

Letter from the President

Dear Fellow Alumni,

I am pleased to announce some changes in the organization of the New Mexico Tech Alumni Association (NMTAA). We are taking the initial steps to establish the Association as an independent 501(c)14 organization, separate from New Mexico Tech. There are a number of models at other universities in which the alumni association is separate but supports goals of the university and the Board has determined this model positions us to better serve you.

To accomplish this, we have amended the bylaws, which are online at <http://www.nmt.edu/images/stories/bylaws18nov2009.pdf>. The new Board of Directors is comprised of nine members, and we



have established a Steering Committee, which does not vote on regular business but has input and veto power. Heads of alumni chapters are members of the Steering Committee, as are other volunteers accepted by the Board.

To bring us in line with 501(c)14 requirements, we have elected a secretary of the Board of Directors, Geza Keller (76, BS, math). Charles Major (69, BS, petr. engr.) has remained as treasurer. Paul Shoemaker (71, BS, physics) has assumed the duties of vice president, since Russ Erbes, who has served faithfully for several years, chose to resign for family reasons. I thank Russ for his contribution and support for NMTAA and hope you join me in wishing him all the best.

To the right is a complete list of members of the board.

The Board wishes to thank Cheryl Pulaski Macey, who elected to retire recently. She has been instrumental in many positive changes during recent years. Cheryl and her assistant director, Carol Lynn Tiegs (now working in Colorado), laid the groundwork for our newly constituted, more active alumni association.

On behalf of the NMTAA, I would like to thank Cheryl for her efforts and wish her a happy retirement.

Brett Wendt

President, New Mexico Tech Alumni Association

Herkenhoff Family Donates to Earl Herkenhoff Fund, benefiting Mineral Engineering Dept.

The Herkenhoff family, longtime supporters of New Mexico Tech, have donated nearly \$1 million to supplement its endowment fund at the university in Socorro. Grandchildren and great-grandchildren of Mrs. Lillian Herkenhoff joined to contribute \$959,000 to add to the Herkenhoff Endowment Fund, started by the late Earl Herkenhoff, which provides direct support to the university's Mineral Engineering Department.

Gay Herkenhoff-Dwyre initiated the latest donation and was joined by Gordon "Corky" Herkenhoff, a Socorro area businessman and farmer who is a member of the Tech President's Club and regular supporter of the university.

According to Gay, the donation was a way of thanking the university for helping her family survive after the paterfamilias, Gordon "Harry" Herkenhoff died in the influenza pandemic in 1918.

"My dad, Gordon, Jr., was only eight when his father died," Gay recalled, "and his brother Earl was only two. New Mexico Tech was very important to my family and their survival."

Herkenhoff senior's death left Mrs. Lillian Herkenhoff as a widow with four young children (the middle two were Walter and Harriet). The School of Mines (as it then was) offered Mrs. Herkenhoff a job overseeing the dining and residence halls, together with an apartment in the basement of Driscoll Hall to raise her young family.

Lillian became a second mother to the School of Mines "boys" during her two stints as matron, from 1920 to 1933 and from 1941 to 1950.

All four of her own children – Gordon, Walter, Earl and Harriett – made their own marks in the early history of New Mexico Tech and went on to successful careers. The boys all graduated from the School of Mines with degrees in mining engineering: Gordon in 1928, Walter in 1935 and

Earl in 1936. Harriet was the longtime secretary for President Edgar H. Wells.

Gordon, a civil engineer, founded Gordon Herkenhoff and Associates, one of the state's most prominent firms. He also served as the director of the state Bureau of Public Welfare and received the Distinguished Alumnus Award from New Mexico Tech in 1981.

Walter was superintendent for the Kennecott Copper Co.'s mine in Santa Rita, N.M. He also worked for several years in Los Alamos

Harriett married a Tech mining graduate, Eric Erickson, who worked for Anaconda Copper Mining Co and the Army Corps of Engineers. While secretary for President Wells in 1928, Harriett saved most of the university's official records in a fire that destroyed the Old Main building.

Earl Herkenhoff earned an international reputation as a mining and metallurgical expert. He was a registered Professional Engineer and a distinguished member of the American Institute of Mining, Metallurgical and Petroleum Engineers. When he passed away in 2002, Mr. Herkenhoff's ashes were scattered over 'M' Mountain.

According to Gay Herkenhoff-Dwyre, her uncle Earl was excited to have the school receive this bequest. He wanted to benefit the school, in the same way that the school benefited his family after his father died. Having learned the importance of education, Earl wanted to give back.

Mineral Engineering Department Chairman Dr. Navid Mojtabai expressed gratitude for the contributions and said the existing endowment already supports several graduate students per year. The additional principal will allow the department to expand its student assistance fund, with travel and scholarships, and support faculty activities and salary enhancement.

Happy Retirement, Cheryl!

Cheryl Pulaski Macey, Director for Advancement, elected to retire in October 2009. A profile of the new Director for Advancement, Colleen Guengerich, will appear in the next issue of *Gold Pan*.

Beginning from her arrival in 2006, Cheryl P. Macey brought substantial grant monies and gifts to the university, including:

- U.S. Department of Education Title V, College Cost Reduction and Access Act collaborative grant with Amarillo College for \$3.2 million
- U.S. Department of Education Title V, Post Baccalaureate Grant for \$3.0 million
- U.S. Department of Education, Upward Bound for \$1.2 million
- U.S. Department of Education, Upward Bound Math and Science (the only one awarded in the state) \$1.2 million
- Children's Center Campaign \$1.375 million

In addition, she brought in approximately \$2.48 million to endowments and scholarship funds at New Mexico Tech, including the gift to the Herkenhoff fund, above. Under her guidance, giving to the Annual Giving Campaign increased by tenfold.

Board of Directors, NMTAA

Brett Wendt (term expires October 31, 2011)

Paul Shoemaker (term expires October 31, 2013)

Geza Keller (term expires October 31, 2011)

Charles Major (term expires October 31, 2013)

Richard Miller (term expires October 31, 2011)

Tom Dillon (term expires October 31, 2011)

Linda Linden (term expires October 31, 2013)

John Dowdle (term expires October 31, 2011)

Eric Wilson (term expires October 31, 2013)

People You Know

September to December 2009

Have news for Gold Pan? Please let us know at alumni@admin.nmt.edu.

Stavros S. Papadopoulos (62, MS, hydrology) was elected to the National Academy of Engineering in February 2009. He writes, "On October 4 and 5, 2009 my wife Annie and I attended the annual meeting of the NAE and participated in the induction of new members to the Academy.



Above, left to right: Stavros Papadopoulos with Coralee and Jim Brierley at the National Academy of Engineering annual meeting.

"At a black-tie dinner, we had the good fortune to sit with Coralee Brierley, the Chair of the Earth Resources Engineering Section of the NAE, and her husband Jim, also a member the Earth Resources Section. You can't imagine our surprise and great pleasure when we discovered that we all had memories to share from our days at Tech and Socorro. My wife memorialized the occasion by taking the attached picture of Coralee and Jim with me."

Dr. Laurel Wilkening, daughter of the late Prof. Marvin Wilkening and his wife Ruby, recently received the U. C. Irvine Medal, the university's highest award. Laurel Wilkening was third chancellor of UCI, serving from 1993 to 1998.



Above: Dr. Laurel Wilkening (left) and classmate from Socorro High School Judy Lovelace

A renowned planetary scientist and expert on comets and meteorites, she served on several NASA committees and boards during the 1990s.

During her five-year tenure, the campus received its first two Nobel Prizes, contributed more than \$1 billion per year to the local economy, completed 250,000 square feet of construction, and increased private, state and federal funding. Thanks to her leadership, UCI was invited to join the prestigious Association of American Universities. Wilkening was instrumental in the creation of University Research Park – now a national model for collaboration between the private sector and university researchers.

In addition, the Center for Educational Partnerships was established during her tenure to enhance campus outreach to K-12 schools and community colleges. Since retiring in 1998,

Wilkening has remained active as a board member for the Planetary Society, the University of Arizona's Commission on the Status of Women and various environmental groups.

1970s

Dr. Bruce Blevins (1972, B.S., math; 1975, M.S., physics) writes, "I retired from PSL at NMSU, and I am now happily building spacecraft antennas at my own company, AntDevCo, in Las Cruces. Lots of flight units in orbit on such satellites as Genesis, Stardust, HETE, Hessi, Themis, ST-5, and many others."

James M. Kentopp (73, BS, geology) writes, "I have lived in Altus, Okla., for the past ten years, working for American Gypsum. I'm responsible for mine engineering and geology, permitting, and environmental compliance."

David C. Hobbs (76, BS, petroleum engr.) writes "After working international assignments in Oman and Venezuela since 1995, I have moved back to the U.S. In 2005, I joined Noble Energy in Denver, Colo., as drilling manager for the midcontinent and Rockies." He and his wife, Jill, reside in Littleton, Colo.

Dr. Michael Zolensky (77, BS, geology) was the subject of an interview in *Smithsonian* magazine, Dec. 2009, on NASA's Stardust Project, which captured and returned cometary material to Earth. One surprising discovery was that the interior of the comet contained particles which formed under extremely high temperatures, close to the sun. Since comets are thought to form far from the sun, this result was unexpected.

1980s

Diane M. Visser (81, BS, petroleum engr.) is operations manager for the Rocky Mt. Division of Samson Resources Co. She lives in Jenks, Okla., and works in Tulsa and Denver.

Phyllis Reiche (84, BA, history; 87, BS, technical communication) writes that she and her husband John retired to the beautiful Gila country and found themselves 35 miles from a library. "So we became involved in starting our own. I'm now director, and Gila Valley Library is one of the more popular places in town, with more than a thousand items being checked out per month. That, of course, means we're desperate for more space. We're hoping to obtain a couple of acres of land from Freeport McMoRan on which to build this much needed facility."

Frances Deters (86, BS, biology) is the director for RioFest Environmental Film Festival 2010. This event, held in Macey Center on Jan. 29 and 30, features films related to environmental issues. Frances invites her fellow alumni to view the schedule at www.riofilmfest.com and to become sponsors, if they choose.

1990s

Ronald Finkbine (94, Ph.D., computer science) is now an associate professor of computer science at Indiana University Southeast.

2000s

Valerie Kimble (01, BS, technical communication) is expecting her first grandchild in late April or early May. She would like to hear from the "Schoolies" she hung out with in the early Senentias at vkimble@gmail.com.

Crystal Krabbenhoft Romney (03 BS Psychology) married Jason Romney September 18, 2009 in Albuquerque, NM. Crystal is a certified prevention specialist currently working for UNM

Prevention Research Center. She is also pursuing her Master's degree in Community Health Education.

David Ladner (03, BS, Environmental Engineering) finished his Ph.D. at the University of Illinois at Urbana-Champaign in August 2009. He's now a post-doctoral research associate in the School of Sustainable Engineering and the Built Environment at Arizona State University. More information on him is at davidladner.org.

Richard Smrt (03, BS, psychology) married Shianne Wimberly on Sept. 13, 2009, in Las Vegas, Nev. Richard is a Ph.D. student in bio-medical research studies, specializing in neurology, at the University of New Mexico School of Medicine. Shianne, a graduate of UNM, is a pre-school teacher at U.N.M. Children's Academy in Albuquerque.

Eric Plum (06, BS, physics) a third year Ph.D. student from the Optoelectronics Research Centre (ORC), University of Southampton, received the Marconi Society Young Scholar Award on October 9, 2009, at the annual Marconi Awards dinner in Bologna, Italy.

Plum, a member of the nanophotonics and metamaterials research group at the ORC, has worked on a variety of projects and published a number of papers including "Metamaterial with Negative Index due to Chirality" which was highlighted in the Editor's suggestions of the journal *Physical Review B*.

Plum grew up in Bad Münstereifel, Germany, studied Physics at RWTH Aachen, Germany and spent his third year as a visiting student at the University of Southampton in the School of Physics and Astronomy. He spent his fourth year as a Fulbright scholar at New Mexico Tech, where he received highest honors for his B.Sc. in physics with astrophysics and was awarded the Albert Petschek Award for excellence in theoretical physics. He joined the ORC in 2006.

Plum is married to Dr. Nadia Fisher-Plum, and is the son of Walther Plum and Helga Trump-Plum, both secondary school language teachers in Germany.

Keenan Dotson (07, BS, materials engr.) is attending the University of Maryland in an M.S. program for fire protection engineering.

Gold Pan is a production of the Advancement Office at New Mexico Institute of Mining and Technology, Socorro, New Mexico 87801.

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49ers Parade 2009

Alumni, students, and Socorroans gathered on a splendid October day for the 49ers parade. Many thanks to Grand Marshalls Dr. Eileen Comstock (88, BS, biology) and Warren Marts (90, BS, computer science). Eileen and Warren have actively supported music and the performing arts at New Mexico Tech.

Many thanks to our illustrious Parade judges:

- Dr. Vannetta Perry, Class of 86
- Estelle Green, Human Resources Office
- Susana Dolber, a professor from Argentina and FOV (Friend of Vannetta)

Floats

- 1st Place: EMRTC Superstar
- 2nd Place: R&ED/ Chemical Engineering
- 3rd Place: Socorro Early Childhood Development Center

NMT Entries

- 1st Place: Residential Life
- 2nd Place: Materials Dept.
- 3rd Place: SHPE/IEE/ASME

Vehicles

- 1st Place: Socorro Old Car Club
- 2nd Place: Grand Marshalls,
- 3rd Place: Midway Fire Dept.

Horses

- 1st Place: Riders of the Rio Grande
- 2nd Place: Socorro County Queen and Sweethearts

Bands

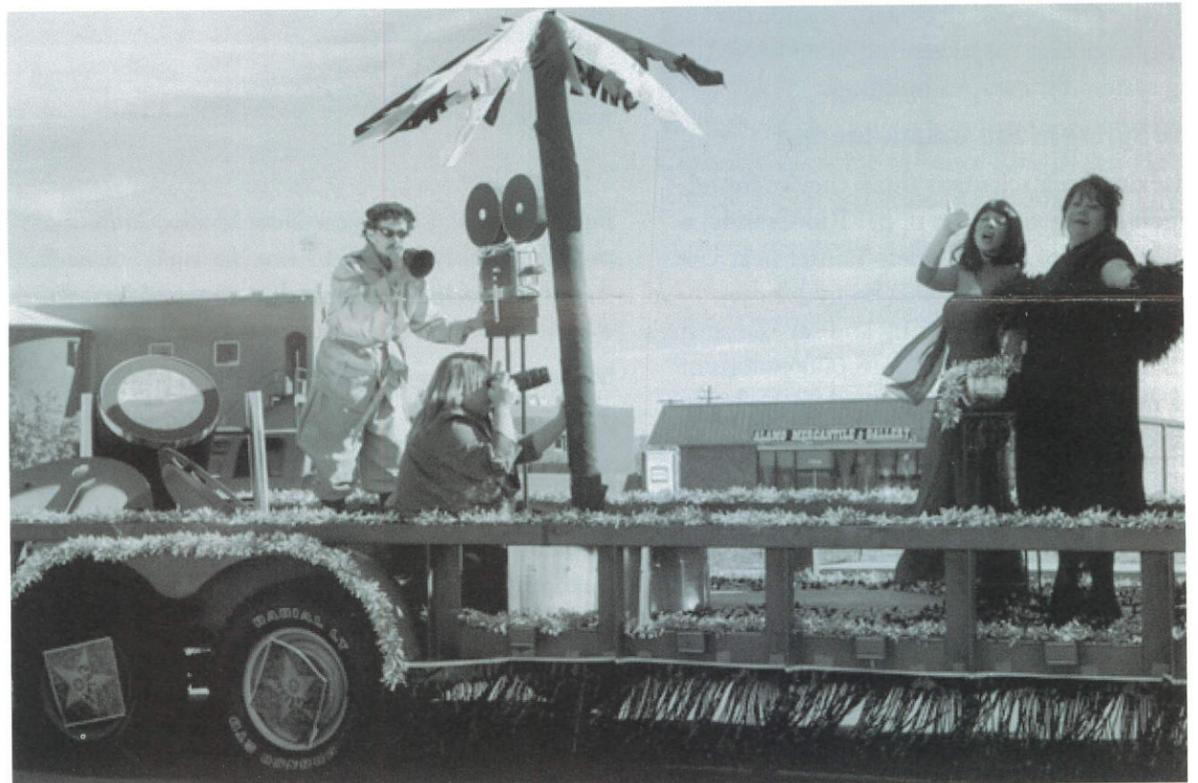
- 1st Place: Socorro High School Band
- 2nd Place: William Torres, DJ

Walking

- 1st Place: DAV Colorguard
- 2nd Place: Memorial for Garrett Joe



Above: Grand Marshalls Eileen Comstock and Warren Marts, in Judy Lovelace's Thunderbird. (photo by William "Schlake" Colburn)



Above: Grand Prize Winner: Student and University Relations float, by Melissa Begay, Annine Gabaldon, Dave Wheelock with their own version of "NMT, Superstar!" (photo by William "Schlake" Colburn)

49ers 2010: Oct. 21, 22, 23, 24

Parade Theme: Zombies Want Brains!

Everyone knows that Zombies Want Brains. And where can they find brains? Lots of brains? Big, juicy ones? New Mexico Tech, of course! The place full of brains! Design your float or other entry around the theme "Zombies Want Brains." Parade on Saturday, Oct. 23.

Reunions of Classes of 2000, 1990, 1980, 1970, 1960, and (if enough demand) 1950

Bill Guse (70, BS, biology) has offered to start a Facebook page for the Class of 1970 reunion. Any volunteers to start Facebook pages for the other classes? Let us know at alumni@admin.nmt.edu. We'd like to hear what you'd like to do for reunion.

Sunset Tour of MRO

Thanks to a suggestion from Dr. Dave Westpfahl, professor of physics, we are planning a sunset tour of Magdalena Ridge Observatory, on either Friday or Saturday night. The tour group will leave campus at about 3 p.m., tour the observatory buildings by daylight, enjoy a beautiful sunset, and do some after-dark viewing. We should even be back in Socorro in time for those who want to go to the Cap!

Alumni-Faculty barbecue dinner, Thursday evening, Oct. 21.

This went really well this past 49ers, and we'd like to do it again. Location: Golf Pavilion, across from Golf Shop. Invited guests: faculty members still living in Socorro. Come talk to your old profs and tell them how well you're doing!

Remember, you can always talk to us at alumni@admin.nmt.edu



Flunk and Forget Dance

Alumni, remember the "Flunk and Forget Dance" a semester-end tradition? The tradition was revived in Dec. 2009 by Residential Life, the Center for Student Success, and some light-footed students. (Photo by Bryson Tidman)

Tech in the News

[Excerpted from news stories by Thomas Guengerich]

Tech Geothermal Project Bolstered by Department of Energy

New Mexico Tech is on its way to being the first campus in the state, and the second in the nation, to be heated by “green” energy, thanks to the Socorro magma body. Led by hydrologist Mark Person, a Tech team is drilling toward a heat anomaly under M Mountain, with the aim of heating the campus with geothermal energy. The federal Department of Energy awarded New Mexico Tech \$457,000 early in 2009 to drill a test well. Later, it awarded Tech another \$2 million to link the geothermal wells to the campus heating system. The project will drastically reduce the university’s reliance on its natural-gas powered heating system for campus buildings.

Massive Spring in Rio Grande Studied

New Mexico Tech scientists think they’ve found the largest spring yet in the upper Rio Grande, a few miles south of the Colorado border near Ute Mountain. Dr. Paul Bauer and Peggy Johnson have dubbed it the Lava Tube Spring and say the spring’s crater is 12 feet deep and erupts 6,000 gallons of water a minute, or 13 cubic-feet-per-second into the Rio Grande.

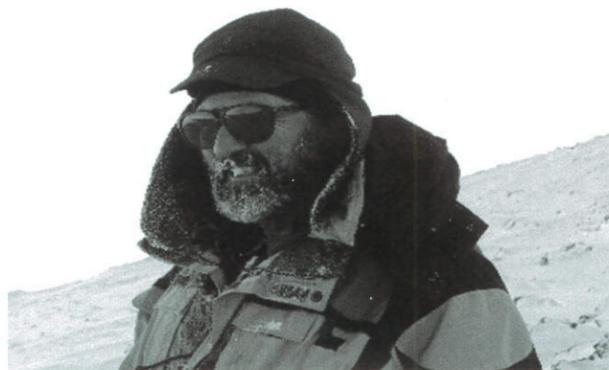


Peggy Johnson (right), associate director of the Bureau of Geology, watches as staff scientists Stacy Timmons and Louis Gillard collect samples of spring water along the upper reaches of the Rio Grande. Photos by Paul Bauer

Surprisingly, the spring is located under the river, rather than on the canyon walls, and generates a continuously dancing plume of gravel in the river.

Antarctic Expedition to Erebus Volcano Examines a Lake of Lava

A team of 12 scientists from around the world conducted six weeks of research on the active Erebus volcano in Antarctica. It was the first



Above: Prof. Philip Kyle first went to Antarctica 40 years ago.

field season of a four-year New Mexico Tech project recently funded by the National Science Foundation Office of Polar Programs using \$499,991 of federal stimulus money.

Materials Engineers Get Industrial Experience

Two teams of materials engineering students are working on real-life problems.

Team 1 – Sean Hamilton, Marcus Chavez and Brandon Nation – is developing an explosive method of welding multiple layers of metal in one action.

Team 2 – Cory Gibson, Ryan Cook and Taylor Wilkinson – is working with sponsor Navair to design a fire-retardant wheel-well insert for military Hummers.

Two Students Noted for Explosives Research

New Mexico Tech students Shaun Geerts and Micah Wild won third place for their research poster at the national American Indian Society of Science and Engineering conference in Portland in late October. The mechanical engineering students were honored for their poster titled “A Study of the Effects of Shaped-Charge Liner Design.”

Electrical Engineering Seniors Tackling Technological Projects

Five teams of electrical engineering seniors are culminating their undergraduate years with ambitious capstone projects. Each team has a difficult challenge in designing, simulating and building state-of-the-art instruments.

Lightning Interferometer: Professor Dr. Bill Rison tasked a team of students to design, build and test a new interferometer using more modern instrumentation than the one built 20 years ago. Their advisor is Dr. Aly El-Osery.

Wireless Cave Sensing Network: Professor Dr. Anders Jorgensen asked students to modify an existing design to be less bulky and more powerful. Their advisor is Dr. Scott Teare.

Submersible Water Quality Sonde: Professors Dr. John Wilson and Dr. Michael Pullin want students to design the next generation of water chemistry sensor. Their advisor is Dr. Kevin Wedeward.

Barium Laser: Air Force Research Labs/Research and Development Lab/Center for Excellence (AFRL/RDL/COE) are working with students to design a continuous beam barium laser. Their advisor is Dr. Hector Erives.

Beam Position Monitor: Los Alamos National Laboratory and National Instruments have asked that students extensively simulate and preliminarily implement a system to monitor the position of particles within the LANL particle accelerator. Their advisor is Dr. Robert Bond.

Vino y Volcanoes

March 13 – 22, 2010

There are still a few spots available! Reserve now by calling 575-835-5525.

\$1750 (does not include airfare to Chile)

Deposit of \$750 due upon reservation. Balance due Feb. 1, 2010.

Checks should be made payable to “New Mexico Tech Research Foundation.”

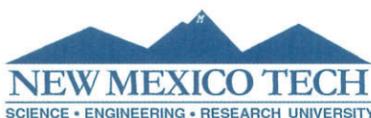
Trip led by led by: Dr. William X. Chávez, Jr. (76, 77), professor of Geological Engineering

Were you in Socorro in 1964?

Dave Thomas (77, BS, math; 79, BS, physics; 80, MS, math) who is a Tech alum, Tech employee, president of the science group New Mexicans for Science and Reason, and a Fellow of CSI (Committee for Skeptical Inquiry) is seeking fellow alumni who were in Socorro during the UFO sighting of April 24.

What do you remember? What have you heard? Visitation from beyond the solar system, or prank by Tech students?

Dave would like people to visit his blog on the subject socorro1964.blogspot.com/ and tell him, even anonymously, what they know.



GOLD PAN, Winter 2009
Alumni Newsletter for
New Mexico Institute for Mining
& Technology
New Mexico School of Mines

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Socorro, NM 87801

Return Service Requested