

News from Holden Hall

Department of Mining and Minerals Engineering
Virginia Polytechnic Institute and State University

Volume 1, Issue 2

Fall 2009

The Mill Report —Dr. Greg Adel, Professor and Department Head

WELCOME to the second issue of *News from Holden Hall*. The first issue seems to have been a rousing success. Thanks to all of our alumni and friends who responded with e-mails and letters. We were even contacted by one consulting firm to let us know that we killed productivity for half a day while several of its Hokie employees stood around trying to identify the people pictured in “*Blast from the Past*.” Although our e-mail list continues to grow, if you are receiving this newsletter by regular mail and have an e-mail address, we would greatly appreciate it if you would send us your electronic contact information.

As we move into our second century as a degree-granting program, the Department continues to remain strong. We recently graduated the largest class in our history with 54 B.S. graduates, 6 M.S. graduates, and 3 Ph.D. graduates in the Class of 2009. As we move into the 2009-10 academic year, the Department enrollment is currently at 130 undergraduates with a projected graduating class of 45. In short, we continue to lead the nation in the production of new mining engineers.

If it has been awhile since your last visit to the Department, you may wonder where our students come from, where they go, and what they do when they graduate. That is why this issue of *News from Holden Hall* is based around the theme of “The Changing Face of Mining Engineering.” In this issue, you will see that the Department is now home to students who hail from locations up and down the East Coast and throughout Virginia. You will learn that nearly one-third of our graduates over the past ten years have gained employment in the aggregates industry. You will discover that over 40 women have graduated from this program since 2000, and that we now have a student chapter of Women in Mining. You will also get to meet our first female faculty member, Dr. Kray Luxbacher (Class of 2002), and learn about her recent \$1.24 million grant from NIOSH to help develop the next generation of mine ventilation experts.

Even as the Department expands its reach into new areas, we continue to pay tribute to the past as we recognize the recent induction of Stonie Barker (Class of 1951) into the College of Engineering’s Academy of Engineering Excellence. We also present highlights of our Spring Awards Banquet and recognize the most recent winners of the Old Timers Club Award and the Careers in Coal Award. Finally, we mark the passing of a legend in the Department, Dr. Chris Haycocks, who had a profound impact on the lives of so many of our alumni.

We have included two new features in this issue: “Alumni Notes,” for those of you who may want to inform classmates about important events in your lives, and “Thank You to Our Donors,” to recognize the companies and individuals who make it possible for us to continue to maintain our program during these difficult financial times. This latter topic has become extremely important to us as we continue to struggle in the face of budget cuts. As President Charles Steger recently noted, state support for the educational mission of Virginia Tech has gone from 55% to 27% over the past nine years. We are becoming more and more like a private institution, and private institutions operate with high tuition and large endowments. One of our goals over the coming years is to work to increase the size of our endowment to secure the future of the Department. Therefore, if you would like to help with this effort, please make sure to earmark your gift to **Mining and Minerals Engineering**. With over 1100 alumni, just \$100 from each alumnus per year, would enable us to make up for the lost state support and permit us to put something away for the future.

Last but not least, if you ever find yourself back in Blacksburg for any reason, I hope you will feel free to stop by. I enjoy keeping up with our alumni and I would be happy to show you around. I also encourage you to visit the Department website (<http://www.mining.vt.edu>). Our faculty and students continue to garner numerous awards and honors which we update frequently on our website. You will also find archived copies of *News from Holden Hall* if you ever wish to refer back to previous issues.

Oh, and don’t forget to take a look at our latest version of the “*Blast from the Past*.” If disco is dead, I believe we may have found the culprits. So please enjoy our latest issue of *News from Holden Hall*.

Dr. Greg Adel
Head, Department of Mining and Minerals Engineering
Virginia Tech

Inside

2009 Awards Banquet
Highlights 3

Changing Face of the
Department 4

New Faces 6

Alumni Notes 7

Blast from the Past 8

In Memoriam: Dr. Chris Haycocks

DR. CHRISTOPHER HAYCOCKS, former C.T. Holland Professor in the department of Mining and Minerals Engineering, passed away in late August, 2009. Throughout his life, Chris Haycocks demonstrated intellectual curiosity, an appreciation of cultures and, above all, an honest, refreshing sense of humor. For his many friends, colleagues and associates throughout the world, Chris will be remembered as a true and unique character.

Chris was born in Malta and spent his early years in England and Scotland during World War II. After attending boarding school in East Africa, he returned to England to attend what he proudly called “the real CSM”—or Camborne School of Mines! He married his wife Ramonda while working on his Master’s and Ph.D. degrees in Mining Engineering from the Missouri School of Mines, and went to work on rock mechanics-related projects for De Beers Diamonds and Anglo American Corporation in South Africa.

In 1969, after a short tenure with the U.S. Bureau of Mines in Denver, Chris accepted a faculty position at Virginia Tech where he taught Mining Engineering for 33 years, making a significant impact on his students and developing long lasting friendships. “He was an exceptional colleague, a scholar and dedicated teacher,” says Michael Karmis, close friend and Head of the Mining and Minerals Engineering department for 14 years. “Chris left an indelible mark in mining engineering education way beyond Virginia Tech.”

Chris was major advisor to 34 graduate students, including 9 Ph.D. students. He published over 100 papers and book chapters on topics ranging from computer applications in mining, to coal mine ground control, slope stability, and multi-seam mining. He received the SME Rock Mechanics Award for his definitive work on multi-seam interaction and was instrumental in establishing the department’s Rock Mechanics Laboratory. During his tenure, Chris taught over 15 distinct graduate and undergraduate courses, and he was awarded 6 Certificates for Teaching Excellence. His courses included Stability of Rock Slopes, Mining Law, the History of Mining, Theory of Ground Control, and Underground Mine Design.

“I worked with Chris for 20 years and the thing I remember most was that he was the consummate teacher,” says Dr. Greg Adel, professor and head of Virginia Tech’s Mining and Minerals Engineering department. “As mining engineering faculty, we all want to feel that we have made some type of impact on the industry. But, in my opinion, that impact is not in the papers we write, or the research grants we receive. It is in the effect we have on our students. It is clear from the cards, letters, and e-mail messages I have received in recent weeks that Chris established a legacy that will live on in the hearts and minds of his students.”

In October, a memorial service was held in Blacksburg to celebrate Chris’ life and friendships. Family members, friends, and former students attended to recall and share stories about Chris’ rich life and unique personality. Students remember Dr. Haycocks for his wide repertoire of jokes: he could flawlessly recite any number of classic “literary” limericks. Department faculty recalled his role as “devil’s advocate” during faculty meetings, and many friends remember his penchant for “pessimism” and hypochondriac complaints that made him fun to work with.

As coach, advisor and referee for the university’s rugby teams, Chris was not one to merely shout from the sidelines, recall former players. When challenged, Haycocks took to the field proving how he earned his rugby name: “The Combine Harvester.” He is also remembered for his fondness of dogs, and the commanding presence of his large bull terrier, “Wellington,” who was as broad as he was long and rock-solidly built. Wellington often was seen riding in the passenger seat around town with Chris, or stopping for his favorite cheeseburger treat at the drive-thru.

Chris retired in 2002 and moved to Las Vegas, Nevada, with Ramonda, where he continued to pursue his passions for boating, fishing and the outdoors. He was preceded in death by his parents, George and Louise Haycocks, and he is survived by his wife, Ramonda Haycocks; sons and daughters-in-law, Gavin and Evelyn, Ian and Kristin, and Neil and Jane; grandchildren, Casey, Anna, Cullen, Haydn, and Gus; and his sister and brother-in-law, Marsha and Ole Palmann.

In honor of Dr. Chris Haycocks, a fund has been established in his name at the Department of Mining and Minerals Engineering to help endow the department’s Writing and Communications Program. If anyone wishes to contribute to this fund, please earmark your gift to the “Haycocks Memorial Fund.”



News from Holden Hall is published semiannually by the Department of Mining and Minerals Engineering at Virginia Polytechnic Institute and State University
100 Holden Hall, Blacksburg, Virginia, 24061-0239
Phone: (540) 231-6671 Fax: (540) 231-4071 Email: mineinfo@vt.edu
www.mining.vt.edu

Department Head **Greg Adel**
Editing/Layout **Angelo Biviano**
Contributing Editors **Lynn Nystrom**

Virginia Tech does not discriminate against employees, students, or applicants on the basis of race, sex, handicap, age, veteran status, national origin, religion, political affiliation or sexual orientation. Anyone having questions concerning discrimination should contact the Equal Opportunity/Affirmative action Office.

Highlights from the 2009 Annual Scholarship and Awards Banquet

In April of 2009, the department again hosted its Scholarship and Awards Banquet, an annual event which brings together students, faculty, and alumni, as well as industry representatives, to recognize students' professional and academic achievements throughout the year.

More than 200 guests turned out at the Inn at Virginia Tech for this year's event to enjoy a cocktail reception and gourmet dinner, followed by a presentation of awards and scholarships from Mining and Minerals Engineering Department faculty, industry contributors and private donors.

Highlights of the banquet included the presentation of this year's **Careers in Coal Award** to senior Michael Chopski by Dick Bolen, member of the CI Coal Group and graduate of the Class of 1970. As an undergraduate, Chopski participated in three summer coal industry internships: two with Jim Walters Resources and one with Consol. He accepted permanent employment with Jim Walters Resources in Alabama.



Dr. Jerry Luttrell (r) presents Serhat Keles with the Outstanding Ph.D. Student Award.

This year's **Old Timer's Club Award** was presented by ICG CEO and Class of 1979 graduate Ben Hatfield to senior Jason Franklin. Conceived during the American Mining Congress Convention of 1938 in Cincinnati, Ohio, the Old Timer's Club now has more than 70 members who, each year, select outstanding engineering students or recent graduates from a pool of universities to earn membership into the club and receive its award of a gold pocket watch.

Among the graduate students honored at this year's banquet, the **Outstanding Ph.D. Student Award** was presented to Serhat Keles, who is completing his doctoral research on fine coal dewatering under the direction of Dr. Jerry Luttrell.

These are just a few of the many awards and honors conferred during the Banquet. Congratulations go out to all recipients for their achievements, and a hearty "Thank You" to the many donors and sponsors whose generosity ensure the success of the Mining and Minerals Engineering program.



Michael Chopski (left) is presented with the Careers in Coal Award from Dick Bolen.



Jason Franklin (left) receives the Old Timer's Club Award from Ben Hatfield.

Thank You to Our Donors

Each year, we are fortunate to receive contributions from individuals and corporations to help support Department operations and scholarships. During Fiscal Year 2009 (July 1, 2008 – June 30, 2009), we received nearly \$300,000 in donations (\$65,000 from individuals and \$235,000 from corporations). We would like to thank the following for their support.

Individual Donations:

Patrick Artrip (Class of 1979)
 Paul Barbery (Class of 1959)
 Drew Barksdale (Class of 1998)
 Mark Bartkoski (Class of 1981)
 Joe Basar (Class of 2002)
 Virginia Billings (Wife of the late George Billings – Class of 1953)
 Jerry Bucklen (Class of 1962)
 O.B. Bucklen (Class of 1959)
 Terry Bush (Class of 1996)
 Richard Busick (Class of 1971)
 Roger Carter (Class of 1981)
 Gerald Collins (Class of 1973)
 Roger Daugherty (Class of 1960)
 Jennifer Ellis (Class of 1998)
 William and Kathleen Georges (Parents of Brett Wolgemuth – Class of 2009)
 Charles Hibbitts (Class of 1974)
 Ronald and Sharon Inge (Parents of Matthew Inge – Class of 2010)
 Dianna (Grotto) Jablonski (Class of 1990)

Nick Kappatos (Class of 1997)
 Derrick Kegley (Class of 2006)
 Eric Lucas (Son of the late J. Richard Lucas – Former Dept. Head)
 David Mullins (Class of 1983)
 Kenneth Nicewonder (Class of 1981)
 David Prelaz (Class of 1984)
 Mike Quillen (CE Class of 1970)
 Caroline Relyea (Class of 2009)
 Steven Richards (Class of 1975)
 Timothy Ross (Class of 1976)
 Sam Shrader (Class of 1963)
 Gary Skaggs (Class of 1968)
 Gary Smith (Class of 1977)
 Stan Suboleski (Class of 1967)
 James Sykes (Class of 1960)
 Joe Tussey (Class of 1982)
 Kevin Whipkey (Class of 1983)
 David White (Class of 1974)
 William Womble (Class of 1965)

Corporate Donations:

Alpha Natural Resources
 Appalachian Technical Services
 Cargill
 Cliffs Natural Resources
 Consol Energy
 Freeport-McMoRan
 Granite Construction
 International Coal Group
 Joy Mining Machinery
 Luck Stone Corporation
 Massey Foundation
 Oldcastle Materials
 Peabody Energy
 Rio Tinto
 Southern Coals Conference
 Unimin Corporation
 Vulcan Materials

If you have donated to Virginia Tech during Fiscal Year 2009 and your name is not listed above, it is possible that your donation did not come to this Department. Please be sure to specify "Mining Engineering" on your check. Donations made to any other entity may go elsewhere. Likewise, if you have donated directly to the Burkhart Mining Society, these donations do not come through the Department. Nevertheless, these donations are important to us and we thank you for helping with student activities.

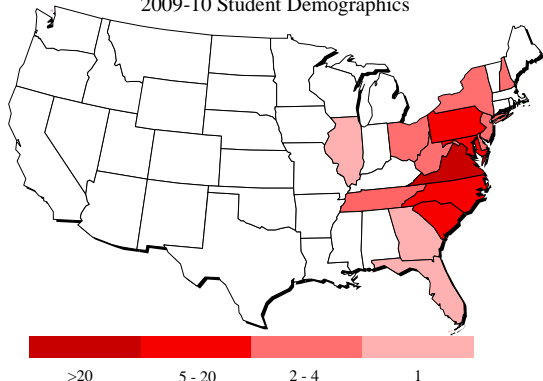
The Times, They Are A-Changin'

A Look at the Changing Face of Mining Engineering

—Greg Adel

For those of you who graduated in the late '70s and early '80s, you may remember the days when nearly half of your graduating class transferred from Southwest Virginia Community College; you had one, maybe two, women in your class; you couldn't understand why anyone would go to work at a rock quarry; and a starting salary of \$25,000 seemed like big money. If this sounds like you, you may want to read on to find out what the Department looks like today.

2009-10 Student Demographics

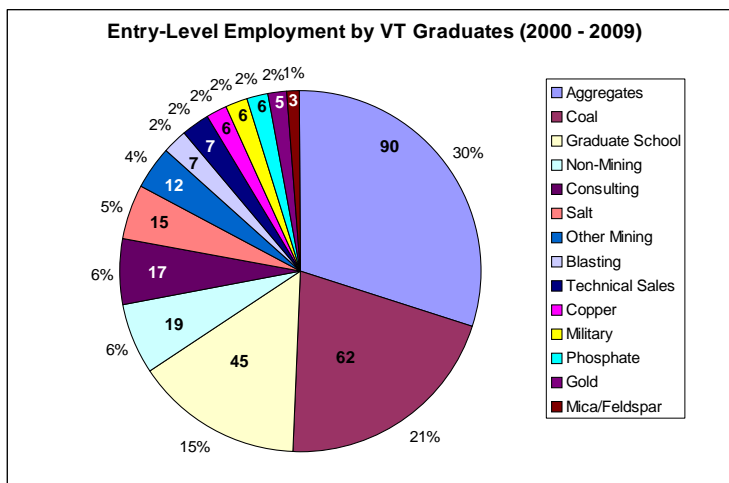


The Department of Mining and Minerals Engineering is currently home to 130 students ranging from sophomores to seniors. Approximately 45% of these students are out-of-state, hailing from locations all along the east coast but primarily from Maryland, North Carolina, South Carolina, and Pennsylvania. The remaining 55% come from locations throughout Virginia with high concentrations in the Richmond and Fairfax areas.

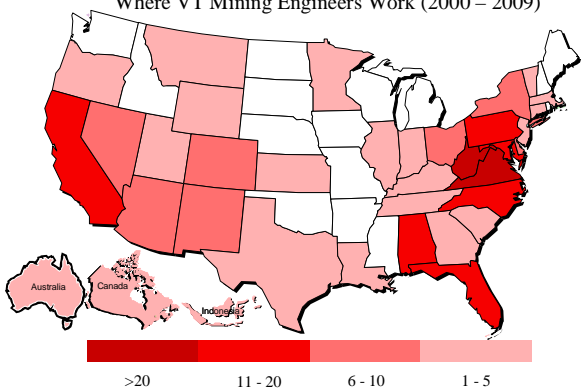
Now let's look at another facet of the changing face of the Department; women in mining engineering. At the 2009 Scholarship and Awards Banquet, the Department named Dr. Bev Watford (Class of '81 and the sixth female graduate of the program) as its first female recipient of the Distinguished Alumni Award. The first female graduate, Dr. Lynn Vinzant Ehrke (Class of '71), was also pictured in the "Blast from the Past" featured in the

Spring 2009 *News from Holden Hall*. Today, women make up 13% of the undergraduate student body in Mining and Minerals Engineering. In fact, in just the past ten years, over 40 women have graduated from the program including 12 in the Class of 2006 (possibly the largest number of female mining engineers to graduate from any program in the world at the same time). The Department is now home to the first student chapter of Women in Mining and recently added its first female faculty member (see articles in this issue of *News from Holden Hall*).

Finally, as the Department has grown in recent years, the diversity of employment opportunities has increased. With over 25% of all new mining engineers in this country coming from Virginia Tech, the



Where VT Mining Engineers Work (2000 - 2009)

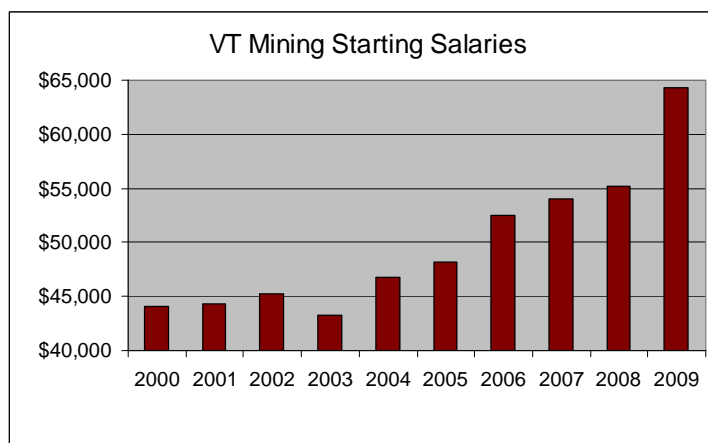


world mining community now looks to this Department to meet its needs. Just as in the past, the Department still places significant numbers of its graduates in the coal industry (62 in the past ten years), but the largest employer in recent times has been the construction aggregates industry (30% of graduates over the past ten years). And for those who thought that working in the salt mines was just a euphemism, 15 of our graduates have gone to work in salt operations over the past decade. In fact, recent graduates of this Department can be found in 32 states and 3 foreign countries.

The starting salaries for Department graduates continue to remain strong. In fact, in a recent survey conducted by CNNMoney.com, mining engineers ranked third in starting salaries among the 15 top earning bachelors degrees. Over the past ten years, average starting salaries for Department graduates have escalated at a rate of over 4% per year with the Class of 2009 averaging a whopping \$64,000 in annual compensation.

Just as in the past, the Mining and Minerals Engineering Department continues to provide high-quality engineers to meet the needs of the coal industry, but now it also provides high-quality engineers to meet the needs of the world mining community. So keep your eyes open the next time you see an interview with a new CEO of a major mining company. She just might be a graduate of Virginia Tech.

The starting salaries for Department



VT's Women In Mining Chapter: Young and Growing Strong

The Department of Mining and Minerals Engineering is known for the large number of student organizations it hosts. From industry-allied student chapters, such as the Burkhart Mining Society, to more competitive clubs, such as the mining competition team, the department's students are some of the most active on campus. But its newest addition is perhaps one of the most rapidly-growing student groups in the department.

The **Virginia Tech Chapter of Women in Mining (WIM)** is less than a decade old, but in the short time since its inception it has enjoyed a steady increase in membership alongside an expanding program of education and outreach for its members.

The goals of the VT chapter are consistent with its nationwide parent organization, Women in Mining, which seeks to educate its members on technical aspects of the mining and mineral resource industries and to develop and promote mining-related educational programs for the public.

Virginia Tech's WIM officially started in the fall of 2003, at a time when the department experienced noticeable growth in the number of females enrolling in the mining engineering program. "A VT chapter of WIM would be a great way to raise awareness of the impressive numbers of women entering the mining and minerals fields," remembers Emily Sarver, a 2004 graduate of the department and one of the students who helped found the chapter. "At that time VT's Mining Engineering program was very quickly attaining the gender diversity that universities and industry always talk about – and we wanted to do our parts to ensure that women continued to feel welcomed and empowered in our department."

From its initial membership of 18 female students, the chapter has quickly grown. This year there are 30 student members in the chapter. Of these, one third are male, two are mining graduate students, and one is non-mining (chemical engineering).

An important chapter goal is to educate its members on a broad range of mining and minerals related operations. Through generous support from industry sponsors, WIM organizes company field trips that expose members to a variety of mining operations. "New students often get their first look at real-world mining operations through a WIM-organized trip," says Cory Mills, this year's WIM President. Each year Cargill's deicing technology division sponsors a WIM trip to visit its underground salt mining operation in Cleveland. Last year, Arch Coal sponsored a trip to an underground longwall mine in West Virginia, and this fall, WIM members will be guests at an Alpha Natural Resources' surface coal operation.

VT WIM fulfills its secondary goal to educate the public by participating in the Government Education in Mining (GEM) program. Each year WIM members visit 2nd and 5th grade elementary students throughout Blacksburg to give presentations about mining. These presentations explain the importance of mining and also show how valuable minerals are extracted from the earth. "All of our WIM members love the industry in which we work, and we know that the future of mining is in the hands of today's children," says Mills.

The chapter also plays a key role in helping new students get to know each other and work with experienced senior students in the department. "WIM has provided a social and networking outlet for the women in the department," recalls Nikky [LaBranche] Manke, a Class of 2005 department graduate who also helped set up the chapter. "You get to know other upper and lower classman girls, who can provide great insight and advice for student issues you are dealing with."

Despite its busy agenda, Virginia Tech's WIM has many plans for the future. It is currently working to expand its successful GEM program into local high schools—potential sources for future mining engineering students. The chapter also wants to increase its presence at the SME (Society for Mining, Metallurgy and Exploration) Annual Conference and Exhibit. If the chapter can secure enough donations and industry sponsorships, they hope to begin sending a "chapter delegate" to future SME conferences.

With a growing membership, increasing slate of industry visits and a developing youth education program, WIM has provided its members with rewarding experiences they carry throughout their student and professional careers. "WIM allows us to get involved with each other, the industry and the community on a personal level," says senior Meredith May.

"It's truly an impressive sight to see so many women being successfully educated in a traditionally male field," notes Sarver. "I remember feeling very proud to attend the 2004 SME Conference in Denver with so many females in our group—we received a lot of positive recognition."



Trip to Arch Coal's Mt. Laurel Mine



WIM works with students under the GEM Program

New Faces in the Department: Dr. Kray Luxbacher



Since high school, **Kray Luxbacher** knew she wanted to be an engineer. But despite being the descendent of three generations of coal miners, the Bluefield, West Virginia, native never considered mining. That all changed once she got to Virginia Tech.

An information session at the mining engineering department piqued her interest in the field, and by the end of the semester she was a mining engineering student. “After

that first semester, I got a co-op job at U.S. Steel’s Pinnacle System in Wyoming County, WV, and that’s when I knew I wanted to be a mining engineer,” recalls Luxbacher. “I worked there for a year, and I loved it – it was an underground coal operation and I got to see a little bit of everything, from the longwall to the preparation plant.” Since then, the 2002 Hokie graduate not only returned to earn her Master’s and Ph.D. degrees in Mining Engineering, but she is now also the department’s newest faculty addition.

In the summer of 2008 Dr. Kray Luxbacher officially joined the department as an Assistant Professor, bringing a range of critical research interests and significant accomplishments, including a 2006 VT College of Engineering Teaching Fellowship, the 2006 American Rock Mechanics Association (ARMA) Best M.S. Thesis Award, and the 2008 Mining & Minerals Engineering Outstanding Graduate Student Award. Recently, Luxbacher helped secure a \$1.24 million NIOSH Grant to study mine ventilation systems after underground emergencies using novel gas tracers (*see sidebar*).

“My primary research interest is in mine ventilation, which is critical to maintaining a safe and productive mine,” says Luxbacher, stressing the benefits of her work. “I’m working in an area where I can positively impact safety for miners.”

Between her undergraduate and graduate degrees, Kray worked in Consol’s Virginia Operations, first as an industrial engineer, and later as an underground foreman at the Buchanan No. 1 Mine, supervising a continuous miner development section. “When working in an underground coal mine, safety is at the forefront of everything,” Luxbacher recalls of the positive work experience. “Roof control and ventilation are research areas that can significantly impact the safety of underground mines. I knew then that I wanted to study one or the other in graduate school, and I was fortunate that Dr. Westman had an opening in ground control related research.”

Kray worked under the direction of Associate Professor Dr. Erik Westman, and her doctoral thesis, *Time-lapse Passive Seismic Velocity Tomography of Longwall Coal Mines: A Comparison of Methods*, utilized local earthquake tomography—the same technology used in cat scans—to image physical changes in a rock mass under stress. “Tomography has been applied to mining in the past,” she explains, “but this was the first time it was successfully applied over a long term with passive sources.”

Luxbacher now enjoys working with her former instructors. “I already had a lot of respect for the faculty here and have studied under every one of them,” she says. “I have to admit I was a little nervous about making the transition from student to colleague, but the faculty has been very deliberate in making me feel like part of the team.”

Luxbacher teaches undergraduate courses in Ventilation Engineering and Mining Surveying, and she is developing a graduate level course in unconventional gas extraction. She serves as faculty advisor for the **Women in Mining** chapter (*page 5*), and she initiated and now advises the department’s new **Student Mine Rescue Team** which has almost 30 members organized into two teams that will compete nationally.

While courses, research and student activities give her plenty to do, Luxbacher is already planning future projects, such as the development of a computational fluid dynamics (CFD) research group. She’s also thinking about the future of ventilation methods: “I think I will see changes in the way we mine and the way we ventilate over my career, and I hope to contribute new technologies and techniques.”

Regardless of where her future lies, one thing is certain: she can now boast being her family’s fourth generation coal miner. “Some of the finest people I’ve known are coal miners—they are infinitely resourceful and generous with their knowledge, and I feel lucky to be working with people such as these in the mining industry.”

Professor Leads \$1.24 Million NIOSH Project

Dr. Kray Luxbacher, Assistant Professor in the Department of Mining and Minerals Engineering, is serving as principal investigator (PI) for a recently awarded \$1.24 million, five-year contract by the National Institute for Occupational Safety and Health (NIOSH) for a project that seeks to better understand mine ventilation systems following emergencies such as roof falls, bumps or explosions.

Luxbacher will be joined by three more Virginia Tech faculty members who will serve as Co-PIs. Dr. Robert Boggess, Senior Research Scientist in the Department of Chemistry, Dr. Harold McNair, Professor Emeritus in the Department of Chemistry, and Dr. Saad Ragab, Professor in the Department of Engineering Sciences and Mechanics, bring their collective expertise in gas chromatography and computational fluid mechanics. This interdisciplinary project proposes the use of novel gas tracers as a means of remotely ascertaining information about ventilation control systems following a mine incident.

“This project has the potential to provide insight into the status of a mine ventilation system following a serious incident, when information is limited and decisions impacting the safety of mine rescue personnel and miners must be made,” says Luxbacher. The NIOSH grant hopes to increase expertise in the area of mine ventilation through graduate education and the development of technologies that can improve mine safety and health. “The average age of people employed in the mining industry is fairly high, and the exodus of experienced personnel is affecting research and higher education,” notes Luxbacher. “This grant is a proactive step by NIOSH to increase expertise in mine ventilation, which is critical to maintaining safe mines and advancing mine safety and health.”

Stonie Barker, Jr., Inducted into Academy of Engineering Excellence

Stonie Barker, Jr., 1951 graduate of Virginia Tech's Mining and Minerals Engineering department, was inducted this year into Virginia Tech's College of Engineering Academy of Engineering Excellence, joining an elite group of 90 individuals out of more than 50,000 living engineering alumni. Since its inception in 1999, The Academy of Engineering Excellence honors the truly exceptional among the university's tens of thousands of alumni.

Barker's long career has been marked by his willingness to meet and succeed at tough assignments. He began his profession in mining as a deep-pit miner, and 19 years later he was the President of Island Creek Coal Company, the fourth largest producer of bituminous coal in the U.S. when he presided over the business.

For a man described by Time magazine as *a critical player* in ending a three and a half month national coal strike in the winter of 1978, his adolescence spent in a low-income area never indicated he would become a prominent leader in the energy arena. He was one of 29 students in his class at Chapman High School in West Virginia in the early 1940s. "You could stick under my thumbnail what I knew about math after graduating from high school," the future engineering graduate recalls.

During World War II, Barker enlisted in the U.S. Army and was sent to the South Pacific. He used the opportunity to enroll in math classes, but the courses still did not make up for his shortcomings. After the War, he worked as a common laborer and questioned how he was going to make a living.

He enrolled at West Virginia Tech. When he told the counselor he wanted to study engineering, "the man just shook his head," Barker says. The counselor advised him to go back to high school math classes, which Barker did during the summer of 1947. Later that summer, he accompanied a friend to Virginia Tech, and while on campus, decided to enroll. That fall, he was on Virginia Tech's roster, using the GI Bill to pay for most of his expenses, leaving him with the sum of \$132 a quarter, or \$44 a month, to pay for his room, board, and tuition.

In 1951 Barker successfully graduated with a degree in mining engineering, and his West Virginia roots led him back to the industry he knew might have opportunities for him. "Coal mining is a tough industry physically, but it had opportunities for educated people," Barker, says. He immediately joined Island Creek, which had operations on 30,000 acres of land in Logan and Mingo Counties in West Virginia.

One of his most difficult assignments came when he accepted the supervisory role at a Breathitt County, Kentucky, coal mine which was mining a seam about 30 inches high. A large man, Barker had to crawl with his employees on hands and knees through the mine. "No one wanted this job, but the company told me if I could make it profitable, I could write my own ticket," he says. Within six months, the mine became profitable and Barker was named a superintendent.

Within 12 years of graduating as a Hokie, Barker was named Island Creek's vice president of operations. Seven years later he was its president, and by 1972, the chief executive officer. In 1983 he was named chairman of the board. During his time with Island Creek, its coal production rate doubled, growing from 16 to 32 million tons annually.

Barker is remembered for his efforts in resolving a difficult standoff between the Bituminous Coal Operators' Association (BCOA) and the United Mine Workers (UMW) union. His suggestion to speak directly with UMW representatives, bypassing mediators, helped remove a log jam between the groups, resulting in a deal within 24 hours. "The UMW saw we did not have horns. They knew who we were. They spent a lot of time talking about the hard line approach the previous negotiators, the lawyers, had taken. They were glad that somebody was working with them who understood what mining was all about," Barker said in an interview with his alma mater after the negotiations in 1978.

Today Barker, who was named Coal Man of the Year in 1985, predicts the coal industry still has a good future, but it must learn how to burn coal cleanly. "This country can't do without coal...The country will demand it, use it, and do it cleanly. We are making headway," the chair of the National Coal Association from 1982-84, says.

Barker retired in 1984 from Island Creek and now divides his time between his homes in Hendersonville, North Carolina and Naples, Florida. After his first wife died in 1998 after 47 years of marriage, he wed a second time in 2003. He and his wife Dorothy enjoy playing golf together and spending time with their children and grandchildren.



Stonie Barker, Jr., is inducted into the Academy of Engineering Excellence. From left to right: Dr. Mike Karmis, Mining and Minerals Engineering (MinE) Stonie Barker Professor; Dr. Greg Adel, MinE Professor and Head, Stonie Barker, Jr.; and Richard Benson, Dean of the College of Engineering, Virginia Tech.

Alumni Notes

In future issues of "News from Holden Hall," we would like to include brief notes from you (our alumni) featuring major events that you may want to share with your classmates (e.g. job changes, promotions, weddings, birth of a child, etc.). If you have an item that you would like to share, please send it to Greg Adel per the contact information provided elsewhere in this newsletter. Here is an example of our first item:

Don Vickers (Class of 1979) moved from the Arch Coal Mountain Laurel Complex in West Virginia last spring to become General Manager of Arch's West Elk Mine in Somerset, Colorado. He writes that he would like to reconnect with his classmates from the late '70s. You can e-mail Don at DVickers@archcoal.com.

“Blast from the Past”

Our first “Blast from the Past” was a rousing success. Thanks to all those who responded. The picture was apparently taken for the 1970 edition of the Bugle; however, Irving “Jack” Craig (Class of ’49) recognized Carl Shelton as a classmate of his who later became a professor in the Department. Ed Wright (M.S. Class of ’74) also recognized several individuals in the group, as did Mike Haynes (Class of ’70) who was Burkhart president at the time. Jim Blount (Class of ’65) sent in an annotated picture that included the identities of a few key individuals, while Joe Aman (Class of ’71) responded with a detailed list of all the individuals pictured and indicated that the picture was taken at a Burkhart Mining Society meeting that included a guest speaker from International Salt. Don McKenzie (Class of ’71) was also able to identify many of the individuals in the picture. However, Paul Hollar (Class of ’70) found the exact picture in the Bugle and added the names of everyone to the picture. So for all those who requested that I reprint the picture with the names, here it is, courtesy of Paul Hollar.



Burkhart Mining Society picture (1970 Bugle, Pg. 273)

*Top Row: Ron Marcum (VP); Pete Morozzi; Lloyd Robinett; Don McKenzie
Middle Row: S.R. Gary; Dick Busick; Ron Smith; Joe Aman; Dr. William Foreman
Bottom Row: R.S. Strode (AIME Rep.); Dr. J.R. Lucas (Dept. Head); Lowell Hess (Secretary); Mike Haynes (President); Lynn Vinzant; Dick Bolen (Treasurer); Prof. T.C. Shelton; Theodore Parkman (Int. Salt Rep.)*

For our next “Blast from the Past” we have a sharp looking group that appears to be ready for a night out at the local disco. Can you help us identify the people in this picture and the occasion?



Please e-mail your responses to: adel@vt.edu, or mail them to: **Dr. Greg Adel**
Department of Mining and Minerals Engineering
Virginia Tech
Blacksburg, Virginia 24061