

Fall 2004



DEPARTMENT OF
geosciences

AT VIRGINIA TECH

Magazine



Happy 100th Birthday to Us!!
Alumni/Faculty Dinner

Message From The Chair



Dear Alumni and Friends,

As I sat to start writing this letter a few weeks ago, I could see from my window the changing foliage colors signaling the arrival of fall, and I was amazed at how quickly some things change. We were in the midst of the late summer hurricane season with three fairly major rain events here in Southwest Virginia. As the cool, crisp days of fall began, the Department of Geosciences continued to change also. After leading the department for 10 very successful years, Cahit Çoruh has retired to Florida. We thank him for his wonderful leadership and wish him well in his new venue.

Bob Bodnar is very busy developing new opportunities for our department's growth and success. Bob has taken a leave of absence from the chair position to assume a leadership role in the multidisciplinary Deep Underground Science and Engineering Laboratory (DUSEL) proposal that Virginia Tech will soon submit to the National Science Foundation. Meanwhile, as the department chair, I continue to manage the day-to-day affairs of the department with the goal of sustaining our very high research and teaching productivity while planning for future growth.

Other changes creep up on us. One hundred years ago, the first curriculum leading to a bachelor's degree in geology was published in the VPI catalog, and in 1907 the first bachelor's degree was awarded to Joel Watkins. We are now looking forward to celebrating a century of excellence in geosciences education in 2007. Over the past 100 years, the Department of Geosciences has awarded approximately 1,150 bachelor's degrees. We encourage you to visit our web site to review the names of these alumni and their dates of graduation. Incidentally, the department has awarded more than 530 master's and doctorate

degrees. To the best of our knowledge, the first master of science degree was awarded to B. F. Moomaw in 1932, and the first doctorate degrees were awarded to C. R. B. Hobbs and G. F. Meenaghan in 1956.

In 1904, Roy Holden joined the VPI faculty, and the first program of study leading to a bachelor of science in Applied Geology was published in the course catalog. Dr. Holden was so new to campus that his name did not appear in the catalog even though his title, Assistant Professor of Geology and Mineralogy, did. The curriculum required the B.S. candidate to take a lot of chemistry, physics, and math along with geology courses.

So, it seems that some things really haven't changed at all. The geology bachelor of science program was very challenging 100 years ago, and it is still very challenging with liberal amounts of chemistry, physics, and math along with plenty of geology. We are proud of our tradition of offering an excellent education in the geosciences, and we look forward to continuing to provide a challenging curriculum for our undergraduate and graduate students in the next century.

We encourage you to continue to be involved with your department. One of the real pleasures for faculty is to meet with our former students to learn how successful you have become. We welcome suggestions from you regarding ways to celebrate our first century of excellence in geosciences education.

Best wishes,
Donald Rimstidt
Professor of Geochemistry
Department Chair

DEPARTMENT OF
Geosciences
AT VIRGINIA TECH
Magazine

www.geol.vt.edu

Fall 2004

Newsletter Editor

Mike Hochella

Design and Copy Editor

Mary McMurray

Photographer/Graphics Design

Mark Fortney

Alumni Relations Committee

F. Donald Bloss, Professor Emeritus
Robert Bodnar, Univ. Distinguished Professor
John K. Costain, Professor Emeritus
Lynn Glover III '52, Professor Emeritus
Mike Hochella '75, Professor
Mary McMurray, Program Support Tech.

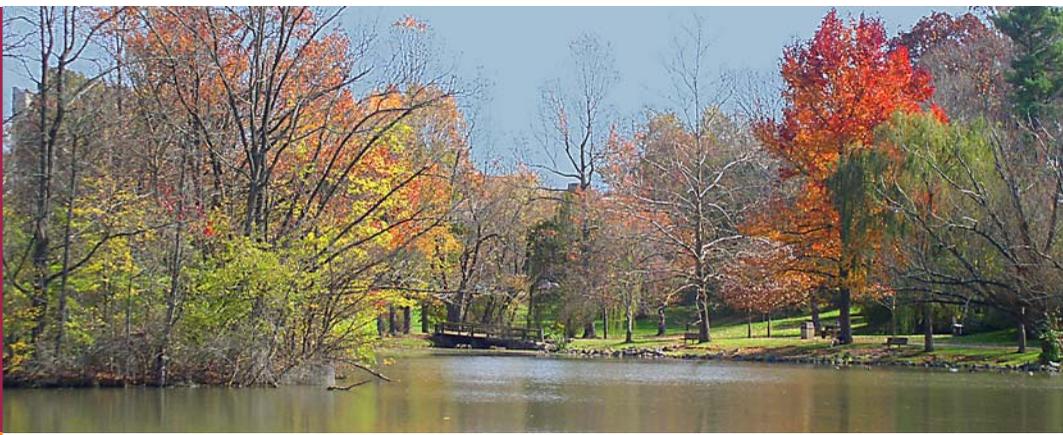
Dedication

This edition of the Geosciences Magazine is dedicated to Professor Emeritus Lynn Glover III, '52, Alumni Relations Committee Chair from 1995 to 2004, for his tireless efforts in outreach to all alumni of the Department of Geosciences over the last decade. The department has benefited immeasurably from his work.



Letters to the editor, suggested articles, and other comments are welcome at this address:

Newsletter Editor
Department of Geosciences (0420)
Virginia Tech, Blacksburg, VA 24061
Office phone (540) 231-6521
Fax (540) 231-3386
E-mail: mcmurray@vt.edu



Contents

2
Happy 100th Birthday to Us!!

Exactly one hundred years ago this semester, the Geology Department at Virginia Polytechnic Institute was born with one professor who left the next year. His replacement, Roy Holden, lasted nearly a half century.

6
**Leo Harris – a Remarkable Man,
a Remarkable Story**

Leo Harris is a truly inspirational role model for Tech's geosciences students, alumni, and faculty today. Just this year, he generously established the Leonard P. and Melva L. Harris Scholarship in Geosciences.

8
Alumni/Faculty Dinner

On October 22, at the annual alumni dinner, the Department of Geosciences celebrated the leadership of Cahit Çoruh, as department chair from 1994 to 2004, on the occasion of his retirement.

17
Interview With Nancy Ross

Professor Nancy Ross discusses how she arrived in the Department of Geosciences at Virginia Tech, the road to Associate Dean of the College of Sciences and many other topics.



| | |
|--------------------|----|
| Faculty News..... | 4 |
| Alumni Awards..... | 10 |
| Obituaries..... | 12 |
| Alumni News..... | 14 |
| Contributions..... | 16 |

Cover: Virginia Tech students (L-R: Dean Snidow, Mark Coffin, Mary Griffith, John Sarao, Beth Glusica and David Cavit) investigate the geology atop Mount Rogers in Grayson County. Volcanic rocks there provide a snapshot of the region's distant past. (Roanoke Times, October 12, 2004)

Happy 100th Birthday to Us!!

by Mike Hochella

Exactly one hundred years ago this semester, 728 male students were enrolled at Virginia Polytechnic Institute. The footprint of Derring Hall was part of a row of faculty houses. All sciences were taught in one small building which was sited at the present position of Shanks Hall in the Upper Quad; and, in that semester, the Geology Department was born with one professor, Dr. Thomas Watson, who would leave the next year for the University of Virginia. Despite the facts that the science building almost completely burned in 1905 and the total enrollment at VPI would drop to as low as 477 during World War I, the Geology Department survived thanks to Dr. Watson's replacement, Roy J. Holden. Dr. Holden was a very young geologist having just finished his Ph.D. at the University of the Wisconsin. He served as a faithful and inspiring mentor to all who took geology at VPI for the next 40 years, bringing the department almost single-handedly through the first half of the 20th century. Despite rapidly declining health as he aged well into his seventies, he continued to teach until his death in December of 1945. Although there was only one geology major at the time, the department was still alive, and that is what Professor Byron Cooper needed upon his arrival in 1946 to begin the

department on its upward trajectory that it still enjoys today.

Even in those early days of the department a century ago, being a geology major was not for the faint of heart. The 1904-1905 college catalog lists mandatory courses for geology majors such as chemical physics, inorganic chemistry, zoology, and French in the first two years, and metallurgy, mineralogy, organic chemistry, petrography, and German in the last two. Under the wing of Professor Holden, the very first geology graduate was Joel Hill Watkins from Charlotte Court House, Virginia, who successfully and proudly finished all requirements with the VPI class of 1907. Back to the present day, over the next four years, the current Department of Geosciences will be reconnecting to its centennial roots, and at the same time planning into the future for its second century of academic success.



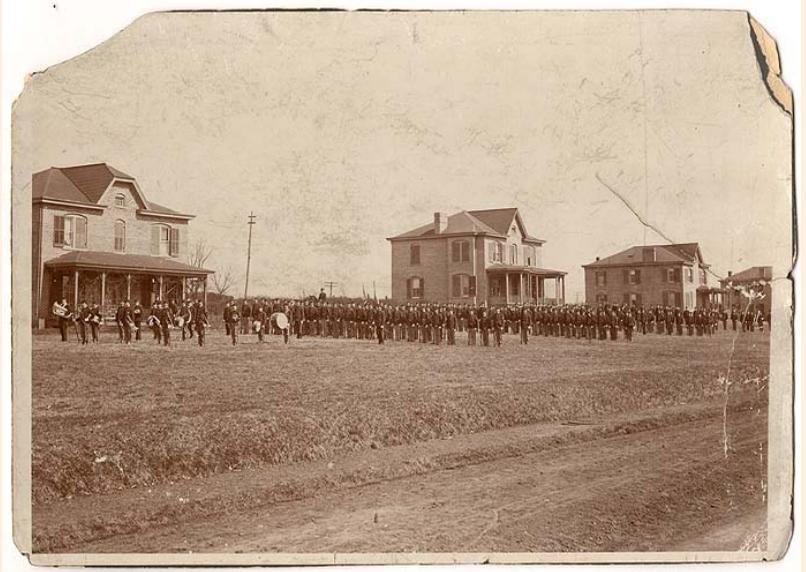
VPI Battalion, ca. 1906
(Historical Photograph
Collection of Virginia Tech.)



Barracks No. 1, Lane, Hall, VPI, V.A.M.C., Blacksburg, Virginia.
(Historical Photograph Collection of Virginia Tech.)

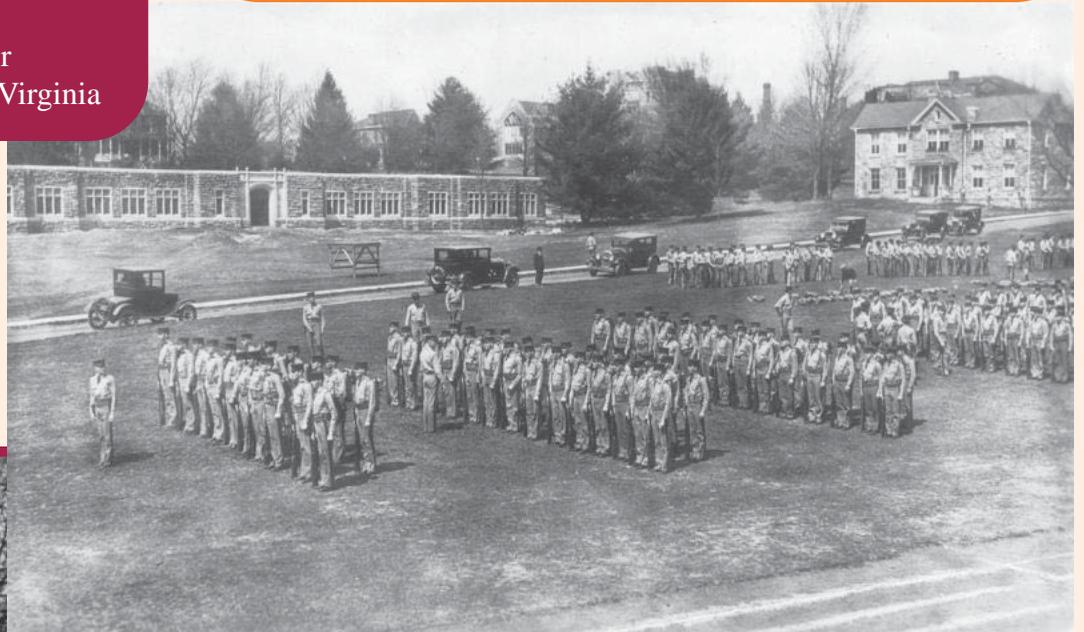


Joel Hill Watkins
First VPI Geology Major
Charlotte Court House, Virginia



*"The Battalion" on Faculty Row, 1899.
(Historical Photograph Collection of Virginia Tech.)*

*Cadet Inspection in
front of Patton Hall,
1926. (Historical
Photograph Collection
of Virginia Tech.)*



*VPI Cadets. (Historical
Photograph Collection of
Virginia Tech.)*

Faculty News

Old Dogs Learn New Tricks



Gil Bollinger on his ranch in Wyoming

Dr. Gil Bollinger retired from the Geological Sciences Department at Virginia Tech in May of 1993. He and his lovely wife, Jane, moved to Shady Lane, Buffalo, Wyoming, and are living happily ever after, BUT he is still researching, publishing and writing proposals. Gil's "second career" began with his interest and study in western frontier history. In the last nine years, he has written some 20 nonfiction publications on the subject including three full-length books; three papers in refereed, professional journals; a pamphlet; and 13 museum newsletter articles. He is enjoying the challenge of researching and writing and even seeking grants for his local Gatchell Museum. His largest undertaking has been *Jim Gatchell – The Man and the Museum* (432 pages) which was a biography of Jim Gatchell (1872-1954), pharmacist, historian, and collector in Buffalo and the history of the Memorial Museum using his collections. If you would like to view a full listing of Gil's latest works, please check out the newsletter at <http://www.geol.vt.edu/general/newsletter/fall2004/>.

Professor Shuhai Xiao and Colleagues Get the Cover of the Journal *Geology*

Professor Shuhai Xiao from Tech's Department of Geosciences, along with Chuanming Zhou, as well as members of research groups from Washington University and the Chinese Academy of Sciences, recently had the headline article (and cover photograph) in the prestigious journal *Geology*. The cover illustration is a photomicrograph of sedimentary barite (barium sulfate) in carbonate that immediately caps a 600 million year old glacial deposit in South China. Glacial deposits of broadly similar age occur widely on all continents, and they have been taken as evidence for a snowball Earth. At least two such events may have occurred between 740 and 600 million years ago, each terminated by the deposition of cap carbonates with unusual geochemical and sedimentary features (such as precipitation of barite). The relationship between the snowball Earth events and the evolution of multicell organisms (including animals), however, is poorly understood. This is largely because of the lack of precise radiometric dates to constrain the age of evolutionary and climatic events. Chuanming Zhou, a post-doctoral fellow in the Xiao group, reported a precise U-Pb age of 663 ± 4 million years from a volcanic ash deposited between two intervals of glacial deposits in South China, as well as high-resolution ^{13}C data from the barite-bearing carbonates. This study provides for the first time a precise radiometric age to differentiate the two glaciation events, and it has important implications for the climatic and biological evolution on the ancient Earth.



Sonars from Deep Time: Fossil Shells Record Depth of Ancient Seas

Press Release

Since at least Galileo's time, fossils have been used to gain insights into the nature of ancient environments. In particular, paleontologists and geologists have argued in recent years that fossil shellfish can provide an important record of water depth of prehistoric oceans. Now, a new study of the relatively recent geological past (the last 125,000 years) shows that ancient mollusk shells can, indeed, provide outstanding depth gauging devices. Daniele Scarponi, an Italian researcher and a postdoctoral fellow of the Marco Polo Foundation visiting the Virginia Tech Department of Geosciences from the University of Bologna, and Michal Kowalewski (a Virginia Tech

Geosciences faculty member) used shells of fossil mollusks extracted from marine sedimentary rocks to estimate the water depth at which these rocks were originally deposited. By applying multivariate numerical techniques to fossil mollusk data and testing the resulting patterns against the depth distribution of the present day shellfish, the researchers were able to estimate the water depth of ancient seas to the nearest 3 meters (~9 feet). The fact that fossil shellfish can act as such an accurate and precise bathymetric (depth gauging) tool is an exciting discovery: it offers geoscientists a precise strategy for enhancing our understanding of sedimentary rocks, which represent the primary source of information about the history of life and past environments and climates of the Earth. The report summarizing this study appeared in the November 2004 issue of *Geology*.



Shells of fossil mollusks — not unlike this specimen dredged from the present-day sea floor of the Puget Sound — can provide surprisingly precise depth estimates for ancient sea floors, especially when analyzed using multivariate ordination methods. Photo by J. Stempien, Virginia Tech Geosciences Ph.D. candidate.

This photo was taken during a 2004 field course in marine biology and paleontology taught at the Friday Harbor Laboratories of the University of Washington by Michal Kowalewski from Virginia Tech (top of photograph in blue shirt) and Lindsey Leighton from the San Diego State University. Three Ph.D. students from Geosciences at Virginia Tech (John Huntley, Jen Stempien, and Rich Krause) participated in the course.

Leo Harris

– a Remarkable Man, a Remarkable Story



Cahit Çoruh chatting with Melva and Leo Harris (B.S. '57) at an Alumni-Faculty Dinner.

When Leonard P. Harris' name was called out at the undergraduate commencement ceremonies in 1957, his VPI degree in geological sciences may have gone nearly unnoticed except to his family and friends attending on that day. Little did anyone know at the time (including Leo!) that he, so many years later, would become a key figure at Virginia Tech; and through his long and distinguished career he would found an empire of successful companies.

Leo Harris started his career as a Geodesist with the Aeronautical Chart and Information Center in 1958. In 1959, he moved to the Rand System Development Corporation as a System Engineer and later became Department Manager. By 1977, Leo formed Southeastern Computer Consultants, Inc. The Corporation now has offices in eight locations, and he remains Chairman of the Board. Never satisfied to stay in one place and get too comfortable, Leo also started a network corporation called Uninet, Inc., in 1990 and sold the company in 2003, and still he was not done. A full 37 years after earning his degree at Virginia Tech he formed Double Eagle Energy Company, Inc. in 1994 to re-work two oil fields in

It is little wonder that Virginia Tech, at many levels, has sought the advice of Leo over the years.

Kazakhstan. The company was sold back to the Kazakhstan government in 2000.

It is little wonder that Virginia Tech, at many levels, has sought the advice of Leo over the years. He is a member of the Ut Prosim Society, a member of the Board of Virginia Tech's Institute for Critical Technology and Applied Science (ICTAS), and a member of the Dean's Roundtable for the College of Arts and Sciences and now the College of Science. Not surprisingly, Leo was honored by being asked to deliver the commencement address to Tech's geosciences graduates this past May.

Mr. Harris is a truly inspirational role model for Tech's geosciences students, alumni, and faculty today. Just this year, he generously established the Leonard P. and Melva L. Harris Scholarship in Geosciences. The endowed fund is available to support students from the Appalachian geographical area that have at least a B+ average.

The Harris Scholarship in Geosciences is much more than a key donation to the education of someone deserving. It carries with it the magic of innovation and hard work, something that Leo himself turned into his life's work.

2004 Geosciences Commencement Address

by Leonard P. Harris

“Dear Cahit, Members of the Faculty, Parents, Families, Friends, Distinguished Guests, and above all — Graduates of the class of 2004. It is indeed an honor for me to be addressing you this morning. I was a member of the Class of 1957, and here I stand this morning speaking to you — Miracles Happen — the American Dream is alive and well!

Edward Bennett Williams once observed that a commencement address is a 15 minute interruption that is impeding the progress of a happy crowd of young people on their way to a great party. So trust me — I’ll try to keep my comments brief.

Graduates — I stand before you today to do three things:

1. To Congratulate you,
2. To Counsel you, and
3. To Challenge you.

First — **Congratulations!** Just think of it. Starting tomorrow you can finally start paying off your student loans.

A degree from Virginia Tech is always hard earned. The best teachers I ever had were those who forced me to do my best — who would not accept merely the acceptable, teachers who required the maximum effort. I understand there are still a few teachers here at Virginia Tech like that.

Let’s congratulate your teachers and your families too. This is their day as much as your own. Parents, the two biggest raises I ever got were when our two children graduated from college.

Graduates, don’t forget what your professors and your families did for you — so — please rise, turn to them and give them a round of applause.

And now my **Counsel** — First let me give you some truths that were presented in a Commencement address at Hood College in 2002 by Ambassador Acersba:

1. It is certain that the United States is still the Beacon of Freedom, Hope, and Democracy. A country where great opportunities exist for everyone — regardless of race, religion, nationality and capabilities.
2. You are tomorrow’s leaders — act locally but think globally.
3. Tolerance is required — Tolerance of people who look, think, act and feel different than you. Tolerance is a real test of civilization.
4. Life is not fair — get used to it. If you thought the professors here were tough, wait until you get a boss. Bill Gates said, “Life is not divided into semesters. You won’t get Spring Break anymore.”
5. Great economic opportunities exist for you. Reach for the stars. If you do, then you’ll never come down with a handful of mud.
6. It is certain if you don’t know where you’re going, you’re already there.

So always have a vision, a goal, and pursue it like there is no tomorrow. And when you feel like there’s no tomorrow, remember, it’s already tomorrow in New Zealand.

I have been involved with oil wells in Kazakhstan, with computers as early as the late 50s with the Rand Corporation, founded and grew a corporation, and I am here to tell you technology, culture, and times have changed. I urge all of you to learn to be a part of a team. The team will be made up of professionals from a number of disciplines.

Geophysics needs Computer Sciences; Biology and Chemistry are becoming more interconnected. As you grow, lawyers, accountants, government regulators, and international treaty considerations all become a part of any project. So you need to grow — in knowledge from across professional boundaries. Those of you who have the ability to learn from other professionals have a greater probability of developing the innovations needed to solve the complex problems of the world. You are graduates of the College of Science and so it’s you to whom we will look to innovate. Innovation is what enables us to have a rising standard of living. Innovation is the ability to get people to do things in a new way. Innovation is using new methods to obtain results.

Sometimes it takes a long time to take a cluster of knowledge and combine it in an innovative way. For instance:

- * The binary theorem was developed in the 17th century
- * The calculating machine in the 19th century
- * The vacuum tube in the early 20th century

By 1918, all of the knowledge to develop the computer was known. However, it took 30 years — until 1946 — for someone to figure out how to use the knowledge to develop the computer.

Look at the Bioinformatics Institute — the research on Nanotechnology — the discovery of oil.

So I urge you to become innovators across the frontiers of the professional world by recognizing the value of working as an interdisciplinary team.

Now for the **Challenge**, and I know that all Virginia Tech graduates are up to challenges.

I know as you grow, you will do well in your careers, but will you use that hard earned degree to also benefit society? I challenge you to give something back. Virginia Tech was here for you in the past — it will be here for you in the future. Use it and its resources — but give something back. Your talent helps — your time helps — and part of your treasure helps.

I challenge you to do good. Believe me when I say that if you are good — have high morals, integrity, and give of your time to society — then happiness and success will pursue you.

The **Final Challenge** is to get you to recognize each of you is a dwarf — Yes, I said DWARF. Virginia Tech has given you a prescription — they have given you your rehabilitation routine — they have given you the directions that go with the prescription.

If you follow the knowledge and advice they have provided, each of you will grow and some of you will actually become giants. Now I want to close by asking each of you to go and take your medicine and grow.

THANK YOU”

Fall Alumni Dinner: A Celebration For Cahit Çoruh

Cahit Çoruh Retires after a Remarkable Decade as Chair

On October 22, at the annual alumni dinner, the Department of Geosciences celebrated the leadership of Cahit Çoruh on the occasion of his retirement. During his ten years as Chair, from 1994 to 2004, the department changed dramatically. The most obvious changes were the faces of the faculty. During those years, eight faculty retired and two left for new positions (that's nearly half the department!). It would seem simple enough to replace all these losses at the average rate of one per year for the 10 years of Cahit's tenure as chair. The only problem was that during those 10 years, Virginia Tech was going through a series of severe budget reductions brought on by the fiscal problems of Virginia and the entire country. Many, in fact most, of the departments in the college simply lost or gave up faculty positions.

In Cahit's second semester as Chair, Dean Bates handed him a letter that said the Geological Sciences Department budget would be reduced by 14% in 1995 alone. This made the idea of downsizing the department to a faculty size of 12 to 14 deceptively attractive. However, Cahit strongly opposed downsizing because the department could not keep its edge in research excellence. The financial news was so severe that it crossed Cahit's mind to resign in protest; but he quickly decided that such a move was not going to do the department any good. Instead, the next day Cahit went back to Dean Bates with a long-range plan to accommodate the budget cut while his department aggressively tried to recruit new faculty. Dean Bates had the wisdom, and trust in Cahit, to believe in the plan, and he approved it.

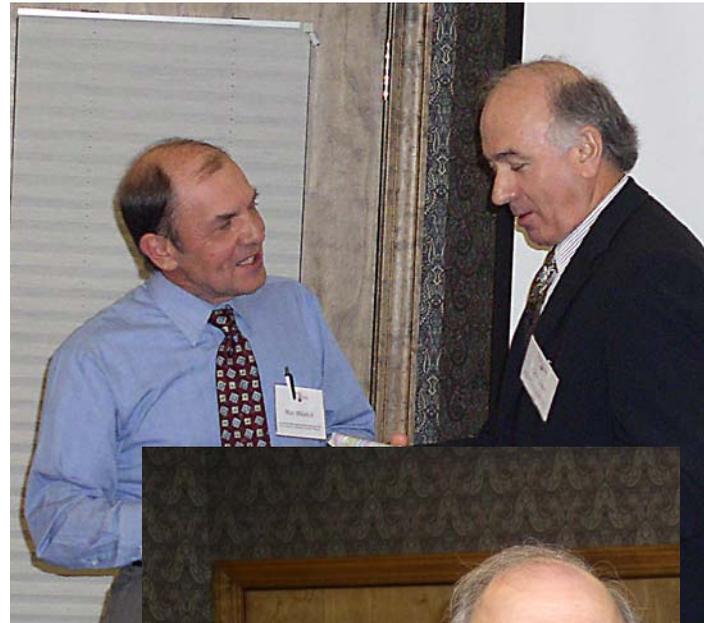
The result of this trust, and Cahit's consensus building style, hard work, and perseverance, was a department that not only survived during the several years of lean or declining budgets, but actually flourished. As bright new stars arrived, year by year, research funding, contributions, teacher ratings, graduate student numbers, and more all improved significantly to dramatically.

The faculty acquisitions that Byron Cooper made in the 1960s eventually put the department in the national and international spotlight, with the department's rating rising well into the top 20 nationally by the mid-1980s. The rejuvenation of the department in the past decade will likely repeat that impressive feat again.

In fact, and thanks largely to the leadership and vision of Cahit, the department feels that even a higher ranking is within its grasp. Although time will tell, one thing is already certain. The legacy that Cahit began, and what continues today, will live on in the Department of Geosciences for a very long time to come.

The Çoruh Story: Seeds of Talent and Fortune, from Tragedy to Triumph

The year was 1952. The place was a small city in the eastern part of Turkey. At 5,750 feet above sea level, next to a 50 mile wide lake with towering mountains all around, the Van area of this fascinating and historic country is spectacularly beautiful and bitterly cold in the winter. But 11 year old Cahit Çoruh seemed to have everything any growing boy would ever want, a close knit family, two loving parents, and a father who was highly industrious and respected in the community. The economy was quickly improving following World War II,





Turkey was a progressive Islamic country, and Cahit could rest assured in great security. But one very dark night in that year, in a split second, the Çoruh family was shattered, never to be the same. Cahit's father was tragically killed in a single car accident on a poorly marked road under construction.

With only \$160 in family savings, no family assistance from the government, and two babies in the household, Cahit, as the oldest boy, must have felt the weight of the world on his shoulders. At such a tender age, he would have to battle through the tremendous grief of loosing his best friend and father, and somehow support the family financially. But Cahit's mother had a plan. Still in the days before gas stations in his town, Cahit would sell gasoline from five gallon cans at a profit of 10 cents per can. So, not yet even 12 years old, Cahit would start his selling before sunrise, go to school, and go back to selling before going home in the late evening.

Spurred on by the constant encouragement of his mother, and the memory of his late father, Cahit was a dedicated student with outstanding developing skills in math and physics. His academic promise was so apparent that his mother insisted he stop the gasoline business and finish his secondary education at one of the best high schools in all of Istanbul. During his senior year, he

took his first geology class, and it was that teacher who recognized his talent in this subject as well. But she went well beyond that. It was this geology teacher that first told Cahit about geophysics, where he could put together all that he loved most in academics. Just a few short years later in 1963, Cahit had earned his Bachelor's degree in geophysics from the University of Istanbul with an outstanding record. After a time at the University of London, combined with working as a professional geophysicist in Turkey, he finished his Doctorate degree back at the University of Istanbul in 1970.

Cahit went off to Ankara, Turkey, and worked for the Turkish Petroleum Corporation, and even did exploration work in Algeria for a few years. It was in those years that he met Dilek who worked in a geotechnical engineering firm. After a long courtship, they married, and a few years later had Basak, their pride and joy who, not surprisingly, was exceptionally bright. (Basak is now in medical school in Richmond, Virginia.)

Cahit knew that he was an academic at heart, and in 1977, he accepted an associate professorship at the University of Istanbul. However, in the late 1970s, there was student unrest in Turkish universities, serious enough to close them often. Cahit became more and more restless, knowing that he was entering the most productive time of his career. He saw an advertisement for a visiting professor in geophysics at Virginia Tech, and after considerable thought, Cahit and Dilek decided to give the United States a try. After several trips to Blacksburg, and growing scientific collaborations with John Costain and Lynn Glover which included the development in 1980 of the first academic data processing center of seismic data, rivaling what industry had at the time, Chair Dave Wones asked Cahit to apply for a permanent position. In 1985, Cahit left as department head of geophysics at the University of Istanbul and became Professor of Geophysics at Virginia Tech. And only seven years later, he was Chair of Geological Sciences in Blacksburg, again able to work his magic but this time in America.

Cahit's mother still resides in Turkey, and you can be sure that she has followed, and has been so proud of, Cahit's long and winding road to the pinnacle of his profession. But as it turned out, on that dark night in 1952, Cahit's father clearly did not really leave. His strength and wisdom have been with Cahit ever since.

Top Left: Matt Mikulich & Cahit Çoruh

Top Right: Jeff Jeffries & Bob Bobnar

Center: Cahit & Dilek Çoruh

Bottom Left: Lynn Glover, Bill Presley & Bill Moon

Bottom Right: Cahit Çoruh

Alumni Awards

Geosciences Alum Wins Prestigious Albert Einstein Fellowship

*Triangle Coalition for Science and Technology Education
(with Mike Hochella)*

Robert Culbertson, a science teacher from Lloyd C. Bird High School in Chesterfield County, VA, and 1988 graduate of the Department of Geosciences, has been awarded the Albert Einstein Distinguished Educator Fellowship. He started his 10-month fellowship on Capitol Hill in the office of Senator Joseph Lieberman (D-CT) in September.

Besides his B.S. in geosciences from Tech, Mr. Culbertson holds an M. Ed. in Curriculum and Instruction from Virginia Commonwealth University (VCU). Rob has spent the past ten years teaching high school level Earth Science, and at the same time he has served for six years as an adjunct geography instructor at VCU. During his teaching tenure in Chesterfield County, Rob exemplified the meaning of a "model citizen." He has served as a science fair judge, an academic competition emcee, a Little League coach, an engineering team coach, a chess club sponsor, and as a member of the National Honor Society selection committee and the county's textbook adoption committee. He has prepared and conducted presentations for Chesterfield County science in-service meetings, the Virginia Association of Science Teachers, the Chesapeake Section of the American Association of Physics Teachers, and the Virginia Home Educators Association, and advises in the development of hands-on science education exhibits for the Science Museum of Virginia. In 2002, Rob spent three weeks touring Italy as a recipient of the R.E.B. Award for Teaching Excellence.

The Albert Einstein Distinguished Educator Fellowship Program offers elementary and secondary mathematics, technology, and science teachers who have demonstrated excellence in teaching, an opportunity to serve in the national public policy arena. Selected teachers spend a school year in a Congressional Office or a federal agency. Fellows provide practical insights and "real world" perspectives to policy makers and program managers developing or managing education programs. The fellowships increase understanding, communication, and cooperation between the mathematics, science, and technology education community and legislative and executive branches of the federal government.



Credit: Andrea Bodmann, Triangle Coalition for Science and Technology Education

Jon Roller (M.S. '04) Wins the 6th Annual William Preston Society Award

by Madeline Schreiber

Jonathan Roller was recently named the winner of the 6th Annual William Preston Society Award. The Preston Society Award was established in 1999 to recognize a Masters level graduate student who presents an original idea with the most potential to benefit all people. Jon's thesis, titled "Arsenic Mobilization through Bioreduction of Iron Oxide Nanoparticles" demonstrated that iron-reducing bacteria can mobilize arsenic from iron oxides through disaggregation of the oxides. His research identified a significant and fundamental mechanism for arsenic release to natural waters.

The award was presented to Jon on homecoming weekend by the William Preston Society, whose members include the Board of Visitors, the current president, Charles Steger, and all past presidents of Virginia Tech. Donald Rimstidt, Department Chair, was present at the ceremony, as were Jon's co-advisors, Madeline Schreiber and Christopher Tadanier.



Rosso Wins Two Prestigious Research Awards

by Michael Hochella

Kevin Rosso, who obtained his M.S. with Bob Bodnar in 1994 and his Ph.D. with Mike Hochella in 1998, was awarded the 2004 Mineralogical Society of America (MSA) Award, as well as the Director's Award for Outstanding Performance at Pacific Northwest National Laboratory (PNNL). The MSA Award is a highly coveted research prize awarded one time each year to the brightest young star in the fields of mineralogy, petrology, and crystallography. Candidates can only be judged for work done before the age of 35. The Director's Award at PNNL is the top research prize at this national laboratory, where Rosso is presently a Senior Research Scientist. His primary research is focused on the fundamental reactivity of mineral surfaces using computational chemistry. While a Ph.D. candidate at Virginia Tech, he was the first researcher in the world to measure electronic spectra of single atoms on mineral surfaces.



Obituaries

Forest D. Etheredge (Virginia Tech '51), 74, Educator, Former State Senator from Aurora, IL

Chicago Sun-Times (IL)

July 2, 2004

Author: Raksha Varma

Contemporaries of Forest D. Etheredge recall his neatly tailored suits, carefully combed salt-and-pepper hair and statesmanlike demeanor. But those closest to Dr. Etheredge remember him as a soft-spoken father, a Thomas Jefferson buff and a faithful Catholic. Dr. Etheredge, a former Republican state senator from Aurora, Illinois, piloted the founding of the Illinois Mathematics and Science Academy, and also contributed to the state's higher-education system for more than 35 years. After he uttered the words, "I'm happy, and I want for nothing," Mr. Etheredge died Saturday (June 26) in his Aurora home from leukemia and non-Hodgkin's lymphoma, said Joan Etheredge, his wife. He was 74.

Dr. Etheredge, who was born in Dallas, moved to Chicago at the age of 10 and graduated from Sullivan High School. After he completed undergraduate studies in geology at Virginia Tech in 1951, Dr. Etheredge went on to pursue his master's degree in the field at the University of Illinois at Urbana-Champaign. He later finished coursework at Northwestern University for a doctorate in geology, but not his dissertation. He received a Ph.D. in higher education from Loyola University Chicago in 1968.

When Mr. Etheredge was working for City Colleges of Chicago, he joined a project to experiment with teaching courses on television. "When he used to appear on TV, our kids were toddlers," said Dr. Etheredge's wife of 49 years. "They were glued to the screen." He taught geology, physics and astronomy. His passion for education meant his family moved around a lot, his wife said. He started at Rock Valley College in Rockford in 1965, went to McHenry County College in Crystal Lake three years later, and joined Waubensee Community College in Sugar Grove as president in 1970.

"Most remember him for his efforts in education," said his wife. "But I remember him as a wonderful father who didn't raise his voice. When the children misbehaved, he used to say, 'I'm confident this will never happen again.'"

In addition to spending time with his family, Dr. Etheredge enjoyed hitting the golf course, listening to classical music and

reading up on historical figures. "He was very well-rounded," said former Illinois State Representative Suzanne Deuchler (R-Aurora), who worked with Dr. Etheredge while he was in office. "He was a huge family man. He had his priorities in order, both in and out of the Senate." Dr. Etheredge, who

represented the Aurora area from 1981 to 1993, was also the minority spokesman for the Revenue Committee and the Appropriations Committee and served on the Elementary and Secondary Education Committee and the Illinois Economic Fiscal Commission. "Forest knew the political process enough to make education a priority for Illinois," said Stephanie Pace Marshall, current and founding president of IMSA, who worked on the academy's opening with Dr. Etheredge in 1985. "He thought like a

politician, a scientist. But his heart was that of a humanist." Following his Senate term, Dr. Etheredge became dean of the Dunham School of Business at Aurora University and served on the IMSA board. He retired in 2001.

Other survivors include his sons, John, Brian and the Reverend F. William; his daughters, Mary-Faith Etheredge-Medernach and Regina Freschi; a sister, Elaine Hutchinson; brothers Phil and Judd, and five grandchildren. Burial was in Mount Olivet Cemetery in Aurora. Copyright 2004 Chicago Sun-Times, Inc.

After retirement in 2001, Forest attended the Old Guard ceremonies marking 50 years as an alumnus. On Forest's and wife Joan's second visit in May 2004, we relived our years as classmates at VPI (as it was called then) and what we had done since. Forest said that Department Chairman Byron Cooper told him in 1951 that he should become a teacher. It was a thought that, being reserved, frightened him a little. Byron had seen something that Forest had not recognized in himself. That evening Forest expressed a deep appreciation for the Department of Geology (now Geosciences) and the education that it gave him. He will be missed.

Lynn Glover III '52



L to R: Lynn Glover '52, Mrs. Etheredge, and Forest D. Etheredge '51

William Joseph Domoracki

May 24, 1959-July 25, 2004

by Cahit Çoruh and John Costain

It is with great sadness that we report the death of William J. Domoracki (Ph.D. Geophysics, '95) who passed away suddenly of cancer on July 25, 2004, in Atlanta, GA.

John Costain recalls a phone call from Bill in the fall of 1987. He was inquiring about entering graduate school in geophysics at Virginia Tech. Bill had a stuttering problem, and it always seemed to John that Bill might have thought that a verbal inquiry instead of a written application would be an honest and complete way of introducing himself. His academic record was exemplary, having graduated from SUNY Potsdam Summa Cum Laude. His teaching at Virginia Tech was superb and he received excellent evaluations from the students. He gave excellent presentations at professional meetings. The stuttering was forgotten.

Bill's interest was in reflection seismology. He had an excellent background in geology and geophysics, which was a major factor in understanding the data with which he chose to work. Processing seismic reflection data is not routine. Although the processing steps can be written down and one can click on icons and get some kind of an answer from the currently available commercial software, blindly following that path rarely produces the best result. This is especially true for difficult (noisy) data or complicated geology. A great deal of judgment is involved in each processing step. It can be a frustrating experience for the impatient. Cahit Çoruh and John Costain met with Bill just about every day for about an hour to discuss processing parameters and what seemed to work and what didn't. Bill never appeared impatient during these meetings, always showed up on time, and never complained when the meetings lasted longer than planned, and always followed through with what we jointly agreed might work for the next step. He was computer literate in the finest sense of the words and could work with both low-level and high-level programming languages.

Bill was an integral part of our Regional Geophysics Laboratory and his research accomplishments while at Virginia Tech were truly regional. He played a key role in imaging the base of the crust in Maine where, for the first time, we saw the Mohorovicic discontinuity across the famous Norumbega Fault Zone (*Geology*, v. 24, n. 3, p. 251-254).



Bill Domoracki produced what is arguably the best reflection seismic cross section ever seen on the Atlantic Coastal Plain. It remains the standard reference for others to examine and speculate upon, as Bill did in his dissertation, about whether faulting is still taking place at the present time all the way up to the surface along those reactivated Paleozoic faults that bound many of our eastern Mesozoic basins. (We three think that the deformation is still taking place.) These results were published for all to see in the *Journal of Geodynamics* (1999, v. 27, p. 97-118).

Bill enthusiastically embraced new processing ideas and last-minute collaborations that sometimes required a frantic pace to complete slides for a talk that was to be given in just days. One such talk was on the enhancement of deep crustal reflections by binning (sorting data) along tectonic strike. John, Bill, and Cahit breathed a sigh of relief when the theoretical ideas

were confirmed by computer simulations just days before the scheduled talk (1990, *EOS*, v. 71, n. 17, p. 556).

During one lunch break, John recalls discussing Bill's childhood, how his parents taught him the value of saving, staying out of debt, and how he still had, in their original boxes, his old Lionel train set, which is now a collector's item. He was an avid coin collector and would occasionally disappear weekends to attend a coin show in another state. There, he related to John, were some traders who knew him but would refuse to do business with him because he drove such a hard bargain. Bill enjoyed playing golf, especially at the golf course of Virginia Tech. He often took advantage of this facility where he would hit four balls, one after the other, at each tee.

Bill Domoracki respected data, challenged results, and was justifiably proud of his processing expertise. Bill's dissertation was supervised jointly by John Costain and Cahit Çoruh. It was a monumental piece of work comprising 236 pages and was accompanied by a separate volume of figures. He loved what he did and had hopes of starting up his own consulting business one day. Bill will be missed by his colleagues and friends.

The University of South Carolina Earth Science Institute has donated \$500 to be used in Bill's name for scholarships. Bill's family has suggested that donations in his name be sent to the "Geosciences Alumni Scholarship" at Virginia Tech.

Alumni News

Houston Area Virginia Tech Geoscience Support Group

by Mike Strickler

The primary goal of the Houston Area Virginia Tech Geoscience Support Group (HAVTGSG) is to provide an important communications link between Geosciences alumni in the Houston area and the department in Blacksburg. The HAVTGSG hosted its kickoff dinner on Saturday, April 3, in Houston with 36 attendees. Mike Strickler, the founding coordinator of HAVTGSG, offered the opening comments at the dinner, reviewed the reasons for forming HAVTGSG, and introduced the guests from Blacksburg. Dr. Lynn Glover spoke on the state of alumni relations; followed by Dr. Cahit Çoruh, outgoing department chair, who gave an update on the department. He then introduced Dr. Robert Bodnar, incoming department chair, who talked about future plans for the department. We would like to thank Dr. Çoruh for his wonderful years of service for the department, and congratulate Dr. Bodnar on his appointment as the new chair. The final speaker was Dr. Lay Nam Chang, Dean of the College of Science, who spoke briefly about the newly organized College of Science.

Since the kickoff dinner, HAVTGSG has made agreements with two companies that are interested in offering "site visits" to Virginia Tech faculty and students when they are in Houston attending conventions, conferences, or meetings. The purpose of the site visit is to give the company an opportunity to interact with students outside the interview room, while at the same time, the students are introduced to people, projects, technology, and the office environment. It is a low-cost, high-reward meeting for the benefit of all involved.

The Support Group has also made arrangements with four Houston area oil companies to review the resumes of Virginia Tech students that are planning to travel to Houston, as mentioned before, and that have expressed interest in the oil industry. These companies will have the additional option of inviting students to onsite interviews. It is hoped that this effort will increase awareness and interest in Virginia Tech among local companies, and at the same time, provide additional employment opportunities for graduates of the department.

Finally, HAVTGSG is collaborating with the Houston Chapter of the Virginia Tech Alumni Association (VTAA) to get updated contact information from Geosciences alumni known to reside in the Houston area. This information will be used to develop a database for two reasons: (1) to create opportunities for alumni to strengthen their career network; and (2) to provide valuable statistical information that Houston companies need in order to support recruiting efforts in the department.

If you are interested in helping with these efforts in the Houston area, please contact Mike Strickler, the

'52

Howard Phillips (B.S. '52; M.S. '53) retired from Gulf Oil-Chevron in 1989. Howard now lives at 305 Halcott Drive, Unit 129, Lafayette, LA 70503. Telephone: 337-991-9457.



'60

William A. Thomas (Ph.D. '60) is currently serving a one-year term as Vice President of the Geological Society of America. Bill is the James S. Hudnall Professor of Geology at the University of Kentucky. Bill and Rachel (Virginia Tech. B.S. 1959; M.S. 1959; Family Life) enjoy visits with their five grandsons (and the boys' parents, too). <geowat@uky.edu>

'66

G. Stephen Ritter (B.S. '66) lives in Winchester, Virginia. You can e-mail Stephen at <wineman1044@aol.com>.

'67

Martin L. Bregman (M.S. '67) is retired from the oil business and is back in Tulsa, OK. Martin writes, "I am now teaching at the Tulsa Community College. Both of my children are on their own and I travel around the country to referee for U.S. Judo. My regards to all at VPI." <MLBregman@aol.com>

'74

David H. Hight (B.S. '74; M.S. '79) is now working for the State of West Virginia in the Department of Environmental Protection, Office of Environmental Remediation in Charleston, WV.

'81

Cathy Enomoto (B.S. '81) began working with the Division of Mineral Resources in Charlottesville, VA, on June 21, 2004. She is working on a project focused on digitizing coal mine maps for mine safety. The position allows her to expand her computer skills (GIS especially) while learning about an industry other than petroleum. She is enjoying living in Charlottesville. <cathy.enomoto@dmme.virginia.doc>

'82

Laura (Davis) DeLoach (B.S. '82; M.S. '85) writes, "I have continued to work at LLNL in California since leaving VPI in 1985. For the past eight years I have worked as a geologist on the Yucca

Mountain Project. Prior to that time I worked in the research and development of new crystalline materials for laser systems.

I am sad to say, my husband of almost 13 years, Doug DeLoach, passed away in June of this year. It was unexpected, but he had suffered with chronic pain for many years. Although my grief is overwhelming, with God's help I find joy that Doug is finally free of the suffering he endured. We had no children, but our three year old black lab, Heidi, doesn't know that.

I want to say "Hi!" to the many folks whose friendship I enjoyed over my VPI-geology days. I hope everyone is doing well. Please give me a call or drop me a line if you see this update. (I am terrible about keeping in touch, but I will try.) You can contact Laura at 925-423-8241 or e-mail <deloach2@llnl.gov>

'86

Dwight Holland (M.S. '86) was named an AsMA (Aerospace Medical Association) Fellow in May, and also has been appointed to the AsMA Executive Committee. Other achievements include, serving as President of the International Association of Military Flight Surgeons Pilots (IAMFSP) until 2005, and being selected as only the second American to be an Honorary member of the Slovenian Aerospace Medical Association, an arm of their medical society. Congratulations on your many achievements Dwight. <Dwightholl@aol.com>

'90

Ashley K. Goodrich (B.S. '90) writes, "Howdy to everyone from GOM (Gulf of Mexico)! Our alumni map should include some 'specks' for those of us fortunate enough to literally LIVE offshore! I am still an 'air-taxi' driver for both major and independent oil/gas companies. I recently finished an eight month drilling project near shelf's edge in the Ship Shoal Block, and five good wells are now producing. I am now on a production job as both a field and 'loop' ship: covering nearly a 700n mile route throughout the gulf. With the price of oil, there should be more drilling, but lack of rig-commitment and company buy outs (not to mention hunting season!!!) are keeping things slower than expected until '05. Exploration on land has never revived since '99 and work is spotty, doesn't pay, and is predominately spec'd out. Offshore has oscillated as usual, but doing better. Although I am deep in LSU country, I am still proud to be a Hokie! I usually don't get too much hassle about it... am not sure if my being at the helicopter controls has anything to do with that either though! I'm contracted to the GOM helicopter division of Evergreen Aviation. Check

out our new Supertankers (retro'd Boeing 747's) designed for aerial firefighting for oil/gas/forest fires: www.evergreenaviation.com. It's a spectacular sight: 747 at 300' dumping 27,000 gallons of retardant or water! It sure beats us out there dropping teaspoons of water on million acre fires. Best to everyone! If you're ever going offshore, call me... (I give big company discounts;-) GO HOKIES!" <seismicpilot@geologist.com>

'93

Rhonda Adkins, (B.S. '93; M.S. '97) and Peter Welch, (M.S. '99) returned to New Orleans, LA, in 2003, after spending several years in Australia. Rhonda is now working with the ChevronTexaco Gulf of Mexico Deepwater Business Unit and was transferred to Houston, TX, in July. Rhonda writes, "I guess our biggest news is that we have finally (after all these years) set a date for our wedding --October 30 of this year!!" Congratulations Rhonda and Peter! <RhondaAdkins@chevrontexaco.com>

'94

Michael Lang (B.S. '94) is a geologist at Sydnor Hydro, Inc. in the water well construction division and was certified as a Professional Geologist by the state of Virginia in December 2003, and by the state of North Carolina in September 2004. Michael's daughter, Magnolia, was born in September 2003. Contact Michael at <holeyroller@hotmail.com>.

'95

Joe East (B.S. '95) writes, "I'm working for the USGS - Eastern Energy Resources team. About four years ago I started working on ANWR and NPRA assessments on the North Slope of Alaska. Since I'm the only one who can change the paper on the plotters, they keep me around. I'm now working on three projects, National Coal Assessment, Michigan Basin Oil and Gas Assessment, and World Coal Quality Map. I've got a couple of maps and publications from Alaska and Wyoming, and I'm currently updating the National Coal Map. I don't know which is more unlikely, me finding gainful employment as a geologist, or me getting married. I got married back in 2001 to a musician. She sings as a soprano in operas and musicals and various classical music-type things. It's a strange mix, but we get along. Tell everyone I said "Hi" and if anyone wants to drop me a line, my e-mail address is <jeast@usgs.gov>."

Erich J. Weissbart (B.S. '95; M.S. '97) is an Environmental

Engineer Senior for the Virginia Department of Environmental Quality in Richmond, VA. He recently moved from private consulting to the regulation side of environmental work in the office of Waste Permitting doing groundwater/corrective action on RCRA facilities. <ejweissbart@deq.virginia.gov>

'96

Peter Lanagan (B.S. '96) received his Ph.D. in Planetary Sciences from the University of Arizona and is now a Research Associate in the Lunar and Planetary Laboratory at the University of Arizona. <planagan@planagan.com>

'01

Carmen Davis Lang (B.S. '01) writes, "I moved back to my hometown from Richmond and started a new job teaching Earth Science at Hidden Valley High School in Roanoke. The school and kids are great." <clang@rcs.k12.va.us>

'03

Chelsea McRaven (B.S. '03) writes, "I'm working as a Geology Specialist for the Oregon Department of Transportation in Bend, Oregon. I work directly with other geologists and geotechnical and foundation engineers on transportation projects; which include working on Material Source Quarry locations (since 94% of black top on roads is composed of rock...it's got to come from somewhere!!), exploration drilling for structures and bridge foundations (investigating the subsurface geology), and working with survey, environmental, hazmat and other technical crews on new sites and projects. <Chelsea.MCRAVEN@odot.state.or.us>

Jenny LaGesse (M.S. '03) is at the Colorado School of Mines. <jlagesse@mines.edu>

Thomas C. Wynn (Ph.D. '03) has a tenure track position as Assistant Professor of Geology at Lock Haven University in Lock Haven, Pennsylvania. Thomas writes, "The university just has an undergraduate degree in Geology, but the students are great. I miss Blacksburg and the folks in the Geology Department. Jane and I got married before school started at the end of August. Tell everyone hello." <twynn@lhup.edu>

'04

Sam Harvey (M.S. '04) is working for Chevron Texaco in New Orleans, Louisiana. <SamuelHarvey@chevrontexaco.com>

HAVTGSG coordinator, at (281) 287-7513 or mike.strickler@unocal.com. Additional contacts are Wendi (Thompson) Tibiletti at (281) 879-3571 or wtibiletti@opex.cc; and Shelley Ellison Tyree at (713) 432-6763 or etyr@chevrontexaco.com.



L to R Mike Enomoto, Shelly Ellison Tyree '98, Cathy Enomoto '81, and Donald Vossler '71 visit at the Alumni-Faculty Dinner in Houston.

James W. Hayman, PE, PG, Esq. (M.S. '73)

On May 2004, I received the Juris Doctor as valedictorian of the class. I passed the Florida Bar Exam in late July and in late September was sworn in as a member of the Florida Bar.

I am now licensed with fifteen state boards in three professions in ten different states. As she has done frequently during our 35 years of marriage, Marilyn continues to ask, "What do you want to be when you grow up?" I may have an answer for her. I've become involved in several consulting projects serving as the technical resource, ramrod, and/or expert witness for attorneys and their clients who are involved in environmental contamination litigation or due diligence for the sale of commercial property. Speaking "lawyeres," "engineer jargon," and "geo-jive," I have become the clearing-house, educator, and mediator. In these roles I address the needs, questions, and perspectives of the attorneys, clients, and engineering or geological consultants. The work is proving to be fun and rewarding; the feedback is that I am filling a gap of long standing between attorneys and their technical consultants. Hopefully, I can grow this into a full-time consulting role.

Fortunately, the hurricanes waited until the bar exam was over. At our rural location near the Kennedy Space Center, we took a fairly hard hit from hurricanes Charley, Frances, and Jeanne, three of the four that hit Florida. Fortunately we escaped serious damage to the house, barn, greenhouse, or outbuildings. For this we are very thankful; many folks in our immediate area lost roofs to the wind or falling trees. Sadly, our 40 acres of mostly live oaks, red cedars, and palms were severely damaged. We'll be months, if not years, cutting out all the dead-limb debris. Also, wind-driven brackish water from the Indian River lagoon flooded our fields, killed the grass, and deposited dead fish. We are very ready for the 2004 hurricane season to end. <JWHAYMANPEPG@prodigy.net>

Contributions

The John K. Costain Graduate Geophysics Endowed Scholarship Receives Another Large Contribution

by Cahit Çoruh



David W. and Beverly Worthington recently made a large contribution (\$25,000) to the John K. Costain Graduate Geophysics Endowed Scholarship Fund. The Scholarship was established by Mr. David W. Worthington, Chairman of the Board of TGS-NOPEC. Mr. Worthington has

been a consistent supporter of the geophysics program at Virginia Tech where he received his masters degree. In addition to his annual contributions, Mr. Worthington was the prime mover of the successful 1997 industry fund drive that resulted in the establishment of the 3-D Subsurface Imaging Laboratory in the Department of Geosciences.

Mr. Worthington continues to "make a difference" by his contributions to the geophysics profession and society in many dimensions. The Department of Geosciences appreciates Mr. and Mrs. Worthington for their generous contribution, which will make the John K. Costain Graduate Geophysics Scholarship Fund grow faster and support graduate students in the geophysics program. Mr. Worthington's efforts to strengthen the geophysics program will have lasting results. And we wish him the best in his business partnership in a dinosaur quarry in Colorado.

The Matthew J. Mikulich Endowed Geophysics Scholarship is Awarded Using Additional Contributions

by Cahit Çoruh

Dr. Matthew J. Mikulich is a longtime friend and supporter of the Department of Geosciences at Virginia Tech through his visits, lectures, seminars, roundtable discussions, advising, and financial contributions. Dr. Mikulich also served the Department of Geosciences as a member of the Advisory Board.

In 1999, Dr. Mikulich, then Chevron Corporation Chief Geophysicist and Principal Technical Advisor, established the Matthew J. Mikulich Geophysics Scholarship, which will be used to provide full scholarships to students in Geophysics with the following constraints: The scholarship will be awarded to a U.S. citizen, graduate student, or an upper level undergraduate student majoring in geophysics on the basis of academic merit and financial need. Dr. Mikulich desired that the endowment will not fund a scholarship until its principal reaches an amount to provide income equal to a full teaching assistantship in the Department of Geosciences. At that time, the excess earnings will be retained in the endowment until a second full scholarship can be given.

Meanwhile, as the Matthew J. Mikulich Geophysics Scholarship Fund continues to grow, Dr. Mikulich has been making additional annual contributions to award a scholarship. This year, in addition to a significant contribution to the fund, he also made a second gift that enabled the department to support the stipend of a graduate student for one semester. On behalf of the geophysics students, the department appreciates Dr. Mikulich's continued support and contributions.



An Interview with Nancy Ross . . .

Editor's Note: Dr. Nancy Ross (B.S. '79) returned to Virginia Tech in 2000 as Professor of Mineralogy. In January of this year, she became Associate Dean for Research in the College of Science. Below is an interview with her, recently conducted by Mike Hochella.

You were an undergrad at VT, eventually becoming a professor in London, England. What drew you back to Blacksburg?

I have been fortunate throughout my career to have opportunities arise at just the right moment. Ross (Angel) and I moved to Europe in 1988 where I spent 12 wonderful years working at University College London. I would have happily continued my career there except for one thing: Ross had a position at the Bayerisches Geoinstitut, and we were commuting between England and Germany. Then, out of the blue, I received an email in the summer of 1999 from Jerry Gibbs asking whether I would be interested in a position at Virginia Tech. I couldn't believe it! It was an incredible opportunity to continue the tradition of crystallography and mineralogy in the department. To make a long story short, Ross and I were both offered positions in the department and we moved to Blacksburg in 2000. The move was doubly wonderful because my family lives in Blacksburg.



Tell us about how you became Associate Dean, and briefly about your role in the Dean's office?

I never considered applying for the position until our previous Chair, Cahit Çoruh, suggested that I should meet with Dean Lay Nam Chang to find out more about it. I did so, and I applied for the position in September 2003. I was offered the position and became Associate Dean in the College of Science in January 2004. My role in the Dean's office is to assist and advise the Dean in areas related to research, graduate studies and outreach. My duties are diverse and range from making decisions on cost-sharing of research proposals to meeting with members of the Roundtable, the College of Science's advisory committee.

You have already had a very successful research career. When and how did you decide that you might want to do university administration?

When I moved to Virginia Tech, I thought it would be interesting to see the view from the "other side," but I never expected to do it quite so soon. When I met with Lay Nam, I was very impressed with his vision for the college. My research experience was the key that admitted me to the Dean's office. I realized that this was a unique opportunity that I should pursue.

What has been the most surprising/interesting thing that you have learned since you have been in the Dean's office?

Each day is different and poses a new set of challenges, so there is never a dull moment! One of the most interesting and enjoyable aspects of my new position is that it provides me with the opportunity to meet lots of people outside my particular area of research - not only within Virginia Tech but also from other universities, national laboratories, funding agencies and the private sector.

Do you have time for teaching or research anymore?

Yes! This was one of my concerns I had when I applied for the position, as I did not want to burn all my bridges behind me. I am teaching the undergraduate mineralogy course and I contribute to graduate level courses on advanced mineralogy (with Bob Tracy). This keeps me in touch with our undergraduates and graduate students.

I am also actively involved in research; although, I do not have time for "hands on" experiments in the crystallography laboratory. I am fortunate to have an extremely skilled Postdoc, Jing Zhao, who has been working with Ross and me for three years. I also have a Ph.D. student, Jason Burt, who is studying the electron density of minerals in collaboration with Jerry Gibbs. I have another Postdoc arriving in early 2005 who will be doing neutron diffraction experiments at high pressure, so all in all, I am keeping my research program ticking along.

What do you want to accomplish as an Associate Dean? How will you leave your mark?

The College of Science was "born" in July 2003 after the restructuring of the University. Therefore, I am the first Associate Dean for Research, Graduate Studies and Outreach in the College of Science. My goal is to help the College of Science grow in each of these areas and to work on solutions to some of our most critical needs, including recruitment, retention, equipment, infrastructure, space, etc. It is exciting to be part of the team to establish the college, to map out future directions and to work on strategies to attain our goals.

Do you see a future in university administration for you? If you stay in administration, what would you like to do most? Don't be shy!

Mike, I know this is avoiding the question, but it is really too early to say. If I continue to feel like I am contributing to the progress of the College as Associate Dean, I might reapply for the position in 2007 when my contract comes to an end. I might just as happily leave administration and return full time to teaching and research as Professor of Mineralogy. However, with experience in university administration, opportunities may appear in the future that aren't even on my radar screen at the moment.

Wallace D. Lowry Scholarship Endowment (Lowry Scholarship Fund)

3-D Subsurface Imaging Laboratory Fund

Byron Cooper (Geology) Geoscience Endowed Fellowship

Donald V. Dalton Endowed Fund for the Museum of Geosciences

Heath Robinson-Roy J. Holden Geoscience Endowed Scholarship

Tillman Teaching Excellence Endowed Award

David R. Wones Geoscience (Geological Sciences) Endowed Scholarship

Aubrey E. Orange Endowed Award in Geophysics

Charles Edward and Frances Peppin Sears Endowed Scholarship

Matthew J. Mikulich Endowed Geophysics Scholarship

Alumni Endowed Geosciences Scholarship

Wallace D. Lowry Geosciences Endowed Graduate Scholarship

John K. Costain Graduate Geophysics Endowed Scholarship

Petroleum Industry Geosciences Endowed Graduate Scholarship

Geosciences Undergraduate Research Endowed Fund

Geosciences Faculty Endowed Scholarship

Charles J. Gose, Jr. Scholarship for Geosciences

Thomas T. Jeffries Geological Sciences Endowed Scholarship

William C. "Bill" & Francia J. Presley Scholarship Endowment

Leo & Melva Harris Geosciences Endowed Scholarship

Chinese Geosciences Endowed Scholarship

The faculty, staff and students of the Department of Geosciences appreciates the continued support of our alumni and friends.
Information concerning contributions can be obtained from Mary McMurray at 540-231-6521 (mcmurray@vt.edu)



www.geol.vt.edu

Department of Geosciences
College of Science
4044 Derring Hall, Virginia Tech
Blacksburg, Virginia 24061
Phone: (540) 231-6521
Fax: (540) 231-3386
E-mail: mcmurray@vt.edu
Web Info: <http://www.geol.vt.edu>

NONPROFIT
U.S. POSTAGE PAID
PERMIT NO. 28
BLACKSBURG, VA 24060

Change Service Requested