plant Superintendent.

Student Chapter for this tour and to attend the PCMA/SME Annual Meeting at Southpointe, PA.

The roof mapping project team: (Left to right) Dr. Takashi Sasaoka, Dr. Syd Peng, Eddie Alford, technician, and Craig Collins, Electronic Engineer, J. H. Fletcher & Co., and David Tang.

The roof mapping project team: (Left to right) Dr. Takashi Sasaoka, Dr. Syd Peng, Eddie Alford, technician, and Craig Collins, Electronic Engineer, J. H. Fletcher & Co., and David Tang.
MinE Students and Faculty Participated in MINExpo 2004 in Las Vegas, NV.

Faculty and Students participated in 2004 MINExpo on September 27-30, 2004, at Las Vegas, NV. The Faculty included Dan Alexander, Keith Heasley, Syd Peng, Felicia Peng, and Wahab Khair. In addition to an exhibit, the faculty also presented two papers: Dr. Syd Peng on roof geology mapping using roof bolters, and Dr. Khair on simulation of CM cutter head optimization.

Many mining Engineering alumni stopped by WVU MinE Exhibit Booth. The partial list includes Barry Dangerfield (BSEM ’72, MSEM ’81), Ben Gandy (BSEM ’96), Ben Mirabile (BSMinE ’01, MSMinE ’03), Dan Roman (BSEM ’81), Emily Cook (BSEM ’99), Gerry Finfinger (PhDMinE ’03), Jens Lange (BSEM ’84), Jim L. Adams (BSEM ’80), John R. Stoehr (BSEM ’80), Mark Schuerger (BSEM ’81), Mike Shook (BSEM ’81), Pete Vaughan (BSEM ’79), Randy Hansford (BSEM ’78), Ray Dubois (BSEM ’79), Ron Matthews (BSEM ’81), Russell Combs (BSEM ’79), Steve Sanders (BSEM ’93), Keith Smith (BSEM ’80), Vinnie Richardson (BSEM ’85), Wm. Mark Hart (MSEM ’93).

Some WVU non-MinE Alumni also came to the Booth and visited with us. They were Bob Blak (MD ’94), Boyd Petry (’94), Ches Latham (ChemE ’94), Dan Loss (’74), Don Hoylman, Estow Petry (’64), J.G. Cutlip (’02), Richard Silva (ME ’94), William Oaks.

Faculty and students visited BPB Gypsum mine, Blue Diamond, southeast of Las Vegas were (back row, left to right) Matthew Jordon, Michael Moten, Joe Helbig, Michael Mullins, Bryan Schwalm, Kevin Rakes, Keith Heasley, Syd Peng, Wahab Khair, (front row, left to right) Cade Mason, Lucas O’Neal, Christian Warfield, Felicia Peng, Dan Alexander.
Dear Alumni and Friends:

In December 2004, we have seven (7) graduates; one PhD, two MS’s and four BS’s. The two MS’s graduates stayed on and continued for their PhD program, one accepted a job with aggregate industry and the remaining four are working for coal companies in WV.

2004 was a good year for our program. Our faculty received two prestigious international awards: one is the Medal for Excellence by the Institute of Materials, Minerals and Mining in London, UK and the other was the R&D 100 awards by the R&D Magazine in Chicago, IL. For more detail please refer to the stories in Pages 8 & 9.

The Visiting Committee under the leadership of John Murphy is helping the Department to develop a strategic plan by assigning a subcommittee headed by CONSOL’s Walt Scheller III. The objective is to develop plans to meet the coal industry’s expected strong demand for graduated mining engineers in the near future.